NHANES-III DIETARY INTERVIEWER'S MANUAL

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1. OVERVIEW OF THE NHANES III

1.1   Introduction and Purpose of the Survey

The Third National Health and Nutrition Examination Survey (NHANES III) is being conducted by the National Center for Health Statistics (NCHS) of the United States Public Health Service. Data collection began in September 1988 and will continue for approximately 6 years (two 3-year rounds) at 88 locations across the U.S. The main survey was preceded by three pretests which were held between September 1987 and March 1988 in Los Angeles, California, Washington, D.C. and Tampa, Florida. Another pretest called the "Dress Rehearsal" was conducted in October 1988, just prior to the start of the main survey.

Approximately 40,000 individuals two months of age and older will be randomly selected from households across the U.S. to participate in the survey. Selected persons will be invited to take part in the survey by completing interviews in their homes and by receiving examinations at the Mobile Examination Center (MEC). The detailed interview includes demographic, socioeconomic, dietary, and health-related questions. Upon completion of the interview, respondents will be asked to voluntarily participate in additional interviews, extensive physical and dental examinations and biochemical tests, all conducted by highly trained medical personnel in a mobile examination center (MEC).

The purpose of NHANES III is to assess the health and nutritional status of adults and children in the United States. NCHS will use the data collected in this survey to define the normative distribution of:

- Specifically-defined diseases and other conditions of ill health;

- Nutritional disorders;

- Potential risk factors; and

- Normative health-related measurements, such as height, weight, and blood pressure.

At the conclusion of the study, prevalence rates will be computed for blacks, Mexican-Americans, Puerto Ricans, and other groups including whites, by age, sex, and income level. To assist in obtaining these rates, the survey will oversample blacks, Hispanics, the elderly and children.

The diseases and other medical conditions to be studied include, but are not limited to, the following:

- Cardiovascular disease (heart disease);

- Cancer;

- Chronic obstructive lung disease, including:

  - Asthma;

  - Chronic bronchitis; and

  - Emphysema;

- Diabetes;

- Kidney disease and other urologic disorders;

- Gallbladder disease;

- Osteoporosis;

- Arthritis and related musculoskeletal conditions, including:

  - Rheumatoid arthritis; and

  - Osteoarthritis;

- Infectious diseases, including:

  - Immunization to childhood diseases;

  - Exposure to hepatitis A or B;

  - Exposure to human immunodeficiency virus (HIV); and

  - Exposure to sexually transmitted diseases, such as herpes simplex 1 and 2;

- Oral health problems, such as:

    - Caries;

    - Periodontal disease;

    - Tooth loss;

    - Soft-tissue lesions;

    - Trauma assessment;

    - Occlusal and dentofacial characteristics; and

    - Tooth restoration and prosthesis conditions;

- Allergies to:

    - Certain foods, animals, insects and molds;

- Mental health conditions, for example:

    - Depression;

- Hearing loss;

- Retinal Disease; and

- Nutritional disorders, such as vitamin and mineral deficiencies.

Risk factors are those aspects of a person's lifestyle, constitution, heredity or environmental exposures which may increase his/her chances of developing a certain disease or condition. Some of the risk factors to be included in this study are:

- Tobacco usage;

- Alcohol consumption;

- Physical activity;

- Sexual practices;

- Occupational exposures;

- Reproductive health, such as oral contraceptive use and breastfeeding practices;

- Weight;

- Dietary intake; and

- Stress.

The results of this survey will benefit the American people in two important ways. First, data on the distribution of health problems and potential risk factors in the population provide researchers with important clues to the causes of disease development. This survey will provide the data researchers need to establish hypotheses of disease causation which can be tested in future epidemiologic and clinical research studies. Secondly, information collected from this survey will be compared to information collected in previous HANES surveys and future HANES surveys in which study participants will be asked to be examined and interviewed again sometime in the future. This will allow researchers to determine the extent to which various health problems and risk factors have changed in the U.S. population over time. By identifying the health care needs of the population, agencies of the government and private sector can establish policies and plan research, education, and health-promotion programs which will help improve the current health status of the population and prevent future health problems.

By computing prevalence rates for the population as a whole and for specific age-race-sex groups (e.g., 30-35 year old white females), researchers can determine which subgroups of the population would benefit most from specific programs and policies. For example, information collected in this survey will help FDA decide whether to implement calcium fortification regulations for the nation's food supply and how best to implement the fortification program, if needed. Data from this survey will be used to revise the growth charts which are used widely by pediatricians to monitor the growth of children.

Study participants are first interviewed at their homes and asked detailed demographic, socioeconomic, and health-related questions. Extensive physical examinations by highly trained medical personnel, additional health interviews, dietary interviews, and biochemical tests on biological specimens are then conducted in specially equipped mobile examination centers (MECs). Persons who cannot or will not come to the MEC for the full-scale examination are asked to undergo certain parts of the exam at their homes.

In addition to using these data as a baseline for future follow-up studies and analysis, some blood and urine specimens collected in this survey will be stored. Biological specimen banking will be of value in the future as new techniques are developed to measure exposure to environmental contaminants or disease agents or when new health problems are recognized. Biological specimen banking will be used to permit future laboratory analyses for:

- Estimating the prevalence of factors of current interest but for which acceptable testing protocols do not yet exist (e.g., pesticides);

- Estimating the prevalence of factors of emerging importance (e.g., chlamydia subtypes, various types of non-A, non-B hepatitis); and

- Conducting studies to look for the specific causes of diseases (e.g., bacteria, viruses, toxic materials).

Four areas have been selected for special emphasis in NHANES III: child health; health of older Americans; occupational health; and environmental health.

Child Health. NHANES III will help researchers assess the physical and emotional health status of children in the U.S. Communicable diseases, such as influenza, measles, and chickenpox, are not the only causes of illness and disability in the young. The focus of the childhood component of NHANES III will be on:

- Chronic diseases (heart and lung diseases);

- Allergic conditions;

- Immunity to various infectious diseases;

- Nutritional status;

- Cognitive functioning (ability to function in the activities of daily life);

- Physical growth;

- Disorders of hearing and dentition; and

- Blood lead levels.

Older Americans. The U.S. has experienced dramatic growth in the number of older people during this century. These demographic changes have major implications related to health care needs, public policy, and changing research priorities associated with older Americans. Recognizing this, NCHS is working with a consortium of public health service agencies to improve information on the health of the elderly. NHANES III is designed to fill many of the gaps in our knowledge of the health of older people. The survey component for older persons focuses on physical health status and aspects of functional health status. The key components for this part of the survey are:

- Osteoporosis and the evaluation of lower extremity function, including risk of falls and fractures;

- Musculoskeletal function, focusing on osteoarthritis, as a major cause of disability in older persons;

- Nutrition, including the evaluation of obesity;

- Cardiopulmonary diseases, which are major causes of illness and death in older persons;

- Physical function (individual's capacity for self-care);

- Cognitive function (ability to function in the activities of daily life); and

- Social function (ability to live independently).

Occupational Health. This component of the survey will focus on exposures in the workplace, such as noise, chemicals, and dust, which may be associated with specific health problems, such as neurological problems, lung disease, and musculoskeletal injuries.

Environmental Health. The environmental health research topic for NHANES III focuses primarily on studying exposure to toxic metals and chemicals, such as pesticides, by examining blood specimens for levels of various metals and chemicals in the blood.

Westat is a survey research firm which has been awarded a contract by NCHS to carry out data collection activities for the survey. Westat is responsible for selecting the survey sample, scheduling and

planning study procedures, developing the survey materials, such as manuals and forms, hiring and training field personnel, making advance arrangements for each stand, conducting community outreach activities, setting up and maintaining field offices and Mobile Examination Centers (MECs), scheduling and conducting screening interviews and extended interviews in the household, conducting interviews and physical examinations in the MECs, designing and carrying out quality control procedures, transmitting data to NCHS, and shipping biological specimens to various laboratories in the U.S. The examination and interview components of this survey have been designed in close collaboration with the Federal agencies which will use the resulting data for program planning and regulatory and research purposes. The following agencies have been involved in designing NHANES III:

Agencies of the National Institutes of Health, Public Health Service

- National Heart, Lung and Blood Institute (NHLBI);

- National Cancer Institute (NCI);

- National Institute of Child Health and Human Development (NICHD);

- National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK);

- National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMSD);

- National Institute of Dental Research (NIDR);

- National Institute of Mental Health (NIMH);

- National Institute of Neurological and Communicative Disorders and Stroke (NINCDS); and

- National Institute on Aging (NIA).

Other Federal Agencies

- Environmental Protection Agency (EPA);

- Food and Drug Administration (FDA);

- National Institute of Occupational Safety and Health (NIOSH); and

- National Institute of Environmental Health and Safety (NIEHS).

1.2 History of the Health and Nutrition Examination Survey

The National Health Survey Act, passed in 1956, provided the legislative authorization for a continuing survey to collect statistical data on the amount, distribution, and effects of illness and disability in the United States. In order to fulfill the purposes of this Act, it was recognized that data collection would involve at least three sources: the people themselves by direct interview; clinical tests, measurements, and physical examinations on sample persons interviewed; and places where persons received medical care such as hospitals, clinics, and doctors' offices.

To collect data by interview and physical exam, NCHS conducted four separate examinations surveys between 1959 and 1976. The first Health Examination Survey (HES I) focused mainly on selected chronic diseases of adults aged 18 - 79. HES II and HES III, conducted between 1963 and 1970, focused primarily on the growth and development of children.

The fourth survey introduced a new emphasis: the study of nutrition and its relationship to health status. This had become increasingly important as researchers began to discover links between dietary habit and disease. In response to this concern, under a directive from the Secretary of the Department of Health, Education and Welfare, the National Nutritional Surveillance System was undertaken by NCHS. The purpose of this system was to measure changes in nutritional patterns over time. However, a special task force recommended that the continuing surveillance system be expanded to include clinical observation and professional assessment as well as the recording of dietary intake patterns. Thus, the National Nutritional Surveillance System was combined with the Health Examination Survey to form the National Health and Nutrition Examination Survey, NHANES.

NHANES I, the first cycle of the NHANES studies, was conducted between 1971 and 1974. This survey obtained a national sample of about 21,000 persons between the ages of 1 and 74 years of age. Extensive data on health nutrition were collected by interview, physical examination, and a battery of clinical measurements and tests from all members of the sample.

The planning process for NHANES II was carried out in 1974 and 1975 in collaboration with other Federal agencies. Throughout the planning stage there was continual awareness of the necessity of making the data collection for NHANES II comparable to the first NHANES survey so that NHANES I data could serve the purpose of providing a baseline for assessing changes overtime. This means that many of the same measurements had to be taken the same way on the same age segment of the U.S. population in both surveys. The NHANES II survey began examinations in February 1976 with the goal of interviewing and examining 21,000 persons between the ages of 6 months and 74 years. This survey was completed in 1980.

In addition to NHANES I and NHANES II, a special survey of the U.S. Hispanic population, HHANES, was undertaken to provide information on the health and nutrition status of Hispanics comparable to that obtained for the general U.S. population. The survey was completed in 1984. A fourth NHANES project, the NHANES Epidemiologic Followup Survey, was recently completed. This study was an effort to conduct followup interviews with the sample population, now aged 35-84, who were interviewed and examined in NHANES I between 1970 and 1974.

NHANES III is the third cycle in the NCHS series of surveys to collect data on the health and nutrition of the people of the United States through interviews and physical examinations. As in previous NHANES cycles, the survey's primary purpose will be to produce descriptive statistics that can be used to measure and monitor the health and nutritional status of the civilian, noninstitutionalized U.S. populations.

The plan is to administer a household interview and a 4-hour examination consisting of medical procedures, biochemical tests, and questionnaires to 40,000 sample persons aged 2 months and older over a period of approximately 6 years. The survey will be conducted in 2 rounds of about 3 years each in approximately 88 locations across the country.

NHANES III will serve to collect public health data for use in evaluating the health status of the U.S. population and determining how health status is affected by social and economic conditions. The wide range of statistics produced will be valuable for:

- Estimating the prevalence of selected diseases and conditions;

- Assessing health and nutritional status;

- Determining needs for health care;

- Analyzing relationships between health measures and risk factors; and

- Evaluating aspects of health and nutrition.

A number of longitudinal studies which use NHANES III data as baseline data are planned. These studies will follow the sample persons interviewed and examined during NHANES III over a period of years to attain measures of changes in health status and to study human growth and development in detail.

1.3   About Westat

Westat is an employee-owned research firm founded in 1961 and located in the Metropolitan Washington, DC area (Rockville, Maryland). Westat is recognized as one of the leading research firms engaged in survey research, program evaluation, mathematical and statistical analysis, and computer applications. Although primarily involved in conducting surveys for agencies of the Federal Government, the company has also served local government agencies, universities, professional societies, nonprofit institutions, and commercial enterprises.

The professional staff of more than 450 includes statisticians, epidemiologists, psychologists, sociologists, survey managers, market research analysts, economists, and computer systems analysts with specialized knowledge in health, labor, housing, and education. A highly trained nationwide field staff of supervisors, interviewers, and survey assistants provides additional support to the organization.

A large number of the studies Westat manages are concerned with the health of various subgroups of the population. The success of these projects can be attributed in part to the company's ability to enlist the cooperation of individuals and groups in the communities where the studies are conducted. For instance, it may be necessary to obtain cooperation from state or local government officials, professional associations, hospital administrators, citizen groups, and individuals.

Many of Westat's studies in the area of health involve nationwide data collection efforts in hundreds of different communities. For example, in 1979-80, Westat enlisted 38,000 U.S. school children in a study to estimate the prevalence of dental caries (cavities) and other oral health problems in that population. A second dental survey conducted in 1986-87 involved 45,000 school children. Fourteen teams, each with a dentist, a data recorder, and 2 coordinators, traveled to schools across the U.S. to collect data from students via dental examinations and interviews.

1.4 Pretest and Main Survey Schedules

1.4.1 Pretests

1.4.1.1 Purpose of the Pretests

Before any large-scale data collection effort is started on a survey, one or more pretests are conducted. During a pretest, field procedures and data collection instruments are tested and evaluated, then refined by the researchers. Field procedures are carried out just as they would be in the main study, but during the pretest a much smaller group of sample persons is selected. After the completion of a pretest, a series of meetings is held and suggestions for improving the field procedures and data collection instruments are incorporated into the plans for the main study. In this way, potential problems are resolved before the main survey begins, although it is inevitable that some unanticipated problems will arise as the study progresses.

1.4.1.2   Summary of the Pretests

Since NHANES III is so large and complex, four pretests were scheduled from September 1987 through December 1988.   The first three pretests were conducted at different sites to evaluate the performance of the field procedures in various locations. The fourth pretest, or "Dress Rehearsal" was conducted in October 1988 and was intended to provide a final practice of all procedures before the main survey was initiated.   Following is a summary of the pretests, the locations, the number of sampled persons (SPs), and the procedures tested.

Pretest I

LOCATION: Los Angeles, California
DATE: October 1987
DURATION: Six weeks
NUMBER OF SPs: 450
Questionnaires and interviewer field procedures were tested and evaluated.

Pretest II

LOCATION: Washington, D.C.
DATE: October - December 1987
DURATION: 9 weeks
NUMBER OF SPs: 600
MEC procedures and examinations tested.

Pretest III

LOCATION: Tampa, Florida
DATE: February - March 1988
DURATION: Six weeks
NUMBER OF SPs: 500
All office, interviewing and MEC procedures tested.

Pretest IV ("Dress Rehearsal")

LOCATION: College Park, Maryland
DATE: October 1988
DURATION: 6 weeks
NUMBER OF SPs: 450
Final testing of all procedures

1.4.2 Schedule for the Main Survey

Data collection for the main survey of 40,000 sample persons (SPs) began in September l988 and will be conducted in 2 cycles of approximately 3 years in length. Field office staff, interviewers, and 2 examination teams will travel to approximately 44 locations throughout the U.S. in each cycle. The average stand size will be about 450 SPs (within a range of 300-600 SPs). At any given time during the survey, examinations will be conducted at two stands simultaneously for 10 1/2 months of the year. There will be breaks of about 2 weeks around Christmas and about 2 weeks during the summer.

1.5 Sample Design

A sample is defined as a representative part of a larger group. Surveys involve studying a sample of persons rather than conducting an expensive and time-consuming census whereby every person in the population of interest is studied. Since it is impossible to interview and examine everyone in the U.S. for NHANES III, a representative sample is taken of the nation's population. At the conclusion of the study, estimates will be made of the prevalence of various health conditions and risk factors for the entire U.S. population, based on what is learned from the sample of people studied in the survey. By studying a representative sample of the population, it is assumed that the findings would not have been too different had every person in the U.S. been studied. Because generalizations about the population will be made, it is extremely important that the sample be selected in such a way that it accurately represents the whole population. Statisticians must calculate the size of the sample needed and take into consideration the geographic distribution and demographic characteristics of the population such as age, sex, race, and income.

After a decision has been made on the size and characteristics of the sample, the next step is to determine the method of drawing the sample. For NHANES III, a multi-stage approach is being used.

Stage 1:   Sampling PSU's.

The U.S. is divided into geographic regions called Primary Sampling Units (**PSU's**). Each PSU is a county or small group of contiguous counties. At the home office, Westat statisticians randomly select 88 PSU's to be included in this study. The probability (likelihood) of a PSU being selected depends on its size (i.e., the more people who live in the PSU, the more likely it will be sampled). Each PSU that is selected is called a **stand**. Exam teams will travel to each of the 88 stands to conduct exams and interviews in the MECs.

Stage 2:   Sampling BG/ED's.

Each selected PSU is comprised of block groups (**BGs**), defined by the Census Bureau, or enumeration districts (**ED's**). The home office randomly selects BG/ED's to be included in the study. Similar to Stage 1, the probability of a BG/ED being selected depends on its size.

Stage 3:   Sampling segments.

Each BG/ED is comprised of **segments** which are clusters of homes. Segments are randomly selected to be included in the study. The larger the segment the more likely it is to be selected. Project staff called listers go to each segment and, using special forms, list the addresses of all dwelling units (houses, apartments, mobile homes) in that area.

Stage 4:   Sampling households from the field listing.

Not all households in a stand are selected for the study. Home office project staff randomly select households from the field listings.

Stage 5:   Selecting eligible persons (screening).

Field interviewers go to each sampled household identified in Stage 4.   The interviewer administers a 10-minute screening questionnaire (Household Screener Questionnaire) to determine the household composition and sex/race/age/ethnicity characteristics of the household members. Depending on the characteristics of the household, only certain households are selected for the final sample. Interviewers have written instructions from the home office on how to conduct this stage of sampling.

Stage 6:   Choosing Sample Persons in the selected households.

Following the screener sampling instructions, in a typical household 2-3 persons will be selected. However, in some households we may select none and in others as many as 10. Each individual selected for the study is called a **Sample Person (SP)**.

1.6   Personnel and Reporting Relationships

There are two different organizations conducting NHANES III. The National Center for Health Statistics (NCHS) is the government agency sponsoring, and ultimately responsible for, the survey. NCHS has contracted with Westat to conduct the field operations for the survey. NCHS staff and consultants from both NCHS and Westat participate in staff training programs and pretest activities, and periodically visit the field operations during the main survey.

As a member of the exam team staff, you are an employee of Westat and will report directly to Catherine Novak, Director of MEC operations for the Westat staff. Exhibit 1-1 shows the formal reporting relationships for the project. Renee Slobasky serves as the NHANES project director for the Westat home office. Dr. Carla Maffeo, technical director for examinations at Westat's home office, is responsible for technical issues, such as how an exam procedure or biochemical test should be done. Exam or personnel matters should be discussed with the Director of MEC operations. The MEC manager, who is responsible for day-to-day activities of the MEC at the stand, should be consulted for such questions regarding the automated system, equipment, supplies, data collection, sterilization of instruments, storage and shipment of data and specimens, and administrative issues.

Exhibit 1-1. Reporting relationships
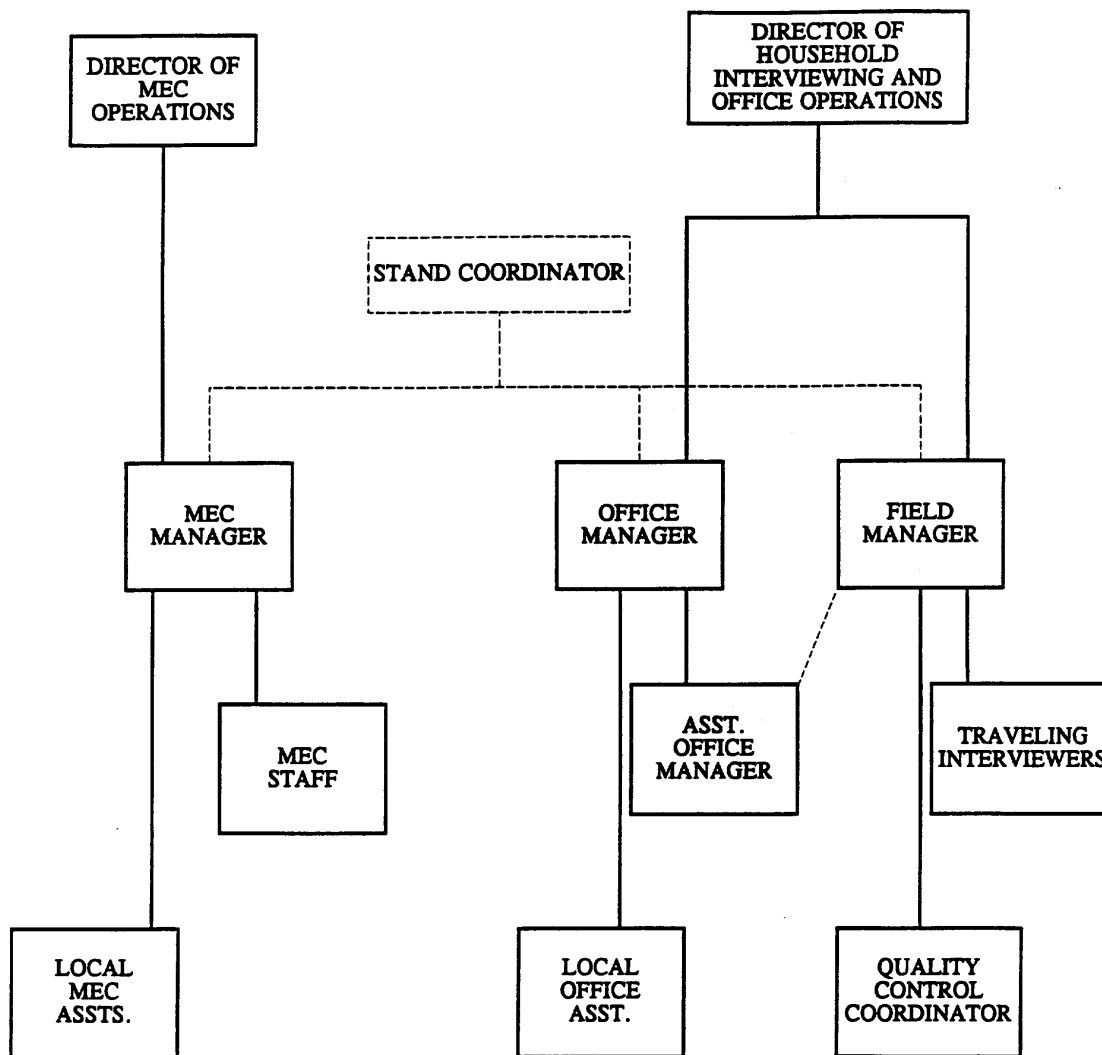
A Stand Coordinator is also designated for each stand and will be responsible for coordinating stand activities with the other on-site managers.

1.7 Advance Arrangements for a Stand

1.7.1 Schedule for Advance Arrangements

Exhibit 1-2 summarizes the schedule for a stand. Advance arrangements begin in Westat's home office at least 10 weeks prior to the start of interviewing at a stand. Members of the advance arrangements team study maps and familiarize themselves with the layout of a stand, location of sampled segments, major highways and arteries, public transportation, and sites that appear appropriate for location of the MEC. Once they have a basic knowledge of the layout of the area, they contact local officials identified by our outreach program as prospective knowledgeable informants and make arrangements to visit the prospective stand.

The field office is opened at least 1 week prior to the start of household screening and interviewing. During that week the rental furniture and office equipment arrive, supplies shipped to the site from the home office are unpacked, telephones are installed, and computer systems are tested. A member of the advance arrangements team is at the stand during this period.

At least 1 week before examinations begin, the MEC is delivered to the prearranged site. The MEC manager will be on hand to receive the trailers and direct their location and leveling by the shipping firm, to oversee the hookup of electricity and plumbing lines by local contractors, and to verify the presence of the previously arranged security. After the trailers are set up, examination staff members unpack, calibrate and test the equipment. Medical and laboratory supplies delivered to the MEC are unpacked and stored. These preparations are scheduled and managed so that the MEC is ready for its dry run prior to the first scheduled examinations.

Exhibit 1-2. Stand schedule

Weeks	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
ADVANCE ARRANGEMENTS	X	X																				
LISTING		X	X																			
FIELD OFFICE OPEN										X								X				
INTERVIEWING											X						X					
TRAILERS AT STAND														X								X
TRAILER SET-UP														X	X							
DRY RUN																X						
EXAMINATIONS																X					X	
CLOSE STAND																						X

1.7.2   Community Outreach Activities

Westat and NCHS have developed a comprehensive and effective outreach program. This program is directed from the Westat home office under the supervision of the Director of Advance Arrangements, Jack Powers. Outreach activities are initiated prior to entering a stand and continue throughout the period of interviewing and examinations.

The purpose of the outreach activities is to inform public officials and potential participants about NHANES III. In informing public officials, regardless of whether their active support is sought, it is hoped that by providing information the study will be recognized as a legitimate and important research effort. The goal of outreach programs directed to potential sample persons is not only to provide information, but to encourage them to take part in an important study.

Westat directs the outreach program to audiences at the national, regional, state and local levels. Through Westat, public officials receive a letter from NCHS describing the survey, a fact sheet explaining technical aspects of the study, and a brochure.

It is important to establish a positive relationship with local health officials and other community representatives as their active support will help legitimize the survey. These persons can also assist during advance work by providing an introduction to other community officials whose cooperation may be important to the survey.

Westat has developed a community outreach program to be activated in each stand incorporating various types of media. The goal is to reach as many of the target populations as possible via radio, television and newspapers in each community. Posters and flyers, in English and Spanish, will be distributed and posted in highly frequented areas, such as churches and community centers, shopping centers and high-rise apartment buildings.

Another purpose of the outreach program is to identify local physician's and dentist's offices or clinics to which the examination reports of findings may be sent for those SPs who are referred for immediate medical or dental care but who report no regular source of health care.

1.8   Data Collection

Data for NHANES III are collected in two phases:

■   Household interviews in which SPs are asked detailed demographic, socioeconomic, and health-related questions; and

■   Extensive physical examinations, dental examinations, health and dietary interviews, and laboratory tests on biological specimens conducted in mobile examination centers (MECs).

The household component and MEC component are discussed in more detail in the following section.

1.8.1   The Automation System

An automated system has been developed for survey control and capture of interview and examination data in the field. In the MEC, this system will collect, record, account for and transmit examination and interview data. In addition, the computerized flow system will process examinees through the MEC. A more detailed explanation of the MEC Automation System is given in The NHANES III Laboratory Automation System Manual.

1.8.2   Household Interviews

The field interviewers conduct all household interviews and schedule appointments for examinations in the MEC.

1.8.2.1   Advance Letter

As mentioned in Section 1.5, certain households are sampled for the survey. Before an interviewer contacts a household, the Westat home office mails an advance letter to the household.

The advance letter is an important tool for introducing and legitimizing the study. The letter clearly states the purpose and importance of the study, a respondent's rights as a participant, including the confidentiality of information given and the voluntary nature of participation, and indicates that an interviewer will be coming to the household in the near future.

1.8.2.2   Household Screening Interview

Upon arriving at a home, interviewers are instructed to show the advance letter at the door (if the respondent has not seen or does not remember the letter), the screener brochure, and his/her survey I.D. badge.

- **The Household Screener Questionnaire** is administered to one eligible respondent living in the selected dwelling unit who is at least 17 years of age and preferably the head of the household. It includes an introduction, a household enumeration section (including a series of questions identifying secondary families), and an eligibility criteria section collecting information on age, sex, and race or ethnic background. The Screener takes about ten minutes to administer. Once the interviewer has determined that at least one person in the household is eligible to participate in the survey, he/she attempts to administer the family questionnaire, the medical history interview and make an examination appointment. During this process, each selected respondent receives a sample person brochure.

- **The screener brochure** contains a brief description of the study and provides answers to typical questions a respondent might have during initial contact.

- **The sample person brochure** contains more detailed information on the extended interview and examination component of the study. The interviewer distributes this brochure to eligible respondents upon completion of the screening. The brochure describes the examination to be conducted in the MEC and, like the screener brochure and advance letter, emphasizes the purpose and importance of the study, voluntary participation and confidentiality of the information provided. It also includes the Informed Consent Form.

1.8.2.3 Informed Consent

■ **Consent form**. The last page of the Sample Person Brochure contains the consent form. The SP must sign the form as an indication of his/her willingness to participate in the study. If the SP does not wish to sign the consent form at that time, he/she may bring the signed form to the MEC at his/her scheduled exam time, or may have additional questions answered at the MEC before signing the form. A refusal to sign the consent form is considered a refusal to participate in the examination phase of the study. Examinations will not be conducted on sample persons who do not return a signed consent form. To participate in the household interviews, an SP only needs to give verbal consent.

For minors the signature of a parent or guardian is required on the consent form. Minors over the age of 12 years are also asked to sign the form as an indication of agreement to participate.

By signing a consent form, a person gives permission for the SP to have the extensive physical exam in the MEC (or the home health examination). A copy of the Home Health Exam Fact Sheet will be given to each SP who is offered the home examination option.

1.8.2.4 Extended Household Interviews

■ **The Family Questionnaire** is administered to one eligible respondent in each family who is at least 17 years of age and preferably the head of the household. Information is collected on family relationships, demographics, health insurance, housing, and income. It also contains instructions for within household sampling.

■ **The Sample Person Questionnaire** is administered to each sample person or an eligible proxy. A detailed health history is collected on each sample person. The extended interviews require about 40 minutes for each SP. There are two versions of the SP Questionnaire, one for adults and one for youths. Information about SPs who are 2 months to 16 years old is obtained through direct interviews with a proxy, such as the child's parent.

1.8.2.5   Exam Appointments

Interviewers make appointments for SPs to receive physical examinations at the MEC. The interviewer calls the field office to obtain an exam appointment time. If the SP agrees to the time, the information is entered into the field office Automated Survey Management System.

1.8.2.6   English and Spanish Study Materials

The advance letter, brochures, consent form, and household questionnaires are printed in both English and Spanish. Bilingual interviewers use the language with which the respondent feels most comfortable.

1.8.3   Exams and Interviews in the Mobile Examination Center (MEC)

1.8.3.1   The MEC

Examinations and interviews are conducted in specially equipped and designed mobile examination centers (MECs) each consisting of four trailers. Each trailer is approximately 45 feet long and 8 feet wide. The trailers are drawn by detachable truck tractors when moving from one geographic location to another. At an examination site, such as a hospital parking lot, the four trailers are set up side-by-side and connected by enclosed passageways. At any given time during the survey, there are two MECs set up at two different stands and a third MEC is either in transit or in for maintenance.

Exhibit 1-3 shows a floor plan for the MEC. The interior of each MEC is designed specifically for this survey and incorporates many customized features. For example, the trailers are divided into specialized rooms to assure the privacy of each study participant during the exams and interviews. Also, the audiometry room is soundproofed and the X-ray room shielded with lead. The MEC houses all of the state-of-the-art equipment and supplies necessary for the exams and biochemical tests conducted in the MEC.

1.8.3.2   Exam Sessions

The MEC remains at a stand for approximately 6 weeks (range 4-8 weeks). During that period, the MEC operates 5 days a week including weekday, evening and weekend sessions. Two 4-hour sessions are scheduled each day with 10 examinees per session.

Exhibit 1-3. Floor plan of MEC
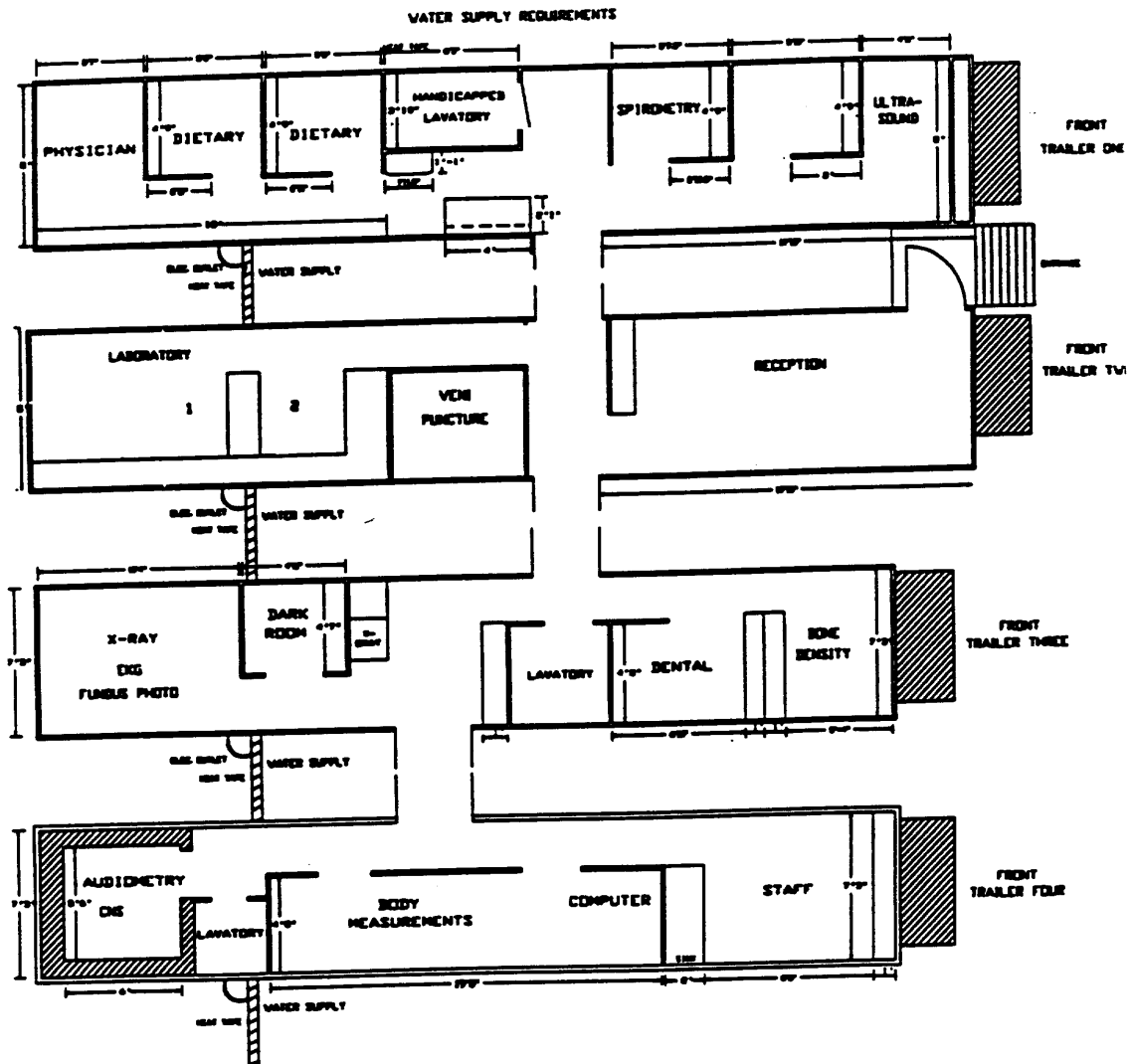
Exhibit 1-3. Floor plan of MEC (continued)

Trailer	Room	Room Use
Trailer I	Physician	Physical examination by a physician
	Dietary	Dietary and food frequency interview
	Dietary	Dietary and food frequency interview
	Interview	Cognitive test and neurological tests
	Spirometry	Tests lung function
	Ultrasound	Ultrasound exam for gallstones
Trailer II	Waiting Area	Waiting area for sample persons
	Reception	Welcoming station and public waiting room
	Venipuncture	Drawing of blood samples, GTT
	Lab	Centrifugation preparation and analysis, blood processing, hematology and blood chemistry laboratory
Trailer III	X-ray/ECG/	X-rays of hand, knee; test heart function
	Fundus Photography	Photo of the fundus of the eye
	Dental	Dental exam by a dentist
	Bone Densitometry	Measures bone density
Trailer IV	Audiometry	Hearing tests
	Body Measurements/ Allergy	Height, weight, and other physical measurements/Allergy testing
	Computer	Storage of collected data
	Lounge	Staff

1.8.3.3 Exam Team Responsibilities

The two exam teams travel from stand to stand to conduct the exams and interviews in the MECs. There are 16 individuals on each traveling team. In addition, a local assistant will be recruited, trained, and employed at each stand to assist the exam staff. The duties of the exam team members are summarized below.

- One coordinator directs the flow of SPs through the MEC examination process. The coordinator manages all SP appointments, prepares the SP examination folders, and verifies that all exam components have been conducted and recorded before the SP leaves the MEC.

- One physician reviews the SP's medical history, conducts the medical examination, and records the results of the exam. The physician also reviews the X-rays, the results of the blood test (CBC) and the ECG.

- One dentist conducts the dental exam and "calls" the results to a health technician who records the dentist's exam findings.

- One health interviewer administers questionnaires for cognitive and neurological tests and records the results.

- Two dietary interviewers administer the SP dietary questionnaire. During the interview the interviewer records (a) a 24-hour dietary recall of the types and amounts of all foods and beverages consumed by the SP in the last 24 hours and, on selected SPs, (b) food frequency information regarding how often certain types of foods were consumed by the SP in the past month.

- Four certified radiologic health technologists take and record body measurements, X-rays, bone densitometry, pulmonary function tests (spirometry), ECGs, photos of the fundus of the eye, administer audiometry and allergy exams, and record the dental exam findings. The duties of the health technicians are assigned on a rotating basis.

- One certified ultrasonographer performs sonography of the gallbladder, and also assists health technicians in performing selected other tests such as allergy, audiometry, spirometry and body measurements.

- Three certified medical technicians/technologists conduct clinical laboratory tests on blood and urine specimens, record the results of tests, and prepare and ship specimens to various laboratories.

- One certified phlebotomist administers the phlebotomy questionnaire, draws blood from SPs, and administers Trutol for the glucose tolerance test (GTT).

■   One home health technician conducts home exams, and works as a health technologist and a laboratory technologist when there are no home exams scheduled.

Each MEC staff member is part of a team of professional persons with specific assignments that must be completed in order to accomplish the overall objective of the National Health and Nutrition Examination Survey. Each individual must be aware of and respect the job demands placed upon other staff members, maintain an attitude of tolerance and consideration for fellow members of the team, and willingly perform any extra tasks that may be assigned to support other staff members in the performance of their duties. MEC staff members may be requested to perform tasks not directly related to their specific professional skills in order to implement the overall data collection plan. Team members will rotate periodically to prevent the introduction of bias into the exam results due to "team effects" .

1.8.3.4   Exam Components

Each SP exam takes up to 4 hours. The actual length of time depends on the age of the SP, as some exam components are only done on certain age groups (adult SPs tend to receive more extensive exams). Exhibits 1-4 and 1-4a present lists of exam components for each age group. Exhibit 1-5 presents an estimate of the number of minutes for each exam component.

Some blood specimens are analyzed in the MEC by the medical technologists while other specimens are sent to various laboratories in the U.S., such as the Centers for Disease Control (CDC), and have special storage and shipping specifications.

1.8.3.5   Sample Person Remuneration

SPs who complete all or part of the exam in the MEC are given a monetary token of appreciation for their time and effort. This remuneration is in addition to the payment for transportation expenses. Adult examinees will receive $30 or $50, depending on whether they accept an appointment at a particular time. Also adults who receive special components, such as the volatile toxicants study, will receive additional remuneration. Children will receive $30.00.

Exhibit 1-4. Examination components by age groups

2-11 mos.	1-5 yrs.	6-19 yrs.	20 yrs. +
Physician exam	Physician exam	Physician exam	Physician exam
Body measurements	Body measurements	Body measurements	Body measurements
Dietary interview	Dietary interview	Bioelectrical impedance	Bioelectrical impedance
Dental exam	Dental exam	Dietary interview	Dietary interview
	Venipuncture	Dental exam	Dental exam (up to 74)
		Tympanic impedance	Venipuncture
		Venipuncture	Urine collection
		Audiometry	Cognitive tests (60+)
		Urine collection	Neurological tests (20-59)
		Cognitive tests	Allergy skin test (20-59)
		Allergy skin test	Spirometry
		Spirometry	Joint X-ray (60+)
		MEC questionnaire	Electrocardiogram (40+)
			Glucose tolerance test (40-74)
			Ultrasound (up to 74)
			Bone densitometry
			Physical function (60+)
			Fundus photography (40+)
			MEC questionnaire

Exhibit 1-4a. NHANES III Examination Components

Components	Ages
Physician exam	all
Phlebotomy	1+
GTT	40-74
Body measures	all
24-hour recall	all
Food frequency	6-19
ECG	40+
Bioelectrical impedance	12+
Spirometry	8+
Dental	2 mos-74
Bone densitometry	20+
Ultrasound	20-74
Allergy (adult half sample)	6-59
Physical function	60+
Cognitive function	60+
MEC questionnaire-adult + Dis	20+
MEC questionnaire - youth	6-19
MEC questionnarie - proxy youth	20-39
CNS (half sample)	20-59
Cognitive testing-child	6-19
Joint X-ray	60+
Audiometry/tympanometry	6-19
Urine collection	6+
Fundus photography	40+

Exhibit 1-5. Estimated number of minutes for each exam component

EXAM COMPONENTS	SAMPLE PERSON LENGTH OF TIME (IN MINUTES)
Physical Exam	10
Body Measurements	9
Bioelectrical Impedance	3
Dietary Interview	19
Food Frequency (12-16)	12
Fundus Photography	6
Dental exam	8
Tympanic Impedance	5
Venipuncture, GTT	19
Audiometry	10
Cognitive and Neurological Tests and Health Interview	30
Allergy Skin Test	7
Spirometry	11
X-rays of Hand, Knee	8
Electrocardiogram (ECG)	13
Ultrasound	10
Bone Densitometry	16

1.8.3.6   Report of Exam Findings

For each SP examined in the MEC, the routine blood pressure and dental findings will be reported to the examinee prior to his/her leaving the MEC. A report of all other findings will be generated by the automated system at NCHS summarizing the findings of the physical exam and biochemical tests. This Report of Findings form will be produced **after** the stand is closed, and **mailed** to the SP.   The dentist completes a report of the dental exam findings which is alsogiven to all SPs. Additionally, for SPs who are referred for immediate medical or dental care, a report is sent to the SP's personal physician, dentist or clinic. If the SP does not have a personal physician, dentist or clinic, a list of community clinics will be shown to the SP by the MEC coordinator who will encourage the SP to choose one; the report of the physician's/dentist's findings is then sent to that clinic. If the SP refuses to choose a health care provider, the report of the physician or dentist's findings is given to the SP.

In the MEC, in those instances when the physician or dentist finds a condition that warrants immediate attention from the ECG, hematology, X-ray, dental, or blood pressure results, or from an unexpected incident, the physician or dentist will contact the SP's health care provider by telephone.

1.8.3.7   Dry Run

At the beginning of each stand, members of the MEC staff will devote one-half day to calibrating instruments and practicing MEC procedures. Since the MEC will be moving from one stand to another, it is important to check the equipment before exams begin to make sure everything is working properly. If there are problems with any of the equipment, including the automated system, the stand manager must be informed so that malfunctions can be repaired before the real exams begin. In addition to calibrating instruments, the dry run will give MEC staff an opportunity to practice their assigned duties, including setting up equipment and supplies, verifying instrument quality control results, sterilizing instruments, processing examinees through the MEC, interacting with other MEC staff members and examinees, performing exam procedures, recording exam results on the automated system, completing required forms, and shipping data and specimens to Westat and various laboratories. All procedures in the dry run will be completed as though the actual study were being conducted. The only difference is that in the dry run the examinees will be volunteers who are not part of the actual sample for the main

study or pretests. To solicit volunteers from the community, someone from the field office may post an advertisement at a local grocery store. Other volunteers may include local officials who want to see first-hand the type of exams to be conducted, field office staff, field interviewers, and MEC staff.

Problems identified during the dry run will be discussed by the MEC manager and MEC staff. Based on the results of the dry run, certain procedures may need to be modified or additional quality control procedures may be instituted by the home office in order to overcome or alleviate identified problems.

1.8.4   Home Exams

An examination in the home will be available for selected SPs who are wheelchair or bed-bound or unable or unwilling to go to the MEC for an examination. The household interviewers will determine when an SP should be offered the home exam, and the field office will schedule the appointment. If the SP is reluctant to participate in a MEC exam, every attempt will be made to persuade the SP to agree to an exam, either at the MEC or in his/her home. Because of equipment and staffing considerations, only certain exam components can be conducted in the home. For instance, any equipment required for the home exams must be portable and relatively compact when packed. Exhibit 1-6 lists the exam components which are conducted in the homes of SPs. As with the full-scale MEC exam, the components of the exam depend on the SP's age.

The home examiner conducts the examination of SPs in the home. All tests are completed on-site with the exception of the blood tests, which are prepared and shipped from the MEC. After completing an SP exam, the home examiner will return to the MEC with the blood tubes and enter the results of the home examination phlebotomy into the automated system in the laboratory. The blood is processed and shipped with the blood collected in the MEC.

SPs who complete the home exam are given $15 as a token of appreciation for their time and effort. This is less than the remuneration for the MEC exam because the home exam is less extensive.

Exhibit 1-6. Home exam components

| COMPONENTS | AGE | | |
	2-11 months	20-59 years	60+ years
Body Measurement (Height, Weight, Mid-Arm Girth & Tricep Skinfold)	X	X	X
Head Circumference	X		
Venipuncture		X	X
Spirometry		X	X
Cognitive Tests			X
Physical Function Exam			X
Infant Food frequency	X		
Selected Conditions/Medicine, Vitamin & Mineral Usage/Tobacco/ Reproductive Status		X	X
TIME (Minutes)	10	40	50

1.8.5   Special Studies

At times during the study, special projects may be implemented to obtain information about a specific area of interest, as NHANES III provides an unusual opportunity to capture large amounts of data in an efficient manner. The volatile toxicant study is one such special study.

1.8.5.1   Volatile Toxicants Study

The volatile toxicant study is being sponsored by the toxicology branch of the CDC as an additional component of NHANES III. Extra blood and urine samples are to be collected from 45 volunteers at each stand and analyzed by CDC for selected variables. Volunteers are paid $10 for participating in the study.

Recruitment for the study will begin on the first day of exams at each stand and continue until 45 sample persons have volunteered.   Only sample persons between the ages of 20 and 59 are eligible for the study.   The phlebotomist is responsible for recruiting sample persons at the time of the first venipuncture.   Because the MEC itself may be a source of some of the chemicals CDC is measuring in this study, the blood and urine samples must be collected as soon as possible after the sample person enters the MEC.

If a sample person agrees to participate in the study, one 10 ml gray top tube and one 10 ml non-silicone coated red top tube are obtained on the first draw. If this is not possible, the sample person will be asked if a second stick can be performed. If the SP is over the age of 40 years and will have a second venipuncture for the glucose tolerance test, the additional blood may be drawn at that time.

The required 45 ml of urine is obtained from the urine specimen which is collected when the sample person first enters the MEC, assuming that the first specimen is of sufficient volume to allow this. If the required amount of urine cannot be obtained from the initial sample, a second urine specimen will be collected.

The sample person is also asked to complete a self administered questionnaire as part of the volatile toxicants study. The phlebotomist collects the questionnaires from the coordinator at the end of the session and mails the questionnaire with the urine samples to CDC.

1.9   Confidentiality and Professional Ethics

All information collected for this study must be kept strictly confidential except as required by law. Since this study is being conducted under a contract with the National Center for Health Statistics, the privacy of all information collected is protected by two public laws: Section 308(d) of the Public Health Service Act (42 U.S.C. 242m) and the Privacy Act of 1974 (5 U.S.C. 552a).

Each person working on the study must be continuously aware of the responsibility to safeguard the rights of all the individuals participating in the study. Each study participant should be treated courteously, not as a sample number. Never divulge names or any other information about study participants except to the research team. Refrain from any discussions about study participants, in or out of the MEC, which might be overheard by people not on the survey staff. All of the members of the research team are under the same legal, moral and ethical obligations to protect the privacy of the SPs participating in the study.

When the study is finished, all of the collected information will be summarized by NCHS in a report. No participant names will be included in any reported results. Neither NCHS nor Westat is allowed to release information that would identify study participants without the consent of the participants.

Cooperation from the public is essential to the success of survey research. Westat expends a great deal of effort in obtaining cooperation from national, regional, state, and local officials and the general public. It is the responsibility of each person working for Westat to build on the company's reputation of integrity so that we can continue to have access to study participants during current and future studies; therefore, professional conduct both on and off the job is very important.

As you travel across the country for this study, you may find yourself to be very much in the public eye, particularly in the smaller towns where your presence is easily recognized. Each staff member has a responsibility to the Public Health Service and to Westat for promoting good public relations. The Public Health Service and Westat will be judged by the actions of the staff both on and off duty; consequently, you must be discreet in speech and actions. Your personal appearance and behavior must be governed by these same considerations. Be aware of the customs of the area and avoid any actions which might be interpreted unfavorably by the public, for example, parking a Westat vehicle in a questionable location. Please be aware of your "audience" at all times and try to avoid statements or actions that could shed an unfavorable light on Westat, the Public Health Service, or the survey.

You will be asked to sign a pledge of confidentiality before the survey begins. This pledge states that you understand that you are prohibited by law from disclosing any information obtained while working on the study to anyone except authorized staff of NCHS and Westat and that you agree to abide by the Assurance of Confidentiality.

This chapter of the manual was designed to provide you with general information about the study, including the advance work that Westat and NCHS completed prior to your joining the study staff. The remainder of this manual explains in detail your responsibilities in this study.

2.0   THE DIETARY INTERVIEW

2.1   Role of the Dietary Interviewer

The responsibilities of the dietary interviewer consist of the administration of two complementary, yet distinct interviews: the 24-hour recall for all SPs, and the food frequency interview for SPs ages 12 through 16 years. For both interviews, the information will be recorded on automated (computer) systems; coding is done automatically, not by the interviewer. In gathering the data for NHANES III, the dietary interviewer is the liaison between the respondent and the computer system.

The primary goal of the 24-hour recall is to collect a detailed list of all the foods and beverages the SP consumed within a 24-hour period, time and place of consumption, name of meal or snack and details needed for accurate food coding. Food models will be used to aid respondents in estimating amount of intake. The dietary interviewer establishes a rapport with the respondent, obtains the most accurate, objective, and complete data, and enters these data into the automated system. Throughout the interview, it is important that the dietary interviewer maintain his/her professionalism, while creating an environment in which the subject feels comfortable to respond freely.

The 24-hour dietary recall interview is comprised of two parts, the 24-hour recall and a short set of questions. Coded data from the 24-hour recall are linked to a data base of nutrient compositions of foods, and calculations of total daily vitamin and mineral intake (in addition to many other food constituents) will be derived from these data. The information obtained will be used for describing the dietary intake of the population and for studying the relationship between diet, nutritional status, and health. The 24-hour recall questions (the trailer questions), ask briefly about the respondent's usual intake, water consumption habits, use of salt, whether or not his/her food consumption is limited by financial resources, and who usually prepares the food at home.

The dietary interviewer also administers a food frequency for SPs ages 12 through 16 years, which is used to collect data on how often certain foods and beverages are consumed. For all SPs over age 16, the food frequency interview will be conducted by the household interviewer. A short proxy food frequency interview for SPs under 1 year of age will be administered by the MEC interviewer, or by the home health technician if the SP does not come to the MEC but has a home exam.

The 24-hour recall and the food frequency provide complementary data; the food frequency includes a one month recall period of "typical" or usual intake, and covers day-to-day variation in eating patterns. These data enable researchers to rank respondents by nutrient intake (e.g., high vitamin A or C intake) or food group intake. On the other hand, the 24-hour recall provides a detailed quantitative food intake record for a defined period, the previous day.

Other nutrition related data that will be collected in the household interview include questions on dietary practices, participation in meal programs, infant feeding practices, type of home water supply, history of anemia, height and weight history, lifestyle eating habits, and vitamin/mineral supplement and medicine usage.

While nutrition status is clearly related to overall health status, in particular, researchers from NCHS will focus on the dietary intake and nutritional status, and anthropometric measurements used for assessing growth and development, overweight/underweight, and body fat distribution. The anthropometric measures will also be used as reference data for new standards and for revision of the growth charts. Blood specimens will also be related to dietary intake by looking at low and high levels of nutrients such as iron, vitamin A, vitamin C and carotenoids.

Even though an automated system will be used throughout the MEC to record data, it is still necessary to know how to do a hand-written or hard copy interview. Whenever a computer problem exists, and the system is "down," the hard copy will be used to collect the data. Later, when the system is functional, the dietary interviewer will (on most occasions) enter the hard copy data into the computer.

The dietary interviewer may conduct the interview in English or Spanish. Since all SPs 2 months of age and above are eligible for the 24-hour recall, a proxy interview is generally conducted with a parent or guardian if the SP is less than 12 years old or is in someway incapacitated and not able to answer for himself/herself. However, for the 24-hour recall, children 6 to 11 years old may provide some dietary data and the interview is then conducted with both the child (SP) and proxy to obtain the most accurate information. Exhibit 2-1 summarizes the dietary components by age of SP, place of interview and who conducts the interview.

Exhibit 2-1. Summary of dietary components

Age of SP	Dietary Component	Place	Interviewer
Under 1 Yr	24-Hour Recall (Proxy)	MEC	Dietary
	Infant Food Frequency*	MEC	MEC
1 Yr to 5 Yrs	24-Hour Recall (Proxy)	MEC	Dietary
	No Food Frequency	-	-
6 Yrs to 11 Yrs	24-Hour Recall (SP, Proxy)	MEC	Dietary
	No Food Frequency	-	-
12 Yrs to 16 Yrs	24-Hour Recall**	MEC	Dietary
	Food Frequency**	MEC	Dietary
17 Yrs +	24-Hour Recall**	MEC	Dietary
	Food Frequency**	Household	Household

*   May be done during home exam
**   Proxy is used if necessary

2.2   Other Duties of the Dietary Interviewer

- Checking supplies each day at the start of the exam session - You must make sure that you have all the materials available to conduct interviews for that day. You should plan to get to the MEC 20 minutes early to check your materials.

- Inventorying materials at the beginning and end of a stand.

- Unpacking and packing supplies at the beginning and end of a stand - All supplies should be packed into boxes at the end of a stand in preparation for moving the MEC. You are responsible for unpacking supplies prior to the start of a stand in a new area.

- Adhering to the travel schedule - Westat will be providing you with a travel schedule for each stand. You are expected to follow this schedule.

- Conducting the dietary and food frequency interviews - You are responsible for conducting the dietary and food frequency interviews according to the specifications outlined in your manual, including market checks and data retrieval.

- Editing the dietary interview - You are required to edit your work and to review one recall per day of your dietary counterpart.

- Assisting other exam staff members with packing equipment, recording for other parts of the exam, etc., as time permits.

- Ordering additional supplies, when necessary.

It is important to remember that each member of the MEC team is hired to perform certain tasks. The work load and hours will vary per component. Since your responsibilities are very different from other team members, it is best to fulfill your tasks without making comparisons to the work load of other team members with different responsibilities.

2.3   Collaborators and Consultants

To better understand the dietary component of NHANES III and its development, it is also necessary to be familiar with its collaborators and consultants. The interview tools in use were developed by three major contributors, the National Center for Health Statistics (NCHS), the Nutrition Coordinating Center (NCC) at the University of Minnesota, and Westat. As mentioned in the introduction, Westat is under contract to the National Center for Health Statistics which is part of the Public Health Service (PHS) and one of the centers of the Centers for Disease Control (CDC).

The developmental process required testing, revising, and retesting by a team of representatives from several locations. Although many persons were involved in this process the primary representatives from NCHS were:

Division of Health Examination Statistics (DHES):
Ronette Briefel, Dr.P.H., R.D.
Clifford Johnson, M.S.P.H.

Health Examination Field Operations Branch (HEFOB):
Marie Mitchell

The Nutrition Coordinating Center (NCC) at the University of Minnesota designed the automated program currently in use, and also holds the copyright. The NCC is a research unit in the Division of Human Development and Nutrition, School of Public Health, University of Minnesota. The primary persons involved in the design of the automated Dietary Data Collection (DDC) system and construction of the foods database include:

Marilyn Buzzard, Ph.D., R.D.; NCC Director and Principal Investigator
Elaine Asp, Ph.D.; Food Science and Nutrition Department, Co-Investigator
Diane Feskanich, M.S.; Project Coordinator
Linda Dieleman, M.S., R.D.; Chief Database Nutritionist
Janet Ditter-Johnson; Nutritionist
Laurie McBane, M.P.H., R.D.; Nutritionist

NCC personnel primarily responsible for software development and computer operations include:

Kyun-Rak Chong, M.S.; Senior Systems Programmer
Bruce Welch; Analyst Programmer
Scott Kiesling; Analyst Programmer

Support for the development of the DDC system was provided by the National Cancer Institute (NCI), the National Heart, Lung and Blood Institute (NHLBI), the National Center for Health Statistics (NCHS) and the Food and Drug Administration (FDA).

3.0 GENERAL INTERVIEWING TECHNIQUES

This chapter provides a general introduction to the techniques of good interviewing. It presents some basic ideas about preparing for your interviews and explains the standard rules and procedures for administering the dietary interview.

3.1 Before Beginning the Interview

Before beginning the interview, take some time to make sure you are thoroughly prepared. Review your manual and other materials given to you during training until you fully understand all aspects of your job. Practice doing the interview until you are comfortable using the automated system and probing. This practice will help in building your confidence so that you can deal with any situations you may encounter when you begin interviewing. Your ability to work comfortably will help keep your respondents interested in the interview and will help your interviews go smoothly. Respondents quickly lose interest when the interviewer is constantly stopping, losing track of his/her place and stumbling in his/her efforts to ask questions or probe.

Check to make sure you have sufficient quantities of all necessary materials, and that your materials are organized in an orderly way. Materials that are to be handed to respondents should be easily accessible to avoid any awkward fumbling or searching.

The first thing a respondent will notice about you is your appearance. In general, you should aim at an appearance that is neat, suitable, and inconspicuous. Avoid extremes of any kind. Keep in mind that it is better to be a little underdressed than overdressed, and that, regardless of what clothes you wear, cleanliness and neatness are always very important.

3.2 Beginning the Interview

When you first make contact with a respondent, your initial task is to establish a friendly but professional relationship. Your own confident and professional manner will reassure the respondent and set a tone that will enable you to complete the interview in an efficient manner. Experience with past surveys has indicated that there are three main factors that determine whether a respondent will consent to be interviewed.

- **The Rapport Established Between You and the Respondent**

"Rapport" is the term used to describe the personal relationship between you and the respondent. Rapport provides the foundation for good interviewing. Your appearance, your introductory remarks, and the way you answer any questions the respondent may ask will strongly influence the rapport that develops between you and the respondent.

What you say and how you say it should set the tone for the friendly, cooperative, but businesslike relationship that will continue to develop throughout the interview.

Whether using the "hard copy" or using the computer system, interviewing techniques will be quite similar. However, you must make more of an effort when using the computer system in order to maintain rapport with the respondent. It could be very easy to become so absorbed in the computer screen that you forget you are dealing with a person.

- **Whether the Respondent Sees the Survey as Being Important and Worthwhile**

You must try to interest the respondent in the survey. Encourage the respondent to see the interview as an opportunity to express his/her views and to have those views taken seriously.

From the start, give the respondent certain basic information about the interview: what to expect during the interview, and what the purpose of the interview is. If asked, you may also explain how the information will be used, and the length of the interview.

- **Whether You Can Respond Convincingly to the Respondent's Objections and Questions**

Even respondents who are convinced of the importance of the study may, for a variety of reasons, be reluctant to grant a certain part of the interview. Your friendly manner, your introductory statements, and your success in answering the respondents' questions will help you sell both yourself and the survey to the respondents. Your effectiveness will be increased by your knowledge that your job is legitimate and important, and by your thorough understanding of what you are doing and how to do it.

Your own state of mind -- your conviction that the interview is important -- will strongly influence the respondent's cooperation. Your belief that the information you obtain will be significant and useful will help motivate the respondent to answer fully and accurately. Most people want to be heard and are happy that you have asked their opinions. Those who are reluctant to give specific information will often do so willingly, if they are convinced that good use will be made of it and that their privacy will be protected.

3.3   Administering the Interview

Your task is to collect accurate information. You must have a thorough understanding of the general principles for administering the interview and comprehend fully its confidential nature. The material in the following sections of this manual will acquaint you with the general principles and procedures to follow when collecting survey data.

3.3.1   Asking the Questions

Although the 24-hour recall is essentially an open-ended interview, the trailer questions and food frequency interview are standard interviews. Collecting accurate and reliable data requires that every respondent hears exactly the same questions read in exactly the same way. Even small changes in the way you ask a question can affect the way a respondent answers and, in the long run, affect the results when researchers combine the answers given by large numbers of respondents. The basic rules for asking survey questions, discussed below, are all designed to ensure uniformity in the way questions are asked of respondents.

1.   **Always remain neutral**. During the entire interview you must always maintain a completely neutral attitude. As an interviewer, you must never allow anything in your words or manner to express criticism, surprise, approval, or disapproval of the questions you ask or of the answers respondents give.

An important part of your role as an interviewer is to get the respondent actively involved in the interview, to lead him/her to talk comfortably and freely in response to your questions. While encouraging the respondents to talk freely, however, you must carefully avoid saying or doing anything to influence the content of the respondent's answers. No matter what topics you ask about, no matter how strongly you agree or disagree with the respondent's answers, and no matter how interesting, unusual or discouraging you might find those answers to be, you must always maintain the same neutral and professional stance during the interview. You are there to ask for and record the respondent's answers, not to influence or advise in any way.

At times, particularly if your respondent is talking freely, you may feel that he/she has already answered a question before you get to it. <u>Do not skip over any scheduled questions, even though you think there may be some repetition</u>. If a respondent becomes annoyed or says something like "I just told you that," you can acknowledge the repetition, but explain that you are required to ask all of the questions. You might say something like:

"I need to make sure I have your full answer on that."

"I thought perhaps you might have more to say about that."

Sometimes it may be helpful to anticipate the respondent's reaction to the repetition by saying something like:

> "You may already have mentioned this, but I need to make sure I have your answer recorded here."
>
> or
>
> "You may have told me about this before, but let me ask this question to make sure I have the right answer."

To be a good interviewer, you must be comfortable with the questions you ask. If you feel uncomfortable with certain questions, it is likely that you will transmit something of that feeling to the respondent and influence the answers you receive. If you are uneasy with some questions, you should practice them repeatedly until you can ask them in a simple, straightforward, matter-of-fact way. Occasionally you will find a respondent who refuses to answer some questions, but usually you will find that as long as you can deal with all of your questions in the same relaxed and professional manner, your respondents will answer without hesitation.

2.   **Ask all questions exactly as worded**. On questionnaire parts of the dietary interview, you must read each question completely and exactly as it is printed. Do not change even a single word, since even the smallest change can affect the entire meaning of a question. For the answers obtained by different interviewers to be combined, there must be no doubt that each respondent heard exactly the same question before responding. If you must repeat a question because the respondent did not hear you the first time or did not understand the question, reread the entire question. Do not omit any parts or words you think the respondent did hear or understand the first time.

Even though you feel that the question could be worded much more simply, do not improvise. Every word is there for a purpose. Emphasize only those words that are underlined or in bold type. Pause only at commas or, when answer categories are included in the question, after each answer category. Read everything in a natural, even-toned manner.

At times respondents may ask you to define words or to explain some part of a question. If a definition or explanation is provided in your Question-by-Question Specifications, you may give that explanation to the respondent. If the specifications do not provide an explanation, do not attempt one on your own. Simply let the respondent know that he/she should answer using his/her own definition. You might say, "whatever it means to you - - just answer that way," or "however you understand that word."

3.   **Every effort should be made so that the respondent does not see the questions.** Respondents can be influenced by knowing what questions are coming next or by seeing answer categories that are not read to them as part of a question. When it is appropriate for respondents to see the answer categories for a question, you will have a card showing those categories.

4.   **Do not read answer categories to the respondent unless they are part of the question.** Do not read material contained in the answer column to the respondent unless you are specifically instructed to do so. Instructions which are not read to the respondents are occasionally included with the question and usually printed in all capital letters.

In some questions, the answer categories are read to the respondent. For these questions, the answer categories are actually part of the question, as in the following example.

How does the amount of food (you/_____) consumed yesterday compare with (your/his/her) usual consumption for that day of the week? Was it much more than usual, usual, or much less than usual?

|__| much more than usual
|__| usual
|__| much less than usual
|__| DK

In other questions, the answer categories are not read to the respondent. For these questions, the answer categories will not be part of the question and will only appear in the answer column, as in the following example.

Are you the person who **usually** prepares the meals at home?

|__| Yes
|__| No
|__| shared preparation
|__| food not prepared at home
|__| DK

---

5. **Discourage unrelated conversation.** Occasionally a question may lead a respondent to begin reminiscing or to relate a lengthy story having little or no relevance to the survey. As an interviewer, your task is to discourage such irrelevant conversation and keep the discussion focused on the interview. In some ways, this requires that you subtly teach the respondent how to be a good respondent. If you maintain a businesslike attitude, acknowledge answers with neutral comments such as "I see," "OK," or a simple nod of your head, and tactfully interrupt rambling and irrelevant answers to bring the conversation back to the question you have asked, the respondent will soon learn how to be a good respondent and provide the kinds of answers you need. If you must interrupt a respondent, do it politely, taking care not to antagonize him/her. You might say something like:

   "That sounds very interesting, but what I need to ask is..."

   "I see what you mean, but let me repeat that last question..."

3.3.2 Maintaining Rapport

You began your rapport-building process with your introduction and it must be continued throughout the interview. Through accepting and understanding behavior and your interest in the respondent, you can create a friendly atmosphere in which the respondent can talk freely and fully.

Occasionally rapport may be broken during the interview for some reason such as the respondent feeling that a particular question is "too personal." If this happens, take time to reassure the respondent that he/she may speak freely without fear. This may be done by restating the confidential nature of the interview and the impersonal nature of the survey. If a respondent refuses to answer a question after you have reassured him or her of confidentiality, do not press the respondent--enter a refusal response. The procedure will be explained later in the manual.

3.4 Probing

The quality of the interview depends a great deal on your ability to probe meaningfully and successfully. During training, we will discuss appropriate probing techniques for each specific part of the dietary interview. The following section is a brief introduction to probing.

3.4.1   What is Probing and Why is it Necessary

Probing is the technique you will use to stimulate discussion and obtain more information. We probe when a respondent's answer is not meaningful or is incomplete, i.e., when it does not adequately answer the question. There are a number of reasons respondents sometimes do not answer the question to our satisfaction.

In every day social conversation, people normally speak in vague and loose terms. It is understandable that respondents will at first respond to our questions in a way which is not clear or specific. It is important to encourage the respondent to express himself/herself more concretely, in very specific terms.

Sometimes respondents will think that they are answering a question when all they are doing is simply repeating an answer which was already given, or simply repeating parts of the question. A respondent can talk a great deal and still be just repeating the question in different words.

Respondents will sometimes miss the point of the question. Many times they will give responses which seem to answer the question, but when you look further, are not to the point of the question and are therefore irrelevant. It is easy to be "taken in" by a respondent who is talkative and gives a lengthy and detailed response which, however, is quite beside the point. It is not the answer to the question asked. In most cases, a respondent gives an irrelevant response because he/she has missed an important word or phrase in the question.

Probing, therefore, has two major functions. First, probing motivates respondents to enlarge, clarify, or explain the reasons for their answers. Secondly, probing focuses the respondent's answer so that irrelevant and unnecessary information can be eliminated. All this must be done, however, without introducing bias or antagonizing the respondent.

Some examples of answers that for different reasons fail to answer the questions properly are given next. Because of the answers given, each requires probing.

Examples of answers that require probing:

Question: During the past month, did you skip any meals because you did not have enough food or money to buy food?

Answer: My husband just lost his job, and I only work part-time.

Question: How much plain water do you **usually** drink in a 24-hour period of time? (Include tap water and spring water only.)

Answer: My doctor says I should drink more water.

3.4.2 Probing Inappropriate Responses

Sometimes a respondent will answer using words different from those in the answer categories you read. When this happens, <u>do not make assumptions</u> about what the respondent intends. If the respondent's answer does not clearly fit one of the provided answer categories, you must probe for a response you can code. Sometimes the best probe is repeating the original question. At other times, the best approach might be to ask, "Well, which comes closest?" and repeat all the answer categories.

At times a respondent will feel that none of the responses are suitable, or that under certain conditions they would choose one answer and under different conditions another. In this situation, you should try to get the respondent to generalize by repeating the question and saying, "Just generally speaking, is it this way or that?," or "Most of the time," or "In most cases," etc. If the respondent insists that he/she can't choose, be sure to enter exactly what is said, and let the home office decide how it should be coded.

<u>Example:</u>

Question: Are you the person who **<u>usually</u>** prepares the meals at home?

Answer: Well, my mother does it when I'm at work, otherwise I do.

Probe: I see. But generally speaking, are you the person who **<u>usually</u>** prepares meals at home?

Answer: Well, I work five days a week, so, no I'm not.

3.4.3 Probing Methods Should be Neutral

It is very important to always use neutral probes. By this we mean you should not imply to the respondent that you expect a specific answer or that you are dissatisfied with an answer.

Remember the reason for probing is to motivate the respondent to respond more fully or to focus the answer, without introducing bias. The potential for bias is great in the use of probes. Under the pressure of the interviewing situation, the interviewer may quite unintentionally imply that some answers are more acceptable than others or may hint that a respondent might want to consider this or include that in giving responses. You must be careful not to do this.

The following example consists of a response from the SP, and two possible probes. The first of these probes is neutral, the other is not.

Example:

SP: I had a cup of coffee at 9:00 a.m.

Neutral Probe: Did you add anything to your coffee?

Non-neutral Probe: So you probably added cream and sugar?

The non-neutral probe suggests a specific answer to the respondent and thus leads the respondent toward that answer, rather than leaving the range of possible responses completely open for the respondent to specify.

3.4.4   Kinds of Probes

There are several different neutral probes which appear as part of a normal conversation that can be used to stimulate a fuller, clearer response.

1. **An expression of interest and understanding.** By saying such things as "uh-huh" or "I see" or "yes," the interviewer indicates that the response has been heard, that it is interesting and that more is expected.

2. **An expectant pause.** The simplest way to convey to a respondent that you know he/she has begun to answer the question, but has more to say, is to be silent. The pause, often accompanied by an expectant look or a nod of the head, allows the respondent time to gather his or her thoughts. Eye contact is important here.

3. **Repeating the question**. When the respondent does not seem to understand the question, or misinterprets it, or seems unable to decide, or strays from the subject, it is often useful to repeat the question. Many respondents, when hearing the question for the second time, realize what kind of answer is needed.

4. **Repeating the respondent's reply**. Simply repeating what the respondent has said is often an excellent probe. Hearing the response just given often stimulates the respondent to further thought.

5. **A neutral question or comment.** Neutral questions or comments are often used to obtain clearer and fuller responses. The following are some suggestions for probing questions that may help explore many types of insufficient answers.

PROBES TO CLARIFY:
"What do you mean exactly?"
"What do you mean by...?"
"Could you please explain that a little? I don't think I quite understand."

PROBES FOR SPECIFICITY:
"Could you be more specific about that?"
"Tell me more about that."

PROBES FOR RELEVANCE:
"I see. Well, let me ask you again... (REPEAT EXACT QUESTION)."

PROBES FOR COMPLETENESS:
"What else?"
"What else can you think of?"

3.4.5   The Don't Know (DK) Response

The "I don't know" answer can mean a number of things. For instance,

- The respondent doesn't understand the question and says DK to avoid saying he/she doesn't understand;

- The respondent is thinking the question over, and says DK to fill the silence and give himself/herself time to think;

- The respondent may be trying to evade the issue because he/she is afraid of giving a wrong answer, or because the question seems too personal; or

- The respondent may really not know or really may have no opinion on the question.

Try to decide which of the above may be the case. Don't be in too big a rush to settle for a "don't know" reply. If you sit quietly -- but expectantly -- your respondent will usually think of something. Silence and waiting are frequently your best probes for a "don't know" reply.

Always try at least once to obtain a reply to a "don't know" response, before accepting it as the final answer. But be careful not to antagonize respondents or force an answer. If they say again that they "don't know," proceed to the next appropriate question after coding the DK reply.

3.4.6   Additional Guidelines for Probing

The following rules and examples provide further guidance to help you select probes that will not bias respondent's answers.

1.   Don't ask "Do you mean ____ or _____?" Such a probe suggests only one or two possible answers, when the respondent may actually be thinking about other possibilities. Do use probes for clarity and specificity when a respondent's answers are unclear.

   Example:

   Question: Did you put anything on your grapefruit?

   Answer: Yes, sweetener.

   Neutral Probe: Could you be more specific? What type of sweetener?

   Non-neutral Probe: You mean it had Equal or Sweet 'n Low?

2.   Don't try to sum up in your own words what someone has said, because this may suggest to the respondent that YOUR idea of his/her response is the "right answer." Do use probes for completeness to make certain that you've obtained full answers.

   Example:

   Question: What did you eat at that time?

   Answer: I had eggs and juice.

   Neutral Probe: Did you eat or drink anything else at that time?"

Non-neutral Probe: So you had breakfast -- you probably had coffee, too then?

3.4.7   When to Stop Probing

When you have obtained all necessary information about the respondent and when you have encouraged the respondent to clarify the meaning of his/her own words so that you (and we) know exactly what he/she had in mind -- only then do you have a complete answer and only then should you stop probing. However, if at any time the respondent becomes irritated or annoyed, discontinue probing. We do not want the respondent to refuse the rest of the interview.

3.5   General Rules for Recording Answers

So far, we have talked about how to ask the questions and how to obtain clear and complete answers. Both of these are very important jobs. However, it is also critical that the SP's answers are accurately recorded. Specific rules for recording using the automated system and hard copy will be discussed throughout training. The following general rules always apply. Recording or entering answers using the automated system is quite simple.

1.   **Rounding answers.** When whole numbers are to be entered, it may be necessary to "round off" an answer the respondent has given you. Whenever necessary, the following rule should be used:

   Enter whole numbers as reported, dropping any fractions.

   The following example illustrates how you would round answers:

   4 1/2 days   __4__ days.

2.   **Verbatim recording.** When a respondent elaborates on a response, use the respondent's own language word for word. Don't correct or summarize what you think the respondent means; let him/her speak for himself/herself. We are as interested in the kinds of words a respondent uses as in the meaning of an answer. If you are conducting the interview in Spanish, enter the responses verbatim in that language. These responses, however, must be translated into English later.

3.   **Be sure to include the pronouns (he, she, I, they).** Without pronouns the meaning of the answer is frequently not as clear as you think.

3.6   Ending the Interview

All people who give their time for an interview are entitled to courteous and tactful treatment. Try to leave respondents with the impression that they have taken part in an interesting and worthwhile experience -- one they would be willing to repeat.

After all questions have been asked, indicate your appreciation to respondents by thanking them; also mention that their contribution has been most helpful in providing important information to the study. Remember that the respondent is familiar with your task from the discussion at the beginning of the interview, so don't spend too much time going over the same information. Spend a few minutes answering any additional questions your respondent may have; then close the interview.

3.7   Editing

After you have completed the interview with a respondent, you are to edit or check your work. You should try to complete the edit before the respondent leaves the MEC. Once the respondent leaves the MEC, data that were not collected or data that needed to be corrected are lost forever. Editing will be discussed in detail in Chapter 6.

3.7.1   Purposes of Editing

Although editing is not difficult, it is an important part of an interviewer's job. The main purposes of editing are:

1. **To review all sections of the interview -** Review each section to assure all information is complete and accurate.

2. **To learn from mistakes so they are not repeated -** There is an educational value in editing. Many interviewers feel that the interviewing procedures and Question-by-Question Specifications become more meaningful after they have conducted the first few interviews. Editing will improve the quality of your interviews for the remainder of the study, as well as catch errors. Editing, therefore, is part of the learning process for a survey.

3. **To write out abbreviations -** The clerical aspect of editing is an obvious one. This includes checking to make sure any abbreviations that are not commonly understood are clarified, and to assure that notes and any other comments are presented for easy comprehension.

4. **To add your comments which might help to understand a response or an interview as a whole -** Add notes concerning the respondent, the interviewing situation, or anything else that you feel might help in the correct interpretation of the interview.

4.0   CONDUCTING THE AUTOMATED 24-HOUR RECALL

This section of the manual contains a general introduction to the automated system and detailed, step-by-step instructions for conducting the 24-hour dietary recall. The format of this section is arranged so that a description of a screen is either preceded or followed by an example. These examples are usually a succession of screens (condensed onto one or more pages) demonstrating the function of that particular aspect of the automated system.

In order to avoid repetition, once a task has been described, it will be referred to later in a less detailed fashion. Each section of this manual builds upon the previous one; if one area is confusing to you, return to that section and review it carefully before going further.

4.1   General Overview of Computer

This section will explain the procedures for conducting the dietary interview using the computer system. The system operates through terminals located in each dietary interview room, which are connected to a computer located in the rear of the MEC. The computer you will be using is called a VAXmate.

The VAXmate consists of two components: a video screen or monitor (Exhibit 4-1), and a keyboard (Exhibit 4-2). The terminal works through an exchange of messages between the terminal operator (you) and the computer. The messages that go back and forth between you and the computer are usually in the form of questions and answers.

If you have never worked with a computer terminal, the thought of dealing with a sophisticated and unseen computer can be a little frightening. It is only natural to expect that learning to work with a computer will be difficult, or to worry about what will happen to the information stored in it if you make a mistake. One of the first things you will learn about operating a terminal, however, is that such concerns are largely unnecessary. A period of training and practice, plus some patience and attention to detail are all you will need to master the basic features of working with the terminal.

Each step in using the computer to conduct the dietary interview will be explained to you: how to turn on the computer and access the program, how to use the keys on the keyboard, and how to conduct the interview.

4.1.1   The Keyboard

The keyboard for the terminal is much like an ordinary typewriter; the letters on the keyboard are arranged in the same pattern as those found on a typewriter (Exhibit 4-2).

Exhibit 4-1. Monitor
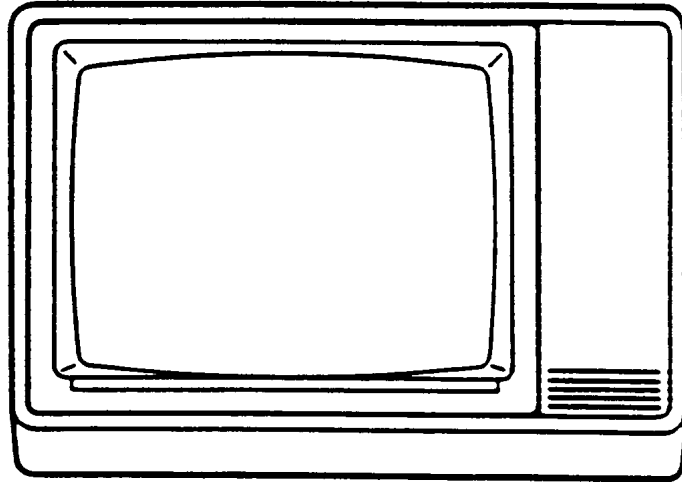
Monitor
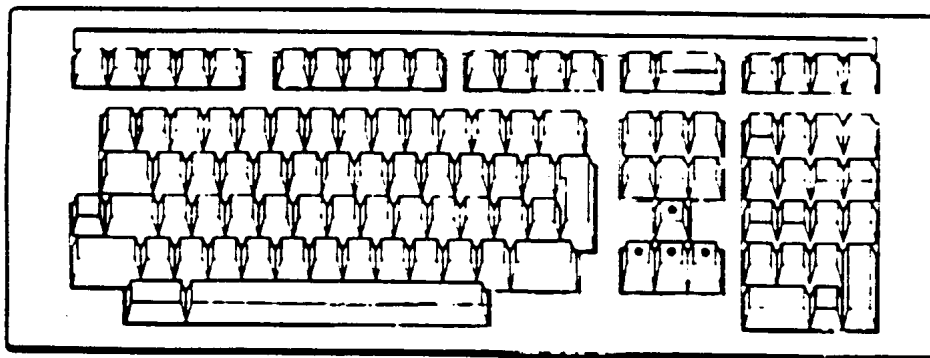
Keyboard

Exhibit 4-2. Keyboard
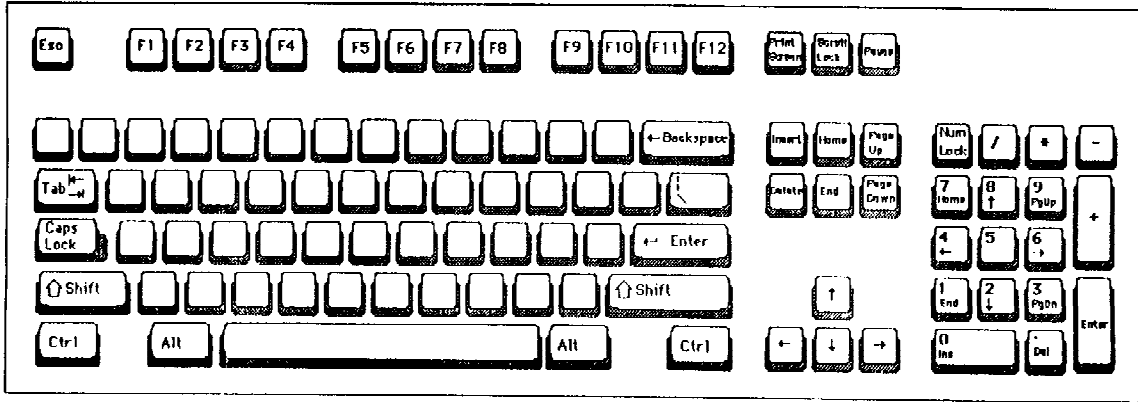
The terminal keyboard has some keys not found on a typewriter, but most of these are not used to conduct the dietary interview. Those that are used will be explained in more detail later in the manual.

The main difference between operating a computer terminal keyboard and a typewriter keyboard occurs because the computer is very literal minded. It reads every letter and every space between letters that you enter, and it is quite limited in its ability to interpret what you "mean" or "intend" if you make an incorrect entry. If an entry does not match what the system has been programmed to expect, the system rejects your entry, by making a "beep" sound and not allowing the data to be entered, or by providing a message to try another entry. The ability of the computer to detect your mistakes makes it relatively difficult for you to make a mistake that will have any serious consequences.

Another difference between a computer terminal keyboard and most typewriters is that a lower case "L" cannot be used for the number "1", nor can you use the letter "O" when you want to type a zero. As mentioned earlier, the computer is very particular about the keys you use. It demands that you keep letters and numbers distinct. Generally, if you type in a wrong letter/number the computer will "beep" or, in some other way, let you know that it finds your entry unacceptable.

As you type on the keys of the terminal, the words you type will appear on the video screen. However, the computer does not know what has been typed; and the computer won't know until you tell it. You must transmit your typed message to the computer. This is done by pressing the ENTER key (Exhibit 4-3). Each time the ENTER key is pressed, the computer will attempt to read and assess the entry.

As you type at the keyboard, you will notice that the letters you type appear on the monitor in a little square of light. This little square of light is called a "highlight". The highlight moves across the screen as you type.

When typing or using any of the keys, it is important to press firmly, but quickly, rather than holding them down. But don't worry, the proper touch comes quickly with practice.

4.2   Turning Computer On and Accessing the Program

To turn the computer on, simply flip the on/off switch to the correct position as pictured in Exhibit 4-4. You may adjust the viewing level of the monitor, the angle of the keyboard, and the contrast and brightness for your comfort (Exhibits 4-4 and 4-5). The Vaxmate requires a few minutes to connect to the VAX (main system) before any entries are allowed. Once the Vaxmate has successfully completed the connection to the VAX, the dietary interview menu appears as shown in Exhibit 4-6. A "menu" basically is a list of choices from which you make a selection to complete a certain task.

Exhibit 4-3. ENTER key
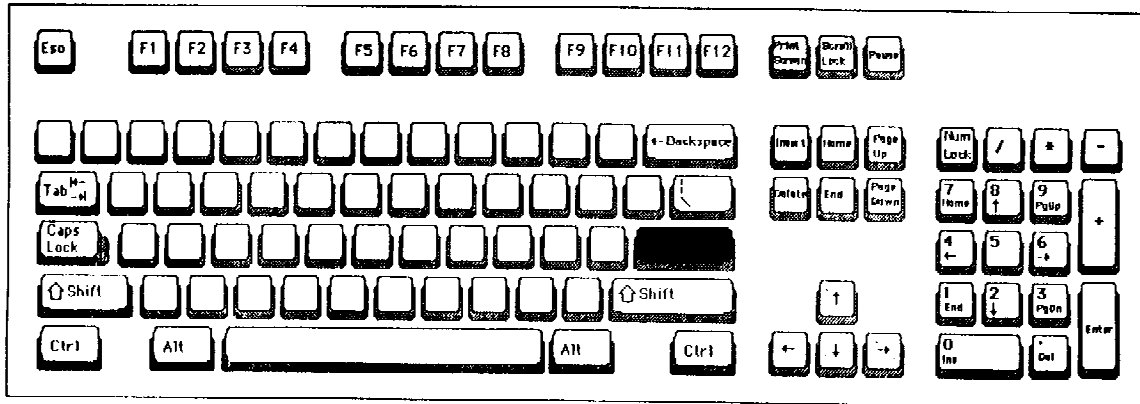
Exhibit 4-4. Power Switch and Control Knobs
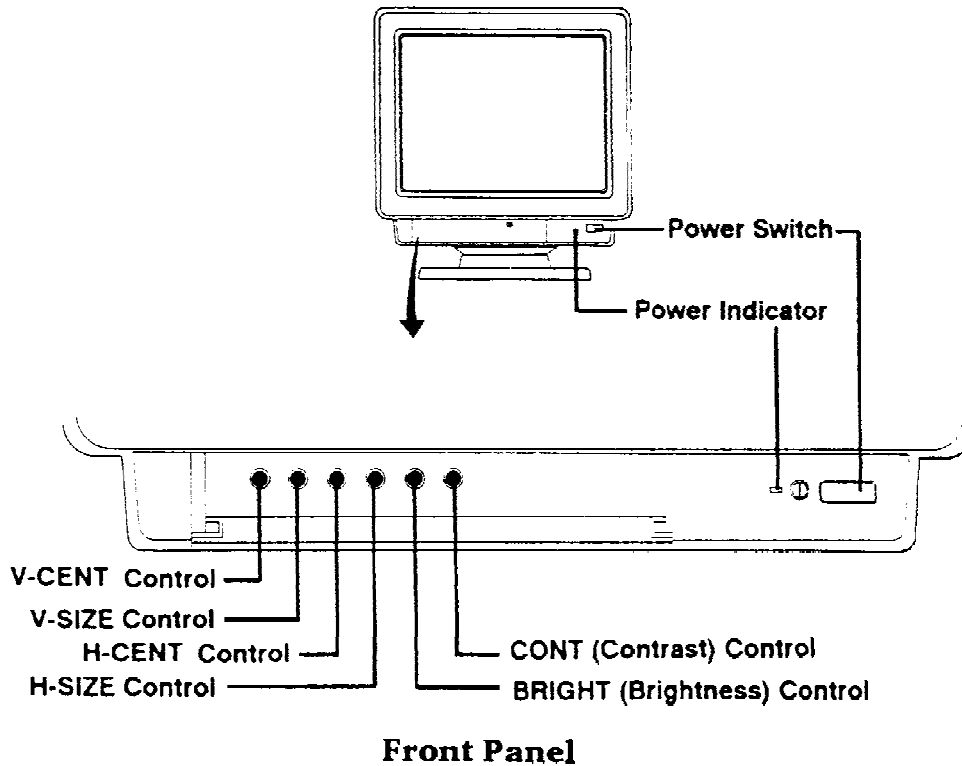
Front Panel

Power Switch: To turn the computer on and off, locate the switch on the front of the monitor and flip it to the proper position.

Contrast and Brightness Control: Control the contrast and brightness using the knobs on the left side of the monitor. Adjust these for your own comfort.

Contrast: Changes the brightness of the data displayed on the screen.

Brightness: Changes the brightness of the entire screen.

Power Switch: To turn the computer on and off, locate the switch on the front of the monitor and flip it to the proper position.

Contrast and Brightness Control: Control the contrast and brightness using the knobs on the left side of the monitor. Adjust these for your own comfort.

Contrast: Changes the brightness of the data displayed on the screen.

Brightness: Changes the brightness of the entire screen.

Exhibit 4-5. Keyboard Height Adjustment and Monitor Viewing Angle
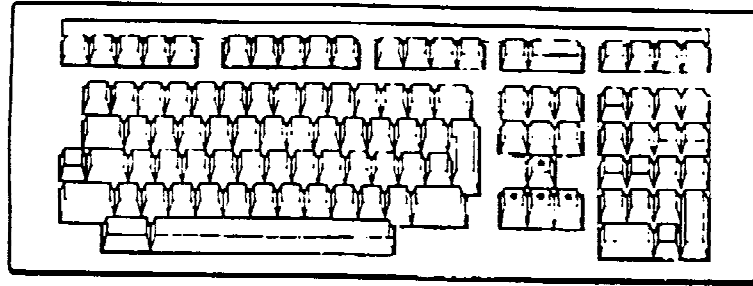
To adjust the Keyboard for a steeper typing angle, insert the plastic feet into the holes on the bottom of the unit.
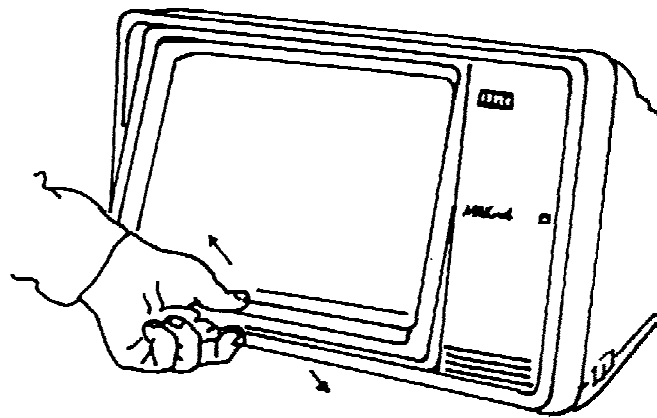
Select a comfortable viewing level. The display screen can be tilted downward or upward.

Exhibit 4-6. Accessing the DDC System

Screen A

```
Dietary interview

1.     Enter DDC 24 hour recall system
2.     Food frequency questionnaire
3.     End of session data backup
4.     Remove recalls from PC to the VAX
5.     Set active day
6.     Set time and date
7.     List original and edited recalls on PC

Choice
```

Screen B

```
Set active day

1.     Sunday
2.     Monday
3.     Tuesday
4.     Wednesday
5.     Thursday
6.     Friday
7.     Saturday
Choice
```

Screen C

```
ACTIVE DAY IS WEDNESDAY


Dietary interview

1.     Enter DDC 24 hour recall system
2.     Food frequency questionnaire
3.     End of session data backup
4.     Remove recalls from PC to the VAX
5.     Set active day
6.     Set time and date
7.     List original and edited recalls on PC

Choice
```

From the dietary interview menu (Exhibit 4-6, Screen A), you are able to: (1) enter the DDC 24-hour recall system, (2) enter the CASS system to begin a food frequency, (3) backup data, (4) remove recalls off PC to VAX, (5) set the active day, (6) set the time and the date, and (7) list original and edited recalls.

In order to begin a 24-hour recall, follow three steps. The first step before beginning an interview is to set the active day. The "active day" refers to the day the interview is actually conducted (not the day of the recall). Enter "5" at the choice prompt ("choice __") to "set active day". Then, from the following screen, select the number which corresponds to the day of the week the interview is being conducted (Exhibit 4-6, Screen B). Once this has been completed, the system returns to the menu. At this time, the active day is presented at the top of the dietary interview menu screen (Exhibit 4-6, Screen C). Make sure it is correct; repeat the process if an error was made.

You must then enter the number 1 at the choice prompt to progress to the DDC System. The DDC Title screen (Exhibit 4-7 below) will appear followed by the Recall Header screen where new recalls are initiated.

Many of the selections on the dietary interview menu are easily understood; however, more knowledge regarding the overall interview process is required to comprehend all the choices. Therefore, those selections not presented at this time will be discussed later in the manual.

Exhibit 4-7. DDC title screen

```
Dietary Data Collection System
   for use in the NHANES III
   Version 17.2  - 04/24/1992

Copyright (C) - 1988,1991,1992
   University of Minnesota
```

4.2.1   Introduction to the Dietary Data Collection (DDC) System

Purpose: The Dietary Data Collection (DDC) system is a microcomputer-based system for you as an interviewer to use to capture food intake data at the level of detail required for dietary research studies. It prompts you to choose descriptions and amounts to specify the food so that the computer system can assign numerical codes.

Food Specification: The DDC system prompts you to keep making choices until the food selection, amount, ingredient description and selection of preparation methods are complete. Specific instructions for entering and editing the food during this food specification process appear in Section 4.2.4.

Food Selection: Foods are grouped into several major food categories. A list of foods in a category appears on the screen after you type in the first 4 or more letters of a food category. For example, if you enter VEGE, the list of the different vegetables appears on the screen. If you select potato from the list, then another list of descriptions appears, such as boiled, french fries, mashed, etc. Descriptions keep appearing until the food selection process is complete. Then you are asked for the amount eaten.

Amount: You are always able to enter the weight of the food eaten in ounces, pounds or grams. Depending on the food, you may be able to enter a volume measurement or describe it by a food-specific unit, such as slice or medium size. In addition, you will almost always have the option of choosing a food model. If a shape describes the food better than using a food model, another option is to choose a shape, such as wedge, cube, etc. With these, the system will prompt you for the appropriate dimensions, such as diameter, height, or width, depending on the shape chosen. For some foods, you can enter a weight or volume before cooking or enter a weight with refuse, such as chicken leg with bone, and the computer will calculate the cooked edible weight.

Preparation Method: The DDC system may also ask you how the food was prepared or what foods were used in the preparation. For example, available preparations for fish include fried, baked, boiled, broiled, grilled, microwaved, steamed, stewed or stir fried. If baked is chosen, the system then asks whether or not the fish was breaded or marinated. More specification is then required if either breaded or marinated is chosen to discern whether the coating was eaten or what type of marinade was used.

Ingredients: After describing the food and stating the amount eaten, you may be asked for more detail. For example, milk, salt and some type of fat are commonly used to prepare mashed potatoes from dehydrated potatoes. After selecting mashed potatoes and the amount, you choose the type of milk used in the recipe. If fat was added, you specify the type of fat used. You also may be asked to specify whether salt was added in preparation. Amounts for ingredients are automatically assigned by the DDC system based on standard recipes and the amount eaten by the SP. The system does not ask what ingredients were added at the table. Ingredients such as butter or gravy added at the table are entered as separate food items and should be listed as part of a multi-component food, i.e., mashed potatoes and gravy. Salt added at the table is not asked for during the 24-hour recall; this is handled by two trailer questions.

Computerized Coding: The system automatically assigns the food codes and appropriate gram weights after the food specification is complete. Amounts for ingredients used in recipes or in preparation methods are calculated based on the amount of the food you entered in the food selection process.

4.2.2   Screen Design

As you begin to use the computer program, you will notice that different types of screens are presented to you on the monitor. Screen titles appear in reverse video in the upper left hand corner. Each screen prompts you to select or insert specific information so that you can describe each food or beverage as completely as possible. The following describes each type of screen:

Quick List: Screen where you list all foods and beverages eaten during the day without descriptive details.

Food Entry: Screen where you begin the food specification process.

Food Selection: Screens where you specify descriptions during the food selection process.

Amount Of: Screens where you specify the unit of measurement and amount for the selected food.

Preparation Of: Screens where you specify how a food was prepared.

Ingredients In: Screens where you describe the ingredients used in the selected food or in the preparation method.

Recall Review: Screen where you can review the foods and beverages entered, and details about them.

Other common screen features are described below and illustrated on the next page:

Menu Box: The menu box is an outlined area on the screen containing a list of descriptions.

Scroll Bar: The location of the scroll bar at the right of the menu box indicates the location of the highlight in a list of descriptions.

Descriptions: Descriptions available for selection appear in the box.

Abbreviations: Abbreviations appear beside the descriptions in most boxes. You may enter your selection by typing in the abbreviation.

Selected Descriptions: As you select descriptions, they appear on the upper lines of the screen.

Cursor: An underscore or square on the screen that indicates where to type the next character.

Highlight: The highlight is a reverse video bar inside the menu box that you use to indicate your selection.

Data Entry Area: A cursor appears at the place where you can enter the data (abbreviation). You cannot move the cursor to another area.

Message Area: At the bottom of the screen, messages appear giving instructions and/or options for entering information.

The screen display below is representative of the screens you will use in the food specification process:


```
Title ─────────────FOOD SELECTION  soup

Selected
Description

Menu Box                  ASP   asparagus - cream of
                          BEA   bean
                          BEE   beef
                          BER   beer cheese
Abbreviations             BIR   bird's nest soup
                         ┌─────────────────────────┐
                         │ BOR   borscht (beet soup)│────Highlight
                         └─────────────────────────┘
Descriptions              BOUI  bouillon
                          BRO   broccoli - cream of
                          CAB   cabbage
                          CAR   carrot (with rice and milk)

Data Entry          food:
Area

Message Area
```
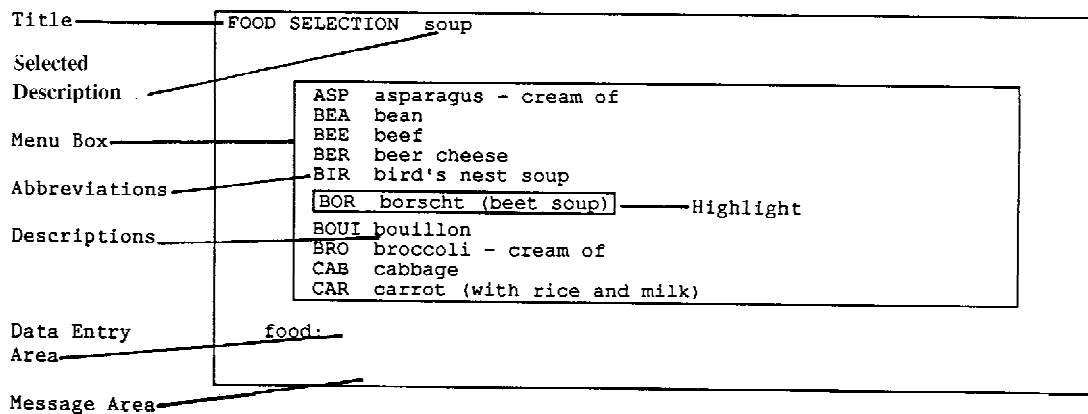
4.2.3   Description of Computer Components and Keys

The following diagrams and descriptions have been inserted to give you some insight into the computer and its components. If you do not thoroughly understand a certain key or function, do not be concerned; each will be discussed in much greater detail later in the manual. With practice, the location of the keys on the keyboard, the function of each key, and how everything works together to obtain the necessary data for 24-hour recall will become clear.

4.2.3.1 Backspace and Number Keys
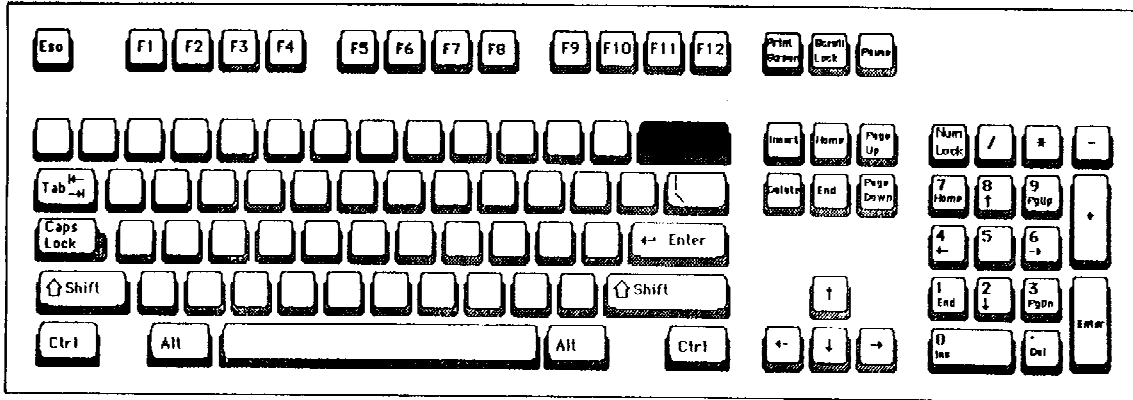
Press the backspace key to erase any information that has been typed in. The backspace key erases one character at a time.
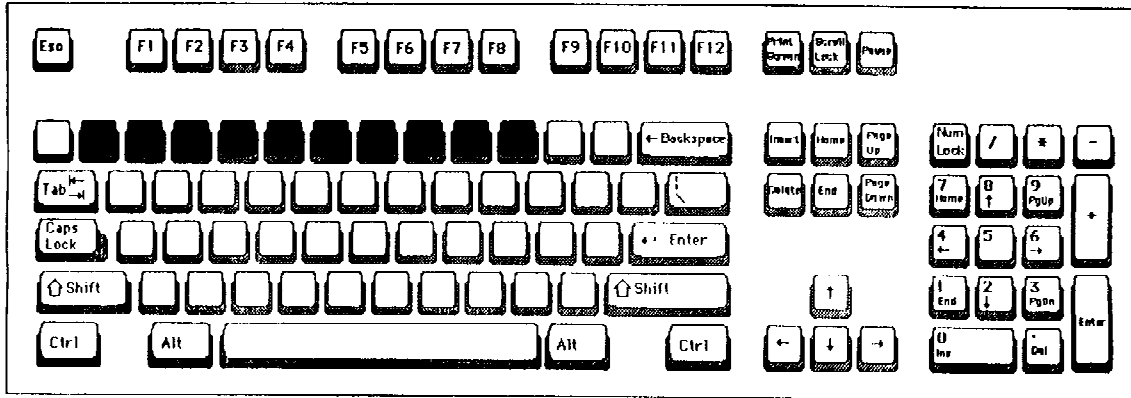
Use the top row of the keyboard to enter numbers.

4.2.3.2 Highlight Control Keys

The highlight control keys are commonly called the cursor control keys. The word "highlight" in the DDC system refers either to the area made brighter or the area displayed in reverse video.

A highlight is used to designate the selection that is to be entered. In the DDC system, the highlight control keys are used to move the highlight up and down a list of available selections that are presented in a boxed-in portion of the screen.
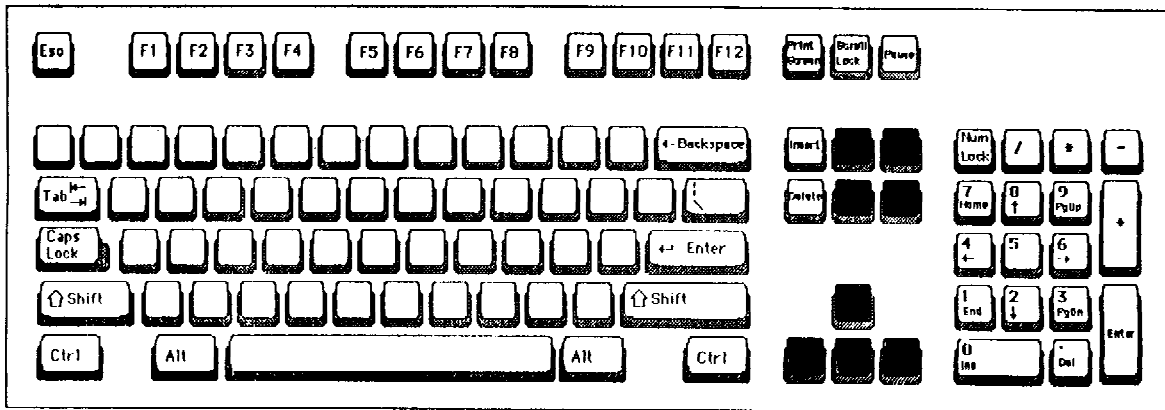
The chart below provides a description of the use of highlight control keys in the DDC system:

↑	**ARROW UP:** Available in scrolling areas on the Food Entry and Food Selection screens, and may be used on the Quick List, Amount, Note and Missing Food screens to move the highlight or cursor in the indicated direction. Press **ARROW UP** key to move the highlight or cursor up one line at a time. Hold this key down to scroll to the beginning of the list.
↓	**ARROW DOWN:** Available in scrolling areas on the Food Entry and Food Selection screens, and may be used on the Quick List, Amount, Note and Missing Food screens to move the highlight or cursor in the indicated direction. Press **ARROW DOWN** key to move the highlight or cursor down one line at a time. Hold this key down to scroll to the end of the list.
←	**ARROW LEFT:** Press **ARROW LEFT** to move the cursor in the indicated direction on the Recall Header, Quick List, Note, and Missing Food screens.
→	**ARROW RIGHT:** Press **ARROW RIGHT** to move the cursor in the indicated direction on the Recall Header, Quick List, Note, and Missing Food screens.
Home	**HOME:** Press **HOME** to move highlight to the first selection displayed on the screen. Press **HOME** again to move to the beginning of the selection list. This key is also functional on the Recall Review, Recall Trailer and End of Recall screens.
End	**END:** Press **END** to move highlight to the last selection displayed on the screen. Press **END** again to move to the end of the selection list. This key is also functional on the Recall Review, Recall Trailer and End of Recall screens.
Page Up	**PAGE UP:** Press **PAGE UP** to view the selections prior to the first item displayed on the screen. Use **PAGE UP** on the Missing Food, and the Unknown Beverage, Food and Meal screens, to move the highlight from the Amount and Measurement area to the General Description area.
Page Down	**PAGE DOWN:** Press **PAGE DOWN** to view the selections following the last item displayed on the screen. Use **PAGE DOWN** on the Missing Food, and the Unknown Beverage, Food and Meal screens, to move the highlight from the General Description area to the Amount and Measurement area. Press **PAGE DOWN** to access the Ingredient/Preparation Selections window on the Recall Review screen.

4.2.3.3 ENTER Key

Press the ENTER Key to enter information that you either typed in or selected by moving the highlight to the appropriate selection on the screen. Press the ENTER key to exit the Help Screen (F1) and to edit meal information, amounts, missing foods, notes, and ingredient and preparation selections on the Recall Review screen.
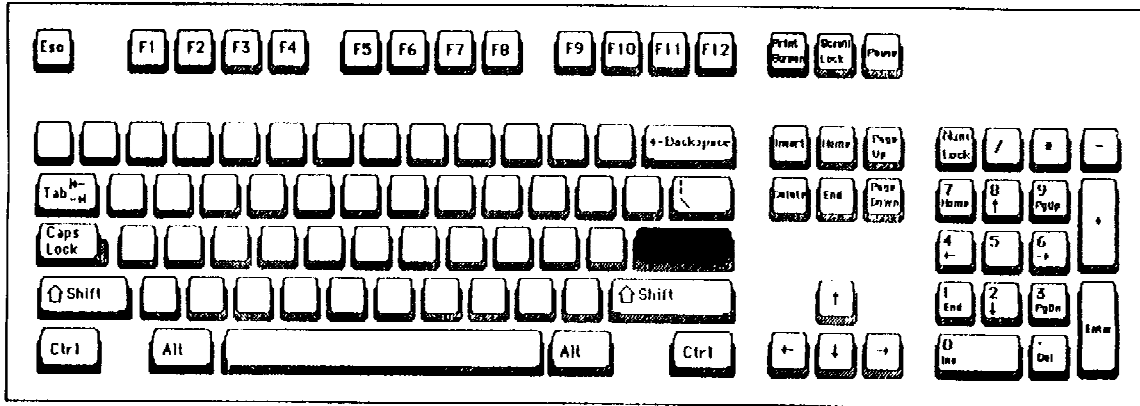
4.2.3.4 Escape and Function Keys

Press the ESCAPE key ('Esc') to erase a food on the Food Selection screen. A message appears asking you to confirm whether you want to erase all selections made for that food. The ESCAPE key is also used to exit from the Recall Header screen, the Help Screen (F1), the System Menu (F4) and the Item Insertion Menu on the Recall Review screen, and to bypass the Recall Trailer questions.
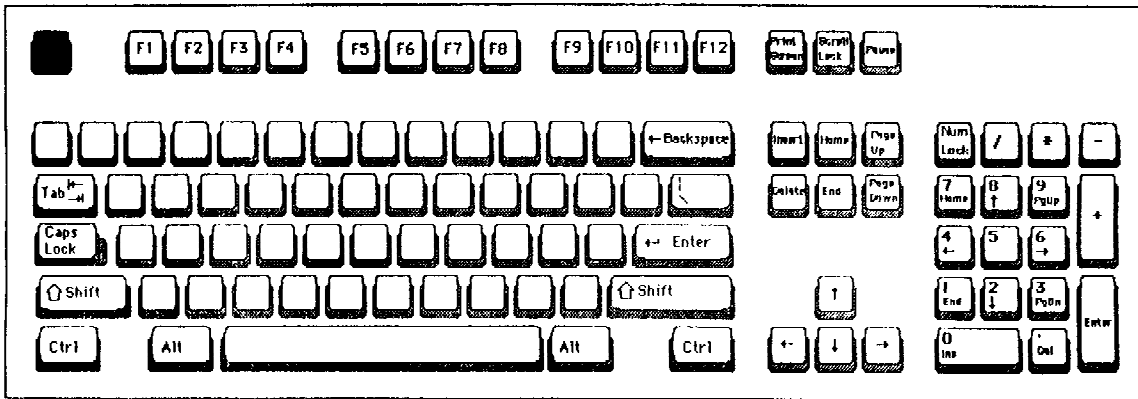
F1   F2   F3   F4   F5 F6   F7   F8   F9   F10

Since the descriptions of the function keys are quite lengthy, their use will be explained in Section 4.2.4.2.

To fully understand their functions, it is necessary to have some prior experience using the computer program.
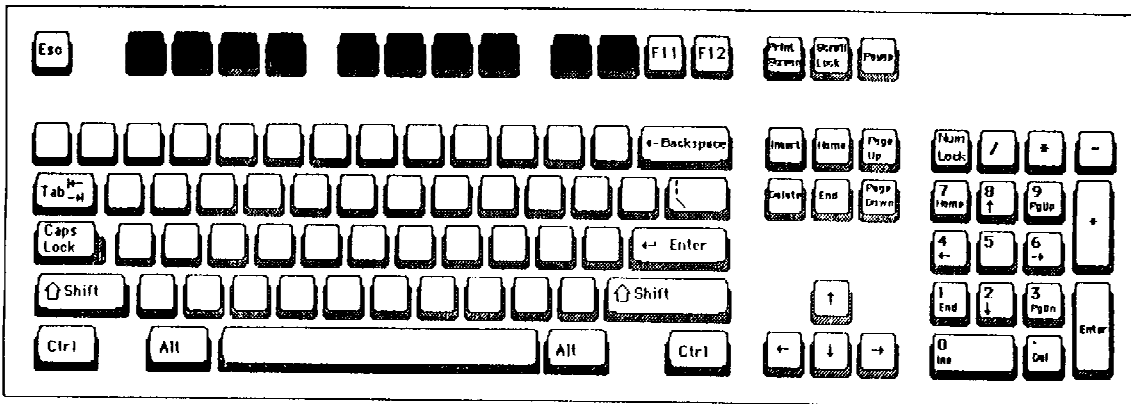
4.2.3.5 Insert and Delete Keys

The insert and delete keys may be used to insert or delete text within the highlight on most screens. These keys are available on the Recall Header, Quick List, Food Entry, Food Selection, Amount, Preparation, Note and Missing Food screens, and when recording information about an unknown food, beverage or meal.

Insert: Use the insert key to insert text without deleting or overwriting existing text.

Delete: Use the delete key to delete text one letter at a time.
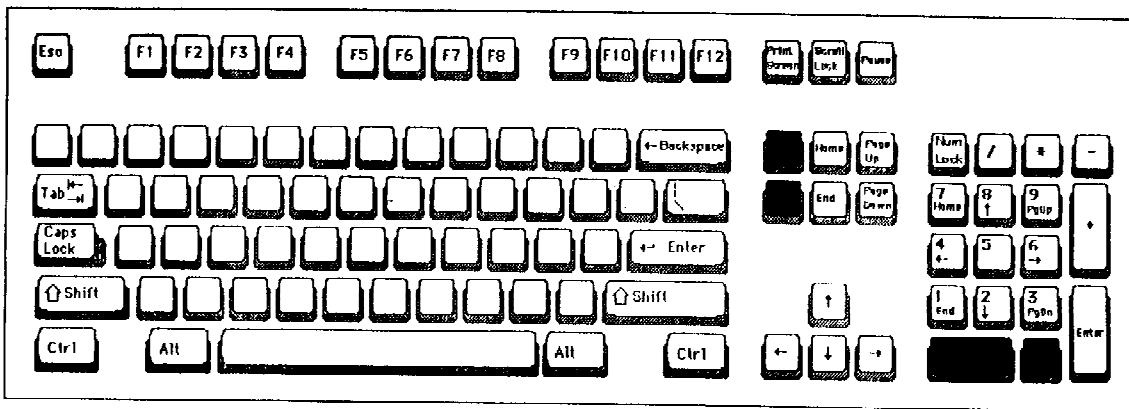
4.2.3.6 Control Key

The CONTROL key ('Ctrl') is a combination key; use it in combination with another key in order to perform a specific function. For example, press the 'Ctrl' and 'o' keys simultaneously to enter a note about a meal that is usually consumed but omitted to comply with the fasting requirements of the survey. More information on the control key will be presented later in the chapter.
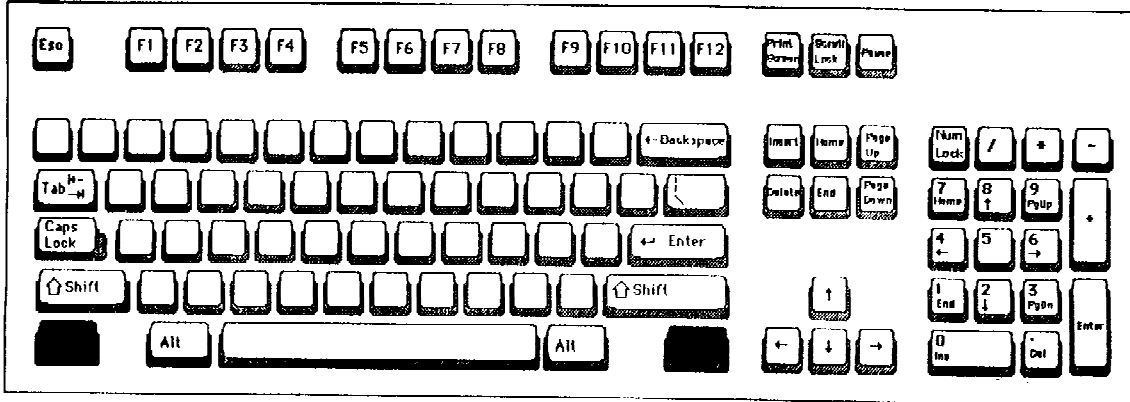
4.2.4   Reference Guide

Sections 4.2.4.1 through 4.2.4.3 are provided at this point to serve solely as a reference guide. Since many of the terms used to describe the general operation of the function keys have not yet been defined, do not become overwhelmed. As you progress through the training manual, each of these terms will be explained.

A great deal of practice time on the computer system is incorporated into the training sessions. Remove Sections 4.2.4.1-4.2.4.3 from the manual during your practice time and refer to them when necessary. Once you have familiarized yourself with the dietary program, reread these pages to assure that you understand the precise function(s) of the keys.

4.2.4.1 Entering Data

Entering by highlight:

Select from the list of descriptions in the menu box on the screen by moving the highlight to your choice. Press ENTER. To move the highlight, use the highlight control keys (See 4.2.3.2).

Entering by typing abbreviations:

Select from the list of descriptions in the menu box on the screen by typing the abbreviation and pressing ENTER. For simplicity the instructions in this manual refer only to entering by highlight, even though it is also possible to type the abbreviation. In many cases, it is preferable (e.g., quicker) to type the abbreviation as opposed to entering by highlight. With practice, the method which is most appropriate for each specific situation, will become apparent. When lists appear that do not have abbreviations, you must use the highlight to make your selection.

4.2.4.2 Help Screen, System Menu and Function Keys

The DDC system includes several features to assist you in using the system. These features are the Help Screen, System Menu and Function Keys.

-   Help Screen

The Help Screen provides basic information about the function keys, combination keys and other data entry keys. Press F1 to access the Help Screen. Press ENTER or ESCAPE to return to data collection after you are finished reviewing the information. The Help Screen includes the following information:

Function Keys

F1   HELP SCREEN

This screen provides basic information about the function keys, combination keys and other data entry keys. Refer to the manual or press F4 for more detail on the available functions for each screen.

Press ENTER or ESCAPE to return to data collection.

F2   BACK UP

Press F2 to back up to a previous selection to review or correct your entry.

On the Food Selection* and Amount screens, you may press F2 to back up to the previous screen. Pressing F2 erases the previous selection and requires you to reselect a response. (*If you press F2 after you have been presented with a list of brands, DDC will return to the first Food Selection screen for that food.)

If you press F2 on the screen which prompts, "Press enter to proceed with amount specification," DDC will return to the first Food Entry screen for that food.

On Preparation and Ingredient screens, pressing F2 may erase all selections for the Preparation or Ingredient, respectively. You may need to reselect your responses.

On the Recall Header, Recall Trailer and End of Recall screens, pressing F2 does not erase previous responses.

F3   SYSTEM HOLD

Press F3 to put the Dietary Data Collection System on hold and lock the keyboard.   Timing of the collection process is suspended and will automatically resume when you press F10.

If a lengthy hold time is expected, exit the recall. To resume the collection process, access the recall by entering the Participant's ID on the Recall Header screen.

F4   SYSTEM MENU

Press F4 to access the System Menu which lists other screens that may be accessed from a particular screen and the functions that are available for the screen. Screens and functions that are not available appear in reverse video. Use the up and down arrow keys to place the highlight on the desired selection and press ENTER. Press ESCAPE to exit the System Menu without making a selection.

F5   INSERT

Press F5 to create a blank line for inserting a new food on the Quick List and Food Entry screens. On the Recall Review screen, press F5 to insert a new food, insert a new meal, create a combination food, or add an item to an existing combination food.

F6   DELETE

Press F6 to delete a highlighted item on the Quick List, Food Entry and Recall Review screens, or to delete a note on the Note screen. If you press F6 while on the Note and Recall Review screens, you are asked to verify that you want to delete the note, or meal or food, respectively.

F7   MISSING FOOD

Press F7 to access a MISSING FOOD screen where you enter specific information regarding a food that is not adequately described by the DDC system. The Missing Food screen is available on the Food Selection screens; any descriptions chosen before pressing F7 are saved.

The MISSING FOOD screen is divided into two parts. Use the Page Up and Page Down keys to move from one part to the other.

Press F10 to return to data collection.

F8   NOTE

Press F8 to access the NOTE screen where you enter additional information or questions regarding your selections. In some cases, attaching a NOTE to a selection is mandatory since the protocol of the survey requires you to explain the selection.

Press F10 to return to data collection.

F9   ENG/SPA TOGGLE

Press F9 to toggle between English and Spanish text on the Forgotten Foods Question in Recall Review and on the first question on the Recall Trailer screen. If the questions appear in English, press F9 to change the questions to Spanish, and vice versa.

F10   NEXT SCREEN

Press F10 to advance to the next screen once all responses on a screen have been entered. Press F10 to return to data collection from the Note and Missing Food screens.

Combination keys

CTRL-o

      Press 'CTRL' and 'o' simultaneously on the Food Entry screen to denote a meal that is usually consumed but omitted due to the fasting requirements of the survey. The word 'omitted' is displayed next to the meal information on the Food Entry and Recall Review screens.

CTRL-F5

      Press 'CTRL' and 'F5' simultaneously to insert a meal or food at the end of the Recall Review screen regardless of the position of the highlight.

Other data entry keys

K   KNOWN AMOUNT

      Enter a 'K' at the prompt on the first Amount screen to indicate that a known amount requires further calculation or that an amount option is not available. Entering a 'K' requires that you complete a note providing further information about the known amount.

U   UNKNOWN AMOUNT

      Enter a 'U' at the prompt on the first Amount screen to indicate an unknown amount.

BACKSPACE

      Use the backspace key to delete one character at a time.

INSERT

      Use the insert key to insert text within the highlighted area without deleting or overwriting existing text.

DELETE

      Use the delete key to delete text within the highlighted area one letter at a time.

ENTERING

Move the highlight to your choice using the up and down arrow keys. Press ENTER to select the highlighted item. If abbreviations appear with the list, you may type in the abbreviation and press ENTER.

Refer to subsequent sections of the manual for more information regarding entry of data. Either a beep will sound indicating an entry is not allowed or a message will appear on the screen with more information.

ESCAPE

Press ESCAPE on the Recall Header screen to quickly exit a recall and access a blank Recall Header screen. Information entered initially on the Recall Header screen is not saved.

Press ESCAPE on the Quick List and Food Entry screens to bypass Food Selection and access the Recall Trailer screen. Items entered on the Quick List but not specified are not saved.

Press ESCAPE on the Food Selection, Amount, Ingredient and Preparation screens to quickly end the food selection process and access the Food Entry screen. Information entered for that food is not saved.

Press ESCAPE to exit the F1 Help Screen and the F4 System Menu to return to data collection. The ESCAPE key is also used to exit from the Item Insertion Menu on the Recall Review screen, and to bypass the Recall Trailer questions when necessary.

EXIT RECALL

To quickly exit the recall from the Recall Header, Quick List and Food Entry screens, press the F4 key, place the highlight on EXIT RECALL, and press ENTER. If you select EXIT RECALL from the Recall Header screen, you will access a blank Recall Header screen. Information entered initially on the Recall Header screen is not saved. If you select EXIT RECALL from the Quick List or Food Entry screens, information completely specified up to the point of exiting is saved and you are brought to the Recall Trailer screen. Foods remaining on the Quick List are not saved.

When you select Exit Recall, you are asked to verify your choice before the system ends the recall.

EXIT DDC SYSTEM

To exit the Dietary Data Collection System, access the Recall Header screen, press the F4 key, place the highlight on EXIT DDC SYSTEM, and press ENTER.

-        **System Menu**

The System Menu (illustrated in Exhibit 4-8 below) lists other screens that may be accessed from a particular screen and available functions for a screen. Screens and functions that are not available for a particular screen appear in reverse video.

Exhibit 4-8. System menu


```
┌──────────────────────────────────────┐
│           SYSTEM MENU                  │
│                                        │
│                                        │
│   Recall Header                        │
│   Quick List                           │
│   Food Entry                           │
│   Recall Review                        │
│   Recall Trailer                       │
│   End of Recall                        │
│   Print Recall Report                  │
│   Exit Recall                          │
│   Exit DDC System                      │
│  ──────────────────────────────────   │
│   Help                        F1       │
│   Back Up                     F2       │
│   System Hold                 F3       │
│   Insert                      F5       │
│   Delete                      F6       │
│   Missing Food                F7       │
│   Note                        F8       │
│   ENG/SPA Toggle              F9       │
│   Next Screen                 F10      │
│                                        │
│   Press <ESC> to exit menu.            │
│                                        │
└──────────────────────────────────────┘
```

Press F4 to access the System Menu. Use the up and down arrow keys to place the highlight on the desired selection and press ENTER.

The availability of screens from the System Menu is summarized below:

Recall Header: Select Recall Header from the Quick List, Food Entry and Recall Review screens to view or modify the participant information recorded on the Recall Header screen. To return to the original screen, press F4, place the highlight on the desired selection and press ENTER.

Quick List: Select Quick List to review or modify the Quick List from the Food Entry and Recall Review screens. You are able to insert, edit or delete foods and meals while on the Quick List screen. To return to the original screen, press F4, place the highlight on the desired selection and press ENTER.

Food Entry: Select Food Entry to access the Food Entry screen from the Quick List.

Recall Review: Select Recall Review to view or modify the Recall Review from the Quick List, Food Entry, Forgotten Foods Question and Recall Trailer screens. On the Recall Review screen, you can review your entries of the foods eaten during the day, and correct any errors and omissions. You can also review or modify the time, name and place of each meal. To return to the original screen, press F4, place the highlight on the desired selection and press ENTER.

If you are editing a recall, select Recall Review from the menu or press F10 to access Recall Review from the Recall Header screen. (Editing is described in Chapter 6 of the manual.)

Recall Trailer: You may select Recall Trailer from the Quick List and Food Entry screens. If you are editing a recall, select Recall Trailer from the Recall Header or Recall Review screens to review or modify the Recall Trailer responses.   To return to your original screen, press F4, place the highlight on the desired selection and press ENTER.

End of Recall: If you are editing a recall, you can select End of Recall from the Recall Header or Recall Review screens to review or modify the End of Recall entries. To return to your original screen, press F4, place the highlight on the desired selection and press ENTER.

Print Recall Report: The Recall Report is a printed version of the Recall Review. You can select Print Recall Report only from the Recall Header and Recall Review screens. During an active recall, you may print an incomplete Recall Report by accessing the Recall Header or Recall Review screen from the Quick List and Food Entry screens.

To print a complete Recall Report, you must enter the participant's ID on the Recall Header screen, and then select Print Recall Report from the System Menu.

Exit Recall: Select Exit Recall only from the Recall Header, Quick List and Food Entry screens. If you select EXIT RECALL from the Recall Header screen, no information is saved.

If you select EXIT RECALL from the Quick List and Food Entry screens, items completely specified up to the point of exit are saved. Foods remaining on the Quick List are not saved.

When you select Exit Recall, you are asked to verify your choice before the system ends the recall.

Exit DDC System: Select Exit DDC System only from the Recall Header screen.

-   Function Keys

The function keys are located on the top row of the keyboard. You can select the function keys in two ways: 1) press F4 to access the System Menu, move the highlight to the desired function and press the ENTER key; or 2) press the function key directly.

F1   =   HELP SCREEN
F2   =   BACK UP
F3   =   SYSTEM HOLD
F4   =   MENU
F5   =   INSERT
F6   =   DELETE
F7   =   MISSING FOOD
F8   =   NOTE
F9   =   ENG/SPA TOGGLE
F10   =   NEXT SCREEN

Press F1 to review the use of each function key on the Help Screen or refer to the beginning of Section 4.2.4.2.

4.2.4.3 Keys to Change Incorrect Information

You may need to change or correct information that you have entered if:

1.   you inadvertently entered an incorrect response.

2.   the respondent wishes to change an answer altogether.

There are several ways in which you can change or correct information. Depending on the type of error and location within the system, you may use the F6 (Delete) key, the Backspace key, or the F2 (Back-Up) function key. The ESCAPE key (Esc on the keyboard) may also be used during the food selection process. Changing incorrect entries will be discussed later in more detail.

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4.3   Conducting the Interview: Step-by-Step

4.3.1   Recall Header Screen

The Recall Header screen initiates the dietary data collection process. The title of the screen appears in the upper left corner of the screen in reverse video. ENTER information identifying the sample person on this screen.

Once the Recall Header screen is accessed, the highlight appears next to "Participant's ID". The number identifying the SP is referred to as the "participant's ID" in the system. (On hard copy forms, it is referred to as the "sample number".)

When the participant's ID number is entered on the Recall Header screen, the DDC system accesses a file which contains the name, sex, and age of the person assigned that ID number and presents the information on the screen for verification. If, for some reason, after entering the participant's ID number, the identifying information does not appear, the interviewer should first verify that the ID was entered correctly; if so, the interviewer must then manually enter the information. For both the manual and automatic entries, the exam date, recall date, and day of week are always entered by the system for you; review them for accuracy.

To enter data, locate the highlight (which indicates where information will appear on the screen), enter the information requested, and press ENTER.

To correct any errors, use the arrow keys or the backspace key within a field. Press F2 to return to the previous answer and enter the correct data by typing over the previous answer which erases the incorrect information.

4.3.1.1 Automatic Entry

Exhibit 4-9 displays a progression of screens illustrating the automatic entry procedures. (An imaginary ID "4444444" is used in the example.) Enter the participant's ID number and press ENTER. The second screen presents the name, sex, and age for verification. Ask the respondent if he/she is (NAME DISPLAYED). It is possible that the respondent is not the SP (a mother answering for a child); however, make sure you are interviewing the correct person. Be especially careful when a father and son, or mother and daughter have the same name. Check the age to verify that you are interviewing the right person.

Exhibit 4-9. Automatic entry procedures

<u>Screen 1 of 3</u>

```
                              RECALL HEADER

      Exam Date:   08/22/91              Recall Date:  08/21/91
                                         Day of Week:  Wednesday


   Participant's ID:  4444444            <-- Type ID.

              Name:

        Sex (M/F):

        Age (M/Y):

   Interviewer's ID:
```

<u>Screen 2 of 3</u>

```
                              RECALL HEADER

      Exam Date:   08/22/91              Recall Date:  08/21/91
                                         Day of Week:  Wednesday


   Participant's ID:  4444444

              Name:  Hans Anderson

        Sex (M/F):  M                Name, sex and age information
                                     automatically appears.
        Age (M/Y):  20Y

   Interviewer's ID:
```

Exhibit 4-9. Automatic entry procedures (continued)

```
                            RECALL HEADER

    Exam Date:  08/22/91              Recall Date: 08/21/91
                                      Day of Week: Wednesday


  Participant's ID: 4444444

             Name: HANS ANDERSON

       Sex (M/F): M

       Age (M/Y): 20Y

  Interviewer's ID: [0002]         <-- Type your ID number
```

If you have correctly entered the SP number but the name, sex or age is wrong, try to resolve the problem with the coordinator. If you and the coordinator decide that the SP number is correct but the information displayed is incorrect and you need to correct it, note this on the Dietary Interviewer Log (Chapter 10) and correct it during the edit session. You will not be able to correct these entries on the Recall Header screen during the original interview. Be aware that the age displayed on the Recall Header screen is calculated from the SP's date of birth, not the age at the time of the household interview.

If you find that you are interviewing the wrong person while in the Recall Header, press F4 to access the System Menu, place the highlight on Exit Recall and press ENTER (or press ESCAPE). No information is saved when Exit Recall or ESCAPE is selected from the Recall Header screen. Therefore, you may enter the same participant ID number again when you have located the correct person. Return to the waiting area and discuss the situation with the coordinator. Exiting a recall is illustrated in Exhibit 4-10.

After you have verified that the information is correct, type your interviewer ID number. After pressing the <ENTER> key, the system will advance to the next screen.

Exhibit 4-10. Recall Header screen: exiting a recall

```
                   System Menu
    Exam Date┊ Recall Header              ┊
             ┊ Quick List                 ┊
             ┊ Food Entry                 ┊
    Participa┊ Recall Review              ┊
             ┊ Recall Trailer             ┊
         Sex┊ End of Recall              ┊
             ┊ Print Recall Report        ┊
                                               <-- Place highlight on Exit Recall
         Age┊ │Exit Recall│               ┊       and press ENTER.
             ┊ Exit DDC System            ┊
    Interview┊ ------------------------ ┊
             ┊ Help                  F1   ┊
             ┊ Back Up               F2  .┊
             ┊ System Hold           F3   ┊
             ┊ Insert                F5   ┊
             ┊ Delete                F6   ┊
             ┊ Missing Food          F7   ┊
             ┊ Note                  F8   ┊
             ┊ ENG/SPA Toggle        F9   ┊
             ┊ Next Screen           F10  ┊
             ┊                            ┊
             ┊ Press <ESC> to exit menu.┊

 Enter the participant's ID.
```

4.3.1.2 Manual Entry

In the event that the SP's number is not recognized or the automatic entry is non-functional, you must enter the information manually. Exhibit 4-11 is an example of manual entry. To overcome the possibility of entering an incorrect ID number, e.g., transposing numbers, you must confirm the participant's ID by entering the ID number a second time. Immediately after the first entry, the ID just entered is blanked out, and you are prompted to enter the ID a second time. The system will compare the two IDs. If they are identical, the ID will be accepted. If they differ, both will be displayed and you must select the correct one by entering either "F" for the first ID or "S" for the second. If neither ID is correct, enter "N" for neither to start again.

Occasionally, SPs from one stand location are brought into another stand's MEC. Should this occur, you will need to use the manual entry for entering the SP's number and header information. Enter the SP's name as it appears on the Daily Appointment Schedule (Chapter 10), and then "M" (male) or "F" (female) to indicate the sex. The age of the SP will not be accepted by the DDC unless the number is followed by an "M" or "Y," signifying months or years, respectively. Only 2 through 11 months can be entered. Even though the Daily Appointment Schedules may indicate the age is "18 months," you must enter any age 12 months and over in years. For "18M," you would enter "1Y" (e.g., round down to the year).

Exhibit 4-11. Manual entry procedures

```
                           RECALL  HEADER


      Exam Date:   08/22/91              Recall Date: 08/21/91
                                        Day of Week: Wednesday
    _____


      Participant's ID: [1234567]        <-- Type ID

                Name:

           Sex (M/F):

           Age (M/Y):

    Interviewer's ID:


    [Enter the participant's ID.]         <-- Read message area.
```

```
                           RECALL  HEADER


      Exam Date:    08/22/91             Recall Date: 08/21/91
                                         Day of Week: Wednesday
                    ID Verification

        Participant's ID Re-entry:[       ]   <-- System blanks out number.

                Name:

           Sex (M/F):

           Age (M/Y):

    Interviewer's ID:



    [Re-enter the participant's ID for verification.]<-- Read message area.
```

Exhibit 4-11. Manual entry procedures (continued)

```
                               RECALL HEADER

       Exam Date:   08/22/91          .        Recall Date: 08/21/91
                                               Day of Week: Wednesday
                       ID Verification

          Participant's ID Re-entry:  [1234566]       <-- Type ID again.

                 Name:

            Sex (M/F):

            Age (M/Y):

   Interviewer's ID:




    [Re-enter the participant's ID for verification.]
```

```
                               RECALL HEADER

       Exam Date:   08/22/91                   Recall Date: 08/21/91
                                               Day of Week: Wednesday
                    +-----------Which Participant ID -----------
                    |
       Participant's |        First ID: 1234567
                    |
                 Na |        Second ID: 1234566
                    |
                    |        Which ID: [F]       <-- Type F, S, or N.
            Sex (M/ |
                    +---------------------------------------------
            Age (M/Y):
   Interviewer's ID:

    [Please enter which ID you want (F)irst (S)econd or (N)either.]
```

Exhibit 4-11. Manual entry procedures (continued)

```
                          RECALL HEADER

      Exam Date:  08/22/91            Recall Date:  08/21/91
      Start Time: 12:24:11          . Day of Week:  Wednesday
  _____

      Participant's ID: [1234567]        <-- Correct ID appears.

               Name:

          Sex (M/F):

          Age (M/Y):

    Interviewer's ID:

                               [NEW RECALL]

  _____


   Enter the participant's name.
```

4.3.2   The Process of Conducting the 24-Hour Recall

Before providing more details about the individual screens of the DDC system, it is important to first understand the flow of the interview. In this section, a brief overview will be given of the interview process. Following this summary, explicit details will be given regarding when and how to introduce the interview, specific screen presentations, what functions are available per screen, and how to enter data.

The 24-hour recall is entered in two major steps. The first step is to simply list all foods and beverages that the SP/proxy recalls during the specified 24-hour period and the time they were eaten. The first time through, the respondent speaks freely without interruption.

Once the respondent has listed all the foods and beverages that he/she can think of, continue this step by probing to make sure the list is complete.

Prior to beginning the second step, another probe regarding fasting status is asked of those SPs 20 years old and above who are scheduled during the morning session. Fasting status will be discussed in more detail in Section 4.3.2.2.

When all foods and drinks have been listed, the second major step is to probe for more details. In a methodic manner, item-by-item, you collect more information about (1) the meal code, and (2) the place where the food was eaten. Next, you gather more information about (3) additional items added to specific foods and beverages, or ingredients in a specific recipe, (4) portion sizes, (5) methods of preparation, and if necessary, (6) specification of ingredients.

In previous HANES, the final step in conducting the 24-hour recall was to hand "code" the foods or ingredients listed. The coding was completed after the SP left the interview room. Since the DDC system has the capacity to assign food codes, coding will not be one of your responsibilities for NHANES III. However, a brief overview of coding will be given during training since it is important to understand the process.

4.3.2.1 Your Introduction to the 24-Hour Recall and Listing the Foods Eaten

The introduction to the 24-hour recall is divided into two parts. In the initial introduction, you must make four main points while explaining to the respondent the types of information being requested:

1. The respondent must understand that you are interested in everything eaten or drunk during the 24 hours of the previous day, from midnight to midnight. It is important to define the day and time exactly, such as, "We'll be talking about the period from 12 midnight Tuesday until 12 midnight last night." (If an SP were to report eating an item at midnight the day before and the night before, the exact time frame is 12:00 a.m. to 11:59 p.m.)

2. Explain to the respondent that during the first step of simply listing the foods and beverages consumed, the respondent must tell you the approximate time the foods and beverages were eaten. Have the respondent categorize the foods and beverages by using a time frame, e.g., "At 8:00 a.m., I had coffee and eggs. At 10:00 a.m., I had a doughnut."

3. Emphasize that the respondent is to tell you everything eaten or drunk, including snacks, coffee breaks and alcoholic beverages, at home or away from home. Do not include tap or spring water; but do include bottled water, such as Perrier.

4. After the foods are listed, inform the respondent that you will be asking for more detail about these foods later.

In addition to these four major points, always remember to introduce yourself to the respondent, make the respondent aware that you will be administering the dietary interview, and explain that all information gathered will be kept confidential.

If the respondent is unable to recall what he/she ate in the 24-hour period, use a prompt such as, "Perhaps it will help you to think about what you did on Wednesday." Be careful, however, not to use probes that suggest specific meals or foods such as, "What did you have for breakfast?" or, "Do you usually have a cup of coffee first?"

It is crucial that the respondent understands what is being asked. Remember that this is not a familiar procedure to the respondent and the request may seem unusual. This is why it is important to explain the procedure carefully and let the respondent know that you will be patient while he or she tries to recall the information. While it is useful to prompt the respondent in some cases, do not do so before he or she has time to think about the question.

During the initial listing of the foods/beverages, let the respondent list all items consumed without interruption. Remember that in order for you to enter the foods in a logical and efficient manner, the SP/proxy should give the time each food or group of foods was eaten. By listing the foods chronologically, the respondent is also better able to organize his/her thoughts. Though you may have asked the respondent to give the time each food or group of foods was eaten in the introduction, many respondents are so intent on remembering the foods that time is forgotten. If this should occur, stop the respondent to ask the time the items were consumed. Should a respondent be uncertain as to the time something was eaten, probe for his/her best guess.

If the SP does not initially tell you the time of day the food/beverage was consumed, but instead provides an acceptable meal name or place eaten (which would separate out that time frame), wait until the Food Entry screen to ask the time. For example, the SP says something such as, "For lunch I had a hamburger and ...," do not probe for the time. Enter "/LUN" on the Quick List and the items consumed. The system will prompt you for the time eaten once you finish the Quick List and begin the Food Entry portion of the interview. If the respondent says he ate at McDonald's, without mentioning the time, enter "/FAS" and the items consumed. The system will prompt you for the time at the Food Entry screen.

Exhibit 4-12 is an example of the first part of the introduction. You may adapt this version to accommodate your own interview style; however, remember that you must include the four major points outlined earlier, plus your name, the name of the component, and a confidentiality statement.

The information in the first paragraph of the introduction can be delivered as the SP/proxy enters the dietary room. After he/she has been seated and you have verified that you are interviewing the correct respondent, you may continue.

Exhibit 4-12. Introduction script

"Hello, my name is _____. This is the dietary interview (or the nutrition component of the study). Everything you say here will be kept confidential.

What we want to do first is to make a list of all the foods and beverages that you have had in a 24-hour period of time, a complete day. This includes alcoholic beverages, soda, mineral water like Perrier, but not tap or spring water. Remember to include all snacks.

Today is __(day)__. I'd like you to tell me everything you ate and drank all day ___(day)___ starting from __(day)__ at midnight to midnight last night. This means if you went to bed late on _ (day)___ after midnight, and you ate or drank something, you'd start there. If you were asleep at that time, start with the first thing you ate or drank after you woke up yesterday.

I'd also like you to classify the foods as to what time you had them. For example, at 8:00 I had this, at 10:00 I had that.

We'll make a very general list at first, then we'll go back and fill it in with more detail."

Sample: "Hello, my name is Joe. This is the dietary interview. Everything you say here will be kept confidential.

What we want to do first is to make a list of all the foods and beverages that you have had in a 24-hour period of time, a complete day. This includes alcoholic beverages, soda, mineral water like Perrier, but not tap or spring water. Remember to include all snacks.

Today is Wednesday. I'd like you to tell me everything you ate and drank all day Tuesday starting from Monday at midnight to midnight last night. This means if you went to bed late on Monday after midnight, and you ate or drank something, you'd start there. If you were asleep at that time, start with the first thing you ate or drank after you woke up yesterday.

I'd also like you to classify the foods as to what time you had them. For example, at 8:00 I had this, at 10:00 I had that.

We'll make a very general list at first, then we'll go back and fill it in with more detail."

4.3.2.2 Follow-up Probes Once Listing Process Has Been Completed

As mentioned earlier, there are two follow-up probes once the SP/proxy has completed his/her list of foods and beverages. First, probe to assure that the list is as complete as possible; for example, "Is there anything else you can think of?"

The second probe, for those respondents 20 years and above, concerns the fasting status of the respondent. Until this time, the fasting status has only been alluded to briefly. It is important that you understand the purpose and use of the fasting status probe.

The fasting status probe is, "Did you change the way you ate last night between the hours of 8:30 p.m. and twelve midnight because of the fasting requirement?"

Assuming the SP fasted from 8:30 p.m. to midnight the night before the day of the exam, there is a possibility that the SP's intake was affected; and therefore, the 24-hour recall would not accurately reflect the SP's true intake for a specified 24-hour period of time. Remembering to ask the fasting status question is critical to ensure a complete recall.

Each morning you will receive a list of SPs who will be examined that day. This listing will be divided into the two sessions scheduled for that day. SPs in the afternoon or evening sessions will not be asked to fast for 12 hours. Refer to the morning session listing to determine which SPs are 20 years old or more and were to have fasted for the bloodwork (12-hour fast). All SPs who were to have fasted for 12 hours will be asked their fasting status. In summary, SPs eligible for the fasting status question are all SPs in the morning session 20 years old or above.

It is possible that SPs who were not to have fasted for 12 hours (according to the list) or who are under 20 years of age, will have fasted for that length of time. Some SPs have been requested to fast for shorter periods, which would not affect the day of the recall. If you find that an SP fasted by mistake, and this affected the recall day, attach a note at the end of the interview explaining the situation.

If the SP responded "yes" to the fasting status question, ask the SP the following question(s) before stating the second half of the introduction. If the SP says "no," continue to the second part of the introduction.

1. Ask the SP, "In what way did you alter or change your eating habits?" If the SP says that only the amount of food or time eaten had changed, continue to the second part of the introduction.

2. However, if the SP omitted foods or beverages due to fasting, ask him/her to recall all foods/beverages consumed after 8:30 p.m. the previous evening (the day before the recall date). Enter these foods/beverages as if they were eaten on the day of the recall. For example, if an SP said, "I usually have a snack while I watch the 10:00 p.m. news, but I did not have one last night because I had to fast," ask the SP to report whether he/she consumed anything after 8:30 p.m. the night before the recall. Record the 10:00 p.m. snack from the night before the day of the recall. Even though what the SP consumed the night before the recall may have been different than what he/she would normally eat/drink, <u>always record</u> <u>what was actually consumed</u>. This is the only situation in which it is permissible to record foods for a period of time other than the day of the recall. [You will later specify that these foods/beverages were omitted due to the fasting requirements (Section 4.3.3.4).]

After asking the fasting status questions, pay close attention to the SP's responses so that you are able to discern those situations which require an additional meal entry from those that do not. A few examples follow which explain how to handle other situations related to fasting which may occur.

Should an SP report a snack consumed at 8:00 p.m. the night before the recall date, do not enter the snack since it was consumed outside of the 8:30 p.m. to midnight time frame. Continue to the second part of the introduction without probing further. In summary, if an SP omitted foods or beverages due to fasting, but did not consume anything after 8:30 p.m. the previous evening, no additional entry is required.

Even though an SP may not have correctly followed the fasting procedures (e.g., he/she ate some ice cream at 9:30 p.m. on the day of the recall), you still must ask the fasting status question. The SP still could have altered his/her eating habits; some SPs misinterpret the fasting instructions. In a situation such as this, the recall would contain a 9:30 p.m. meal entry of ice cream which was actually <u>eaten on the day of the recall</u>. To distinguish this entry from the food(s) eaten the night before the recall day, attach a note to the meal line containing the unauthorized food(s) stating that the "SP did not correctly follow the fasting procedure."

If an SP fasted incorrectly, such as in the situation described above, try to notify the phlebotomist so that the lab can document the information well. SPs are asked questions by the phlebotomists regarding their compliance to the fasting instructions. Sometimes SPs remember eating something after 8:30 p.m. during the dietary interview which they may have forgotten during the phlebotomy questions.

4.3.2.3 Meal Codes

You will be provided with one flash card listing the meal codes in both English and Spanish. Display the flash card (Exhibit 4-13) so that is easily seen by the respondent. Although similar procedures are used in entering both the English and Spanish meal codes, the discussion at this point will be limited to English meal code entry. (The Spanish meal codes are explained in more detail in Chapter 7.)

The abbreviations for the English meal codes are:

Breakfast	=	BRE
Brunch	=	BRU
Lunch	=	LUN
Dinner/Supper	=	DIN
Snack or Beverage	=	SNA
Infant Feeding	=	INF
Other	=	OTH
Extended Consumption	=	EXT

Infant feeding, other and extended consumption are not presented on the flash card since their use is limited to certain situations which will be explained shortly. Note the combined categories for dinner/supper and snack/beverage. Enter "DIN" for either dinner or supper, and "SNA" when the respondent reports either a snack or beverage break.

We generally let the respondents define the meal codes. For example, "lunch" is whatever the SP defines as lunch. However, use some discretion when the respondent is hesitant or unable to select a classification. Four meal codes need explanation: snack or beverage, infant feeding, other, and extended consumption. The snack or beverage code includes coffee or beverage breaks, sipping or tasting an item, or a bottle drunk by a toddler. Sometimes you will encounter an SP who has trouble classifying something like a few bites of cake eaten at a party. If, after probing, the SP still is not able to choose a selection, you may use the code "snack".

The category "other" is limited to occasions where the SP was ill and is unable to classify the foods or beverages consumed. For example, if the SP sipped ginger ale and soup throughout one day, this would be "other."

The introduction to the dietary interview will be slightly different for SPs below the age of one year (See Section 7.1); the respondent will not be required to specify the name of the meal eaten. Classify all items consumed by an SP below the age of one year as an "infant feeding".

Exhibit 4-13. Meal code flash card

LIST OF MEALS
LISTA DE COMIDAS

BREAKFAST	DESAYUNO
BRUNCH	ALMUERZO
LUNCH	COMIDA
DINNER/SUPPER	MERIENDA
SNACK OR BEVERAGE	CENA
	ENTRE COMIDAS/ BOTANA/BOCADILLO/ TENTEMPIE
	BEBIDA

The category "extended consumption" is restricted to those situations where the respondent has consumed multiple servings (or a significant amount) of a food or beverage over a period of time, and cannot provide the specific times at which each serving was consumed. For example, this would include the consumption of a "pot" of coffee throughout the day, a 2-liter bottle of soda or a large bag of potato chips consumed throughout the afternoon, or a six-pack of beer drunk while watching a football game.

One bottle of milk drunk by a toddler throughout the morning would not be included in this category, nor would a situation where an SP drank one cup of coffee at his/her desk over a period of time. In addition, do not include a dinner party or leisurely dinner where a meal is consumed over an extended period.

In the latter three situations, have the respondent select the type of meal using the categories listed on the flash card. Record the time the SP began consuming the meal or snack.

Other than the situations previously described, if the food reported is not identified as a specific meal, try to determine from the respondent what it was. As always, probing for a meal should be done without giving the respondent an answer. Don't say, "Was that your breakfast?" Say, "Was that a meal or a snack?" Frequently, an SP will respond, "Oh, that was my breakfast" in which case, further probing is not necessary. On the other hand, if the SP responds that it was a meal, direct him/her to the appropriate flashcard to indicate which meal.

4.3.2.4 Place (Where Eaten) Codes

You will also be provided with an English and Spanish flash card with a listing of the "where eaten" locations. Display these cards (Exhibit 4-14) so they are easily visible to the respondent.

Exhibit 4-14. Where eaten flash card

WHERE EATEN

HOME
WORK
SCHOOL
DAY CARE/DAY CAMP
FAST FOOD/TAKE OUT
DELI
RESTAURANT
CAFETERIA/SELF-SERVE BUFFET
STORE
FRIEND'S/SOMEONE'S HOUSE
COMMUNITY FEEDING PROGRAM
CAR/BOAT/PLANE
OTHER

DÓNDE COMIÓ

CASA PROPIA

TRABAJO

ESCUELA

GUARDARÍA PARA NIÑOS POR DÍA/CAMPAMENTO DE DÍA

COMIDA RÁPIDA/PARA LLEVAR

DELICATESEN

RESTAURANTE

CAFETERÍA/BUFFET, AUTO-SERVICIO

TIENDA/ALMACÉN

CASA DE AMIGO/CASA AJENA

PROGRAMA DE ALIMENTACIÓN COMUNITARIA

AUTOMÓVIL/BARCO/AVIÓN

OTRO

The place (where eaten) code designates the location where the meal was eaten. The codes are:

Home	=	HOM
Work	=	WOR
School	=	SCH
Day Care/Day Camp	=	DAY
Fast Food/Take-Out	=	FAS
Deli	=	DEL
Restaurant	=	RES
Cafeteria/Self-Serve Buffet	=	CAF
Store	=	STO
Friend's/Someone's Home	=	FRI
Community Feeding Programs	=	COM
In Transit	=	TRA
Other	=	OTH

The majority of these codes are self-explanatory, but in order to assure consistency among all interviewers, it is necessary to give a brief explanation of each. Use these definitions if an SP gives you an answer that seems to fall into more than one category, or if the SP is not certain. The definitions are:

Home: Foods/beverages eaten in the home.

Work: Foods/beverages eaten at the work place.

School: Foods/beverages eaten at a school or school cafeteria. Include preschool, elementary, junior/senior high school, Adult Education, college/university, etc.

Day Care/Day Camp: Foods/beverages eaten at a licensed Day Care Center, Family Day Care, or official Day Camp.

Fast Food/Take-Out: Foods/beverages eaten at a fast food restaurant. Fast food refers to a location where the food is served fairly quickly, usually without waiter service, and may have drive-thru windows. The foods/beverages do not have to be purchased there. Include a situation such as bringing lunch from home, buying a soda at McDonald's, and staying to eat lunch there. Also include food establishments in food courts, such as those in malls, unless there is an obvious, more appropriate category, such as deli.

Delicatessen: Foods/beverages eaten at a deli.

Restaurant: Foods/beverages eaten in a restaurant. Restaurants usually have table service. Include coffee shops and dinner houses.

Cafeteria/Self-Serve Buffet: Foods/beverages eaten in a cafeteria. Foods are usually selected from any array of food items; a tray is moved along a metal railing and the customer selects the items he/she wants. On a self-serve buffet, a customer serves him/herself from a buffet.

Store: Foods/beverages eaten in a store, such as a 7-11, department store, or a grocery store.

Friend's/Someone's Home: Foods/beverages eaten in someone else's home. Include a situation where a child eats at a baby-sitters house.

Community Feeding Program: Foods/beverages eaten at specially designated locations. Available primarily for senior citizens.

In Transit: Foods/beverages eaten while walking, or using any form of transportation, e.g., car, boat, or plane.

Other: Include any other situation not yet included, such as food eaten in a movie theater.

If an SP took lunch to school, and bought milk at school, the meal code would be lunch (LUN), and the place (where eaten) code would be school (SCH).

There are some situations that occur where the "place" might fall into two categories, such as an SP who has an office in his home. In such cases, have the SP decide on the category.

4.3.2.5 Quick List

Before entering any information, always read and follow the instructions in the message area located at the bottom of the screen. Refer to Exhibit 4-15 which illustrates the message area on the Quick List screen.

Begin the interview with the first part of the introduction to the 24-hour recall, explaining to the respondent what information is needed. Emphasize the 24-hour time frame, and that you will ask for more specific details later. As the respondent states the foods/beverages consumed and the times they were eaten, enter the information. You may abbreviate these entries, e.g., type "oj" instead of "orange juice". Make sure, though, that the abbreviation is easily understood (by you) to avoid confusion.

Always precede each new time, meal, or place on the automated system with a "/".

Exhibit 4-15. Quick List screen: message area

```
                          QUICK LIST

                                    EX: /7a bre hom

                                         CODES

                              Meals      Place
                              BRE        HOMe
                              DES        WORk
                              BRU        SCHool
                              ALM        DAY care
                              LUN        FASt food
                              COM        DELi
                              MER        REStaurant
                              DIN        CAFeteria
                              CEN        STOre
                              SNA        FRIend's
                              ENT        COMmunity
                              INF        TRAnsit
                              EXT        OTHer
                              OTH

 Type / to BEGIN a new meal and press <ENTER>.    <-- Review the message
 Type one food per line and press <ENTER>.            area on each screen.
 Press F10 to complete the Quick List.
 ─────────────────────────────────────────────────────────────────
 Enter the Quick List.
```

If the meal code and place eaten are given at this point by the respondent, enter those data also on the same line as the time. The meal and place eaten codes are the first three letters of the word. Note the example in the right-hand corner of the screen indicating the order in which the time, meal, and place eaten must be entered.

For the time category, type in 1 to 4 numbers, and a, p, m, or n (for AM, PM, midnight, or noon, respectively). Do not use a colon or space; for example, 7:00 a.m. would be entered as "7a," 8:45 p.m. as "845p". Enter times verbatim. If the SP says he/she ate breakfast at 8:20 a.m. enter the exact time, "820a". If after probing, an SP/proxy is unable to estimate the time a food/beverage was consumed, enter an "approximate" time and attach a note stating the situation. Refer to Exhibit 4-16 which indicates how a Quick List is completed.

Although the message area on the Quick List screen alerts you to enter only one food name per line, you should enter foods eaten in combination on one line. For example, if the SP tells you that he/she ate potatoes with gravy, you should enter "potatoes with gravy" or "pota w/gravy" on the same line. This entry automatically appears on the Food Entry screen and reminds you that the SP did not eat the potatoes plain. You may enter anything on the Quick List, so if there is any doubt, record more information than normally necessary. Press F10 to complete the Quick List.

4-47

Exhibit 4-16. Quick List screen: completing the Quick List

```
                         QUICK LIST

                                   EX: /7a bre hom

                                        CODES
    /7a                <-- Note the "/" before
    instant breakfast      meal or snack.     Meals     Place
    apple, sliced                             BRE       HOMe
    /10a wor                                  DES       WORk
    tea                                       BRU       SCHool
    toast                                     ALM       DAY care
    /12p lun                                  LUN       FASt food
    lean pocket        <-- Press ENTER after  COM       DELi
    salad                  each new entry.    MER       REStaurant
    perrier                                   DIN       CAFeteria
    /5p hom                                   CEN       STOre
    wine                                      SNA       FRIend's
    /6p hom                                   ENT       COMmunity
    chicken w/ gravy                          INF       TRAnsit
    mashed pot w/ gravy                       EXT       OTHer
    /9p sna                                   OTH
    ice cream

   ┌─────────────────────────────────────────┐
   │Type / to BEGIN a new meal and press <ENTER>.│ <-- Review the message
   └─────────────────────────────────────────┘
   ┌─────────────────────────────────────────┐    area.
   │Type one food per line and press <ENTER>.│
   └─────────────────────────────────────────┘
   ┌─────────────────────────────────────────┐
   │Press F10 to complete the Quick List.│
   └─────────────────────────────────────────┘
   ─────────────────────────────────────────────────
   Enter the Quick List.
```

You can edit the information recorded on the Quick List using the up, down, left and right arrow keys, the insert and delete keys, and the backspace key. Press F5 to insert a blank line or F6 to delete an item (illustrated in Exhibit 4-17). Press F1 to review the use of function keys, combination keys and other data entry keys.

Pressing F4 accesses the System Menu which lists specific screens and functions that may be accessed during the Quick List. You may exit the recall, view the information recorded in the current Recall Header screen, or progress to the Recall Review screen. If you exit the recall from the Quick List without further specifying any of the foods listed, no information is saved. However, foods that have been fully specified before exiting the recall are saved. The procedures for exiting a recall are illustrated in Exhibit 4-18.

Exhibit 4-17. Quick List screen: use of F5 and F6 keys

```
                        QUICK LIST

                                      EX: /7a bre hom

                                           CODES
    /7a
    instant breakfast               Meals      Place
    apple, sliced                   BRE        HOMe
    /10a wor                        DES        WORk
    tea                             BRU        SCHool
    toast                           ALM        DAY care
    /12p lun                        LUN        FASt food
    lean pocket                     COM        DELi
    salad        <-- Highlight and press F6   MER        REStaurant

    perrier             to delete a food.     DIN        CAFeteria
    /5p hom                         CEN        STOre
    wine                            SNA        FRIend's
    /6p hom                         ENT        COMmunity
    chicken w/ gravy                INF        TRAnsit
    mashed pot w/ gravy             EXT        OTHer
    /9p sna     <-- Highlight and press F5    OTH

    ice cream           to insert a food.

Type / to BEGIN a new meal and press <ENTER>.
Type one food per line and press <ENTER>.
Press F10 to complete the Quick List.

Enter the Quick List.
```

To insert soda under "mashed pot w/ gravy" at 6:00 pm, bring the highlight to "9p sna" and press the F5 key. A blank line will appear above "9p sna" and soda may be typed at this point.

To delete "salad" at lunch, bring the highlight to salad and press the F6 key.

Exhibit 4-18. Quick List screen: exiting a recall

```
                 System Menu
          ¦ Recall Header           ¦        EX: /7a bre hom
          ¦ Quick List              ¦
          ¦ Food Entry              ¦           CODES
          ¦ Recall Review           ¦
          ¦ Recall Trailer          ¦        Meals    Place
         .¦ End of Recall           ¦        BRE       HOMe
          ¦ Print Recall Report     ¦        DES      WORk
          ¦                         ¦
          ¦ Exit Recall             ¦   <-- Place highlight on Exit Recall
          ¦                         ¦
          ¦ Exit DDC System         ¦      and press ENTER.
          ¦-------------------------¦
          ¦ Help              F1    ¦        LUN      FASt food
          ¦ Back Up           F2    ¦        COM      DELi
          ¦ System Hold       F3    ¦        MER      REStaurant
          ¦ Insert            F5    ¦        DIN      CAFeteria
          ¦ Delete            F6    ¦        CEN      STOre
          ¦ Missing Food      F7    ¦        SNA      FRIend's
          ¦ Note              F8    ¦        ENT      COMmunity
          ¦ ENG/SPA Toggle    F9    ¦        INF      TRAnsit
          ¦ Next Screen       F10   ¦        EXT      OTHer
          ¦                         ¦        OTH
          ¦ Press <ESC> to exit menu.¦

Type / to BEGIN a new meal and press <ENTER>.
Type one food per line and press <ENTER>.
Press F10 to complete the Quick List.
_____
Enter the Quick List.
```

4.3.3   Before Beginning the Food Entry Process

In the first half of the introduction, you told the respondent that you would be asking for more details about the foods/beverages he/she reported. To provide a smooth transition from the Quick List to the food entry process, you must now state the second part of the introduction which explains to the respondent what is expected next.

There are four major points which must be incorporated into the second half of the introduction. You may create an introduction with which you feel comfortable but the following important points must be included:

1.   There are two flash cards on the wall, one entitled "list of meals" and the other "where eaten". The respondent must select the answer he/she feels is the most appropriate; there is no right or wrong answer.

2.   Explain the use of the food models, shape chart, grid, and thickness bars.

3.   When answering, the respondent should point to the line on the model which best describes the amount consumed.

4.   The spoons should indicate level spoonfuls only.

The following is an example of the second half of the introduction.

"Now we're going to fill your list in with more detail. There are two charts on the wall, one says 'list of meals' and the other 'where eaten.' For each food or group of foods that you've listed, I'll have you select an answer from each card. There is no right or wrong answer. (In addition, you do not have to be specific on the location. You can say 'home,' not which room the food was eaten.)

The reason the models are on the table is for you to show me about how much you ate or drank of something. If a shape would better describe the food, you may use the shape chart by pointing to a shape and using the ruler to show me the size. You may use the grid for rectangular or square shapes (use your hands to show SP how it is used) and the circles (point to the plastic and floppy discs) for circular or round shapes. To show me the thickness of an item, you may use these thickness bars. (Give example).

For the cups, bowls, and glasses, show me which line best describes the portion you ate or drank. (Point to one of the lines on the models.)

When you use any of the spoons, please tell me the quantity in level spoonfuls."

4.3.3.1 Beginning the Food Entry Process

Since "time" was already entered on the Quick List, it will automatically appear on the Food Entry screen as shown on screen 1 in Exhibit 4-19. Your next step is to ask the SP what meal this was. Referring to the flash card, ask the SP to identify the appropriate meal code. Should the respondent have difficulty reading the flash cards because of poor eyesight, illiteracy, etc., you may read the list to him/her. Read the whole list, not specific answers, in order to assure that each respondent either hears or sees all the choices available to him/her. Select the meal code by moving the highlight to the correct answer or typing the abbreviation of the meal and pressing ENTER. If the respondent had given the meal code while listing his/her intake on the Quick List, the meal code would have automatically appeared on screen 1. This also holds true for the place eaten.

Once the respondent has selected the meal code, you then ask where the food was eaten. If the SP chooses "lunch," probe, "Where did you eat your lunch?" Note that the place code signifies where eaten, not where the food was purchased or made. For example, food bought from a street vendor but eaten at one's desk is coded "work"; however, if the same food is brought home and consumed there, it is coded "home". A situation might occur in which a meal is eaten in two different places. In this case, select the place where the meal began.

If the SP does not specify anything else, but just says "restaurant," do not probe further. As mentioned, should a respondent have difficulty, you may read the list of choices to the respondent. Let the SP define each and decide which is the most appropriate.

To enter the place, highlight the correct answer and press ENTER.

As mentioned earlier, occasionally a respondent forgets to give the time on the Quick List, but gives you the meal code or the place eaten. In this case, the system will prompt you at this point to type the time. Type in four numbers followed by either "am" or "pm." As shown in Exhibit 4-19, you must zero fill if the time has less than four digits. On the Food Entry screen the system will accept "0700 am" but will not accept "700 am."

In Exhibit 4-19, screen 1, the respondent only told you the time, so you must select both the meal and the place eaten (screen 2). To correct an entry, press the F2 key which backs up to the previous entry. Select the correct entry and press the ENTER key.

Exhibit 4-19. Food Entry screen: selecting meal and place

Screen 1 of 2

```
        Meal Time  : [07:00 am]        <-- Automatically brought from Quick List.
        Meal Name  :
        Meal Place:
 +-------------------------------------------------------------------+
 |   Food Name: instant breakfast                                    |
 +---------------------------- Meal Name Choices --------------------+
 |                                                                   |
 |           +------------------------------------------------+      |
 |           |  BRE  Breakfast                                 |     |
 |           |  DES  Desayuno                                  |     |
 |           |  BRU  Brunch                                    |     |
 |           |  ALM  Almuerzo                  Select meal name.     |
 |           |  LUN  Lunch                                     |     |
 |           |  COM  Comida                                    |     |
 |           |  MER  Merienda                                  |     |
 |           |  DIN  Dinner/Supper                             |     |
 |           |  CEN  Cena                                      |     |
 |           +------------------------------------------------+      |
 |       Meal Name:                                                  |
 |                                                                   |
 +-------------------------------------------------------------------+
   [Enter the meal name or choose one from the list.]
```

Screen 2 of 2

```
        Meal Time  : 07:00 am
        Meal Name  : breakfast
        Meal Place:
 +-------------------------------------------------------------------+
 |   Food Name: instant breakfast                                    |
 +---------------------------- Meal Place Choices -------------------+
 |                                                                   |
 |           +------------------------------------------------+      |
 |           |  HOM  Home                                      |     |
 |           |  WOR  Work                                      |     |
 |           |  SCH  School                                    |     |
 |           |  DAY  Day care/day camp         Select place eaten.   |
 |           |  FAS  Fast food/take out                        |     |
 |           |  DEL  Delicatessen                              |     |
 |           |  RES  Restaurant                                |     |
 |           |  CAF  Cafeteria/self-serve buffet               |     |
 |           |  STO  Store                                     |     |
 |           +------------------------------------------------+      |
 |       Meal Place:                                                 |
 |                                                                   |
 +-------------------------------------------------------------------+
   [Enter the meal place or choose one from the list.]
```

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4.3.3.2 Use of Food Hierarchies in the Food Entry Process

On the Food Entry screen, the food items from the Quick List automatically appear on the screen in the order they were listed. In order to identify that food and begin the food specification process, you must now enter four or more letters which correspond to a specific food, food group or category. If the food has less than 4 letters, add an "S," such as in TEA(S), HAM(S), and EGG(S).

The hierarchical order in which a stated food/beverage progresses through a series of food groupings, resulting in a detailed description of that item is called the food hierarchy. Exhibit 4-20 consists of a partial listing of the cereal (CERE) hierarchy. For example, to specify oat bran cooked in salted water, the hierarchical order is cereal (CERE), cooked (CKD), oat bran (OTB), and cooked with salt (S). Each abbreviation entered on the Food Entry screen is known as a "key." The string of abbreviations which identify a specific food is known as the keylist. In this example, the keylist would be "CERE.CKD.OTB.S."

Foods are also grouped together as they are found in the marketplace. For example, sherbets and frozen fruit pops, are found in the ice cream hierarchy. Cross-referencing is extensive. In the event that you cannot access a food item, enter a "?" at item 1, and the system will produce a list of food categories to "jog" your memory.

Exhibit 4-21 presents a "special index" of four-letter keys. This special index is not all inclusive; refer to the hierarchies for other four-letter keys. By becoming familiar with this listing and the food hierarchies, you will learn to enter four-letter keys at the Food Entry screen to directly access an intermediate level of a hierarchy rather than progressing through the entire selection process. (Appendix A contains a list of all four-letter keys in the DDC.)

Sometimes, instead of entering only the first four letters (four-letter key) of a food item, it is more effective to type the whole word. An example of this occurs with the fruits grapes and grapefruit, since both of these fruits begin with the letters "grap." By typing "grapes," you bypass a screen asking you to identify which of the two fruits is to be specified (Exhibit 4-22). By becoming familiar with the food hierarchies, you will save the respondent and yourself time.

4.3.3.3 Continuing the Food Entry Process

Continue the food entry process by saying something like "You told me that you had a snack at 10:00 a.m. at work." This will orient the SP and also give him/her a chance to correct or change anything. When the first food appears, say, "At that time you had (insert food or beverage)." If the SP agrees, you would type in that food after item 1.

Exhibit 4-20. Partial listing of cereal hierarchy

```
                                          CERE: cereal
CERE CKD   GRIT MIL  NS    cooked without salt
                 |——— U    unknown if cooked with salt   <CERE.CKD.GRIT.MIL.S>
                 |— U    unknown if cooked with water or milk   <CERE.CKD.GRIT.WAT>
           —— MAL Malt-O-Meal
                 |——— PL    plain
                       |—— WAT  cooked with water
                       |    |— S    cooked with salt
                       |    |— NS   cooked without salt
                       |    |—— U    unknown if cooked with salt    <CERE.CKD.MAL.PL.WAT.S>
                       |—— MIL  cooked with milk
                       |    |— S    cooked with salt
                       |    |— NS   cooked without salt
                       |    |—— U    unknown if cooked with salt   <CERE.CKD.MAL.PL.MIL.S>
                       |—— U    unknown if cooked with water or milk   <CERE.CKD.MAL.PL.WAT>
                 |—— CHO chocolate
                       |—— WAT  cooked with water
                       |    |— S    cooked with salt
                       |    |— NS   cooked without salt
                       |    |—— U    unknown if cooked with salt   <CERE.CKD.MAL.CHO.WAT.S>
                       |—— MIL  cooked with milk
                       |    |— S    cooked with salt
                       |    |— NS   cooked without salt
                       |    |—— U    unknown if cooked with salt   <CERE.CKD.MAL.CHO.MIL.S>
                       |—— U    unknown if cooked with water or milk   <CERE.CKD.MAL.CHO.WAT>
      —— MAT Maltex
            |— WAT  cooked with water
            |    |— S    cooked with salt
            |    |— NS   cooked without salt
            |    |—— U    unknown if cooked with salt   <CERE.CKD.MAT.WAT.S>
            |—— MIL  cooked with milk
            |    |— S    cooked with salt
            |    |— NS   cooked without salt
            |    |—— U    unknown if cooked with salt   <CERE.CKD.MAT.MIL.S>
            |—— U    unknown if cooked with water or milk   <CERE.CKD.MAT.WAT>
      —— MAYP Maypo
            |— WAT  cooked with water
            |    |— S    cooked with salt
            |    |— NS   cooked without salt
            |    |—— U    unknown if cooked with salt   <CERE.CKD.MAYP.WAT.S>
            |—— MIL  cooked with milk
            |    |— S    cooked with salt
            |    |— NS   cooked without salt
            |    |—— U    unknown if cooked with salt   <CERE.CKD.MAYP.MIL.S>
            |—— U    unknown if cooked with water or milk   <CERE.CKD.MAYP.WAT>
      —— MIX Mix 'N Eat Wheat cereal
      —— MUL multi-grain or seven grain
      —— OTB oat bran
            |— WAT  cooked with water
            |    |— S    cooked with salt
            |    |— NS   cooked without salt
```

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Exhibit 4-21. Special index hierarchy

INDX: @special index

```
INDX @special index
─── ALEX Alexander - brandy  <BEVE.COCK.BRA>
─── AWAK Awake  <BEVE.JUIC.***>
─── BLAC black-eyed peas/cowpeas  <VEGE.PEAS.COWP>
─── BURG Burger Chef  <FAST.BUR>
─── CHIC chickpeas/garbanzo beans  <VEGE.BEAN.GARB>
─── CIDE cider  <BEVE.JUIC.APP>
─── COKE Coke  <BEVE.SODA.***>
─── COOL Cool Whip dessert topping  <CREA.WHIP.***>
─── CREM Cremora  <CREA.CRE.***>
─── COUG cough drops  <CAND.***.HAR.P13>
─── DORI Doritos  <SNAC.***>
─── DREA Dream Whip dessert topping  <CREA.WHIP.***>
─── DRUM drumstick - ice cream type  <ICEC.TREA.***>
─── FIVE Five Alive  <BEVE.JUIC.***>
─── FRAN frankfurter  <LUNC.HOTD>
─── FRIT Fritos  <SNAC.***>
─── GATO Gatorade  <BEVE.JUIC.***>
─── GRAP grapefruit  <FRUI.GRA>
─── GROU ground beef  <BEEF.HAMB>
─── HIHO HiHo crackers  <CRAC.***>
─── HYDR Hydrox cookie  <COOK.***>
─── INST Instant Breakfast  <MILK.MIX.***>
─── JELL Jello - gelatin  <DESS.GELA>
─── KETC ketchup  <COND.CATS>
─── KOOL Kool-Aid  <BEVE.JUIC.***>
─── KUGE kugel/noodle pudding  <DESS.PUDD.NOO>
─── LOAF loaf - meat or fish  <MIXE.MEAT>
─── LONG Long John or Bismark  <BREA.BISM>
─── LORN Lorna Doones  <COOK.***>
─── MEAT meat balls  <MIXE.MTB>
─── MIRA Miracle Whip  <DRES.MAYO.***>
─── NACH nacho chips - plain  <SNAC.CHIP.TACO>
─── NERD Nerds  <CAND.***.HAR.P20>
─── OREO Oreos  <COOK.***>
─── OVAL Ovaltine  <MILK.MIX.***>
─── PEDI Pedialyte  <SPEC.***>
─── PEPS Pepsi  <BEVE.SODA.***>
─── PERR Perrier water  <BEVE.WATE.***>
─── PICK pickle relish  <COND.RELI.PIC>
─── POPT pop tart or toaster pastry  <BREA.TOA>
─── POST Postum  <BEVE.COFF.SUB.***>
─── PREA Pream  <CREA.CRE.***>
─── PRES preserves or jams  <SWEE.JAMS>
─── QUIK Quik  <MILK.MIX.***>
─── RAIS raisins - coated  <CAND.OTH.RAI>
─── REDD Reddi wip  <CREA.WHIP.***>
─── RIBS ribs
      │─── BEE  beef  <BEEF.RIB>
      │─── POR  pork  <PORK.RIB>
```

Exhibit 4-21. Special index hierarchy (continued)

```
                                    INDX: @special index
INDX RIBS U    unknown if beef or pork  <INDX.RIBS.POR>
 |── RITZ Ritz crackers  <CRAC.***>
 |── RUFF Ruffles  <SNAC.***>
 |── RYKR RyKrisp  <CRAC.***>
 |── SASH sashimi - raw fish  <FISH>
 |── SEVE Seven-Up  <BEVE.SODA.***>
 |── SLEN Slender  <MILK.MIX.***>
 |── SLIC Slice  <BEVE.SODA.***>
 |── SLUR slurpee/slush  <ICEC.SLUS>
 |── SPAM spam  <LUNC.***>
 |── SPRI Sprite  <BEVE.SODA.***>
 |── SQUI Squirt  <BEVE.SODA.***>
 |── STRI string/green beans  <VEGE.BEAN.GREE>
 |── TANG Tang  <BEVE.JUIC.***>
 |── TRIS Triscuits  <CRAC.***>
 |── TURN turnip greens  <VEGE.TUR>
 |── VELV Velveeta  <CHEE.***>
 |── WATE watercress  <VEGE.WAT>
 |── YELL yellow/wax beans  <VEGE.BEAN.WAXB>
 |── UFOO unknown food
 |── UMEA unknown meal
```

Exhibit 4-22. Food entry screen: when to enter whole word

```
+-------------------------------------------------------------+
|FOOD SELECTION                                               |
|                                                             |
|                                                             |
|     +------------------------------------------------+      |
|     :         grapes                                  :      |
|     :         grapefruit                              :      |
|     :                                                 :      |
|     :                           Enter "grapes" on the Food Entry
|     :                           screen to bypass this screen.
|     :                                                 :      |
|     :                                                 :      |
|     :                                                 :      |
|     :                                                 :      |
|     :                                                 :      |
|     +------------------------------------------------+      |
|       food:                                                 |
|                                                             |
|                                                             |
+-------------------------------------------------------------+
```

Next, probe by asking what, if anything, was added to or put on the food item after it was prepared. This includes any type of fat, sauce, etc. added at the table, but it does not include salt. Also included here is a food that contains more than one component such as a peanut butter and jelly sandwich.

If, after probing, the food brought forth from the Quick List was eaten plain (bread without spread) or alone, it would be considered a single item food. Press the F10 to begin the food selection process.

If, however, the food from the Quick List is a food that contains more than one component, or is a food that was eaten in combination with other items (mashed potatoes and gravy), you must list all components as items before beginning the specification of item 1.

On screen 1 in Exhibit 4-23, you see tea as the food name and a blank space after item 1. You type in "TEAS" as shown in screen 2. After pressing the ENTER key, the highlight progresses to item 2. This is your cue to PROBE; you would ask the respondent if anything was added to the tea. As shown in screens 3 and 4, the respondent said that sugar was added. It is entered as a separate item under the food name, tea. Continue to probe for "anything else" until the SP says "no."

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Exhibit 4-23. Food Entry screen: multi-component beverage

```
                            FOOD ENTRY
          Meal Time : 10:00 am
          Meal Name : Snack/Beverage
          Meal Place: Work

    +-----------------------------------------------------------+
    |
    |   Food Name : tea
    |
    |Item    1:                    Even though "tea" appears on the screen as the
    |Item    2:                    "food name," the system does not recognize it
    |Item    3:                    unless it is entered as an "item."
    |Item    4:
    |Item    5:
    |Item    6:
    |Item    7:
    |Item    8:
    |Item    9:
    |Item   10:
    |
    |   Press F10 when all the food items are listed.
    +-----------------------------------------------------------+
Type the first four or more letters of the food item.  Press <ENTER>.
```

```
                            FOOD ENTRY
          Meal Time : 10:00 am
          Meal Name : Snack/Beverage
          Meal Place: Work

    +-----------------------------------------------------------+
    |
    |   Food Name : tea
    |
    |Item    1: TEAS             Enter a four-letter key (add "s" to three-letter
    |Item    2:                  words). This is your probing screen. Probe for
    |Item    3:                  additional items added after the preparation
                                 of the food or beverage.
```

Exhibit 4-23. Food Entry screen: multi-component beverage (continued)

```
                              FOOD ENTRY
          Meal Time : 10:00 am
          Meal Name : Snack/Beverage
          Meal Place: Work                                    .
    +------------------------------------------------------------------+
    |
    |   Food Name : tea
    |
    |Item    1:  TEAS              The SP added sugar.  Enter "sugar" at item 2.
    |Item    2:  SUGAR
    |Item    3:
```

```
                              FOOD ENTRY
          Meal Time : 10:00 am
          Meal Name : Snack/Beverage
          Meal Place: Work
    +------------------------------------------------------------------+
    |
    |   Food Name : tea
    |
    |Item    1:  TEAS              Ask, "Anything else?"
    |Item    2:  SUGAR
    |Item    3:                    Nothing else was added.
```

```
                              FOOD ENTRY
          Meal Time : 10:00 am
          Meal Name : Snack/Beverage
          Meal Place: Work
    +------------------------------------------------------------------+
    |
    |   Food Name : tea
    |
    |Item    1:  TEAS              Press F10 to begin food selection for item 1.
    |Item    2:  SUGAR
    |Item    3:                    Tea with sugar is a multi-component beverage.
```

Exhibit 4-24. Food Entry screen: identifying an omitted meal

```
                              FOOD ENTRY

          Meal Time  : 09:30 pm      ┌────────┐    <-- Appears next to the
                                     │Omitted │
                                     └────────┘
          Meal Name  : Snack/Beverage              meal information.
          Meal Place : Home                            .

    +────────────────────────────────────────────────────────────+
    ¦    Food Name : ice cream with syrup                         ¦
    ¦                                                             ¦
    ¦Item    1: ICEC                                              ¦
    ¦Item    2: SYRU                                              ¦
    ¦Item    3:                                                   ¦
    ¦Item    4:                                                   ¦
    ¦Item    5:                                                   ¦
    ¦Item    6:                                                   ¦
    ¦Item    7:                                                   ¦
    ¦Item    8:                                                   ¦
    ¦Item    9:                                                   ¦
    ¦Item   10:                                                   ¦
    ¦                                                             ¦
    ¦    Press F10 when all the food items are listed.            ¦
    +────────────────────────────────────────────────────────────+
Type the first four or more letters of the food item.  Press <ENTER>.
```

4.3.3.4 Identifying an Omitted Meal

Recall that if the SP omitted foods or beverages on the recall day usually consumed after 8:30 p.m. due to fasting, you entered the foods or beverages consumed after 8:30 p.m. on the previous evening (the day before the recall day) on the Quick List. You must attach a special note to these foods and beverages to identify that it was an "omitted meal." While you are on the first Food Entry screen for that meal, press the 'Ctrl' and 'o' keys simultaneously. The system requires that you complete a note regarding the omitted meal. When you return to the Food Entry screen, "omitted," will appear to the right of the meal time, name and place information (Exhibit 4-24 above). If you want to erase the "omitted meal" designation, simply press the 'Ctrl' and 'o' keys together again.

4.3.3.5 Exiting a Recall From Food Entry

If, for some reason, you need to exit the active recall from the Food Entry screen, press the escape or press F4 to access the System Menu. Move the highlight to "Exit Recall," and press Enter. The system will prompt for verification that you want to exit the recall and subsequently progress to the Recall Trailer screen. The food selections made up to this point will be saved. However, any items remaining on the Quick List will not be saved. Refer to Exhibit 4-25 which illustrates the process.

Exhibit 4-25. Food entry screen: exiting a recall

```
+--------------------------------------------------------------------------+
|                           FOOD ENTRY                                     |
|                        +------- System Menu ------+                      |
|          Meal Time  : 10:0! Recall Header          !                     |
|          Meal Name  : Snac! Quick List             !                     |
|          Meal Place : Work! Food Entry             !                     |
|                           ! Recall Review          !                     |
|        +------------------ ! Recall Trailer        !----------------+    |
|        !                   ! End of Recall         !                     |
|        !    Food Name : tea ! Print Recall Report  !                     |
|        !                   ! +-----------+                               |
|        !                   ! | Exit Recall|      Move highlight to Exit Recall |
|        !Item    1:         ! Exit DDC System    and press ENTER.        |
|        !Item    2:         ! -------------------------                   |
|        !Item    3:         ! Help               F1  !                    |
|        !Item    4:         ! Back Up            F2  !                    |
|        !Item    5:         ! System Hold        F3  !                    |
|        !Item    6:         ! Insert             F5  !                    |
|        !Item    7:         ! Delete             F6  !                    |
|        !Item    8:         ! Missing Food       F7  !                    |
|        !Item    9:         ! Note               F8  !                    |
|        !Item   10:         ! ENG/SPA Toggle     F9  !                    |
|                           ! Next Screen        F10 !                     |
|             Press F10 when al!                                           |
|        +-------------------- ! Press <ESC> to exit menu !---------------+ |
| Press enter to exit this recall but remain in the DDC System.            |
+--------------------------------------------------------------------------+
```

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4.3.4 Food Selection

Food selection screens contain descriptions of the basic food you entered at the food entry screen. You continue to select descriptions until the food selection process is complete.

These selections build a detailed description of the food. Read the selections carefully to assure the greatest accuracy. Hierarchies are designed to present a clear decision at each level. Generally, descriptions are presented in alphabetical order, with the exception of items very commonly selected, being presented first.

ENTERING DESCRIPTIONS: As each screen appears with a list of choices in the box, move the highlight to your choice and press ENTER. The descriptions you choose are displayed on the first line of the screen.

CORRECTING DESCRIPTIONS: Press F2 to back up, erasing the last description. Move the highlight to a new choice and press ENTER.

4.3.4.1 How To Probe

Probing on the Food Selection screen varies somewhat depending on the type of food; it takes practice and experience to probe correctly and quickly. On the automated system, the choices are presented to you, but you must ask the SP the correct question (similar to the game show Jeopardy). At times you have to ask more than one question to get the answer that you need, and at other times you will find that the SP has already given you the answer and you need to "catch up." Generally speaking, the best probing technique for DDC screens which contain few choices is to read all the selections to the respondent (except the "unknown" if it is an option). For those screens which have a significant number of choices, the best approach is to either ask a general question, such as "What kind of _____ was that?" and/or offer the most typical responses and add "or something else?" In so doing, you have not limited the possibilities. You must always remember the basic rules of probing; do not lead the respondent, and always use neutral probes.

Even though the automated system has added an element of sophistication, you are always limited to what the SP is able to report. Do not deduce or try to mold an answer to fit one of the answer categories.

At times you may need to ask two or more questions for one screen. In a "mixed" screen, the type of food and preparation are shown together, therefore, you must ask the SP as many questions as required in order to select the appropriate answer on that screen. Exhibit 4-26 is an example of a vegetable screen for green beans. First, ask the SP whether the beans were eaten raw, cooked, canned or prepared some other way. If raw is the answer, you must ask if they were plain or marinated in oil; however, if cooked is the answer, you must ask if the beans were cooked from fresh or frozen. You will quickly be able to tell when this is appropriate.

If the choices allow an unknown, you may select the unknown by moving the highlight to the unknown choice or entering "U." The unknown choice is usually the last (or close to the last) selection on the screen; therefore, you may also use the End key to quickly locate the unknown. Press ENTER. The computer is programmed with a default choice.

Some foods and beverages offer brand name as a selection. If brand name is an option, it will always appear first on the list. This occurs, for example, when margarine is reported (Exhibit 4-27). Before asking for any other detail about the margarine, first probe to find out whether or not the SP knows the brand name. If the SP does not know the brand name, review the screen to determine how to ask your next question to get the information needed for that screen. In this case, probably provide the SP with the options: regular, whipped, spread, diet, or margarine/butter blend. It is acceptable to read the options to the SP, but only if you read the whole list.

4.3.4.2 Brand Names

If the SP knows the brand name or thinks he/she knows the brand name, highlight "brand name"; press the ENTER key, and ask SP for the brand name. By typing in only one letter, a list of all brand name selections that have a word that begins with that letter will appear. Typing in more than one word is not recommended because typing and spelling errors may occur, and the system will not be able to search and locate the brand name. The most preferable method is typing only a few letters of the brand name, then selecting the correct entry from the list.

Common national brands should be in the DDC system. To more easily locate a popular brand name, think about how the name is presented on the product label. For example, "7-Up" can be found by typing "7" at the brand name listing prompt. The DDC system is programmed to recognize specific four-letter keys (four-letter abbreviations) at the Food Entry screen. Since "SEVE" is the 4-letter key for "Seven-Up," you may enter "SEVE" at the Food Entry screen to save time, if the SP reported up front drinking "Seven-Up."

If the brand name is not exclusive, such as Corn Flakes, the food item is listed with the manufacturer's name. In this case, "Corn Flakes (Kellogg), Corn Flakes (Post)," etc. are presented on the screen. The manufacturer's name appears in parentheses. If you have difficulty locating a cereal by entering the brand name, and the SP does know the manufacturer, it may be helpful to enter the manufacturer's name at the brand name prompt.

Exhibit 4-26. Food Selection screen: green beans

```
FOOD SELECTION   beans, green/string beans


        +--------------------------------------------------------+
        | RAW   raw
        | MAR   raw or blanched - marinated in oil mixture
        | FRS   cooked from fresh
        | FRZ   cooked from frozen
        | CAN   canned
        | U     unknown if cooked from fresh or frozen or canned
        | CAS   casserole - with cream of mushroom soup
        | CHE   with cheese sauce
        | CRE   creamed
        | MUS   with mushroom sauce
        +--------------------------------------------------------+
         food:
```

Exhibit 4-27. Food Selection screen: margarine

```
FOOD SELECTION   margarine



        +--------------------------------------------------------+
        | ***   brand name listing
        | REG   regular
        | WHP   whipped
        | SPR   spread
        | D     diet
        | MB    margarine/butter blend
        | U     unknown type
        |
        |
        |
        +--------------------------------------------------------+
         food:
```

- **Helpful hints:**

Candy Listing: The candy brand name listing allows for common specialties that are not associated with a "brand," such as cotton candy, candy cane, butterscotch disks, candy hearts, candy corn, jawbreakers, and salt-water taffy.

Ready-to-Eat Cereal Listing: The cold cereal brand name listing also offers generic type cereals like oat rings for "Cheerios."

Instant tea: Only brand names for artificially sweetened instant teas are presented.

Juice: This brand name listing does not include 100% fruit juices. It does include V-8 juice and fruit flavored drinks, such as Kool-Aid.

Mixed Dish Listing: The mixed dish brand name listing is primarily for frozen food entrees/dinners.

The food categories that offer brand names as an option are: (1) Baby formulas, (2) Coffee substitutes, (3) Juices, (4) Soda, (5) Candy, (6) Cereal, ready-to-eat, (7) Cheese, (8) Cookies, (9) Crackers, (10) Cream, non-dairy, (11) Sour cream substitutes, (12) Whipped cream, (13) Dessert snacks, (14) Dressings, (15) Egg substitutes, (16) Margarine, (17) Oils, (18) Shortening, (19) Ice cream, (20) Luncheon meats, (21) Milk mixes, (22) Bacon breakfast strips, (23) Snacks, (24) Special formulated products, (25) Artificial sweetener, (26) Yogurt (27) Instant teas, (28) Bottled water, and (29) Commercial entrees.

If you can't locate the brand name, try using fewer letters or a different word in the brand name. To view the entire list, press the ENTER key at the brand name prompt. If the brand name is not on the list, and it is NOT a national brand, use the Note screen to record the brand name. (Use of the Note screen is explained in detail in Section 4.3.9.1.)

When the SP gives a brand name and a brand name is not required by the system, decide whether or not there is anything unique about that brand name. If there is nothing unique to affect the nutrient content, such as Log Cabin pancake syrup or Skippy peanut butter, then do not attach a note.

In past HANES surveys, it has been observed that many respondents use the terms "Coke" and "Kool-Aid" generically to signify any type of soda pop or soft drink. Therefore, whenever an SP reports drinking "Coke" or "Kool-Aid," probe to verify that it is the actual brand, saying something like, "Was that actually Coke or another type of soda?"

Exhibit 4-28. Message displayed when discontinuing food selection process

```
+-------------------------------------------------------------+
:                                                             :
:         ** Do you want to erase all selections              :
:                made for this food?  (Y/N)     **            :
:                                                             :
+-------------------------------------------------------------+
```
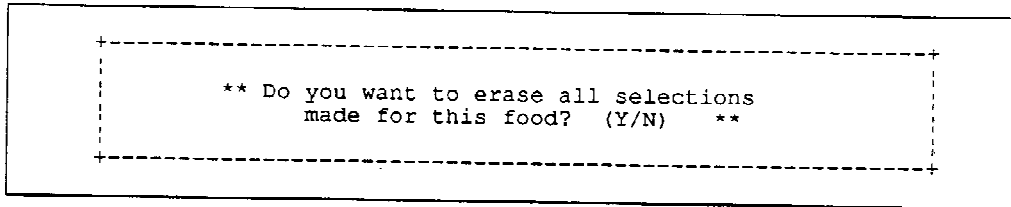
DISCONTINUING THE FOOD SELECTION PROCESS: Press the escape key to discontinue the food selection process for a specific food if you feel you're proceeding down the wrong path. A screen message (represented in Exhibit 4-28) will appear asking you whether or not you want to erase all selections made for the food. Enter "Y" to return to the Food Entry screen, or enter "N" to continue the food selection process. Type over the previous entry or press F6 to delete the food and proceed with a different food.

4.3.4.3 Combination Types

All multi-component foods and beverages must be classified as to their combination type. The system prompts you for the combination type once you have completely described all the foods within the combination.

The food combination data will be useful to identify foods commonly eaten together or in specific types of combinations. Also, it will provide information on quantities of foods consumed in different types of combinations. For example, the amount of milk eaten with cereal versus the amount of milk added to coffee could be compared. In addition, the type of combination listing permits the coding of more unusual combinations of foods into categories.

Many of the "combination types" are self-explanatory, but in order to assure consistency among all interviewers, it is necessary to give an explanation of each. The specifications are:

SANDWICH: Include sandwiches prepared on any type of bread, roll, pita, etc., with or without condiments. Examples are hot dogs, hamburgers, chopped/shredded meat or poultry mixed with barbecue sauce on a bun, and open-faced sandwiches with or without gravy.

BREAD WITH ADDITIONS: Select this option when a respondent reports eating bread (toasted or untoasted) with fat or spreads, such as butter, margarine, jelly, cream cheese, etc. Bread reported as part of a sandwich should not be counted here but in the sandwich category.

Breads include all types of loaf breads, buns, roll-type yeast breads, quick breads such as nut bread, pancakes, waffles, French toast, coffee cakes, muffins, and bagels. Snack foods, such as crackers, popcorn and snack chips are EXCLUDED from the bread category. Tortillas with additions have a separate listing entitled "Tortillas with additions."

CEREAL WITH ADDITIONS: Use this category to code all cereals including ready-to-eat cold cereal, hot cereal and infant cereals. Additions may include milk, infant formula, juice, breast milk, cream, sugar, syrup, butter or margarine, yogurt, wheat germ, fruit, etc. If a respondent reports that a small amount of dry infant cereal was added to a bottle of infant formula or milk, the combination should be coded as "Beverage."

SALAD: Use this option to code vegetable salads, such as taco salads, tossed salads, and cole slaw. These salads may contain meat and/or cheese, and be topped with salad dressing, bacon bits, etc. If the respondent reports a fruit "salad" and does not refer to the salad as "dessert," code this combination "Salad."

BEVERAGE: Include any type of beverage mixture, such as alcoholic beverages, infant formula mixtures, blenderized drinks, and milk with Quik. Also include coffee, tea, and other beverages with sugar, cream, milk, etc., added at the table.

MIXED DISH: Usually refers to recipes that are mixed together and served together as a dish rather than assembled at the table. Include in this category such items as pizza, spaghetti with sauce, meat loaf, beef stroganoff with noodles, beef and broccoli stir-fry, quiche, pot pies, and casseroles.

MIXED DISH WITH ADDITIONS: Denotes a mixed dish with an additional item(s) usually added at the table and, in most cases, a condiment. Examples include pizza or spaghetti with Parmesan cheese sprinkled over the mixture, meat loaf with catsup, and a stir-fry with soy sauce.

MEAT, FISH, OR POULTRY WITH ADDITIONS: This option is used when a respondent reports eating plain (e.g., non-mixture type) meats, fish or poultry with additions added at the table such as gravy, sauces, and condiments (e.g., mustard and catsup). "Plain" types of meats, fish and poultry include items such as roast beef, ribs, chicken, turkey, baked or fried fish, plain hot dog (e.g., no roll or bun), etc. These foods are often reported as eaten with barbecue sauce, gravy, steak sauce, catsup, cocktail sauce, tartar sauce, etc. Most commonly this category is used for condiments added at the table; however, do include a situation where a plain meat, such as a sparerib, has barbecue sauce added during preparation. Since the system does not prompt for barbecue sauce added in preparation, the sauce would be added as a second item, and therefore, the combination would require a code.

VEGETABLE(S) WITH ADDITIONS: Use this option to code vegetables eaten with additions added at the table such as butter/margarine, gravy, catsup, and sauces. Examples include fries with catsup, baked potato with bacon bits and sour cream, mashed potatoes with gravy, cooked collard greens with vinegar, and green beans with almonds. This option should also be used to code raw vegetables eaten with additions such as "veggies" with dip or celery with peanut butter. Use the "Mixed dish" option to code vegetable casseroles or stir-fried vegetable mixtures. Use the "Salad" option to code vegetable salads such as taco salads, tossed salads, etc.

VEGETABLE COMBINATION: Use this option when the respondent reports eating a homemade vegetable combination. For homemade vegetable combinations, enter the vegetables as separate items.

Example: The respondent prepared a homemade combination of carrots, peas and beets by mixing leftover vegetables together. Obtain details on the types and amounts of each vegetable in the combination; code as "Vegetable combination" if no additions were made. If additions, such as butter or margarine were made, code the combination as "Vegetables with additions."

With commercial vegetable combinations, it is preferable to use standard combinations listed in the hierarchy.

Vegetable casseroles and stir-fried vegetable combinations should be coded as "Mixed Dishes." Vegetable salads are coded as "Salads."

DESSERT: When a respondent reports foods eaten together as part of a dessert during a meal or snack, code "Dessert." Examples of dessert combinations include ice cream with toppings or two flavors of ice cream eaten together, gelatin or pudding with toppings, baked apple with cream, and cake or pie with ice cream. In addition, use this option if the respondent calls a dish "dessert." If the respondent reports that he/she ate a fresh fruit combination as dessert, code it dessert. If the respondent does not call the dish or combination "dessert," use your judgment to code whether the foods eaten together were "Dessert" or should be classified in another category. Desserts are usually served at lunch and dinner. If in doubt about the type of combination, code it "Other/Foods eaten together" and attach a note.

TORTILLA WITH ADDITIONS: Include masa products, such as tamales with additional toppings, and foods that contain sope/gordita shells or tortillas, such as burritos, fajitas, tacos, tostadas, quesadillas and huevos rancheros. Also, include tortillas eaten with beans, eggs, salsa or fats. Nachos and chips eaten with salsa or other dips should be coded as "Other/Foods eaten together." Use the category "Salad" to classify a taco salad.

SOUP/STEW: Include canned or homemade stews or soups. Use this code if the respondent reports additional items added to a canned soup base during the preparation. On the other hand, if the respondent reports crumbling crackers into his/her soup at the table, the type of combination would be "Other/Foods eaten together."

FROZEN MEAL: This code is rarely used since the DDC has an extensive list of TV Dinners (compartmentalized meals) by brand name. Should the respondent not know the brand name of a TV Dinner (Exhibit 4-64,) and the dinner consumed was not a modified meal, e.g., low in calories, low in cholesterol, low in sodium, etc., enter each component of the dinner as part of a combination, and code it "Frozen meal."

OTHER/FOODS EATEN TOGETHER: Include other combinations of foods which cannot be classified with the aforementioned codes, for example, snack foods with additions such as crackers with dip or cheese, or chips with salsa. Other examples are eggs with additions such as catsup, soup with crackers crumbled into the soup, and instant baby foods. Instant baby foods are mixed with liquid before they are eaten. Exclude instant baby cereal from this category; it should be coded as "Cereal with additions." If you are in doubt as to how a combination should be coded, select "Other/Foods eaten together" and attach a note.

For purposes of classifying foods by their combination type, legumes are considered vegetables. Included in this category are lentils, chickpeas, garbanzos, and all types of beans (e.g., kidney, pinto, black, baked, refried, etc.). Frequently legumes are combined with rice or pasta. If the legume is mixed with rice, such as a rice and refried bean mixture, this is considered a "mixed dish." On the other hand, refried beans with cheese melted on top would be classified as "vegetables with additions."

Some food combinations seem to fall into more than one category depending upon whether the items were mixed together at the table or actually prepared together as a dish. These should be handled in the following manner:

If an additional item is added at the table, classify the mixture as "mixed dish with additions;" however, if an item is included in the preparation, classify the mixture as a "mixed dish." Thus, a mixture containing the same ingredients may be classified both ways depending upon when the "addition" was added. For example, spaghetti and sauce with Parmesan cheese added at the table would be "mixed dish with additions" while spaghetti and sauce with Parmesan cheese added to the pot before serving at the table would be a "mixed dish."

In the screens presented in Exhibit 4-23 (page 4-59), the food items are tea with sugar, which would be classified as a "beverage." As illustrated below, move the highlight to the correct response, and press ENTER to select "beverage" as the combination type. The type of combination screen appears after all items within a particular combination have been completely specified.

```
+-------------------------------------------------------------------------+
| FOOD SELECTION                                                          |
|                                                                         |
|          Meal Time : 10:00 am                                          |
|          Meal Name : Snack/Beverage                                    |
|          Meal Place: Work                                              |
|      +------------------------------------------------------------+    |
|      :    Food Name: tea                                          |    |
|      +--------------------- Combination Types -------------------+    |
|      :                                                            :    |
|      :          +-------------------------------------+          :    |
|      :          : SAN   Sandwich                      :          :    |
|      :          : BRE   Bread with additions          :          :    |
|      :          : CER   Cereal with additions         :          :    |
|      :          : SAL   Salad                         :          :    |
|      :          : +-------------------+               :          :    |
|      :          : | BEV   Beverage    |               :          :    |
|      :          : +-------------------+               :          :    |
|      :          : MIX   Mixed dish                    :          :    |
|      :          : MIXA  Mixed dish with additions     :          :    |
|      :          : MEA   Meat, fish, poultry with additions :     :    |
|      :          : VEGA  Vegetables with additions     :          :    |
|      :          : VEG   Vegetable combination         :          :    |
|      :          +-------------------------------------+          :    |
|      :    Combination Type:                                       :    |
|      :                                         •                  :    |
|      +------------------------------------------------------------+    |
| +---------------------------------------------------------------+      |
| | Enter the combination type or choose one from the list.       |      |
| +---------------------------------------------------------------+      |
+-------------------------------------------------------------------------+
```

Since the food name is saved by the DDC, entering the food name verbatim is important when the respondent gives the name of a casserole, recipe or an unfamiliar food title. It is important to capture the actual words used by the SP in describing these dishes. For common items, you may enter a food name abbreviation that is recognizable to both you and someone else reviewing the data for quality control purposes.

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4.3.5   Quantifying the Amount

Depending on the type of food/beverage entered, there are numerous options for quantifying the amount. The choices the system displays are: volume, weight, "food-specific units," square inch, cubic inch, linear inch, shapes, and food models. The choice of options will vary depending upon the specific food item chosen.

Before learning the actual "mechanics" of entering amounts, it is necessary to first be acquainted with and understand all possible choices available for quantifying foods and beverages in the DDC system.

4.3.5.1 Food Models: Overview

Abstract food models and shapes are the principal instruments used to obtain quantities of food reported by the respondents in NHANES III. The current set of models contains household measures, such as measuring cups and spoons, which were not used in earlier HANES. The use of shapes has also been added. In addition, two lifelike food models, a slice of pizza and a muffin/cupcake, and three cardboard beverage cartons (pint and half-pint sizes) have been added as "accessories" to be used only under specific circumstances.

The models and shapes are designed so that a computer program can convert the codes on each model, or convert the dimensions of the shape to gram weights. By using the appropriate mathematical computations, based on the portion size described by the SP, the system has the capacity to arrive at the gram weight of the food consumed.

The models and shapes are not intended to represent any one food, but rather are designed to estimate portion size. Exhibit 4-29 provides a graphic representation of the models, and Exhibit 4-30 is a facsimile of the flash card which will be displayed in each dietary room showing three-dimensional shapes. (Exhibit 4-31 is the Spanish version of the flash card.)

4.3.5.2 Use of Food Models and Other Amount Options

In order that data be recorded in a consistent manner, you must be thoroughly familiar with the portion size models and their correct use. Improper entry of food models can result in either overestimation or underestimation of nutrient intake. The food models which are to be displayed in the dietary interview room, their abbreviations, and dimensions are listed in Exhibit 4-32.

The models should be easily accessible in the interview situation and the shape drawing in full view. Not every model can be used for certain foods; at times you may need to ask the respondent to select another model or to use a shape.

-       **Food-Specific Units**

Some foods can be entered as food-specific units (FSU), which are amounts which do not require specification of a volume or weight unit. Food-specific units include a "slice," a "medium" size, or "each." For example, "medium slice" is one of the options for tomato and "small," "medium" or "large" are options for apple.

You must observe certain rules when using food-specific units. In general, it is acceptable to use food-specific units for fruits and vegetables. If the SP is hesitant when asked the size of the fruit or vegetable (e.g., "Was that apple small, medium or large?"), you may demonstrate the sizes listed in parentheses by using one of the models or the ruler. If the dimensions are not available, suggest to the SP that he/she use one of the shapes or models to describe the size.

It is permissible to use the food-specific units for packaged items such as one package of M & M's, a Baby Ruth candy bar, a bottle of soda, ice cream bars, etc. Foods that come as a standard size, such as crackers, can be entered as "each."

-       **Shapes**

As mentioned, each dietary room will have a "shape" flash card displayed. The use of shapes gives the respondent the ability to use two or three dimensions to describe the amount of food eaten. Since there are some foods that are not easily represented by the food models, the shapes also offer the SP another alternative. By looking at the flash card, the SP can determine which shape best describes his/her portion. A rectangular grid (Exhibit 4-33) is also available to the SP. He/she demonstrates the size of the square or rectangular object by placing his/her hands on the grid to complete the shape.

Shapes are used only for those foods which may be accurately described by shape; shapes are not allowed for liquid or non-solid foods. The shapes available in the DDC system are: sphere, cube (any three-dimensional rectangular box), wedge, cylinder, circle, rectangle, and triangle. This does not mean that all solid foods have shapes as an option. Sometimes the food-specific unit is a more accurate way to describe a food item than having the respondent give dimensions. For instance, grapes are more accurately quantified by a food-specific unit, that is, number of grapes. Therefore, the option of sphere is not allowed.

Exhibit 4-29. Food models and shapes
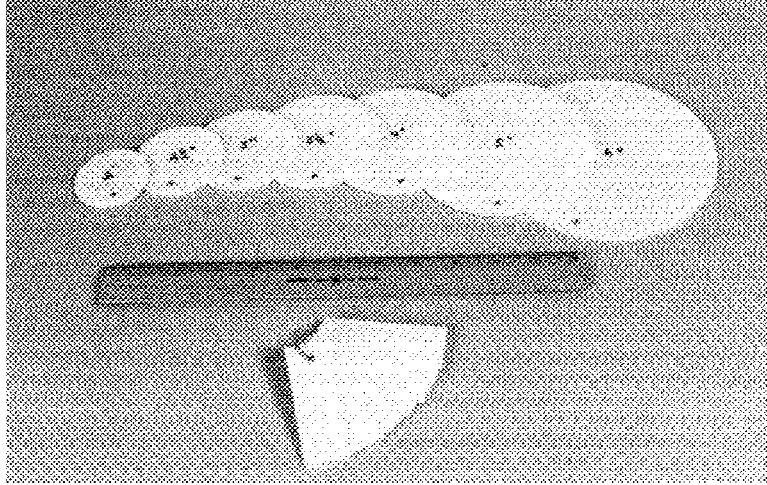
Discs, Ruler, Thickness Sticks
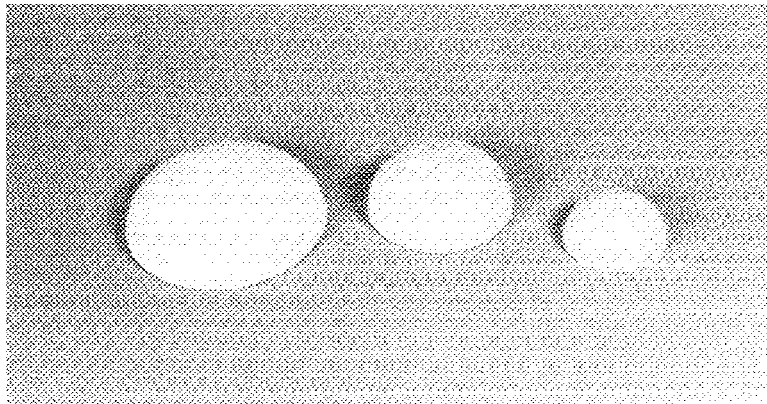
Mounds

Exhibit 4-29. Food models and shapes (continued)
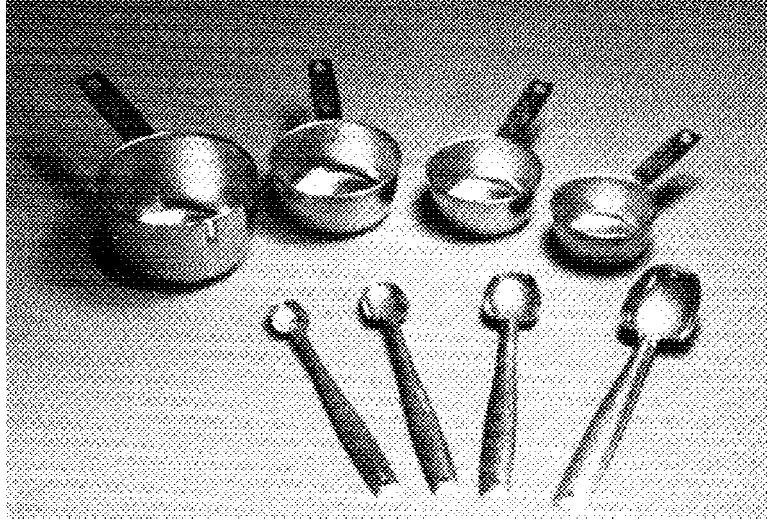
Measuring Cups and Spoons
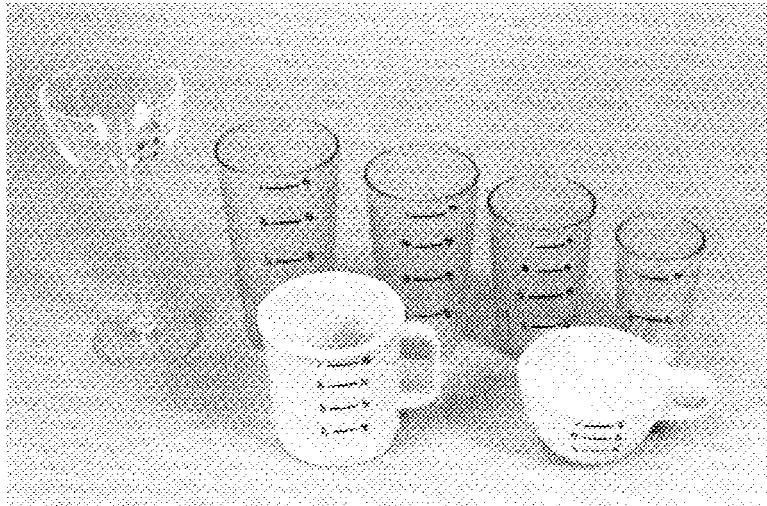
Coffee Cup, Glasses, Mug

Exhibit 4-29. Food models and shapes (continued)
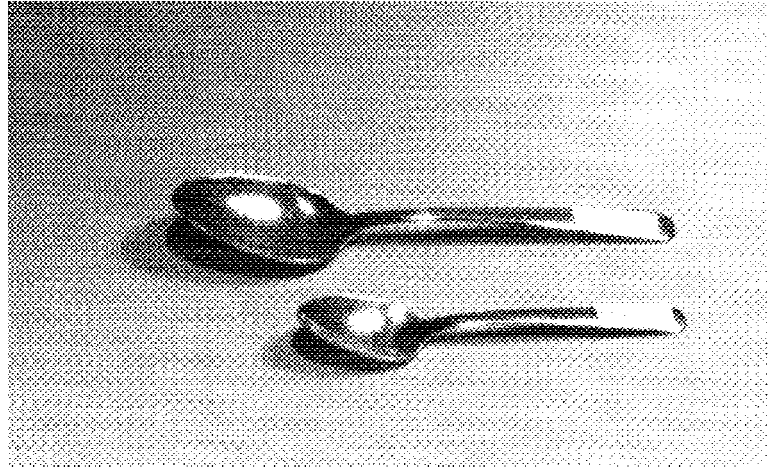
Household Spoons, Empty
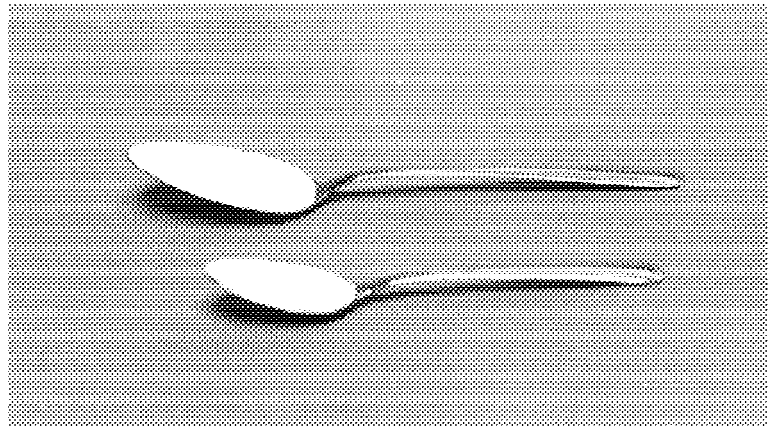
Household Spoons, Filled

Exhibit 4-29. Food models and shapes (continued)
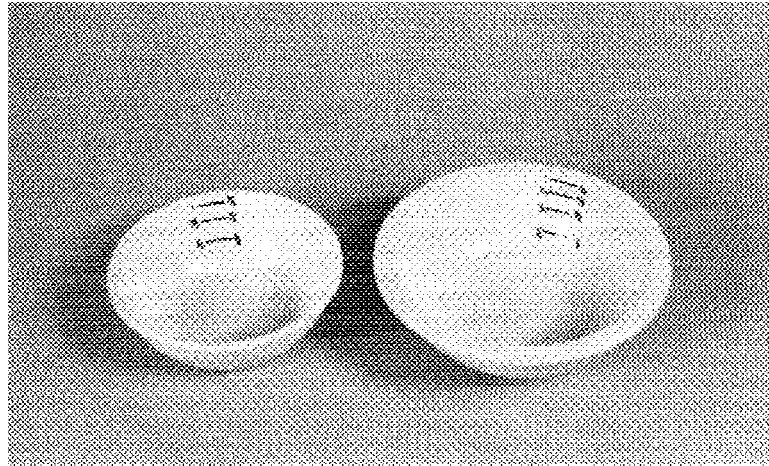
Bowls
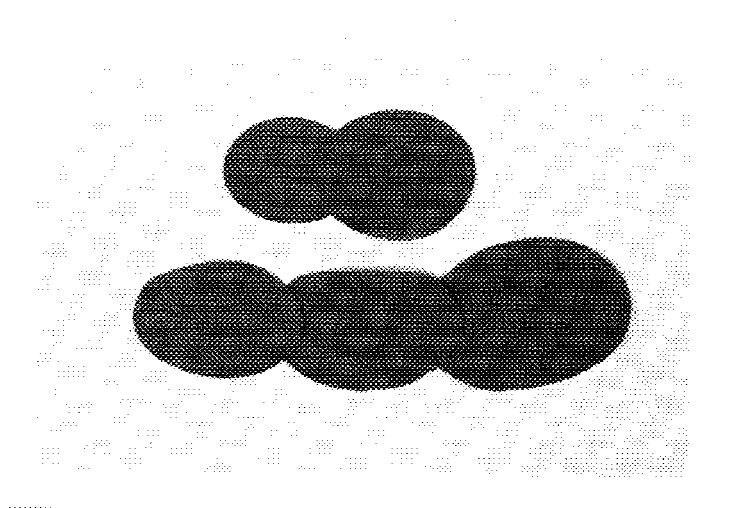
Floppy Discs

Exhibit 4-29. Food models and shapes (continued)
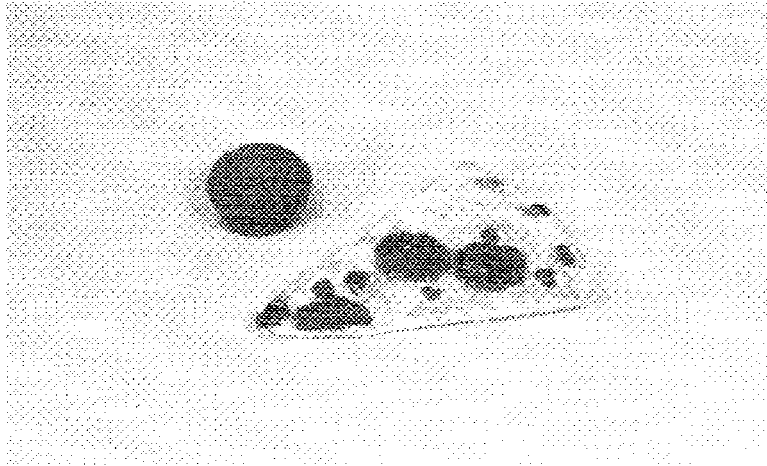
Muffin Model, Pizza Model

Cardboard Beverage Cartons

BOX

WEDGE

TRIANGLE

H

L

W

L

W

H

L

W

H = HEIGHT

L = LENGTH

CYLINDER

or

D

SPHERE

D

D

H

D

W = WIDTH

D = DIAMETER

L (or H)
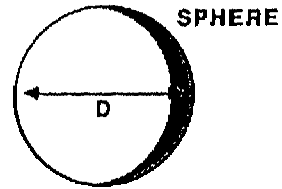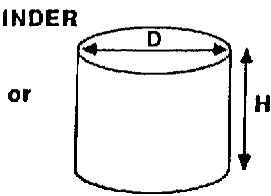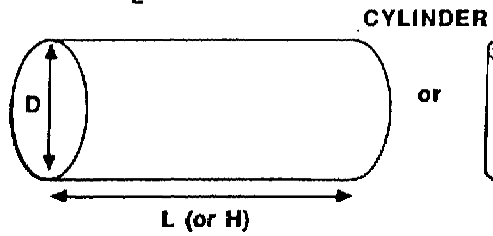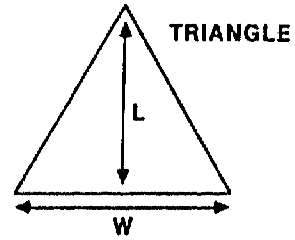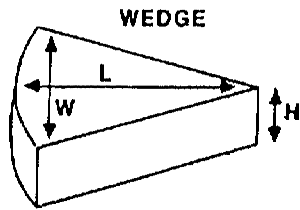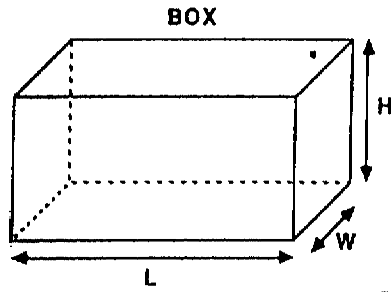
Exhibit 4-30. Three dimensional shapes

CUBO

AL

AN

L

CUÑA

L

AN

AL

TRIÁNGULO

L

AN

AL = ALTURA

L = LARGO

AN = ANCHO

D = DIÁMETRO

CILINDRO

D

L (o AL)

o

D

AL

ESFERA

D
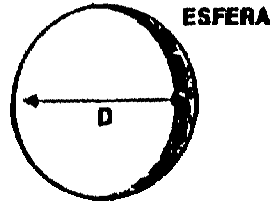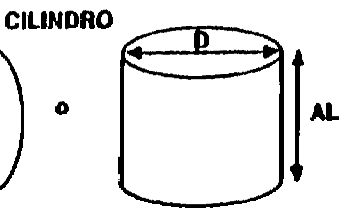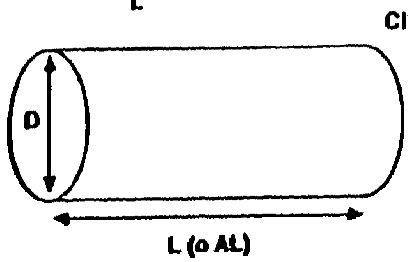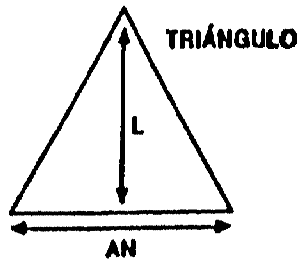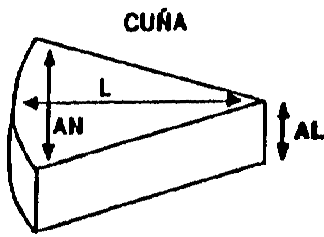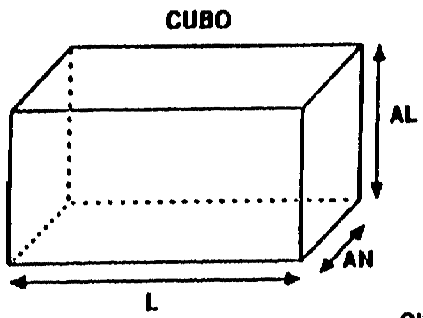
Exhibit 4-31. Three dimensional shapes (Spanish version)

Exhibit 4-32. 24-hour recall food models

ENTERED AS SYSTEM ABBREVIATIONS:

1.	Bowls	B1 = 9 oz =	1 1/8 cp(rim = 10 oz; marked in 1/3's)
		B2 = 16 oz	(marked in 1/4's)

2.	Glasses	G1 = 4 oz	(rim = 5 oz; marked in 1/2)
		G2 = 8 oz	(rim = 9 oz; marked in 1/4's)
		G3 = 11 oz	(rim = 12 oz; marked in 1/4's)
		G4 = 15 oz	(rim = 16 oz; marked in 1/4's)
		G5 = 6 oz	(rim = 7 oz; marked in 1/3's)
		G6 = 32 oz	(fill to 32 oz line; marked in 1/4's)

3.	Mounds	M1 = 1/3 cp (2.7 oz)
		M2 = 3/4 cp (6 oz)
		M3 = 1 3/4 cp (14 oz)

4.	Mug	MUG = 10 oz	(rim = 11 oz; marked in 1/4's)

5.	Coffee Cup	COF = 6 oz	(rim = 7 oz; marked in 1/3's)

6.	Household Spoons	SP1 = 1 1/2 TS	teaspoon
		SP2 = 1 TB	tablespoon

USED AS MEASUREMENT AIDS:

1.	Measuring Cups and Spoons	1 cup, 1/2 cup, 1/3 cup, 1/4 cup 1 TB, 1 tsp, 1/2 tsp, 1/4 tsp
2.	Ruler	12" wooden ruler
3.	Thickness Sticks	Set of eight, 1/8" each
4.	Discs	Sizes: 2", 2½", 3", 3½", 4", 5", 6" (plastic, 1/8" thick)
5.	Floppy discs	Sizes: 5", 6", 7", 8", 9", 14", 16"
6.	Muffin Model	Special unit selection for muffin and cupcake in the DDC.
7.	Pizza Model	Special unit slice for pizza (1/8 of 14") in the DDC.
8.	Cardboard Cartons	1/2 pint and 1 pint plain cardboard containers for beverages.

Exhibit 4-33. Rectangular grid
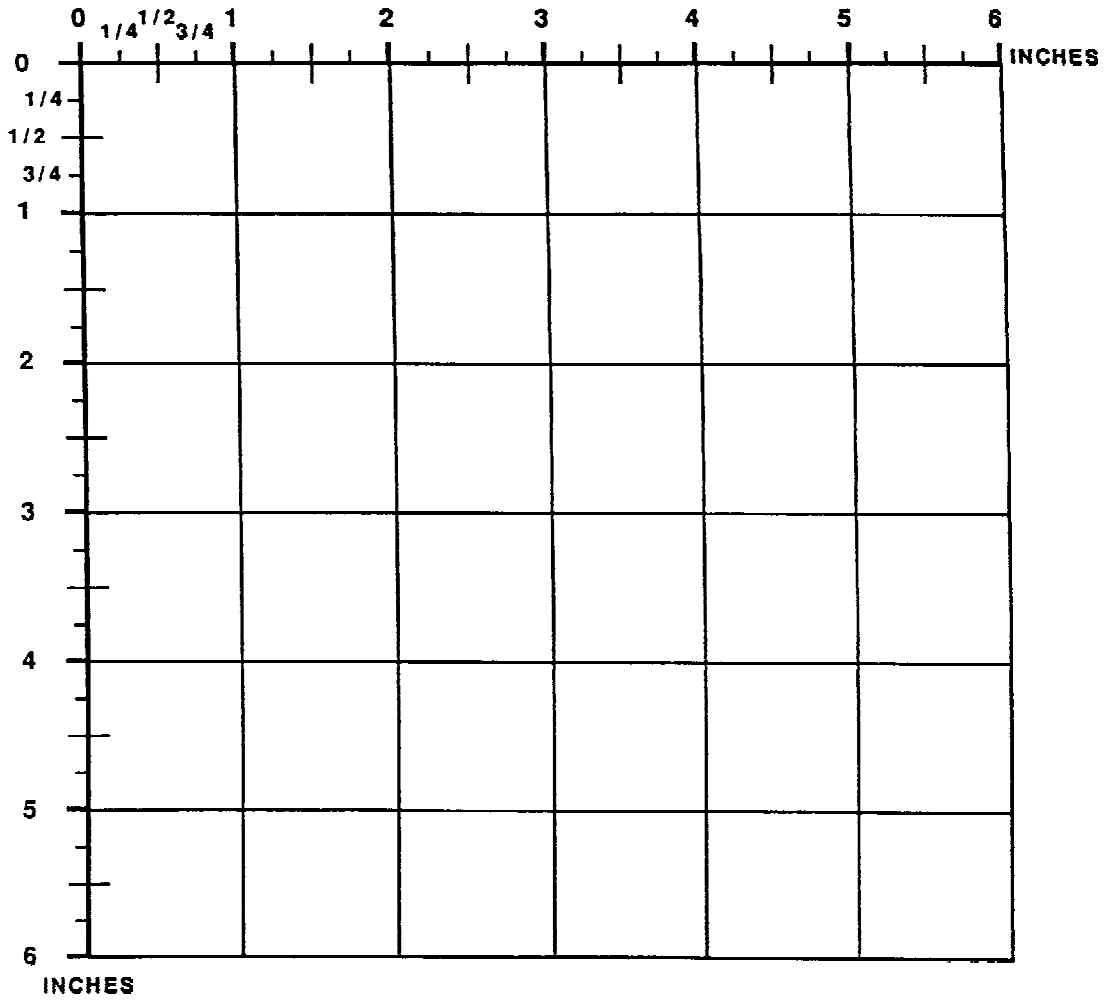
The two-dimensional shapes which include the circle, rectangle, and triangle, are used for foods which have a fairly uniform thickness; each is assigned a default thickness. For example, an SP should be able to describe the diameter of a tortilla with some degree of accuracy; however, a standard thickness for the tortilla would likely be more accurate than the SP's estimate. If the only shape option available is two-dimensional, assume that the DDC system has a more reliable default thickness than the respondent could estimate (using the thickness bar or ruler).

When both a two-dimensional and three-dimensional shape are options on the Amount screen, such as a circle and cylinder, the standard default thickness is not adequate; it is preferable for the SP to estimate a thickness or height. In this case, the two-dimensional shape is used only when the SP is unable to estimate the thickness or height.

The following hierarchies have few, if any, food shapes: BEVErages, CEREal, CONDiments, CREAm, DIPS, DRESsings for salad, FATS, GRAIns, GRAVies, INGRedients, MILK, NUTS, ORGAn meats, SALAds, SAUCes, SOUP, SPECial formulated products, SWEEteners, and YOGUrt.

-        **Weight, Volume, Density**

Weight is an option for all foods and beverages contained in the DDC system. Since it is only selected when an SP has weighed a portion of food on a scale, or the SP specifically knows how much a package contains, it is not used frequently. In some cases, the weight of a food item must be further distinguished: raw versus cooked and with/without refuse.

Volume is usually available as an amount option, but not always. Whenever an SP describes a portion using one of the household measuring cups or spoons, volume is selected. Many volume measurements must be distinguished by selecting the form in which the food was eaten.   The form of the food describes the density or compactness of the food item. There is a difference between eating two cups of mashed apples and two cups of sliced apples because the sliced apples have more air space. The true amount of apples eaten is not accurately reflected by just specifying "2 cups." Therefore, the form in which the food was eaten (mashed, sliced, diced, etc.) must be taken into account for the system to make the necessary calculations.

The standard volume and weight measures listed in the automated system are shown below:

VOLUME			WEIGHT		
CP	-	cup	OZ	-	ounce
FO	-	fluid ounce	LB	-	pound
TB	-	tablespoon	GR	-	gram
TS	-	teaspoon			
PT	-	pint			
L	-	liter			
CI	-	cubic inch			

As mentioned, "weight" is not frequently used. However, fluid ounces and weight ounces are often confused when reporting amounts and this type of error can significantly affect the recall.

Manufacturers must follow certain guidelines in labeling an item by weight or volume measurements; however, some items are excluded from these rules and follow what is termed "the custom of the industry." Review the general rules below to avoid mistakes.

1.   If an item is liquid: the label says, "fluid ounce."

2.   If an item is solid: the label says "weight ounce."

3.   If an item is a mixture of liquid and solid: the label says "weight ounce."

4.   For viscous solutions like yogurt, the manufacturer may choose to declare by weight ounce, if desired.

Two items which fall into the category of "custom of industry" and do not follow these rules are pickles and ice cream which are labeled as fluid ounces.

-        **Square, Cubic and Linear Inch**

Other amount selections included in the DDC system are square, cubic and linear inch. <u>You may only select linear inch.</u> Although square inch and cubic inch may be presented on the screen, do not use them. In order to properly enter square and cubic inch certain calculations are necessary. To limit errors, situations requiring mathematical computations are avoided during the interview.

On the other hand, linear inch does not always require a calculation and may be used as a default only when the food-specific unit does not adequately describe the quantity reported. Celery, for instance, offers "small (5" long stalk), medium (7 1/2" - 8" long stalk), large (11" - 12" long stalk), stick (4" long)," as food-specific units and "linear inch." If the SP could not describe the celery as "small", "medium", or "large", and instead indicated on the ruler that he/she ate one stalk of celery that was 6 1/2 inches long, the linear inch is the only choice which allows you to enter the correct amount. In this case, enter 6 1/2 linear inches.

- Additional Criteria on When to Use the Food-Specific Unit, Shape, and Linear Inch

The following are additional criteria to help clarify when a food-specific unit, shape, or linear inch should be used. There are three factors to be considered before determining which amount option is the most preferable. First, it is important to assess the ability of the SP; some adults and many children may not be capable of quantifying an item using a shape. Second, determine what measurement options are available to you on the Amount screen; a food-specific unit may not be allowed. And third, think about the size characteristics of the food being reported, e.g., how much size/shape variability is there for that food item in the marketplace?

Type of preparation also plays a large role in determining whether or not to use a food-specific unit. Generally speaking, food-specific units may be used for fruits, vegetables, and commercially packaged products where the size is fairly standard. Items prepared from scratch, mix, and refrigerated dough usually are best entered as shapes with dimensions. In addition, shape is preferable for items purchased from a specialty bakery. The food-specific unit may be used for store bought baked products, such as cookies, sweet rolls, and doughnuts. For the most part, the DDC allows for variation in sizes for these commercially prepared products by presenting various size options, e.g., small, medium and large, etc.

Foods, such as pork chops and chicken are very difficult to describe as a shape; therefore, a food-specific unit is preferred for meat pieces/parts with irregular shapes.

Pre-sliced and pre-packaged luncheon meats and cheeses may be entered as food-specific units. Meats and cheeses which are home-sliced or purchased at the deli should be entered as shapes since these will vary in size.

Sometimes respondents begin to anticipate your next question, and may show the amount consumed before you have a chance to probe. It is important to know how the SP/proxy reported the food during the interview; therefore, when the food is described using a shape (or ruler); do NOT use the food-specific unit should the size described by the SP exactly match the dimensions displayed in parentheses. In this situation, enter the appropriate dimensions.

If a food-specific unit and linear inch are options on the Amount screen, use the food-specific unit. A calculation is required for the linear inch option when a food is reported in multiples, and since it is best to keep calculations to a minimum, the food-specific unit (small, medium, large, etc.) is better. Use linear inch as a course of default if the SP describes the amount using the ruler before you are able to probe. Exhibit 4-34 displays the Amount screen for corn on the cob; both food-specific units and linear inch are options. When corn on the cob is reported, probe, "Was that a small, medium, large or extra large cob?" and, "How many did you eat?"

Exhibits 4-35 and 4-36 show the Amount screens for corn tortillas and pizza, respectively. Note that the presentation of the food-specific units on these screens differs from the typical format. Usually the food-specific unit is presented with a descriptor, such as small, medium, or large, followed by the dimensions in parentheses. The study protocol emphasizes that you probe by asking the SP if the food item was small, medium, large, etc; you usually do not mention the dimensions displayed in parentheses. For both corn tortillas and (circular) pizza, there are no descriptors. You must probe for the diameter. It is very likely that the respondent will use the ruler or a floppy disc to describe the diameter. Should the diameter described exactly match the food-specific unit (or number of inches) displayed on the screen, it is best to select the food-specific unit. THESE ARE THE EXCEPTIONS TO THE RULE. On the other hand, should the SP describe the diameter as a fraction (4.5 inches, etc.), enter the amount using the circle option, since 4.5 inches is not a food-specific unit choice.

Your knowledge of what is being sold in the "marketplace" and your familiarity with the amount options presented in the DDC will help you determine whether the shape or food-specific unit (FSU) is preferred. It may be necessary to probe more thoroughly on some foods to determine whether they meet the criteria explained previously. Use the following as a general guide:

Describe an item by shape if it is:

-     Homemade/Bakery/Mix/Dough
-     Not pre-sliced/prepackaged
-     Much variation in size and shape in the marketplace but limited selections for food-specific unit

Describe an item by FSU if it is:

-     Brand specific cookies and candy
-     Fruits and vegetables
-     Irregular shapes of meats (FSU when available)
-     Prepackaged/sliced luncheon meats and cheese

Exhibit 4-34. Amount screen: corn on the cob

```
AMOUNT OF        corn, yellow, cooked from fresh, cob


      +----------------------- Measurements ---------------------+
      |      volume
      |      weight - edible portion after cooking
      |      weight - edible portion before cooking
      |      weight - with refuse after cooking
      |      weight - with refuse before cooking
      | SM   small (3" cob)
      | MD   medium (5" cob)
      | LG   large (8" cob)
      | XL   extra large (12" cob)
      | LI   linear inch
      +----------------------------------------------------------+
      unit:
```

Exhibit 4-35. Amount screen: corn tortilla

```
AMOUNT OF        tortilla, corn, plain


      +----------------------- Measurements ---------------------+
      |      volume
      |      weight
      | D4   4" diam
      | D5   5" diam
      | D6   6" diam
      | D7   7" diam
      | D8   8" diam
      | CIR  shape - circle
      |
      +----------------------------------------------------------+
      unit:
```

Exhibit 4-36. Amount screen: pizza

```
AMOUNT OF       pizza, restaurant/take-out or similar, with one meat
                topping, without extra cheese, thin crust


     +--------------------- Measurements ----------------------+
     |     volume
     |     weight
     | D8  8" diam
     | D9  9" diam
     | D10 10" diam
     | D12 12" diam
     | D13 13" diam
     | D14 14" diam
     | D15 15" diam
     | D15 15" diam
     | D16 16" diam
     | PM  pizza model - 1/8 of 14" diam
     | CIR shape - circle
     | REC shape - rectangle
     +---------------------------------------------------------+
      unit:
```

4.3.5.3 Entering the Unit and Amount Into the Automated System

The choice of a unit for the food amount may be either a one, two or three-screen process. With the exception of food models, the first screen presents all available options for that food/beverage. Depending on how the respondent chooses to quantify the food, move the highlight to the appropriate description; press ENTER.

-        **Volume and Weight Measurement**

If you choose a volume or weight measurement, a second screen appears with a list of possible units for entering the weight or volume. Move the highlight to your choice. Press ENTER.

Refer to Exhibit 4-37. On screen 1, volume was selected and screen 2 appears with the list of possible units for volume.

-        **Volume - Physical Form**

Another unit option of which you must be aware is the volume plus "physical form" (Exhibit 4-38). The physical form refers to the density of the food item. As mentioned earlier, in order for the system to calculate the quantity eaten, the density of a food is very important. The types of physical forms offered vary depending upon the item chosen.

Before selecting "volume" as the unit, you must first know the physical form of the food. The physical form may be used in conjunction with either a volume measurement or a food model.

-        **Food-Specific Units and Shapes**

When a food-specific unit is chosen (also displayed in Exhibit 4-38), a second screen is not necessary.

When shapes are used, it is also a one-screen process to enter the unit, but it varies slightly from the procedure for food-specific units. Once the shape has been entered, the system prompts you to enter the dimensions (Exhibit 4-39).

In both situations, move the highlight to the appropriate unit, and press ENTER.

Exhibit 4-37. Amount screen: volume

<u>Screen 1 of 2</u>

```
+------------------------------------------------------------------+
| AMOUNT OF        tea, herbal                                   . |
|                                                                  |
|                                                                  |
|      +----------------------- Measurements ----------------------+
|      |    [volume]                      <--Select volume.        |
|      |    weight                                                 |
|      |                                                           |
|      |                                                           |
|      |                                                           |
|      |                                         .                 |
|      |                                                           |
|      |                                                           |
|      +-----------------------------------------------------------+
|      unit:                                                       |
|                                                                  |
+------------------------------------------------------------------+
```

<u>Screen 2 of 2</u>

```
+------------------------------------------------------------------+
| AMOUNT OF        tea, herbal                                     |
|     .                                                            |
|   Measurement: volume                                            |
|                                                                  |
|      +----------------------- Volume Units ----------------------+
|      | CP   cup                                                  |
|      | FO   fluid ounce                                          |
|      | TB   tablespoon                                           |
|      | TS   teaspoon.         These volume units appear.         |
|      | PT   pint                                                 |
|      | L    liter                                                |
|      | CI   cubic inch                                           |
|      |      food model                                           |
|      |                                                           |
|      +-----------------------------------------------------------+
|      unit:                                                       |
|                                                 .                |
+------------------------------------------------------------------+
```

Exhibit 4-38. Amount screen: volume plus physical form and food-specific units

```
AMOUNT OF         apple, fresh, with skin


        +------------------- Measurements ----------------------+
        |       volume - chopped
        |       volume - sliced           <-- Volume plus physical form.
        |       volume - solid
        |       weight - edible portion
        |       weight - with refuse
        | SM    small (2 1/2" diam)
        | MD    medium (2 3/4" diam)       <-- Food-specific units.
        | LG    large (3 1/4" diam)
        | SPH   shape - sphere
        +-------------------------------------------------------+
        unit:
```

Exhibit 4-39. Amount screen: shapes

```
AMOUNT OF          pancake, white flour (include buttermilk), plain



         +------------------------ Measurements ----------------------+
         |        volume
         |        weight
         | SM   small (approx 3" diam)
         | MD   medium (approx 5" diam)
         | LG   large (approx 7" diam)
         | +-------------------+        Respondent chose the shape "cylinder."
         | | CYL shape - cylinder |
         | CIR shape - circle
         |
         |
         +------------------------------------------------------------+
          unit:
```

Screen 2 of 4

```
AMOUNT OF          pancake, white flour (include buttermilk), plain

   Measurement: cylinder

                        +------ Cylinder: Dimensions ------+
                        |
                        |
                        |     Diameter :        inches     |
                        |     Height   :        inches     |
                        |
                        |
                        +----------------------------------+
                                    The system prompts for the diameter. Have
                                    the respondent show you the size using the
                                    ruler or other food model accessory.

   +--------------------------------------------------+
   | Enter the diameter in inches.  Press <ENTER>. |
   +--------------------------------------------------+
```

Exhibit 4-39. Amount screen: shapes (continued)

```
┌──────────────────────────────────────────────────────────────────────┐
│ AMOUNT OF        pancake, white flour (include buttermilk), plain      │
│                                                                        │
│    Measurement: cylinder                                               │
│                                                                        │
│                      +------- Cylinder: Dimensions ------+             │
│                      ¦                                   ¦             │
│                      ¦                                   ¦             │
│                      ¦    Diameter : 4.000   inches      ¦             │
│                      ¦    Height   :         inches      ¦             │
│                      ¦                                   ¦             │
│                      ¦                                   ¦             │
│                      +-----------------------------------+             │
│                                                                        │
│                                        The system now prompts for the  │
│                                        height. Again, have the         │
│                                        respondent use the ruler, etc., │
│                                        to indicate the number in       │
│                                        inches.                         │
│                                                                        │
│   ┌────────────────────────────────────────────┐                      │
│   │ Enter the height in inches.  Press <ENTER>. │                      │
│   └────────────────────────────────────────────┘                      │
└──────────────────────────────────────────────────────────────────────┘
```

```
┌──────────────────────────────────────────────────────────────────────┐
│ AMOUNT OF        pancake, white flour (include buttermilk), plain      │
│                                                                        │
│                                                                        │
│    Measurement: cylinder          Diameter :   4.000 inches            │
│                                   Height   :   0.250 inches            │
│                                                                        │
│                                                                        │
│                                   After you enter the dimensions,      │
│                                   the system prompts for the           │
│                                   "amount," or how many.               │
│                                                                        │
│                                                                        │
│         unit: CYL cylinder                                             │
│       amount:                                                          │
│                                                                        │
│   ┌──────────────────────────────────────────┐                        │
│   │ Enter the amount.  Press <ENTER>. │                               │
│   └──────────────────────────────────────────┘                        │
└──────────────────────────────────────────────────────────────────────┘
```

-   Food Models

In the case of food models, the choice of the unit for the food/beverage amount is a three-screen process. In order to access the screen which presents the food model options, you are required to first select "volume." If a physical form is stated, probe first to find out the form in which the food was eaten, then select the appropriate answer. If the respondent has chosen a model as the unit of measurement, highlight volume or the appropriate volume - physical form, and press ENTER. After selecting the appropriate volume, the food model selection is always the last option on the screen. Use the End key to highlight food model and press ENTER.

When food models are selected, the procedure is slightly different than what has been presented thus far (Exhibit 4-40). In this case, you are required to enter the abbreviation for that desired food model; a list of food models (and their abbreviations) are not displayed on the screen. You must become familiar with the food models, and memorize the correct abbreviations. Although the abbreviations are noted on the bottom of each model, it would be awkward and time consuming to pick up and view these labels. The system will not accept an entry for a food model if it does not exactly match the computer-allowed abbreviation.

-   Entering the Amount

After the unit is selected, you must enter the amount (Exhibit 4-41). The amount may be expressed in whole numbers, fractions, or decimals. Press ENTER to process the entry.

To correct errors, use the F2 key to back up and erase the entry. Either reselect the highlighted choice or enter the correct amount. Press ENTER.

Screen 1 of Exhibit 4-41 shows that **cup** was selected as the unit; the blank after amount prompts you to enter the amount, as is shown in screen 2. Screen 3 shows all the entered data for the apple; the SP had 1 cup of fresh, sliced apples, eaten with skin.

-   Use of the Escape Key on the Amount Screen

To quickly end the selection process for a food or beverage and return to the Food Entry screen, you may press the escape key on the Amount Screen. The system will prompt you for confirmation that you want to erase all selections made for the food (Exhibit 4-42). If you select "Y," not only will the amount be erased but also all of the descriptions entered for that food item.

Exhibit 4-40. Amount screen: food models

<u>Screen 1 of 4</u>

```
AMOUNT OF        tea, herbal

  Measurement: volume

      +--------------------- Volume Units ----------------------+
      ¦ CP  cup
      ¦ FO  fluid ounce
      ¦ TB  tablespoon
      ¦ TS  teaspoon
      ¦ PT  pint
      ¦ L   liter
      ¦ CI  cubic inch
      ¦     [food model]        <-- Select food model.
      ¦
      ¦
      +--------------------------------------------------------+

        unit:
```

<u>Screen 2 of 4</u>

```
AMOUNT OF        tea, herbal

  Measurement: volume












  food model:                  <-- The system prompts for the food model.
```

Exhibit 4-40. Amount screen: food models (continued)

Screen 3 of 4

```
AMOUNT OF        tea, herbal

  Measurement: volume












  food model:  [COF]                    <-- Enter the food model abbreviation.
```

Screen 4 of 4

```
AMOUNT OF        tea, herbal

  Measurement: volume









        unit: COF = 6 FO
        number:                         <-- Type in whole number, fraction or decimal.
  [Enter the number.  Press <ENTER>.]
```

Exhibit 4-41. Amount screen: entering an amount

Screen 1 of 3

```
AMOUNT OF         apple, fresh, with skin

   Measurement: volume - sliced



       unit: CP  cup
     amount:


 Enter the amount.  Press <ENTER>.
```

Screen 2 of 3

```
AMOUNT OF         apple, fresh, with skin

   Measurement: volume - sliced



       unit: CP  cup
     amount: 1


 Enter the amount.  Press <ENTER>.
```

Screen 3 of 3

```
AMOUNT OF         apple, fresh, with skin

   Measurement: volume - sliced

       Amount = 1.000 cup (0.80 MD)



       Press <ENTER> to continue.
```

Exhibit 4-42. Amount screen: use of the escape key

```
AMOUNT OF       tea, herbal


          +---------------------------------------------------+
      +--|              ** Do you want to erase all selections |+
      :  |                 made for this food?   (Y/N)    **   |
      :  +---------------------------------------------------+
      :
      :
      :
      :                              |
      :
      +------------------------------------------------------+
          unit:



Enter (Y)es or (N)o.
```

If you press the escape key (Esc) while on the Amount screen, the system prompts for confirmation. If you select "Y," the amount and all descriptions entered for that food item will be erased.

-   Unknown Amounts

There will be times when an SP or proxy will not be able to estimate the amount eaten.

Although it does not appear as an option, the system will always allow you to enter a "U" for an unknown quantity on the first Amount screen displayed. After entering a "U," a prompt appears asking "Amount unknown. Correct? (Y/N)." If the screen was accessed in error, enter "N;" otherwise enter "Y" and proceed with the interview.

Certain standards for unknown amounts have been established; you will receive a laminated reference card stating this information. This list does not encompass all situations where an unknown amount might arise, but rather, the more common occurrences, such as an unknown amount of cream and sugar in coffee, or an unknown amount of a spread on a slice of bread. Even though the calculations will be completed during the edit process (Chapter 6), display this reference card in a location that you can easily view during the interview process. The listing contains not only the formulas necessary to calculate a standard for a specific item, but also the approved abbreviations for the food models and their volume (Exhibit 4-43). You may quickly glance at the list to "jog" your memory regarding food model abbreviations. However, do not use this reference card as a reason for not memorizing the abbreviations. Do not use this list as a way to enter the default amount (explained in Section 6.4.1.2) during the original interview; it is important that the home office have the ability to know what the SP actually said during the original interview.

-   Known Amounts

At times the respondent may describe an amount consumed which requires a calculation on the part of the interviewer. At other times you may find that the amount described by the respondent is not a selection on the Amount screen. When these situations occur, a "K" is entered during the original interview to indicate a known amount. Since calculations are completed during the edit (explained in detail in Section 6.4.1.2), instead of during the actual interview, the "K" serves as a place holder until you can perform the calculation later. When the Amount screen presents limited options, the "K" allows NCHS to flag those foods/beverages which may need additional size options, e.g., a new size available on the market, or a square shape needed in addition to a circular shape, etc.

Like the "U" for unknown amounts, the "K" option is not displayed on the screen, but can be typed on the first Amount screen for all foods and beverages. After you enter a "K," a screen appears that is similar to a Note screen (Exhibit 4-44) prompting you to enter notes on the known amount of the food or beverage. This mandatory note should contain either the information needed to make the calculation, or the new size or shape described by the respondent but not displayed as an option on the screen. After completing the note, press F10 to return to data collection.

Exhibit 4-43. Food model amounts and default standards

FOOD MODEL AMOUNTS AND DEFAULT STANDARDS

Model	Amount (FO)	Rim:	FO	Proportion of Model
B1	9		10	$1^1/_9$
B2	16		16	1
G1	4		5	$1^1/_4$
G2	8		9	$1^1/_8$
G3	11		12	$1^1/_{11}$
G4	15		16	$1^1/_{15}$
G5	6		7	$1^1/_6$
MUG	10		11	$1^1/_{10}$
COF	6		7	$1^1/_6$
M1	2.7 (1/3 CP)		-	-
M2	6 (3/4 CP)		-	-
M3	14 ($1^3/_4$ CP)		-	-
SP1	1½ tsp		-	-
SP2	1 TB		-	-

Baby Bottle

Standard Sizes	Mid-Rim (FO)	Rim (FO)
4 FO	5	6
8 FO	9	10

DEFAULT STANDARDS

Item	Standard
Catsup	1 TB*/sandwich
Sandwich spread	1 TB*/sandwich
Mayo/Mayo-type dressing and salad dressing	1 TB*/sandwich 2 TB/1 CP of lettuce salad
Mustard	1 tsp*/sandwich
Margarine/butter	1/2 TB/1 slice of bread
BBQ sauce	1 TB/1 oz. of meat
Milk/cream	1/2 CP/1 CP cereal (hot or cold) 1 TB/6 FO beverage
Cream substitute (liquid or powder)	1 TB/6 FO beverage
Sugar	2 tsp/6 FO beverage

*For large-size sandwich, double the standard

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Exhibit 4-44. Note on a known ("K") amount

```
                                           NOTE ON
       apple, fresh, with skin

           Amount = Known

                       +------------------ Note Text ------------------+
                       |                          .                     |
                       |                                                |
                       |                                                |
                       |                                                |
                       |                                                |
                       |                                                |
                       |                                                |
                       |                                                |
                       +----+-------------------------------------------+

   Type in notes about the highlighted information.   Press F10 when
   finished.
```

The five examples which follow illustrate when the "K" option should be used:

1.   All values needed to perform a calculation are provided by the SP.

        The SP reports drinking a G3 (without ice) of fresh-squeezed fruit juice. She is able to
        tell you that she added 1/2 cup sugar to a 32 fluid ounce pitcher of juice, but she does not
        know how much sugar was in her portion.

2.   A volume of measurement is reported which is not a screen option.

        The SP reports drinking a 1-quart or 1/2-gallon container of Gatorade. Neither "quart"
        or "gallon" is a volume option on the Amount screen.

3.   A shape is reported by the SP which is not an option on the screen.

        The SP reports consuming a square pancake. The options on the Amount screen for
        pancake allow the entry of either a circle or cylinder, but not a square or rectangular
        shape.

4.   The amount options on the screen are limited to "weight" and "each." For those DDC
        screens with very limited options, it is preferable to have the SP demonstrate the amount

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using a shape and giving dimensions. In this way, a shape may be assigned for future use. The "each" option should be used only as a default when the SP cannot provide any information.

The SP reports consuming a turnover entree. Screen choices are limited to "weight" and "each." After probing the SP is able to tell you that he ate one rectangular turnover with the dimensions of two inches in width, five inches in length, and a height of one inch.

5.   The SP is able to tell you the total amount eaten of an item which was poured over (or added to) other foods, but not how much was on each individual item. In this case, the only determination NCHS must make is the proportion used on each item; the total amount was provided by the SP.

The SP reports consuming salsa which was not only poured onto her tortilla chips, but also on her refried beans. She can tell you that in total she used one cup of salsa on both items, but she cannot tell you how much she used on each.

All five examples explained above require the entry of a note during the original interview. However, the first two examples are the only situations where an additional amount entry would be made in the edit mode. The first example requires that you perform a calculation; whereas, the second requires a fluid ounce (FO) entry equivalent to a quart or 1/2 gallon. NCHS would process the latter three.

-       **Differentiating Between Known and Unknown Amounts**

Using the "U" and "K" options allows NCHS to separate the true unknown amounts (which eventually receive defaults) from known amounts (i.e., reported to you by the respondent).

It is important, therefore, to learn how to easily and quickly distinguish between the two options. Most of the time it is fairly obvious. For instance, restaurants frequently butter toast prior to serving. By the time the customer finally receives the toast, the butter has melted. In this case, the SP may tell you the number of slices he/she ate, but not the amount of butter. This is a true unknown amount which would initially receive a "U" during the original interview, and then a default amount during the edit.

Other items reported deserve more careful evaluation depending on how much information the respondent is able to provide. The more information you are able to collect from the respondent through meaningful and thorough probing during the interview, the fewer decisions NCHS must make regarding appropriate defaults for unknown amounts. Whenever a respondent reports a beverage or food consisting of more than one item, such as a salad, and tells you how much was consumed of the whole mixture, but not of the individual ingredients, probe to find out whether the respondent is able to give you an estimate of the proportion of the items in the mixture. Whether or not the SP can estimate the proportions is the determining factor as to whether a "U" or "K" will be entered. If the proportions are known, enter "K;" if unknown, enter "U." Enter the information provided by the respondent, including the proportions, if provided, as a note attached to the type of combination. In these particular cases, the note refers to the mixture as a whole; therefore, it is better to attach the note to the combination as opposed to each individual component. (The procedures for attaching notes will be explained in more detail in section 4.3.9.1.)

For example, if an SP reported the total amount of a salad with lettuce and other vegetables as 1-1/2 cups, and was able to tell the interviewer the proportion of lettuce to "other vegetables" (1/2 lettuce; 1/2 vegetables), but not the amount of each item in the salad, the interviewer would enter "K" for the lettuce and "U" for all other vegetables listed. A note would be attached to the type of combination (by pressing F8 to access the Note screen) stating something like "total salad equal to 1-1/2 cups; 1/2 lettuce and 1/2 other vegetables." [The calculation would be done during the edit process (Section 6.4.1.2).] On the other hand, all salad items would receive a "U" for unknown amount if the SP was unable to provide proportions. The note attached to the combination would state, "total salad equal to 1-1/2 cups; SP doesn't know proportions."

- **Common Units and Maximum Amounts**

Common Units: A common unit is assigned to each food. This unit is used to provide an additional edit check. After you have entered the amount in the unit of measurement you selected, a screen appears showing the selection. If the entered unit is not the assigned common unit, the system converts the entered amount to the assigned common unit, and displays it.

Maximum Amounts: Maximum amounts are assigned to each food to help you catch errors. If you exceed the maximum amount allowed by the system a message appears prompting you to check the amount and verify whether or not it is correct. You must type "Y" (yes) or "N" (no) to proceed. If you realize that you actually did make an error in entering the data, type "N" and then re-enter the correct amount.

Two examples illustrate common units and maximum amounts (Exhibit 4-45):

Example 1: The common unit for apple is "MD" signifying medium (apple). One cup of sliced apples is equal to "0.80" of a medium apple.

Exhibit 4-45. Amount screen: common units and maximum amounts

Example 1

```
AMOUNT OF        apple, fresh, with skin

  Measurement: volume - sliced


       Amount = 1.000 cup (0.80 MD)        <-- Common unit.









            Press <ENTER> to continue.
```

Example 2

```
AMOUNT OF         apple, fresh, with skin

  Measurement: volume - sliced


      +---------------- Maximum Amount Check ------------------+
      |                                                        |
      |              10.000 cup (7.97 MD)                      |
      |                                                        |
      |         ** Check Amount. Correct? (Y/N)     **         |
      |                                                        |
      +--------------------------------------------------------+


   The amount entered exceeds the maximum amount check.  Press "Y" to confirm the amount
   or "N" to re-enter the amount.



    Enter (Y)es or (N)o.
```

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Example 2: Ten cups of sliced apples exceed the maximum amount allowed by the system. Note that the common unit indicates that ten cups is equivalent to almost eight medium apples, an unusually large amount.

4.3.5.4 Probing for Amounts

In earlier HANES surveys, SPs were allowed to utilize the models in any fashion to describe the amount consumed of an item. However, because there were problems in analyzing the data following the study, the current method requires, at times, that you ask the SP to choose a particular model to describe the amount. Do not lead the SP by saying something like, "Don't you think the mounds would describe that better?" Say, "Is there another model or shape that might also describe that quantity?"

Unlike the food selection screens, there are fairly standard probes for amount. You simply ask the SP to tell you the amount eaten or drunk using the models or shapes. It is especially important to remind the SP that you want to know how much he/she ate or drank, not how much was on his/her plate or in his/her glass. Probes for the Amount screen include: "How many (insert food or beverage) did you eat (drink)?" "Did you eat (drink) all or part of the (insert food or beverage)?"

- **Food Model Markings**

In the second part of the 24-hour recall introduction, the respondent is instructed to point to a specific line on the food models which is equivalent to the amount he/she consumed. Should an SP point to a model, such as a glass, without specifying a specific line, do not assume the SP means the glass was full. You must probe, "To what line?" before entering any information. Familiarize yourself with the markings on the models. Note that G1 is marked in half, B1, G5, and COF in thirds, and B2, MUG, G2, G3, G4, and G6 in fourths. The system allows you to enter whole numbers, fractions or decimals. If the SP describes the quantity as being "to the rim," there is a different procedure to follow which will be explained later in this section.

- **Level Spoonful**

Also in the second part of the introduction, you ask the respondent to describe the quantity in level spoonfuls whenever he/she uses the spoon models or household measuring spoons. If the SP says that he/she added a heaping teaspoon, probe "Can you please tell me about how many level spoonfuls of that model would be equal to the amount you added?" Should he/she have difficulty trying to estimate using the first model he/she chose, suggest that he/she try a different model.

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-       **Drinks with Ice**

When an SP reports a beverage, probe to find out whether or not the beverage contained ice (Exhibit 4-46). Ask the SP if the beverage was consumed with ice or without ice. If the SP says that the beverage contained ice, ask the SP if he/she can estimate the amount consumed without ice. If the SP cannot do this, select "volume-with ice (crushed or cubed)" and enter the amount with ice. If "volume with ice" is not a selection on the Amount screen, enter "U" on the Amount screen and attach a note with the total amount drunk of the beverage with the ice. However, if the SP can tell you the proportion of ice in a beverage, this is usually a known amount which can be calculated during the edit. Enter "K" when the total amount of a single-component beverage including ice and the proportion of ice are both known.

-       **More Than One Eaten of the Same Item**

When an SP reports eating more than one of the same item, such as two homemade biscuits, it is very important to find out whether or not both biscuits were the same size. Probe "Were those biscuits the same size or different sizes?" If they were different sizes, you must enter each biscuit as a separate item and specify the size of each biscuit. Should an SP report eating "4 Wheat Thins," a store-bought item which comes in only one standard size, you do not need to probe further.

-       **Probing for the Form of the Food**

Probing for the form of the food is quite easy. In most cases, you simply read the form choices presented on the screen, such as, "Was that chopped, diced, or melted?" On occasion, the terms presented on the screen can be somewhat confusing to the respondent. For example, the forms for generic saltine crackers are: whole, crushed and solid. "Whole" allows for a certain amount of air space when the food amount is described as being in a bowl or cup, etc.; "crushed" allows for less air space and "solid" does not include air space. Since these are not common terms, have the respondent describe the form of the food. In the case of the generic saltine crackers, it is best to probe, "Can you please show me the amount you ate?" If the SP replies that he/she ate three crackers, select the food-specific unit from the Amount screen. However, if he/she uses a food model, measuring cup, etc., the probe varies depending upon whether the crackers were eaten alone or used as part of a recipe (e.g., as a topping for a casserole). "Volume-whole" should be selected for crackers described as eaten alone; further probing is not necessary. On the other hand, probe "Were they whole crackers or were they crushed?" when they are reported in conjunction with a recipe.

Exhibit 4-46. Amount screen: probing for beverage with ice

```
+------------------------------------------------------------------+
| AMOUNT OF        juice/nectar/flavored drink, orange, juice, fresh |
|                                                                    |
|      +-------------------- Measurements --------------------+      |
|      |  [volume]              <-- Select volume.            |      |
|      |  weight                                              |      |
|      |                                                      |      |
|      |                                                      |      |
|      |                 SP: "I drank 1/2 cup of fresh-squeezed orange juice.  |
|      |                                                      |      |
|      |                                                      |      |
|      |                                                      |      |
|      +------------------------------------------------------+      |
|      unit:                                                         |
|                                                                    |
+------------------------------------------------------------------+
```

```
+------------------------------------------------------------------+
| AMOUNT OF        juice/nectar/flavored drink, orange, juice, fresh |
|    Measurement: volume                                             |
|                                                                    |
|      +-------------------- Volume Units --------------------+      |
|      | [CP   cup]             <-- Select cup.               |      |
|      | FO   fluid ounce    •                                |      |
|      | TB   tablespoon                                      |      |
|      | TS   teaspoon                                        |      |
|      | PT   pint                                            |      |
|      | L    liter                                           |      |
|      | CI   cubic inch                                      |      |
|      |      food model                                      |      |
|      |                                                      |      |
|      +------------------------------------------------------+      |
|      unit:                                                         |
|                                                                    |
+------------------------------------------------------------------+
```

Exhibit 4-46. Amount screen: probing for beverage with ice (continued)

```
┌─────────────────────────────────────────────────────────────────────┐
│ AMOUNT OF        juice/nectar/flavored drink, orange, juice, fresh    │
│                                                                       │
│    Measurement: volume                                                │
│                                                                       │
│                                                                       │
│        unit: CP   cup                                                 │
│      amount: │1/2│              <-- Enter 1/2 or .5.                   │
│                                                                       │
│                                                                       │
│                                        I: "Was that with ice or without ice?" │
│   Enter the amount.  Press <ENTER>.    SP: "Without ice."             │
│                                                                       │
└─────────────────────────────────────────────────────────────────────┘
```

Since shapes provide a better way of describing solid objects, "volume - solid" is rarely used. "Volume - solid" would be used if an SP were to report eating a quarter cup of melted Colby cheese. Since the only form choices for Colby cheese are grated, diced and solid, "solid" would be selected and a note attached stating "melted." "Volume - solid" would also be used if an SP reported eating a food item, such as mashed fruit and that form selection was not available on the Amount screen. In this case, you would also attach a note stating the form "mashed."

-        **How to Enter Variations in Responses**

It will often be the case that the SP gives you the whole answer, saying something such as "I drank 1/2 cup of juice," but you must still progress through the succession of screens to enter the information. In this case, you would select "volume" from the first screen presented, "cup" from the second screen, and enter "1/2" or ".5" on the third screen for the amount (displayed on Exhibit 4-46). Remember, though, that before you accept this answer (without probing), the SP must have pointed to the model while verbally describing the quantity. Many times, what the SP verbally tells you and what he/she shows you are contradictory. Enter the amount the SP indicated using the food models, rather than the verbal amount. If the SP says, "I had about a handful," or even says, "I had about a quarter cup," ask the SP to please show you the quantity using a model or a shape. When an SP says that he/she drank "11 ounces of juice," the interviewer should try to redirect the SP to the food models. Say something like, "Can you please use one of the glasses to show me the amount you drank?" If the SP responds that he/she knows it was "11 ounces," then accept and enter that answer.

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In general, you should let the SP select the appropriate model or shape without leading, and then enter the amount into the system. However, if there is the option of selecting a form for the food, you must probe for that before making your selection. For example, if the SP reports eating cooked carrots, as in screen 1 of Exhibit 4-47 the form options are sliced, diced, mashed or solid. If the carrots were reported by the SP as eaten raw, the selections are slightly different; you would need to probe for grated, sliced, or diced (screen 2 of Exhibit 4-47).

Once an option is selected, the next screen presents not only cups, tablespoons, etc., but also the food models. If the SP says he/she had sliced, raw carrots, and uses the measuring cup pointing to the half mark, you would select "volume - sliced," "cup," and enter "1/2" or ".5" for the amount. On the other hand, if the SP pointed to the top line of model G1, you would select "volume - sliced," "food model," enter "G1" to indicate the model chosen, and a "1" for the amount eaten. Note that physical forms of food are entered only in conjunction with the volume amount.

Shapes are used frequently to describe foods. Use of the rectangular grid and the shape chart have already been mentioned. To assist the respondent in visualizing shapes, measurement aids included in the food model set can also be used. These include thickness sticks, floppy discs, discs (plastic), and a 12-inch wooden ruler. The dimensions of each individual floppy disc and plastic disc are printed on the back for easy reference. Many respondents can more easily describe the diameter of a circular food by looking at the floppy or plastic discs than trying to measure the diameter using the ruler. Encourage the SP to use one of these measurement aids if he/she appears to be having difficulty.

Measurement aids do not have computer-allowed abbreviations; they are used only as visual cues. For example, an SP reporting boiled ham may say that he ate one slice the size of the 4-inch plastic disc; enter "cylinder." The system then asks you to enter the diameter in inches; enter "4." Next you must enter the thickness or height of the ham slice in inches. To probe for height, ask the SP to use the thickness sticks (each stick is 1/8 inch thick) to show you the thickness of that slice. If the SP indicated one thickness stick, enter "1/8." Finally, the system asks how many were eaten. Probe, "Did you eat the whole slice or just a part of it?" You may enter a whole ("1") or a fraction of the whole ("3/4") depending on how the SP responded.

Occasionally the dimensions reported by the SP will exactly match the dimensions presented in parentheses for a food-specific unit. Since it is important to know how the SP/proxy actually reported the food during the interview, e.g., as a shape, do not use the food-specific unit should it exactly match the dimensions displayed. If an SP reported eating a slice of bologna, and demonstrated the dimensions, 4 inches in diameter and 1/8 inch thick using the measurement aids and these dimensions were exactly the same as those presented in parentheses for the food-specific unit, do not use the food-specific unit.

Exhibit 4-47.   Amount screen: selecting physical form for cooked and raw carrots

Screen 1

```
+------------------------------------------------------------------------+
| AMOUNT OF        carrots, cooked from frozen                           |
|                                                                    .    |
|                                                                         |
|   +----------------------- Measurements -----------------------+        |
|   ¦       volume - sliced                                      |        |
|   ¦       volume - diced          <-- Forms of food are entered only   |
|   ¦       volume - solid              in conjunction with volume.      |
|   ¦       volume - mashed                                     |        |
|   ¦       weight - after cooking                              |        |
|   ¦       weight - before cooking                             |        |
|   ¦ SM    small (5 1/2" - 6" long)                            |        |
|  .¦ MD    medium (approx 6 1/2" long)                         |        |
|   ¦ LG    large (7 1/2" long)                                 |        |
|   +----------------------------------------------------------+        |
|     unit:                                                               |
|                                                                         |
+------------------------------------------------------------------------+
```

Screen 2

```
+------------------------------------------------------------------------+
| AMOUNT OF        carrots, raw                                          |
|                                                                         |
|                                                                         |
|   +----------------------- Measurements -----------------------+        |
|   ¦       volume - grated                                     |        |
|   ¦       volume - sliced         <-- Forms of food may vary for certain|
|   ¦       volume - solid              items depending on the           |
|   ¦       volume - diced              preparation, e.g., raw or cooked. |
|   ¦       weight - edible portion                            |        |
|   ¦       weight - with refuse                               |        |
|   ¦ SM    small (5 1/2" long)                                |        |
|   ¦ MD    medium (approx 6 1/2" long)                        |        |
|   ¦ LG    large (7 1/2" long)                                |        |
|   +----------------------------------------------------------+        |
|     unit:                                                               |
|                                                                         |
+------------------------------------------------------------------------+
```

Food-specific units are a feature you will notice on many Amount screens. As mentioned earlier, there are certain situations when it is acceptable to use the food-specific unit as opposed to having the respondent describe the amount with the shapes or models. If the SP says he/she ate a large apple, you would select "large." On the screen, after the specified size, in parentheses, is the dimension of the food-specific unit. You do not need to probe to find out if the SP's apple matches those dimensions; they are there as a guideline. In addition, make sure to verify whether or not the SP ate the whole large apple. If the SP asks, "What do you mean by 'large'?", you may show the SP the dimensions presented in the parentheses by using the ruler or discs, such as "large equals an apple this size," etc.

- **Special Situations**

If the SP sipped on a beverage, such as a large mug of coffee, throughout the morning, and is unable to specify a quantity drunk for each period of time, first enter the time he/she began drinking the beverage, then enter the total quantity drunk throughout the morning on the Amount screen. Probe first before entering the total quantity to be sure that nothing additional was added to some of the coffee throughout that period. (Do not use the meal code "extended consumption" in this situation as it does not meet the criteria of a large amount.)

- **Simple Calculations**

Occasionally you are required to do some very simple calculations; these calculations are kept to a minimum to reduce the likelihood of error. Though not a common occurrence, SPs may report drinking a quantity equivalent to two food models. If the SP says something like, "It was 1/2 of this glass plus 3/4 of that glass," redirect him/her to the models and ask if another model could better describe the quantity. Add that he/she may indicate that it was two (or more) times the size of a certain model or that it was a certain proportion of one. However, if the SP indicates that the quantity drunk was equal to a beverage model filled to the rim and a beverage model filled to the top line, you may add these amounts together and enter the total. In summary, it is permissible to add models together if the SP reports the amounts as being "to the rim" or "to the top line." This rule applies to beverage models (mug, glasses and coffee cup) and bowls; do not allow the respondent to add mound or spoon models together as the calculations for these are more complex. In the latter situation, ask the SP if there is another way he/she could describe the amount.

The following example further illustrates this procedure. If the SP reported drinking the equivalent of G1 and G2 both to the top line, refer to the Food Model Amounts (and abbreviations) reference card to calculate the total number of fluid ounces consumed by the SP. By quickly referring to the reference card, you can easily calculate the total volume, 12 fluid ounces (4 plus 8). Since the answer now is in fluid ounces, the amount cannot be entered as "food model," but rather must be entered as "fluid ounces." Select "volume," "fluid ounces," and enter "12." The fact that two food models were actually used to describe the quantity is lost. Therefore, in these cases, attach a note stating which models were added together.

Should an SP describe the quantity drunk as being "to the rim," a slightly different procedure is used. Instead of entering the total number of fluid ounces, you may enter a certain proportion of the model. In this way, a note is usually not necessary since the correct food model is entered in conjunction with the proportion, e.g., "1 1/4 G1." For "2 G1" drunk to the rim, enter "2 2/4 G1" on the Amount screen. In this case, attach a note stating "2 G1 to the rim" to document that a calculation was necessary. Refer to the column entitled "Rim: Proportion of Model" on the Food Model Amounts reference card in order to locate the appropriate proportion.

Another situation occurs where a simple calculation may be necessary. If the SP points to the measuring spoons and says that the amount was between 1/2 and 1 teaspoon, you may enter 3/4 teaspoon.

Sometimes SPs may use a measuring cup to report a specific quantity, and then state that it was 1-1/2 times the size, such as 1-1/2 times the size of the 1/3 measuring cup. To simplify these computations, the dietary interviewers will be supplied with a laminated card containing a multiplication table (Exhibit 4-48). By using the multiplication table during the interview, the interviewer does not have to perform any calculations. In this case, the interviewer would simply find "1-1/2" in the left column of the table, "1/3" in the top column. The location where the two intersect is the answer, "1/2." Therefore, the amount entered into the system would be "1/2 cup."

Exhibit 4-48. Multiplication table

	1/2	1/3	2/3	1/4	3/4
1/2	1/4	1/6	1/3	1/8	3/8
1/3	1/6	1/9	2/9	1/12	1/4
2/3	1/3	2/9	4/9	1/6	1/2
1/4	1/8	1/12	1/6	1/16	3/16
3/4	3/8	1/4	1/2	3/16	9/16
1 1/2	3/4	1/2	1	3/8	9/8

-   Guidelines and Rules

To accommodate those situations which may arise in the field, certain rules or guidelines have been developed to assist the SP (and you) in describing specific foods.

-   Guidelines:

-        Enter shredded chicken as "cut pieces" to specify the form of the food.

-        Select "cube" or "rectangle" when specifying an oblong shape.

-        Select "cylinder" or "circle" when specifying an oval shape.

-        For fish or other items without uniform thickness, have the respondent visualize folding over the thin edges of, e.g., the fish fillet, to make an equal thickness throughout.

-        Canned Fruits: The amount selections include the fruit and the liquid which surrounds the fruit. Should the SP report "drained" canned fruit and the screen options state "with liquid," select "with liquid" since this would not significantly affect the nutrient content. <u>A note is not necessary</u>.

-        Pizza and Pie: Probe for: 1) the diameter of the item; 2) the total number of slices; and 3) the number of slices consumed by the SP. Enter the amount eaten as a fraction of the whole pizza or pie. For example, if the SP ate 2 slices from a 14 inch (diameter) pizza which contained 8 slices, the amount eaten was 2/8 of a 14 inch pizza. If the SP is unable to tell you the total number of slices in the pizza, have him/her use a floppy disc with the correct diameter and fold it into the probable portion size.

-   Rules:

Lifelike (Nasco) Muffin/Cupcake and Pizza Models: Hide these models in the drawer provided in the dietary interview room. As mentioned earlier, these models are used as accessories and are only presented to the respondent should he/she have difficulty describing a muffin, cupcake or pizza slice. If a respondent cannot quantify one of these specific items using the shape chart and ruler, or one of the measurement aids on the table, you may remove the appropriate model from the drawer and ask the SP how his/her portion size compares to the model.

If the SP had one or more muffins (cupcakes) the same size as the Nasco food model, enter the number as the food-specific unit. For muffins, the screen presents the food-specific unit, "muffin model - 2" diam base," as an actual choice; whereas, for cupcakes, the food specific unit states, "cupcake (2" diam base)." If the SP indicates that the muffin model is too small, do not allow him/her to double or triple the size of the model to estimate its size. Instead, probe again using the food specific units presented on the screen as your guide.

Though the muffin model has certain restrictions in its use, the pizza model does not. The same procedure is followed as to when it is presented to the respondent; remove the pizza model from the drawer when the respondent has difficulty describing the portion he/she ate using a shape and/or the measurement aids. If the SP ate one or more slices of pizza the exact same size as the Nasco model, enter the amount by selecting "pizza model - 1/8 of 14" diam." Should the SP say that he/she ate a slice which was 1-1/2 times the size of the pizza model, you may enter "1-1/2."

Cardboard Beverage Cartons: Because some respondents have difficulty with the concept of 1/2-pint and one-pint containers, three visual aids are available to prevent under/over reporting of these standard sizes. The visual aids consist of three cartons, two 1/2-pint cartons in two distinct shapes and one 1-pint carton. These cartons are typically found in schools, vending machines, and cafeterias, and may contain milk, chocolate milk, juices, iced tea, etc.

As with the muffin and pizza models, hide these visual aids until you need them; they are used only when a respondent has difficulty quantifying an amount. The procedure for entering the cardboard beverage carton is slightly different than the pizza or muffin model; enter the carton by selecting "volume" on the first Amount screen, then select the amount as fluid ounces or pint. There is NO food-specific unit which corresponds to these cardboard beverage cartons. Do not confuse these visual aids with the drink boxes (8.45 fluid ounces) available on the market and presented as a food-specific unit on the Amount screen.

Breaded Fish/Meat: In order for the DDC system to calculate an accurate amount of breading/batter on fish, meat, etc., you must ask the SP to describe the portion eaten **without** coating. The DDC system calculates the amount of coating based on the weight of the food eaten without coating. However, if the food item is presented on the Food Selection screen as "commercial pre-coated," or the item is a pre-breaded chicken or fish fillet from a fast food establishment, you do not need to probe for the amount eaten without breading/batter. In these two cases, the system has a standard for the coating, and therefore, the coating is not variable.

Should the SP report removing the breading from a commercially prepared pre-breaded patty before eating, try to describe the food item using the food hierarchies. If this is not possible, then use the Missing Food screen (Section 4.3.9.2).

Iced Cakes and Cupcakes: This same principle applies to icing on cakes and cupcakes. The DDC system assigns a specific amount of icing to cakes and cupcakes dependent on the portion eaten. Again, there is an exception; the system has a standard for pre-packaged commercial snack cakes and cupcakes with icing.

4.3.6 Quick Entry

Once you have become familiar with the DDC system, using another method of entering data will expedite the selection process.

Quick entry of foods and amounts is allowed at the item prompts. You may enter the keylist which is a string of abbreviations that identify the food. The abbreviations must be separated by periods. The keylist of abbreviations then is separated from the amount with a comma. The amount must be entered in computer-allowed abbreviations. You can enter as much of the keylist as desired, and the system will automatically bring up the next level of descriptions.

For example:

Partial keylist and amount

COFF.REG,6FO   The system will take you to the next level that needs to be specified, and then present the 6 FO for verification

Whole keylist and amount

MILK.WHO,8FO   The system will present the description, and then the amount for verification.

Partial keylist and no amount

BREA.LOA   The system will take you to the next level of description, and then to the amount screen.

Quick entry should be avoided for such items as potato chips and club soda, e.g., CHIP.POT or CLUB.REG, because these abbreviations cause the system to bypass the screen which contains the "brand name listing." Brand name information is very important and would be lost by using the quick entry method.

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4.3.7   Preparations

Preparation methods may be assigned to a food. A list of common preparation methods appears when appropriate for the food (screen 1 in Exhibit 4-49). Preparation descriptions refer only to cooking preparations. Depending on the preparation method chosen, the system may also prompt for more detail.

For example, after selecting either "fried," "baked or microwaved," "stir fried" or "unknown preparation" for a New York steak, you must then select whether the steak was "breaded or batter dipped," "marinated," "unknown," or that "no coating or marinade" was used. If the respondent reports consuming a food with a breading or batter, the system prompts whether or not the coating was eaten. On the other hand, if the respondent reports that the food was marinated, the system then asks whether the food was marinated "in soy sauce mixture (include teriyaki or tamari)," "in non-soy sauce mixture," or "unknown if soy sauce in marinade." In addition, "basted with added fat" also appears when appropriate.

So that you will not "force" the respondent to make a choice if he/she is unsure, there is the choice of "unknown preparation." Even if the respondent does not know, for example, whether the food was baked or broiled, it is possible that he/she may know whether or not it was breaded. Therefore, further probing may still be required even when the unknown preparation is selected. Should the respondent be unsure of both the preparation and the detailed probes which follow, an unknown option is usually available.

ENTERING: Move the highlight to the appropriate choice or type the abbreviation of the appropriate choice and press ENTER. The preparation method selected is displayed at the top of the screen, as shown screen 2, Exhibit 4-49.

CORRECTING: Press F2 to return to the previous screen if you are still describing the preparation. If you have completely described the preparation, proceed with the interview until you access the Recall Review screen (Section 4.3.12), then make the correction.

4.3.7.1 Use of No Fat or Salt Added

"No fat or salt added" is offered as an option in selecting preparation methods.

1.   If a preparation method is used that is not listed and does not add fat or salt, select "no fat or salt added." This occurs, for instance, with poached fish which was cooked over or in unsalted boiling water.

2.   If no preparation was required for the food, for example, canned vegetables eaten cold, select "no fat or salt added."

Exhibit 4-49. Preparation screen: New York steak

```
PREPARATION OF  steak - beef, New York, no visible fat eaten


+------------------- Ingredient/Preparation Selections ------------
|P:
|
|
|
+------+-----------------------------------------------------------
      | NONE no fat or salt added in preparation
      | ┌FRI  fried┐              <-- Select fried.
      | └──────────┘
      | BAK  baked or microwaved
      | BRO  broiled or grilled
      | STM  steamed
      | STE  stewed or boiled
      | STI  stir fried
      | U    unknown preparation
      |
      |
      |
      +-----------------------------------------------------------
       food:


 Type in abbreviation or move highlight to choice and press <ENTER>.
```

```
PREPARATION OF  steak - beef, New York, no visible fat eaten


+---------------- Ingredient/Preparation Selections ---------------
|P:    fried
|
|
|
+------+-----------------------------------------------------------
      | NCM  no coating or marinade (plain)
      | BRE  breaded/batter dipped
      | MAR  marinated
      | U    unknown if coating or marinade used
      |
      |
      |
      |
      |
      +-----------------------------------------------------------
       food:

 Type in abbreviation or move highlight to choice and press <ENTER>.
```

Press F2 to erase all preparation ingredient selections.

If the preparation method used by the respondent is presented on the screen, its selection always supersedes the "no fat or salt added" response. For example, if the SP broils his/her fish without adding any salt or fat, select "broiled" and then specify that no fat or salt was added in preparation. If the SP "fried" the fish in "Pam" without adding salt, select "fried."

4.3.7.2 Special Situations

-        **Barbecued Versus Barbecue Sauce Added**

"Barbecued" foods are frequently reported. You must ascertain whether the SP consumed a food which had been prepared on a barbecue grill or a food prepared with barbecue sauce, but not necessarily on a barbecue grill. Select "broiled or grilled" for those foods prepared on a barbecue grill. However, if the food was baked with barbecue sauce added, add the barbecue sauce as a food item (combination type: meat, fish, poultry with additions), and choose "baked or microwaved" as the method of preparation.

-        **Basted With Added Fat**

"Basted with added fat" means basting with a fat other than the meat's own juices. If a food is basted with its own juice there is no extra fat added to the meat. For example, venison basted with its own juice (Exhibit 4-50, screen 1) does not add additional fat; however, basting with butter does. If a meat is basted with its own juice, select "no basting fat."

Screen 2 in Exhibit 4-50 presents one of the Preparation screens for turkey. If turkey is basted with the pan juices and the turkey is definitely not a self-basting turkey, choose the preparation "no basting or browning fat." If the SP is unsure as to whether or not the turkey is self-basting, select "unknown basting or browning method."

-        **Sauces Other Than Soy Used in Marinades**

When "marinated" is chosen on the Preparation screen, you must then select the type of marinade. The only choices available are: "in soy sauce mixture (include teriyaki or tamari)," "in non-soy sauce mixture" and "unknown if soy sauce in marinade." Included in the soy sauce category are: "lite" soy sauce (reduced sodium), low sodium tamari, and as indicated in the parentheses, teriyaki and tamari. Do not select "in soy sauce mixture" if the marinade contains worcestershire sauce. The chart on page 4-123 illustrates the reason for excluding not only worcestershire sauce but also other common marinades:

Exhibit 4-50. Preparation screen: basted with added fat

Screen 1 of 2

```
PREPARATION OF  venison/deer (carne de venado), steak

+------------------- Ingredient/Preparation Selections -------------
|P:   broiled or grilled
|
|
|
+------+-------------------------------------------------------------
       | NBM  no basting fat or marinade (plain)
       | BAS  basted with added fat
       | MAR  marinated
       | U    unknown if basted with added fat or marinated
       |
       |     Select "no basting fat or marinade" if basted with own juices.
       |     Select "basted with added fat" if basted with butter.
       |
       |
       |
       +-------------------------------------------------------------
       food:


 Type in abbreviation or move highlight to choice and press <ENTER>.
```

Screen 2 of 2

```
PREPARATION OF  turkey, drumstick, skin eaten


+------------------- Ingredient/Preparation Selections -------------
|P:   baked or microwaved, no coating or marinade (plain)
|
|
+------+-------------------------------------------------------------
       | BAS  basted or browned with added fat
       | SEL  self-basting
       | NB   no basting or browning fat
       | U    unknown basting or browning method
       |
       |     Select "no basting or browning fat" if basted with pan juices and the
       |     turkey is not self-basting.
       |     Select "unknown basting or browning method" if the SP is unsure.
       |
       +-------------------------------------------------------------
       food:


 Type in abbreviation or move highlight to choice and press <ENTER>.
```

Soy Sauce Marinades	mg sodium per 1/2 tsp	Other Marinades	mg sodium per 1/2 tsp
Soy Sauce	171	A-1 Sauce	46
Lite Soy Sauce	100	Worcestershire Sauce	24
Tamari Sauce	160	Italian Dressing	19
Low Sodium Tamari Sauce	120	Lemon juice	1
Teriyaki Sauce	115	Oil	0
		Orange juice	0
		Vinegar	0
		Wine	0

As you can see, the sauces listed in the left column of the above chart are high in sodium; whereas, those listed in the right column are comparably lower.

If the SP reports using a marinade presented in the right column of the above chart, select "in non-soy sauce mixture." Should the SP report a marinade which is not included in either column of the chart, select "in non-soy sauce mixture," and attach a note stating the type of marinade used.

- **Marinades Containing Oil**

Recent research has demonstrated that the amount of oil absorbed by meats from marinades is insignificant. Therefore, should the respondent report, for example, a steak which was marinated in soy sauce and oil, select marinated "in soy sauce mixture (include teriyaki or tamari)." You may disregard the oil.

This does not hold true for vegetables that are marinated in oil. Unlike meats, vegetables absorb fat since their fat content is very low. However, the method of preparation affects whether you need to enter information about the oil used in the marinade. For fried and stir fried preparations, the system only prompts for "fat used in frying." Specify the oil used in frying or stir frying, and disregard the oil used to marinate the vegetables. For other vegetable preparations, such as "broiled or grilled," specify the type of oil used in the marinade by selecting the appropriate preparation and "fat used in seasoning." Raw or blanched vegetables marinated in an oil mixture are handled in a slightly different manner since the marinade option is at the hierarchy level. Once the marinade option is selected, the system does not prompt for a cooking method.

The following chart should assist you in making the appropriate marinade selection for cooked meats and vegetables:

Food	Type of Marinade	How to Enter
Meat	Oil only	Enter marinated "in non-soy sauce mixture."
	Oil and soy sauce	Enter marinated "in soy sauce mixture..." and disregard oil used in marinade.
Vegetables (cooked)	Oil only, or oil and soy sauce*	Enter "fat used in frying" for fried and stir fried vegetables, and disregard oil used in marinade. If marinade contains soy sauce, enter "with soy sauce mixture" for stir fried vegetables. If marinade does not contain soy sauce, enter "with non-soy sauce mixture" for stir fried vegetables. Enter "fat used in seasoning" to specify the type of oil in marinade for other preparations.

*The system only presents a soy sauce option for stir fried vegetables.

-    **Flavorings and/or Additional Items Added to Marinades**

SPs may report additional items added to a marinade, such as garlic or onions. Disregard them since these items are basically used as a flavoring. It is not necessary to attach a note. If, however, the SP later cooks and eats more than one tablespoon of the onions from the marinade, add them as a separate food item.

-    **Foods With Two Different Preparations**

When a food is prepared a second time (leftovers), use the first preparation unless salt and/or fat were added in the second method. The correct choice for leftover baked chicken which was stewed the following day would be "baked," since neither fat nor salt was added in the second preparation. However, if the respondent instead stir fried the leftover baked chicken in fat, the second preparation, "stir fried," would be selected.

- Restatement of Preparation

At times you are required to reselect a preparation method. When a preparation method is selected at the hierarchy level, the item must be respecified on the Preparation screen. This occurs, for example, in specifying boiled potatoes. When "boiled" is selected at the hierarchy level, you must again enter "boiled" at the Preparation screen. In order for the DDC system to probe for fat and salt, the preparation has to be selected; in this case, it must be selected twice since "boiled" is also part of the food name.

- Use Closest Preparation Listed

Occasionally the exact preparation method stated by the respondent will not be presented on the screen. In these cases, choose the preparation method which most closely approximates the method stated by the respondent.

1. Select the "fried" preparation method when a respondent reports "sauteed," or "broasted" (deep fried under pressure).

2. If you are not able to select "roast" at the hierarchy level for a food, the method of preparation for that roasted food item would be "baked or microwaved."

3. If the SP "heated" canned vegetables with fat and/or salt, select "boiled" in order to specify the fat and/or salt. However, if the SP did not add anything during preparation, select "no fat or salt added", since "heated" is not an actual selection on the screen.

4. If the respondent reports a chicken and carrot mixture prepared in a crock pot, you must first probe whether the mixture was prepared with a large or small quantity of liquid. Depending on the amount of liquid used in preparation, select "stewed or boiled" or "baked or microwaved" ("roasted" is not a selection) for the chicken, and "boiled" or "baked or roasted in meat drippings" for the carrots. The definitions below should assist you in making the correct selection.

   Roast: to cook with little or no moisture as in an oven.

   Stew: to cook by simmering or boiling slowly in a large amount of liquid.

Exhibit 4-51, screens 1 and 2, illustrate the proper selections for the chicken and carrot mixture prepared with a large quantity of liquid. Screens 3 and 4 present the correct selections when prepared with a small amount of liquid.

Exhibit 4-51. Preparation screen: chicken and carrots in crock pot

```
PREPARATION OF  chicken, breast (pechuga), skin eaten


+------------------------ Ingredient/Preparation Selections -------------
|P:
|
|
+------+----------------------------------------------------------------
       | NONE no fat or salt added in preparation
       | FRI  fried
       | BAK  baked or microwaved
       | BRO  broiled or grilled
       | STM  steamed
       | STE   stewed or boiled <-- Select if prepared with a large amount of
       | STI  stir fried              liquid.
       | U    unknown preparation
       |
       |
       +-----------------------------------------------------------------
       food:


  Type in abbreviation or move highlight to choice and press <ENTER>.
```

```
PREPARATION OF  carrots, cooked from fresh


+------------------- Ingredient/Preparation Selections -------------
|P:
|
|
+------+----------------------------------------------------------------
       | NONE no fat or salt added in preparation
       | BOI   boiled       <-- Select if prepared with a large amount of liquid.
       | BRO  broiled or grilled
       | FRI  fried or sauteed
       | MEA  baked or roasted in meat drippings
       | MIC  microwaved or steamed or baked
       | STI  stir fried
       | U    unknown preparation
       |
       +-----------------------------------------------------------------
       food:


  Type in abbreviation or move highlight to choice and press <ENTER>.
```

Exhibit 4-51. Preparation screen: chicken and carrots in crock pot (continued)

```
PREPARATION OF  chicken, breast (pechuga), skin eaten

+------------------- Ingredient/Preparation Selections ------------
|P:
|
+-----+-----------------------------------------------------------
      | NONE  no fat or salt added in preparation
      | FRI   fried
      |[BAK   baked or microwaved]    <-- Select if prepared with a small amount
      | BRO   broiled or grilled          of liquid.
      | STM   steamed
      | STE   stewed or boiled
      | STI   stir fried
      | U     unknown preparation
      |
      +------------------------------------------------------------
      food:


Type in abbreviation or move highlight to choice and press <ENTER>.
```

```
PREPARATION OF  carrots, cooked from fresh

+------------------- Ingredient/Preparation Selections ------------
|P:
|
+-----+-----------------------------------------------------------
      | NONE  no fat or salt added in preparation
      | BOI   boiled
      | BRO   broiled or grilled
      | FRI   fried or sauteed   .
      |[MEA   baked or roasted in meat drippings]<-- Select if prepared with
      | MIC   microwaved or steamed or baked        a small amount of liquid.
      | STI   stir fried
      | U     unknown preparation
      |
      +------------------------------------------------------------
      food:


Type in abbreviation or move highlight to choice and press <ENTER>.
```

- The Preparation Algorithm

Once you have interviewed for a period of time using the DDC system, you will begin to expect certain screens to appear. At times, the screen you anticipate does not appear. For meat, fish, poultry, and vegetables, the DDC system follows a specific "preparation algorithm." Each food item is assigned only those preparations which are possible cooking methods for that food. The algorithms which are applied for a specific preparation vary with the type of meat, fish, or poultry; vegetables are fairly standard.

The meat, fish, and poultry preparations have been structured into specific hierarchies based on percent fat: less than 15% fat, 15%-25% fat, and more than 25% fat. The rules the DDC system follows regarding both fat and salt for each preparation method are lengthy and complex. For example, the variable ingredient screen for fat specificity will not appear for a beef rib steak if the visible fat was eaten. Since the fat content of the beef rib steak (with visible fat) is more than 25 percent, fat added in preparation does not significantly increase the fat content. The preparation methods presented on the screen are based upon the guidelines in the preparation algorithm of the DDC system.

- Hierarchy Preparation Options

For certain foods, the preparations are presented at the hierarchy level. Baking powder or buttermilk biscuits and chocolate chip cookies are two examples (Exhibit 4-52). It is usually best to read these options to the respondent, for instance, "Were those biscuits prepared from a mix, refrigerated dough, or from a recipe?"

In general, the hierarchy preparation description is easily understood. "Recipe" always signifies an item made "from scratch." Sometimes the description may actually refer to the place of purchase, such as "bakery." An unknown option is provided at this level should the SP be unsure of the preparation. If, after reading the preparation options to the SP, he/she says that it was a "ready-to-eat" baking powder biscuit, select "unknown preparation" since the SP did not know how it was made.

"Commercial" is the proper choice for canned pasta (Exhibit 4-53, screen 1). In this case, "commercial" refers to canned, frozen, packaged, school lunch, and restaurants. If the SP cooked his or her own spaghetti noodles and topped the pasta with "Ragu," select "commercial." If the SP added more ingredients, other than meat, to a commercial sauce, still select the commercial sauce, not homemade. However, if the SP added meat, select "homemade;" the system will then prompt for more detail about the meat (Exhibit 4-53, screen 2).

Exhibit 4-52. Hierarchy preparation options: biscuit and cookie

Screen 1

```
+---------------------------------------------------------------------+
| FOOD SELECTION  biscuit, baking powder or buttermilk                |
|                                                                     |
|                                                                     |
|                                                                     |
|        +-----------------------------------------------------+      |
|        ¦ MIX   prepared from mix                              |      |
|        ¦ DOU   prepared from refrigerated dough               |      |
|        ¦ RCP   prepared from recipe                           |      |
|        ¦ U     unknown preparation                            |      |
|        ¦                                                      |      |
|        ¦                                                      |      |
|        ¦                                                      |      |
|        ¦                                                      |      |
|        ¦                                                      |      |
|        +-----------------------------------------------------+      |
|          food:                                                      |
|                                                                     |
+---------------------------------------------------------------------+
```

Screen 2

```
+---------------------------------------------------------------------+
| FOOD SELECTION  cookies and bars, chocolate chip, regular           |
|                                                                     |
|                                                                     |
|                                                                     |
|        +-----------------------------------------------------+      |
|        ¦ PKG   commercial package                            |      |
|        ¦ RCP   prepared from recipe                          |      |
|        ¦ MIX   baked from mix or dough                       |      |
|        ¦ BKY   bakery                                        |      |
|        ¦ U     unknown                                       |      |
|        ¦                                                      |      |
|        ¦                                                      |      |
|        ¦                                                      |      |
|        ¦                                                      |      |
|        +-----------------------------------------------------+      |
|          food:                                                      |
|                                                                     |
+---------------------------------------------------------------------+
```

Exhibit 4-53. Hierarchy preparation options: spaghetti sauce

Screen 1 of 2

```
+----------------------------------------------------------------+
| FOOD SELECTION   spaghetti sauce, without meat                 |
|                                                                |
|                                     .                          |
|                                                                |
|                                                                |
|     +--------------------------------------------------+       |
|     ¦ H     homemade                                    |       |
|     ¦ C      [commercial]    <-- Refers to canned, frozen, packaged, school |
|     ¦ U     unknown type        lunch, and restaurants.  If the SP added a  |
|     ¦                            substantial amount of onions to a commercial |
|     ¦                            spaghetti sauce, still select "commercial." |
|     ¦                            Add onions as a separate item.             |
|     ¦                                                   |       |
|     ¦                 .                                 |       |
|     +--------------------------------------------------+       |
|       food:                                                    |
+----------------------------------------------------------------+
```

Screen 2 of 2

```
+----------------------------------------------------------------+
| FOOD SELECTION   spaghetti sauce, with meat                    |
|                                                                |
|                                                                |
|                                                                |
|                                                                |
|     +--------------------------------------------------+       |
|     ¦ H     [homemade]       <-- If the SP added meat to a commercial spaghetti |
|     ¦ C     commercial          sauce, select "homemade."  The system will  |
|     ¦ U     unknown type        then prompt for more detail about the type of |
|     ¦                            meat used.                                 |
|     ¦                                                   |       |
|     ¦                                                   |       |
|     ¦                                                   |       |
|     +--------------------------------------------------+       |
|       food:                                                    |
+----------------------------------------------------------------+
```

4-130

4.3.8   Ingredients

When appropriate, the system automatically presents "variable ingredients," a list of choices for foods which contain ingredients that need to be further specified. Choose ingredient descriptions in the same manner as you choose food selection descriptions. Since the system calculates the amount of each ingredient based on a standard recipe and the portion eaten by the SP, you do not need to probe for amounts on the Ingredient screen. For many foods, the Ingredient screen prompts for both salt and fat; however, whether or not a specific ingredient is asked depends upon the preparation method chosen. In addition, depending on the type of food being described, other ingredient choices may be presented.

ENTERING: Move the highlight to the appropriate choice or type the abbreviation for the appropriate choice and press ENTER. The ingredient descriptions appear in order of selection at the top of the screen.

CORRECTING: Press F2 to return to the previous screen if you are still describing the ingredient. If you have completely described the ingredient, proceed with the interview until you access the Recall Review screen (Section 4.3.12), then make the correction.

-   No Fat/No Salt Added in Preparation

In most cases, you can elect not to use fat or salt in preparation as shown in Exhibit 4-54. To select this option move highlight to either "no fat used" or "no salt added in preparation" and press ENTER.

There are two default selections when "no fat used" is an option on the screen: "unknown type of fat used," and "unknown if fat used." Select "unknown type of fat used" if the SP knows that fat was used in preparation, but does not know the type of fat. Select "unknown if fat used" when the SP does not know whether or not fat was added in preparation.

Exhibit 4-54. Preparation screen: entering no fat used/no salt added

<u>Screen 1 of 2</u>

```
+--------------------------------------------------------------------+
| PREPARATION OF  broccoli, cooked from fresh                        |
|                                                                    |
| +---------------- Ingredient/Preparation Selections ------------+  |
| :P:   boiled                                                     |  |
| :                                                                |  |
| :     I:    salt                                                 |  |
| :                                                                |  |
| :                                                                |  |
| +-----+----------------------------------------------+--------+  |
| :     | NONE No salt used in preparation |                      |  |
| :     REG  regular                                               |  |
| :     US   unknown if salt added in preparation                  |  |
| :                                                                |  |
| :                                                                |  |
| :                                                                |  |
| :                                                                |  |
| +---------------------------------------------------------+       |
|       food:                                                        |
+--------------------------------------------------------------------+
```

<u>Screen 2 of 2</u>

```
+--------------------------------------------------------------------+
| PREPARATION OF  broccoli, cooked from fresh                        |
|                                                                    |
| +---------------- Ingredient/Preparation Selections ------------+  |
| :P:   boiled                                                     |  |
| :                                                                |  |
| :     I:    salt, no salt used in recipe                         |  |
| :     I:    fat used as seasoning                                |  |
| +-----+----------------------------------------------+--------+  |
| :            Fats used as seasoning                              |  |
| :     | NOFT no fat used |                                      |  |
| :     UF    unknown if fat used                                  |  |
| :     UTF   unknown type of fat used                             |  |
| :                                                                |  |
| :                                                                |  |
| :                                                                |  |
| :                                                                |  |
| +---------------------------------------------------------+       |
|       food:                                                        |
+--------------------------------------------------------------------+
```

-       **Sources**

Food sources may be presented at either the hierarchy level or the variable ingredient level. In general, food sources presented at the hierarchy level indicate that the nutrients in the food differ significantly depending on the food source. However, food sources presented at the variable ingredient level indicate minimal nutrient differences between food sources.

For example, food sources for cornbread (Exhibit 4-55) are presented at the variable ingredient level (indicating that the nutrients in cornbread vary slightly with regard to food source). You may specify the type of fat used or select "unknown-commercially prepared," "unknown-prepared at home," or "unknown - prepared from a commercial mix." If the SP does not know the type of fat in the cornbread, probe, "Was the cornbread prepared commercially, prepared from scratch or prepared from a mix?" "Commercially prepared" includes purchased in a restaurant, bakery, market, etc. "Prepared at home" usually refers to an item prepared from scratch (but not always). "Prepared from a mix" is self-explanatory.

Although cornbread offers three default options, some foods offer only two defaults, "unknown-commercially prepared" and "unknown-prepared at home." The distinction between the two categories is simple unless the food was prepared from a mix. When a mix is reported where no additional fat was added, the proper default choice may vary, e.g., a mix may fall into either default category depending upon whether or not fat was added by the preparer.

The chart below illustrates what selections to make when a coffee cake is reported which was prepared from a mix:

4-133
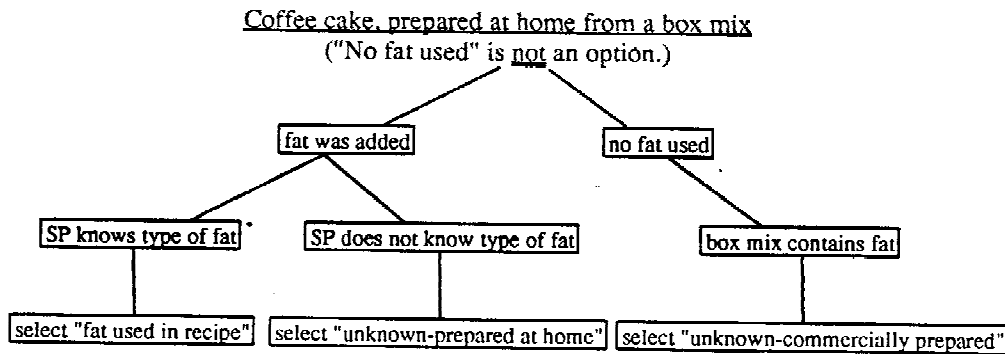
Exhibit 4-55. Ingredient screen: cornbread

```
+-----------------------------------------------------------------+
| INGREDIENTS IN  bread, cornbread                                |
|                                                                 |
| +------------------- Ingredient/Preparation Selections ------------+ |
| |I:   Fat used in recipe                                         | |
| |                                                                | |
| |                                                                | |
| |                                            .                   | |
| |                                                                | |
| +-----+--------------------------------------------------+--------+ |
|       |        fat used in recipe                         |         |
|       | C      unknown - commercially prepared            |         |
|       | H      unknown - prepared at home                 |         |
|       | MIX    unknown - prepared from a commercial mix   |         |
|       |                                                   |         |
|       |                                                   |         |
|       |                                                   |         |
|       |                                                   |         |
|       |                                                   |         |
|       +---------------------------------------------------+         |
|         food:                                                      |
+-----------------------------------------------------------------+
```

- **Unknowns/Defaults**

The DDC system is able to automatically assign a default choice if the SP is unable to specify the food completely. When you select the unknown choice, the system assigns the appropriate default.

Options of unknown are given for most variable ingredients. When selecting ingredient descriptions, select the unknown based on the food source (e.g., prepared commercially, prepared at home, prepared from a commercial mix, etc.).

Screens 1 through 7 in Exhibit 4-56 include a dialogue between you and the SP to help show the progression for the ingredients in "mashed potatoes." Remember that amounts are not asked on the Ingredient screens.

Exhibit 4-56. Ingredient screen: mashed potatoes

```
INGREDIENTS IN  mashed potatoes, prepared from dehydrated, plain


+------------- Ingredient/Preparation Selections ------------------+
|I:    Fat used in recipe
|
|                          I: "Were the potatoes prepared with or without fat?"
|                          SP: "I prepared them with margarine."
|
|
+------+----------------------------------------------------+--------+
|      | ANI . animal
|      | BUTT butter
|      | LARD lard
|      | +--------------+
|      | |MARG margarine|
|      | +--------------+
|      | OILS oils
|      | SHOR shortening
|      |
|      |
|      +------------------------------------------------------+
|        food:
```

```
INGREDIENTS IN  mashed potatoes, prepared from dehydrated, plain


+--------------Ingredient/Preparation Selections ------------------+
|I:    Fat used in recipe, margarine
|                         I: "Can you tell me the brand name of the margarine?"
|                         SP: "I don't remember."
|                         I: "Was it regular, whipped, a spread, diet, or a
|                         margarine/butter blend?"
|                         SP: "Regular."
+------+----------------------------------------------------+--------+
|      | ***  brand name listing
|      | +-----------+
|      | |REG  regular|
|      | +-----------+
|      | WHP  whipped
|      | SPR  spread
|      | D    diet
|      | MB   margarine/butter blend
|      | U    unknown type
|      |
|      |
|      +------------------------------------------------------+
|        food:
```

Exhibit 4-56. Ingredient screen: mashed potatoes (continued)

```
+------------------------------------------------------------------------+
| INGREDIENTS IN  mashed potatoes, prepared from dehydrated, plain       |
|                                                                        |
|                                                                        |
| +--------------- Ingredient/Preparation Selections ------------------  |
| +                                                                      |
| ¦I:   Fat used in recipe, margarine, regular                           |
| ¦                                                                      |
| ¦                      I: "Was the margarine from a stick, tub, or in the form of |
| ¦                      a liquid?"                                      |
| ¦                      SP: "Stick."                                    |
| ¦                                                                      |
| +-----+------------------------------------------------+--------+      |
|       ¦ +-------------+                                                 |
|       ¦ |STI  stick  |                                                 |
|       ¦ TUB  tub                                                       |
|       ¦ LIQ  liquid                                                    |
|       ¦ U    unknown form (stick, tub, or liquid)                      |
|       ¦                                                                |
|       ¦                                                                |
|       ¦                                                                |
|       ¦                                                                |
|       +--------------------------------------------------+            |
|        food:                                                           |
+------------------------------------------------------------------------+
```

```
+------------------------------------------------------------------------+
| INGREDIENTS IN  mashed potatoes, prepared from dehydrated, plain       |
|                                                                        |
|                                                                        |
| +---------------Ingredient/Preparation Selections -----------------+   |
| ¦I:   Fat used in recipe, margarine, regular, stick                    |
| ¦                                                                      |
| ¦                      I: "Was the margarine salted, low sodium or unsalted?" |
| ¦                      SP: "Salted."                                   |
| ¦                                                                      |
| ¦                                                                      |
| +-----+------------------------------------------------+--------+      |
|       ¦ +-------------+                                                 |
|       ¦ |S     salted|                                                 |
|       ¦ LS   low sodium                                                |
|       ¦ NS   unsalted                                                  |
|       ¦ U    unknown if salted                                         |
|       ¦                                                                |
|       ¦                                                                |
|       ¦                                                                |
|       ¦                                                                |
|       ¦                                                                |
|       +--------------------------------------------------+            |
|        food:                                                           |
+------------------------------------------------------------------------+
```

Exhibit 4-56. Ingredient screen: mashed potatoes (continued)

```
INGREDIENTS IN  mashed potatoes, prepared from dehydrated, plain


+--------------- Ingredient/Preparation Selections --------------------+
|I:    Fat used in recipe, margarine, regular, stick, salted
|
|                      I: "What was the base oil in the margarine?"
|                      SP: "I don't know."
|
+-----+------------------------------------------------------+--------+
      | CAN  canola or canbra oil (rapeseed)
      | COR  corn oil
      | LAR  lard
      | SAF  safflower oil
      | SOY  soybean oil
      | SYC  soybean/cottonseed oils
      | SYP  soybean/palm oils
      | SUN  sunflower oil
      | U    unknown type of oil
      |
      +------------------------------------------------------+
       food:
```

```
INGREDIENTS IN  mashed potatoes, prepared from dehydrated, plain


+--------------- Ingredient/Preparation Selections --------------------+
|I:  .Fat used in recipe, margarine, regular, stick, salted, unknown |
|     type of oil
|I:   milk              I: "Was the milk you added to your potatoes regular or
|                          evaporated?"
+-----+-----------------------------------------------------+--------+
      | WHO  whole        SP: "Regular."

      | TWO  2% fat       I: "What kind of milk was it?"
      | ONE  1% fat       SP: "What do you mean?"
      | SKM  skim         I: "Was the milk whole, 2%, 1%, or skim?"
      | LOW  low fat      SP: "Whole."
      | EVA  evaporated
      | UK   unknown
      |
      |
      +-----------------------------------------------------+
       food:
```

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Exhibit 4-56. Ingredient screen: mashed potatoes (continued)

```
INGREDIENTS IN  mashed potatoes, prepared from dehydrated, plain


+--------------- Ingredient/Preparation Selections -----------------+
|I:   Fat used in recipe, margarine, regular, stick, salted, unknown
|     type of oil
|I:   milk, whole
|I:   salt
|
+-----+-------------------------------------------------+--------+
      | NONE No salt used in recipe
      | |REG   regular|
      | US    unknown if salt added in preparation
      |
      |                    I: "Were the potatoes prepared with or without salt?"
      |                    SP: "With salt."
      |
      |
      |
      |
      |
      |
      +-------------------------------------------------+
      food:
```

-      **Special Situations**

1.   Make sure the SP understands that "fat" includes butter, margarine and oil.

2.   When "stewed" is selected as the preparation method for meats, fish and poultry, the system prompts for salt only, not fat. Should the SP report a stewed item with fat added during the preparation, attach a note to specify the type of fat used.

3.   If the SP reports using a specific fat (as an ingredient) which is not presented as an option for the food you are describing, select the unknown choice and attach a note to specify the type of fat used.

4.   Should an SP report marinating meat, fish or poultry in a salad dressing other than Italian, select marinated "in non-soy sauce mixture" after entering the appropriate preparation method. Attach a note to describe the type of salad dressing used to marinate the food (Exhibit 4-57).

5.   Although the Ingredient screen uses the term "fat used as seasoning," do not use this wording when probing (e.g., "Was fat used in seasoning?") since it is uncommon terminology. It is best to probe, "Was your ____ prepared with or without fat?"

**Exhibit 4-57. Preparation screen: grouper**

<u>Screen 1 of 2</u>

```
PREPARATION OF  grouper (mero)


+---------------- Ingredient/Preparation Selections ----------------+
|P:   fried, marinated
|  .                           SP: "I marinated the fish in salad dressing."
|
|
|
|
+-----+---------------------------------------------------+--------+
      |  ┌────────────────────────────────┐
      |  │NSO   in non-soy sauce mixture  │
      |  └────────────────────────────────┘
      |  SOY  in soy sauce mixture (include teriyaki or tamari)
      |  U    unknown if soy sauce in marinade
      |
      |
      |
      |
      +--------------------------------------------------+
      food:

Type in abbreviation or move highlight to choice and press <ENTER>.
```

<u>Screen 2 of 2</u>

```
                              NOTE ON

     grouper (mero)



            +------------------- Note Text --------------------+
            |Marinated in Kraft French salad dressing, regular |
            |                                                  |
            |                                                  |
            |                                                  |
            |                                                  |
            |                                                  |
            |                                                  |
            |                                                  |
            |                                                  |
            +--------------------------------------------------+


Type in notes about the highlighted information.  Press F10 when .
finished.
```

6.   When fried chicken is reported with the skin removed before eating, the DDC system does not prompt for fat used in frying; it is assumed that the fat was absorbed into the skin. If the SP removed the skin before the chicken was cooked, the system would then prompt for the type of fat used in frying.

7.   The use of "Pam" as a cooking fat was mentioned in the section on preparations. If the SP "fries" a food in Pam, select "fried" as the preparation. If used as directed, Pam adds an insignificant amount of fat; therefore, select "no fat used" on the Ingredient screen.

8.   In general, hierarchy descriptions are as clear as possible. However, if you are faced with a description that basically says "commercial" or "homemade" (Exhibit 4-58), and the SP says that he/she used a mix, you should select "homemade." The selection of "homemade" is preferable in a situation such as this so that more detail may be captured by the system regarding the type of fat used by the SP. The commercial selection does not prompt for this detail. When the variable ingredients appear, probe, "What type of fat did you use to prepare the dressing?" If the SP did not add fat and "no fat used" is not available as an option, select "unknown" since the mix contains some fat. If the SP added fat, probe for more detail and, if unknown, select that option.

9.   If ham (or bacon) is cooked, for example, with beans, and used only as a seasoning fat, do not add the ham or bacon as a separate item. However, if the ham (or bacon) was used as a seasoning fat and the SP ate a piece of that ham (or bacon), enter the ham (or bacon) both as the seasoning fat and as a separate food item.

10.   Most of the selections listed under the types of animal fat are easily understood. There are two selections, though, that require further explanation as both are fats from pork, "bacon, ham or sausage" and "pork." Select "bacon, ham or sausage" for processed pork products, such as ham hocks. Select "pork" only for fresh pork.

11.   Should an SP report using salt substitute in the preparation of a food item, do not count it. In this case, choose "no salt used in preparation." "Regular salt" includes lite salt, Accent, garlic salt, other flavored salts, such as onion and celery salt, and seasoning salts, such as Old Bay.

Exhibit 4-58. Ingredient screen: salad dressing

```
+--------------------------------------------------------------------+
| FOOD SELECTION  dressing for salads, Italian                       |
|                                                                    |
|                        I: "Was the dressing homemade or commercial?"|
|                        SP: "It was from a mix."                    |
|                                                                    |
|         +----------------------------------------------------------|
|         : C     commercial (include clear and creamy)              |
|         : |H      homemade|        <-- Select homemade.            |
|         : U     unknown if commercial or homemade                  |
|         :                                                          |
|         :                                                          |
|         :                                                          |
|         :                                                          |
|         +----------------------------------------------------------|
|      ,    food:                                                    |
|                                                                    |
|                                              .                     |
| Type in abbreviation or move highlight to choice and press <ENTER>.|
+--------------------------------------------------------------------+
```

```
+--------------------------------------------------------------------+
| FOOD SELECTION  dressing for salads, Italian, homemade             |
|                                                                    |
|                        I: "Was it the clear or creamy              |
|                              type?"                                |
|                        SP: "Clear."                                |
|         +----------------------------------------------------------|
|         : |CLE    clear type|       <-- Select clear type.         |
|         : CRE   creamy type                                        |
|         :                                                          |
|         :                                                          |
|         :                                                          |
|         :                                                          |
|         :                                                          |
|         +----------------------------------------------------------|
|           food:                                                    |
|                                                                    |
|                                                                    |
| Type in abbreviation or move highlight to choice and press <ENTER>.|
+--------------------------------------------------------------------+
```

Exhibit 4-58. Ingredient screen: salad dressing (continued)

```
+------------------------------------------------------------------+
| INGREDIENTS IN  dressing for salads, Italian, homemade, clear type|
|                                                                   |
| +------------------------- Ingredient/Preparation Selections ------------- |
| |I:    fat used in recipe                                         |
| ¦                                                                 |
| +------+---------------------------------------------------------- |
|        ¦ FREC fat used in recipe                                  |
|        ¦ [UTF   unknown type of fat used]    <-- Select unknown.  |
|        ¦                                                          |
|        ¦                                                          |
|        ¦                                                          |
|        ¦                      I:  "What type of fat did you use to prepare |
|        ¦                          the dressing?"                  |
|        ¦                      SP:  "I did not use any fat."        |
|        ¦                                                          |
|        ¦                                                          |
|        ¦                                                          |
|        +---------------------------------------------------------- |
|        food:                                                      |
|                                                                   |
|  Type in abbreviation or move highlight to choice and press <ENTER>. |
+------------------------------------------------------------------+
```

12.   Should the SP say that he/she is unsure whether salt was added as an ingredient during the preparation, select, "unknown if salt added in preparation." However, if after probing, "Was that prepared with salt or without salt?", the SP replies, "I'm not sure if salt was added, but I think so," select "regular salt" was added. For those foods purchased or eaten in a restaurant, ask the SP to give his/her best guess as to whether or not salt was added. Ask, "Did it taste like salt had been added?"

13.   If rice or any other grain is reported as being cooked with low sodium bouillon instead of salt, select "no salt used in preparation," and attach a note stating, "cooked with low sodium bouillon." On the other hand, if the SP reports using regular bouillon, choose the "regular salt" selection, and attach a note stating, "cooked with bouillon."

-       **Use of the Escape Key**

If you press the escape key while on an Ingredient screen, the system prompts, "Do you want to erase all selections made for this food? (Y/N)." If "Y" is selected, all previous selections for the food item will be erased. Refer to Exhibit 4-59 which illustrates the process.

Exhibit 4-59. Ingredient screen: using the escape key

```
INGREDIENTS IN  mashed potatoes, prepared from dehydrated, plain

+------------- Ingredient/Preparation Selections -----------------+
¦     oil                                                          
¦                                                                  
¦:   milk, whole        .                                          
¦                                                                  
¦:   salt+---------------------------------------------------------+
+-----+--¦                                                        ¦+
      ¦ N¦         ** Do you want to erase all selections          ¦
      ¦ R¦              made for this food?  (Y/N)    **            ¦
      ¦ U¦                                                          
      ¦   +-----------------------------------------------------+   
      ¦                                                          
      ¦                                                          
      ¦                                                          
      ¦                   .                                      
      ¦                                                          
      ¦                                                          
      ¦                                                          
      ¦                                                          
      +----------------------------------------------------------+
       food:
```

4.3.9   Notes and Missing Foods

4.3.9.1 The Note Screen

In Section 4.3.4.2, procedures on how to use the brand name listings were discussed. As mentioned earlier, if the brand name is not on the list, and it is a generic or store brand (e.g., not a national brand), use the Note screen to record the brand name. The note may be as simple as "Giant brand" to describe a brand name or it may be more lengthy.

You may access the Note screen at almost any point throughout the interview process. You may attach notes during the Food Entry, Food Selection, Amount, Ingredient, Preparation and Recall Review screens, and for each question on the Recall Trailer and End of Recall screens. It is important that notes be attached in the correct location, e.g., to the item it explains or describes. Therefore, if an SP told you that he could not remember what time he ate his lunch, you would enter an approximate time and attach a note to the meal line stating that you estimated the time. If a particular physical form was not available on the Amount screen, such as mashed, you would attach the note to the amount entry. (In this case, you would select "volume-solid" because mashed food has no air space.) If necessary, refer to the System Menu by pressing F4 to determine whether notes can be attached on a particular screen.

If the SP describes a food or preparation which you think is unusual and might be questioned, use the Note screen to attach a comment. For example, if an SP reports eating a food plain, that is usually eaten with an accompaniment, such as cereal without milk, or bread without a spread (screen 1 in Exhibit 4-60), add a brief comment. Also attach a note if an SP eats or drinks an unusually large amount of a particular food item.

> **To access the Note screen:** Press F8 to access the Note screen and type in the relevant information. Press F10 to process that selection and return to the screen from which you accessed the Note screen.

> **To delete a note**: To delete a note, press F6 and a prompt will appear to verify that you actually want to erase the note (screen 2 in Exhibit 4-60). Press F6 again to erase the note.

Since the procedure for entering comments on the trailer questions and at the end of the recall are slightly different than the 24-hour recall, instructions on how to utilize the Note screen will be given in those respective sections.

4.3.9.2 Missing Foods

Situations may occur in which you must decide whether to use the Note screen and completely specify the food using the hierarchies or use the Missing Food screen. The Missing Food screen enables you to enter detailed information about a food which you are unable to specify using the descriptions currently in the DDC system. Its use is limited to the food selection process. It can be accessed, at that time, to describe any food or beverage you are unable to locate or specify within the DDC system.

Determining when to use the Note or Missing Food screen will require a decision on your part. As you become more familiar with the DDC system and the hierarchies, it will become easier to make these decisions.

A decision is required when the SP knows the brand name, but the brand name is not displayed on the DDC system. Before specifying the food using the hierarchies, discern whether or not the nutrient content of the food item has been modified in any way; for example, is it a reduced fat product, a reduced sodium product, a reduced sugar product, a fortified product, etc.? Next decide whether the brand name is a national, generic or store brand. If the food item is "normal" and not a national brand, specify the food using the hierarchies and attach a note to the food stating the brand name (Exhibit 4-61)

On the other hand, there are many hierarchies which do not allow the level of specification necessary to describe a modified product. In the mixed dish hierarchy, for example, you may sometimes find the brand name listed, but not the specific frozen meal reported by the SP. If you are unable to locate, for instance, a specific Weight Watcher's frozen meal in the hierarchy, do not try to specify the item using the hierarchies. In this case, it is very important to use the Missing Food screen to describe the food.

Exhibit 4-60. Note screen: accessing from the Food Selection screen

Screen 1 of 2

```
+-------------------------------------------------------------------+
|                              NOTE ON                              |
|    wheat bread, whole wheat (100%), regular, commercial           |
|                                                                   |
|                                                                   |
|             +-------------------- Note Text --------------------+ |
|             |plain                                              | |
|             |                                                   | |
|             |                                                   | |
|             |                                                   | |
|             |                                                   | |
|             |                                                   | |
|             |                                                   | |
|             |                                                   | |
|             |                                                   | |
|             +---------------------------------------------------+ |
|                                                                   |
| Type in notes about the highlighted information.  Press F10 when  |
| finished.                                                         |
+-------------------------------------------------------------------+
```

Screen 2 of 2

```
+-------------------------------------------------------------------+
|    wheat bread, whole wheat (100%), regular, commercial        .  |
|                                                                   |
|                                                                   |
|             +-------------------- Note Text --------------------+ |
|             |plain                                              | |
|             |                                                   | |
|             |                                                   | |
|             |                                                   | |
|             |                                                   | |
|             |                                                   | |
|             |                                                   | |
| ------------|-----------------------------------------------|----|
|             To confirm you wish to DELETE this note, press F6.    |
|                Press any other key to abort the process           |
+-------------------------------------------------------------------+
```

Press F6 to delete this note.

Exhibit 4-61. Note screen: brand of cereal not available

```
FOOD SELECTION   cereal, ready-to-eat


       +---------------------------------------------------------+
       ┆ ┌───────────────────────┐                               
       ┆ │***   brand name listing│  SP: "I had raisin bran."
       ┆ FLA   flake              └─ I: "Do you know the name of the
       ┆ GRAN  granola               manufacturer?"
       ┆ NUG   nugget or ring or shredded form
       ┆ PUF   puffed form           SP: "Yes, it was Giant."
       ┆ WBR   wheat bran (unprocessed)
       ┆ WGE   wheat germ
       ┆ U     unknown type
       ┆ OAT   oat bran (uncooked)
       ┆
       +---------------------------------------------------------+
         food:

 Type in abbreviation or move highlight to choice and press <ENTER>.
```

```
FOOD SELECTION   cereal, ready-to-eat

                                Try either entering the manufacturer's name
                                or a few letters of the cereal, e.g.,
                                "RAIS." "RAIS" brings up the list of
                                manufacturers, but Giant is not included.
       +----------------------------------------------------------------
       ┆
       ┆
       ┆
       ┆
       ┆
       ┆
       ┆
       ┆
       ┆
       ┆
       +----------------------------------------------------------------
   Brand name:
+-------------------------------------------------------------------
┆ Brand name not found.  Please try again or enter '?' for a full
┆ brand name listing.
+-------------------------------------------------------------------
```

Exhibit 4-61. Note screen: brand of cereal not available (continued)

```
+-------------------------------------------------------------------+
| FOOD SELECTION   cereal, ready-to-eat, flake                      |
|                                                                   |
|                                                                   |
|       +-----------------------------------------------+           |
|       ¦ [BRA   bran]            Evaluate the product.  Since it is a
|       ¦ COR   corn             "normal" product, specify the cereal using
|       ¦ OAT   oat              the hierarchies.  Select "flake" from
|       ¦ WHE   wheat            screen 1, then "bran."
|       ¦ WB    wheat and barley
|       ¦ U     unknown grain
|       ¦
|       ¦
|       +-----------------------------------------------+           |
|         food:                                                     |
|                                                                   |
|                                                                   |
|   Type in abbreviation or move highlight to choice and press <ENTER>. |
|                                                                   |
+-------------------------------------------------------------------+
```

```
+-------------------------------------------------------------------+
| FOOD SELECTION   cereal, ready-to-eat, flake, bran                |
|                                                                   |
|                                                                   |
|       +-----------------------------------------------+           |
|       ¦ [R     with raisins]        <-- Select "with raisins."    |
|       ¦ NR    without raisins                                     |
|       ¦                                                           |
|       ¦                                                           |
|       ¦                                                           |
|       ¦                                                           |
|       ¦                                                           |
|       ¦                                                           |
|       +-----------------------------------------------+           |
|         food:                                                     |
|                                                                   |
|                                                                   |
|   Type in abbreviation or move highlight to choice and press <ENTER>. |
|                                                                   |
+-------------------------------------------------------------------+
```

4-147

Exhibit 4-61. Note screen: brand of cereal not available (continued)

```
     cereal, ready-to-eat, flake, bran, with raisins



                +------------------- Note Text -------------------+
                | Giant brand          <-- Attach a note stating the brand name.
                |                                                  |
                |                                                  |
                |                                                  |
                |                                                  |
                |                                                  |
                |                                                  |
                |                                                  |
                +--------------------------------------------------+


  Type in notes about the highlighted information.  Press F10 when
  finished.
```

The Missing Food screen must be utilized when:

1.   Describing a modified food product which cannot be specified through the hierarchies.

2.   Describing a new food or beverage product not yet included in the DDC system.

3.   Describing an already existing product whose form has been changed, such as an item that previously was sold as a liquid and is now sold as a dry powder to be reconstituted.

4.   Describing a frozen dinner and in some cases, a frozen entree which is not listed on the brand name listing.

5.   Describing national brand name items not included on the brand name listings.

6.   Describing a homemade recipe which cannot be specified through the hierarchies.

7.   Describing regional and ethnic foods which cannot be entered using the DDC options displayed.

8.   Describing commonly reported food items which cannot be fully described using the DDC hierarchies. (Explained in more detail in Section 4.3.11.1.)

9. Describing a new item added to the menu at a fast food establishment currently listed in the DDC system.

Always read and follow the instructions in both the upper and lower portions of the Missing Food screen. If your description lacks detail, it will be very difficult to assign the correct food code. To properly code a "missing food," the following details must be included in the area entitled "Food Description:"

1. Complete description of the product, e.g., shape, flavor, color, etc.

2. Salt and fat specificity. Was the product reduced in sodium or fat?

3. Brand name.

4. Added or deleted nutrients. Was it fortified with vitamin C or calcium?

5. Name and location of store where the item was purchased.

6. Description of the package or container, e.g., color, etc.

7. Cost of the item.

8. Consistency of the product, e.g., Was it like a pudding, a cake?

9. If the food or beverage was prepared at home, ask whether or not salt, sugar and/or fat was added in preparation. If so, what type? What was the preparation method? What were the ingredients?

If the respondent is unsure of a specific detail, include that information in your description to indicate that you probed. For example, enter, "DK type of fat" or "DK name of store," to signify that the SP did not know the type of fat in a recipe, and did not know where the item was purchased, respectively.

In the area entitled "Amount and Measurement," the following details should be included:

1. Amount actually consumed. Specify before or after cooking, and with or without refuse, if applicable.

2. Package size or weight (if known). If ounces are recorded, be sure to state fluid or weight ounces.

3. Shape and dimensions or model amount.

Screen 2 in Exhibit 4-62 is an example of the optimum level of detail desired to describe a missing food.

The discussion of missing foods thus far has focused primarily on commercial products. Frequently, though, missing foods are homemade mixtures which cannot be entered using the available food selection options. If the respondent is aware of how the recipe was prepared, probe for what the recipe consisted of and the preparation method.

This would include not only listing the ingredients, but also probing for a detailed description of each ingredient. For example, if the SP described a mixture which contained "meat", you would have to probe for the type of meat, the cut, and whether it was trimmed or untrimmed, etc. In addition, determine how much of each ingredient was used to prepare the entire recipe. Once the mixture has been described fully, proceed to the Amount and Measurement box. Encourage the respondent to tell you either how many servings the recipe made and how many servings he/she ate of the entire recipe, or find out the total quantity prepared of the recipe and what proportion he/she consumed of the total. The amount consumed could be entered as, "recipe serves eight; SP ate two servings" or "total recipe made four cups; SP ate one cup." When the data are recorded in this manner, NCHS can easily and accurately calculate how much the SP actually ate.

At times a respondent may not be able to provide such detailed information. This frequently occurs when the mixture was prepared by someone else. Obtain as complete a description as possible from the respondent; he/she may know more than he/she thought. Unless the respondent can provide the amount information just described, have him/her estimate the amount consumed using the shape chart or food models.

To access the Missing Food Screen:

1.   Press F7. All descriptions chosen to that point are saved, and a screen appears with two blank boxes. See Exhibit 4-62, screen 1. (Press F10 only if you want to return to the Food Selection screen without entering any information.)

2.   Type in the information requested. Press the PgDn key to move the highlight to the "Amount and Measurement" box, and the PgUp key to return to the "Food Description" box, if necessary. Use the arrow keys to move the highlight back and forth, or up and down within the boxed-in area. In addition, you may use the ENTER key to begin a new line.

3.   Press F10 to return to the Food Entry screen to begin a new food specification.

Exhibit 4-62. Missing Food screen: example of optimum level of detail

Screen 1 of 2

```
+---------------------------------------------------------------------+
| MISSING FOOD:    mixed dish                                         |
|                                                                     |
|  General Description (record food name verbatim and include): Consistency, |
|  flavor, preparation, ingredients, salt and fat.  If commercial: brand name, |
|  package description, modified nutrients or caloric value, where purchased. |
|          +-----------------------------------------------------------+ |
|          |                                                           | |
|          |                                                           | |
|          |                                                           | |
|          |                                                           | |
|          |                                                           | |
|          |                                                           | |
|          |                                                           | |
|          |                                                           | |
|          +-----------------------------------------------------------+ |
|  Amount & Measurement:  Specify amount before or after cooking; with or |
|  without refuse; volume, weight, or shape; amount actually eaten.    |
|          +-----------------------------------------------------------+ |
|          |                                                           | |
|          |                                                           | |
|          +-----------------------------------------------------------+ |
|                                                                     |
|  Press <PgDn> to move to Amount & Measurement.                      |
+---------------------------------------------------------------------+
```

Screen 2 of 2

```
+---------------------------------------------------------------------+
| MISSING FOOD:    mixed dish                                         |
|                                                                     |
|  General Description (record food name verbatim and include): Consistency, |
|  flavor, preparation, ingredients, salt and fat.  If commercial: brand name, |
|  package description, modified nutrients or caloric value, where purchased. |
|          +-----------------------------------------------------------+ |
|          | Lean Pockets: Chicken Parmesan                            | |
|          | Pieces of chicken with a parmesan sauce wrapped in a hard | |
|          | dough                                                     | |
|          | Bought at Giant--has picture of the pocket on front of    | |
|          | package                                                   | |
|          | Less than 300 calories                                    | |
|          | DK price                                                  | |
|          | Prepared in microwave w/no fat or salt                    | |
|          +-----------------------------------------------------------+ |
|  Amount & Measurement:  Specify amount before or after cooking; with or |
|  without refuse; volume, weight, or shape; amount actually eaten.    |
|          +-----------------------------------------------------------+ |
|          | Net weight of package: 10.0 oz  Contains two pockets. SP  | |
|          | ate 1.  Cube:  3" wide, 6" long, 1" thick.                | |
|          +-----------------------------------------------------------+ |
|                                                                     |
|  Press <PgDn> to move to Amount & Measurement.                      |
+---------------------------------------------------------------------+
```

The F7 key can only be accessed during the food selection process. In a situation where a food has been entered, and later the respondent changes his/her mind, and the new food the respondent reports is a "missing food," you must access the Recall Review screen. Refer to Section 4.3.10 which describes how to edit a food during an active recall.

4.3.9.3 Missing Food Versus Attaching a Note

Sometimes there is no clear line as to whether a food item should be entered as a missing food or as a note attached to a particular food selection entry. What is most important is to make sure you gather sufficient information about the food. It is better to err on the side of collecting too much information than too little. When in doubt, always enter the item as a missing food.

4.3.10 Editing Foods in the Middle of an Interview

On occasion, it may be necessary to edit a food in the middle of an interview. For example, an SP may suddenly change his/her mind about an ingredient in a food which has already been specified. Instead of waiting until the system progresses normally to the Recall Review screen, you can access Recall Review and make the edit immediately. To access the Recall Review screen, press F4, highlight Recall Review and press ENTER. All meal and food information collected up to this point will be listed on the screen. You can make the appropriate edit, such as changing an ingredient in a food. After completing the edit, press F10 to return to the Food Entry screen. The procedures for editing foods will be explained in detail in Section 4.3.12.2.

Note: This feature is available only when you first access the Food Entry screen for a food and have not yet entered any items. If you try to access Recall Review from a Food Entry screen where food items have been entered, such as in the middle of specifying a combination food, the NIS will display the following message,

"You may not access Recall Review until you have specified all food items."

When you resume food selection, the message will be removed.

4.3.11 More Specific Food Recording Rules

Since you are now familiar with the food entry, food selection, and amount procedures, this section will present specific rules and guidelines to use during the food data collection process. For the most part, these rules and guidelines have been developed to assist you in reducing the need to reenter or change information. Through extensive testing, these procedures were found to be effective in assisting the flow of the interview; both repetition in probing and computer entries were reduced, thus decreasing respondent burden and interview time.

This section will not only present specific rules to follow, but also suggest techniques in conducting the most thorough interview. Each stage or aspect of the interview previously discussed will be addressed: the Quick List, Food Entry, Food Selection, Amounts, Notes, and Missing Foods.

4.3.11.1 Rules and Guidelines

- **Recording Small Amounts**

You must record any item quantified by the respondent as being **more than one tablespoon**. Do not record anything that is one tablespoon or less unless it is a fat, salt, sugar, or a significant contributor of important nutrients and/or calories. With the exception of artificial sweeteners, do not record anything 1/4 teaspoon or less. No matter what quantity is reported, **artificial sweeteners must always be recorded**. The small amounts recording rule was developed mainly to avoid specifying a "bite" or a "taste."

"Fats" include margarine, oil, butter, nuts, coconut, salad dressing, avocado, cream cheese and other cheeses, non-dairy creamer and cream. Salty items include soy sauce, teriyaki sauce, tamari, mustard, catsup, pickles, bacon bits, olives, anchovies, and caviar. "Sugars" include sugar, honey, jelly, jam, corn syrup, fructose, pancake syrup, and chocolate syrup.

You must evaluate the food/beverage described to determine whether or not the item reported is a significant contributor of important nutrients or calories. Protein supplements, oat bran, wheat bran, wheat germ, and vegetables high in vitamin A and/or C, are considered significant and should be included in the 24-hour recall if the SP consumed more than 1/4 teaspoon.

In the interview process, amount is asked **after** the item is specified. In order to avoid the process of specifying an item which ultimately is too small to be recorded, probe for the amount **before** the specification of the item, saying something like, "Was the amount more than, equal to, or less than one tablespoon?" Before asking this probe, you must first determine whether the additional item is of significant nutritional value using the guidelines previously mentioned. If so, it is not necessary to ask for the amount up front, since the item must be entered into the system in the usual manner. However, if an SP reported a soup or mixed dish to which he/she added additional items, list the items, then ask the amounts for only those foods which are not significant contributors of important nutrients or calories. In so doing, you avoid entering and specifying a teaspoon of onions added to a soup. The same probe works well for an SP who reports eating a salad prepared from a salad bar, or an SP who "tastes" his/her

spouse's meal at a restaurant. Remember, though, that additions of fat, salt, and sugar must be recorded if more than 1/4 teaspoon. Therefore, if a tablespoon of bacon bits have been sprinkled on a salad, you must enter them as part of the salad combination. <u>If in doubt, always enter and specify the food item</u>.

-        **Rules for Use Of Generic Versus Item-By-Item Entry**

"Generic" or "standard recipe" refers to an item presented in a hierarchy as a complete recipe, such as macaroni and cheese. "Item-by-item" refers to the attempt to list and specify each individual ingredient in a recipe as reported by the SP. In general, it is acceptable to use the standard recipes for the majority of items reported; however, if the SP can supply the basic ingredients for a sandwich, salad, or homemade vegetable mixture, you should not use the standard recipe presented in the hierarchy.

> **SANDWICHES**: Most SPs can give some information about a sandwich. Except in cases involving very young children, an SP often knows more than he/she thinks. A sandwich purchased in a restaurant should not signal the use of the generic sandwich hierarchy. Even a six-year-old may be able to tell you whether the bread was white or brown (wheat). Unknowns are usually provided should the SP not be able to provide certain details.

> For example, if an SP reported eating a bologna and cheese sandwich at a friend's house, it is likely that he/she may not know all the details about the type of bologna or cheese on the sandwich, but he/she will usually be able to give you some information as well as the type of bread and other accompaniments.

> Certain sandwiches are fairly standard, and if not prepared by the SP, are difficult to specify. Therefore, <u>it is acceptable to use the generic sandwich hierarchy when gyros, Italian subs, and Cuban sandwiches are reported</u>. In addition, you do not need to break down sandwiches purchased at national fast food chains into their component parts. Select the sandwich by accessing the fast food establishment in the "FAST hierarchy. Since the nutrition information for these sandwiches comes directly from the manufacturer, it is considered more accurate than the information the SP could provide.

> **TOSSED SALADS**: It is preferable to have an SP list and quantify the items in a tossed salad. Remember to apply the small amount recording rule to avoid entering and specifying items which are not necessary due to the small quantity consumed. Should the SP know the components of the salad and how much he/she ate of the total salad, but not the amounts of each ingredient, enter either "U" or "K." You can determine which amount entry is correct based upon whether the SP can provide you with information as to the proportion of the ingredients in the salad, for example, "2/3 lettuce and 1/3 other vegetables." Attach a note to the type of combination with the total amount eaten, and the proportions, if given. In the example provided, the lettuce would be entered as a "K" as all information was given by the SP to perform a calculation; whereas, the other vegetables in the salad would be entered as "U."

If the SP reports a salad but cannot break it down into its individual components, you may use the generic lettuce salad, if appropriate. Note that the generic tossed lettuce salad (Exhibit 4-63) includes: 1) tomatoes and/or carrots; 2) chicken, shrimp, turkey or no meat or fish; and 3) avocado, cheese, egg, and an egg and cheese combination. If the salad contained tomatoes, avocado, and cheese, you can use the generic lettuce salad, but should list either the cheese or avocado as a separate item. To record the amount of the lettuce salad, have the SP provide the amount of salad minus the additional item. Record the amount of the additional item separately or enter "U" if the SP is unsure.

MIXED DISHES AND SOUPS: In general, it is best not to attempt to break down intricate recipes into their component parts as inevitably the SP will forget a primary ingredient.

The procedure to enter frozen T.V. dinners and entrees (i.e., frozen lasagna) is diagrammed in Exhibits 4-64 and 4-65. These exhibits demonstrate in a hierarchy order how to proceed with varying amounts of information. Review the exhibits carefully. Realize that the information requested in the exhibit for a missing food is in a shortened form and is not all inclusive; only that information specific to the situation is listed. You still must read and follow the instructions presented on the Missing Food screen and enter as much "other" pertinent information as necessary.

For any item reported including mixed dishes and soups, try to evaluate the food for variations from those presented using the descriptions on the screen. At times what the SP reports will be slightly different from the descriptions. As a general rule, if a food is being described that cannot be accurately represented in the DDC, and it is a commonly occurring food, enter the item using the Missing Food screen. Most common foods should be included in the DDC. The purpose, therefore, of this procedure is to quickly bring these foods to the attention of NCHS so that they may be added to future versions of the DDC.

Some judgement is required on your part. For example, suppose an SP reports consuming a jicama quiche. As screen 1 in Exhibit 4-66 illustrates, jicama quiche is not represented on the listing of the different types of quiches currently in the DDC. Since jicama quiche would definitely be classified as uncommon, it would be entered into the system as two separate items, quiche and jicama, as shown in Exhibit 4-66, screen 2.

Exhibit 4-63. Food Selection screen: generic lettuce salad

<u>Screen 1 of 2</u>

```
FOOD SELECTION  salad, lettuce, tossed (no dressing), no meat or fish


      +-------------------------------------------------------+
      ¦ TOC  with tomatoes and/or carrots
      ¦ NTC  without tomatoes and carrots
      ¦ U    unknown if with tomatoes and/or carrots
      ¦
      ¦
      ¦
      ¦
      ¦
      ¦
      +-------------------------------------------------------+
       food:



  Type in abbreviation or move highlight to choice and press <ENTER>.
```

<u>Screen 2 of 2</u>

```
FOOD SELECTION  salad, lettuce, tossed (no dressing), no meat or fish,
with tomatoes and/or carrots

              •

      +-------------------------------------------------------+
      ¦ AVO  with avocado
      ¦ CHE  with cheese
      ¦ EGG  with egg
      ¦ ECH  with egg and cheese
      ¦ NA   no avocado/cheese/egg
      ¦ U    unknown if with avocado/cheese/egg
      ¦
      ¦
      ¦
      ¦
      +-------------------------------------------------------+
       food:


  Type in abbreviation or move highlight to choice and press <ENTER>.
```

T.V. Dinner (Compartmentalized)

Know Brand Name

Don't Know Brand Name

Brand Name Listed

(Specific dinner included)

Brand Name Listed

(Specific dinner not included)

Brand Name Not Listed

Usual

Unusual (e.g., "lite")

Enter each component and amount.
Specify using food hierarchies.

Missing Food

Missing Food

Use "frozen meal" as the
type of combination.

Enter each component.
Enter name of dish.
Obtain package size, if known.
Obtain percent eaten and
amount of each component,
e.g., "all of entree, 1/2 of
vegetables," etc.

Enter name of dish and brand name.
Enter each component.
Obtain package size, if known.
Obtain percent eaten and amount of
each component, e.g., "all of entree, 1/2
of vegetable," etc.

Exhibit 4-64. Diagram of procedures for entering a T.V. dinner

Exhibit 4-65. Diagram of procedures for entering a frozen entree

4-158
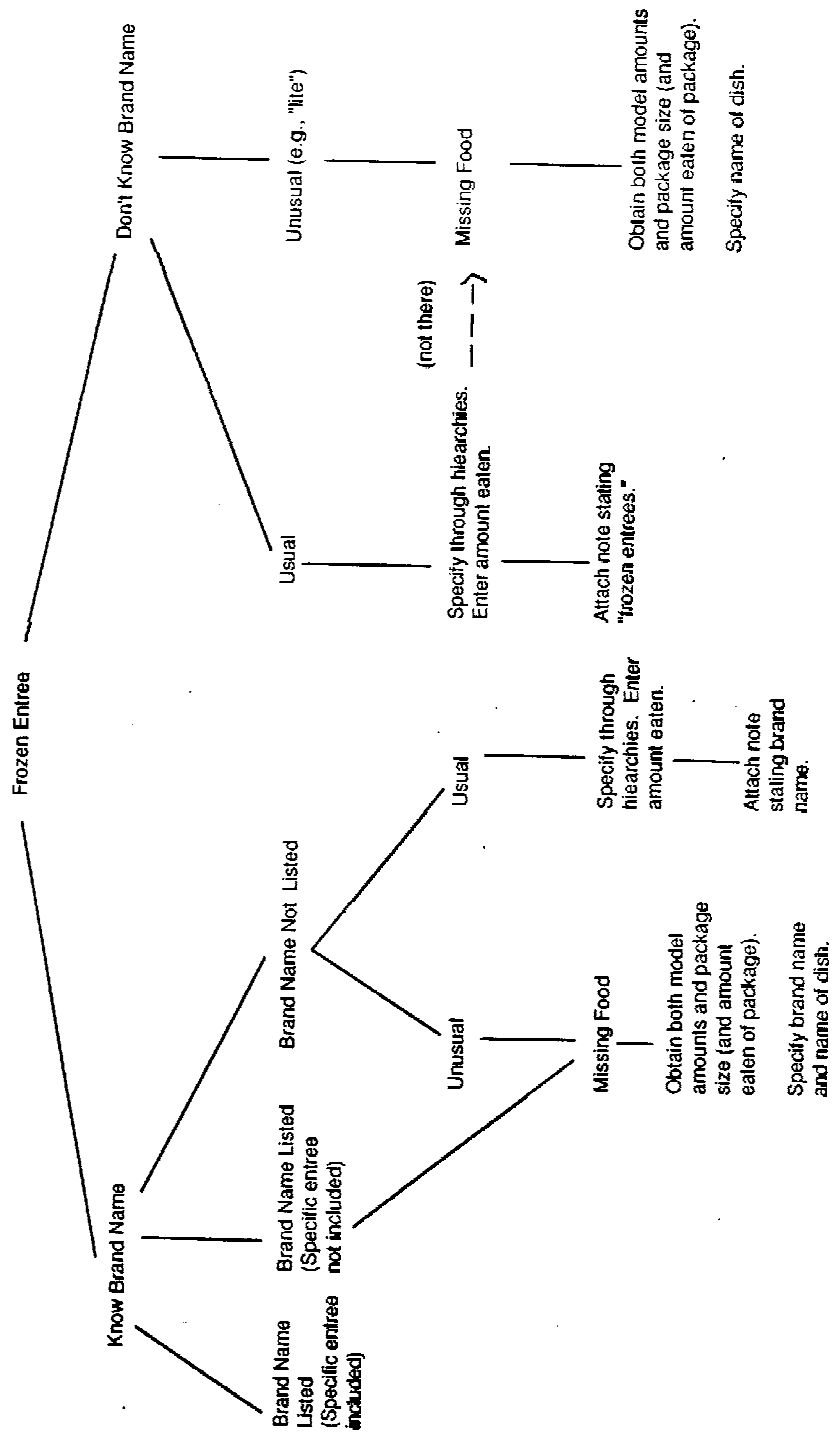
Exhibit 4-66. Example of entering an unusual mixed dish

<u>Screen 1</u>

```
FOOD SELECTION   quiche


                          Jicama quiche isn't on the selection list.


        +----------------------------------------------------+
        : PL   plain
        : BRO  with broccoli
        : CHI  with chicken
        : FIS  with fish or seafood
        : LOR  Lorraine - with bacon
        : MEA  with meat
        : SPI  with spinach
        : TUR  with turkey
        :
        :
        +----------------------------------------------------+
         food:


   Type in abbreviation or move highlight to choice and press <ENTER>.
```

<u>Screen 2</u>

```
                            FOOD ENTRY

          Meal Time : 08:00 pm                          -
          Meal Name : Dinner/Supper    .
          Meal Place: Home

     +-------------------------------------------------------------
     :
     :    Food Name :
     :
     :Item   1: QUICHE          You would specify "plain" quiche and continue
     :Item   2: JICAMA          the selection process for the jicama.
     :Item   3:
     :Item   4:
     :Item   5:
     :Item   6:
     :Item   7:
     :Item   8:
     :Item   9:
     :Item  10:
     :
     :    Press F10 when all the food items are listed.
     +-------------------------------------------------------------
Type the first four or more letters of the food item.  Press <ENTER>.
```

VEGETABLE COMBINATIONS: If the SP reports a commercial vegetable mixture, it is preferable to use the standard combinations presented in the hierarchy. These proportions are probably more accurate than the amount attempted by the SP. If the SP created the mixture (homemade), you should enter the vegetables as separate items and try to obtain the amounts.

-   Deleted And Additional Ingredients

There will be selections in the hierarchies, where a minor ingredient in a dish is not fully represented or an additional ingredient is presented which the SP did not eat. In some situations, you may need to use your own judgment as to the most nutritionally appropriate choice. The rule that follows specifically applies to vegetables.

When the DDC system does not include a vegetable in a vegetable mixture, which has significant nutritional value, add a note stating the vegetable which was not represented. Use the color of the vegetable as the main indicator of its nutritional importance. If the vegetable is green, orange, or red, the vegetable is worth noting. Do not count small amounts of onions, mushrooms, or celery missing from a vegetable mixture; do count broccoli, green peppers, orange squash, carrots, and tomatoes. Before going through the process of evaluating the food, remember that the small amounts recording rule still applies for those vegetables low in vitamin A and/or C.

Screen 1 in Exhibit 4-67 presents an example where you must find the choice which must closely approximates what the SP reported: a vegetable mixture containing corn, lima beans, peas and carrots. In this case, you should select the first choice on the screen, and attach a note stating the item excluded: "SP did not eat green beans." This type of situation may also occur with soups and mixed dishes; attach a note stating the item excluded.

Screen 2 in Exhibit 4-67 illustrates a slightly different situation. An SP reports eating green beans with tomatoes and onions; however, you can only select green beans with tomatoes or onions. Following the red/green/orange rule outlined above, you should select "green beans with tomatoes." In this case, a note is not necessary since the onions are less nutritionally significant than the tomatoes.

In situations other than vegetables, added and deleted ingredients cannot be determined by you.

Exhibit 4-67. Food Selection screen: mixed vegetables

<u>Screen 1 of 2</u>

```
FOOD SELECTION   vegetables, mixed vegetables



                              Attach note that SP did not eat green beans.
      +-----------------------------------------------------+
      ¦ COR   corn/lima beans/peas/[green beans]/carrots
      ¦ BRO   broccoli/carrots/corn/cauliflower
      ¦ CP    corn with peppers
      ¦ CS    cowpeas with snapbeans
      ¦ GBA   green beans with almonds
      ¦ GBC   green beans with chickpeas
      ¦ GBO   green beans with onions
      ¦ GPI   green beans with pinto beans
      ¦ GPO   green beans with potatoes
      ¦ GBS   green beans with spaetzel
      +-----------------------------------------------------+
       food:



Type in abbreviation or move highlight to choice and press <ENTER>.
```

<u>Screen 2 of 2</u>

```
FOOD SELECTION   vegetables, mixed vegetables




      +-----------------------------------------------------+
      ¦ COR   corn/lima beans/peas/green beans/carrots
      ¦ BRO   broccoli/carrots/corn/cauliflower
      ¦ CP    corn with peppers
      ¦ CS    cowpeas with snapbeans
      ¦ GBA   green beans with almonds
      ¦ GBC   green beans with chickpeas
      ¦ [GBO   green beans with onions]
      ¦ GPI   green beans with pinto beans
      ¦ GPO   green beans with potatoes
      ¦ GBS   green beans with spaetzel
      ¦ [GBT   green beans with tomatoes]  <-- Select.
      +-----------------------------------------------------+
       food:


Type in abbreviation or move highlight to choice and press <ENTER>.
```

- **Summary: item-by-item versus generic (standard recipes)**

The following table summarizes which method should be utilized for most foods and beverages which may be reported:

Item-by-item	Generic (standard recipe)
1. Tossed salads 2. Mixtures of fruit 3. Stir-fried dishes 4. Homemade vegetable mixtures 5. Beverage mixtures (e.g., rum and coke, milk with Quik, etc.) 6. Sundaes (e.g., ice cream with syrup, whipped cream, etc.) 7. Sandwiches (except those listed under generic)	1. Mixed dishes 2. Soups 3. Commercial vegetable combinations (e.g., frozen vegetable combinations) 4. Baked goods (e.g., cakes, cookies, doughnuts, pies, etc.) 5. Commercially prepared gyros, Italian subs and Cuban sandwiches 6. Sandwiches from regional fast food chains (For fast food locations not listed in the FAST hierarchy, use the SAND hierarchy and attach a note with the name of the establishment.) 7. Sandwiches from national fast food chains (Use the FAST hierarchy.)

- **Minor Discrepancy Between Food Reported and Screen Display**

When you are faced with DDC selections which do not exactly match what the SP reported, ask yourself the following questions:

1.   Does it fall into the category of the small amount rule?

Always check to see if the small amount rule applies; if so, disregard the item.

If the amount is 1/4 teaspoon or less, disregard (except artificial sweeteners).

If the amount is 1 tablespoon or less, disregard (if not a fat, salt, or sugar).

2.   Is it a commonly reported food?

When a food item is reported that you feel will probably be reported again in the future because it is a fairly common food, enter the item as a missing food. This allows NCHS to see in advance what selections might need adding to the DDC.

For unusual foods which have little likelihood of being reported again, enter them using the existing hierarchies (if possible) and list the additional ingredient as a second item. Refer to Exhibit 4-66.

3.   Is it a regional or ethnic food?

All regional and ethnic foods should be entered as missing foods with as much detail as possible.

4.   Is it a national brand for which the DDC offers a brand name listing for that food/beverage?

Any national brands reported by the SP which are not listed on the brand name listing should be entered as missing foods.

5.   Is it just a small change from the screen description?

For those foods reported which have a minor inconsistency between what the SP said and the description presented on the screen, a print screen procedure is recommended. Attach a note to the food, ingredient, etc. explaining the discrepancy. Print the screen by holding down the shift key and simultaneously tapping the Print Screen key (Prt Sc), then release. Write the ID number of the SP at the top of the printed screen. Send this screen to NCHS along with your other weekly transmittals (Chapter 10). Please note that this procedure is not to be used to avoid doing a market check (Section 6.4.2.1)!

Some foods are technically not true missing foods; therefore, when the following situations present themselves, you may use the print screen procedure:

a.   The Ingredient screen does not allow for the entry of the exact fat used by the SP.

b.   The Ingredient screen does not allow for the entry of the exact ingredient used by the SP, e.g., types of cream are listed, but milk was used.

c.   The Ingredient screen presents an ingredient which was not used by the SP in his/her recipe.

d.   There is a slight variation on a mixed dish, such as whole wheat noodles in a lasagna recipe as opposed to white noodles.

e.   Turkey was used in the recipe instead of chicken, such as turkey tetrazzini. (The print screen procedure is not to be used for any meats other than chicken and turkey.)

f.   The SP reported that an item had nuts, but there is no "with nuts"/"without nuts" option, e.g., a frosted and nut-covered doughnut.

4.3.11.2   Suggested Techniques for a Smooth Interview

You, thus far, have been presented with many rules that must be followed to accurately record and perform an automated dietary interview. To review the interview from a more practical standpoint, a recall has been created so that you may follow the progression of some of the foods through the listing, specification, and quantification process. In order to incorporate the suggestions and rules presented, it is helpful to see and understand the flow of the interview.

Exhibit 4-68 presents the Quick List for the imaginary recall. Certain foods are followed through different stages of the food specification and quantification process. Specific foods and beverages were chosen to provide you with suggestions on how to handle the usual and unusual foods and situations which may occur while conducting an interview. Next, issues are addressed relating to this recall. In addition, each category or grouping should provide you with helpful hints for that portion of the recall.

-   Quick List

When the respondent finishes giving his/her list of foods and beverages, ask the respondent if he/she can think of anything else. Meals should be listed sequentially whenever possible; therefore, should the respondent remember a 2:00 p.m. snack, you should insert the snack in the appropriate location.

Many SPs offer more information than requested when providing the Quick List. Should the SP state the form of a food or any other pertinent information, enter the information on the Quick List. If specific data have already been collected, it is not necessary to reask the questions later. One exception is amounts. Should the SP say, "I had 1/2 cup of _____," disregard the information. However, you may want to enter a unit measurement such as "2 hot dogs" and verify the amount at the correct time.

When an SP reports a food eaten at 12:00 midnight or 12:00 noon, you may enter "12m" or "12n," respectively. (You may also use "a" and "p.") If you enter "12m" on the Quick List, "12:00 am" will appear on the Food Entry screen; if you enter "12n" on the Quick List, "12:00 pm" will appear on the Food Entry screen.

Exhibit 4-68. Quick List example

```
                        QUICK LIST
                                     EX: /7a bre hom

                                        CODES
       /7a
       instant breakfast             Meals    Place
       apple, │sliced│   <-- Enter the form of the   BRE      HOMe
       /10a wor            food if given.    DES      WORk
       tea                                    BRU      SCHool
       toast                                  ALM      DAY care
       /12p lun                               LUN      FASt food
       lean pocket                            COM      DELi
       salad                                  MER      REStaurant
       perrier                                DIN      CAFeteria
       /5p hom                                CEN      STOre
       wine                                   SNA      FRIend's
       /6p hom                                ENT      COMmunity
       chicken w/ gravy                       INF      TRAnsit
       mashed pot w/ gravy                    EXT      OTHer
       /9p sna                                OTH
       ice cream

     Type / to BEGIN a new meal and press <ENTER>.
     Type one food per line and press <ENTER>.
     Press F10 to complete the Quick List.

     Enter the Quick List.
```

If cough drops, gum, breath mints, spices, vitamins, minerals and/or medicines, such as Metamucil, are reported by the SP during the Quick List, do not record them. Although some of these items are in the system, they are not to be recorded by you.

-       **Food Entry**

When the Food Entry screen appears, you begin to read the information already given by the SP, such as "At 7:00 a.m. you had instant breakfast." At this time, the SP may change his/her mind and say, "No, it wasn't 7:00; it was 8:00." Press the F2 key to return to the meal time, correct the time by typing over the entry and press ENTER. Continue the process by probing for the meal code and place eaten.

Occasionally the place where the SP ate his/her meal or snack is not presented on the flash card; the "other" category should then be selected. It is not necessary to attach a note explaining the "other" location unless you are unsure and feel that it may fit into one of the remaining categories. For example, if an SP reports eating in an ice cream parlor, select "other" and attach a note specifically stating the location (Exhibit 4-69). A decision will be made in the home office as to the appropriate selection. A memo, saying "use _____ if ice cream parlor is reported," may be issued by NCHS or Westat in the future for an "other" location that has occurred repeatedly.

4-165

Exhibit 4-69. Food Entry screen: entering meal place other than those listed

```
+----------------------------------------------------------------------+
|                              FOOD ENTRY                               |
|                                                                      |
|         Meal Time : 09:00 pm                                         |
|         Meal Name : Snack/Beverage                                   |
|         Meal Place:                                                  |
|   +--------------------------------------------------------------+   |
|   |    Food Name: ice cream                                      |   |
|   +------------------- Meal Place Choices ------------------     |   |
|   |                                                              |   |
|   |              +------------------------------+               |   |
|   |              | HOM   Home                   |               |   |
|   |              | WOR   Work                   |               |   |
|   |              | SCH   School                 |               |   |
|   |              | DAY   Day care/day camp      |               |   |
|   |              | FAS   Fast food/take out     |               |   |
|   |              | DEL   Delicatessen           |               |   |
|   |              | RES   Restaurant             |               |   |
|   |              | CAF   Cafeteria/self-serve buffet            |   |
|   |              | STO   Store                  |               |   |
|   |              +------------------------------+               |   |
|   |       Meal Place:                                           |   |
|   |                                                              |   |
|   |                                                              |   |
|   +--------------------------------------------------------------+   |
| Enter the meal place or choose one from the list.                    |
|                                                                      |
+----------------------------------------------------------------------+
```

```
+----------------------------------------------------------------------+
|                              FOOD ENTRY                               |
|                                                                      |
|        Meal Time : 09:00 pm                                          |
|        Meal Name : Snack/Beverage                                    |
|        Meal Place:                                                   |
|                                                                      |
|                                                                      |
|          +------------------ Note Text -------------------+         |
|          | ice cream parlor                               |         |
|          |                                                |         |
|          |                                                |         |
|          |                                                |         |
|          |                                                |         |
|          |                                                |         |
|          |                                                |         |
|          |                                                |         |
|          +------------------------------------------------+         |
|                                                                      |
|                                                                      |
| Type in notes about the highlighted information.  Press F10 when     |
| finished.                                                            |
+----------------------------------------------------------------------+
```

If a beverage is normally reconstituted with milk, and the SP prepared it with water instead of milk, specify the item by using the plain "water" selection. Instant breakfast drinks are usually prepared with milk; therefore, use the unprepared dry mix selection and add water as a separate item. Exhibit 4-70 demonstrates two ways in which you may proceed with the food selection process depending on whether or not the SP knew the manufacturer. When "instant" is typed at the brand name prompt, a list of different manufacturers, flavors and preparations of Instant Breakfast appears. Select the appropriate dry mix. On the other hand, if the SP does not know the manufacturer, select the generic "instant breakfast drink," and again select the unprepared dry mix.

Do not confuse this "plain water" with bottled waters, such as mineral water, seltzer, etc. To access plain water, enter "WATE" and select "water - drinking." In addition, the plain water selection is not to be used for glasses of plain water drunk throughout the day, nor water used to reconstitute instant coffee. The plain water selection was added to the system for those unusual situations where the SP has modified the normal preparation of a beverage, or where an entry would appear "odd" if water were not entered. The latter occurs when an SP reports drinking hot water with lemon and sugar. Not only would an entry of lemon and sugar seem unusual, but also total fluids could not be calculated accurately.

The reverse also holds true; if a beverage is normally reconstituted with water, and milk is used, such as with a hot cocoa mix, specify the beverage as two items: unprepared dry mix and milk.

Unless the SP is four years old or younger (Section 7.1.2), there are no standard probes which check whether the respondent followed the package instructions when adding water to reconstitute such items as frozen juices, powdered juice drinks, soups, etc. You should not probe for this information! If, in the process of probing for a food, the respondent mentions that he/she added more water or less water than listed in the instructions, attach a note to the food stating this information. Enter the information only if it was offered to you.

For SPs over four years old, there are predominantly two situations which may occur where an entry of water either as a note or as an actual food item might be necessary:

1. If, after probing for additions at the table, the respondent says that he/she added water, enter the water as an item and quantify it. This might occur if an SP is trying to decrease his/her caffeine intake by pouring regular coffee into his/her cup, then filling the remainder of the cup with water. Since it is a standard probe to ask whether anything was added to a food at the table, and because the SP offered this information to you, you would enter coffee as item 1 and water - drinking as item 2.

Exhibit 4-70. Food Selection screens: manufacturer known and manufacturer not known

Screen 1 of 7

```
                              FOOD ENTRY

          Meal Time : 08:00 am
          Meal Name : Breakfast
          Meal Place: Home

    +-----------------------------------------------------------------
    !
    !   Food Name : instant breakfast
    !
    !Item    1: MILK.MIX
    !Item    2: WATER          Instant breakfast prepared with water instead
    !Item    3:                of milk.
    !Item    4:
    !Item    5:
    !Item    6:
    !Item    7:
    !Item    8:
    !Item    9:
    !Item  10:
    !
    !   Press F10 when all the food items are listed.
    +----------------------------------------------------------------
Type the first four or more letters of the food item.  Press <ENTER>.
                                •
```

Screen 2 of 7

```
FOOD SELECTION   milk, mixtures and milk drinks



      +-----------------------------------------------------------
      !  [*** brand name listing]      <-- Select brand name listing.
      !  BATI  batida
      !  BRE   instant breakfast drink
      !  CHO   chocolate
      !  COCO  cocoa or hot chocolate
      !  EGGN  eggnog   .
      !  FRU   fruit Julius
      !  LICU  licuado
      !  MAL   malted milk
      !  MIL   milkshake
      +-----------------------------------------------------------
      food:


Type in abbreviation or move highlight to choice and press <ENTER>.
```

Exhibit 4-70. Food Selection screens: manufacturer known and manufacturer not known (continued)

```
FOOD SELECTION  milk, mixtures and milk drinks




            +-----------------------------------------------------------
            :
            :
            :
            :
            :
            :
            :
            :
            :
            :
            +-----------------------------------------------------------
      Brand name: instant
```

```
FOOD SELECTION  milk, mixtures and milk drinks


                    Choose appropriate selection by manufacturer and type.

      +---------------------------------------------------------
      :      Carnation Instant Breakfast - canned, chocolate
      :      Carnation Instant Breakfast - canned, eggnog
      :      Carnation Instant Breakfast - canned, other flavors
      :      Carnation Instant Breakfast - dry mix, chocolate
      :      Carnation Instant Breakfast - dry mix, eggnog
      :      Carnation Instant Breakfast - dry mix, other flavors
      :      Carnation Instant Breakfast - prepared w/ milk, chocolat
      :      Carnation Instant Breakfast - prepared w/ milk, eggnog
      :      Carnation Instant Breakfast - prepared w/ milk, other fl
      :      Carnation Instant Breakfast-sugar free, dry mix, chocola
      +---------------------------------------------------------
      brandname:
```

**Exhibit 4-70. Food Selection screens: manufacturer known
and manufacturer not known (continued)**

<u>Screen 5 of 7</u>

```
+--------------------------------------------------------------+
| FOOD SELECTION  milk, mixtures and milk drinks               |
|                                                              |
|                                                              |
|         +--------------------------------------------------- |
|         | ***  brand name listing                           |
|         | BATI batida                                       |
|         | [BRE  instant breakfast drink]   <-- Select.      |
|         | CHO  chocolate                                    |
|         | COCO cocoa or hot chocolate                       |
|         | EGGN eggnog                                       |
|         | FRU  fruit Julius                                 |
|         | LICU licuado                                      |
|         | MAL  malted milk                                  |
|         | MIL  milkshake                                    |
|         +--------------------------------------------------- |
|           food:                                              |
|                                                              |
|                                                              |
|  Type in abbreviation or move highlight to choice and press <ENTER>. |
|                                                              |
+--------------------------------------------------------------+
```

<u>Screen 6 of 7</u>

```
+--------------------------------------------------------------+
| FOOD SELECTION  milk, mixtures and milk drinks, instant breakfast |
| drink, regular, other flavors                                |
|                                                              |
|                                                              |
|         +--------------------------------------------------- |
|         | P    prepared                                     |
|         | [NP   unprepared dry mix]    <-- Select.          |
|         |                                                   |
|         |                                                   |
|         |                                                   |
|         |                                                   |
|         |                                                   |
|         |                                                   |
|         +--------------------------------------------------- |
|           food:                                              |
|                                                              |
|                                                              |
|  Type in abbreviation or move highlight to choice and press <ENTER>. |
|                                                              |
+--------------------------------------------------------------+
```

```
FOOD SELECTION


                     Accessed by typing "WATER" at Food Entry screen.
     +-------------------------------------------------------------
     |        watermelon
     |        watercress
     |        waterchestnuts
     |        water - drinking
     |        water - bottled
     |                                            .
     |
     |
     +-------------------------------------------------------------
       food:



  Type in abbreviation or move highlight to choice and press <ENTER>.
```

2. During an interview an SP reports drinking orange juice. After asking whether anything was added to the juice at the table or whether it was mixed with anything, the SP says that she did not add anything. As you continue through the probing process, the SP mentions that she didn't prepare the juice according to the instructions on the can. She added an extra can of water to the pitcher when reconstituting the juice to keep the flavor from being too strong. In this case, attach a note to the juice entry with this information.

Since the Food Entry screen has the capacity to list 99 items in a given food name, running out of space to include all items in a multi-component food is not an issue. However, once food specification for a combination food begins, the SP may remember other components not originally included. As shown in Exhibit 4-71, you may insert additional items into a combination food by highlighting any item and pressing F5 to create a blank line.

Exhibit 4-71. Food Entry screen: inserting items into a combination food

```
                              FOOD ENTRY

          Meal Time : 12:00 pm
          Meal Name : Lunch
          Meal Place: Work
    +-----------------------------------------------------------------
    |
    |   Food Name : salad
    |
    |Item    1: LETT
    |Item    2: SPIN
    |
    |Item    3: [TOMA]          <-- Highlight an item and press F5 to insert a
    |                                blank line.
    |Item    4: CUCU
    |Item    5: CELE
    |Item    6: PEPP
    |Item    7: BEET
    |Item    8: SPRO
    |Item    9: BACO
    |Item   10: CROU
    |
    |   Press F10 when all the food items are listed.
    +-----------------------------------------------------------------
Type the first four or more letters of the food item.  Press <ENTER>.
```

```
                              FOOD ENTRY

          Meal Time : 12:00 pm
          Meal Name : Lunch
          Meal Place: Work
    +-----------------------------------------------------------------
    |
    |   Food Name : salad
    |
    |Item    1: LETT
    |Item    2: SPIN
    |
    |Item    3:                 <-- Enter the additional item.
    |Item    4: TOMA
    |Item    5: CUCU
    |Item    6: CELE
    |Item    7: PEPP
    |Item    8: BEET
    |Item    9: SPRO
    |Item   10: BACO
    |
    |   Press F10 when all the food items are listed.
    +-----------------------------------------------------------------
Type the first four or more letters of the food item.  Press <ENTER>.
```

The insert function is valuable on the Food Entry screen when you need to add an item into an already existing meal. If the SP forgets to report a food/beverage at the time of the Quick List, you may insert the item by accessing the System Menu from the Food Entry screen. Press F4 to access the System Menu, highlight "Quick List" and press ENTER. The system will bring you to the Quick List. Place the highlight on the first food or beverage listed, press F5 to create a blank line and enter the new food. The food name presented at the time the F5 key is pressed is saved and will reappear after the new food is specified.

When chicken is reported, ask, "what part or parts of the chicken were eaten or was the chicken off the bone?" This probe determines whether more than one entry is needed. For chicken eaten by the part, the next probe is, "What part or parts did you eat?" If two pieces are eaten of the same part, the system allows one entry of the part, such as breast, then the entry of "2" for the amount. However, if the SP ate a breast and a drumstick, you should enter the chicken twice (as two separate entries) in order to specify both chicken parts. This procedure is used because chicken needs to be entered as separate pieces, not as a combination food. Exhibit 4-72 illustrates the procedure used to insert another piece of chicken. If the chicken was eaten off the bone, the system probes for light or dark meat and only one entry is necessary.

If lettuce is eaten in a salad, probe at the Food Entry screen, "Did your salad contain one kind of lettuce or more than one?" If two kinds of lettuce were eaten, you may enter "LETT" twice on the Food Entry screen so that you do not forget to probe for both types later. The two different types of lettuce must be listed as items under the food name, "salad," since they are part of a salad combination. After probing the SP may say that it actually was not lettuce but spinach. By knowing up front that the item was spinach as opposed to lettuce, you are able to avoid escaping to rename the lettuce as "spinach." Spinach is accessed by typing "SPIN"; it cannot be accessed when "LETT" is entered.,

It is impossible to address the infinite numbers of foods and beverages which may be reported. The following helpful hints may be of assistance to you:

- Remember that the computer scans approximately twenty characters at the Food Entry screen when sorting indexed foods; therefore, when practicing try to locate those foods which when typed in a non-abbreviated form access the food more quickly. "French fries" and "chicken" are two examples.

- Often coffee is reported with "milk" added. Just as lettuce and/or spinach need to be known up front, such is the case for milk added to a beverage. Many SPs use the terms milk, cream, and (non-dairy) creamer interchangeably. The system, though, accesses milk and cream/creamer differently; milk is found by typing "MILK" and cream and creamer are found by typing "CREA." You save time by initially accessing the correct hierarchy. The technique of probing up front is helpful when "butter" is reported. Probe, "Was that margarine, butter or something else?" Depending upon how the SP responds, you may enter "BUTT" or "MARG," or type "FATS," then choose the correct one.

Exhibit 4-72. Food Entry screen: inserting food names

```
                              FOOD ENTRY

          Meal Time  : 06:00 pm
          Meal Name  : Dinner/Supper
          Meal Place: Home

     +--------------------------------------------------------------
     !
     !    Food Name : chicken w/gravy
     !
     !Item    1:                    I: "What part or parts of the chicken did you eat,
     !Item    2:                         or was the chicken off the bone?"
     !Item    3:                    SP: "I ate a breast and a drumstick."
     !Item    4:
     !Item    5:                    Press F4 to access the System Menu and select
     !Item    6:                    Quick List.
     !Item    7:
     !Item    8:
     !Item    9:
     !Item   10:
     !
     !    Press F10 when all the food items are listed.
     +--------------------------------------------------------------
Press <ENTER> to proceed with the specification of the food name
displayed.
```

```
                          +------- System Menu ------+
          Meal Time  : 06:0! Recall Header            !
          Meal Name  : Dinn! [Quick List]<--Select Quick List.
          Meal Place: Home! Food Entry               !
                          ! Recall Review            !
     +-------------------! Recall Trailer         . !-----------------
     !                   ! End of Recall            !
     !    Food Name : chick! Print Recall Report      !
     !                   ! Exit Recall              !
     !Item    1:         ! Exit DDC                 !
     !Item    2:         ! ---------------------    !
     !Item    3:         ! Help              F1     !
     !Item    4:         ! Back Up           F2     !
     !Item    5:         ! System Hold       F3     !
     !Item    6:         ! Insert            F5     !
     !Item    7:         ! Delete            F6     !
     !Item    8:         ! Missing Food      F7     !
     !Item    9:         ! Note              F8     !
     !Item   10:         ! ENG/SPA Toggle    F9     !
     !                   ! Next Screen       F10    !
     !    Press F10 when al! 
     +-------------------! Press <ESC> to exit menu !-----------------
Go to the Quick List
```

Exhibit 4-72. Food Entry screen: inserting food names (continued)

```
                         QUICK LIST
+-----------------------------------------------+   EX: /7a bre hom
: / 06:00pm DIN HOM                             :
:                                               :        CODES
: chicken w/gravy                               :
:                                               :   Meals  Place
:                                               :   BRE    HOMe
:       Highlight "chicken w/gravy" and press F5 to insert
:       a blank line on the Quick List.
:                                               :   LUN    FASt food
:                                               :   COM    DELi
:                                               :   MER    REStaurant
:                                               :   DIN    CAFeteria
:                                               :   CEN    STOre
:                                               :   SNA    FRIend's
+-----------------------------------------------+   ENT    COMmunity
                                                    INF    TRAnsit
Type / to BEGIN a new meal and press <ENTER>.       EXT    OTHer
Type one food per line and press <ENTER>.           OTH
Press F10 to complete the Quick List.
```

```
                         QUICK LIST
+-----------------------------------------------+   EX: /7a bre hom
: /. 06:00pm DIN HOM                            |
: chicken                <-- Type "chicken."     :        CODES
: chicken w/gravy                               :
:                                               :   Meals  Place
:                                               : BRE      HOMe
:                                               :   DES    WORk
:                                               :   BRU    SCHool
:                                               :   ALM    DAY care
:                                               :   LUN    FASt food
:                                               :   COM    DELi
:                                               :   MER    REStaurant
:                                               :   DIN    CAFeteria
:                                               :   CEN    STOre
:                                               :   SNA    FRIend's
+-----------------------------------------------+   ENT    COMmunity
                                                    INF    TRAnsit
Type / to BEGIN a new meal and press <ENTER>.       EXT    OTHer
Type one food per line and press <ENTER>.           OTH
Press F10 to complete the Quick List.
```

Press F10 to begin the Food Specification process of that part of the chicken. Once "chicken" has been specified, the system brings back the "chicken w/gravy" entry. Now specify the other chicken part.

-　　　When probing for additional items added to a hamburger or hot dog, it may be necessary to ask, "Was that plain, or on bread, roll or something else?" Many times, the SP assumes you know the hot dog was on a bun; the SP mentions the catsup and mustard, but not the bun. The same holds true for dry cereal. Frequently, it is necessary to follow your initial probe, "Did you put anything on your cereal?" with, "Did you eat your cereal dry or did you add anything?" The SP assumes you know that milk was added.

-　　　Lemon is frequently reported when an SP consumes tea. If a whole fresh lemon wedge is eaten, enter the lemon and select "wedge;" however, if the SP reports squeezing the juice into the beverage, probe as to the amount of juice added. If it is one tablespoon or less, do not record the juice.

-　　　If the SP reports eating a "stir-fry," ask if the recipe had an actual name (e.g., beef and broccoli stir-fry). If it did not, use whatever term the SP used to describe the dish.

-　　　Pre-packaged cupcakes can be accessed by typing "SNAC," "DESS," or "CAKE."

-　　　Sunkist Fun Fruits are accessed through the brand name listing in the candy hierarchy.

-　　　Access pork and beans through "BEANS."

-　　　Access dry onion soup mix under "SOUP" or "INGR."

-　　　Food Selection

If half or more of the skin is eaten on an apple or potato it is considered "with skin."

In general, if further descriptions are not available in the DDC system for a food, it has been determined by NCC that the nutrient differences were insignificant. For example, it has become popular recently to add flavor essences to unsweetened bottled waters. Since these flavors do not alter the nutrients, it is not necessary to record that level of detail. If a flavor is not in the description, it means to use the "plain" selection for all flavors. Therefore, select the type of bottled water, in this case, "Perrier;" a note is not needed. The same holds true for generic flavored and unflavored chips. In addition, "blush" wines fall into this category. For example, if an SP reports drinking a zinfandel wine which is usually white, but says that it was a "blush" wine, you do not need to record that level of detail; select "zinfandel." Be aware that foods formulated to have a reduction in fat or salt, or an addition of nutrients, are constantly coming on the market. These types of foods should be described as much as possible using either the Note or Missing Food screens.

Whenever an ice cream-type product is reported as being at least 1/2 chocolate, and the SP does not know the brand name to specify the item using that route, select "chocolate." "Other flavors" should be selected for chocolate chip flavor since the base is vanilla. As Exhibit 4-73 indicates, you only need to separate "chocolate or coffee," "neopolitan," and "other flavors." If the SP put together his/her own concoction of ice cream, it may be necessary to enter the ice cream twice depending on the flavors chosen. Frequently "ice cream" and ice milk" are used interchangeably; therefore, probe "was that ice cream, ice milk or something else?"

For salads or dishes, such as shish kabobs, where a large number of the ingredients are vegetables, it is important to find out certain information up front. In this way, if each item was prepared in the same fashion, you save time by not repeating the same probe for each item. After itemizing the foods, but before beginning the food selection process, probe as to whether the vegetables were raw, cooked, etc. and whether they were plain or marinated. The SP might say that all the vegetables in the salad were raw and not marinated. In this case, you may select the raw choice in the hierarchy for the remaining vegetables without further probing. On the other hand, if the SP reported a shish kabob (or something similar), probe "were all the foods on the shish kabob cooked in the same way or in a different way?" and "were the foods plain or were they marinated before preparation?" If you were told that all the foods were marinated in the same marinade and cooked in the same fashion, you need only ask the detail of the first food being specified, then you may move quickly through the other items without probing (unless necessary).

When an SP is unsure whether a salad dressing from a salad bar or from a restaurant is commercial, mix, or homemade and there is not an "unknown" selection, select "commercial" or "bottled." It is not necessary to probe for the color (red or green) of tomatoes in a salad; assume they are "red."

For "bacon bits," probe for "real bacon or an imitation."

- **Helpful Hints**

- If the SP reports a bagel with garlic, onion, poppyseed and/or sesame, select the bagel by its base, either "white" or "egg" since these selections include the seasonings (Exhibit 4-74). Cinnamon-raisin and blueberry bagels are also selected by their base. The selections, with raisins, without raisins and with other fruit, are presented on the second screen, in most cases. Disregard the cinnamon since it is a spice. Honey wheat bagels may be entered as "wheat." Marbled bagels should be entered as missing foods.

- Fast food chicken is presented as breaded and fried **with the skin** since this is how it is purchased. If the SP does not eat the skin, specify the chicken using the chicken hierarchy.

Exhibit 4-73.   Food Selection screen: ice cream and frozen desserts

```
FOOD SELECTION  ice cream and frozen desserts, regular (10% fat)



       +----------------------------------------------------------
       ¦ CHO  chocolate or coffee flavors
       ¦ NEO  neopolitan (chocolate, strawberry, and vanilla)
       ¦ OTH  other flavors
       ¦
       ¦
       ¦
       ¦
       ¦
       ¦
       ¦
       ¦
       +----------------------------------------------------------
        food:


  Type in abbreviation or move highlight to choice and press <ENTER>.
```

If an ice cream/ice milk is at least 1/2 chocolate, select "chocolate or coffee."

"Other flavors" includes chocolate chip, strawberry swirl, pistachio, etc.

-       "Unknown oil" should be selected for a generic vegetable oil.

-       It is permissible to define "fresh" and "cured" ham to the SP if he/she is unsure of the terminology. You may explain that fresh hams are tan or beige in color; whereas, cured hams are pink.

-       If an SP reports drinking weak or strong brews of tea or coffee (except expresso), disregard this information. The coffee and tea selections are for all strengths and dilutions; no note is necessary.

-       When an SP reports consuming frozen yogurt, select "frozen" on the first Food Selection screen, then select the flavor or form on the second screen, as shown in Exhibit 4-75.

Exhibit 4-74. Food Selection screen: bagel

<u>Screen 1 of 2</u>

```
FOOD SELECTION  bagel


      +----------------------------------------------------------------
      ¦ WHI   white (plain or with seasonings)
      ¦ EGG   egg (plain or with seasonings)
      ¦ MUR   multigrain with raisins
      ¦ PUM   pumpernickel
      ¦ RYE   rye
      ¦ WHE   wheat
      ¦ WW    whole wheat (100%)
      ¦ CHI   chips
      ¦ U     unknown type
      ¦ WB    wheat bran
      +----------------------------------------------------------------
        food:

 Type in abbreviation or move highlight to choice and press <ENTER>.
```

<u>Screen 2 of 2</u>

```
FOOD SELECTION  bagel, white (plain or with seasonings)


      +---------------------------------------•------------------------
      ¦ NR    without raisins or other fruit
      ¦ R     with raisins
      ¦ OTH   with other fruit
      ¦
      ¦
      ¦
      ¦
      ¦
      ¦
      ¦
      ¦
      +----------------------------------------------------------------
        food:

 Type in abbreviation or move highlight to choice and press <ENTER>.
```

4-179

Exhibit 4-75. Food Selection screen: frozen yogurt

<u>Screen 1 of 2</u>

```
┌─────────────────────────────────────────────────────────────────────┐
│ FOOD SELECTION  yogurt                                                │
│                                                                       │
│                                                                       │
│      +-------------------------------------------------------------   │
│      ¦ FRN   with fruit and nuts                                      │
│      ¦ VAN   vanilla                                                  │
│      ¦ CHO   chocolate                                                │
│      ¦ COF   coffee                                                   │
│      ¦ OTH   other flavors                                            │
│      ¦ U     unknown % fat or flavor                                  │
│      ¦ CHP   chips                                                    │
│      ¦ TOF   tofu-based                                               │
│      ¦ ┌─────────────┐                                                │
│      ¦ │FRZ   frozen │            <-- Select frozen.                  │
│      ¦ └─────────────┘                                                │
│      ¦ LIQ   liquid                                                   │
│      +-------------------------------------------------------------   │
│        food:                                                          │
│                                                                       │
│                                                                       │
│                                                                       │
│   Type in abbreviation or move highlight to choice and press <ENTER>. │
└─────────────────────────────────────────────────────────────────────┘
```

<u>Screen 2 of 2</u>

```
┌─────────────────────────────────────────────────────────────────────┐
│ FOOD SELECTION  yogurt, frozen                                        │
│                                                                       │
│                                                                       │
│      +-------------------------------------------------------------   │
│      ¦ CHO   chocolate                                                │
│      ¦ OTH   fruited/vanilla or other flavors                         │
│      ¦ CHB   chocolate-coated bar                                     │
│      ¦ CAR   carob-coated bar                                         │
│      ¦ SAN   sandwich                    Select the flavor or form.   │
│      ¦ STK   on a stick                                               │
│      ¦ PL    plain                                                    │
│      ¦                                                                 │
│      ¦                                                                 │
│      ¦                                                                 │
│      +-------------------------------------------------------------   │
│        food:                                                          │
│                                                                       │
│   Type in abbreviation or move highlight to choice and press <ENTER>. │
└─────────────────────────────────────────────────────────────────────┘
```

-       Screen 1 in Exhibit 4-76 shows the various options for popcorn. If an SP reports preparing popcorn in a microwave, but it was not the commercially packaged microwave type, select "hot air popped." The selections "hot air popped," "popped in oil," and "unknown type" are unique in that the probing for additional items added during and after preparation is asked on the Preparation and Ingredient screens. As shown in screen 2 in Exhibit 4-76, you may use the "topped with 'butter' and/or salt."

-       When searching through the hierarchies for a "cracker" reported by the respondent, check the **cookie** hierarchy. In screen 1 in Exhibit 4-77, the respondent reported eating a "cracker" and knew the brand was "Social Tea" (which is not listed). However, the "cracker" can be found in the brand name listing of the cookie hierarchy (screen 2 in Exhibit 4-77). Use the same type of procedure for the reverse situation, a cracker called a "cookie."

-       The probe for bananas is, "Was that the regular type or something else?"

-       Select "salt free" for very low sodium seltzer water.

-       Amount Specification

        The imaginary recall presented has a situation which may occur in the field concerning gravy. In this case, the SP not only put gravy on his/her mashed potatoes, but also on one of the pieces of chicken. Since the recall looks at the way in which certain foods are combined, you should indicate first which food items had gravy, and second how much gravy was on each food item.

        Additions for gravy would be added as items to the mashed potatoes and to the chicken drumstick. Since the SP knew the amount used in total, known amounts would be selected for the gravy if the SP was not able to quantify each separately. Attach a note to either gravy entry, as shown in Exhibit 4-78, to indicate the amount of gravy used in total (screen 1). Since only one piece of chicken had gravy, it is a good idea to attach a note e.g., "no gravy" to the other piece (screen 2). In this way, a reviewer knows that you probed.

Exhibit 4-76. Food Selection screen: popcorn

Screen 1 of 2

```
FOOD SELECTION  popcorn

       +-----------------------------------------------------------
       ¦ ┌─────────────────┐
       ¦ │AIR   hot air popped│   The boxed selections lead to Screen 2.
       ¦ └─────────────────┘
       ¦ ┌───────────────┐
       ¦ │OIL   popped in oil│
       ¦ └───────────────┘
       ¦ MIC   microwave popped from package
       ¦ COM   commercially popped
       ¦ ┌──────────────┐
       ¦ │U     unknown type│
       ¦ └──────────────┘
       ¦ CAR   caramel or sugar coated
       ¦ CHE   with cheese
       ¦ CAK   cake
       ¦
       +-----------------------------------------------------------
         food:

 Type in abbreviation or move highlight to choice and press <ENTER>.
```

Screen 1 of 2

```
PREPARATION OF  popcorn, hot air popped

+--------------------- Ingredient/Preparation Selections -----------
¦
¦
¦
+------+-----------------------------------------------------------
       ¦ NONE no fat or salt added in preparation
       ¦ ┌──────────────────────────────────┐
       ¦ │TOP   topped with "butter" and/or salt│<-- Added after preparation.
       ¦ └──────────────────────────────────┘
       ¦ U     unknown if topped with "butter" or salt
       ¦
       ¦
       ¦
       ¦
       ¦
       ¦
       +-----------------------------------------------------------
         food:


 Type in abbreviation or move highlight to choice and press <ENTER>.
```

Exhibit 4-77. Food Selection screen: cracker

```
FOOD SELECTION   [crackers]

                              "Social" is not found under the brand name listing
                              for crackers.

        +----------------------------------------------------------------
        |
        |
        |
        |
        |
        |
        |
        |
        +----------------------------------------------------------------
    Brand name:
+-------------------------------------------------------------------------
| Brand name not found.  Please try again or enter '?' for a full
| brand name listing.
+-------------------------------------------------------------------------
```

```
FOOD SELECTION   [cookies and bars]




        +----------------------------------------------------------------
        |       Nabisco Social Tea Biscuit
        |
        |
        |
        |
        |
        |
        |
        +----------------------------------------------------------------
    Brand name:
```

Exhibit 4-78. Food Selection screen: "K" amount of gravy

```
                                  NOTE ON
      gravy, giblet, broth based


         Amount = Known

                        +------------------ Note Text -------------------+
                        |1/2 cup in total used on chicken drumstick and   |
                        |mashed potatoes.                                 |
                        |                                                 |
                        |                                                 |
                        |                                                 |
                        |                                                 |
                        |                                                 |
                        |                                                 |
                        +-------------------------------------------------+


   Type in notes about the highlighted information.  Press F10 when
   finished.
```

```
                                  NOTE ON
        chicken, breast (pechuga), skin eaten


          Amount = 1.000 medium (3.46 OZ)

                       +------------------ Note Text -------------------+
                       |  no gravy                                      |
                       |                                                |
                       |                                                |
                       |                                                |
                       |                                                |
                       |                                                |
                       |                                                |
                       +------------------------------------------------+


   Type in notes about the highlighted information.  Press F10 when
   finished.
```

- **Helpful Hints:**

- When the SP is estimating the amount of cereal eaten, make sure he/she is approximating the cereal only, not the total with milk. The same holds true for coffee with milk or cream(er). Probe, "Please show me the amount of (coffee/cereal) you (ate/drank) without the milk."

- Sometimes the form selection can be a bit confusing. "Moist" versus "dry" stuffing is differentiated because the moist stuffing is more dense, soggy, or condensed. Although "cooked" and "uncooked" are descriptors in the food selection process for raisins, the reason for the probe is related to the density. Cooked raisins increase the density by plumping the raisin. However, uncooked raisins would still be chosen if raisins were added to a cooked cereal since the measurement of the raisins is done prior to the cooking.

- Nuts and seeds are assumed hulled on the Amount screen.

- Meat is assumed to be without bone for shapes and volume amounts. Probe, "Please show me the amount you ate without the bone."

- For alcoholic beverages prepared in a bar or by a person other than the SP, where the amounts of the ingredients are unknown, enter unknowns and attach a note with the total amount drunk of the beverage. (By attaching the note to the type of combination, you do not have to duplicate the note for all unknown entries.) For example, if the SP drank a "rum and coke" prepared with diet coke, you would describe both the rum and diet coke using the hierarchies, then enter unknown amounts for both the rum and diet coke. A note with the total amount consumed then would be attached to the type of combination "beverage." It is important to include in the note whether the drink was drunk with or without ice.

- For cookies prepared from scratch, dough, mix and/or purchased from a bakery, try to have the SP describe the shape of the cookie and its dimensions. Since there is less standardization in size for non-commercial cookies, food shapes are usually available, such as circles and cylinders, and cubes and rectangles for bar-type cookies. If the SP is unsure, then ask, "small, medium, large," etc. There are no shapes available for brand names because the food-specific unit is the more accurate way to quantify the cookie. Each commercial cookie is assigned the food-specific unit which corresponds to its actual weight. Therefore, you should not enter anything other than the food-specific unit.

-   Notes

If you are recording a situation which will look unusual to a person reviewing the data you collected, attach a note. Examples of this would include cereal eaten dry or toast eaten without a spread. The note can be as simple as "dry" or "plain."

For coffee and tea, it is not necessary to attach a note if sweetener and/or lightener are not added. However, if the SP drank coffee with sugar three times in the day, yet drank his/her evening coffee without sugar, a note is necessary saying "plain." In this case, it would appear that you forgot to probe for additional items added to the coffee.

-   Missing Foods

When you begin the selection process on a food item, you cannot recognize a "missing food" until you confront a screen with options that do not satisfy the item description given by the respondent. A missing food can occur at any hierarchy level, at the beginning, middle or end of the food description process. When an item cannot be explained satisfactorily using the selection process, and you feel this missing information may affect the nutrient content, press F7. The Missing Food screen includes "hints" to assist you in probing for all the necessary information. The food item can only be coded (and added, if necessary, to the database) if complete information has been obtained. Remember that any descriptors of the missing food chosen to that point will be saved. To assure that missing food descriptions are clear, review the Request Forms of your dietary counterpart for all non-market check items (Chapter 6).

Press PgDn to move the highlight to the amount box. Probe to find out the amount and enter this onto the Missing Food screen; describe what portion of the whole was eaten and, if possible, how much was eaten of a model, shape, etc. Use Exhibit 4-79 as a guide as to the degree of information required of a missing food.

If the food can be described with the detail in the hierarchy, do not use the Missing Food screen. This is easier for you since the Amount screens will be automatic. By selecting descriptions, you remember to ask the level of detail that is helpful in identifying the correct food codes. The more information provided by the descriptions in the hierarchy, the more accurate the final coding is for a specific food.

When there is a brand name listing, and the brand name the SP gave is not listed, use the hierarchies when it is a generic or store brand and attach a note with the brand name. On the other hand, when the brand reported by the SP is a national brand and that brand is not included under the brand name listing, enter the food or beverage as a missing food. By following this procedure, NCHS is able to more quickly view these food/beverages to determine which brand name listings should be expanded.

Exhibit 4-79. Missing Food screen: Lean Pockets

```
+-----------------------------------------------------------------------+
|                             FOOD ENTRY                                |
|          Meal Time : 12:00 pm                                         |
|          Meal Name : Lunch                                            |
|          Meal Place: Work                                             |
|                                                                       |
|    +------------------------------------------------------------      |
|    :                                                                  |
|    :    Food Name : lean pocket                                       |
|    :                                                                  |
|    :Item    1: MIXED                                                  |
|    :Item    2:                                                        |
|    :Item    3:                                                        |
|    :Item    4:                                                        |
|    :Item    5:                                                        |
|    :Item    6:                                                        |
|    :Item    7:                                                        |
|    :Item    8:                                                        |
|    :Item    9:                                                        |
|    :Item   10:                                                        |
|    :                                                                  |
|    :    Press F10 when all the food items are listed.                 |
|    +------------------------------------------------------------      |
| Type the first four or more letters of the food item.  Press <ENTER>. |
+-----------------------------------------------------------------------+
```

```
+-----------------------------------------------------------------------+
| FOOD SELECTION  mixed dish                                            |
|                                                                       |
|       +----------------------------------------------------------     |
|       :                                                               |
|       :                                                               |
|       :                                                               |
|       :                                                               |
|       :                                                               |
|       :                                                               |
|       :                                                               |
|       :                                                               |
|       +----------------------------------------------------------     |
|   Brand name:                                                         |
| +--------------------------------------------------------------       |
| : Brand name not found.  Please try again or enter '?' for a full     |
| : brand name listing.                                                 |
| +--------------------------------------------------------------       |
+-----------------------------------------------------------------------+
```

Exhibit 4-79. Missing Food screen: Lean Pockets (continued)

```
MISSING FOOD:    mixed dish

General Description (record food name verbatim and include):
Consistency, flavor, preparation, ingredients, salt and fat.  If
commercial: brand name, package description, modified nutrients or
caloric value, where purchased.
      +-----------------------------------------------------------+
      |Lean Pockets:  Chicken Parmesan
      |Pieces of chicken with a parmesan sauce wrapped in a hard
      |dough
      |Bought at Giant--has picture of the pocket on front of
      |package
      |Less than 300 calories
      |DK price
      |Prepared in microwave w/no fat or salt
      +-----------------------------------------------------------+
Amount & Measurement:  Specify amount before or after cooking; with or
without refuse; volume, weight, or shape; amount actually eaten.
      +-----------------------------------------------------------+
      |Net weight of package:  10.0 oz  Contains two pockets.  SP
      |ate 1.  Cube:  3 inches wide, 6 inches long, 1 inch thick.
      +-----------------------------------------------------------+

Press <PgDn> to move to Amount & Measurement.
```

When the same missing food is reported more than once during an interview, it is acceptable to enter a complete description for one entry and make a brief notation for the other, such as "see above" or "see below." However, enter a complete description if another family member reports that same food.

4.3.11.3   Dialogue and Probes

Exhibit 4-80 presents a succession of 32 screens using coffee with milk and sugar as the example. Examples of probes are written beside each screen. Some of the probes will become very familiar because the foods will be reported frequently. Other times, you will have to carefully evaluate the screen to make sure you ask the question correctly. Remember to always probe for the brand name first if the screen presents that option. Some examples of screen selections for which probing is not necessary have been included in this sequence of screens.

Exhibit 4-80. Examples of dialogue and probes

```
                                    FOOD ENTRY
            Meal Time : 07:00 am
            Meal Name :              I: "At 7:00 am you had coffee."
            Meal Place:              SP: "No, I'm sorry. It was 8:00 in the morning."
                                     Press F2 to return to the meal time.
        +-------------------------------------------------------------------+
        :    Food Name: coff
        +---------------------------- Meal Name Choices --------------------+
        :
        :                  +----------------------------------------+
        :                  : BRE   Breakfast
        :                  : DES   Desayuno
        :                  : BRU   Brunch
        :                  : ALM   Almuerzo
        :                  : LUN   Lunch
        :                  : COM   Comida
        :                  : MER   Merienda
        :                  : DIN   Dinner/Supper
        :                  : CEN   Cena
        :                  +----------------------------------------+
        :    Meal Name:
        :
        +-------------------------------------------------------------------+
Enter the meal name or choose one from the list.
```

```
                                    FOOD ENTRY

            Meal Time : 08:00 am      <-- Type "08:00 am" and press ENTER to continue.
            Meal Name :
            Meal Place:
        +-------------------------------------------------------------------+
        :    Food Name: coff
        +---------------------------- Meal Name Choices --------------------+
        :
        :                  +----------------------------------------+
        :                  : BRE   Breakfast
        :                  : DES   Desayuno
        :                  : BRU   Brunch
        :                  : ALM   Almuerzo
        :                  : LUN   Lunch
        :                  : COM   Comida
        :                  : MER   Merienda
        :                  : DIN   Dinner/Supper
        :                  : CEN   Cena
        :                  +----------------------------------------+
        :    Meal Name:
        :
        +-------------------------------------------------------------------+
Enter the meal name or choose one from the list.
```

Exhibit 4-80. Examples of dialogue and probes (continued)

```
                              FOOD ENTRY

      Meal Time : 08:00 am     I: "At 8:00 am you had some coffee. Would you
      Meal Name :                  consider that a meal or a snack?"
      Meal Place:              SP: "That was my breakfast."
     +-------------------------------------------------------------+
     !    Food Name: coff
     +----------------------- Meal Name Choices -------------------+
     !
     !           +----------------------------------------+
     !           ! +---------------+
     !           ! |BRE   Breakfast|<-- Select breakfast.
     !           ! DES   Desayuno
     !           ! BRU   Brunch
     !           ! ALM   Almuerzo
     !           ! LUN   Lunch
     !           ! COM   Comida
     !           ! MER   Merienda
     !           ! DIN   Dinner/Supper
     !           ! CEN   Cena
     !           +----------------------------------------+
     !       Meal Name:
     !
     +-------------------------------------------------------------+
    |Enter the meal name or choose one from the list.|
```

```
                              FOOD ENTRY

      Meal Time : 08:00 am     I: "Where did you eat your breakfast?"
      Meal Name : Breakfast    SP: "At home."
      Meal Place:
     +-------------------------------------------------------------+
     !    Food Name: coff
     +----------------------- Meal Place Choices ------------------+
     !
     !           +----------------------------------------+
     !           ! +---------------+
     !           ! |HOM   Home|    <-- Select home.
     !           ! WOR   Work
     !           ! SCH   School
     !           ! DAY   Day care/day camp
     !           ! FAS   Fast food/take out
     !           ! DEL   Delicatessen
     !           ! RES   Restaurant
     !           ! CAF   Cafeteria/self-serve buffet
     !           ! STO   Store
     !           +----------------------------------------+
     !       Meal Place:
     !
     +-------------------------------------------------------------+
    |Enter the meal place or choose one from the list.|
```

4-190

Exhibit 4-80. Examples of dialogue and probes (continued)

<u>Screen 5 of 32</u>

```
                          FOOD ENTRY

           Meal Time : 08:00 am
           Meal Name : Breakfast
           Meal Place: Home

      +-----------------------------------------------------+
      !
      !    Food Name : coff
      !
      !Item    1:               You now must press ENTER and type in the four-
      !Item    2:               letter key (computer-allowed abbreviation) for
      !Item    3:               coffee, "COFF."  Press ENTER.
      !Item    4:
      !Item    5:
      !Item    6:
      !Item    7:
      !Item    8:
      !Item    9:
      !Item  10:
      !
      !    Press F10 when all the food items are listed.
      +-----------------------------------------------------+
Press <ENTER> to proceed with the specification of the food name
displayed.
```

<u>Screen 6 of 32</u>

```
                          FOOD ENTRY

           Meal Time : 08:00 am
           Meal Name : Breakfast
           Meal Place: Home
      +-----------------------------------------------------+
      !
      !    Food Name : coff
      !
      !Item    1: COFF          I: "Did you add anything to your coffee at the
      !Item    2:                  table?"
      !Item    3:               SP: "Yes."
      !Item    4:
      !Item    5:
      !Item    6:
      !Item    7:
      !Item    8:
      !Item    9:
      !Item  10:
      +-----------------------------------------------------+
Type the first four or more letters of the food item.  Press <ENTER>.
```

Exhibit 4-80. Examples of dialogue and probes (continued)

```
                              FOOD ENTRY
          Meal Time  : 08:00 am
          Meal Name  : Breakfast
          Meal Place: Home

   +----------------------------------------------------------------+
   :
   :    Food Name  : coff
   :
   :Item   1: COFF          SP: "I added some milk."
   :Item   2: MILK          I: "Did you add anything else?"
   :Item   3:
   :Item   4:
   :Item   5:
   :Item   6:
   :Item   7:
   :Item   8:
   :Item   9:
   :Item  10:
   :
   :    Press F10 when all the food items are listed.
   +----------------------------------------------------------------+
Type the first four or more letters of the food item.  Press <ENTER>.
```

```
                              FOOD ENTRY
          Meal Time  : 08:00 am
          Meal Name  : Breakfast
          Meal Place: Home

   +----------------------------------------------------------------+
   :
   :    Food Name  : coff
   :
   :Item   1: COFF          SP: "Some sugar."
   :Item   2: MILK          I: "Anything else besides milk and sugar?"
   :Item   3: SUGA          SP: "No. That was all."
   :Item   4:
   :Item   5:
   :Item   6:
   :Item   7:
   :Item   8:
   :Item   9:
   :Item  10:
   :
   :    Press F10 when all the food items are listed.
   +----------------------------------------------------------------+
Type the first four or more letters of the food item.  Press <ENTER>.
```

Exhibit 4-80. Examples of dialogue and probes (continued)

```
FOOD SELECTION  coffee
                              I: "Was the coffee regular, decaffeinated, one of
                                  the  stronger types like espresso, or some
                                  other type?"
        +-----------------------------------------------------------+
        ¦ [REG  regular]          SP: "Regular."
        ¦ NC   decaffeinated
        ¦ RED  reduced caffeine (50% of regular)
        ¦ U    unknown if regular or decaffeinated
        ¦ ACI  acid neutralized
        ¦ CAFE cafe au lait
        ¦ CAPP cappuccino
        ¦ CUBA Cuban coffee
        ¦ DEMI demi-tasse
        ¦ DRY  dry instant - unprepared     EXTENDED SCREEN DISPLAY.
        ¦ ESPR espresso
        ¦ IRIS Irish coffee with alcohol
        ¦ LEC  cafe con leche (sweetened with sugar)
        ¦ LIQ  liquid concentrate - unprepared
        ¦ MEX  Mexican coffee
        ¦ MIX  prepared from flavored mix
        ¦ SUB  coffee substitute
        ¦ TUR  Turkish coffee
        +-----------------------------------------------------------+
          food:
```

```
FOOD SELECTION  coffee, regular
                              I: "Was the coffee made from ground, instant,
                                  or something else?"
                              SP: "From ground."
        +-----------------------------------------------------------+
        ¦ [GRO  made from ground]<-- Select ground.
        ¦ INS  made from instant
        ¦ CON  made from liquid concentrate
        ¦ U    unknown preparation
        ¦ VEN  from vending machine
        ¦ DRY  dry instant - unprepared
        ¦ LIQ  liquid concentrate - unprepared
        ¦
        ¦
        ¦
        +-----------------------------------------------------------+
          food:
```

Exhibit 4-80. Examples of dialogue and probes (continued)

```
FOOD SELECTION  coffee, regular, made from ground

                          I:  "Was the coffee plain or flavored?"
                          SP: "Plain."

    +-------------------------------------------------------------+
    |  +------------+
    |  | PL    plain |           <-- Select plain.
    |  +------------+
    |  FLA   flavored
    |
    |
    |
    |
    |
    |
    |
    |     .
    +-------------------------------------------------------------+
      food:
```

```
AMOUNT OF        coffee, regular, made from ground, plain

                          I:  "How much coffee did you drink without
                                the milk?"

                          The SP points to 3/4 of the mug model.

    +------------------------- Measurements ----------------------+
    |     +--------+
    |     | volume |            <-- Select volume.
    |     +--------+
    |     weight
    |
    |
    |
    |
    |
    |     .
    |
    +-------------------------------------------------------------+
      unit:
```

Exhibit 4-80. Examples of dialogue and probes (continued)

```
AMOUNT OF        coffee, regular, made from ground, plain

  Measurement: volume


      +------------------- Volume Units --------------------+
      ¦ CP   cup
      ¦ FO   fluid ounce
      ¦ TB   tablespoon
      ¦ TS   teaspoon
      ¦ PT   pint
      ¦ L    liter
      ¦ CI   cubic inch
      ¦     [food model]        <-- Select food model.
      ¦
      ¦
      +-----------------------------------------------------+

      unit:
```

```
AMOUNT OF        coffee, regular, made from ground, plain

  Measurement: volume








  food model:                  <-- You are prompted for the computer-allowed
                                   abbreviation.


  [Enter a food model.]
```

Exhibit 4-80. Examples of dialogue and probes (continued)

```
AMOUNT OF        coffee, regular, made from ground, plain

  Measurement: volume




                                                          .






   food model: [MUG]              <-- Enter MUG.



 Enter a food model.
```

```
AMOUNT OF        coffee, regular, made from ground, plain

  Measurement: volume





                    .


      unit: MUG = 10 FO
      amount:                  The SP pointed to the 3/4 line.

 Enter the amount.  Press <ENTER>.
```

Exhibit 4-80. Examples of dialogue and probes (continued)

Screen 17 of 32

```
AMOUNT OF         coffee, regular, made from ground, plain


   Measurement: volume










          unit: MUG = 10 FO
         amount: 3/4              <-- Press ENTER to process the amount.


 Enter the amount.  Press <ENTER>.
```

Screen 18 of 32

```
AMOUNT OF         coffee, regular, made from ground, plain

   Measurement: volume



      Amount = 0.750 MUG (7.50 FO) <-- The system displays the common unit.

                    MUG = 10 FO






      Press <ENTER> to continue.
```

Exhibit 4-80. Examples of dialogue and probes (continued)

Screen 19 of 32

```
                            FOOD ENTRY

          Meal Time : 08:00 am
          Meal Name : Breakfast
          Meal Place: Home

   +------------------------------------------------------------------+
   |
   |   Food Name : coff
   |
   |Item    2: MILK           I: "You said you added milk to your coffee.  Was
   |Item    3: SUGA               that actually milk, cream, or something else?"
   |Item    4:                SP: "Milk."
   |Item    5:
   |Item    6:                Note: If the SP had said, "cream," you would
   |Item    7:                simply type over the MILK entry with the
   |Item    8:                appropriate four-letter key.
   |Item    9:
   |Item   10:
   |
   |    Press F10 when all the food items are listed.
   +------------------------------------------------------------------+
Type the first four or more letters of the food item.  Press <ENTER>.
```

Screen 20 of 32

```
FOOD SELECTION   milk

      +------------------------------------------------------------------+
      | WHO   whole
      | TWO   2% fat            I: "Was the milk fresh, canned, or from dry?"
      | ONE   1% fat            SP: "Evaporated."
      | SKM   skim
      | LOW   low fat
      | U     unknown % fat
      | FOR   fortified with calcium
      | REC   reconstituted from dry
      | DRY   unprepared dry powder
      | ACI   acidophilus
      | BUT   buttermilk                 EXTENDED SCREEN DISPLAY
      | CHO   chocolate
      | CON   condensed (sweetened)
      | [EVA   evaporated]       <-- Select evaporated.
      | GOA   goat
      | HUM   human
      | LAC   Lactaid (lactose reduced)
      | LS    low sodium whole
      | MIX   mixtures and milk drinks
      | SOY   soymilk
      +------------------------------------------------------------------+
        food:
```

4-198

Exhibit 4-80. Examples of dialogue and probes (continued)

```
FOOD SELECTION  milk, evaporated

                              I:  "Was the milk diluted or undiluted?"
                              SP: "I just poured the milk from the can right into
                                   my coffee."

   +-------------------------------------------------------------------+
   ¦ DIL   diluted
   ¦ ND    undiluted          <-- Select undiluted.
   ¦ U     unknown if diluted
   ¦
   ¦
   ¦
   ¦
   ¦
   ¦
   ¦
   +-------------------------------------------------------------------+
     food:
```

```
FOOD SELECTION  milk, evaporated, undiluted

                              I:  "Was the milk whole, 2% fat, skim or some
                                   other type?"
                              SP: "Whole."

   +-------------------------------------------------------------------+
   ¦ WHO   whole              <-- Select whole.
   ¦ TWO   2% fat
   ¦ SKM   skim
   ¦ U     unknown % fat
   ¦ SUB   substitute or imitation (filled)
   ¦
   ¦
   ¦
   ¦
   +-------------------------------------------------------------------+
     food:
```

4-199

Exhibit 4-80. Examples of dialogue and probes (continued)

```
AMOUNT OF        milk, evaporated, undiluted, whole

                            I:  "How much milk did you add to your coffee?"
                            The SP points to the 1/4 measuring cup.


    +------------------------ Measurements ------------------------+
    |      [volume]              <-- Select volume.
    |      weight
    |
    |
    |
    |
    |
    |
    |
    +-------------------------------------------------------------+
        unit:
```

```
AMOUNT OF        milk, evaporated, undiluted, whole
   Measurement: volume


    +------------------------ Volume Units -----------------------+
    |  [CP   cup]               <-- Select cup.
    |  FO   fluid ounce
    |  TB   tablespoon
    |  TS   teaspoon
    |  PT   pint
    |  L    liter
    |  CI   cubic inch
    |       food model
    |
    +-------------------------------------------------------------+
        unit:
```

Exhibit 4-80. Examples of dialogue and probes (continued)

Screen 25 of 32

```
AMOUNT OF       milk, evaporated, undiluted, whole


   Measurement: volume

      .








         unit: CP   cup
        amount: 1/4              <-- Press ENTER to process the amount.

Enter the amount.  Press <ENTER>.
```

Screen 26 of 32

```
                         FOOD ENTRY

        Meal Time  : 08:00 am
        Meal Name  : Breakfast
        Meal Place : Home

   +--------------------------------------------------------------+
   |   Food Name : coff                                           |
   |
   |Item   3: SUGA      I: "You also added sugar to your coffee.
   |Item   4:              Was that real sugar or a sugar substitute
   |Item   5:              (artificial sweetener)?"
   |Item   6:           SP: "Real sugar."
   |Item   7:
   |Item   8:
   |Item   9:           Note:  If the SP had said, "artificial sweetener,"
   |Item  10:           you would simply type over the SUGA entry with
   |Item  11:           the appropriate four-letter key.
   |Item  12:
   |
   |    Press F10 when all the food items are listed.
   +--------------------------------------------------------------+
Type the first four or more letters of the food item.  Press <ENTER>.
```

4-201

Exhibit 4-80. Examples of dialogue and probes (continued)

Screen 27 of 32

```
FOOD SELECTION   sugar

                                I: "Did you use regular white granulated sugar or
                                      some other type?"
                                SP: "The white granulated kind."

   +----------------------------------------------------------------------+
   |  [WHI   white granulated]<--Select white granulated.
   |  BRO   brown
   |  POW   powdered confectioner's
   |  CAR   carmelized
   |  CIN   cinnamon
   |  MAP   maple
   |  RAW   raw
   |  ROC   rock
   |  U     unknown type
   |
   +----------------------------------------------------------------------+
    food:
```

Screen 28 of 32

```
AMOUNT OF         sugar, white granulated

                                I: "How much sugar did you add to your coffee?"
                                SP: "A cube."




   +------------------------ Measurements ------------------------+
   |        volume
   |        weight
   |  [CBE cube]                    <-- Select cube.
   |  PKT packet
   |  LUM lump (each approx 1 ts or 2 cubes)
   |
   |
   |
   |
   +-------------------------------------------------------------+
    unit:
```

Exhibit 4-80. Examples of dialogue and probes (continued)

```
AMOUNT OF        sugar, white granulated


                                    I:  "Did you use one cube or more than one?"
                                    SP:  "Just one."






          unit: CBE cube
        amount:


 Enter the amount.  Press <ENTER>.
```

```
AMOUNT OF        sugar, white granulated












          unit: CBE cube
        amount: 1            <-- Press ENTER to process the amount.

 Enter the amount.  Press <ENTER>.
```

Exhibit 4-80. Examples of dialogue and probes (continued)

```
AMOUNT OF        sugar, white granulated




         Amount = 1.000 cube (0.60 TS)    <-- The system displays the
                                              common unit.







         Press <ENTER> to continue.
```

```
                         FOOD ENTRY

          Meal Time : 08:00 am
          Meal Name : Breakfast
          Meal Place: Home
   +-----------------------------------------------------------+
   ! Food Name: coff
   +----------------------- Combination Types -----------------+
   !
   !            +-------------------------------------------+
   !            ! SAN  Sandwich
   !            ! BRE  Bread with additions
   !            ! CER  Cereal with additions
   !            ! SAL  Salad
   !            ! BEV  Beverage           <-- Select beverage as the
   !            !                             combination type.
   !            ! MIX  Mixed dish
   !            ! MIXA Mixed dish with additions
   !            ! MEA  Meat, fish, poultry with additions
   !            ! VEGA Vegetables with additions
   !            ! VEG  Vegetable combination
   !            +-------------------------------------------+
   !    Combination Type:
   !
   +-----------------------------------------------------------+
   Enter the combination type or choose one from the list.
```

4-204

4.3.12.1   Recall Review

It is critical to review the entire 24-hour recall with the respondent upon completion of that section of the interview. First let the respondent know what is expected next by saying something like, "We have gone through all the foods that you have listed. I would now like to quickly review those foods with you to make sure I have entered everything correctly. Please feel free to stop me at any time if I have made any errors or if you remember anything else." Follow this statement with, "From midnight until (time of first meal code), you had nothing to eat or drink." Pause a moment for an affirmative response from the respondent, then begin the review of the SP's intake aloud, for example, "At 7:00 in the morning you ate breakfast at home. You had one slice of toast with butter, and decaffeinated coffee with Equal ..." Continue this procedure until you have reviewed the complete recall.

As you progress through the Recall Review, allow the respondent to make corrections or add any forgotten food items. Try to analyze the list for foods/beverages or added ingredients that the respondent may have missed. In addition, try to identify any mistakes (wrong entries) that you may have made when entering the data. Pay particular attention to the flow or "sense" of the entire 24-hour period. For example, if the SP is apparently a coffee drinker, but did not report coffee at breakfast, make sure that what was reported is correct. If no beverage was reported, ask whether he/she had anything to drink with breakfast. Do not say, "Did you have coffee in the morning?" Instead say, "Did you have your breakfast with or without a beverage?" A note is not necessary if the SP indicates that no beverage was drunk with a specific meal. It is assumed that you probed for this information.

If a meal appears incomplete, such as a sandwich reported for lunch without a beverage, probe by saying something like, "Was there anything else you ate or drank when you ate your sandwich?" Use only neutral probes; do not suggest a particular food, such as, "Did you have a dessert at lunch?" While reviewing the recall, look for large gaps in time; draw the respondent's attention to it by saying, "<u>Then you had nothing to eat or drink from 8:00 am until 1:00 pm, when you had lunch.</u>" This should cue the respondent to remember to report beverages and/or food consumed during a coffee break or an in-between-meal snack.

Also pay attention to foods/beverages that commonly have other added items. Even though you probed for additional items at the Food Entry screen, it is sometimes beneficial to ask again. Also, look for places where you may have forgotten to probe. For example, if a SP reports having a martini, ask whether or not anything was added to the martini. However, do not ask, "Did that martini have an olive?" Frozen yogurt has recently gained popularity; always ask whether anything was added to the yogurt. Again, do not ask, "Did you add carob chips to your yogurt?" Remain neutral by using a probe similar to, "Did you add any toppings to your yogurt or did you eat it plain?"

4.3.12.1   The Recall Review Screen

After completing the food selection process for the last food on the Quick List, the Recall Review screen (Exhibit 4-81) appears which includes a numbered list of completed food selections. The amounts reported by the SP are presented below each food selection description. The Recall Review screen does not show fractions; therefore, "1/3 CP" entered at the Amount screen is now presented as a decimal, "0.33 CP." Items in a multi-component food are listed below the type of combination.

Missing Foods are shown with the descriptors chosen through the food selection process. Notes regarding meal information are displayed below the meal time, name and place. Notes regarding food selection descriptions and/or amounts are displayed below the amount, and notes regarding multi-component foods are displayed below the type of combination.

4.3.12.2   Making Changes on the Recall Review

To move the highlight up and down the Recall Review screen, you may use the up and down arrow keys, and the "home" and "end" keys. "PgUp" and "PgDn" are not functional on this screen. The word, "More..." will appear in the lower or upper right hand corner of the screen if more foods follow or more foods are listed above on the Recall Review, respectively.

Since the edit options and function keys are not listed in the message area at the bottom of the screen, you must press F4 to determine the edit options and function keys available for use (Exhibit 4-82). The edit options and function keys that are not available during Recall Review will be displayed in reverse video. Depending on the type of change you wish to make, the various editing options include pressing F5 to insert a food, F6 to delete a food, and F8 to attach a note. You may press CTRL and F5 simultaneously to insert a meal or food at the end of the Recall Review screen regardless of the position of the highlight. You may move the highlight to a missing food and press ENTER to review or modify the text on the Missing Food screen. To edit an amount, simply place the highlight on a food item and press ENTER and the system will bring you to the first amount screen. Other available keys are the F1 Help screen, F3 System Hold and F10 to advance to the next screen.

Other options include moving from the Recall Review screen to other parts of the system. For example, from the Recall Review screen, you may access the Recall Header screen to view the participant information recorded there. You may access a clean Quick List screen to insert a new meal or multiple meals, or you may print the Recall Report which is the hard copy of the Recall Review.

Exhibit 4-81. Recall Review screen

```
                          RECALL REVIEW
      06:00 am                    Breakfast                    Home


  1.   Beverage

       1.1  tea, herbal                               .
            1.00 COF

       1.2  sugar, white granulated
            0.50 packet

  2.   wheat bread, whole wheat (100%), regular, commercial, toasted
       2.00 slice (4" x 4" x 1/2")                         .

       *Note:  Toast eaten dry.  No spread.< -- Note is displayed.
 --------------------------------------------------------------------
       12:00 pm                     Lunch                      Work

 @3.   missing food:  mixed dish<--Missing Food including food selection
                                   descriptions.

  4.   Kool-Aid , [Kool-Aid - presweetened, prepared]
  +    12.00 fluid ounce - volume with ice      Indicates more below.
 --------------------------------------------------------------- More...
 ----------------------------- Press F1 for help --------------------
```

4-207

Exhibit 4-82. Recall Review screen: System Menu

```
      06:00 am              +------- System Menu ------+           Home
                            ¦ Recall Header
1.      Beverage            ¦ Quick List
                            ¦ Food Entry
      1.1  tea, herbal      ¦ Recall Review
           1.00 COF         ¦ Recall Trailer
                            ¦ End of Recall
      1.2  sugar, white gr¦ Print Recall Report
           0.50 packet      ¦ Exit Recall
                            ¦ Exit DDC
2.    wheat bread, whole w¦ ------------------------cial, toasted
      2.00 slice (4" x 4"  ¦ Help               F1
                            ¦ Back Up            F2
      *Note:  Toast eaten   ¦ System Hold        F3
------------------------- ¦ Insert             F5  ---------------
      12:00 pm             ¦ Delete             F6              Work
                            ¦ Missing Food       F7
------------------------- ¦ Note               F8  -------- More...
                            ¦ ENG/SPA Toggle     F9
                            ¦ Next Screen        F10
                            ¦
                            ¦ Press <ESC> to exit menu
                            +---------------------------+

        Only the selections printed in bold are available on the Recall Review screen.
```

-        **Use of the F5 Key**

The F5 key may be used to insert a new meal or food(s), insert a food into an existing combination or create a combination food. After pressing F5, a small "Item Insertion Menu" will appear on the screen (Exhibit 4-83). Depending on whether you highlighted a meal line, a single food item or a food in an existing combination, you will be asked to specify whether you would like to: insert a new meal; insert a food or food(s); create a combination food; or, insert a food into an existing combination. The item you highlighted dictates the allowable insert options; the options that aren't available will be displayed in reverse video. To make a selection, highlight the appropriate selection and press ENTER. Press the ESCAPE key to cancel the insert.

Exhibit 4-83. Recall Review screen: Item Insertion Menu

```
      06:00 am                   Breakfast                         Home
1.     Beverage

       1.1  tea, herbal
            1.00 COF

       1.2  sugar, white granulated
            0.50 packet +---- Item Insertion Menu -----+
                         | Insert New Meal              |
2.     wheat bread, whol| Insert New Food(s)            |ial, toasted
       2.00 slice (4" x | Insert Food Into Combination  |
                         | Create ComBination Food       |
       *Note:  Toast eat+------------------------------+
----------------------------------------------------------------------
      12:00 pm                   Lunch                           Work

---------------------- Press F1 for help ---------------- More...



Press <Enter> to insert a new food or <ESC> to cancel.
```

To insert a new meal: Highlight the meal line (meal time, name, and place) that you want to insert a new meal above and press the F5 key. "Insert New Meal" is the only available selection on the Item Insertion Menu. Press ENTER. You will be brought to the Food Entry screen where you must enter the time, name, and place eaten for the new meal. Type the food name and item(s) for the first food. After completing the food selection process for this food, the system will return to the Food Entry screen. Press F10 to return to the Recall Review screen. Exhibit 4-84 illustrates the process of inserting a new meal.

Though the system allows you to specify more than one food with this procedure, only use it to insert a new meal containing **one** food or food combination. Use the Quick List procedure described shortly to insert new meals with two or more foods or food combinations.

To insert a new food(s): Highlight the food item that you want to insert a new food above and press the F5 key. Press "f," or highlight "Insert New Food(s)" on the Item Insertion Menu and press ENTER. You will be brought to the Food Entry screen which will include the completed meal time, name and place information. Type the food name and item(s), and proceed with the food selection process. After specifying the food or food combination, you will be brought back to the Food Entry screen. If you want to enter another food, repeat the process above or press F10 to return to the Recall Review screen. Exhibit 4-85 illustrates the process of inserting a new food.

Exhibit 4-84. Recall Review screen: inserting a new meal

<u>Screen 1 of 5</u>

```
+----------------------------------------------------------------------+
|                           RECALL REVIEW                              |
|                                                                      |
|  2.  wheat bread, whole wheat (100%), regular, commercial, toasted   |
|      2.00 slice (4" x 4" x 1/2")                                     |
|                       +---- Item Insertion Menu -----+               |
|          *Note:  Toas| [Insert New Meal]             |               |
| ---------------------| Insert New Food(s)            |-------------   |
|    [12:00 pm]        | Insert Food Into Combination  |      Work      |
|                      | Create ComBination Food       |               |
| @3.   missing food:  m+------------------------------+               |
|                                                                      |
| '4.   Kool-Aid, [Kool-Aid - presweetened, prepared]                 |
|       12.00 fluid ounce                                              |
| ------------------------------ Press F1 for help ----------------    |
|                                                                      |
| +------------------------------------------------------------+       |
| |Press <Enter> to insert a new meal or <ESC> to cancel.      |       |
| +------------------------------------------------------------+       |
|                                                                      |
|     Highlight the meal line (meal time, name and place) that you want to insert the new meal |
|     above.  Press F5 to select "Insert New Meal."  Press ENTER.      |
+----------------------------------------------------------------------+
```

<u>Screen 2 of 5</u>

```
+----------------------------------------------------------------------+
|                           FOOD ENTRY                                |
|                                                                      |
|          Meal Time :   :                                            |
|          Meal Name :             Enter new meal information.        |
|          Meal Place:                                                 |
|                                                                      |
|      +------------------------------------------------------------   |
|      |                                                               |
|      |   Food Name :                                                 |
|      |                                                               |
|      |Item    1:                                                     |
|      |Item    2:                                                     |
|      |Item    3:                                                     |
|      |Item    4:                                                     |
|      |Item    5:                                                     |
|      |Item    6:                                                     |
|      |Item    7:                                                     |
|      |Item    8:                                                     |
|      |Item    9:                                                     |
|      |Item   10:                                                     |
|      |                                                               |
|      |   Press F10 when all the food items are listed.               |
|      +------------------------------------------------------------   |
|  Please enter the meal time.                                        |
+----------------------------------------------------------------------+
```

Exhibit 4-84. Recall Review screen: inserting a new meal (continued)

```
+----------------------------------------------------------------+
|                        FOOD ENTRY                              |
|        Meal Time  : 10:30 am                                   |
|        Meal Name  : Snack/Beverage                             |
|        Meal Place : Work                                       |
|           .                                                    |
|   +--------------------------------------------------------    |
|   :                                                            |
|   :    Food Name  :  popcorn                                   |
|   :                                                            |
|   :Item    1: POPC                                             |
|   :Item    2:                                                  |
|   :Item    3:                                                  |
|   :Item    4:                                                  |
|   :Item    5:          Enter the food name and item(s).        |
|   :Item    6:                                                  |
|   :Item    7:                                                  |
|   :Item    8:                                                  |
|   :Item    9:                                                  |
|   :Item   10:                                                  |
|   :                                                            |
|   :    Press F10 when all the food items are listed.           |
|   +--------------------------------------------------------    |
| Type the first four or more letters of the food item. Press <ENTER>. |
+----------------------------------------------------------------+
```

```
+----------------------------------------------------------------+
| AMOUNT OF       popcorn, commercially popped, plain            |
|                                                                |
|    Measurement: volume                                         |
|                                                                |
|                                                                |
|        Amount = 1.000 B2 (2.00 CP)                             |
|                                                                |
|                 B2 = 16 FO                                     |
|                                                                |
|                                                                |
|                                                                |
|                                                                |
|        Press <ENTER> to continue.                              |
|                                                                |
+----------------------------------------------------------------+
```

After specifying all items listed, the system will return to the Food Entry screen. Press F10 to return to the Recall Review screen.

Exhibit 4-84. Recall Review screen: inserting a new meal (continued)

```
                           RECALL REVIEW
-------------------------------------------------------------- More...


 2.    wheat bread, whole wheat (100%), regular, commercial
       2.00 slice (4" x 4" x 1/2")

       *Note:  Toast eaten dry.  No spread.
-------------------------------------------------------------------
     | 10:30 am                       Snack                    Work |
     |_____|

 3.    popcorn, commercially prepared, plain
       1.00 B2
-------------------------------------------------------------------
       12:00 pm        ,                Lunch                    Work

@4.    missing food:  mixed dish

 5.    Kool-Aid, [Kool-Aid - presweetened, prepared]
       12.00 fluid ounce
-------------------------------------------------------------- More...
---------------------------- Press F1 for help ----------------------
```

Exhibit 4-85. Recall Review screen: inserting a new food or foods

Screen 1 of 4

```
+----------------------------------------------------------------------+
|                           RECALL REVIEW                              |
|                                                                      |
|   2.   wheat bread, whole wheat (100%), regular, commercial, toasted |
|        2.00 slice (4" x 4" x 1/2")                                   |
|                        +----- Item Insertion Menu -----+            |
|            *Note:  Toas¦ Insert New Meal                ¦            |
|   ----------------------¦ ┌─────────────────────┐       ¦----------- |
|                         ¦ │ Insert New Food(s)  │       ¦            |
|        12:00 pm         ¦ └─────────────────────┘       ¦      Work  |
|                         ¦ Insert Food Into Combination ¦            |
|                         ¦ Create ComBination Food      ¦            |
|   @3.  ┌────────────┐:  +-------------------------------+            |
|        │missing food│                                               |
|        └────────────┘                                               |
|                                                                      |
|   4.    Kool-Aid, [Kool-Aid - presweetened, prepared]               |
|         12.00 fluid ounce                                            |
|   --------------------------------- Press F1 for help -------------- |
|                                                                      |
|   ┌──────────────────────────────────────────────────────┐          |
|   │Press <Enter> to insert a new food or <ESC> to cancel. │          |
|   └──────────────────────────────────────────────────────┘          |
|                                                                      |
|        Highlight the food that you want to insert the new food(s) above.  Press F5 and highlight |
|        "Insert New Food(s)".  Press ENTER.                          |
+----------------------------------------------------------------------+
```

Screen 2 of 4

```
+----------------------------------------------------------------------+
|                           FOOD ENTRY                                 |
|             Meal Time : 12:00 pm                                     |
|             Meal Name : Lunch                                        |
|             Meal Place: Work                                         |
|                                                                      |
|     +---------------------------------------------------------------- |
|     ¦                                                                |
|     ¦    Food Name : pretzels                                        |
|     ¦                                                                |
|     ¦Item    1: PRET            <-- Enter the food name and item(s). |
|     ¦Item    2:                                                      |
|     ¦Item    3:                                                      |
|     ¦Item    4:                                                      |
|     ¦Item    5:                                                      |
|     ¦Item    6:                                                      |
|     ¦Item    7:                                                      |
|     ¦Item    8:                                                      |
|     ¦Item    9:                                                      |
|     ¦Item   10:                                                      |
|     ¦                                                                |
|     ¦   Press F10 when all the food items are listed.                |
|     +---------------------------------------------------------------- |
|  Type the first four or more letters of the food item.  Press <ENTER>. |
+----------------------------------------------------------------------+
```

Exhibit 4-85. Recall Review screen: inserting a new food or foods (continued)

<u>Screen 3 of 4</u>

```
AMOUNT OF        pretzels, hard type, salted, twists or rings




          Amount = 5.000 medium (0.38 CP)








        Press <ENTER> to continue.
```

After specifying the new food(s), the system will return to the Food Entry screen where you may repeat the process or press F10 to return to the Recall Review screen.

<u>Screen 4 of 4</u>

```
                         RECALL REVIEW
          1.1   tea, herbal
                1.00 COF

          1.2   sugar, white granulated
                0.50 packet

   2.     wheat bread, whole wheat (100%), regular, commercial, toasted
          2.00 slice (4" x 4" x 1/2")

          *Note:  Toast eaten dry.  No spread.
   ------------------------------------------------------------------
        12:00 pm                      Lunch                    Work

   3.     pretzels , hard type, salted, twists or rings
          5.00 medium (2 3/4" diam)

   @4.    missing food:  mixed dish
   --------------------------- Press F1 for help --------------------
   More...
```

Pretzels appear above the food item initially highlighted.

To insert a food into a combination: Highlight the food in the combination that you want to insert the new food above and press the F5 key. "Insert Food Into Combination" is the only selection available on the Item Insertion Menu. Press ENTER. You will be brought to the Food Entry screen which will include the completed meal time, name and place information. The highlight will appear at "item 1:" and the food name will be the name originally entered for the combination. Type the four-letter key(s) of the item(s) you wish to insert into the combination and proceed with the food selection process. After specifying all of the item(s), you will be brought to the Recall Review screen. Exhibit 4-86 illustrates the process of inserting a food into an existing combination.

To create a combination food: Highlight the food that you would like to include in a combination and press the F5 key. From the Item Insertion Menu, press "b," or highlight "Create Combination Food" and press ENTER. You will be brought to the Food Entry screen which includes the completed meal time, name and place information. The highlight will appear at "item 1:" and the food name will be the name initially entered for the item. You may press F2 to edit the food name, if necessary. Or, press ENTER, type the four-letter key(s) of the item(s) you wish to include in the combination and proceed with the food selection process. You will be prompted for the type of combination before returning to the Recall Review screen. Exhibit 4-87 illustrates creating a combination food.

-        **Use of the 'Ctrl' and 'F5' combination keys**

You may simultaneously press the 'Ctrl' and 'F5' keys to insert a new meal or new food(s) at the end of the Recall Review, regardless of the location of the highlight.   After pressing these keys, the "Item Insertion Menu" will appear and you must specify whether you would like to insert a new meal or food(s). You may also insert a food into a combination if the last food on the Recall Review is a combination food. Move the highlight to the appropriate selection and press ENTER. Follow the same procedures for inserting a new meal, inserting a new food(s) and inserting a food into a combination that were described above. Press the ESCAPE key to cancel the insert.

Exhibit 4-86. Recall Review screen: inserting a food into a combination

Screen 1 of 4

```
                            RECALL REVIEW

         06:00 am                    Breakfast                       Home

1.      Beverage:  tea

        1.1  tea, herbal
             1.00 COF

        1.2  sugar, white granulated
             0.50 packet +---- Item Insertion Menu -----+
                         ¦ Insert New Meal               ¦
2.      [wheat bread], who¦ Insert New Food(s)            ¦ial, toasted

        2.00 slice (4" x  ¦ [Insert Food Into Combination]¦
                          ¦ Create Combination Food       ¦
        *Note:  Toast eat+-------------------------------+
     -----------------------------------------------------------------
        12:00 pm                     Lunch                       Work

     ----------------------- Press F1 for help --------------- More...

Press <Enter> to insert a food into this combination or <ESC> to
cancel.

        Highlight the food in the combination that you want to insert the new food above.  Press
        F5 to select "Insert Food Into Combination" and press ENTER.
```

Screen 2 of 4

```
                            FOOD ENTRY

        Meal Time : 06:00 am
        Meal Name : Breakfast
        Meal Place: Home
     -----------------------------------------------------------------

        Food Name : tea

Item    1: [CREA]                        <-- Enter the item(s).
Item    2:
Item    3:
Item    4:
Item    5:
Item    6:
Item    7:
Item    8:
Item    9:
Item   10:

     Press F10 when all the food items are listed.
     -----------------------------------------------------------------
Enter the first four or more letters of the food item.  Press <ENTER>.
```

Exhibit 4-86. Recall Review screen: inserting a food into a combination (continued)

```
AMOUNT OF        cream, half and half (10-12% fat)


   Measurement: volume



        Amount = 1.000 tablespoon (0.06 CP)









        Press <ENTER> to continue.
```

```
                        RECALL REVIEW
   06:00 am                   Breakfast                    Home
1.    Beverage:  tea

      1.1  tea, herbal
           1.00 COF

      1.2  sugar, white granulated
           0.50 packet

      1.3  [cream], half and half (10-12% fat)
           1.00 tablespoon

2.    wheat bread, whole wheat (100%), regular, commercial, toasted
      2.00 slice (4" x 4" x 1/2")

      *Note:  Toast eaten dry.  No spread.
------------------------- Press F1 for help --------------- More...

        The new food appears above the food item initially highlighted.
```

Exhibit 4-87. Recall Review screen: creating a combination food

Screen 1 of 4

```
┌──────────────────────────────────────────────────────────────────────────────┐
│  2.   ┌───────────┐                                                            │
│       │wheat bread│, whole wheat (100%), regular, commercial, toasted          │
│       └───────────┘                                                            │
│       2.00 slice (4" x 4" x 1/2")                                              │
│  ----------------------------------------------------------------------------- │
│   12:00 pm                          Lunch                          Work        │
│                                                                                │
│   3.    mustard, regular                                                       │
│         1.50 tablespoon +---- Item Insertion Menu -----+                       │
│                         ¦ Insert New Meal               ¦                      │
│   4.    pretzels, hard t¦ Insert New Food(s)            ¦                      │
│         5.00 medium (2 3¦ Insert Food Into Combination  ¦                      │
│                         ¦ ┌─────────────────────────┐   ¦                      │
│                         ¦ │Create ComBination Food  │   ¦                      │
│  @5.    missing food:  m+─────────────────────────────--+                      │
│                                                                                │
│   6.    Kool-Aid, [Kool-Aid - presweetened, prepared]                          │
│         12.00 fluid ounce                                                      │
│  ------------------------ Press F1 for help ------------------------           │
│                                                                                │
│  ┌────────────────────────────────────────────────────────────────┐          │
│  │Press <Enter> to create a combination food or <ESC> to cancel.   │          │
│  └────────────────────────────────────────────────────────────────┘          │
│                                                                                │
│       Highlight the food that you want to make into a combination food.  Press F5 and │
│       highlight "Create Combination Food."  Press ENTER.                       │
└──────────────────────────────────────────────────────────────────────────────┘
```

Screen 2 of 4

```
┌──────────────────────────────────────────────────────────────────────────────┐
│                               FOOD ENTRY                                       │
│                                                                                │
│         Meal Time  : 06:00 am                                                  │
│         Meal Name  : Breakfast                                                 │
│         Meal Place: Home                                                       │
│  ----------------------------------------------------------------------------- │
│                                                                                │
│    Food Name :  toast w/ butt                                                  │
│                                                                                │
│   Item    1: ┌────┐                          <-- Enter the item(s).           │
│              │BUTT│                                                            │
│              └────┘                                                            │
│   Item    2:                                                                   │
│   Item    3:                                                                   │
│   Item    4:                                                                   │
│   Item    5:                                                                   │
│   Item    6:                                                                   │
│   Item    7:                                                                   │
│   Item    8:                                                                   │
│   Item    9:                                                                   │
│   Item   10:                                                                   │
│                                                                                │
│  Press F10 when all the food items are listed.                                 │
│  ----------------------------------------------------------------------------- │
│  Enter the first four or more letters of the food item.  Press <ENTER>.        │
└──────────────────────────────────────────────────────────────────────────────┘
```

Exhibit 4-87. Recall Review screen: creating a combination food (continued)

<u>Screen 3 of 4</u>

```
AMOUNT OF        butter, regular, salted

   Measurement: volume


       Amount = 1.000 teaspoon (0.02 CP)






       Press <ENTER> to continue.
```

<u>Screen 4 of 4</u>

```
                        RECALL REVIEW
       1.1   tea, herbal
             1.00 COF

       1.2   sugar, white granulated
             0.50 packet

       1.3   cream, half and half (10-12% fat)
             1.00 tablespoon

2.     Bread with additions: toast w/ butt<-- Combination type & food name.

       2.1   butter , regular, salted
             1.00 teaspoon

       2.2   wheat bread, whole wheat (100%), regular, commercial,
             toasted
             2.00 slice (4" x 4" x 1/2")
-----------------------------------------------------------------------
----------------------- Press F1 for help --------------- More...

   The new food appears above the food initially highlighted and the type of combination is
   displayed.
```

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-   Accessing a clean Quick List screen from Recall Review

To enter a new meal with two or more foods or several new meals, access the Quick List from the Recall Review screen. The new meal(s) will be placed at the <u>end</u> of the Recall Review list regardless of the position of the highlight on the Recall Review screen.

To access the Quick List screen, press the F4 System Menu, move the highlight to "Quick List" and press ENTER. You will be brought to a blank Quick List which operates in the same manner as during the initial part of the interview. You must enter a slash ("/") with a time, meal code, or place (preferably time as done in the earlier stage of the interview). The system progresses through the Quick List until all foods have been specified, and then returns you to the Recall Review screen. This process is illustrated in Exhibit 4-88.

It is important to make corrections to the Recall Review in a manner which is the least time consuming for the respondent. Guidelines for using the F5 key as opposed to accessing a new Quick List are outlined below:

Use the F5 key to:

1.   insert a single food or food combination into an already existing meal, including creating a combination food;

2.   add multiple foods into an already existing meal.

3.   insert a new meal with only one food or food combination.

Use the new Quick List to:

1.   insert a new meal with two or more food items;

2.   add more than one new meal.

Exhibit 4-88. Recall Review screen: use of Quick List to insert a meal

```
                              FOOD ENTRY

            Meal Time : 10:30 am
            Meal Name : Snack/Beverage
            Meal Place: Work

    +---------------------------------------------------------------
    ;    Food Name : doug
    ;
    ;Item    1: DOUG
    ;Item    2:
    ;Item    3:
    ;Item    4:
    ;Item    5:
    ;Item    6:
    ;Item    7:
    ;Item    8:
    ;Item    9:
    ;Item   10:
    ;
    ;    Press F10 when all the food items are listed.
    +--------------------------------------------------------------
Type the first four or more letters of the food item.  Press <ENTER>.

      Complete the food specification process for each food in the meal.
```

```
                              RECALL REVIEW
3.    sandwich, barbecued pork on a bun
      1.00 each

4.    Coke, [Cherry Coke]
      1.00 can (each 12 FO)
---------------------------------------------------------------------
      03:30 pm                  Snack/Beverage                  Work

5.    ice cream and frozen desserts, soft serve, ice milk, chocolate or
      coffee flavors
      1.50 cup
---------------------------------------------------------------------
      10:30 am                  Snack/Beverage                  Work

6.    doughnut, cake (dona sin levadura), regular, powdered sugar
      1.00 medium (3 1/4" diam)

7.    milk, whole
      1.00 cup
---------------------- Press F1 for help ----------------------------

      The new meal appears at the end of the Recall Review screen.
```

Exhibit 4-88. Recall Review screen: use of Quick List to insert a meal (continued)

```
      06:00 am            +------ System Menu ------+        Home
                          ; Recall Header           ;
1.   juice/nectar/flavore;|Quick List|             ;nstituted from
frozen, not fortified, un; Food Entry              ;
     0.50 cup             ; Recall Review           ;
                          ; Recall Trailer          ;
2.   pop tart or toaster  ; End of Recall           ;
     2.00 each            ; Print Recall Report     ;
------------------------- ; Exit Recall             ;-----------------
      12:45 pm            ; Exit DDC                ;        Work
                          ; ----------------------- ;
3.   sandwich, barbecued  ; Help              F1    ;
     1.00 each            ; Back Up           F2    ;
                          ; System Hold       F3    ;
4.   Coke, [Cherry Coke]  ; Insert            F5    ;
     1.00 can (each 12 FO; Delete            F6    ;
------------------------- ; Missing Food      F7    ;-----------------
------------------------- ; Note              F8    ;--------More...
                          ; ENG/SPA Toggle    F9    ;
                          ; Next Screen       F10   ;
                          ;                         ;
                          ; Press <ESC> to exit menu ;
Go to the Quick List
         Select Quick List from the F4 System Menu and press ENTER.
```

```
   +--------------------------------------------------+ EX: /7a bre hom
   ; /1030a sna wor                                   ;
   ; doug                                             ;       CODES
   ; milk                                             ;
   ;                                                  ;Meals      Place
   ;                                                  ; BRE       HOMe
   ;                                                  ; DES       WORk
   ;                                                  ; BRU       SCHool
   ;                                                  ; ALM       DAY ca
   ;                                                  ; LUN       FASt f
   ;                                                  ; COM       DELi
   ;                                                  ; MER       REStau
   ;                                                  ; DIN       CAFete
   ;                                                  ; CEN       STOre
   ;                                                  ; SNA       FRIend
   +--------------------------------------------------+ ENT       COMmun
                                                        INF       TRAnsi
Type / to BEGIN a new meal and press <ENTER>.          EXT       OTHer
Type one food per line and press <ENTER>.              OTH
Press F10 to complete the Quick List.
----------------------------------------------------------------------
Enter the Quick List.

       Complete the Quick List in the same way as you did at the beginning of the interview.
```

-   Use of the F6 Key

The F6 key is used to delete a single food item, one or more components in a food combination, an entire food combination, or an entire meal. Depending on whether you highlighted a single food, a food component in a combination food, the type of combination or a whole meal, you will be asked to confirm that you want to complete the process.

To delete a food, a component of a food combination and/or an entire food combination: Move the highlight to the item you wish to delete and press the F6 key. The following message will appear at the bottom of the screen:

> "To confirm you wish to DELETE this food (or 'this food from the combination' or 'all components in this food'), press F6. Press any other key to abort the process."

> Press the F6 key again to delete the item, or press any other key to abort the process.

> Exhibit 4-89 illustrates the process of deleting a component from a food combination.

To delete an entire meal: Probably, the only time you will need to delete an entire meal is when an SP accidentally reports a meal from a day other than the specified recall period. To delete the meal, move the highlight to the meal line (meal time, name and place). Press the F6 key. The following message will appear at the bottom of the screen:

> "To confirm you wish to DELETE all foods in this meal, press F6. Press any other key to abort the process."

> Press the F6 key again to delete the entire meal, or press any other key to abort the process.

> Exhibit 4-90 illustrates the process of deleting an entire meal.

Exhibit 4-89. Recall Review screen: deleting a food from a combination

<u>Screen 1 of 2</u>

```
                        RECALL REVIEW

       6.1   lettuce, romaine or cos
             2.00 leaf

       6.2   lettuce, iceberg
             0.50 cup, chopped

       6.3   spinach, raw
             0.33 cup

       6.4   dressing for salads, buttermilk (ranch style), regular -
             bottled
             3.00 SP2

       6.5   [tomato], red, raw
             3.00 cherry

       6.6   cucumber, raw
             5.00 slice
---------------------------- Press F1 for help ----------------------------
----------------------------------------------------------------------------
To confirm you wish to DELETE this food from the combination, press
F6.  Press any other key to abort the process.

    Highlight the food item you want to delete and press F6. The system will prompt for
    confirmation that you want to delete this item. Press F6 again to delete the item or press
    any other key to abort the process.
```

<u>Screen 2 of 2</u>

```
                        RECALL REVIEW

       6.1   lettuce, romaine or cos
             2.00 leaf

       6.2   lettuce, iceberg
             0.50 cup, chopped

       6.3   spinach, raw
             0.33 cup

       6.4   dressing for salads, buttermilk (ranch style), regular -
             bottled
             3.00 SP2

       6.5   cucumber, raw
             5.00 slice
---------------------------- Press F1 for help ----------------------------

    The highlighted item is no longer on the list.
```

Exhibit 4-90. Recall Review screen: deleting an entire meal

<u>Screen 1 of 2</u>

```
                              RECALL REVIEW
        2.2  wheat bread, whole wheat (100%), regular, commercial,
             toasted
             2.00 slice (4" x 4" x 1/2")
    ----------------------------------------------------------------
    12:00 pm                       Lunch                        Work
    @3.    missing food:  mixed dish

     4.    Kool-Aid, [Kool-Aid - presweetened, prepared]
           12.00 fluid ounce

     5.    Salad

           5.1  lettuce, romaine or cos
                2.00 leaf
    ------------------------ Press F1 for help --------------- More...
    ----------------------------------------------------------------
    To confirm you wish to DELETE all foods in this meal, press F6.
    Press any other key to abort the process

       Highlight the meal (meal time, name and place) that you want to delete and press F6.
       The system will prompt for confirmation that you want to delete all foods in this meal.
       Press F6 again to delete the meal or press any other key to abort the process.
```

<u>Screen 2 of 2</u>

```
        2.1  butter, regular, salted
             1.00 tablespoon

        2.2  wheat bread, whole wheat (100%), regular, commercial,
             toasted
             2.00 slice (4" x 4" x 1/2")
    ----------------------------------------------------------------
     3:45 pm                       Snack                        Work
    3.    popcorn, commercially prepared, plain
          3.00 cup

    4.    juice or flavored drink, apple, juice or cider, purchased ready-
          to-drink, unsweetened
    ------------------------ Press F1 for help --------------------

         The foods in the highlighted meal are no longer on the list.
```

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4.3.12.3   Making Other Changes from the Recall Review Screen

In addition to the insert and delete functions previously described, a number of other corrections or additions can be made from the Recall Review screen. These corrections and additions include:

1.   editing a variable ingredient or preparation ingredient;
2.   editing an amount;
3.   attaching or editing a note;
4.   editing the text previously typed for a Missing Food (refer to Section 4.3.14 which describes editing an unknown beverage, food or meal);
5.   editing a meal, time, and place heading; and
6.   editing the food name and the type of combination.

-   Editing a variable ingredient or preparation ingredient

When you highlight foods that contain variable ingredients and/or preparations, a message, "PgDn for Ingr/Prep," flashes in the lower right hand corner. Press the PgDn key to view and access the "Ingredient/Preparation Selections" window. This window lists the ingredient or preparation descriptions for the food. Notes about ingredients or preparations are displayed below the descriptions. Move the highlight to the ingredient or preparation you would like to edit and press ENTER. You will be brought to the appropriate screen where you must respecify the item. For example, Exhibit 4-91 illustrates changing ricotta cheese to cottage cheese in lasagna.

Press F10 to move from the lower window to the main Recall Review screen.

-   Editing an amount

To edit an amount, move the highlight to the appropriate food and press ENTER. You will be brought to the first Amount screen. After you respecify the amount descriptions, you will be brought back to the Recall Review screen. Exhibit 4-92 shows how to change two slices of whole wheat bread to one slice. Refer to Section 6.4.1.2 which addresses known and unknown amounts.

-   Attaching or editing a note

To attach a note on the main Recall Review screen or the Ingredient/Preparation Selections window, move the highlight to the appropriate item and press the F8 key. You will be brought to the Note screen where you may insert text. Press F10 to return to the Recall Review screen. Exhibit 4-93 illustrates the process of attaching a note to chicken breast to indicate without gravy.

Exhibit 4-91. Recall Review screen: editing a variable ingredient

<u>Screen 1 of 3</u>

```
                              RECALL REVIEW
06:00 pm                      Dinner/Supper                      Home

1.    [lasagna], beef              ·
      1.50 cube shape: 3.00" length x 3.00" width x 2.00" height

2.    milk, whole
      1.00 cup
----------------------------------------------------------------------
      06:00 am                    Breakfast                      Home

3.    juice/nectar/flavored drink, orange, juice, reconstituted from
      frozen, not fortified, unsweetened
      0.50 cup

4.    pop tart or toaster pastry
      2.00 each
---------------------------- Press F1 for help ---------------- More...
----------------- Ingredient/Preparation Selections ------------------
I:    hamburger/ground beef, unknown
I:    [ricotta cheese], part skim milk
I:    Mozzarella cheese, part skim milk

      Press PgDn to view and access the "Ingredient/Preparation Selections" window.    ·
      Highlight the ingredient you want to edit and press ENTER.
```

<u>Screen 2 of 3</u>

```
INGREDIENTS IN   lasagna, beef


+----------------------- Ingredient/Preparation Selections -----------
|I:   hamburger/ground beef, unknown
|I:   [cheese]
|I:   Mozzarella cheese, part skim milk
+-----+---------------------------------------------------------------
      |  [COTT cottage cheese]
  ·   |  RICO ricotta cheese                                      ·
      |  UK   unknown
      |
      |
      |
      +---------------------------------------------------------------
      food:

Type in abbreviation or move highlight to choice and press <ENTER>.

      Respecify the highlighted ingredient.
```

Exhibit 4-91. Recall Review screen: editing a variable ingredient (continued)

<u>Screen 3 of 3</u>

```
                              RECALL REVIEW
06:00 pm                      Dinner/Supper                      Home

1.    ┌────────┐
      │lasagna │, beef
      └────────┘
      1.50 cube shape: 3.00" length x 3.00" width x 2.00" height

2.    milk, whole
      1.00 cup
---------------------------------------------------------------------
      06:00 am                   Breakfast                       Home

3.    juice/nectar/flavored drink, orange, juice, reconstituted from
      frozen, not fortified, unsweetened
      0.50 cup

4.    pop tart or toaster pastry
      2.00 each
------------------------- Press F1 for help --------------- More...
----------------- Ingredient/Preparation Selections ----------------
I:    hamburger/ground beef, unknown
      ┌───────────────┐
I:    │cottage cheese │, regular or creamed (4% fat)
      └───────────────┘
I:    Mozzarella cheese, part skim milk

      You will be brought to the Recall Review screen. You may need to use the PgDn key to
      see your edit.
```

4-228

Exhibit 4-92. Recall Review screen: editing an amount

<u>Screen 1 of 3</u>

```
                              RECALL REVIEW
06:00 pm                    Dinner/Supper                        Home

1.    lasagna, beef
      1.50 cube shape: 3.00" length x 3.00" width x 2.00" height

2.    ┌──────────┐
      │wheat bread│, whole wheat (100%), regular, commercial, not
      └──────────┘
      toasted
      2.00 slice (4" x 4" x 1/2")

3.    milk, whole
      1.00 cup
-----------------------------------------------------------------------
06:00 am                      Breakfast                          Home

4.    juice/nectar/flavored drink, orange, juice, reconstituted from
        frozen, not fortified, unsweetened
      0.50 cup

----------------------- Press F1 for help ---------------- More...
      Highlight the appropriate item and press ENTER.
```

<u>Screen 2 of 3</u>

```
AMOUNT OF           wheat bread, whole wheat (100%), regular, commercial,
                    not toasted




      +------------------------- Measurements ------------------------+
      |         volume
      |         weight
      | ┌─────────────────────────┐
      | │SL   slice (4" x 4" x 1/2")│
      | └─────────────────────────┘
      | LGS large slice (4 1/2" x 4 1/4" x 1/2")
      | CUB shape - cube
      | REC shape - rectangle
      |
      |
      |
      +---------------------------------------------------------------+
      unit:


Type in abbreviation or move highlight to choice and press <ENTER>.

      Respecify the amount. You will be brought back to the Recall Review screen.
```

Exhibit 4-92. Recall Review screen: editing an amount (continued)

Screen 3 of 3

```
                         RECALL REVIEW
06:00 pm                Dinner/Supper                         Home

1.   lasagna, beef
     1.50 cube shape: 3.00" length x 3.00" width x 2.00" height

2.   ┌───────────┐
     │wheat bread│ whole wheat (100%), regular, commercial, not toasted
     └───────────┘
     1.00 slice (4" x 4" x 1/2")

3.   milk, whole
     1.00 cup
-----------------------------------------------------------------
  06:00 am                 Breakfast                          Home

4.   juice/nectar/flavored drink, orange, juice, reconstituted from
     frozen, not fortified, unsweetened
     0.50 cup

---------------------- Press F1 for help ---------------- More...

       The corrected amount is displayed.
```

4-230

Exhibit 4-93. Recall Review screen: attaching a note

Screen 1 of 3

```
                              RECALL REVIEW

06:00 pm                    Dinner/Supper                          Home

11.   chicken , breast (pechuga), skin eaten
      1.00 medium (half)

12.    Meat, fish, poultry with additions:   chix w/ gravy

      12.1 chicken, drumstick, skin eaten
           1.00 medium

      12.2 gravy, giblet, broth based

          *Note:  1/2 cup used in total on chicken drumstick and mashed
          potatoes.

------------------------- Press F1 for help ------------------ More...

      Highlight the appropriate item and press the F8 key to attach a note.  Highlight an
      existing note and press ENTER to edit the note.
```

Screen 2 of 3

```
                              NOTE ON

      chicken, breast (pechuga), skin eaten


      Amount = 1.00 medium (half)


          +------------------ Note Text ------------------+
          |no gravy                                       |
          |                                               |
          |                                               |
          |                                               |
          |                                               |
          |                                               |
          |                                               |
          +-----------------------------------------------+


Type in notes about the highlighted information.  Press F10 when
finished.

      Enter or edit the note text and press the F10 key to return to the Recall Review screen.
```

Exhibit 4-93. Recall Review screen: attaching a note (continued)

Screen 3 of 3

```
                          RECALL REVIEW
06:00 pm                  Dinner/Supper                       Home

11.  chicken, breast (pechuga), skin eaten
     1.00 medium (half)

     Note:  no gravy           <-- The note is displayed.

12.   Meat, fish, poultry with additions:  chix w/ gravy

     12.1 chicken, drumstick, skin eaten
          1.00 medium

     12.2 gravy, giblet, broth based

          Note:  1/2 cup used in total on chicken drumstick and mashed
                 potatoes.
------------------------- Press F1 for help ------------------ More...

       The note is displayed on the Recall Review screen.
```

To edit a note, move the highlight to the note and press ENTER. You will be brought to the Note screen where you may modify the existing text. From the Note screen, press F10 to return to Recall Review.

Only the first three lines of note text are displayed on the Recall Review screen. If a note contains more than three lines, you must access the Note screen using the above instructions to see the entire note.

-        **Editing Missing Food text**

Editing Missing Food text (including unknown meal, unknown food, and unknown beverage described in 4.3.14) is similar to editing a note. Move the highlight to the appropriate item and press ENTER. Edit the general description or amount and measurement text, and press the F10 key to return to the Recall Review screen. Exhibit 4-94 demonstrates editing existing missing food text.

-        **Editing the meal information**

To change the meal information, move the highlight to the meal line and press ENTER. You will be brought to the Food Entry screen where you may edit the meal time, name or place eaten. Exhibit 4-95 illustrates changing a meal time from "10:00 am" to "10:30 am."

4-232

Exhibit 4-93. Recall Review screen: attaching a note (continued)

Screen 3 of 3

```
                          RECALL REVIEW
06:00 pm                  Dinner/Supper                       Home

11.  chicken, breast (pechuga), skin eaten
     1.00 medium (half)

     Note:  no gravy           <-- The note is displayed.

12.   Meat, fish, poultry with additions:  chix w/ gravy

     12.1 chicken, drumstick, skin eaten
          1.00 medium

     12.2 gravy, giblet, broth based

          Note:  1/2 cup used in total on chicken drumstick and mashed
                 potatoes.
------------------------- Press F1 for help ------------------ More...

       The note is displayed on the Recall Review screen.
```

To edit a note, move the highlight to the note and press ENTER. You will be brought to the Note screen where you may modify the existing text. From the Note screen, press F10 to return to Recall Review.

Only the first three lines of note text are displayed on the Recall Review screen. If a note contains more than three lines, you must access the Note screen using the above instructions to see the entire note.

-        **Editing Missing Food text**

Editing Missing Food text (including unknown meal, unknown food, and unknown beverage described in 4.3.14) is similar to editing a note. Move the highlight to the appropriate item and press ENTER. Edit the general description or amount and measurement text, and press the F10 key to return to the Recall Review screen. Exhibit 4-94 demonstrates editing existing missing food text.

-        **Editing the meal information**

To change the meal information, move the highlight to the meal line and press ENTER. You will be brought to the Food Entry screen where you may edit the meal time, name or place eaten. Exhibit 4-95 illustrates changing a meal time from "10:00 am" to "10:30 am."

Exhibit 4-94. Recall Review screen: editing text for a missing food

```
                          RECALL REVIEW
   08:00 am                   Breakfast                        Home

   1.   apple, fresh, with skin ·
        1.00 cup, sliced
   ------------------------------------------------------------------
   10:30 am                   Snack/Beverage                   Work

   2.   wheat bread, whole wheat (100%), regular, commercial, toasted
        2.00 slice (4" x 4" x 1/2")

        *Note:  plain
   ------------------------------------------------------------------
   12:00 pm                   Lunch                            Work

   @3.   ┌─────────────────────────┐
         │missing food:  mixed dish│
         └─────────────────────────┘

   4.   Salad
   ----------------------- Press F1 for help --------------- More...

        Highlight the missing food and press ENTER to access the Missing Food screen.
```

```
MISSING FOOD:   mixed dish

General Description (record food name verbatim and include):
Consistency, flavor, preparation, ingredients, salt and fat.  If
commercial: brand name, package description, modified nutrients or
caloric value, where purchased.
        +---------------------------------------------------------+
        |Lean Pockets:  Chicken Parmesan                          |
        |Chicken pieces mixed with parmesan sauce wrapped in hard |
        |dough                                                    |
        |Bought at Giant--has a picture of the pocket on the front|
        |Less than 300 calories                                   |
        |KD price                                                 |
        |Prepared in microwave w/no fat or salt                   |
        |                                                         |
        +---------------------------------------------------------+
Amount & Measurement:  Specify amount before or after cooking; with or
without refuse; volume, weight, or shape; amount actually eaten.
        +---------------------------------------------------------+
        |Net weight of package:  10.0 oz  Contains 2 pockets.  SP |
        |ate 1.  Cube:  3 inches wide, 6 inches long, 1 inch thick|
        +---------------------------------------------------------+

Press <PgDn> to move to Amount & Measurement.

        Review or edit the text.  Press the F10 key to return to the Recall Review screen.
```

Exhibit 4-95. Recall Review screen: editing meal information

<u>Screen 1 of 3</u>

```
                         RECALL REVIEW
08:00 am                   Breakfast                        Home

1.    Beverage:  formula

      1.1  milk, mixtures and milk drinks, instant breakfast drink,
           regular, other flavors, unprepared dry mix
           1.00 envelope

      1.2  water - drinking
           1.00 G3

2.    apple, fresh, with skin
      1.00 cup, sliced
----------------------------------------------------------------------
10:00 am                  Snack/Beverage                     Work

3.    Beverage: tea
-------------------------- Press F1 for help ---------------- More...

        Highlight the meal line (meal time, name and place) and press ENTER.
```

<u>Screen 2 of 3</u>

```
                         FOOD ENTRY

        Meal Time :  10:30 am
        Meal Name : Snack/Beverage
        Meal Place: Work

   +------------------------------------------------------------------
   |   Food Name :                                    .
   |
   |Item    1:
   |Item    2:
   |Item    3:
   |Item    4:
   |Item    5:
   |Item    6:
   |Item    7:
   |Item    8:
   |Item    9:
   |Item   10:
   |
   |   Press F10 when all the food items are listed.
   +------------------------------------------------------------------
Please enter the meal time.

        Edit the meal time by typing over the existing entry. Press the F10 key to return to the
        Recall Review screen.
```

```
                              RECALL REVIEW
08:00 am                      Breakfast                          Home
1.    Beverage:  formula

      1.1  milk, mixtures and milk drinks, instant breakfast drink,
           regular, other flavors, unprepared dry mix
           1.00 envelope

      1.2  water - drinking
           1.00 G3

2.    apple, fresh, with skin
      1.00 cup, sliced
-----------------------------------------------------------------------
|10:30 am                      Snack/Beverage                    Work|
-----------------------------------------------------------------------

3.    Beverage:  tea
---------------------- Press F1 for help ---------------- More...

      The corrected time is displayed on the Recall Review screen.
```

- **Editing the food name and type of combination**

    To change the food name and/or the type of combination, move the highlight to the appropriate item and press ENTER. You will be brought to the Food Entry screen and the food name that you originally entered will be highlighted. Edit the food name as appropriate and press ENTER. You will be brought to the type of combination screen. Reselect the type of combination, if appropriate, and press ENTER to return to the Recall Review screen. Editing the meal name and type of combination is illustrated in Exhibit 4-96.

    One function you may not perform on the Recall Review screen is to change a food selection descriptor. In this case, you are required to first insert and re-specify the food, then delete the incorrect entry. If an SP, during the food selection process, reported white bread, then realized during the Recall Review that it actually was whole wheat, you must first insert and specify the whole wheat bread, then delete the white bread.

    If an SP changes his/her mind about the components or ingredients in a previously described food, and you cannot describe this food using the food selection process, a Missing Food must be entered. Again, you must re-specify the food; however, in this case, the Missing Food screen must be utilized. You are then required to delete the incorrect entry once the Missing Food appears on the Recall Review screen.

Exhibit 4-96. Recall Review screen: editing the meal name and type of combination

<u>Screen 1 of 4</u>

```
                            RECALL REVIEW

07:00 am                      Breakfast                        Home

1.   juice/nectar/flavored drink, orange, juice, reconstituted from
     frozen, not fortified, unsweetened
     12.00 fluid ounce


2.   ┌─────────────────────────────────────────────────────┐
     │Other/food eaten together: cereal with fruit          │
     └─────────────────────────────────────────────────────┘

     2.1   cereal, ready-to-eat, [Cracklin' Oat Bran (Kellogg's)]
           1.00 cup

     2.2   banana, ripe (common type), fresh
           0.33 medium (8 3/4" long)

     2.3   raisins, uncooked
           2.00 tablespoon

------------------------- Press F1 for help ----------------- More...

         Highlight the type of combination and press ENTER.
```

<u>Screen 2 of 4</u>

```
                            FOOD ENTRY

            Meal Time : 07:00 am
            Meal Name : Breakfast
            Meal Place: Home

     +-----------------------------------------------------------------
     ¦  Food Name :  ┌─────────────────────────┐
     ¦               │cereal w/ bana & raisins │
     ¦               └─────────────────────────┘
     ¦Item   1:
     ¦Item   2:
     ¦Item   3:
     ¦Item   4:
     ¦Item   5:
     ¦Item   6:
     ¦Item   7:
     ¦Item   8:
     ¦Item   9:
     ¦Item  10:
     ¦
     ¦   Press F10 when all the food items are listed.
     +-----------------------------------------------------------------
Please enter the meal time.

       Edit the food name by typing over the existing entry.  Press ENTER.
```

Exhibit 4-96. Recall Review screen: editing the meal name and type of combination (continued)

```
                              FOOD ENTRY

              Meal Time : 07:00 am
              Meal Name : Breakfast
              Meal Place: Home                    .
       +---------------------------------------------------------------+
       |     Food Name: cereal w/ bana & raisins
       +--------------------------- Combination Types ------------------
       |
       |          +-----------------------------------------------+
       |          | SAN   Sandwich
       |          | BRE   Bread with additions
       |          | |CER  Cereal with additions|
       |          | SAL   Salad
       |          | BEV   Beverage
       |          | MIX   Mixed dish
       |          | MIXA  Mixed dish with additions
       |          | MEA   Meat, fish, poultry with additions
       |          |.VEGA  Vegetables with additions
       |          | VEG   Vegetable combination
       |          +-----------------------------------------------+
       |   Combination Type:
       +--------------------------------------------------------------
       Enter the combination type or choose one from the list.

         Move the highlight to the appropriate type of combination and press ENTER.
```

```
                              RECALL REVIEW
       07:00 am                      Breakfast                      Home

     1.    juice/nectar/flavored drink, orange, juice, reconstituted from
           frozen, not fortified, unsweetened
           12.00 fluid ounce

     2.    |Cereal with additions: cereal w/ bana & raisins|

           2.1   cereal, ready-to-eat, [Cracklin' Oat Bran (Kellogg's)]
                 1.00 cup

           2.2   banana, ripe (common type), fresh
                 0.33 medium (8 3/4" long)

           2.3   raisins, uncooked
                 2.00 tablespoon

       ----------------------- Press F1 for help ----------------- More...

           The edited food name and combination type appear on the Recall Review screen.
```

Exhibit 4-97. Commonly forgotten foods question

```
                            RECALL REVIEW

    Since the information that you have given me will make an important
    contribution to this health and nutrition study, I would like to
    make sure that it is as complete as possible.
    On this card are some foods and beverages which are often forgotten.
            (Fruits, chips, candy, nuts, cheese
             Coffee, tea, soft drinks, juices
             Beer, wine, cocktails, or any other alcoholic beverage
             Crackers, breads, rolls, tortillas, and cereals.)
    Can you think of anything else that you ate or drank yesterday
    that you haven't mentioned?
    If YES, press F2 to return to Recall Review or F8 to comment on why not
    If NO, press F10 to continue with Recall Trailer.
```

-       **Forgotten Foods**

There is still one more final check to assure the completeness of the recall. Press F10 when you have finished the recall review. At this point, a paragraph appears with text and a list of commonly forgotten foods (Exhibit 4-97 above). You may elect to present this paragraph in English or Spanish by using the F9 function key. Determination of the language of the interview, and the use of the F9 function key will be discussed in more detail in Section 4.3.13.

Read the paragraph aloud to the respondent; read the list of foods, if necessary. Show the respondent the "Forgotten Foods" flashcard, Exhibit 4-98. The flashcard should not be easily visible prior to this point in the interview; therefore, it is recommended to attach this flashcard to the pull-out desk in the dietary interviewers' room. In this way, you need only slide out the desk and point to the flashcard. Allow the respondent sufficient time to read the list before continuing, then read the question, "Can you think of anything else that you ate or drank yesterday that you haven't mentioned? Insert the name of the SP for proxy interviews, for example, "Can you think of anything else that Joey ate...?" For a "yes" response, press the F2 key to return to Recall Review screen or F8 to comment on why not.   For a "no" response, press the F10 key to access the first Recall Trailer question.

Exhibit 4-98. "Forgotten Foods" flash card

Fruits, Chips, Candy, Nuts, Cheese

Coffee, Tea, Soft Drinks, Juice

Beer, Wine, Cocktails, or Any Other
Alcoholic Beverage

Crackers, Breads, Rolls,Tortillas, Cereals

Frutas, Papitas/Papitas Fritas, U Otro Tipo de
Merienda de Esta Clase Como Fritos/Tostadas

Dules, Nueces, Queso

Café, Té, Refrescos o Sodas, Jugos

Cerveza, Vino, Cocteles, Alguna Otro
Bebida Alcohólica

Galletas, Panes, Panecillos, Tortillas, Cereales

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4.3.13   Trailer and End of Recall Questions

Before reviewing the specifications for each trailer question, it is important to first learn how to enter "don't know" and "refusal" responses, and the procedure for attaching a comment since these guidelines apply to all trailer questions. In addition, selection of the appropriate language, entering the responses, and the importance of asking the questions verbatim will be briefly addressed.

- **Procedures for Refusals and "Don't Know" Responses**

It is hoped that all respondents will realize the importance of providing as much information as possible. If a SP/proxy refuses to answer a question, "refusal" is always available as an option. All refusals require a note explaining the situation. To record a refusal, either highlight "refusal" (use the Page Down key to view this option) or type "r." Type your comments on the Note screen, and press F10 to progress to the next question. If a SP refuses to answer all of the trailer questions, press the Escape key to bypass that section. A prompt will appear, "Do you want to exit from the Recall Trailer (Y/N)?" Pressing "Y" takes you to a second prompt asking, "Are you sure you want to bypass the Recall Trailer?" Pressing "Y" again takes you to the End of Recall screen. Even though the "quality of recall" refers to the recall (explained later in this section), you must attach a note to the quality code stating the reason for exiting the trailer questions, e.g., "respondent refused to answer questions," and include a brief explanation.

The response, "I don't know," often means that the SP needs time to think about the question. Do not accept a "don't know" response without probing. Based on the way the SP says, "I don't know," wait to see if the SP just needs time to think. Or you can repeat the question, the answer categories, or ask for his/her best estimate. Most SPs are able to give an accurate answer or "best guess" if you give them a moment to think and some encouragement. Many of the trailer question specifications have probes or suggestions which you may use to encourage or assist the SP. If, after probing, the SP still cannot answer the question, select "don't know" and attach a note explaining the situation. In the case of a "don't know" response, you must first press F8 to enter your comment, then F10 again to return to the current question. Highlight "don't know" or enter "d" and press ENTER; the system will then skip to the next appropriate question.

- **Procedure for Attaching Notes**

In order to attach a note to any of the answers on the recall trailer questions, you must first press F8, attach the note, press F10 again to return to the correct question, then select your answer. If you enter the answer before attaching the note, the system will move on to the next question. Press F2 to back up, then follow the initial instructions.

Some trailer question responses require notes. When a response requires a note, you are automatically brought to the Note screen. Press F2 to back up to the question or enter a note explaining the response. After completing the note, press F10 to proceed to the next trailer question.

If you press F2 to back up to a previous question to which you attached a note, the note screen will not automatically appear. You must press F8 to review the note.

- **Selection of Language for Trailer Questions**

Since the language displayed on the Forgotten Foods screen determines whether a Spanish or English version of the trailer questions appears on the screen, at this point, make a decision as to the primary language used during the 24-hour recall. If the SP/proxy spoke mainly English during the interview but used a few Spanish words to describe foods, "English" should be chosen. If, on the other hand, the SP/proxy spoke predominantly Spanish with a few English words interspersed, the appropriate selection would be "Spanish." Press F9 to have the appropriate screen appear.

- **Answering the Questions**

You may select answers for the trailer questions by moving the highlight to the appropriate choice and pressing ENTER, or by pressing the first letter of the desired response, such as "r" for "refusal" or "d" for "don't know" and pressing ENTER. For responses that begin with the same letter, such as "much more than usual" and "much less than usual," pressing "m" will move the highlight down to the first choice beginning with "m." Hit "m" again to move the highlight to the next choice beginning with "m."

If, for some reason, the trailer questions are not completed due to time, attach a note. Do not fill in the answers with unknowns or "don't know" responses. The completion code (addressed shortly) would still be complete if your work was finished for that SP.

- **Reading the Questions Verbatim**

Read the trailer questions to all SPs verbatim and in the order presented on the screen. The questions were designed and revised after much pilot testing to be understandable to most of the general population. There may be some individuals, including teenagers, who will require that you reread the question and/or probe for the answer. It is important that the trailer questions be asked consistently by all dietary interviewers during the entire survey.

- Choosing the Correct Pronoun

You may notice that most questions contain parentheses displaying various pronouns or a pronoun followed by a blank space (you____). Tailor the question to the respondent by selecting the appropriate pronoun, or by inserting the SP's name.

- Question-by-Question Specifications

<u>Trailer question #1</u>

```
                                                    +---------------------+
How does the amount of food (you/    ) consumed    ¦much more than usual¦
   yesterday compare with (your/his/her) usual     ¦usual                ¦
   consumption for that day of the week?  Was      ¦much less than usual¦
   it much more than usual, usual or much less     ¦don't know           ¦
   than usual?                                     +---------------------+
```

As you read the question, refer to the SP or, if conducting the interview with a proxy, use the SP's name as indicated in the parentheses. Read the answer categories to the SP or proxy as part of the question. The SP or proxy must select one of these answers.

This question targets total amount, not types of food nor a larger quantity of a specific item. For example, if the SP said, "I usually don't eat so many sweets," you must probe to find out if the total amount for the day including the sweets was usual or typical. You might probe, "Yes, but," and then repeat the question, emphasizing "much." Many times a SP will respond with, "I ate a little more than usual yesterday." In this case, ask whether it was "a little more" or "much more." This trailer question is emphasizing major, not minor, changes in consumption; therefore, if the SP again responds "a little more," select "usual."

This is one question where you may have to use some judgement when interpreting the subject's response. "Much more" or "much less" should indicate that the food consumption for the 24 hours was significantly different than usual for that day of the week. For example, the SP says he/she ate "much more than usual" because he/she "ate 2 extra apples" on the day of the recall. At this point you must evaluate the answer to determine whether or not this is an extreme change in the total amount consumed. In this case, you should enter "usual." Do not include in the category "much less than usual" a decrease in intake due to the 12-hour fast. The data collected about food intake from the evening before the day of the recall compensates for this.

On the other hand, if the respondent ate dinner in a smorgasbord restaurant or served himself/herself at an all-you-can-eat buffet, and said he ate "much more than usual," it would be best to select the answer and probe as to why he/she considered it much more. If at any time you are unsure as to how to classify the answer, enter the answer given by the SP and add a note verbatim.

The most common situations in which "much less than usual" would be the appropriate response are:

1.   A significant decrease in intake due to illness, such as influenza,

2.   A substantial decrease in intake due to dental problems, such as a toothache,

3.   A decrease in usual intake due to lack of time, for example, skipping dinner because the SP was too busy, and

4.   A significant decrease in intake due to financial problems, for example, not having enough money to buy a meal.

The most common situations in which the response "much more than usual" would be appropriate are:

1.   A significant increase in intake due to a vacation or holiday,

2.   A substantial increase in intake due to a special occasion or special day,

3.   A significant increase in intake due to business luncheons or travel, and

4.   A substantial increase in intake due to the consumption of several extra snacks or an extra meal.

To assist you in interpreting answers other than "usual", another probe may be helpful. Probe, "Was the total amount different or were just different foods eaten?" Enter "usual" if the answer is "just different kinds of foods." If the respondent says that the total amount was "much more" or "much less", then probe, "In what way was it much more/much less?" and "Why?" At this point, you must decide whether the reason(s) given by the respondent truly fall into one of the categories explained previously or whether the "usual" selection would actually be more appropriate.

Also note that the question asks the SP/proxy to compare days of the week (for example, a usual Sunday consumption), not just usual consumption. Intake often varies during the work week versus the weekend; therefore, try to discern any errors on the SP's part in comparing intake to the previous day as opposed to, for example, another Monday.

"Usual" is referring to a time frame of the past month, meaning the past 30 days. Therefore, a SP who is reporting for a Tuesday will be comparing that Tuesday of the recall specifically to the last 4 Tuesdays in the past 30 days. More than likely, the SP will respond to the question without asking for further explanation regarding the time frame; however, there are certain cases in which an explanation might be needed. This may occur, for instance, if a SP recently started a diet, if the SP's appetite has changed in the first months of pregnancy, or if a SP recently returned from the hospital.

If a SP was examined in the MEC on a Monday, he/she would report his/her intake for the previous day, Sunday. The SP would be comparing that Sunday to previous Sundays in the past 30 days. It is important to remember that this question targets amount, not a change in types of food, so technically someone could be on a reduction diet and still consume the same amount. Do not assume that the SP is eating much less than usual if the SP states he/she is consuming 1500 calories. First let the SP reply, then probe by repeating the question emphasizing amount if he/she says something like "I started a diet yesterday." If the SP recently started the diet, he/she would be comparing the day of the recall to the preceding Sundays in the past 30 days when he/she was not on the diet. However, a SP who has been following a maintenance program for 6 months would be comparing the day of the recall (Sunday) to the previous Sundays (on the maintenance program).

Responses of either "much more than usual" or "much less than usual," must have a note attached. After selecting either of these responses, the Note screen will automatically follow. Probe to find out how the amount was different from his/her usual intake and the reason for the unusual intake, then record the answer verbatim. Make sure the note is as complete as possible. A note which seems appropriate in the context of the interview may be incomprehensible to someone reviewing the interview later.

Trailer question #2

```
+-------------------------------+
How much plain water (do you/does    )  |none                           |
    usually drink in a 24-hour period?  |total fluid ounces consumed    |
    (Include only tap water and spring  |no. of glasses/cups consumed   |
    water.)                             |don't know                     |
                                        +-------------------------------+
```

Note that this question is not specific to yesterday, but rather to usual consumption in a 24-hour period. When necessary, read the text in parentheses to clarify that only tap and spring water should be included. Count water from a water fountain or cooler in this total. Bottled mineral waters (such as Perrier) are not included here since they will be reported and accounted for in the 24-hour recall. Exclude also water used to prepare coffee, tea, formula, or other beverages. A proxy may at times have difficulty answering this question; for example, a child may be attending school, and drinking from a water fountain. Probe for the respondent's best estimate.

If the SP usually does not drink any water, select "none" and press ENTER. The system will go on to the next question.

Recording this answer depends on how the SP/proxy responds. If the SP usually does drink water, the system will prompt you to indicate whether the SP/proxy responded in total fluid ounces or number of glasses/cups. Once you enter the answer (by highlighting that choice), it will then either prompt you for 1) total fluid ounces or for 2) glasses/cups and size, depending on which you initially selected.

Frequently a SP will use the food models to describe water intake. For example, the SP may point to a specific line on G2 equivalent to 8 fluid ounces. Before entering that amount as the total fluid ounces, first probe as to how many glasses were consumed. If one glass was consumed, you can either enter the answer as total fluid ounces (8), or select number of glasses consumed (1) and size of glass (8). If there is any doubt as to whether the glass was full, partially full, or to the rim, ask the SP/proxy to indicate to which line on the food model he/she is referring. In the event the SP uses two different sized food models to describe the quantity, use your guide (Food Model Amounts and Default Standards) to calculate the number of ounces. For example, G1 (4 ounces) plus G2 (8 ounces) are equivalent to 12 ounces; enter this number as total ounces consumed. If on the other hand, the SP does not respond using the models, but states "2 glasses," you must probe "what size glass?" in order to answer the second part of the question. Again, the SP may use food models to indicate the size of the glass.

Another fairly common response which needs further explanation is the use of the terms "pint", "quart", "half-gallon", "gallon", etc. The difficulty here is that your entry for this question must either be in terms of total fluid ounces or a specific number of cups/glasses. Therefore, if the respondent stated that he/she usually drinks "2 quarts" of water each day, a conversion to 64 fluid ounces is required before this response may be entered into the system. All situations where a calculation or conversion is necessary must have an attached note. Enter the amount in terms of "total fluid ounces" with a note stating what the SP actually said during the interview.

Trailer question #3

```
+-------------------+
What type of salt (do you/does    ) usually    | none              |
   add to (your/his/her) food at the table?    | ordinary salt     |
              .                                 | lite salt         |
                                                | salt substitute   |
                                                | don't know        |
                                                +-------------------+
```

"At the table" and "usually" are highlighted to emphasize their importance. If a SP/proxy adds salt during food preparation, but never at the table, the answer would be "none." Note that the "none" response skips question 4.

Ordinary salt includes sea salt, flavored salts, such as garlic, celery, and onion, and seasoning salts, such as Old Bay. Lite salt is labeled as such and has a reduced sodium content by combining potassium chloride with sodium chloride. Although technically the product Salt Sense is not a lite salt, it is included in this category although its sodium content has been reduced by 33%. Salt substitutes do not contain sodium; they are usually potassium chloride. Even though there are seasonings which may have a low sodium content per serving or do not contain sodium, such as Molly McButter or Mrs. Dash, do not include these in the salt substitute category since they are not considered a "salt."

This question specifies usual behavior. If a SP usually adds ordinary salt to his/her food at the table, but uses salt substitute on occasion, select "ordinary salt." On the other hand, if the SP says "I use both ordinary and lite salt at the table," probe as to which he/she uses most often. Attach a note to either selection using the F8 function key if the SP says they are used equally. If after probing the SP/proxy does not know the type of salt (e.g., because the spouse does all the shopping and puts "something" in the salt shaker), select "don't know," and add a comment.

Be sure that the proxy understands that trailer questions #3 and #4 refer to adding salt specifically to the SP's food. It does not make any difference if the mother/father adds the salt to the SP's food or if the SP actually adds it himself/herself.

As always, the answer categories should not be read unless they are part of the question; however, there are three situations where it is acceptable to read the answer categories after asking this question:

1. The SP/proxy responds with a confused look;

2. The SP/proxy directly asks, "What do you mean?"; and

3. The SP/proxy says something like, "I use iodized salt."

In the last situation, "iodized" salt does not answer the question since it falls into more than one of the answer categories.

Trailer question #4

```
+----------------+
How often  (do you/does    ) add (answer in 3)  ¦ rarely         ¦
   to (your/his/her) food at the table?  Is it  ¦ occasionally   ¦
   rarely, occasionally, or very often?         ¦ very often     ¦
                                                ¦ don't know     ¦
                                                +----------------+
```

The system automatically inserts and highlights the answer selected in question 3. Remember to read the answer categories to the respondent. Occasionally a SP/proxy may misinterpret question 3, give you an answer, such as lite salt, then say "never" in response to this question. Initially the SP/proxy may not have heard "at the table," but did focus on those words in this dependent question. In this case, go back to question 3 and repeat it in its entirety, again stressing at the table. The respondent might this time say that he/she only adds salt during preparation. Correct question 3 by selecting "none;" the automated system will skip question 4 automatically.

If a SP/proxy asks you to define the answer categories, such as "what do you mean by very often?", explain that it is however he/she defines it, "whatever it means to you."

Questions 5 through 11 may be sensitive to some respondents. Exhibit 4-99 is a memorandum which documents the background on the development of these food sufficiency questions. Read it carefully to more fully understand why these questions are being asked and how the data may be used.

As always, ask the questions in a neutral manner. If the respondent seems upset or refuses to answer, remind the respondent that all of his/her answers will be kept confidential, and that having his/her answer is important to the survey.

Trailer question #5

```
┌─────────────────────────────────────────────────────────────────────┐
│ Thinking about the past month, how many days                         │
│    did you have no food or money to buy food                         │
│    (for        )?                      .         (number of days)    │
│          .                                                           │
└─────────────────────────────────────────────────────────────────────┘
```

The time frame for this question is the past month. You must respond in days (1-31) if the answer is affirmative. Type the correct number and press ENTER.

The purpose of this question is to evaluate food insufficiency due to financial problems. Some respondents may specify other reasons for not having food or money to buy food, such as not having time to buy groceries and/or accidentally leaving their wallet at home. Should this occur, tell the respondent not to include either situation, then repeat the question.

The "none," "don't know" and "refusal" responses are not visible on the screen. To enter a response of "don't know," or "refusal," press "d" or "r," respectively, then ENTER. The system will automatically skip to Question 7 when "don't know" is selected; however, a refusal leads to Question 12. "None" responses require you to press "n."

Exhibit 4-99. Memo on food sufficiency questions

DEPARTMENT OF HEALTH & HUMAN SERVICES   Public Health Service

Memorandum

Date January 10, 1989

From Nutritional Epidemiologist

Subject: Food Sufficiency Questions in NHANES III

To Carla Maffeo, Ph.D., Westat
    Cathy Novak, Westat

This memo documents the background of the development of the food sufficiency questions that are collected in the MEC at the end of the 24-hr recall interview. This short series of questions were adapted from a larger set of questions which were used in a community survey in Connecticut and found to be related to health indicators. Due to time allotments the larger set of questions could not be used in the NHANES III setting.

The food sufficiency questions were designed to be used in conjunction with other health, nutrition (dietary), and sociodemographic (e.g., family income) data collected in the survey for purposes of describing food availability and related health status in subgroups of the population. The MEC questions will likely be used in conjunction with food sufficiency and family income questions asked of the family respondent in the home.

While the food sufficiency questions may be interpreted for general survey findings, they were not designed to provide a specific assessment of an individual, primarily because of the wording of the questions which say "lack of food or money". The questions should not be interpreted or judged for a particular individual's status even though they may suggest that a food sufficiency problem exists. The questions are also subject to interpretation for an individual because they may be misunderstood by some individuals, for example, teenagers.

In summary, the MEC food sufficiency questions are an integral part of the data collection instruments used in the survey, and were designed to be used in concert with other parts of the household and MEC questionnaires and examination data. While the questions should not be interpreted for each individual, they can be used to study the relationship between food sufficiency and health and nutritional status in groups of individuals.

If you have any questions regarding this subject please call me at (301) 436-7080.

                                    Ronette R. Briefel, Dr.P.H., R.D.

Trailer question #6

```
+-------------------+
Is that because there wasn't enough money to      ¦ not enough money ¦
   buy food or is there another reason?           ¦ another reason    ¦
                                                  ¦ don't know        ¦
                                                  +-------------------+
```

This question verifies whether or not question 5 was understood correctly by the SP/proxy. For instance, if the SP says "I forgot my money at home, so I didn't have money to buy food," "another reason" would be selected, since the SP had money but just did not have it with him/her. The system will automatically skip to question 12.

However, if the SP/proxy says "because there wasn't enough money," select that answer and continue to the next question. A "don't know" response also will lead to the next question.

Trailer question #7

```
+--------------+
During the past month did  (you/   ) skip any     ¦ yes           ¦
   meals because there wasn't enough food  or      ¦ no            ¦
   money to buy food?                              ¦ don't know    ¦
                                                   +--------------+
```

The time frame is the past month. "Meals" is defined by the respondent. Some respondents may specify other reasons why meals were skipped, such as inability to get to the store to buy food, or illness. Probe by repeating the question, emphasizing "not enough food or money to buy food."

Highlight the appropriate answer category or enter the first letter of the response.

Trailer question #8

```
How many days in the past month did (you/   )
   skip any meals because there wasn't enough
   food or money to buy food?                      days
```

Again, "meals" is defined by the respondent. The question asks how many days, not how many meals were skipped. If the SP/proxy skipped two meals in the same day, the answer would be one day. Time frame is the past month. If the respondent gives a vague answer, such as "2 or 3," probe for his/her best estimate, "Was that closer to 2 days or 3 days?" Valid choices are 1 through 31 only. Drop any fractions; "2 1/2 days" would be recorded as 2 days, if the respondent was unable to estimate using whole numbers.

Trailer question #9

```
+-------------+
Did (you/   ) skip any meals  yesterday because   ¦ yes         ¦
    there  wasn't enough food  or  money to buy   ¦ no          ¦
    food?                                          ¦ don't know  ¦
                                                   +-------------+
```

This is specifically asking about yesterday (the 24-hour period for which the recall was done). It requires a yes/no answer, not how many meals were skipped. Again, "meals" is defined by the respondent. The recording is done the same as question 7.

Trailer question #10

```
+-------------+
During the  past month,   were there any days    ¦ yes         ¦
    when (you/   ) did not eat at all because     ¦ no          ¦
    there wasn't enough food or  money to buy     ¦ don't know  ¦
    food?                                          +-------------+
```

The time frame is the past month. If the SP reduced the amount of food he/she ate, but still consumed something, the response to this question would be "no." The question focuses on "did not eat at all." Count beverages, other than plain water, as "food." If the respondent answers "no," highlight that choice, and press ENTER. The system automatically skips to question 12.

If the SP says that he/she had beverages (coffee, tea, soda), but no food, select "no."

Trailer question #11

```
+---------------------------------------------+
| In the past month, how many days were there |
|    when (you/    ) did not eat at all?        days  |
|                                             |
+---------------------------------------------+
```

The time frame is past month. If SP/proxy states "a week," probe to find out the number of days. The respondent might be considering a "work week" of 5 days. Only numbers 1-31 will be accepted by the system.

Trailer question #12

```
+----------------------------------+-----------------------------+
| Are you the person who usually prepares | |yes                    |
|    the meals at home?               |no                     |
|                                     |shared preparation     |
|                                     |food not prepared at home|
|                                     |don't know             |
|                                     +-----------------------------+
+----------------------------------+
```

The important word here is "usually." "Meals" is defined by the respondent. If the respondent says that he/she usually prepares breakfast and lunch, but someone else prepares dinner, repeat the question emphasizing usually.

The question is intended to find out if the <u>respondent</u> is the person usually responsible for preparing meals for the SP (or for himself/herself); the place where the preparation is done is not important. If a child goes to her grandmother's home 5 days a week, and the grandmother prepares the meals (and is the respondent) the answer is "Yes," even though the preparation is not at the child's home. Sometimes a SP will say that he/she shares the preparation with his/her spouse. Before selecting "shared preparation," probe as to whether or not the work is equally shared. Setting the table and doing the dishes are not considered meal preparation. If the preparation is equally shared between two parties, for example, between a husband and wife, or a mother and daughter, highlight that choice or select "S" for shared preparation. Occasionally a respondent will state that absolutely no food preparation is done at home. If the SP always eats his/her meals in restaurants or has meals delivered to the home, highlight that choice or select "F" for food not prepared at home.

Notice that this question always refers to the respondent whether this person is an SP or a proxy.

-       **Completing the Interview: Answering the End of Recall Statements**

The next four statements are to be completed by you. Use your own best judgement.
Make comments where appropriate.

```
                +-----------------------+
Respondent:  :  SAMPLE PERSON         :
             :  PROXY                 :
             :  SAMPLE PERSON/PROXY   :
                +-----------------------+
```

Sample Person: Only the sample person participated in the interview contributing the
information without assistance from another person. Include also a situation where a
friend/relative is present to serve as a translator for the SP, but does not provide any
additional dietary information.

Proxy: Someone else answered on behalf of the sample person. Included in this category
are parents, guardians, siblings, baby-sitters, persons responsible for food planning/
preparation at a day care center, etc. More than one proxy may be needed to complete
the interview.

Sample Person/Proxy: Both the sample person and proxy contributed information.

```
                              +------------------+
Language of interview:  :  ENGLISH          :
                        :  SPANISH          :
                        :  ENGLISH/SPANISH  :
                        :  OTHER            :
                              +------------------+
```

Select the language which was primarily used during the 24-hour recall. Select
ENGLISH/SPANISH combination only if a significant portion of the interview was conducted
in each language. The use of a few words of English, such as using English names of certain
foods, would not be counted as a combination interview. OTHER would refer to an interview
conducted in a language other than English or Spanish. If a SP speaks a language other than
English or Spanish, see if an interpreter is available, e.g., a friend or relative who may have
accompanied the SP to the MEC. Should an interpreter be available, complete the 24-hour recall
portion of the interview with his/her assistance.

Do not attempt to ask the trailer questions when an interview is conducted in a language
other than English or Spanish. You should escape out of the trailer questions and attach a note
stating that "the interview was conducted through an interpreter." The trailer questions have been
carefully worded in English and Spanish so that each respondent is read (and hears) the

exact same questions. Since a great deal of time and effort went into the design of the trailer questions, it is not appropriate to have an interpreter haphazardly translate these questions. Whenever an interpreter is used, a comment must be added to record the language used, and any other information that might clarify the situation.

```
                          +------------------+
   Quality of recall: | RELIABLE         |
                          | UNRELIABLE       |
                          | REFUSAL          |
                          | NOT INTERVIEWED  |
                          +------------------+
```

An explanation must be given for any recall not coded reliable. This code only refers to the quality of the 24-hour recall.

Reliable: You feel that the respondent made a sincere effort to answer the questions, and that the information given is probably correct. Include recalls in which the respondent does not know certain ingredients in a recipe, such as in a casserole, or whether fat was used in preparation. Classify the recall as reliable even if the majority of food amounts are unknown. These unknown amounts can be replaced by NCHS with default amounts at a later time.

If you perceive the foods reported by the SP/proxy as accurate, yet he/she says he/she cannot remember his midnight snack, still code this as a reliable recall. In the latter situation, the SP has made a sincere effort to report all foods, but just cannot remember his/her snack; the information is reliable. (The procedure for entering a food, beverage, and/or meal in which a respondent can remember only that "something was consumed" will be discussed in Section 4.3.14.)

Unreliable: You feel the respondent was not able to give information that you think is correct. Include, for example, an elderly SP who cannot seem to understand the instructions or remember what was eaten, or a SP who was drunk. Before coding an interview unreliable, make sure you have exhausted all sources of possible proxies for the sample person. An elderly SP may have been accompanied to the MEC by a daughter or son who cares for and feeds the SP. Do not code unreliable in cases where you do not believe the SP, such as an obese SP who reports very little intake.

Refusal: The SP refuses to do the interview before you are able to obtain any information.

Not Interviewed: Due to time constraints, there will be occasions when the dietary interviewers are unable to complete interviews on all the SPs scheduled for a specific session. Since all SPs must be accounted for in the DDC system, select "not

interviewed" if no contact was made with the SP (or proxy). Attach a note stating "no time." In addition, for those SPs determined (by the coordinator or other authority, before any attempt at a dietary interview) to be unable to reliably complete the interview, and where there is no chance of data retrieval or a proxy interview, select "not interviewed." If a SP speaks a language other than English or Spanish, and an interpreter is not available, "not interviewed" would also be the appropriate selection for this situation. A mandatory note is required to explain the situation. If an SP arrived for his/her assigned appointment and was sent home by the doctor (due to serious medical problems) prior to your doing the dietary interview, enter the SP number into the system with the "not interviewed" code. Since SPs with medical problems may return in the future once the problems have been treated, attach a note stating, "sent home due to medical problems; may be rescheduled." Depending upon when the SP returns, you may later access that recall to complete the dietary interview.

In general, if an SP recalled food items for the previous day and you were able to record them even though the SP had some difficulty with detailed descriptions or amounts, this would still be a RELIABLE interview. An example of an UNRELIABLE interview is a situation where an elderly SP reported an entire day's recall and during the Recall Review said that those were not the foods he actually had. In this case the SP was confused and unlikely able to accurately give a day's recall, especially in the time you would have. In a case like this, record the interview as UNRELIABLE; do not take the additional time to try to start over. If this type of situation happens and after 15-20 minutes you can tell that the SP cannot provide a reliable interview, end the interview, thank the SP, and attach a note explaining the situation. Check to see if a proxy is available to give the recall for the SP.

```
                          +----------------+
    Interviewer's work:   |  COMPLETED     |
                          |  NOT COMPLETED |
                          +----------------+
```

In order to provide you with a mechanism to determine whether a recall needs further attention, the "interviewer's work" code was developed. It is used solely as a reminder to verify whether or not all work has been completed for a specific interview.

The dietary "interviewer's work" following an interview may consist of three tasks depending on the data collected during the 24-hour recall. These tasks include: 1) editing the interview, 2) data retrieval, and/or 3) completing a Request Form. Since each of these tasks is explained in great detail in Chapter 6, at this time, only a brief description will be given.

As mentioned earlier, editing is mandatory. Each interview is reviewed, and any modifications made, if necessary, to assure completeness and accuracy. Since editing is always a part of your responsibilities, it is expected that this task will be completed; therefore, if an interview lacks only the edit, code the "interviewer's work" as "completed."

A mandatory note is necessary for all "not completed" codes; attach a note stating the type of work that remains to be done for that specific interview. The note may be simple or more elaborate, as will be described shortly. Once the task has been completed, it is not necessary to delete the original note, just enter an additional comment indicating that the task was completed. It is anticipated that all final edited versions of the recall will receive a "completed" code; however, if for some reason, your work has not been completed, attach a brief note explaining the problem.

When a respondent cannot provide all the necessary information for a specific SP, and additional information must be retrieved at a later time, your work will initially receive a "not completed" code. In this case, a note containing detailed information is mandatory. Included in this note is information regarding whom to call, when to call, and the person's phone number. Following data retrieval (which is the information obtained about the SP's intake at a later time), the code will then be changed to "completed." Do not delete the original note; just add a statement indicating that you did follow through in gathering the necessary information, e.g., "called day care." If your data retrieval attempt(s) was unsuccessful, still change the code to "completed" and attach an additional statement explaining the situation. Remember, this code is a tool to discern what work remains to be done by you for a specific interview; therefore, even if you were unable to gather the additional data (for whatever reason) from an outside source, the attempt was made and your work is considered "completed."

In the pressure of the interview situation, you may be unable to find a specific food reported by the respondent in the DDC system. As explained earlier, detailed information about the item is then entered on the Missing Food screen. Whenever the Missing Food screen is utilized during the original interview, enter your work code as "not completed;" attach a note "missing food." If, during the edit process, you are able to locate the food in the hierarchies, make the correction; attach an additional note stating "found in hierarchies." If, however, you cannot locate the missing food, a Request Form must be completed. Should a Request Form be required, transfer the appropriate information to the form and attach a Recall Report. Detailed procedures on how and when to fill in this form are described in Chapter 6. Once you have completed the task, change the code to "completed" and attach a simple note stating "done." The actual market check is not considered part of "interviewer's work" since the information obtained is not entered into the system, but rather sent to NCHS for further evaluation.

Completed: The dietary interviewer has completed all tasks required to assure completeness of his/her work. "Completed" denotes that one or more attempts have been made to collect data retrieval information. In addition, Request Forms have been

completed, if necessary. Use the "completed" code if the recall lacks <u>only</u> the task of editing.

<u>Not Completed</u>: The dietary interviewer has not yet completed the required tasks. "Not completed" denotes that either data retrieval (Section 6.4.2) is necessary and/or a missing food(s) is contained in the recall. On the last day of a stand, there is probably more likelihood that your work may not be completed; however, every effort should be made.

Unless the note is mandatory, you may attach a note pertaining to the quality of recall or completion code by pressing F8. After the note is completed, press F10 to select your answer on the End of Recall screen. (Comments on trailer questions should be attached to the specific question requiring the comment.)

```
End Time: 13:53:18        Elapsed time of 24-hour recall: 00:18:28
```

The computer will automatically enter the "End Time" and the "Elapsed time of 24-hour recall" displayed on the top of the End of Recall screen.

-   The Recall Report

Exhibit 4-100 is a printed copy of the 24-hour recall interview. The Recall Report, as it is called, is very similar to the information presented on the Recall Review; however, the Recall Report includes the Recall Header information, and the trailer question and end of recall responses.

You will note that three symbols may appear in the left-hand column of the Recall Report depending on the selections made during the interview. These are: 1) an "*" which signals that a note has been attached to that item via the Note screen, 2) an "@" which flags a missing food, and 3) a "+" which indicates that an unknown amount ("U") or volume with ice was entered during the interview. The text entered for either a note or a missing food appears on the Recall Report below the appropriate item.

Exhibit 4-100. Recall Report

```
Participant ID:    4444441                    Recall date:   01/06/92
        name:    HANS ANDERSON                      day :    Monday
        sex :    M
        age :    28Y                    Elapsed Recall Time   :   00:24:48
Date of exam :    01/07/92             Elapsed Interview Time:   00:25:22

Interviewer ID:    0002

Interview VER :    Original - DB ver 11a, DDC ver 17.0
```

****

```
08:00 am     BREAKFAST      HOME

   1.  Beverage:  instant breakfast

           1.1  milk, mixtures and milk drinks, instant breakfast drink,
                regular, other flavors, unprepared dry mix
                1.00 envelope

           1.2  water - drinking
                1.00 G3 volume - without ice

   2.  apple, fresh, with skin
       1.00 CP sliced
```

```
10:30 am     SNACK/BEVERAGE      WORK

   3.  Beverage:  tea

           3.1  tea, herbal
                1.00 COF

           3.2  sugar, white granulated
                0.50 packet

   4.  wheat bread, whole wheat (100%), regular, commercial, toasted
       1.00 slice (4" x 4" x 1/2")

*        Note:  plain
```

```
12:00 pm     LUNCH      WORK

@  5.  Missing Food: mixed dish
       Lean Pockets:  Chicken Parmesan
       Chicken pieces mixed with parmesan sauce wrapped in hard
       dough
       Bought at Giant--has a picture of the pocket on the fron
       Less than 300 calories
       DK price
Prepared in microwave w/o fat or salt
       Net weight of package:  10.0 oz.  Contains two pockets.  SP
       ate 1.  Cube:  3 inches wide, 6 inches long, 1 inch thick

   6.  Salad: salad
```

Exhibit 4-100. Recall Report (continued)

PartID: 4444441

    6.1 lettuce, romaine or cos
         2.00 leaf

    6.2 lettuce, iceberg
         0.50 CP chopped

    6.3 spinach, raw
         0.33 CP

    6.4 dressing for salads, buttermilk (ranch style), regular - bottled
         3.00 SP2

    6.5 cucumber, raw
         5.00 slice

    6.6 celery, raw
         3.00 TB diced

    6.7 green pepper - sweet (pimiento morron), raw
         2.00 SP2 chopped

    6.8 beets (remolachas), unknown if cooked from fresh or canned
         3.00 slice

         P: unknown preparation
           I: salt, unknown if salt added in preparation
           I: fat used as seasoning, unknown if fat used

    6.9 sprouts, mung bean, raw
         2.00 TB

    6.10 bacon, bits, textured vegetable protein
         3.00 SP2

    6.11 croutons, unknown if commercial or homemade
         10.00 each

    6.12 lunchmeats and sausages, turkey, breast, processed
         0.50 CP sliced

    6.13 eggs, boiled
         0.25 CP

  7. water - bottled, [Perrier Water]
      1.00 small bottle (each 6.5 FO)

03:30 pm   SNACK/BEVERAGE   WORK

  8. popcorn, commercially popped, plain
      1.00 B2

05:00 pm   SNACK/BEVERAGE   HOME

  9. pretzels, hard type, salted, twists or rings

Exhibit 4-100. Recall Report (continued)

PartID: 4444441

       5.00 medium (2 3/4" diam)

  10. zinfandel wine
       1.00 G5

  11. candy, [Butterfinger]
       1.00 bite size (each 0.25 OZ)

  12. candy, [Baby Ruth]
       1.00 fun size bar (each 0.5 OZ)

06:00 pm   DINNER/SUPPER   HOME

  13. chicken, breast (pechuga), skin eaten
       1.00 medium (half)

*   Note: no gravy

     P: fried, breaded/batter dipped - coating eaten, home prepared, pan fried
       I: fat used in frying, margarine, [Imperial - stick]
       I: salt, regular

  14. Meat, fish, poultry with additions: chicken w/gravy

      14.1 gravy, giblet, broth based
           known amount

*   Note: 1/2 cup used in total on chicken drumstick and
mashed potatoes.

      14.2 chicken, drumstick, skin eaten
           1.00 medium

        P: fried, breaded/batter dipped - coating eaten, home prepared,
          pan fried
          I: fat used in frying, margarine, [Imperial - stick]
          I: salt, regular

  15. Vegetables with additions: mash pot w/ gravy

      15.1 mashed potatoes, prepared from dehydrated, plain
           1.00 M2

        I: fat used in recipe, margarine, [Imperial - stick]
        I: milk, whole
        I: salt, regular

      15.2 gravy, giblet, broth based
           known amount

*   Note: See note for chicken w/gravy.

09:00 pm   SNACK/BEVERAGE   OTHER

Exhibit 4-100. Recall Report (continued)

PartID: 4444441

*Note: ice cream parlor

  16. ice cream and frozen desserts, regular (10% fat), chocolate or coffee
      flavors
      1.00 Ml

  I = ingredient P = preparation * = note + = unknown amt @ = missing food
****
amount of food consumed compared with usual intake: usual

volume of tap water consumed : number of glasses/cups :   4.00
                                  size of glass/cup   :   8.00 FO
                                  total volume   : 32.00 FO

type of salt added at table: ordinary salt

how often is salt added at table: occasionally

days during past month with no food or money: none

meals skipped during past month due to lack of food or money? no

respondent   : SAMPLE PERSON

language of interview : ENGLISH

quality of recall   : RELIABLE

interviewer's work   : COMPLETED

[This page left intentionally blank.]

4.3.14 Procedure for Unknown Food, Beverage, and/or Meal Entries

To accommodate those situations where a SP or proxy cannot provide further details regarding a specific meal, food, or beverage, but knows that "something" was consumed, three "unknown" entries were developed. These unknowns are entered as food items and serve as place holders. They will either be replaced with the correct information by you once data retrieval has been completed, or with default entries by NCHS if there is no chance of data retrieval or the data retrieval attempt(s) was unsuccessful.

The three unknown entries are:

UBEV - food entry for unknown beverage
UFOO - food entry for unknown food
UMEA - food entry for unknown meal

Exhibit 4-101 provides examples of how these unknown entries may be utilized on the Quick List and Food Entry screens.

It is anticipated that these unknown entries will be used most frequently for proxy interviews where data retrieval is necessary. For example, a proxy may be aware that the SP received some type of food and beverage at the day care center as a snack, but may not know what was consumed the day of the recall. In this case, enter the time of the snack, the location, and "UFOO" and "UBEV" as two separate items on the Quick List. Enter the same four-letter keys on the Food Entry screen at the appropriate food item prompt. Remember that these entries are used specifically for those occasions in which there is no knowledge about the type of food or beverage; they are not to be used when a SP or proxy reports an unknown type of fruit, cracker or slice of bread. In the latter situation, be sure to use the unknown selection in the appropriate hierarchy.

In addition, the unknown entries should be used when a SP cannot recall a specific food, beverage or meal, but again knows "something" was consumed. If a food was consumed at a party and the SP cannot provide any information about the food, also use the unknown entry. In this case, enter the time, meal code, location, and "UFOO" (as the food item). On the other hand, do not use the unknown entry if the SP is able to provide a description of the food, but does not know the name of the food. Try to locate the food through the hierarchies or enter the item as a missing food.

When conducting a proxy interview where the respondent knows that "something" was eaten by the SP at a day care center, but does not know whether it was a food or beverage, first try to find out the usual item served and enter either "UFOO" or "UBEV" into the system. If the respondent still is unsure, attach a note to the entry and state "unknown if food or beverage." If data retrieval is successful, enter the correct food item; if unsuccessful, at least sufficient data was gathered for NCHS to enter a default.

Exhibit 4-101. UFOO, UBEV, UMEA examples

<u>Screen 1 of 5</u>

```
                          QUICK LIST
+---------------------------------------------+ EX: /7a bre hom
¦ /9a bre day                                 ¦
¦ umea                                        ¦        CODES
¦ /12p lun day                                ¦
¦ umea                                        ¦ Meals          Place
¦ /2p sna day                                 ¦  BRE           HOMe
¦ ufoo                                        ¦  DES           WORk
¦ ubev                                        ¦  BRU           SCHool
¦ /6p din hom                                 ¦  ALM           DAY care
¦ mac and cheese                              ¦  LUN           FASt food
¦ koolaid                                     ¦  COM           DELi
¦ pie                                         ¦  MER           REStaurant
¦                                             ¦  DIN           CAFeteria
¦                                             ¦  CEN           STOre
¦                                             ¦  SNA           FRIend's
+---------------------------------------------+  ENT           COMmunity
                                                 INF           TRAnsit
  Type / to BEGIN a new meal and press <ENTER>.  EXT           OTHer
  Type one food per line and press <ENTER>.      OTH
  Press F10 to complete the Quick List.
----------------------------------------------------------------------
Enter the Quick List.
```

<u>Screen 2 of 5</u>

```
                          FOOD ENTRY
          Meal Time  : 02:00 pm
          Meal Name  : Snack/Beverage
          Meal Place : Day care/day camp

    +-------------------------------------------------------------
    ¦    Food Name : ufoo
    ¦
    ¦Item    1: UFOO
    ¦Item    2:
    ¦Item    3:
    ¦Item    4:
    ¦Item    5:
    ¦Item    6:
    ¦Item    7:
    ¦Item    8:
    ¦Item    9:
    ¦Item   10:
    ¦
    ¦    Press F10 when all the food items are listed.
    +-------------------------------------------------------------
Type the first four or more letters of the food item.  Press <ENTER>.
```

Exhibit 4-101. UFOO, UBEV, UMEA examples (continued)

```
UNKNOWN FOOD


        General Description:  Enter any available information about
        the unknown food.
        +--------------------------------------------------------------+
        |                                                              |
        |                                                              |
        |                                                              |
        |                                                              |
        |                                                              |
        |                                                              |
        |                                                              |
        +--------------------------------------------------------------+


        Amount & Measurement:  Enter any available information about
        the amount and measurement.
        +--------------------------------------------------------------+
        |                                                              |
        |                                                              |
        +--------------------------------------------------------------+

   Describe the food.  Use <PgDn> to move to Amount & Measurement.
```

```
UNKNOWN BEVERAGE


        General Description:  Enter any available information about
        the unknown beverage.
        +--------------------------------------------------------------+
        |None                                                          |
        |                                                              |
        |                                                              |
        |                                                              |
        |                                                              |
        |                                                              |
        |                                                              |
        +--------------------------------------------------------------+


        Amount & Measurement:  Enter any available information about
        the amount and measurement.
        +--------------------------------------------------------------+
        |unknown                                                       |
        |                                                              |
        +--------------------------------------------------------------+

   Use <PgUp> to go to Description.  Press F10 when complete.
```

Exhibit 4-101. UFOO, UBEV, UMEA examples (continued)

```
                                RECALL REVIEW
09:00 am                        Breakfast           Day care/day camp

1.   unknown meal
------------------------------------------------------------------------
12:00 pm                        Lunch               Day care/day camp

2.   unknown meal
------------------------------------------------------------------------
02:00 pm                        Snack/Beverage      Day care/day camp

3.   unknown food

4.   unknown beverage
------------------------------------------------------------------------
06:00 pm                        Dinner/Supper                     Home
```

Once the unknown entry is used, the system progresses to a screen that is very similar to a Missing Food screen. The screen contains two fields, one for recording a "general description" and notes, and the other for recording "amount and measurement" information. Press "Pg Dn" to access the "amount and measurement" field, and press "Pg Up" to return to the "general description" field. Press the F10 key to return to the food selection process.

When "UFOO," "UBEV," and "UMEA" are used, try to replace these entries during the edit process with the appropriate foods by contacting an outside source. This procedure holds true more for proxy interviews as opposed to an adult SP who just cannot give more details about the beverage he/she drank at a party.

4.3.15 Nutrition Information and Referral

Because you are conducting an interview on nutrition, respondents will assume that you have knowledge of nutrition and may take the opportunity to ask you for information and advice on the diet and eating habits.

Although it is always important to appear and behave in a professional manner, your role during the interview is that of a professional interviewer, not a dietitian or nutritionist. This is important to remember because if the respondent sees you as an "expert" he or she may be embarrassed to report actual food intake. For instance, a SP who reports being on a diabetic

or low salt diet, may omit reporting certain foods that are restricted, but were eaten during the 24-hour recall period.

During the interview, the respondent may "test" your nutritional expertise by making comments such as, "I know I really shouldn't eat this on my diet should I?" Or a respondent may ask directly for nutritional advice with questions about what foods to include or exclude on a certain diet, what foods have different nutrient values or what food (or brands) are recommended for certain illnesses.

Remember that your first job is to complete the interview, obtaining data as accurately as possible. You must remain neutral and not make any judgmental statements or comments about what the respondent tells you. Be aware of your facial expression. Frequently, the best approach is to encourage the respondent to proceed with the interview by barely acknowledging stray comments.

For example, to a statement such as, "I ate a candy bar even though it's not allowed on my diet," you need only say, "Okay, and what kind of candy bar was this?", or whatever information is needed next.

Sometimes the respondent will ask a direct question during the interview such as, "I read that eating fried foods isn't good for you. Is that true?" When this happens you will have to tactfully avoid answering the question and redirect the respondent's attention back to the interview. This can usually be done by saying something such as, "Perhaps we could talk about where you can get information on that topic after the interview is finished."

At the end of the interview, if the respondent has questions, your role is to refer the respondent to an appropriate source. You are not to do dietary or nutritional counseling. Tell the respondent that without knowing more about his or her medical history, finances, lifestyle or dietary habits, you cannot answer the questions, but encourage him or her to make use of community resources.

The food insufficiency trailer questions sometimes prompt a concerned SP to ask about the availability of public assistance programs in the area. NCHS will provide you with a list of WIC (Women, Infants and Children) clinics serving a specific stand, and their addresses and phone numbers, if they are available. Other programs that exist in many areas are food stamps and food banks. NCHS will provide you with more specific programs in each stand when approval/permission has been given from the officials in that county. If few programs are available, you may tell the SP to call the local public health agency. Any time that you provide a SP with a referral, you must preface the statement with, "I cannot guarantee that you will be eligible for this program, but you might try..."

5.0 Handling Problematic Situations While Interviewing

The DDC system is designed to make it as simple as possible for the interviewer to conduct the interview. In most cases, you will be able to conduct a computer-assisted interview without technical difficulties.

When an unusual situation or problem occurs, look for clues which may help to resolve the problem. First, the system may assist you by indicating through a prompt why an entry was not accepted and what action to take. In Exhibit 5-1, the interviewer typed in "ham", which is unacceptable. The prompt explains that at least 4 letters need to be typed; an "s" must be added if the food name has less than four letters. This occurs also with "egg" and "tea".

Another scenario occurs when you accidentally press the Num Lock key (Exhibit 5-2). This key, as its name indicates, locks a particular keypad so that only numbers can be entered. Functions located on that keypad may not be operational when the Num Lock key is engaged. You may determine if the Num Lock key is engaged by looking for a light located above the top row of keys and labeled "Num Lock." If the light is on, simply press the Num Lock key to return the system to normal operation.

After using the automated system for a period of time, entering the slash ("/") should become second nature. Initially, though, there may be times when it is forgotten. Do not panic! There is an easy way to remedy the situation. Exhibit 5-3 illustrates a situation where the slash was forgotten. The progression of screens demonstrates the resolution of the problem. When the slash is forgotten, the system presents the time, meal code, and place as the food name. To correct this problem, press F4, select Quick List on the System Menu and press ENTER. Insert a slash ("/") in front of the appropriate meal and press F10 to continue with food selection. The next food to be specified will appear at the food name prompt on the Food Entry screen.

Whenever you begin an interview, check the time and date for accuracy. Usually, the information presented is correct; however, for those rare times when it is not, the interviewer may select number 6 on the dietary interview menu, "set time and date." Selecting number 6 automatically resets the time and date on the Vaxmate by accessing the appropriate information from the VAX computer located in the back of the MEC. If the time and/or date are still incorrect after completing this procedure, notify the MEC manager.

5.1 DDC System Malfunctions

From time to time, the DDC system may malfunction. The general types of malfunction are: system abort, system freeze, and power failure. The following sections describe each of these types of malfunction and how to recover from them:

Exhibit 5-1. Food Entry screen: prompt for a four-letter item

```
 FOOD ENTRY

          Meal Time  : 07:00 am
          Meal Name  : Breakfast
          Meal Place : Work

      +---------------------------------------------------------------
      ¦
      ¦    Food Name  : ham
      ¦
      ¦Item    1: [HAM]                   Prompt indicates that at least 4 letters
      ¦Item    2:                         must be typed.
      ¦Item    3:
      ¦Item    4:
      ¦Item    5:
      ¦Item    6:
      ¦Item    7:
      ¦Item    8:
      ¦Item    9:
      ¦Item   10:
      ----------------------------------------------------------------
Type in at least 4 letters.  Add S if food name is less than 4
letters.  eg: HAMS.
```

Exhibit 5-2. Num Lock key
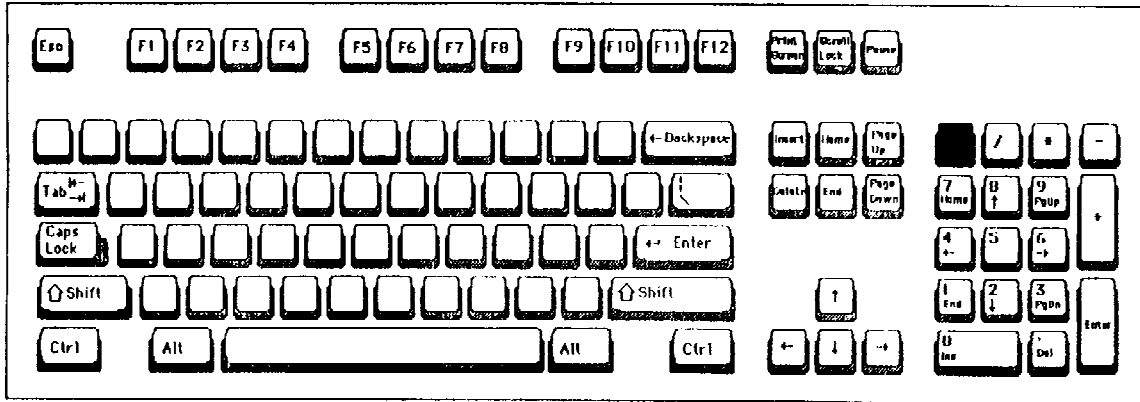
Exhibit 5-3. Food Entry screen: when "/" not entered prior to meal information on Quick List

<u>Screen 1 of 5</u>

```
+------------------------------------------------------------------+
|                          FOOD  ENTRY                             |
|            Meal  Time  :  07:00  am                              |
|            Meal  Name  :  Breakfast                              |
|            Meal  Place:  Work                                    |
|                                                                  |
|       +--------------------------------------------------+       |
|       |  Food Name :  [12p lun wor]  <-- Slash forgotten.  Press F4 to access the |
|       |                                        system menu.     |
|       |Item   1:                                                 |
|       |Item   2:                                                 |
|       |Item   3:                                                 |
|       |Item   4:                                                 |
|       |Item   5:                                                 |
|       |Item   6:                                                 |
|       |Item   7:                                                 |
|       |Item   8:                                                 |
|       |Item   9:                                                 |
|       |Item  10:                                                 |
|       |                                                          |
|       |   Press F10 when all the food items are listed.          |
|       +----------------------------------------------------------|
| Please enter the meal time.                                      |
|                                                                  |
+------------------------------------------------------------------+
```

<u>Screen 2 of 5</u>

```
+------------------------------------------------------------------+
|                          FOOD  ENTRY                             |
|                    +------- System Menu ------+                  |
|        Meal  Time  :  07:0| Recall Header          |             |
|        Meal  Name  :  Brea| [Quick List]  <-  Highlight Quick List and press |
|        Meal  Place:  Work | Food Entry       ENTER. |            |
|                           | Recall Review          |             |
|   +-------------------+   | Recall Trailer         |-------------+
|   |                   |   | End of Recall          |             |
|   |   Food Name :  12p l| Print Recall Report      |             |
|   |                   |   | Exit Recall            |             |
|   |Item   1:          |   | Exit DDC System        |             |
|   |Item   2:          |   | ---------------------- |             |
|   |Item   3:          |   | Help              F1   |             |
|   |Item   4:          |   | Back Up           F2   |             |
|   |Item   5:          |   | System Hold       F3   |             |
|   |Item   6:          |   | Insert            F5   |             |
|   |Item   7:          |   | Delete            F6   |             |
|   |Item   8:          |   | Missing Food      F7   |             |
|   |Item   9:          |   | Note              F8   |             |
|   |Item  10:          |   | ENG/SPA Toggle    F9   |             |
|   |                   |   | Next Screen       F10  |             |
|   |   Press F10 when al|                          |             |
|   +-------------------+   | Press <ESC> to exit menu |-----------+
| Press enter to exit this recall but remain in the DDC System.    |
|                                                                  |
+------------------------------------------------------------------+
```

Exhibit 5-3. Food Entry screen: when "/" not entered prior to meal information on Quick List (continued)

<u>Screen 3 of 5</u>

```
                           QUICK LIST
+--------------------------------------------------+ EX: /7a bre hom
| /7a bre wor                                      |
| [12p lun wor]                                    |        CODES
| BLT sandwich                                     |
| Coke                                             |Meals      Place
| chips                                            | BRE       HOMe
| /4p sna wor                                      | DES       WORk
| candy bar                                        | BRU       SCHool
| Coke                                             | ALM       DAY ca
| popcorn                                          | LUN       FASt f
| /730p din hom                                    | COM       DELi
| salad w/ dressing                                | MER       REStau
| T-bone                                           | DIN       CAFete
| baked pot w/ sour cream                          | CEN       STOre
| peas                                             | SNA       FRIend
+--------------------------------------------------+ ENT       COMmun
                                                     INF       TRAnsi
Type / to BEGIN a new meal and press <ENTER>.        EXT       OTHer
Type one food per line and press <ENTER>.            OTH
Press F10 to complete the Quick List.

        Move the highlight to the appropriate meal.
```

<u>Screen 4 of 5</u>

```
                           QUICK LIST
+--------------------------------------------------+ EX: /7a bre hom
| /7a bre wor                                      |
| [/12p lun wor]                                   |        CODES
| BLT sandwich                                     |
| Coke                                             |Meals      Place
| chips                                            | BRE       HOMe
| /4p sna wor                                      | DES       WORk
| candy bar                                        | BRU       SCHool
| Coke                                             | ALM       DAY ca
| popcorn                                          | LUN       FASt f
| /730p din hom                                    | COM       DELi
| salad w/ dressing                                | MER       REStau
| T-bone                                           | DIN       CAFete
| baked pot w/ sour cream                          | CEN       STOre
| peas                                             | SNA       FRIend
+--------------------------------------------------+ ENT       COMmun
                                                     INF       TRAnsi
Type / to BEGIN a new meal and press <ENTER>.        EXT       OTHer
Type one food per line and press <ENTER>.            OTH
Press F10 to complete the Quick List.

      Insert a slash ("/") immediately in front of the meal.  Press F10 to continue with food
      selection.
```

Exhibit 5-3. Food Entry screen: when "/" not entered prior to meal information on Quick List (continued)

<u>Screen 5 of 5</u>

```
                             FOOD ENTRY
          Meal Time : 12:00 pm
          Meal Name : Lunch
          Meal Place: Work


     +-----------------------------------------------------------+
     ¦    Food Name  : |BLT sandwich|<-- The next food to be specified appears.
     ¦
     ¦Item    1:
     ¦Item    2:
     ¦Item    3:
     ¦Item    4:
     ¦Item    5:
     ¦Item    6:
     ¦Item    7:
     ¦Item    8:
     ¦Item    9:
     ¦Item   10:
     ¦
     ¦    Press F10 when all the food items are listed.
     +-------------------------------------------------------------
Please enter the meal time.
```

- System Abort

A system abort is an unexpected exit from a DDC screen to the dietary interview menu. If this happens, access the DDC program, as described in Section 4.2. Enter the participant's ID number on the Recall Header screen. The participant's name, sex, age, and your ID number appear as you originally entered them. The phrase, "Continue Recall," appears at the bottom of the screen (Exhibit 5-4). (If you were editing a recall at the time of the system abort, the phrase, "Edit Recall," appears.) Press ENTER to accept this data (to correct a mistake, retype the data and press ENTER).

If the system abort occurred during food description, the Quick List screen appears and includes only the foods that you had not yet described completely. Press F10. Enter the remaining foods from the Quick List and complete the interview as usual. If a specific food or other piece of information seems to be causing the system abort, use the Note or Missing Food screen, rather than entering the information normally. (Note: Either the food that you were describing at the time of the system abort, or a blank line, may appear on the Recall Review screen. You can identify the latter by a triple space between foods or a skip in the sequence of food numbers on the screen. If either occurs, always delete the food and respecify it or delete the blank line, respectively, before resuming the interview.)

If the system abort occurred at any time following food description (i.e., on the Recall Review or Recall Trailer screens), the Recall Review screen appears. Complete the interview or editing as usual. If a specific food or other piece of information seems to be causing the system abort, use the Note or Missing Food screen, rather than entering the information normally.

- System Freeze

A system freeze is an unresponsive keyboard. If this happens, first make sure that the keyboard and monitor cables are connected to the computer, and that the "F3" and/or "Caps Lock" (Exhibit 5-5) keys are not engaged. On some computers, if the "Caps Lock" key is engaged, then the arrow keys are disabled. If the system is still frozen, reboot the computer. To do this, hold down the "Ctrl" and "Alt" keys and press "Del". The computer should restart. If it doesn't, turn off the power switch for several seconds, then turn it on. The dietary interview menu appears. Access the DDC program, as described in Section 4.2. Enter the participant's ID number on the Recall Header screen. The participant's name, sex, age, and your ID number appear as you originally entered them. The phrase, "Continue Recall," appears at the bottom of the screen. (If you were editing a recall at the time of the system freeze, the phrase, "Edit Recall," appears.) Press ENTER to accept this data (to correct a mistake, retype the data and press ENTER). (Contact the MEC manager if the system is not functional after turning the main switch on and off.)

Exhibit 5-4. Recall Header screen: Continue Recall

```
                              RECALL HEADER
       Exam Date:  10/01/91              Recall Date: 09/30/91
                                         Day of Week: Monday
   ----------------------------------------------------------------
      Participant's ID: 1234567

                Name: MARY SMITH

           Sex (M/F): F

           Age (M/Y): 52Y

      Interviewer's ID: 0002
                                   ┌────────────────┐
                                   │CONTINUE RECALL │
                                   └────────────────┘
   ----------------------------------------------------------------
   Enter the participant's name.
```

If the system freeze occurred during food description, the Quick List screen appears and includes only the foods that you had not yet described completely. Press F10. Enter the remaining foods from the Quick List and complete the interview as usual. If a specific food or other piece of information seems to be causing the system freeze, use the Note or Missing Food screen, rather than entering the information normally.

If the system freeze occurred at any time following food description (i.e., on the Recall Review or Recall Trailer screens), the Recall Review screen appears. Complete the interview or editing as usual. If a specific food or other piece of information seems to be causing the system freeze, use the Note or Missing Food screen, rather than entering the information normally. (Note: Either the food that you were describing at the time of the system freeze, or a blank line, may appear on the Recall Review screen. You can identify the latter by a triple space between foods or a skip in the sequence of food numbers on the screen. If either occurs, always delete the food and respecify it or delete the blank line, respectively, before resuming the interview.)

-       **Power Failure**

When the power is restored, the computer should automatically reboot. If it doesn't, check all cables and connections then turn the power switch off and on. (Contact the MEC manager if the system is not functional after turning the main switch on and off.) When the dietary interview menu appears, access the DDC program as described in Section 4.2. Enter the participant's ID number on the Recall Header screen. The participant's name, sex, age, and your ID number appear as you originally entered them. The phrase, "Continue Recall," appears at the bottom of the screen. (If you were editing a recall at the time of the power failure, the phrase, "Edit Recall," appears.) Press ENTER to accept this data (to correct a mistake, retype the data and press ENTER).

5-8

Exhibit 5-5. Caps Lock key
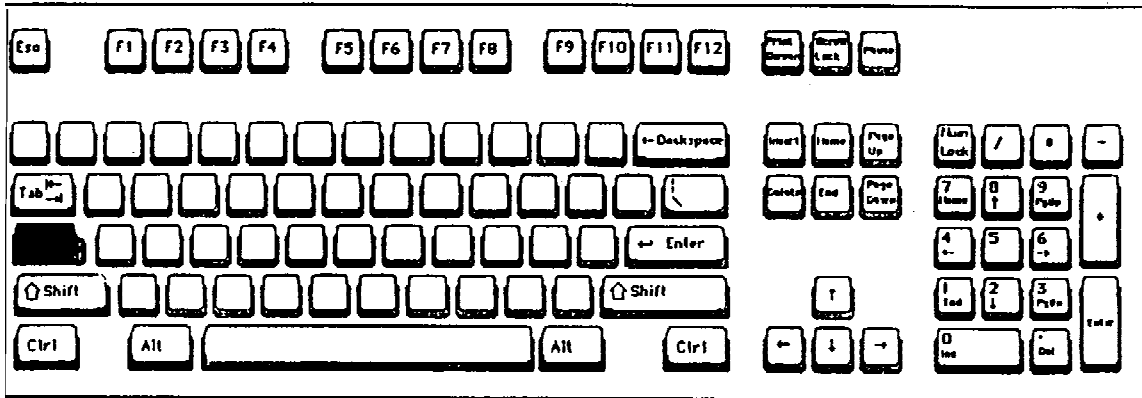
If the power failure occurred during food description, the Quick List screen appears and includes only the foods that you had not yet described completely. Press F10. Enter the remaining foods from the Quick List and complete the interview as usual. (Note: Either the food that you were describing at the time of the power failure, or a blank line, may appear on the Recall Review screen. You can identify the latter by a triple space between foods or a skip in the sequence of food numbers on the screen. If either occurs, always delete the food and respecify it or delete the blank line, respectively, before resuming the interview.)

If the power failure occurred at any time following food description (i.e., on the Recall Review or Recall Trailer screens), the Recall Review screen appears. Complete the interview or editing as usual.

5.1.1 Reporting System Malfunction Information

Any time the DDC system malfunctions, you are required to report the malfunction to the Nutrition Coordinating Center (NCC). The type of information provided to the NCC depends on whether the malfunction is non-fatal (i.e., you can retrieve the recall after the malfunction and successfully complete the DDC interview) or fatal (i.e., you experience repeated malfunctions during the recall and/or are unable to successfully complete the DDC interview).

- Non-Fatal System Malfunctions

If you experience a non-fatal malfunction, use the following procedures to inform NCC of the problem food or situation:

1. Make a hard copy of the screen on which the malfunction occurred (if applicable). To do this, hold down the "Shift" key and press the "Print Screen" key (Exhibit 5-6).

2. Complete a Malfunction Report Form (explained in detail shortly) as soon as possible after the interview, so you don't forget the circumstances surrounding the problem.

3. Make two copies each of the problem screen (if applicable) and the completed Malfunction Report Form. Send one copy to NCHS along with the weekly dietary transmittals. Mail the second copy to the NCC at the address indicated on the Malfunction Report Form. Keep the original forms in the MEC until the problem has been resolved.

- Fatal System Malfunctions

If you experience repeated malfunctions during an interview and/or are unable to successfully complete the interview, you are required to send a copy of the recall to NCC (in addition to a Malfunction Report Form and problem screen) using the following procedures:

1. Make a hard copy of the screen on which the malfunction occurred (if applicable). To do this, hold down the "Shift" key and press the "Print Screen" key.

Exhibit 5-6. Print Screen
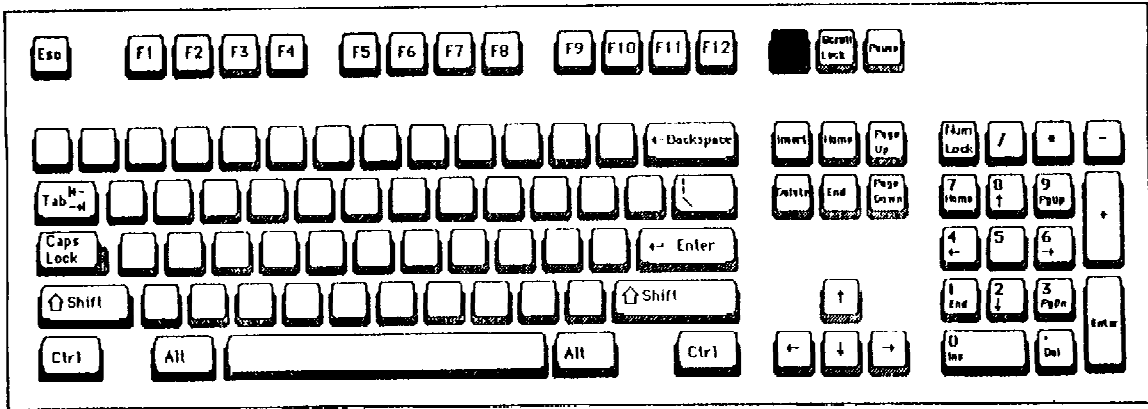
2. Copy the problem recall on a diskette. It is essential to copy the problem recall <u>immediately</u> following an malfunction.

    a. Access the DDC program, as described in Section 4.2.

    b. When the blank Recall Header screen appears, <u>do</u> <u>not</u> enter the participant's ID number. Instead, hold down the "Ctrl" key and press the "E" key. A window appears on the screen prompting you for the participant ID. Type the participant ID, and press "Enter".

    c. Exit the DDC program by pressing F4, highlighting "Exit DDC System" and pressing <Enter>. Type the following at the DOS prompt:

        cd..\tmp   <Enter>

    d. Insert a formatted diskette into the computer's disk drive (Exhibit 5-7).

    e. Type the following two lines at the DOS prompt:

        copy *.dat a: <Enter>
        copy *.idx a: <Enter>

    f. Remove the diskette from the computer's disk drive. Label it with the participant's ID and the date.

3. Complete a Malfunction Report Form (explained in detail below).

4. Make two copies each of the problem screen (if applicable) and the completed Malfunction Report Form. Send one copy to NCHS along with the weekly dietary transmittals. Fold and insert the second copy into the diskette mailer and send them with the diskette to NCC at the address indicated on the Malfunction Report Form. Keep the original forms in the MEC until the problem has been resolved.

If a problem occurs mid-interview, apologize to the respondent for the inconvenience and explain that a computer problem has occurred. Return the respondent to the waiting area and let him/her know that you will continue the interview after you have investigated the problem.

Exhibit 5-7. Disk insertion

Diskette Insertion

To insert a diskette, gently slide it (label side up and metal plate first) into the drive until the diskette locks into place.

Power Switch and Indicator

Diskette Eject Button
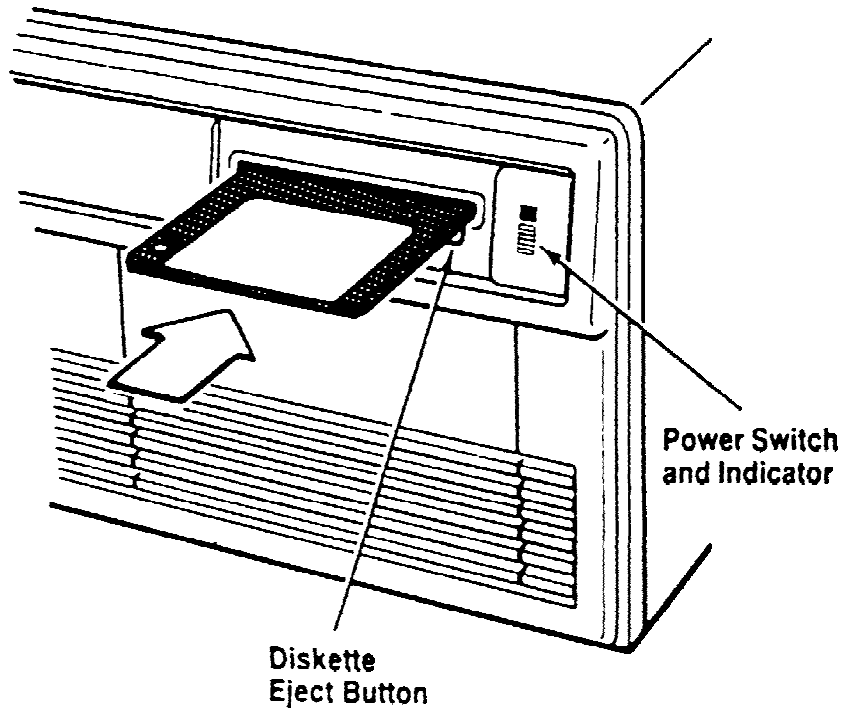
To remove a diskette from the drive, press the diskette eject button. Be careful not to accidentally press the power switch. When the diskette is partially ejected, pull it out.

Caution: A drive activity light comes on when the computer is accessing that drive. Removing a diskette from a diskette drive while the activity light is on can destroy the data on the diskette.

-   How to Complete the Malfunction Report Form

It is essential that you complete the Malfunction Report Form (Exhibit 5-8) as soon as possible, so you don't forget the circumstances of the malfunction. To complete the form, first fill in the date and time the problem occurred, the Participant ID number, your name and interviewer number, the stand number, the dietary room number, and the DDC version number. Follow the step-by-step procedures listed on page 1 of the form.

The second section of the Malfunction Report Form is a summary of the events that preceded the malfunction. Question 1 asks that you check the mode you were working in at the time of the malfunction. Question 2 asks that you specify the screen you were working on, and question 3 asks you to specify the apparent type of malfunction that occurred. Question 4 requests that you document system messages that contain relevant information related to the malfunction. After a malfunction occurs, a system message that contains information regarding the <u>error number</u> and <u>file number</u> of the problem may be <u>displayed in a defined box</u> on the screen. Be sure to document this information because it is extremely useful in resolving the malfunction. [Note that messages randomly displayed on the screen following a malfunction are <u>not</u> useful in resolving a malfunction. These latter messages contain numbers, letters and symbols, and are not contained in a defined box.] Complete this section of the form by reviewing questions 5, 6 and 7, and answering those pertinent to your problem.

After completing the Malfunction Report Form, it may be helpful to "play" with the system to see if the problem is related to a specific food selection. If this is the case, do not enter that food into the system through normal means; instead, attach a note at the end of the recall stating the food item, amount, meal code, etc. Problems such as these will be resolved as soon as possible and corrected with new system versions.

-   Resuming the Interview

Once you have determined that the malfunction is not fatal and completed the Malfunction Report Form, inform the SP and resume the interview using the DDC system. If the malfunction is fatal, discontinue the automated interview and begin recording the interviews on hard copy.

-   Repeating An Interview Due to a System Problem

Whether you are repeating an interview on hard copy or the automated system, it is important to review the instructions again with the respondent, then proceed with the interview. Refer to Chapter 8 which explains conducting a hard copy interview.

Exhibit 5-8. Malfunction Report Form

Malfunction Report Form

Date: _____   Stand #: _____
Time: _____   Room #: _____
SP#: _____   DDC version: _____
Interviewer (Name & ID):_____

1. Make a hard copy of the screen on which the malfunction occurred. To do this, hold down the "Shift" key and press the "Print Screen" key.

2. Copy the problem recall on a diskette only if you are unable to successfully complete the interview. Otherwise, skip to step 3.

   a. Access the DDC program.

   b. When the blank Recall Header screen appears, do not enter the participant's ID number. Instead, hold down the "Ctrl" key and press the "E" key. A window appears on the screen prompting you for the participant ID. Type the participant ID, and press "Enter".

   c. Exit the DDC program by pressing F4, highlighting "Exit DDC System" and pressing <Enter>. Type the following at the DOS prompt:

      ```
      cd..\tmp   <Enter>
      ```

   d. Insert a formatted diskette into the computer's disk drive.

   e. Type the following two lines at the DOS prompt:

      ```
      copy *.dat a:   <Enter>
      copy *.idx a:   <Enter>
      ```

   f. Remove the diskette from the computer's disk drive. Label it with the participant's ID and the date.

3. Complete the Summary of Events Preceding System Malfunction on the reverse side.

4. Make two copies of the problem screen and this Malfunction Report Form. Send one copy to NCHS along with the weekly dietary transmittals. Fold and insert the second copy into the diskette mailer and send them with the diskette (or send the forms only) to NCC at the following address. Keep the original forms in the MEC until the problem has been resolved.

   Laurie McBane
   Nutrition Coordinating Center
   2221 University Ave., S.E., Suite 310
   Minneapolis, MN 55414

Exhibit 5-8. Malfunction Report Form (continued)

Summary of Events Preceding System Malfunction

1. Check the mode you were working in:

   ___New Recall
   ___Continue Recall
   ___Edit Recall

2. Check the screen you were working on:

   ___Recall Header screen   ___Preparation screen
   ___Quick List screen   ___Note screen
   ___Food Entry screen   ___Missing Food screen
   ___Food Selection screen   ___Recall Review screen
   ___Amount screen   ___Trailer Questions screen
   ___Ingredient screen   ___End of Recall screen

3. Check the apparent type of malfunction that occurred. If applicable, indicate the function key you were using.

   ___Abort
   ___System freeze
   ___Power Failure
   ___Other (Specify: _____)

   ___Using a function key (Specify: _____)

4. If a message* appeared on the screen at the time of malfunction, document the error number and the file number:

   Error number = _____
   File number = _____

   * Refer to section 5.1.1 of the Dietary Interviewer's Manual for a description of the types of messages that are useful in resolving malfunctions.

5. What were you entering at the time of the malfunction?

6. Approximately how many foods had you entered at the time of the malfunction?

7. Please provide any additional comments NCC might find helpful.

6.0   Quality Control

A variety of quality control procedures are used in the NHANES III dietary component to assure that data are collected accurately. They include field observation, taped interviews, verifying the work of your dietary counterpart and editing your own work.

6.1   Field Observation

NCHS and Westat staff will conduct field observation of recall interviews at every stand until you and they feel comfortable with all of the procedures. Later during the field period, observations will be conducted less frequently. Field observation will include evaluation of the following:

1.   Introduction and confidentiality statement,

2.   Mannerism and eye contact,

3.   Flow of the interview,

4.   Use of neutral probes,

5.   Proper use of automated systems,

6.   Proper use of food models,

7.   Proper use of the edit system,

8.   Review of dietary logs, and

9.   Review of Recall Reports (printed recalls).

The field observer will also review printed recalls completed the day of observation and provide immediate feedback to you at the time of the field visit. Your questions and concerns will also be discussed during these visits as needed.

6.2   Taped Interviews

You will tape one interview per stand which will be reviewed by NCHS and Westat staff for interview quality. After receiving permission from the SP and/or proxy, you will record the second interview on the first day of week three. When recording an interview, it is extremely important to preface the recording with the following information:

1. The stand number,

2. The SP number,

3. The date the interview was recorded,

4. Your name, and

5. A statement such as, "SP gives permission to record the interview."

In addition, you should attach a label to the cassette listing items 1-4 above. Should the label become detached from the cassette during shipment, the identifying information can be retrieved by simply listening to the first few seconds of the tape. Send the cassette and a copy of the Recall Report to NCHS with the other weekly transmittals. As will be explained in Chapter 10, you will also note the taped interview on the Dietary Interviewer Log.

6.3 Verification

Approximately 10 percent of edited recalls will be cross-checked. Each day you are required to review one of the other interviewer's recalls and provide him/her with one of your recalls for review. The selection of the interview transmitted for verification is based on the number of SPs seen in a particular day. If you completed more than four interviews for the day, transmit the **fourth from the last interview of the day** (not the session). For example, if you completed eight interviews, transmit interview number five. If you completed fewer than four interviews, transmit the first interview. For example, if you completed a total of only three interviews, transmit the first interview.

At the end of the second session for the day, determine which recall should be transmitted to the other dietary interviewer. You can do this easily by consulting your Dietary Interviewer Log; simply count back four from the last SP, or, if there are less than four interviews, transmit the first interview of the day. Print the Recall Report of the final edited version for that interview and give it to your dietary counterpart. As mentioned, you should receive one transmitted interview per day.

The purpose of verification is to learn from each other's successes and mistakes. Although you may find errors during the review, more often you will find new ways of doing things and questions that you both have about a procedure, and you may see something that will make your job easier when in a similar situation.

When reviewing a recall from the other interviewer, make sure notes are clear. If the interview contains a missing food, check other possibilities in the hierarchies that may not have been considered. Redo calculations, if any, performed by the other dietary interviewer to check for accuracy. Review the form as if you were editing your own work. It is acceptable to write your comments, questions and/or suggestions on the Recall Report. After verifying the Recall Report of your dietary counterpart, put your initials at the top of the printed recall (using a blue pencil) to show that you have reviewed it.

When returning the Recall Report to the other interviewer, discuss the suggestions together. There may be times when you and the other dietary interviewer disagree on the appropriate way to handle a specific food/beverage or situation. Exhibit 6-1 is a representation of the Verification Problem Sheet (Section 6.3.1). For those foods/beverages or situations for which there is some discrepancy as to the correct procedure or entry, complete a Verification Problem Sheet. These forms will be reviewed by NCHS or Westat to determine the most appropriate course of action. Once a decision has been made, you will receive a memo addressing the situations for future use. Verification Problem Sheets will be sent to NCHS along with other weekly transmittals.

6.3.1   Filling Out the Verification Problem Sheet

A Verification Problem Sheet should be completed for any interview with some discrepancy. Enter the stand number, the week number of the stand and the beginning and ending dates of that week. Specify the SP number and line number for each problem that arose. If the problem related to a food or beverage, enter the name of the food item in the appropriate column. Write a brief and concise statement of the problem. Attach the Recall Report to the Verification Problem Sheet.

The forms that you have reviewed of each other's work will be sent to NCHS along with your other transmittals (even if both interviewers were in agreement as to the corrections needed).

Exhibit 6-1. Verification Problem Sheet

VERIFICATION PROBLEM SHEET

Stand #: _____

Week #: _____   Beginning from _____ through _____

SP#	Line #	Food or Beverage	Statement of Problem

6.4   Editing the 24-Hour Recall

The system allows you to retrieve an original recall to review your work, and make additions, deletions or corrections. You are required to edit 100 percent of your own work.

As mentioned earlier, editing is a very important part of your responsibilities. During the edit, you may review or make any changes necessary to the header, recall, trailer questions, and/or end of recall portion of the interview. There are basically two types of edits of which one or both may be needed for a particular interview. The first type, usual "clean-up," is always performed. Data retrieval, the second type of edit, may or may not be necessary.

6.4.1   Usual Clean-Up

Usual clean-up is the edit completed **as soon as possible after each interview**. The basic purpose of this edit is to look for problems, clarify notes, and/or add notes. Also, you must check all missing foods. During usual clean-up, you are able to:

1.   Review the entire recall,

2.   Make additions, deletions and corrections,

3.   Check hierarchies for missing foods,

4.   Enter comments to explain a particular situation,

5.   Enter default standard amounts for certain foods reported as unknown, and

6.   Calculate and enter known amounts, if appropriate.

6.4.1.1 Accessing the Edit Mode

You are able to access the edit mode on the DDC system from the Recall Header screen. Simply type the Participant's ID for the recall you wish to edit, and press ENTER. The completed Recall Header screen for that participant will appear with the phrase, "Edit Recall," displayed in the lower center of the screen (Exhibit 6-2).

Exhibit 6-2. Recall Header screen: accessing the edit mode

```
                          RECALL HEADER
    ·Exam Date:   10/01/91              Recall Date: 09/30/91
                                        Day of Week: Monday

 ------------------------------------------------------------
     Participant's ID: 4444446

               Name: FRAN DOE

          Sex (M/F): F

          Age (M/Y): 35Y

    Interviewer's ID: 0002

                                     ┌──────────┐
                                     │EDIT RECALL│
                                     └──────────┘
 ------------------------------------------------------------
 Enter the participant's name.
```

Before providing more detailed instructions on the editing procedure, it is necessary to digress a moment to recall the concept of an active day. The aforementioned instructions are pertinent only in editing recalls for the current active day set at the beginning of the interview session. Should you wish to edit a recall completed on a day other than the active day currently set, you must first exit the system to return to the dietary interview menu. (To exit the system from the Recall Header screen, press F4, highlight "Exit DDC System," and press ENTER.) The active day must then be reset to the day the recall was actually conducted. After completing this step, select number 1 on the menu to access the DDC system, then proceed as previously instructed. After editing, it is important to remember to reset the system to the current active day.

If you enter an incorrect Participant's ID on the Recall Header screen (prior to beginning the edit), one of two things will happen: the system will assume that you are beginning a new recall; or, a completed Recall Header screen will be displayed for the wrong SP. In both cases, re-access the Participant's ID data field on the Recall Header screen by pressing ESCAPE and begin again by entering the correct Participant's ID.

After entering a specific participant's ID number, you may find that the system cannot locate the recall because you inadvertently set the wrong active day for that recall. In the event this should occur, return to the dietary interview menu. Select number 7 on the menu to display a listing of the original and edited recalls by active day. This is a very convenient feature for locating a recall "missing" from a particular active day or searching for a recall entered incorrectly (e.g., transposed numbers). Once the recall has been located, make a mental note of its active day; reset the system to the appropriate active day, and proceed as previously instructed.

From the Recall Header screen, you may systematically access and review the entire recall as described below, or you may quickly access the Recall Review screen by pressing F10. You may advance to the Recall Review, Recall Trailer or End of Recall screens by pressing F4, highlighting the desired screen, and pressing ENTER. You may also print a Recall Report, exit the recall, and exit the DDC System from the System Menu.

6.4.1.2 Reviewing The Entire Recall

Although the system allows you to view a certain portion of the interview to make a specific correction, it is still mandatory to edit the entire recall and review each section carefully for accuracy. The edit session consists of reviewing and/or editing the Recall Header, Recall Review, Recall Trailer and End of Recall screens. Once you have completed reviewing and editing a screen, press F10 to advance to the next screen on the list. Editing each section is described in detail below:

- **Editing the Recall Header**

Use the ENTER and F2 BACK UP keys to review the participant information recorded on the Recall Header screen. You may modify any information except for the Participant's ID and the recall date. The Participant's ID can never be changed during an edit. Review or change the entry by retyping incorrect information. When you have completed reviewing and editing the Recall Header screen, press F10 to advance to the Recall Review screen.

To exit the recall from the Recall Header screen, press ESCAPE. You will be brought to a blank Recall Header screen.

- **Editing the Recall Review**

The procedures for inserting, deleting, and attaching notes using the Recall Review screen were explained in detail in Chapter 4. Review Section 4.3.12 if you have questions.

Use the down arrow key on the Recall Review screen to review each entry, including notes attached to individual food items. Look for anything that might appear unusual to someone else reviewing your work. Enter additional comments, if necessary, to explain a situation.

- Default Standards

It has been discovered through past HANES that there are specific foods and beverages which an SP may find difficult to quantify. This is usually the case when a food item or beverage has been purchased already prepared, such as coffee with cream and sugar, or a sandwich prepared with condiments and/or spreads. Since these computations are not difficult, it is your responsibility to calculate certain defaults when an SP reports an "unknown amount." Exhibit 6-3 is a reference card or guide providing the "formulas" necessary to make these calculations. You need to calculate only those foods or beverages listed under "default standards." For example, if an SP reported eating a biscuit with an unknown amount of butter, enter 'U' on the amount screen. Although there is a formula to calculate a spread on bread, biscuits are not listed. So that <u>NCHS</u> can enter the most accurate default for items where spread might be added to both halves, attach a note. The listings on the flash card are self-explanatory; however, it should be noted that "sandwich spread" refers only to the Thousand Island dressing-like spread used on sandwiches. Do not include any other spreads used on bread, such as peanut butter or potted meats. The top portion of the guide contains the food model amounts which were mentioned in the Chapter 4.

The default amounts for the condiments on a large-size sandwich increase as the size of bread increases. Therefore, double the amounts for large-size sandwiches, as indicated by the asterisk. Use your judgment as to the definition of "large-size." "Large-size" would typically include a hoagie or submarine roll or large pita (6 1/2 inches). A "regular-size" sandwich would include a medium-size roll, a croissant, small to medium-size pita (4 to 5 1/4 inches), and regular sliced bread.

Screen 1 in Exhibit 6-4 displays an example where an unknown amount has been entered for the quantity of milk added to a cold cereal. The reference card indicates the default for milk in either hot or cold cereal is "1/2 cup milk per 1 cup of cereal."

First look at the amount of dry cereal eaten by the SP, in this case, "1.0 B1," then refer to your reference card. The default formula uses a cup measurement, but the upper portion of the reference card displays the amount of B1 in fluid ounces; therefore, you must convert B1 into cups. Let the system perform the calculation for you. Because the system only displays the common unit at a specific point in the interview, it is necessary to take a slightly different approach when retrieving the common unit. This will be explained in Section 6.4.1.3. You should be aware that the unit of measure, e.g., ounces of meat, cups of lettuce salad, etc., in each default calculation, excluding sandwiches, is the common unit presented on the DDC system.

Exhibit 6-3. Food Model Amounts and Default Standards

FOOD MODEL AMOUNTS AND DEFAULT STANDARDS

Model	Amount (FO)	Rim:	FO	Proportion of Model
B1	9		10	$1^1/_9$
B2	16		16	1
G1	4		5	$1^1/_4$
G2	8		9	$1^1/_8$
G3	11		12	$1^1/_{11}$
G4	15		16	$1^1/_{15}$
G5	6		7	$1^1/_6$
MUG	10		11	$1^1/_{10}$
COF	6		7	$1^1/_6$
M1	2.7 (1/3 CP)		-	-
M2	6 (3/4 CP)		-	-
M3	14 ($1^3/_4$ CP)		-	-
SP1	1½ tsp		-	-
SP2	1 TB		-	-

Baby Bottle

Standard Sizes	Mid-Rim (FO)	Rim (FO)
4 FO	5	6
8 FO	9	10

DEFAULT STANDARDS

Item	Standard
Catsup	1 TB*/sandwich
Sandwich spread	1 TB*/sandwich
Mayo/Mayo-type dressing and salad dressing	1 TB*/sandwich 2 TB/1 CP of lettuce salad
Mustard	1 tsp*/sandwich
Margarine/butter	1/2 TB/1 slice of bread
BBQ sauce	1 TB/1 oz. of meat
Milk/cream	1/2 CP/1 CP cereal (hot or cold) 1 TB/6 FO beverage
Cream substitute (liquid or powder)	1 TB/6 FO beverage
Sugar	2 tsp/6 FO beverage

*For large-size sandwich, double the standard

6-9

Exhibit 6-4. Recall Review screen: editing an unknown amount

<u>Screen 1</u>

```
                        RECALL REVIEW
07:00 am                    Breakfast                       Home

1.    Cereal with additions:   cere w/ milk

      1.1   cereal, ready-to-eat, nugget or ring or shredded form, oat
            1.00 B1
                .
      1.2   [milk whole]

2.    milk, whole
      1.00 G1
--------------------------------------------------------------------
      12:00 pm                 Lunch                         Home

3.    milk, whole
      1.00 G3
----------------------------- Press F1 for help ---------------------
```

<u>Screen 2</u>

```
AMOUNT OF   cereal, ready-to-eat, nugget or ring or shredded form, oat


   Measurement: volume


        [Amount = 1.000 B1 (1.13 CP)]

                     B1 = 9 FO








        Press <ENTER> to continue.
```

The common unit the DDC system presents for cereal is "CP." As shown on screen 2 in Exhibit 6-4, B1 is equivalent to "1.13 CP." By using the system to assist you, half the work has been completed. If the common unit presented has more than one digit following the decimal point, round the number either up or down. Round up only if the second digit following the decimal point is five or above. In this case, the system presented "1.13"; round down to "1.1." The computation below demonstrates the remaining portion of the calculation:

$$\frac{0.5 \text{ CP}}{1.0 \text{ CP}} = \frac{x}{1.1 \text{ CP}}$$

$$x = 1.1 \times 0.5 \quad \text{(cross multiply)}$$

$$x = 0.55 \text{ CP}$$

When you replace the unknown amount with the default amount, attach a note stating "default calculation for 1 B1 of dry cereal." If time permits, it is helpful to also include in the note all the values used to make the calculation and the steps you took to calculate the default. In this way, someone reviewing your work is easily able to verify your arithmetic for accuracy.

-        **Calculating a Known Amount**

For all "K" entries, other than calculations, you need only review the note for completeness and clarity during the edit. If a calculation is necessary, make sure all the values needed to make the calculation are contained in the note, then perform the computation. Replace the "K" with the amount calculated. The note you entered during the original interview will be saved. In this way, NCHS can verify that the computation was done correctly.

The following are a few examples illustrating this procedure:

1.   The SP drank one G4 of milk with ice. There is no option on the Amount screen which includes ice and the SP cannot tell you the amount of milk without ice. You probe to find out the proportion of ice in the glass to which he responds that 1/4 of the beverage was ice.

         A "K" was entered during the original interview with a note attached stating, "SP drank 1 G4 of milk with ice; 1/4 of beverage was ice".

         During the edit, replace the "K" with the calculated amount. This is a calculation requiring simple subtraction: 1.0 G4 - 1/4 G4 = 3/4 G4.

2.	Although the food-specific unit is preferred to the linear inch when both are options on the Amount screen, on occasion it is used when the SP responds in a certain fashion.

The SP reported eating three stalks of celery, each 6 1/2 inches long.

A "K" is entered during the original interview with a note attached containing the information provided.

During the edit, perform the calculation (6 1/2 x 3 = 19.5 linear inches), then replace the "K" with the calculated amount.

3.	The SP reported adding 1/2 cup of sugar to a 32 fluid ounce pitcher of fresh-squeezed grapefruit juice. He drank 3/4 of a G2 food model (without ice).

A "K" was entered during the original interview for the amount of sugar with a note attached containing the information needed to make the calculation.

During the edit, a calculation is needed to determine how much sugar was contained in the portion of juice drunk by the SP. Refer to the "Food Model Amounts and Default Standards" reference card to determine the number of fluid ounces in a G2 food model (8 FO). Since the SP only drank 3/4 of the glass, multiply the 8 FO by 3/4 (6 FO).

$$\frac{0.5 \text{ CP}}{32 \text{ FO}} = \frac{x}{6 \text{ FO}}$$

32 x = 3   (cross multiply)

x = 3/32 CP

Replace the "K" with the calculated amount of sugar (3/32 CP).

Once you have completed the Recall Review, press F10 to advance to the Recall Trailer screen.

- **Editing the Trailer Questions**

The answers you selected for each trailer question are highlighted. To progress from one question to the next, press ENTER. You may move the highlight to change the selection; however, it would be unlikely that you would change an answer at this time. Usually the purpose of editing the trailer questions will be to add or expand on notes. To access the note screen, press F8. When you have finished editing the note, press F10 to proceed to the next trailer question. Once you have completed reviewing the trailer questions, press F10 to advance to the End of Recall screen.

- **Editing the End Of Recall**

The answers you selected for the End Of Recall are highlighted. Follow the same procedure as the trailer questions to view the selections, make changes and/or complete the editing of that section. It is very important to review any notes which you may have attached, especially concerning the quality of the interview and your work code. These will be addressed further in relation to data retrieval. After reviewing the End of Recall screen, press ENTER.

- **Completing the Edit Session**

When you press ENTER after reviewing the End of Recall screen, the system displays the following message asking if you would like to save your edits:

```
+---------------------------------------------------+
|                                                   |
|    ** Do you want to save your edits? (Y/N)    ** |
|                                                   |
+---------------------------------------------------+
```
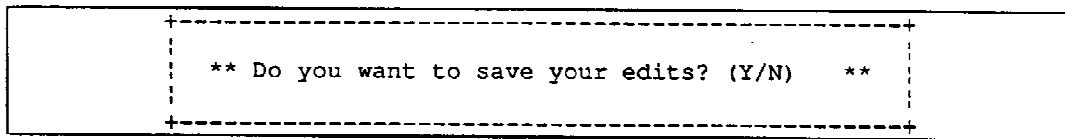
Press "Y" for yes and "N" for no. If you choose "yes," the system saves all changes that were made; whereas, if you choose "no," the system erases all changes. Most likely you will want to save all the edits that you make. It is worth remembering, however, that should you inadvertently make a serious error during the edit, you can choose "no" to return the interview to its previous state. If a review of the interview was done, but no changes were necessary or made, press "Y" to save an edited version for that particular recall.

For record-keeping purposes, every time you select to save your edits, a screen (see the illustration on the next page) is displayed which indicates the date and time the edit was completed. To progress, simply enter your interviewer ID number as instructed on the lower portion of the screen, and press ENTER. You will be brought to a blank Recall Header screen.

```
        +----------------------------------+
        :                                  :
        :         Edit Date:  10/01/91     :
        :         Time     :  11:48:02     :
        :                                  :
        :         Interviewer ID:          :
        :                                  :
        :                                  :
        +----------------------------------+


  Enter your interviewer ID.  Press <ENTER>.
```

 Enter your interviewer ID. Press <ENTER>.

6.4.1.3 The Use Of The "0" Entry

        To look up a particular food/beverage or check a common unit for a default calculation without
creating a "real" recall, you may enter "0" at the Participant's ID prompt on the Recall Header screen.
In order to use this feature, you must access a blank Recall Header screen.

        Each time you enter "0" as a Participant ID, any earlier recall you created this way will be
overwritten. Once you exit a recall entered using the "0" entry, you may not access it again.

-   Default Calculations

        It was mentioned earlier that this feature can be utilized when calculating a default amount.
Exhibit 6-5 demonstrates how to progress through the interview to locate one piece of information. Enter
"0" for "Participant's ID." To progress to the Food Entry screen, type an imaginary name, sex, age, and
interview ID number. Enter a brief Quick List and then quickly progress through the screens until you
encounter the information you desire. Once you find the information you want, press the Escape key to
bypass the trailer questions, and quickly enter imaginary answers for the end of recall.

-   Checking Hierarchies For Missing Foods

        The "0" entry feature is also very useful to look through the hierarchies for missing foods. As
mentioned earlier, it is important to review hierarchies related to the missing food to verify whether the
food is in the system, but not in the location(s) you initially accessed. It is helpful to discuss the missing
food item with the other dietary interviewer; he/she may be able to suggest another hierarchy or may have
encountered the item in another location. If all efforts to find the food in the system fail, it is then
appropriate to leave the item in the system as a "missing food."

Exhibit 6-5. Steps for information location

<u>Screen 1 of 4</u>

```
                          RECALL HEADER
     Exam Date:  10/01/91              Recall Date: 09/30/91
                                       Day of Week: Monday
----------------------------------------------------------------

     Participant's ID: 0          <-- Enter "0."

               Name:

          Sex (M/F):

          Age (M/Y):

     Interviewer's ID:

----------------------------------------------------------------
Enter the participant's name.
```

<u>Screen 2 of 4</u>

```
                          RECALL HEADER
     Exam Date:  10/01/91              Recall Date: 09/30/91
                                       Day of Week: Monday
----------------------------------------------------------------

   Participant's ID: 0

             Name: JOE

        Sex (M/F): M        Enter imaginary name, sex, etc.

        Age (M/Y): 12Y

   Interviewer's ID: 0002
                              NEW RECALL
----------------------------------------------------------------
Enter the participant's name.
```

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Exhibit 6-5. Steps for information location (continued)

Screen 3 of 4

```
                          QUICK LIST
+----------------------------------------------+ EX: /7a bre hom
¦ /7a bre hom                                  ¦
¦ cere                                         ¦        CODES
¦                                              ¦  Meals          Place
¦                                              ¦   BRE           HOMe
¦                                              ¦   DES           WORk
¦                                              ¦   BRU           SCHool
¦                                              ¦   ALM           DAY care
¦                                              ¦   LUN           FASt food
¦                                              ¦   COM           DELi
¦                                              ¦   MER           REStaurant
¦                                              ¦   DIN           CAFeteria
¦                                              ¦   CEN           STOre
¦                                              ¦   SNA           FRIend's
+----------------------------------------------+   ENT           COMmunity
                                                   INF           TRAnsit
Type / to BEGIN a new meal and press <ENTER>.      EXT           OTHer
Type one food per line and press <ENTER>.          OTH
Press F10 to complete the Quick List.
----------------------------------------------------------------------
Enter the Quick List.

        Enter a brief Quick List.
```

Screen 4 of 4

```
AMOUNT OF   cereal, ready-to-eat, nugget or ring or shredded form, oat


   Measurement: volume


        Amount = 1.000 B1 (1.13 CP)


                    B1 = 9 FO



        Press <ENTER> to continue.
```

6.4.2 Data Retrieval

"Data retrieval" is a phrase used to describe the alteration of a preexisting interview when new information is gathered from another source. You may:

1.   Access the recall to insert information gathered from an outside source, such as day care or a school.

2.   Conduct most proxy-type interviews (Explained in Chapter 7).

-   Information Gathered From An Outside Source

Depending on the particular interview, "altering" the preexisting interview may include deleting information, inserting new information, or simply adding a note. Data Retrieval should take place **as soon as reasonably possible after completing the interview**. It is less likely that data will be obtained if too much time passes. Do not forget that your "source" may be in the MEC being examined or may have accompanied the SP to the MEC. Always check for the most immediate source first.

However, should you require additional information after speaking to the SP and/or proxy in the MEC, you may need to call a baby-sitter, relative, school, day care, or even a grocery store to gather additional information. If possible, contact with the baby-sitter, etc., should be made while the SP/proxy is still in the MEC. By using the edit mode, you are able to add to or modify the existing interview with this new information.

During an interview for which data retrieval is necessary, request permission from the respondent to call the appropriate person. If, for some reason, the respondent refuses, explain the importance of obtaining a complete interview. Encourage him/her to cooperate by reiterating that you will only request information and not reveal other data given during the interview. Most respondents are more than cooperative, but do not force a respondent if he/she is unwilling.

Even though a respondent offers to call you later with the data retrieval information, it is <u>best</u> to contact the source yourself because:

1.   You know the appropriate probes asked for each food item reported;

2.   You are not easy to contact;

3.   It decreases the burden on the respondent; and

4.   The risk that data will be lost is lower.

Therefore, at the time of the interview, gather as many details as possible about the missing meal(s) and/or snack(s). As mentioned in Chapter 4, "UMEA," "UBEV," and "UFOO" were developed to assist you in gathering sufficient details about the missing data and, in fact, are predominantly used in data retrieval situations. By using these place holders, you are prompted for the time, meal, and where the food was eaten, thereby, providing all necessary information for NCHS if data retrieval is unsuccessful and a default is required.

Be sure to obtain the name and phone number of the appropriate person. Also find out whether you are calling a school, day care, relative, etc. Occasionally a respondent will not know the phone number of the SP's school or day care center. In this situation, find out the name of the school and its location. Directory Assistance (411) should easily be able to provide you with the phone number. In addition, ask the respondent to give you the best time to reach the person. Be reasonable; do not contact these people at very early or very late hours, unless specified by the respondent. Since it is best to have this contact the same day as the interview or on the following day, it may be necessary to call a person for data retrieval on your day off, or during time off in the evening or afternoon. Remember that there will be other days during a stand when you will have free time as the stand comes to a close.

Print the Recall Report of all interviews which require data retrieval. Your note containing the data retrieval information (phone number, etc.) is attached to your work code. Verify that the **first and last name** are printed in the top portion of the form.

Each dietary interview room is equipped with a telephone. Using the telephone in your room is probably the best way to collect outside information as it allows you to use the DDC during the telephone conversation. Some interviewers find it preferable to use the hard copy 24-hour recall form (Section 8.2.1.1) when conducting data retrieval and then enter the data into the computer following the telephone contact. Both methods are acceptable. Sometimes, however, you may have to contact the outside source on your day off or during a split shift where calling from the field office or your hotel room may be more convenient. In either case, it is important to be organized. Have the Recall Report, your probing guide and sharpened pencils within easy reach. A clipboard may be helpful if a desk is not available. When calling an outside source, it is essential to identify yourself and the survey, mention the confidentiality of the survey, and state the purpose of the call. Explain that the respondent (state his/her name) gave you this phone number. Also, state the relationship of the respondent to the SP, such as "Mrs. Smith, Jim Smith's mother..."

Give a brief introduction, saying something like "Mrs. Smith was able to tell me what Jim ate for lunch and dinner, but she told me that Jim also eats at the day care. Can you please tell me everything that Jim ate, to the best of your knowledge, on (DAY or DATE) when he was with you?" Don't bias the data retrieval by revealing foods reported by the MEC respondent.

In the normal interview environment, the respondent uses the models and shapes to describe amounts; phone interviews do not have this luxury. Ask the person to please give the amounts using household measures, such as a measuring cup or spoon. It is acceptable to use units for cookies, fruit, vegetables, etc., but try to qualify them with small, medium or large. Follow basically the same interviewing techniques as an in-person interview. Refer to your probing guide if needed. Since the phone respondent cannot see the flash card normally displayed in the dietary rooms, you must read the complete list of meal codes when probing for that information. Remember to review the foods/beverages and amounts with the person before concluding the interview. Always thank the person for his/her time. Once you have gathered the new data, add these additional foods/beverages to the existing recall by accessing the Recall Review from the Recall Header screen.

As mentioned earlier, data retrieval frequently may require your calling either day care centers or elementary schools. In most day care centers there is usually someone, such as the director or an aide, who observed what a young SP ate and will happily report these foods to you. However, in elementary schools there typically is a high student to supervisor ratio. Frequently, the supervisor serves more as a disciplinary person as opposed to an observer of what foods were consumed.

For counties with few school districts, the use of printed school menus can be very helpful to remind the child what was served (Section 7.2.1). Using these menus during the interview sometimes makes data retrieval unnecessary. However, it would be impossible to use this technique when, for example, thirty school districts exist in the area sampled. Therefore, for proxy/(young) SP interviews where the child is unable to remember what he/she ate at school, but reports eating the standard meal served in the school cafeteria, ask the SP how much he/she ate of the meal, e.g., 1/2, 3/4, all, most, etc., and enter this information in the Amount & Measurement section of the UMEA entry during the original interview. If he/she cannot remember the portion eaten on the previous day, determine his/her usual habits when eating a standard school cafeteria meal and enter this information. When you contact the source to complete your data retrieval after the interview, someone in the school cafeteria should be able to provide you with what was served and the standard portions. Record the foods; the standard portions should be attached as notes to a "U" amount for each food item. The normal intake information, e.g., 1/2, 1/4, etc., will then assist NCHS in making a decision.

Sometimes a data retrieval situation will arise when you begin a recall with an SP or proxy, and he/she needs to leave the MEC (for whatever reason) before you are able to finish. Should this occur, ask for permission to call his/her home later to complete the interview. If permission is given, obtain the phone number and the best time to call. Enter the data retrieval information as explained earlier, and follow the instructions discussed shortly concerning the complete edit of your work.

Remember that after gathering and entering this new information, you still must complete the other type of edit, usual clean-up. Review the entire recall by accessing the edit mode from the Recall Header screen and sequentially reviewing the Recall Review, Recall Trailer and End of Recall screens. Pay close attention to the selections on the end of recall, especially to the respondent and interviewer's work codes. If the initial interview was conducted with the SP alone, you must change the respondent code from "SAMPLE PERSON" to "SAMPLE PERSON/PROXY." In addition, to show that data retrieval was completed, attach an additional sentence to the note on your work code saying, for example, "called day care." You do not need to erase the previous note. Change your work code from "NOT COMPLETED" to "COMPLETED."

If you are unable to contact the person for data retrieval because the line is busy or no one answers, make a few more attempts before saying that you were unable to contact the source. If this is the case, you must remember to change your work code to "completed," since you attempted to call, but the source was unavailable. Add an additional note stating that you "tried to make contact but were unable to do so because . . ." and state the reason.

6.4.2.1 Market Checks

- Purpose of Market Check

As in previous HANES studies, it is expected that products not in the computerized system will be reported at every stand. Although the DDC database includes the most frequently reported food items, cultural and colloquial variations, in addition to newly marketed items, make market checks an important part of your responsibilities.

The purpose of the market check is to determine the nutrient content of food products not included in the DDC database so that a food code can be assigned. NCHS will then determine whether that food item should be added to the DDC database.

- Market Check Procedure

While conducting the 24-hour recall, you will always probe for as much detail as needed to accurately describe the "missing food." Being able to find the missing food item during market checks is directly related to the amount of pertinent information obtained during the interview.

First, probe to find out if the respondent is actually using a colloquial term for an existing product, or if this is really a new food item.

Probe for added and deleted nutrients. Read the instructions carefully on the Missing Food screen in order to probe for all necessary details.

Probe for the brand name.

Probe for the **place** where the food was purchased and the price. If the exact name of the store is not known, find out the type of store.

Probe for container or package size. If the respondent cannot actually tell you the size in ounces or grams, have him/her estimate the size by using the food models. It is preferable, however, to obtain both the container/package size and an estimate with the food models.

Probe for any other identifying information, such as flavor, texture, color or how the item was packaged.

If an SP reported the same missing food more than once during an interview, it is acceptable to enter a complete description for one entry and make a brief notation of the other(s), such as "see above" or "see below;" however, enter a complete description if another family member or SP reports that same food.

After the interview has been completed, edit the interview and determine if the missing food item can be found in the system. If the missing food item cannot be found, complete a Request Form (Exhibit 6-6). A Recall Report (printout of interview) is required to accurately complete the form. Once you realize the food item is "missing," make a printout of the interview by highlighting "Print Recall Report" on the F4 menu and then pressing ENTER. Attach the Recall Report to the back of the Request Form.

Any time a duplicate Recall Report is sent to NCHS, such as in the case of a missing food, the word "copy" must be stamped at the top of the Recall Report. Each dietary interviewer is provided with a stamp imprinted with this word. (This procedure reduces confusion at NCHS when multiple copies arrive with the same ID number.).

Use the Recall Report to fill in the top half of the Request Form. Since USDA must xerox several copies of this form, it is important to use a black felt tip pen (for legibility in reproduction). Record the SP ID number and the food item name.

Exhibit 6-6. Request Form

To Be Completed By Interviewers

SP ID # (s): _____

Food Item Name: _____

_____

Interviewer Comments:_____

_____

_____

Hierarchy: _____   Label: Y   N   Market Form   Y   N

Interviewer ID: _____

_____

To Be Completed By NCHS

Request Type: **FC**   **A**   **B**   **R**   **SC**

  (Food Code)   (Amount)   (Brand)   (Recipe)   (Screen Clarification)

Destination: USDA   NCC   NCHS

Further Market Research Required: Y   N   Completed ____

Change #:_____   DATES: Requested _____   Answered _____

NCHS Request:_____

_____

_____

_____

_____

Closest USDA Code(s): _____

_____

To Be Completed By USDA, NCC, or NCHS

Answer: _____

_____

Action: **C**   **A**   **D**   **R**   **B**   **VI**   **SC**

  (Code) (Amount) (Density) (Recipe) (Brand added)
   (Variable Ingredient) (Screen Clarification)

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Often you will only have to go to a large supermarket to find many of the items, but at other times, you may have to go to a specific store in order to find a particular product.

When you do a market check, remember to take enough cash to purchase the product(s), the Request Form with the Recall Report attached, a few blank Market Check Forms (Exhibit 6-7), a black felt tip pen, and a clipboard on which to write.

When purchasing food for the market check, have the sales clerk initial the sales receipt. Give your receipts to the office manager for documentation and reimbursement.

Before attempting to locate food items in a market, it is acceptable to accumulate a few Request Forms and check for all the items at one time. Do not enter information gathered from a market check into the system; in this way, it differs from other types of data retrieval. The information obtained about a food item through a market check will be handled by NCHS.

-　　　Completing the Market Check

Remember, the objective of the market check is to supply as much information as possible about the food items so that the nutrient content can be calculated and the food(s) coded. Therefore, it is important that you either purchase the product or write down all available information on the Market Check Form. If you do purchase the product, make sure you attach the **complete** label or package, not a partial one containing just the nutrition information. The complete package is necessary to assign the most accurate food code.

Once you are in the store, the first step is to find the item as reported by the respondent. While you are in the store, either purchase the product or write down **all available information** as listed on the Market Check Form. The Market Check Form should be utilized for those food items whose labels cannot easily be sent through the mail, such as a can of soda for which the label is actually printed on the can.

Do not correct or change any of the identifying information. When completing a Market Check Form, simply begin by recording the Sample Person ID, then entering the brand name of the item from which you need the information and the place (store) where you found the item. Fill in the name and address of the manufacturer or distributor. This is important information, since it is likely that the exact nutrient content may be obtained from the manufacturer.

Exhibit 6-7. Market Check Form

MARKET CHECK FORM

SAMPLE PERSON ID _____

MARKET INFORMATION

Brand Name _____   Package Size _____

Place Recorded _____   Price _____

Manufacturer Name _____

and Address _____

LABEL INFORMATION

SERVING SIZE _____   SERVINGS PER PACKAGE _____

I NUTRITION INFO/SERVING		II % OF US RDA/SERVING		NUTRIENTS/100 GM
NUTRIENT	GM/MG	NUTRIENT	%	(OFFICE USE ONLY)
CALORIES		PROTEIN		
PROTEIN		VITAMIN A		
CARBOHYDRATE		VITAMIN C		
FAT		THIAMIN		
CHOLESTEROL		RIBOFLAVIN		
SODIUM		NIACIN		
POTASSIUM		CALCIUM		
		IRON		
CARBOHYDRATE INFO GM		VITAMIN D		
STARCH AND RELATED CARBOHYDRATES		VITAMIN B6		
		FOLIC ACID		
SUCROSE AND OTHER SUGARS		VITAMIN B12		
DIETARY FIBER		PHOSPHORUS		
		ZINC		
		COPPER		
		SATURATED FAT		
		POLYUNSAT. FAT		
		P/S RATIO		

INGREDIENTS: _____

_____

_____

COMMENTS: _____

_____

_____

Next, look at the nutrition information on the label/package to determine if the contents are broken down by serving size. If the serving size information is available, write down the number of grams or ounces in **one** serving. Be sure to indicate the correct unit of measure, for example, "1.0 <u>fluid</u> ounce" or "1 <u>weight</u> ounce." In addition, record the number of servings per package. Continue to enter the other values listed by serving size for calories, protein, carbohydrates, fat, cholesterol, sodium, potassium, etc., if available, in Column I on the Market Check Form. Again, remember to indicate the correct unit, in this case, either grams or milligrams.

If nutrient information is not available by serving size on the label, record "N/A" in Column I.

The next step is to complete Column II, the percentage of U.S. RDA per serving. This information is also obtained from the product label. If available, this information will be listed under the heading "Percentage of the U.S. Recommended Daily Allowances (U.S. RDA)." Record this information in Column II of the Market Check Form exactly as it appears on the label. Record "N/A" in Column II if this information is not available.

The column labeled "Nutrients/100 GM" is for office use only. Do not record in this space. The third and final step is to record the ingredients listed on the label/package. It is not necessary to include the preservatives, if any, when recording this information.

Finally, in the comments section, at the bottom of the page, record any information which might be useful in identifying the nutrient composition of the food item, e.g., "fortified with extra calcium" on the label.

The Request Form (with attachments) will be transmitted to NCHS for resolution. When necessary, food items will be added to the DDC system.

Compile the data to be transmitted to NCHS, and complete the Request Form. If you are unable to attach the printout, write an explanation in the "Interviewer Comments" area. Attach either the product label or the Market Check Form to the Request Form. Depending on the attachment, circle the appropriate answers on the form, either "Y" or "N" if the product label is attached, and "Y" or "N" if the Market Check Form is attached. Record any additional information about the item, which may be useful in determining the correct nutrients, in the section labeled "Interviewer Comments." Fill in the name of the appropriate hierarchy. Complete the form by recording your interviewer ID number.

If more than one SP has reported the same missing food, it is not necessary to fill out two Request Forms. Use one form and simply record the ID numbers of those SPs who reported the same food. Be sure, though, to attach both recall reports. In addition, if a food product is described later in a stand (or in a subsequent stand) for which either you or your dietary counterpart has already done a market check, it is not necessary to do another. Fill in the Request Form and state the approximate time the previous product had been reported, e.g., "Purchased this product mid-stand in Lansing, Michigan."

-   Food Items Without Labels

There may be times when the weight, nutrient information or description are not available on the label, or a food item does not have a label. For example, a food item may be purchased from a bakery or deli. In these cases, purchase the food and bring it back to the Mobile Examination Center to be weighed. This is done in order to calculate a gram weight per serving or edible portion. You must still complete a Request Form for these items; record all descriptive information gained from looking at and/or tasting the product in the Interviewer Comments section. A Market Check Form should also be completed with any other available information about the food item that may help in classifying and determining the appropriate food code.

-   Unusual Situations

The respondent may not always be able to give you enough information to easily identify the food item when you do the market check. For example, sometimes the respondent will be able to describe the packaging of a product but not be able to recall the brand name. Or, a respondent may think that he/she has provided all the information, but when you go to the store, you find that the description was not complete, and more than one product could qualify.

In every case, the rule is to record all the information available so that the composition of the missing food can be resolved. For example, if you do not know the brand name of the item, and find two items which fit the description given by the respondent, purchase both products; submit both labels. If the description given by the respondent was sketchy, and more than one product fits the description, record all possibilities. Finally, if the identifying information lacks some detail, but you are reasonably sure that you have located the correct product, submit the label. Be sure to note the discrepancies in the Interviewer Comments section on the Request Form.

Other unusual situations might include finding a food frequently consumed and reported from a local restaurant or fast food chain. These food items may be purchased and weighed in the MEC to determine the gram weight per serving. A Request Form and Market Check Form should also be submitted for these items. Record additional pertinent information regarding the food in the Interviewer Comments Section.

7.0 **MODIFIED INTERVIEW SITUATIONS**

Slightly modified procedures are implemented for interviews which are in some way different from the "usual." The usual or standard interview generally has been used to describe the interview techniques and procedures to this point. These modified interview situations have been deferred until now so that you could gain substantial knowledge and experience in using the automated system. After a great deal of training on both conducting the automated interview and the editing process, you are now better able to conceptualize the overall interview process. At this time, because you have the basic skills, you can understand and incorporate these changes fairly easily.

Interviews which require some type of modification from the norm will be discussed. They are: (1) proxy interviews for infants under the age of one year, (2) other proxy interviews, including multiple interviews, and (3) the Spanish interview.

7.1 **Proxy Interviews For Infants**

A proxy interview indicates that someone else answered on behalf of the SP. Infants under the age of one year cannot answer for themselves; therefore, the interviewer must locate the person most likely to provide the most reliable and complete information. The relative (father, mother, sibling, etc.) who accompanies the infant to the MEC is your most likely source of information. At times, an infant may be cared for by a baby-sitter for part of the day and the parent the rest. In this case, conduct the interview with the parent(s) or other relative and contact the baby-sitter for the remaining information, if necessary. Not all proxy interviews require data retrieval, but many do. Follow basically the same data retrieval procedures as outlined in the previous chapter.

7.1.1 **Infant Introduction**

The introduction presented in Chapter 4 is used for all SPs with the exception of infants less than 12 months of age. Since many of the instructions in the standard introduction do not apply to infants, a special introduction was developed for infants geared specifically to their intake. If the age of the SP at the time of the household interview was less than 12 months, the interviewer should use the infant introduction.

The introduction for infants is shorter than the standard introduction, and also varies with what is reported. The first part of the infant introduction is delivered in the same manner for all infant interviews; it is explained below. On the other hand, the presence or absence of the second part of the introduction (where the food models and shapes are introduced) is dependent upon what the infant actually consumed.

As always, introduce yourself, the component, and state the confidentiality of the interview. Inform the respondent of the time frame and what is expected, such as "I need to know everything that (BABY'S NAME) ate and drank in a 24-hour period of time, beginning from midnight (DAY) to midnight (DAY)." Since infants frequently have feedings during the night, it is extremely important that the respondent understands the time frame. Continue by saying, "I also need to know the time of each feeding. Let me know if (BABY'S NAME) is breast-fed or uses formula. If formula is used, tell me if it is plain or whether anything is added. Also, include any baby foods, table foods, and other fluids that may have been introduced. Do not include plain tap or spring water. We will make a very general list, then fill it in with more detail later." Once all items have been listed on the Quick List, probe for "anything else?"

After all foods have been listed on the Quick List, your next step in a standard interview is usually to introduce the list of meals and where eaten flash cards. For the infant interview it is not necessary to introduce the list of meals flash card; enter "infant feeding" for all meal codes. However, you must introduce the where eaten flash card. Say something like, "Now we are going to fill the list in with more detail. There is a flash card on the wall which says 'where eaten'. Select one of the answers to indicate the location of the feeding."

The infant interview differs from the standard interview in that the interviewer chooses whether or not to introduce the food models based on the items reported. If the infant received only breast milk and/or plain formula, you do not need to introduce the food models or shapes. If any item is reported other than those just mentioned, you must introduce the food models and shapes as you would for any other interview.

7.1.2 Food Entry and Food Selection For Infant Interviews

Prior to entering any baby foods on the Food Entry screen, it is important to distinguish between infant foods and regular "adult" foods since they are accessed differently in the DDC system. You should also be aware that parents may prepare their own baby foods at home, such as strained carrots or applesauce, by pureeing regular adult foods. Homemade baby foods are entered using the regular hierarchy selections, and commercial baby foods and formulas are located in the "BABY" hierarchy. Therefore, in order to enter the food item accurately and efficiently, it is essential to begin by knowing whether, for instance, a fruit juice was an infant juice (BABY.JUI), or a regular juice (JUIC), or whether the strained green beans were homemade or a jarred baby food. In addition, when formulas are reported, it is also important to distinguish between homemade and commercial products. Homemade baby formulas are entered by listing the component parts; however, commercial formulas are accessed through the "BABY" hierarchy (or more directly by typing "FORM"). The procedures for entering these foods and others will be discussed in greater detail in the sections which follow.

7.1.2.1 Baby Foods and Baby Formulas: Commercial

-        **Leading Baby Food Manufacturers**

To make the most accurate food selections, it is helpful to familiarize yourself with the products available on the market. The three major baby food manufacturers are: Gerber, Beech-Nut, and Heinz. Each manufacturer has its own unique way of classifying its line of baby foods. The most current delineation is as follows:

Gerber: First Foods; Second Foods; Third Foods; Toddler (Current)
               First Foods; Strained; Junior; Toddler (Previous)

Beech-Nut: Baby's First; Stage 1; Stage 2; Stage 3

Heinz: Beginner; Strained; Junior; Toddler

Some time ago Heinz developed a line of instant baby foods; they are no longer being manufactured. This line of products, however, is still included in the DDC system should it be reported.

Another brand being distributed nationally is Earth's Best, a "natural" baby food that does not contain sugar or salt, and contains only natural pesticides. It should be entered as a missing food as it is not listed in the DDC. Since new baby foods are constantly being introduced, try to periodically check the baby food section in the local markets. If you cannot find the food reported by the respondent in the system, enter it as a missing food.

-        **Brand Names**

Brand name information is very important for all baby foods. Probe for brand names on instant cereal, jarred cereal, baby foods, baby juices, baby cookies and crackers, and infant formula. Although brands for baby formulas and baby juices are included in the large baby food listing, it is more efficient to access brand names for these items under "FORM" and "BABY.JUI", respectively, as each has its own brand name listing.

The procedure for entering the brand name for baby foods differs slightly from the entry of brand names for other foods. When the brand name is known, enter the "BABY" hierarchy and select brand name listing. At the brand name prompt enter the food or product name. The DDC will then display the brand names for that particular food. For example, if you were searching for Gerber vegetables, you would enter "vege" at the brand name prompt. After probing for strained, junior or first foods, and whether it was one vegetable or part of a vegetable combination or dinner, you might select "Gerber-Mixed Vegetables-Junior". This procedure is easier than entering a brand name, such as Gerber, and then having to scroll through a very lengthy list of Gerber products.

If the brand name of the baby food is not known, use the general selections in the BABY hierarchy.

-        **Commercial Baby Formulas**

Many forms of baby formulas exist on the market; these include powder, concentrate and ready-to-feed. Although the DDC brand name listing for baby formulas does not list the form (it assumes ready-to-feed), you must still probe for this information. Should a respondent report the use of a formula prepared from either a powder or concentrate, probe to ascertain whether the respondent followed the instructions written on the label or whether he/she altered them in any way. If the directions on the label were followed, select the appropriate formula listed. On the other hand, if the respondent altered the directions in any way, by either increasing or decreasing the dilution, or using a fluid other than water, enter the formula as a missing food with the form used and the amount. The missing food should only include the type and amount of the formula. Record the type and amount of fluid used for the dilution as the second item.

To know whether the respondent has prepared the formula according to package instructions, you should be familiar with the standard manufacturer's directions. Formulas prepared from a liquid concentrate are made with equal parts concentrate and water. Those prepared from a powder have one scoop of powder for every 2 fluid ounces of water. Ready-to-feed formulas are used as is.

In many low income areas there may be a tendency to dilute even the ready-to-feed formulas in order to extend the product. In all cases, probe to find out if anything was added to a ready-to-feed formula before feeding it to the infant, and list it as a second item.

Formulas currently on the market which come in powder, concentrate and ready-to-feed forms are: Similac/Similac with iron, Isomil, Enfamil/Enfamil with iron, Carnation, SMA (Wyeth), Milupa brand, and Loma Linda brand. It is very possible that other formulas are available in different parts of the country. Check the local stores at each stand and ask the public health nutritionist in the area (Chapter 10) for information regarding the formulas offered through the WIC program.

-        **Juices**

Juice listed in the BABY hierarchy is bottled baby juice sold in the baby food section in stores. You cannot assume that infants are drinking baby juice versus regular juice found in the juice (JUIC) hierarchy. It is necessary to probe whether, for example, it was baby apple juice or regular apple juice. The probes for sweetener, preparation, and the fortification are different for baby juices and regular juices. If the respondent is unsure whether the juice consumed by the infant was regular or baby, use the regular juice hierarchy.

Although the respondent may report a juice as "apple", you can not assume that the juice was a single flavor. Always probe to find out if it was a single flavor or a combination of flavors. In addition to ascertaining the flavor, you also need to find out whether the juice was plain or whether anything was added before feeding it to the SP.

- **Baby Cookies/Crackers**

Brand name baby cookies and animal crackers are located in the BABY hierarchy. Baby cookies for infants and toddlers are usually arrowroot cookies. They are marketed by Nabisco as "National Arrowroot Biscuits" and by Gerber as "Animal-Shaped Cookies" and "Arrowroot Cookies". Other types of cookies should be selected from the cookies (COOK) hierarchy.

- **Cereal**

The only selections allowed to describe baby cereal are "instant unprepared" and "jarred". The unprepared cereal (the dry form) is commonly added to formula; however, to indicate a prepared cereal other than jarred, it is necessary to enter the liquid used to reconstitute the cereal as a separate item. In the latter case, enter the unprepared cereal as item 1 on the Food Entry screen. Depending on what the respondent added, item 2 may be water, milk, formula, etc. The type of combination would be "cereal with additions".

Frequently a respondent will report a cereal such as instant rice. Once you enter this cereal into the system, you will see that there is a variety of instant rice cereal mixtures. Probe carefully to discern whether the cereal was plain or a mixture with fruit, egg, etc.

Should a respondent report, for instance, a jarred oatmeal by Gerber that was plain, and the only DDC option presented is a mixture with bananas and applesauce, select the jarred oatmeal in the system (as long as it is not a new product) and attach a note stating that the respondent reported plain oatmeal. Be aware that new baby foods are constantly being introduced into the marketplace. Any new products not in the system should be entered as missing foods.

- **Other Baby Foods**

Gerber has Lean Meat Dinners in addition to their regular line. These can be found in the BABY hierarchy after selecting brand name listing.

7.1.2.2 Baby Foods and Baby Formulas: Homemade

- **Homemade Baby Food**

As mentioned earlier, baby foods prepared at home are entered through the general hierarchies, not the "BABY" hierarchy. Since more variation may occur in homemade recipes than standard jarred baby food, the general hierarchies allow the entry of more details about the prepared food. By using the general hierarchies, the system prompts, for example, for additions of salt and fat in the preparation of vegetables, etc. Any homemade baby foods which cannot be fully described using the hierarchy selections should be entered as missing foods.

-   Homemade Baby Formulas

There are many "recipes" which may be used for preparing homemade formulas. The type of milk used varies, but may include whole milk, low fat or skim milk, powdered or evaporated milk, sweetened condensed milk, or goat's milk. Often a sweetener is added such as sugar or corn syrup. Water is usually added.

Item-by-item entry should be used to list the components in homemade baby formulas. For example, a homemade infant formula mixture containing milk, sugar, cereal and water would be entered as a beverage combination type with each ingredient listed as a separate food item.

7.1.2.3 Probing For Additional Items

Like the standard interview, you must always probe to find out whether anything was added to the foods and/or beverages reported. Continue probing for additions until the respondent indicates that nothing else was added. A probe such as, "Did you add anything to the (FOOD/BEVERAGE) before feeding or serving it to (BABY'S NAME)?", works well.

Remember not to enter plain tap or spring water drunk alone as a food entry; this information is captured in one of the trailer questions. Do record tap and spring water that is added to or mixed with another food item for infants, toddlers, and small children up to 4 years of age. This would include water sweetened with sugar or syrup, and baby juice diluted with water. Diluted juice, for instance, should be entered as a combination beverage with juice and water listed as two separate items with separate amounts for each. This will allow NCHS to account for total fluid consumed for this age group.

7.1.3   Entering Amounts For Infant Interviews

Because the quantity of food consumed by infants, toddlers and small children is quite small, the small amount recording rule does not apply. Make sure you enter all items regardless of the amount for all SPs up to 4 years of age.

-   Breast Milk

Breast milk can be accessed through either MILK.HUM or BABY.BRE.

Unless the SP's mother has been pumping her breasts for some or all of the feedings, it is unlikely that she will know the amount the infant consumed. If the mother knows this information, enter the time of the feeding and the amount. When known, this amount is usually reported as fluid ounces since the milk is transferred to a bottle.

Even though the mother may not be able to provide the quantity of breast milk consumed, she usually can tell you the length of time the infant nursed at one or both breasts. After accessing breast milk, use the minutes breast-fed selection to enter the number of minutes the infant actively suckled at the breast. Follow the instructions on the screen to enter the number of minutes on the left breast (L-) and/or the number of minutes on the right breast (R-). Screen 1 in Exhibit 7-1 illustrates the use of this feature. The total number of minutes (T--) should only be used if the mother cannot separate the length of time on each breast (or does not remember at which breast the baby nursed) but knows the total amount of time. If you enter only L-- or R-- and press ENTER, the system automatically fills the other L or R selection with a "0" (Exhibit 7-1, Screen 2). You may use the back-up key if you need to correct an entry.

-       **Infant Formula**

If only plain formula was consumed by the infant, you may enter amounts by probing for the bottle size. In the center portion of the Food Model Amounts and Default Standard reference card (Exhibit 7-2), there is a listing of standard bottle sizes. Probe for the number of fluid ounces or the size of the bottle. The reference card not only lists the amount for a standard bottle, but also the number of fluid ounces for mid-rim and rim. Make sure to probe as to the fullness of the bottle to assure that the respondent is giving you the amount actually consumed, not how much formula was in the bottle. A bottle is often drunk over a period of time, so it may be hard for the respondent to tell you individual amounts. Should this occur, enter the time the SP began drinking the bottle and the total amount drunk. To become more familiar with the variety of bottles available on the market, you will have time to look at various sizes of baby bottles during training.

Exhibit 7-1. Amount screen: minutes breast-fed

<u>Screen 1</u>

```
AMOUNT OF        baby food, breast milk


            +------------------- Minutes Breast-Fed -------------------+
            :
            :     Left breast :     minutes   OR   Total:     minutes
            :     Right breast:     minutes
            :
            +---------------------------------------------------------+




   Enter the number of minutes on the left breast.  Press <ENTER>.
```

<u>Screen 2</u>

```
AMOUNT OF        baby food, breast milk



        Amount =  13.000 MBF  Left = 13 mins, Right = 0 mins






        Press <ENTER> to continue.
```

7-8

Exhibit 7-2. Food Model Amounts and Default Standards

FOOD MODEL AMOUNTS AND DEFAULT STANDARDS

Model	Amount (FO)	Rim:	FO	Proportion of Model
B1	9		10	$1^1/_9$
B2	16		16	1
G1	4		5	$1^1/_4$
G2	8		9	$1^1/_8$
G3	11		12	$1^1/_{11}$
G4	15		16	$1^1/_{15}$
G5	6		7	$1^1/_6$
MUG	10		11	$1^1/_{10}$
COF	6		7	$1^1/_6$
M1	2.7 (1/3 CP)		-	-
M2	6 (3/4 CP)		-	-
M3	14 ($1^3/_4$ CP)		-	-
SP1	1½ tsp		-	-
SP2	1 TB		-	-

Baby Bottle

Standard Sizes	Mid-Rim (FO)	Rim (FO)
4 FO	5	6
8 FO	9	10

DEFAULT STANDARDS

Item	Standard
Catsup	1 TB*/sandwich
Sandwich spread	1 TB*/sandwich
Mayo/Mayo-type dressing and salad dressing	1 TB*/sandwich 2 TB/1 CP of lettuce salad
Mustard	1 tsp*/sandwich
Margarine/butter	1/2 TB/1 slice of bread
BBQ sauce	1 TB/1 oz. of meat
Milk/cream	1/2 CP/1 CP cereal (hot or cold) 1 TB/6 FO beverage
Cream substitute (liquid or powder)	1 TB/6 FO beverage
Sugar	2 tsp/6 FO beverage

*For large-size sandwich, double the standard

- **Baby Foods**

When the brand name and type of food are selected, the appropriate jar size for that specific product will be displayed on the Amount screen. It is preferable to have the respondent give you the quantity consumed as a portion of a jar (1/4, 1/2, etc.). Have the respondent use the food models if he/she cannot quantify the food in this manner.

As mentioned earlier, if the brand name is not known, you will use the general BABY hierarchy. Probe for the type of baby food (strained, junior, etc.) and the amount. If the respondent reports the portion in terms of a jar, but is unsure of the exact jar size, use the flash card described below to help the respondent in estimating the size. Ask the respondent to select the jar size closest to the one used. If a respondent selects a jar size that is not an option on the screen, redirect him/her to the regular food models, or attach a note to a "K" amount if there is a new jar size on the market.

In order to assist the respondent in estimating the jar size, a visual aid was created. The flash card (Exhibit 7-3) should remain out of the respondent's view as it is to be used only when the respondent reports that the amount consumed by the SP was some portion of a jar and was unsure of the exact jar size. The flash card consists of six drawings of baby food jars in varying sizes, arranged in a row from the smallest to the largest. Two of these six drawings represent jars of the same size though their shapes are slightly different. The back of the card lists the weight in ounces of each drawing: 2.5, 4.5, 6.0, 7.5, and 12.0. As you can see, not all sizes are represented on the flash card; the purpose of the flash card is to provide an approximate jar size.

The amount of non-commercial or homemade baby foods should be entered using the food models or accessories. Since infants usually receive mashed or pureed foods, you may find that some Amount screens do no offer the correct physical form. If "volume - mashed" is not a selection on the Amount screen when quantifying mashed or pureed baby food prepared at home, select "volume - solid" and attach a note stating the form.

- **Cereals**

Amounts for jarred cereals are easily entered using the procedure previously described. For infant cereals that require preparation, enter the dry amount and the amount of liquid used to reconstitute the dry food separately.   If the respondent cannot report one or both of these amounts, enter "U" where appropriate, and attach a note stating the amount of prepared food. Use this general rule for other baby food which may come in dry form, such as Heinz instant baby foods.

Gerber Feeding Cups are on the market which are 0.5 weight ounce microwave containers that hold dry unprepared cereal. The fluid used to reconstitute the cereal should be entered as item 2 and quantified.

Exhibit 7-3. Baby Food Jar Size Flash Card
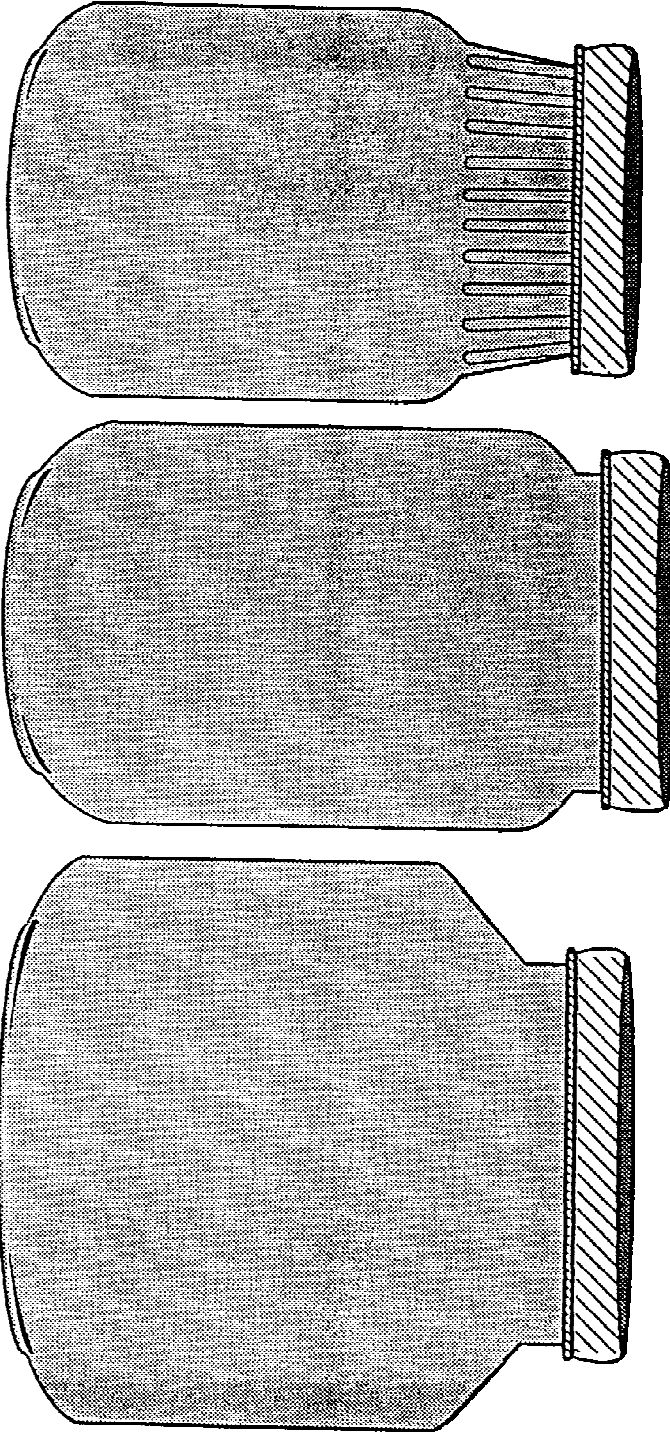
Exhibit 7-3. Baby Food Jar Size Flash Card (continued)
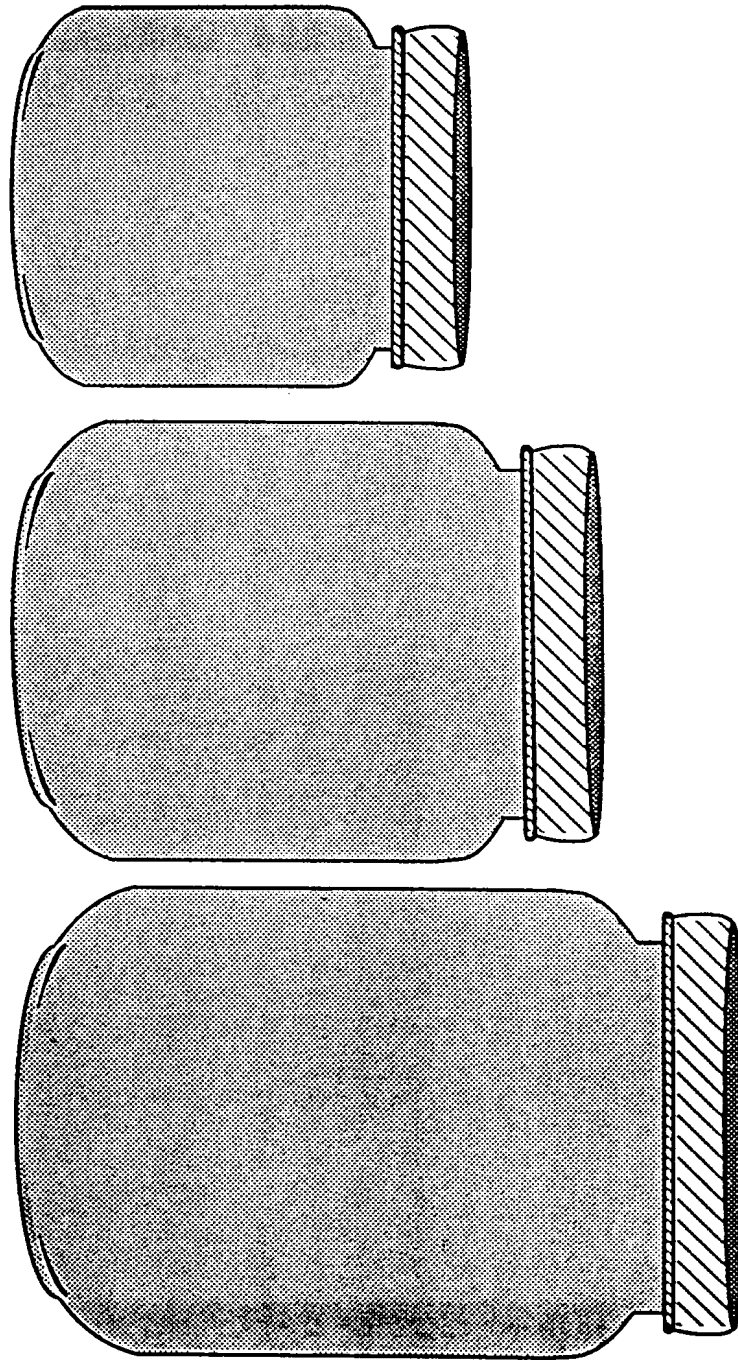
-      **Known and Unknown Amounts**

Some respondents may have difficulty quantifying the actual amount consumed by the infant. This occurs most frequently when diluted juices or a recipe is reported where the infant consumed only a portion of what was prepared. Depending on the amount of information the respondent is able to provide, you will have to determine whether a "U" or "K" is most appropriate.

For example, a mother may prepare a batch of homemade formula to be used throughout the day. For each feeding she may not be able to tell you how much of each ingredient was consumed, but only the amount of prepared formula consumed at each time period. If this occurs, attempt to find out the amount of each item used to prepare the whole recipe, the total amount it made, and the amount the infant actually drank at each feeding. Enter a "K" for each amount if she can provide this information, and attach a note to the type of combination.

During the interview, the information provided would be entered in a similar fashion as the example shown below:

```
                              RECALL REVIEW

07:00 am                  infant feeding                    home

*1. Beverage:  formula

    Note:   To prepare recipe, respondent mixed one 13 FO can
    evaporated milk, 19 FO tap water, and 2 tbsp sugar.   Total
    prepared was four 8 FO bottles.  SP drank one 8 FO bottle.

    1.1 milk, evaporated, undiluted, whole
        known amount

    1.2 water - drinking
        known amount

    1.3 sugar, white granulated
        known amount
```

During the edit, the "K" entries would be substituted with the calculated amounts. For this example, the calculated amounts would be as follows:

<u>8 FO (SP consumed)</u>   Therefore, SP drank 1/4 of recipe at this feeding.
32 FO (total prepared)

milk: 1/4 x 13 FO = 13/4 FO

water: 1/4 x 19 FO = 19/4 FO

sugar: 1/4 x 2 TB = 2/4 TB

If the mother could not provide you with all the data needed to perform a calculation, then you would enter "U" where appropriate.

Another situation where "K" would be used is when the respondent states that the SP received a bottle containing, for example, 3 fluid ounces of juice and 2 fluid ounces of water; the SP drank 4 fluid ounces. In this case, the respondent has given you all the information needed to make a calculation. Enter a "K" during the original interview for each amount. Below is a sample calculation of the amounts of water and juice consumed:

Total Recipe		Amount Consumed
3 FO juice	=	x FO juice
2 FO water	=	x FO water
5 FO total	=	4 FO total

juice: 3/5 = x/4   5x = 12   x = 12/5 FO

water: 2/5 = x/4   5x = 8 x = 8/5 FO

Replace the "K" with the calculated amounts during your edit.

[To verify that your work is correct, add together the two amounts (12/5 FO + 8/5 FO = 20/5 FO) to make sure they equal the amount consumed (4 FO).]

7.1.4   Forgotten Foods List

Instead of using the standard Forgotten Foods flash card, a verification checklist was developed to be used specifically for the infant interview. Use the Infant Verification Checklist (Exhibit 7-4) when conducting an interview for an SP less than one year of age.

Exhibit 7-4. Infant Verification Checklist

Formula, milk, juice and baby foods
including infant cereals.

"Finger" foods such as crackers,
breads, ready-to-eat cereals, teething
biscuits, cookies, cooked or soft fruits
and vegetables, cheese and chopped
or ground meat.

Fórmulas de biberón, leche, jugos y
alimentos para bebé incluyendo
cereales infantiles.

Otros alimentos tales como galletas
saladas, panes, cereales ya
preparados, galletas para ayudar a la
dentición, galletas dulces, frutas, y
verduras cocidas o crudas, queso y
carne picada o molida.

Read the initial paragraph presented on the screen, as usual; however, show the respondent the Infant Verification Checklist. (The flash card should not be easily visible prior to this point in the interview.) Allow the respondent sufficient time to read the list, then read the question, "Can you think of anything else (BABY'S NAME) ate or drank yesterday that you haven't mentioned?". Note that the Infant Verification Checklist is in flash card form only; these infant foods will not be displayed on the DDC screen.

7.1.5   Trailer Questions

For infants solely on breast milk, the trailer questions on usual consumption, water intake, and the meal preparer are answerable.

The salt questions are not appropriate, but can be answered in that "no salt" can be selected and still be considered "correct". When this occurs, attach a note to the answer stating that no solid food was consumed, and that the SP was breast-fed only.

You still must ask the food insufficiency questions for infants who are breast-fed as it is possible that the respondent could not afford more.

7.1.6   Breast-Fed Toddlers

Many toddlers continue to breast feed even though they are consuming solid foods. Usually the amount of breast milk consumed at that age is quite small but it should be listed as a food item. For those SPs between (and including) the ages of one and two, remind the respondent to include breast milk if the SP is still nursing.

7.2   Other Proxy Interviews

Proxy interviews may either be conducted with one proxy or more than one. Frequently interviews are conducted with both the SP and proxy (proxies). Those interviews conducted with both the SP and proxy may be conducted basically in one of two ways: (1) the SP and proxy may be present in the dietary room together working as a "team", or (2) the SP gives a specific portion of the interview and the proxy follows-up (or vice versa). The first method usually allows the interviewer to enter all the information at one time; whereas, the latter requires the entry of the information in stages.

Since the information provided by adults as well as youngsters is confidential, the interviewer must be careful not to reveal foods reported in SP/proxy interviews to the other respondent. A child who ate some doughnuts at school may be hesitant about reporting them if he/she was told not to eat sweets. Under the assumption that his/her parents might find out, the SP may not report them thinking that he/she might be punished.

Therefore, when conducting SP/proxy interviews, you must always mention the confidentiality of the interview to both participants. Young SPs may not understand the term "confidential"; you may explain what it means by saying something like, "What you say to me won't be repeated to anyone".

The following documents how to handle an SP/proxy interview when the first person interviewed is the proxy (1), and when the first person interviewed is the SP (2):

1. The dietary interview was completed with the proxy first, and he/she was able to report everything the SP ate for the 24-hour period with the exception of lunch. When speaking to the SP, say something like "your mother (father, etc.) was able to tell me everything you ate and drank all day yesterday, but she said you ate lunch at school. Can you tell me everything you ate and drank at school and anything else you ate or drank during the day besides your breakfast, dinner and your bedtime snack?"

2. If the SP ate breakfast and lunch at a public elementary school, a proxy may have little or no information about the foods consumed; therefore, much of the dietary interview would be provided by the SP. The proxy, on the other hand, could probably provide better information about foods eaten after the SP returned from school.

   After you have completed the recall with the SP, the proxy enters the room to report the remaining meal(s)/snack(s); do not read the foods listed by the SP to the proxy. Use a similar probe as the previous example, such as "Your son (daughter, etc.) was able to tell me what he/she ate for breakfast and lunch at school. Can you tell me everything else he/she ate or drank during the day besides breakfast and lunch?"

When an interview is conducted in two or more parts, you first record as much information as possible from one of the respondents. The system considers this "original" recall to be complete (provided that you answer the End of Recall questions). Later, you will access the same recall under the edit mode (Section 6.4.1.1) to modify it with information received from the other respondent(s). You should view these additional data as part of the "original" interview, although not technically seen that way by the computer. Since the computer does not add the time the edit mode is running to the "original" recall time, you must record the time to complete the remainder of the interview on the Dietary Interviewer Log (Chapter 10).

Data retrieval, in the true sense, usually refers to data gathered from an outside source after obtaining as much information as possible in the MEC. Although proxy interviews conducted in the MEC are not technically "data retrieval" in the true sense (an outside source), they are referred to in this way because the edit mode is usually accessed to enter additional data from another source.

7.2.1 SP, Proxy, or SP/Proxy Interviews

When the SP is under the age of 12, the first choice for a respondent is the person primarily responsible for preparing the meals for the child, such as a parent, grandparent, or baby-sitter. If that person is not available, the interview is conducted with the adult available who is most knowledgeable about the child's food intake. In the case of school age children under the age of 12, both the child and parent (or other acceptable respondent) should participate in the interview, since that adult may not know what the child ate when away from home. In either case, it is acceptable to begin the interview with the 6-11 year old SP, if the proxy is not available. However, you should complete the trailer questions with the proxy.

Youngsters who ate the meal served in the school cafeteria are sometimes able to remember what they ate once they are given a little assistance. For counties where a small number of school districts exist, the use of printed school menus can be very helpful. Either call the school district(s) for these menus or check the local newspapers. Frequently, weekly public school menus are printed in the newspaper. By having these menus on hand during the interview, you may refer to them when the SP purchased the standard cafeteria meal and cannot remember what is was. The interviewer may "jog" the youngster's memory by saying, "The school menu says that (read menu) was served. Did you eat those foods yesterday or eat something else?"

If a young SP is able to tell you what he/she ate in the school cafeteria, but gives unlikely responses, such as low sodium catsup, it is not necessary to call the school and ask what type of catsup was used. In this case, if you doubt what the SP said is true, select the answer given by the respondent and attach a note with you comments. In addition, if the SP does not know the type of catsup, milk, etc., served at the school, select the unknown option. Again, it is not necessary to call the school for this information (unless you have to call anyway for data retrieval information).

As a general rule, once you have determined that a young SP is capable of completing a portion of the recall, the interviewer should always enter the responses given by the respondent whether or not he/she feels they are correct. This includes both unusually large (or small) amounts and unlikely food item descriptions. In regards to amounts, some children have difficulty with spatial concepts, and therefore, find it hard to describe shapes and dimensions. If it appears that the SP lacks this ability, have him/her describe the item in terms of a food-specific unit. Although children may not be able to tell you the dimensions of a food, they more than likely can recall how many they ate. Also, when a child cannot tell you the time an item was eaten, enter an approximate time and attach a note.

Your comments or observations can be entered through the Note screen. In these cases, enter the interview as "reliable" but attach a note stating your concerns, such as "foods listed seem reliable but amounts seem unrealistic." By attaching a note, these interviews can be reviewed by NCHS, and, if necessary, default amounts or descriptions can be entered instead of using what the SP said.

In some situations, the dietary interviewer must use his/her judgment in deciding whether or not a 10 or 11 year old is capable of completing the interview without assistance from a parent or guardian. There are many children in this age range who assist in food preparation and are able to report with a great deal of detail.

For SPs 12 years and older, and for those SPs judged to be capable of self-reporting, the dietary interview should be conducted with the SP alone. It may often be the case that several SPs in the same family ate together for one or more meals; however, it is essential that each SP be given the opportunity to complete the interview initially without input from other household members. Unless the family member, who has more knowledge regarding a specific food preparation, is readily accessible at the time of the interview, do not seek additional details on a particular food or ingredient. If you do ask another member of the family for additional detail, only ask about the specific food in question; do not review the whole recall. Generally speaking, if a child below the age of 12 self-reports for the entire 24-hour recall, he/she should also answer the trailer questions without assistance.

There may be SPs over the age of 12 who are not capable of responding for themselves due to physical or mental limitations. In these cases, the acceptable respondent would be the person most knowledgeable about the SP's food consumption. Do not assume that an elderly person has memory problems, and therefore, cannot report for himself/herself. Many elderly SPs are perfectly capable of completing the interview without assistance. However, you may have to evaluate the ability of other elderly SPs so that you are able to obtain accurate data. If you feel the SP is not capable of giving reliable information, try to locate the person who possibly accompanied the SP to the MEC; he/she may either be able to report the foods or at least be able to tell you who to contact.

7.2.2 Multiple Interviews

Multiple interviews are interviews in which a respondent has to account for the recalls of more than one SP. There are many possible scenarios. For example, (1) an SP has to report for himself/herself and a child(ren), (2) an SP has to report for himself/herself and a sibling(s), (3) a non-SP has to report for 2 or more children and, (4) a non-SP has to report for 2 or more siblings.

Sometimes the interviewer will be able to complete a set of multiple interviews at one time. At other times, the respondent will leave the dietary interview room, participate in other exam components, then return later for the remaining interview(s). When interviews are done back-to-back, it is acceptable to only briefly review the instructions for the second interview. You may have to remind him/her when giving the initial food list for the second interview that you do not need all the details about the food yet.

For those interviews where the respondent states that the two SPs ate exactly (or very close to) the same foods (or meals), you may use the following shortcut. First complete one of the interviews, then print the Recall Report. Explain to the respondent that you will be back in a moment to complete the second interview. Return with the Recall Report and record the second SP's number. With the respondent, review each meal and snack individually. Check for additions and deletions; always verify the amount. Write any variations on the Recall Report. Ask the trailer questions by using and recording the answers on the hard copy form. The answers to these questions may vary for each SP; therefore, using

the hard copy form assures that all appropriate questions are asked. [Keep track of the time for the second interview and record it on your Dietary Interviewer Log and the Control Record (Chapter 10).] When time permits, enter the second recall into the system. Attach a note to the interviewer's work code stating "Recall Report of SP (insert number) used to conduct interview."

7.3   Spanish Interviews

Since Mexican Americans are being over-sampled in NHANES III, it is very important that accurate detailed information be collected about their food intake. As would be expected, there is more information about the nutrient composition of American foods than foreign foods. Many of the foods that Mexican Americans consume are not yet included as part of the nutrient database which will be used to analyze the data collected. The more details provided by the Mexican-American respondents in the field about the foods they consumed, the higher the chances are that the food codes ultimately assigned these foods will be accurate. Included in Appendix D is an article which was published in the Journal of the American Dietetic Association entitled, "Nutrient data for Mexican-American foods: Are current data adequate?" Read this article which emphasizes the importance of collecting clear, precise and accurate data on Mexican-American foods.

As you have already learned, the foods consumed by the SPs are accessed by typing a four-letter key on the Food Entry screen. Although some of the screens are translated to Spanish by using the F9 key, the majority are in English. Therefore, when conducting a Spanish interview, it is your responsibility to determine what the SP is reporting and make the correct selection in English. Determining which four-letter key is most appropriate for a particular Spanish term will be quite easy at times, such as entering "MILK" for "leche". At other times, you will have to rely on your knowledge of the ingredients and preparation of specific Mexican-American foods to code a food correctly.

We have observed that SPs may refer to Mexican and American foods in unexpected ways. For example, Mexican food names may be used to refer to similar American foods (e.g., "atole" may refer to oatmeal eaten in a bowl) or an American brand name may be used as a generic food name (e.g., "corn flakes" may refer to any ready-to-eat cereal). In addition, some SPs may literally translate the names of foods during interviews conducted in English. The foods may appear to be American foods, but upon probing, you find that the SPs are describing Mexican foods (e.g., "bread" may refer to a tortilla). In all cases, you need to be aware of the foods which present problems and probe for more detail when these foods are reported (Appendix K). Many of these problematic foods are described later in this chapter.

In the sections which follow, a great deal of attention will be paid to vocabulary terms which may be used by the Hispanic respondents, and to specific foods which may be reported. However, before addressing these issues, it is first important to learn several steps which are used to determine in which language to conduct the interview.

7.3.1 Choosing the Language of the Interview

It is important that the interviewer provide the respondent with every possible opportunity to determine the language of the interview. Some Hispanics may choose the language they believe is expected of them in the interview situation, rather than the one in which they are the most articulate. The interviewer should try to find out the preferred language. The MEC coordinator can usually assist you in determining the most appropriate language since he/she has the initial contact with the SP.

Cues provide the interviewer with important information. Be observant. Awareness of the person to be interviewed will provide you with your first language cues. Possibly listen to the language the respondent speaks as he/she waits to be examined. It is vital that you use a number of communication cues in determining the preferred language.

To determine the language of the interview, there are several steps which are important to follow.

1. **INTRODUCE YOURSELF IN BOTH LANGUAGES (IF LANGUAGE PREFERENCE IS NOT KNOWN).**

2. **NOTE THE LANGUAGE USED BY THE RESPONDENT DURING THE INITIAL CONTACT.**

   Use this period of time to ascertain the respondent's language ability and natural preference.

3. **MAKE THE RESPONDENT AWARE THAT YOU ARE COMFORTABLE IN BOTH LANGUAGES.**

   It is important to reinforce that you are able to conduct the interview in both languages and that the choice is his/hers.

4. **ASK THE RESPONDENT TO CHOOSE THE LANGUAGE FOR THE INTERVIEW.**

   Ask the question in both languages. This will continue to stress to the respondent that the final choice of the language used during the interview is his/hers. Say, "In which language do you wish to conduct the interview?" or "¿En qué idioma prefiere usted hacer la entrevista?"

   Keep in mind that the procedures used to determine the language of the interview need to be implemented each time you encounter a new respondent.

5. **CONDUCT THE INTERVIEW IN THE LANGUAGE SPECIFIED BY THE RESPONDENT.**

In the unusual situation where, in your opinion, the communication cues do not support the interview language chosen by the respondent, DO NOT CONTRADICT the respondent's choice. Begin the interview in the language chosen by the respondent and use the guidelines provided in the next section if you encounter difficulties with the language chosen for the interview.

7.3.1.1 Changing the Language During the Interview

On occasion, language changes may occur during the interview. A respondent may determine, once the interview is under way, that he/she actually is more comfortable using the "other language," and would prefer to switch to Spanish (or vice versa). If this happens, assure the respondent that it poses no problem, and that you are happy to oblige.

It may become clear to the interviewer that the respondent is having repeated difficulty understanding the questions being asked, and that this problem is clearly one which could be alleviated by switching the language of the interview.

When this situation occurs, the interviewer may ask the respondent if he/she wishes to complete the interview in the "other language." It is extremely important to be sensitive to the feelings of the respondent to make sure that in making this suggestion the interviewer is in no way implying ineptness on the part of the respondent.

7.3.2 Use of "Usted" and "Tú" During the Interview

Successful interviewing requires that the interviewer establish and maintain a professional relationship with the respondent. To support this, it is important that all communication with the respondent be conducted using the formal "usted" rather than the familiar "tú." This includes all the interaction with the respondent, whether during the informal introduction at the door or during the interview.

7.3.3 The Introduction

Whether the interview is being conducted in English or Spanish, it is still necessary to incorporate all the points previously discussed into the introduction. Exhibit 7-5, a translation of the introduction, should be used as a guide. You may adapt the introduction to accommodate your own personal interview style. Note that the exhibit is divided into three sections: the first is the initial introduction, the second is the question concerning fasting status, and the third is the second part of the introduction.

Exhibit 7-5. Introduction script (Spanish translation)

"(Buenos días/Buenas tardes/Buenas noches.). Mi nombre es (NAME). Esta es la entrevista de la nutrición. Todo lo que diga será mantenido confidencial.

Basicamente lo que queremos hacer es una lista de todas las comidas y bebidas que usted ha consumido en un período de tiempo de 24 horas, un día completo. Esto incluye bebidas alcohólicas, soda, agua mineral como Perrier, pero no agua de la (llave/pluma) ni agua de manantial. Recuerde incluír también todo lo que comió o bebió entre comidas.

Hoy es (DAY). Quisiera que me diga todo lo que usted comió y bebió ayer, empezando el (DAY) a la medianoche hasta (DAY) a la medianoche. Esto significa que si usted se acostó tarde el (DAY) después de medianoche y comió o bebió algo, debe empezar ahí. Si usted estaba dormido(a) a esa hora, empiece con la primera cosa que comió o bebió después que se levantó ayer.

Quisiera además clasificar las comidas en cuanto a la hora en que las consumió. Por ejemplo, a las 8:00 yo tuve esto, a las 10:00 yo tuve lo otro.

Primero, haremos una lista muy general, y después regresaremos a ella para detallarla."

"Cambió la manera en que usted comió anoche entre las ocho y media y las doce de la noche, debido al requerimiento de ayuno?"

"Ahora vamos a completar la lista con más detalles. Hay dos listas en la pared: una dice "LISTA DE COMIDAS" y la otra "DONDE COMIO." Para cada comida o grupo de comidas que ha mencionado, quisiera que escoja una respuesta de cada lista. No hay respuestas correctas o incorrectas. (Además no necesita ser específico en la ubicación. Puede decir "casa," en vez del cuarto donde comió.)

La razón por la cual los modelos están sobre la mesa es para que me muestre cuanto comió o bebió de alguna cosa. Si alguna de las formas en esta tarjeta se acerca más a la forma del alimento, puede utilizarla y podemos medir el tamaño con la regla. Puede usar el reticulado para enseñarme formas rectangulares o cuadradas, también las formas circulares, y estas barras para demonstrar lo grueso de un alimento.

Para las tazas, platos hondos, y vasos, muéstreme cual línea describe mejor la porción que comió o bebió.

Cuando use cualquiera de las cucharas, por favor dígame la cantidad en cucharadas niveladas."

Each dietary interviewer is provided with an English and Spanish shape chart. When delivering the second part of the Spanish introduction, make sure that the Spanish shape chart (Exhibit 7-6) is displayed.

7.3.4   Probing

The quality of an interview depends a great deal on the interviewer's ability to probe meaningfully and successfully. The kinds of probes and probing techniques do not differ when conducting the interview in Spanish. For those SPs who do not provide enough information for you to code a food properly or who do not completely answer a question asked, you may try using one of the following general probes to help the SP expand his/her answer.

- **General Probes**

"Por favor, ¿me puede explicar un poco más? No creo que entiendo por completo."
"¿Puede ser un poco más específico acerca de eso?"
"¿Qué más?" or "¿Hay algo más?"
"Ya veo. Bueno, déjeme preguntarle otra vez...(repeat the same question)."

7.3.4.1 Probing on the Quick List

Since the Mexican-American population is to be over-sampled in NHANES III, their traditions will be addressed here. There is much variation among different Hispanic groups. With thorough probing, you should be able to discern any differences and thus, accurately record the information. The meal pattern which follows is to serve as background material; do not assume that all Mexican-Americans eat this way.

The typical Mexican daily meal pattern begins with "desayuno," the first meal of the day. This is followed later in the morning by "almuerzo," the second or heartier breakfast, usually including an egg dish, tortillas and beans.

The main meal, "comida," is eaten in early to late afternoon. It consists of many courses, including appetizer, soup, a rice or noodle dish called "sopa seca," fish course, main course, salad, beans and dessert.

Exhibit 7-6. Three dimensional shapes (Spanish translation)

SPANISH SHAPE CHART

AL = ALTURA

L = LARGO

AN = ANCHO

D = DIÁMETRO

TRIÁNGULO

ESFERA

CUÑA

CILINDRO

CUBO
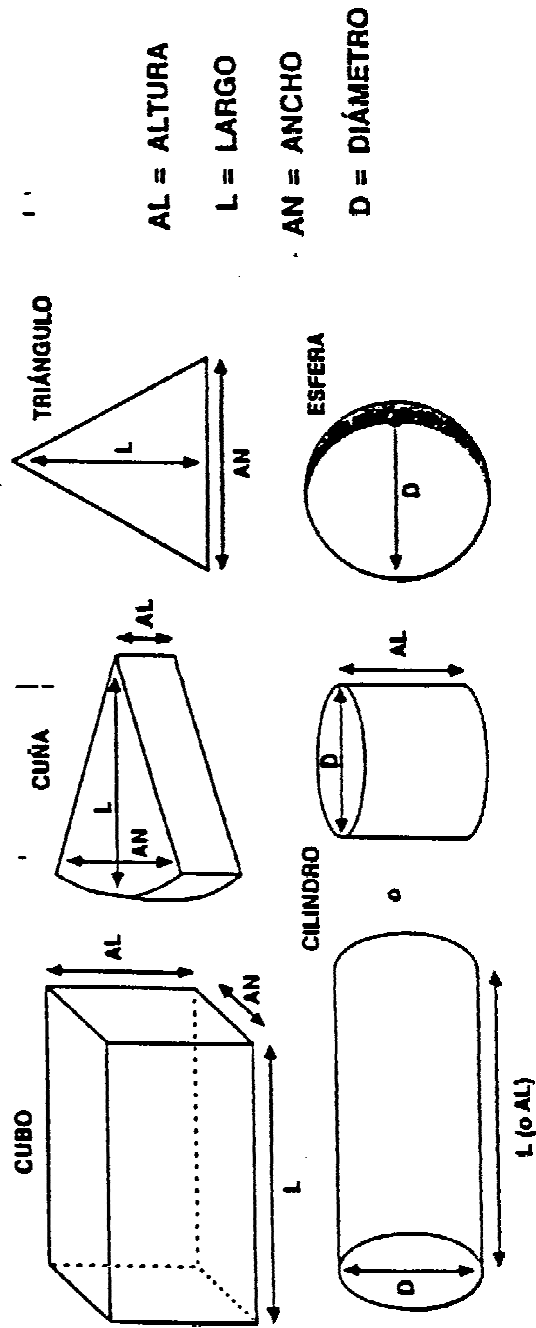
A typical "comida" is followed by a light snack in the evening, "merienda." Sometimes "cena," a two or three-course evening supper, is served instead of a "merienda."

-   Meals Codes and Where Eaten

Because there is variation among Hispanic groups as to what a specific meal or snack is called, the List of Meals/Lista de Comidas (Exhibit 7-7) was developed to try to include all meal references. Because the meal names are listed both in English and Spanish on one flash card, it is possible that a Spanish-speaking SP might select an English term. Therefore, you may have one or more English meal codes, such as "LUN", listed as part of a Spanish interview; this is fine. What is important is to make sure you enter the English or Spanish term which was used by the SP.

The abbreviations for the Spanish meal codes are:

Desayuno	=	DES
Almuerzo	=	ALM
Comida	=	COM
Merienda	=	MER
Cena	=	CEN
Entre Comidas	=	ENT

       Botana
       Bocadillo
       Tentempié
       Bebida

Three meal codes do not appear on the flash card in English nor Spanish. Since the use of these codes is limited to specific situations which were discussed earlier in the manual, review Section 4.3.2.3 if you have any questions about their use. The three codes which do not appear on the flash card are:

Infant Feeding	=	INF
Other	=	OTH
Extended Consumption	=	EXT

Exhibit 7-8. List of Meals/ Lista de Comidas

LIST OF MEALS LISTA DE COMIDAS	
BREAKFAST	DESAYUNO
BRUNCH	ALMUERZO
LUNCH	COMIDA
DINNER/SUPPER	MERIENDA
SNACK OR BEVERAGE	CENA
	ENTRE COMIDAS/ BOTANA/BOCADILLO/ TENTEMPIE
	BEBIDA

Similar procedures are used for both the English and Spanish interview. Thus, like the English interview, you must probe to find out whether the foods consumed at a specific time were a meal or snack. Since there is no one term which translates to "snack" in Spanish, there are five terms displayed on the flash card which are ultimately entered into the system as the Spanish equivalent of a snack. They are: entre comidas, botana, bocadillo, tentempié, and bebida. (Although "bebida" is listed as a separate category on the flash card, it does not have a separate abbreviation.) The Spanish meal code abbreviations are displayed on the Quick List to be used as a quick reference when necessary.

Exhibit 7-8 is a representation of the Spanish translations of the where eaten flash card. Since there is less variation as to the terminology of locations, the respondent should not experience difficulty in understanding these terms. Unlike the entry of the meal codes, the abbreviations entered into the system for both the Spanish and English locations are the same. Should a respondent say that he/she ate his/her breakfast "en mi casa", enter the abbreviation for the translation of the location which, in this case, would be "HOM".

During the listing of the foods on the Quick List, allow the respondent to report the foods without interruption. Type the foods on to the Quick List in Spanish; do not translate the terms into English as it is important to capture the actual words the SP used in describing a food or mixed dish. Should the respondent report eating a "hamburger" as opposed to "hamburguesa", you may then enter the English term since that is how the respondent reported it.

Exhibit 7-8. Where Eaten flash card (Spanish translation)

DÓNDE COMIÓ

CASA PROPIA

TRABAJO

ESCUELA

GUARDARÍA PARA NIÑOS POR DÍA/CAMPAMENTO DE DÍA

COMIDA RÁPIDA/PARA LLEVAR

DELICATESEN

RESTAURANTE

CAFETERÍA/BUFFET, AUTO-SERVICIO

TIENDA/ALMACÉN

CASA DE AMIGO/CASA AJENA

PROGRAMA DE ALIMENTACIÓN COMUNITARIA

AUTOMÓVIL/BARCO/AVIÓN

OTRO

7.3.4.2 Probing on the Food Entry and Food Selection Screens

- **Rules for Use of Generic Versus Item-By-Item Entry**

As explained earlier, the "generic" or "standard recipe" refers to an item presented in a hierarchy as a complete recipe, such as an enchilada. "Item-by-item" refers to the attempt to list and specify each individual ingredient in a recipe as reported by the SP. In general, if the SP can supply basic ingredients for a sandwich, salad, or homemade vegetable mixture, the interviewer should not use the standard recipe presented in the hierarchy.

The same basic premise applies for Hispanic foods. List the component parts for homemade vegetable mixtures, and items similar to sandwiches and salads. Many of the popular Hispanic dishes should be listed by their specific ingredients. These include: (1) Burritos, (2) Chalupas, (3) Fajitas, (4) Nachos, (5) Quesadillas, (6) Tacos [both the fried (hard) and non-fried (soft) varieties], (7) Tostadas, (8) Taco salads, (9) Huevos Rancheros, (10) Flautas, and (11) Sopes/Gorditas. More intricate recipes, such as enchiladas and tamales, should be entered by selecting the standard recipe presented in the hierarchy.

- **"Hispanic" Categories**

To assist with probing, Spanish terms have been added to the DDC system for specific foods. In addition, many of the hierarchies have Hispanic foods. They may either appear as a separate selection in a particular hierarchy, or may be found as a group by accessing the listing labeled "HIS Hispanic." Some Hispanic foods list the major ingredients in the recipe in parentheses; these descriptions are to help you differentiate between Mexican and Puerto Rican versions of recipes. Look for variations in the recipe reported by the respondent compared to the ingredients presented on the screen. In some cases, the selection in the system will have the same name as the food or beverage described by the SP, but will not be prepared in the same fashion; further probing is required in order to assure the most accurate food code. Descriptions and probes for specific foods will be discussed shortly.

- **Cuts Of Meat**

Even for the most fluent interviewer, cuts of meat are not easy to translate. Because the translations of the meat cuts differ significantly depending on the Hispanic group, it was decided not to translate these. When a meat is reported which requires a selection for the cut of meat, ask the SP if he/she can tell you the name of the cut in English. Choose the unknown selection if the respondent is unable to do this.

- Food Specific Probes and Descriptions of Mexican-American Foods

Each dietary interviewer will be provided with a Food Glossary (Appendix F). Terms, foods, and recipes presented in the system are defined in the glossary. In addition, commonly consumed Hispanic foods are listed to provide the interviewer with a readily available reference. If you have any questions about a particular food or beverage in the system or an item reported by a respondent, refer to the glossary to obtain a general idea of what the food is or contains. Each dietary interviewer will also be provided with a Quick Coding Reference Guide (Appendix C). As indicated by its name, this is a reference to quickly check coding rules. Some Hispanic foods are contained in this guide, but it is recommended that you rely more heavily on the DDC glossary and the training manual for most issues regarding Hispanic foods.

In Hispanic HANES, there were certain foods which caused some confusion at the time of analysis. To avoid this problem, review the foods below for the appropriate probes if these items are reported.

CAFE: Probe to determine if the SP is referring to American or Hispanic coffee. If Hispanic, select the type, e.g., Cuban or Mexican. The food selection screen then presents two options: "sweetened with sugar" or "unsweetened." If the coffee was sweetened with sugar, but the SP does not know the amount of sugar because the SP did not add it, select "sweetened with sugar." On the other hand, if the SP is able to quantify the sugar, it is preferable to select "unsweetened" and enter the sugar as a separate item on the Food Entry screen. Hispanic coffee sweetened with an artificial sweetener should always be entered as two separate items with the known, (e.g., 1 packet) or unknown amount ("U") of the artificial sweetener.

CONCHA: Pay attention to the way the SP uses this term as it may refer to very different foods. A concha consumed at breakfast most typically is a Mexican sweet bread while conchas served at a seafood restaurant may refer to something served in a shell, such as oysters or clams. "Sopa de conchas" usually refers to a soup containing shell-shaped pasta.

CORNFLAKES: Many Hispanics use this term to refer to any type of dry cereal or to presweetened cornflakes. Probe carefully to find out the actual brand.

GALLETAS: Probe as to salty or sweet to distinguish crackers from cookies.

LECHE CON CHOCOLATE: Probe to determine whether the chocolate used in preparation was Mexican or another type. Was it prepared with regular or canned milk?

MANTECA: In order to distinguish between lard and vegetable shortening, probe "¿... de cerdo o vegetal?"

PAN DULCE: It is important to find out whether the respondent is actually referring to Mexican pan dulce or a generic description of a sweet roll. Probing as to whether the pan dulce was "tipo mexicano" or "tipo americano" may help to code this food more accurately. Do not use the Mexican pan dulce (BREA.DUL) selection for the Mexican-style croissant or "cuerno"; it is accessed by typing BREA.CUE, then selecting "plain".

PICO DE GALLO: Although this is found by typing "PICO" and typically refers to a red salsa, probe for a more complete description from the SP as this may also refer to a recipe containing jicama and oranges which would be entered as a missing food.

PLATANO: To distinguish between a banana and plantain, probe "¿Para cocinar o no?" Sometimes the term "plátano macho" is used to refer to a plantain.

POLLO: If appropriate, probe as to the part of the chicken. "Pierna" may be used to signify the drumstick or whole leg. Probe if you are in doubt. "Muslo" usually means the drumstick, but some Hispanics use the term to signify the thigh. "Cadera" also may be used to mean thigh. Again, probe if there is any doubt.

POZOLE: Probe to determine whether the mixture was prepared with or without chicken.

QUESO BLANCO: Since many Hispanic cheeses are white in color, it is important to probe to discern whether the respondent is using this term generically.

QUIK: Hispanic respondents frequently use this term to refer to any type of chocolate milk. Probe to determine whether or not the respondent is using this term in the generic sense.

SALCHICHAS: Probe to determine whether the respondent is referring to a hot dog or link-type sausage.

SOFRITO: Probe to ascertain whether the respondent is speaking of a type of preparation or a type of sauce. "Sofrito" can signify an item which is lightly fried (from the verb "sofreir") or a tomato-based sauce.

TORTILLA: Probe to differentiate between "de maíz o harina" or "tortilla de huevo." This term may refer to corn and/or flour tortillas or may signify an omelette.

TUNA VERSUS NOPALES: "Tuna" (prickly pear) is the fruit of the cactus plant; "nopales" are the cactus pads.

VIANDAS: This is a generic term used to signify starchy vegetables. Probe to ascertain the type.

Even after listening to the SP give you a description of a particular food, you may find that you still need further clarification in order to make an appropriate selection. If neither your knowledge of the food reported nor the parenthetical descriptors on the screen provide you with the information you need to make a decision, there is another probe which may be effective. Try asking the SP whether the food was Mexican or American style, e.g., "Fue tipo mexicano o tipo americano?" Knowing this piece of information should make accessing the food somewhat easier.

During the first cycle of NHANES III, many Mexican-American foods were reported with which you should be familiar. The following list documents how to access certain Mexican-American foods and important issues concerning these foods. To familiarize yourself with these foods and the appropriate probes for each, you will be given time to practice entering these foods during training:

1.	Arroz: Ask how the rice was prepared to determine if this was simply rice or if it was prepared with other ingredients. If it contained tomatoes, probe to ascertain whether it was "arroz a la mexicana", "sopa seca de arroz", or "some other kind of rice mixture." Make your selection based on the preparation of the rice instead of the name of the dish that the respondent provided. Use the database recipe information described below to make the proper selection:

	The "arroz a la mexicana" recipe does not contain much fat or chicken broth. If an SP reports browning the rice before cooking, make this a missing food. If the SP reports browning the rice and cooking it with chicken broth and tomatoes, select "sopa seca de arroz" but leave the food name as "arroz mexicano" ("arroz a la mexicana").

2.	Arroz con coco: After typing RICE.COC choose between either a side dish that does not contain sugar or a sweetened pudding with raisins (Puerto Rican style). Both these rice dishes are prepared with coconut milk. Do not confuse this with arroz con leche, a Mexican rice pudding cooked with cinnamon, sugar and milk.

3.	Arroz con pollo (or Pollo con arroz): Ask if this was simply plain chicken and rice mixed together, and if so, enter them as two separate components of a mixed dish combination. On the other hand, if this was mixed with other ingredients, such as tomatoes, make this a missing food and obtain a good description. Do not use the RICE.HIS selection "with chicken in tomato sauce - arroz con pollo" unless the respondent is Puerto Rican so that we can add a Mexican version to the system.

4.	Atole: This sweetened gruel-like beverage can be accessed by typing ATOL. You may select between masa, cornmeal and rice atoles. It is very important to distinguish between the two corn-based atoles as atole prepared from masa is made with lime-treated corn and contains much more calcium than one prepared from cornmeal. The translation for each (masa harina/harina de maíz) is presented on the screen to assist with probing. Enter any other flavors as missing foods. Atole that is prepared with oatmeal is being added to the DDC database.

5.	Caldo o sopa: If an SP reports either of these (and you have determined that the "sopa" is not sopa seca (e.g., fue con mucho líquido?), you need to probe further:

	1)	What was the base? (Do not assume "carne" is always beef.)
	2)	Was it just broth or were there other ingredients?
	3)	Did it contain a grain (e.g., rice or noodles)?
	4)	Were there vegetables in it ? (Be careful, beef soups may have tomatoes in them.)
	5)	Also, was this a soup or a stew? (You might ask how much liquid it contained to determine this.)

Once you have a better idea of what the soup contained, follow these general guidelines:

1)   Use the "Hispanic" soup hierarchy only when the soup reported by the SP matches the descriptors presented on the screen.

2)   Use the regular soup hierarchy, for example, for:

Caldo de res con arroz	--use "soup, beef, with rice"
Caldo de res y fideos	--use "soup, beef, with noodles"
Caldo de res solo	--use "soup, beef, broth"
Caldo de pollo solo	--use "soup, chicken, broth"

If the SP reports a beef base with tomatoes, you must select "soup, tomato, beef" and then choose the grain. You cannot enter "soup, beef" because you will not be able to specify the tomatoes.

If the soup contains an unusual vegetable, e.g., cabbage, chilies or pumpkin, you should make this a missing food although you could select the closest soup during the interview so that you are prompted for all important details. Make the item a missing food during your edit and delete the original entry. Carrots, celery or onions are considered "usual" soup vegetables. When other vegetables are mentioned as part of a soup and these vegetables are not presented as options or descriptors on the screen, use the general rule: If the vegetable is green, orange or red, it is important.

6.   <u>Carne guisada</u>: Found under MIXE or by typing CARN. Select between a stew made with tomatoes and stewed meat without gravy or tomatoes (e.g., "stewed - plain"). Carne guisada prepared with a flour-type gravy should be entered as a missing food. The verb "guisar" means to stew. The reason why "stewed - plain" is a selection on this screen is to distinguish between a plain stewed meat and a recipe where the meat is typically browned in fat with other added ingredients (usually tomatoes). To decrease confusion, note that the "stewed - plain" selection has brief instructions on what to enter on subsequent screens, "(next screens select cut/choose stewed prep)".

7.   <u>Chalupa</u>: Although two chalupa selections appear in the mixed dish hierarchy, only use them if the SP cannot provide enough information to break them down into their component parts. Be aware that this term is often synonymous with "tostada". However, chalupa can also signify a food with toppings similar to a tostada, but with a shell prepared by shaping some masa into the form of a canoe (or boat) with raised edges. Probe to find out the type of shell consumed and whether or not it was fried with fat. If the shell is a tortilla, use the appropriate selection in the system. On the other hand, if the shell is prepared similar to the "boat" described, enter the toppings as separate items using the selections in the DDC and make the base a missing food.

8.   Chilaquiles: A mixed dish made of fried corn tortilla pieces mixed with cheese and usually a red or green sauce. A second screen probes for "with egg stirred into recipe" or "without". If hard-boiled egg was added to the top as a garnish, do not select "with egg stirred into recipe". Instead, select chilaquiles "without egg" and add the hard-boiled egg garnish as a separate item. Code this combination as "tortilla with additions". If the chilaquiles contain some type of meat or chicken, make this a missing food. [Sometimes it is helpful to use the hierarchies during the actual interview to enter a missing food which has only a slight variation to the selection indicated on the screen (as is the case for chilaquiles with meat), and later change the selection to a missing food during the edit. In this way, the system prompts you to gather all necessary data. When you use this technique, you must remember to delete the original entry made during the actual interview.]

9.   Cinnamon crispas: This Americanized version of buñuelos is frequently sold as a dessert in Mexican-American fast food establishments; it is a fried flour tortilla with a cinnamon and sugar topping, and can be found in the DESS hierarchy of the DDC. Mexican buñuelos (which are usually fried fritters with sugar and sometimes cinnamon topping) are not in the system; they should be entered as missing foods.

10.   Dulce de guayaba: This sweetened guava paste can be located by typing CAND, then selecting "other." This may sometimes be referred to as "pasta de guayaba." When the term "pasta de guayaba" is used, it is acceptable to use the "dulce de guayaba" selection as long as the guava paste was sweetened.

11.   Enchiladas empalmadas/chatas: Accessed by typing ENCH, select the "stacked" option from the two descriptors. Often stacked enchiladas may be served with one or more (fried) eggs on the top layer. Note the instructions on the screen, "(probe if with egg)". Enter the egg(s) as a separate item if consumed, and categorize the combination as "tortillas with additions". Since the number of layers of tortillas is variable, you have to select the diameter of the tortilla on the first Amount screen and then, enter the number of layers of tortillas when the DDC probes for the "AMOUNT:" on the next screen. Should the SP report eating only a portion of a stack of enchiladas, you will have to calculate the amount. Enter a "K" during the interview and note the diameter, the number of layers and the portion consumed. The example which follows demonstrates this procedure.

Example: The SP reported consuming stacked enchiladas. The tortillas were 6 inches in diameter, there were 4 layers, and he consumed only half of the stack.

Solution: During the recall, a "K" amount was entered. During the edit, replace the "K" with the calculated amount by first entering the diameter of the tortillas "D6" and then entering the amount calculated, "2" (4 layers x 1/2 stack consumed).

12. Enchilada without sauce: For purposes of this study, an enchilada is defined as either a tortilla rolled around a filling and served with sauce or stacked-tortilla layers (flat) with filling and sauce. If an SP reports an enchilada without sauce, probe for a better description of what was actually eaten; do not select "enchilada". Frequently (but not always) SPs describe something similar to a taco when asked for further details about the "enchilada". Since it is important to capture the actual term used by the SP during the interview to describe mixed dishes, be sure to record whatever food name the SP used.

13. Flauta: Although two flauta selections appear in the mixed dish hierarchy, they are only to be used if the SP cannot provide enough information to break them down into their component parts. The flautas listed in the DDC are made with corn tortillas but flautas may also be prepared with flour tortillas. The standard recipes for the flauta selections do not contain sauce; therefore, list the sauce as an additional item should it be reported, and categorize the combination as "tortilla with additions".

14. Gordita/sope: Gorditas and sopes usually consist of a masa shell and a topping or filling (like beans, lettuce, cheese, etc.). The masa shell may either be puffed up from frying and pierced for stuffing, or may be described as a thick (or fat) tortilla. Because the toppings or fillings are so variable, it is recommended that you enter the gordita or sope as a combination of the shell with the other items. Categorize the combination as "tortilla with additions". The masa shell can be located by accessing the MIXE hierarchy or by typing GORD or SOPE.

15. Horchata: This beverage is much thinner than atole and can be made with ground almonds or ground, uncooked rice; these are found under BEVE or HORC. Sometimes horchata is made with ground melon seeds; make this a missing food if it is reported.

16. Licuado: Licuados or batidas are blenderized beverages usually containing fruit, milk and sugar. There are seven fruit flavors in the system which may be accessed by typing either LICU, BATI, or by looking under the broader category BEVE. Should an SP report a flavor not listed, make it a missing food. If it contains an egg, add the egg(s) as a separate item until the option, "with egg," is added to the system. If Quik is added, enter it as a separate item.

17. Mole: Probe as to the type of mole consumed by the SP. Both mole poblano (made from a paste of chiles, nuts, and chocolate) and mole verde (made with tomatillos and pumpkin seeds) are in the system. Should any other variety be reported, enter it as a missing food.

18. Papas Guisadas: Two Mexican recipes and one Puerto Rican recipe prepared with sofrito are presented in the DDC. Select between the two Mexican recipes depending on whether or not the recipe contained tomatoes. These stewed potatoes may be accessed through either the POTA hierarchy or by typing POTA.HIS.GUI.

19.   Picadillo de carne: Select between the different kinds of picadillo (e.g., made with beef, a combination of beef and pork, and two Puerto Rican versions of this dish). A screen will prompt you to probe for potatoes added in the preparation. You may access this dish either through MIXE.HIS or by typing MIXE.PIC.

20.   Pollo guisado: Found under MIXE or by typing POLL. Select between a stew made with tomatoes and stewed chicken without gravy or tomatoes (e.g., stewed - plain), or a Puerto Rican style which contains ham. See the explanation under "carne guisada" as to the importance of distinguishing between the first two selections.

21.   Queso: Seven Hispanic cheeses can be found in the DDC. They are: queso añejo, queso asadero, queso blanco (Puerto Rican white), queso cotija, queso chihuahua, queso fresco (Mexican white) and queso ranchero. Any other varieties which are reported should be entered as missing foods.

        The following provides a more detailed description of the types of Mexican cheese which are currently in the system:

                Queso Añejo: This "aged" cheese is white and crumbly, often very dry and salty, rather resembling a dry feta. The color ranges from creamy to pale-yellow with an orange outer coating of paprika.

                Queso Asadero: The literal translation of the cheese's name is "broiler" or "roaster"; the cheese itself is made by the same method as the braided Oaxaca cheese and, presumably, mozzarella. Rennet is stirred into warmed raw milk to which a certain proportion of soured milk has been added. As soon as the curd is firmly set, it is cooked and stirred until tough, skeinlike curds have formed. The "skeins" are broken off into lengths, wound into small balls, and cooked. The cheese melts easily when heated and strings appropriately.

                Queso Chihuahua (Menonita): A mild, spongy (semi-soft), pale-yellow cheese originally made in great wheels in the Mennonite farming communities in the State of Chihuahua; there are many copies now. Having a high fat content, it melts easily and is rather like a mild Cheddar.

                Queso Cotija: An aged cheese similar to queso añejo.

                Queso Fresco: A fresh country- or ranch-style cheese. It is moist with a coarse, crumbly texture and white in color with a mild, slightly sour flavor. Similar to a dry cottage cheese or farmer's cheese with a little salt added.

                Queso Ranchero: This "farm-house" cheese is a dry white cheese with a slightly strong flavor.

22. Rompope: You may access this alcoholic eggnog-like Mexican beverage by typing ROMP. Do not use this selection for non-alcoholic rompope; make it a missing food.

23. Salsa added to dishes during short cooking process: When fresh salsa ("salsa cruda") is added to dishes like eggs during the cooking process, select "salsa cruda." The nutritional content of the salsa would not change with such a brief cooking time.

24. Sauces: There are many varieties of Hispanic sauces in the system: red and green salsas (cooked and uncooked), mole, enchilada sauce (with and without cream/milk) and sofrito (Puerto Rican). There are also some Americanized versions of the sauces: taco sauce, chili sauce, picante sauce and hot pepper sauce/Louisiana hot sauce (Tabasco). A choice between homemade or commercially prepared is an option for red and green salsas. Some of the sauces just listed have descriptors on the screen which can assist you in making the right selection. If an SP reports consuming a "hot sauce," probe for a better description since all these sauces technically are "hot."

25. Sopa de pescado: There are two Hispanic fish soups located under SOUP.HIS. Choose between a Mexican style fish soup containing potatoes and a Puerto Rican style containing tomatoes.

26. Sopa seca: Raw rice or noodles are sauteed in oil or fat, then usually onion and garlic are added. Next whole tomato (or tomato sauce) and broth are added. This "dry" soup differs from regular soups in basically two ways: 1) it contains very little liquid, if any, and 2) the raw grain is sauteed in oil or fat before the liquid is added. Use this information when probing to distinguish "sopa seca" from other types of "sopas" which may be reported. After typing SOPA on the Food Entry screen, you may then select between a sopa seca made with rice or one made with vermicelli-type noodles. A second screen prompts for with or without meat; choose the type of meat from the Ingredient screen.

27. Tamale: There is a fairly extensive listing of different types of tamales (accessed by typing TAMA) in the DDC. Do not try to break tamales down into their component parts; the recipes are too intricate. Probe if the tamale was prepared with or without sauce, and probe for the type of filling. There is also a selection for tamales prepared without filling or sauce, sometimes called "tamal(e) blanco". Should the respondent report a tamale with mixed fillings that are not options on the screen (e.g., pork and beef), you may enter the two constituent foods as part of a "tortilla with additions" combination with a note attached stating that it was one food. The example below should help illustrate how tamales with mixed fillings are handled. Pay particular attention to how the amount is entered.

Example: An SP reports eating two tamales containing a filling of pork and beef with sauce. Nothing additional was added to the tamales at the table. After probing you find out that the filling was primarily beef (3/4 beef and 1/4 pork). The SP reported eating 2 rectangular-shaped tamales with the dimensions described as 3 inches in length, 2 inches in width, and 3/8 inch thick.

Solution: Enter item 1 as "tamale - beef filling", with sauce, and item 2 as "tamale - pork filling", with sauce. During the interview use the "K" entry for the amount of each item listed and attach a note stating the proportion of each filling, the dimensions of the tamales, and how many were eaten. Complete the calculations during the edit and replace the "K" with the appropriate amount information. Attach a note to the type of combination stating that this was actually one food.

> Tamale - with beef
> 3/4 (beef filling) x 2 (tamales eaten) = 6/4
>
> Tamale - with pork
> 1/4 (pork filling) x 2 (tamales eaten) = 2/4

The "6/4" (beef tamale) and "2/4" (pork tamale) would be entered on the Amount screen at the "number" prompt after entering the shape (cube) and the dimensions described in the example.

28. <u>Tamale made with dried shredded beef</u>: Should an SP report a tamale made with "machaca" or "tasajo", make this a missing food during your edit but use a tamale selection during the recall so that you are prompted for all the necessary information. (See brackets in #3 for a brief explanation of this procedure.)

29. <u>Tamarind</u>: After typing TAMA choose between either a sweetened beverage (agua de tamarindo) or a sweetened pulp-type candy (dulce de tamarindo). One brand of the candy "Pulpitas" can be found in the brand name listing.

30. <u>Torta de camarón seco</u>: This patty is made from dried shrimp and egg, and fried in oil. Some respondents may also refer to this as "camarón con huevo". It is found under MIXE, MIXE.HIS, or SHRI.RCP.

31. <u>Tortillas used as a "utensil"</u>: It is very common for Mexicans to break apart a tortilla, roll it up, and use it almost like a utensil. The tortilla is used to move around and sometimes scoop up the food. He/she usually will take a bite of the tortilla, then a bite of another food. When an SP reports using a tortilla in this manner, enter the tortilla as a separate food in that meal, <u>not</u> as part of a "tortilla with additions" combination.

- **Vocabulary Terms**

To more easily interpret an interview, it is necessary to be familiar with English terms which may have more than one Spanish translation. The following list has been developed to assist the interviewer in correctly interpreting a Spanish interview.

> APRICOTS: Albaricoques
>   Chavacanes

BABY BOTTLE:	Biberón
	Mamila
CABBAGE:	Repollo
	Col
COLD CUTS:	Fiambres
	Carnes procesadas
	Carnes frías
CORN:	Elote (cob of corn)
	Maíz
EGGS:	Huevos
	Blanquillos
GOAT:	Chivo
	Cabrito
ICE CREAM:	Helado
	Mantecado
	Nieve
ORANGES:	Naranjas
	Chinas
PAPAYA:	Fruta bomba
	Papaya
	Lechosa
PEACHES:	Duraznos
	Melocotones
PEANUT:	Maní
	Cacahuate
PEPPERS:	Ají
	Chile
	Pimiento
POPCORN:	Rositas de maíz
	Palomitas de maíz
PORK:	Cerdo
	Puerco
	Marrano

POTATO:	Papa
	Patata
SALAD DRESSING:	Aliño
	Aderezo
STEW:	Caldillo*
	Estofado
	Guiso
TANNIER:	Malanga
	Yautía
TRIPE SOUP:	Mondongo
	Menudo
TURKEY:	Guajolote
	Pavo
WHOLE MILK:	Leche fresca
	Leche entera
	Leche con vitamina D

*Caldillo may also signify soup for some Hispanics.

7.3.5   Missing Foods and Notes

Missing food information should be entered in Spanish onto the Missing Food screen. After determining during the edit that the food/beverage is actually a missing food, transfer the usual information to the Request Form (RF). Translate the information gathered about the missing food into English and record this information in the "INTERVIEWER'S COMMENTS" section of the RF. Since there is limited space on the Missing Food screen, the English translation will appear on the RF only.

When gathering information about a missing food, make sure it is as complete as possible. Probe for details on the ingredients and preparation. Should the respondent report "carne" as one of the ingredients, probe for the type of meat, e.g., pork, beef, chicken, etc.

Notes, other than those added by the interviewer to clarify an entry, should be entered verbatim in Spanish. Unlike the procedure for missing foods, notes entered in Spanish should also include an English translation; the note in Spanish should be retained. Do not try to translate the notes during the interview itself; enter the translation into the system during your edit.

7.3.6   Forgotten Foods Screen

Press the F9 function key to access the Spanish list of forgotten foods. This key acts as a toggle between English and Spanish presentation of this screen.

Read the initial paragraph displayed on the screen, then show the respondent the English/Spanish Forgotten Foods flash card. After giving him/her a few moments to look over the list, read the last line on the screen to see if he/she forgot to mention any foods.

7.3.7   The Trailer Questions

The Spanish trailer questions may be accessed through the Forgotten Foods screen or at the first trailer question prior to making any entries.

Make sure to read the questions verbatim and in the order presented. Highlighted words should be emphasized when reading the questions. Exhibit 7-9 shows the Spanish trailer questions with the cover sheet. The specifications are the same for both the Spanish and English interview.

Exhibit 7-9. Trailer questions with cover sheet: Spanish translation

Department of Health and Human Services Public Health Service Centers for Disease Control National Center for Health Statistics	Third National Health and Nutrition Examination Survey NHANES III

24-HOUR DIETARY RECALL FORM

NOTICE - La información contenida en este formulario que permitiría identificar a cualquier individuo o establecimiento ha sido recolectada con la garantía que será mantenida en la más estricta confidencialidad, será usada solo para los propósitos establecidos para este estudio, y no será divulgada ni entregada a otros sin el consentimiento del individuo o del establecimiento de acuerdo con las sección 308(d) de la Ley del Servicio de Salud Pública - Public Health Service Act (42 USC 242 m).

Carga al público de reportaje para participación completa en el NHANES III se estima que, en promedio, sea cinco horas. Envíe comentarios respeto a esta carga o cualquier otro aspecto de esta colección de información, incluyendo sugerencias para reducir esta carga al PHS Reports Clearance Officer; Room 721-H, Humphrey Building; 200 Independence Avenue, SW; Washington, DC 20201; ATTN: PRA y a Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503

CASE NO:

Stand No.   Segment No.   Serial No.

FAMILY NO:

SP NO:

NAME (First, Middle, Last)

AGE	SEX
1 ☐ Mos. 2 ☐ Yrs.	1 ☐ Male 2 ☐ Female

SAMPLE NO:

TIME BEGAN
1 ☐ am
2 ☐ pm
3 ☐ noon

DECK NO:

602
602 |||||||||||

AGES 20 + :

12-HOUR FASTING STATUS

1 ☐ yes   2 ☐ no

DATE OF RECALL
_____ / _____ / _____
MO   DAY   YR

INTERVIEWER NO:

DATE OF EXAMINATION
_____ / _____ / _____
MO   DAY   YR

LANGUAGE OF INTERVIEW
1 ☐ English
2 ☐ Spanish
3 ☐ Other

4 _____
SPECIFY

DAY OF RECALL (MARK ONE)
1 ☐ Sunday
2 ☐ Monday
3 ☐ Tuesday
4 ☐ Wednesday
5 ☐ Thursday
6 ☐ Friday
7 ☐ Saturday

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1. ¿Cómo se compara la cantidad de alimentos que (usted/–) consumió ayer con el consumo usual para ese día de la semana? ¿Fué mucho más que lo usual, lo usual, o mucho menos que lo usual?	1 ☐ mucho más que lo usual 2 ☐ lo usual 3 ☐ mucho menos que lo usual 9 ☐ DK
2. ¿Qué cantidad de agua sola toma (usted/–) usualmente en un período de 24 horas? (Incluya únicamente agua de (llave/pluma) y agua de manantial.)	000 ☐ ninguno _____ numero 999 ☐ DK ☐ vasos/tazas } ☐ onzas especifique onzas por vaso o taza
3. ¿Qué tipo de sal le agrega (usted/–) usualmente a la comida en la mesa?	1 ☐ ninguna (5) 2 ☐ sal corriente 3 ☐ sal ("lite"/ligera) 4 ☐ sustituto de sal 9 ☐ DK
4. ¿Con qué frecuencia le agrega (usted/–) (ANSWER IN 3) a la comida en la mesa? ¿Es esto raramente, algunas veces, o muy frecuentemente?	1 ☐ raramente 2 ☐ algunas veces 3 ☐ muy frecuentemente 9 ☐ DK
5. Pensando acerca del mes pasado, ¿cuántos días no tuvo usted alimentos o dinero para comprar alimentos (para _____)?	00 ☐ ninguno (7) _____ días (6) numero 99 ☐ DK (7)
6. ¿Es esto porque no había suficiente dinero para comprar alimentos o hay otra razón?	1 ☐ no había suficiente dinero (7) 2 ☐ otra razón(12) 9 ☐ DK (7)
7. Durante el mes pasado, ¿dejó de comer (usted/–) algunas comidas completas, debido a que no habían suficientes alimentos o dinero para comprar alimentos?	1 ☐ Y 2 ☐ N (12) 9 ☐ DK (9)
8. ¿Cuántos días en el mes pasado, dejó de comer (usted/–) algunas comidas completas, debido a que no tenía suficientes alimentos o dinero para comprar alimentos?	_____ días numero 99 ☐ DK
9. ¿Dejó (usted/–) de comer algunas comidas completas ayer debido a que no habían suficientes alimentos o dinero para comprar alimentos?	1 ☐ Y 2 ☐ N 9 ☐ DK
10. Durante el mes pasado, ¿hubieron algunos días en que (usted/–) no comió nada en absoluto, debido a que no tenía suficientes alimentos o dinero para comprar alimentos?	1 ☐ Y 2 ☐ N (12) 9 ☐ DK (12)

11.	En el <u>mes pasado</u>, ¿cuántos días hubieron en que (usted/–) no comió nada en absoluto?	_____ días número 99 ☐ DK
12.	¿Es usted la persona que <u>usualmente</u> prepara las comidas en el hogar?	1 ☐ Y 2 ☐ N 3 ☐ shared preparation 4 ☐ food not prepared at home 9 ☐ DK
13.	<u>RESPONDENT CODE</u>:	1 ☐ SAMPLE PERSON 2 ☐ PROXY 3 ☐ SAMPLE PERSON/PROXY
14.	<u>LANGUAGE OF INTERVIEW</u>:	1 ☐ ENGLISH 2 ☐ SPANISH 3 ☐ ENGLISH/SPANISH 4 ☐ OTHER 5 _____ SPECIFY
15.	<u>QUALITY OF RECALL</u>:	1 ☐ RELIABLE 2 ☐ UNRELIABLE 3 ☐ REFUSAL (17) 4 ☐ NOT INTERVIEWED (17)
16.	<u>INTERVIEWER'S WORK</u>:	1 ☐ COMPLETED 2 ☐ NOT COMPLETED
17.	<u>COMMENTS</u>:	1 _____ _____ _____ _____ _____ _____
18.	<u>TIME ENDED</u>:	1 ☐ a.m. ___:___ 2 ☐ p.m. 3 ☐ noon

8.0   RECORDING THE INTERVIEW ON HARD COPY

The extensive training you have received thus far on the procedures for conducting an automated interview apply also to one that is hand-written. There will be occasions when the system goes "down," and you will be required to record the 24-hour recall and trailer questions on hard copy.

Although there is only one form used to record the 24-hour recall portion of the interview for ages two months and above, there are two printed forms containing the trailer questions, one in English and one in Spanish. After completing the 24-hour recall, determine which of the two forms would be the most appropriate for the respondent.

8.1   The Cover Sheet

Before beginning the interview, the interviewer must fill in the front of the hard copy form (Exhibit 8-1), the "cover sheet," which not only presents information to identify the SP, but also information regarding the interview itself.

Since all information identifying the SP can be accessed with his/her sample number, it is critical that this number be correct. A sheet with printed self-adhesive stickers displaying the SP's sample number will be enclosed in a folder which accompanies the SP throughout the MEC. Before beginning the interview, remove one of these stickers from the sheet and place it in the box entitled "Sample No." Then fill in the remaining information with the SP's name, age and sex. (Refer to Exhibit 8-1.)

-   Time Began

Fill in the time you are beginning the interview in the box labeled "time began." Four spaces are provided to record the hour and minutes. Make sure you zero fill for times that have three digits, for example, 0800 or 0545. In addition, mark the box for "noon," "am," or "pm" to indicate the time of day.

-   Interviewer Number

Each dietary interviewer will be given a four-digit interviewer number. Insert this number in the appropriate box.

Exhibit 8-1. Cover Sheet

Department of Health and Human Services Public Health Service Centers for Disease Control National Center for Health Statistics	Third National Health and Nutrition Examination Survey NHANES III

24-HOUR DIETARY RECALL FORM

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Carga al público de reportaje para participación completa en el NHANES III se estima que, en promedio, sea cinco horas. Envíe comentarios respeto a esta carga o cualquier otro aspecto de esta colección de información, incluyendo sugerencias para reducir esta carga al PHS Reports Clearance Officer, Room 721-H, Humphrey Building; 200 Independence Avenue, SW; Washington, DC 20201; ATTN: PRA y a Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503

CASE NO:

Stand No.   Segment No.   Serial No.

FAMILY NO:

SP NO:

NAME (First, Middle, Last)

SAMPLE NO:

AGE
1 ☐ Mos.
2 ☐ Yrs.

SEX
1 ☐ Male
2 ☐ Female

TIME BEGAN
1 ☐ am
2 ☐ pm
3 ☐ noon

DECK NO:

602

602 ▌▍▌▍▌▍▌

AGES 20 + :

12-HOUR FASTING STATUS
1 ☐ yes   2 ☐ no

DATE OF RECALL
___ / ___ / ___
MO   DAY   YR

INTERVIEWER NO:

LANGUAGE OF INTERVIEW
1 ☐ English
2 ☐ Spanish
3 ☐ Other

4 _____
SPECIFY

DATE OF EXAMINATION
___ / ___ / ___
MO   DAY   YR

DAY OF RECALL (MARK ONE)
1 ☐ Sunday
2 ☐ Monday
3 ☐ Tuesday
4 ☐ Wednesday
5 ☐ Thursday
6 ☐ Friday
7 ☐ Saturday

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-   Date of Examination

Next, complete the date of the exam. The codes are:

Month:	01-12
Day:	01-31
Year	88-94

Zero fill for the months or days that have only 1 digit, e.g., 01 not 1.

-   Date of Recall

Record the date of the recall period, that is, the date the food reported was eaten. Use the same codes described above. The date begins the midnight of the day before the exam.

-   Day of Recall

Below the date, mark the appropriate code for the day of recall. For example, if an SP was interviewed on Friday, August 16, 1991, the recall period would begin from 12 midnight Thursday the 15 th. You would mark "5 Thursday."

The codes for the days of the week are:

1	=	Sunday
2	=	Monday
3	=	Tuesday
4	=	Wednesday
5	=	Thursday
6	=	Friday
7	=	Saturday

-   Fasting Status

Mark this box only for those SPs 20 years and above. Since SPs will not be asked to fast for 12 hours in the afternoon or evening sessions, mark "no" for those SPs 20 years and above. After you have checked your list as to which SPs in the morning session were supposed to have fasted, ask only those SPs if they fasted and if so, how long. If the SP fasted for 12 hours, mark the appropriate answer, "yes." For those SPs, the interviewer must ask the fasting status questions at the same point as in the automated interview ("Did you change the way you ate last night between the hours of 8:30 p.m. and midnight because of the fasting requirement?," etc.) and follow the same procedures. If the SP answers that he or she did not fast, mark the appropriate box; conduct the interview without any change in procedure.

8.2   The 24-Hour Recall

Before beginning the interview, have available all forms and supplies needed to complete an interview on hard copy, including sharpened pencils and an eraser. It is acceptable to erase incorrect entries on the 24-hour recall. DO NOT USE PEN.

8.2.1   Conducting the 24-Hour Recall on Hard Copy

The basic principles in conducting an interview apply whether an interview is completed by hand or computer. Not being able to view the screens which provide you with the information to probe is the major difference between completing an interview on hard copy and using the automated system.

Through the repetition of specifying foods using the automated system, you will be surprised to find that you have actually memorized many of the probes for frequently reported foods and beverages. However, since the DDC system probes for a great amount of detail, it is almost impossible to remember everything. Exhibit 8-2 is a detailed probing guide; it lists by foods and beverages which probes are appropriate for each food type. Because of its length, it would be too difficult to use as a reference guide during a non-automated interview. Therefore, a shortened version was created for this purpose. Exhibit 8-3 presents an abbreviated probing guide to be used during a hard copy interview. By referring to the guide during the interview, you may "jog" your memory as to the appropriate probes for a familiar food. Or, for those less common foods, the guide is easily accessible to assure you obtain the most complete information. Obviously, it is impossible to anticipate all the probes needed, but the guide should assist you immensely.

Since a great deal of time has already been spent on interviewing techniques, a very brief overview will be presented now. If the interviewer has questions about what procedures to follow for any aspect of the interview, refer back to that chapter or section.

Remember that the 24-hour recall is comprised of two major steps: (1) allowing the respondent to list without interruption the foods and beverages for the 24-hour period specified and (2) probing for more detail about each item. During step 1, the interviewer has provided the respondent with the initial introduction to the dietary interview stating the four main points about the information requested. In step 2, the interviewer completes the instructions introducing the flash cards on the wall and how to use the food models and shapes.

8.2.1.1 The Hard Copy 24-Hour Recall Form

Exhibit 8-4 is a facsimile of the hard copy form to be used in the field; it consists of three sections each providing a different type of information:

1. The top section will provide information similar to that of the cover sheet; the information is duplicated in case this page should become detached from the others. Also note, to the right, an area indicating how many forms were used "__ of __ pages." If a second page is needed, record **again** all identifying information.

2. The center section will contain all the data provided by the respondent regarding the foods and beverages consumed.

3. The bottom section lists the codes to be used when filling out the form. Since these are the same abbreviations used in the DDC system, they should be easy to remember. With the exceptions of mixed dish with additions (MIXA) and vegetable with additions (VEGA), the codes are the first three letters of each combination.

Exhibit 8-2. Detailed probing guide for hard copy interview

1.   **BABY FOOD**

    A.   **Cereal**

        -    Brand name?

        -    Kind (i.e., rice, wheat, barley)?

        -    Instant or jarred?

        -    Plain or with fruit, egg, etc.?

        -    Anything added (i.e., formula, milk, fruit, sweetener)?

    B.   **Desserts, fruits, vegetables, meat, and mixed dishes**

        -    Brand name?

        -    Kind?

        -    Form (i.e., dry, strained, junior, toddler)?

    C.   **Formula**

        -    Brand name?

        -    If brand name not known, milk, meat or soy based; with or without iron?

        -    Anything added (i.e., cereal, sweetener)?

    D.   **Breast milk**

        -    Time on each breast?

        -    If pumped, how much?

    E.   **Beverage**

        -    fruit juices and fluid/electrolyte replacement solutions

        -    Brand name?

        -    Kind?

\-   Diluted with water?

2.   **BEEF**

- Was it a steak, roast or ground? If ground, was it regular, lean, or extra lean?

- What cut?

- Was fat trimmed or not trimmed?

- How was it prepared?

- Was anything added before, during or after cooking, e.g., marinade or coating? If marinated, was it a soy sauce or non-soy sauce mixture? If coated, was coating eaten?

- Fat and salt added in preparation?

3.   **BEVERAGES**

A.   **Beer**

- What type (i.e., regular, light, low alcohol, malt or nonalcoholic)?

B.   **Cocktails, liquo, and liqueurs**

- Name of drink or type of liquor or liqueur and what was added to it?

- Accompaniments (i.e., fruit, olive, cherry)?

- With or without ice, or frozen where applicable (i.e., daiquiri).

C.   **Coffee**

- Type (i.e., regular, espresso, specialty coffees, coffee substitutes)? Get brand name for coffee substitutes, and regular or low calorie for flavored coffees.

- Regular or decaffeinated?

- Ground, instant, liquid, or vending machine?

- Accompaniments (i.e., milk, cream, sugar, artificial sweetener)?

- Liquid or dry amount?

- Plain or flavored?

D.   Juices

-    What kind?

-    Real juice or a juice-flavored drink? Get brand name, and type of sweetener for juice-flavored drinks. If brand name unknown, get flavor; regular or low calorie; and whether fortified with vitamin C.

-    Fresh, frozen, or ready-to-drink?

-    Sweetened or unsweetened?

-    Regular or no salt (where applicable, such as tomato or V-8 juice)?

-    With or without ice?

E.   Soda

-    Brand name (if known)?

-    Flavor?

-    Regular or diet? If diet, was it sweetened with aspartame or saccharin?

-    With or without caffeine?

-    With or without ice?

F.   Tea

-    Brewed, herbal (flavor), instant, or ready-to-drink? If sugar-free instant, get brand name.

-    Regular or decaffeinated?

-    Unsweetened or presweetened with sugar or artificial sweetener? If artificial sweetener, was it aspartame, or saccharin?

-    Accompaniment (i.e. lemon, sugar, or cream added)?

-    With or without ice?

G.   Water

-    Quinine, tonic, or mineral? If quinine or tonic, was it regular or diet?

H.   **Wine**

-        Name?

-        If name is unknown, red, white, rose, or sparkling; table or dessert; regular or homemade?

-        Plain or mixed (i.e., spritzer, cooler)?

I.   **Cocoa**

-        Brand name? Regular, sugar-free, or low calorie?

-        Recipe or dry mix? If recipe, what percent milk was used? If dry mix, regular or sugar-free? Was water or milk added? If milk added, what percent fat?

-        Any additions (i.e., marshmallows, whipped topping)?

4.   **BREAD**

A.   **Bread**

-        Kind (i.e., white, wheat, rye, etc.)?

-        Homemade or commercial?

-        Regular or diet? Low sodium? If diet, with or without added fiber?

-        Toasted or untoasted?

-        Accompaniments?

B.   **Rolls or buns, bagels, English muffin and biscuits**

-        Kind?

-        Baked commercially, or from refrigerated dough, mix, or recipe? If recipe, ask type of fat for biscuits.

-        Accompaniments?

C.   **Coffee cake**

-        Yeast or quick bread?

-        Type of fat in preparation of cake (and topping)?

- Fruits, nuts, fillings, frosting, glaze, and/or streusel topping?

D.   Cornbread

-        Regular or stuffing?

-        Type of fat in preparation?

-        Accompaniments?

E.   Danish and sweet rolls

-        Fruit, nuts, filling, frosted? If frosted, type of fat in frosting.

-        Type of fat used in preparation?

-        Accompaniments?

F.   Donuts

-        Yeast, cake, or filled? If filled, with cream/custard or fruit/jelly?

-        Plain, frosted, glazed, or powdered sugar? If frosted, what flavor?

-        With or without coconut?

G.   French Toast

-        Fat used in preparation?

-        Accompaniments?

H.   Fruit breads

-        Type of fat used in preparation?

-        Nuts?

-        Accompaniments?

I.   Muffins

-        Kind?

-        Prepared from mix, commercial, or scratch?

-        Type of fat used in preparation?

-        Fruit or nuts?

-        Accompaniments?

J. **Pancakes and Waffles**

- Kind?

- Type of fat used in preparation?

- Fruits, nuts?

- Accompaniments?

K. **Tortillas**

- Flour (white or whole wheat) or corn?

- Plain or fried?

- Accompaniments?

5. **CAKES**

- Kind (e.g., yellow, devil's food, white, pound, etc.)?

- Mix, ready-to-eat, or recipe? If recipe, type of fat used in preparation. If mix, oil added in preparation?

- Kind of frosting, glaze, or topping? If made from recipe or mix, type of fat used?

6. **CANDY**

- Brand name?

- If brand is unknown, get complete description (kind, coating, filling, nuts). If contains chocolate, what kind? Is it a candy bar or individual pieces?

- Size of candy bar (i.e., regular, miniature, etc.)

7. **CEREAL**

A. **Cold (ready-to-eat)**

- Brand name (or kind if brand unknown)?

- Plain or presweetened?

- If granola, brand name or was it a recipe? If recipe, type of fat used in preparation.

Coconut or nuts added?

-       Accompaniments (i.e., milk, sweetener, fruit)?

B. Hot

- Kind (includes some brand names like Wheatena or Maypo)?

- Flavored?

- Regular, quick cooking, or instant?

- Cooked with water or milk? If milk, what percent fat?

- Cooked with or without salt?

- Accompaniments (i.e., milk, sweetener, fats)?

8. CHEESE

A. Cheese

- Brand name?

- Type (i.e., processed, imitation, natural, cheese food, cheese spread; low sodium, low fat, low cholesterol)?

- Name (i.e., cheddar, Swiss, mozzarella, etc.)?

- Form (i.e., sliced, shredded, brick)?

B. Cottage cheese

- Percent of fat (creamed or uncreamed)?

- Low Sodium? Low fat?

- Additions (i.e., fruit, vegetables, sweetener)?

9. COMMERCIAL FOOD ENTREES

- Brand names?

- Description of product

10. CONDIMENTS

- Kind (i.e., catsup, mustard, pickles, etc.)? If mustard, regular, Chinese, or horseradish?

- Low calorie or low sodium?

- If homemade BBQ sauce, specify fat.

11.   **COOKIES AND BARS**

- Kind and brand name?

- If brand unknown, commercial, mix/dough, bakery, or recipe? If recipe, type of fat used in preparation?

- Nuts, chips, fillings, raisins, frosting or icing?

- Dietetic?

12.   **CRACKERS**

- Brand name (or kind, if brand name unknown)?

- Regular, low sodium, or unsalted, where applicable.

- Accompaniments (i.e., spread, cheese, deli meat)?

13.   **CREAM/CREAMER**

- Kind (i.e., real, imitation)?

- For real cream, ask type (i.e., heavy, light, half and half).

- For non-dairy creamers, get brand name. If unknown, was it liquid/frozen or powdered?

- For whipped cream, get brand name or type (i.e., aerosol, frozen, powder, or recipe). If recipe, get type of cream used. Sweetened or unsweetened? If aerosol or frozen, dairy or non-dairy. If powder, regular or low calorie?

- For sour cream, get type (i.e., regular, half and half, or non-dairy substitute).

14.   **DESSERTS**

A.   **Pudding/Custard**

- Kind (flavor)?

- From dry mix, ready-to-eat, frozen on stick, or recipe? If dry mix or recipe, was it regular or sugar-free? What type of milk was used in preparation?

- Any additions (e.g., bananas in banana pudding, whipped cream)?

B. **Gelatin**

- Regular or sugar free?

- Clear or whipped?

- Prepared with cream cheese? Fruit? If fruit, what kind (e.g., canned peaches, fresh banana)?

- Any additions (i.e., whipped cream)?

15. **EGGS**

- How were they prepared (i.e., fried, boiled, scrambled)?

- Fat and salt in preparation?

- Whole egg? White only? Yolk only?

- Brand name of egg substitutes? If brand name unknown, was it liquid or powder?

- Accompaniments?

16. **FAST FOODS**

- Name of fast food chain?

- Food item(s) eaten?

- Additions to food item (i.e., catsup on fries, lettuce or tomato on hamburgers, extra mustard or catsup, etc.)?

- Deletions of "extras" on a food item (i.e., a hamburger without the special sauce).

- For hamburger and fries, what size (e.g., regular or junior, or regular or large)?

- For soda, what kind (i.e. Coke, Pepsi)? Regular or diet? Small, medium, or large? With or without ice?

17. **FATS**

A. **Butter**

- Type (i.e., regular, whipped or butter/margarine blend)?

- Salted or unsalted?

B. Margarine

- Brand name, if known.

- Type (i.e., whipped, diet, spread, or butter/margarine blend)?

- Form (i.e., stick, tub, or liquid)?

- Salted, unsalted or low sodium?

- Type of oil (e.g., corn, safflower)?

C. Oils

- Brand name or type of oil.

D. Shortening

- Brand name or type of base (i.e., animal, vegetable, or a combination)?

E. Animal Fat

- Kind?

18. FISH AND SEAFOOD

- Kind?

- How was it prepared?

- Fat and salt in preparation?

- Form for some types (i.e., fresh, frozen, canned, smoked, dried)?

- Was anything added before, during or after cooking, e.g., marinade or coating? If marinated, was it a soy sauce or non-soy sauce mixture? If coated, was coating eaten?

- For canned fish, in what was it canned (i.e., oil, water, tomato sauce)? Was the fish drained and/or rinsed? Regular or low sodium?

19. FRUITS

- Kinds?

- Form (fresh, cooked, canned, frozen, dried, juice)?

-        For some fruits, with or without skin?

-        Sweetened or unsweetened?

- For canned fruit, what type of syrup (i.e., water pack, juice pack, light or heavy syrup)?

- For juice, was it real? If real, what form (i.e., fresh, frozen, or ready-to-drink) and sweetened or unsweetened?

- For cooked fruits, was anything added before, during, or after preparation, e.g., fried apple rings?

20.   GAME

- Kind (i.e., antelope, rabbit, squirrel)?

- Was fat trimmed or not trimmed?

- How was it prepared?

- Was anything added before, during, or after cooking?

- If venison/deer, what cut?

- If bird (i.e., pheasant, quail, dove), skin eaten or removed?

21.   GRAINS

- Kind of grain (i.e., rice, barley, bulgur)?

- Type of preparation (i.e., instant, quick, regular)?

- Fat and salt used in preparation?

- Anything added (i.e., gravy, fat)?

22.   GRAVY

- Kind of gravy (i.e., beef, chicken, mushroom, onion)?

- Prepared from recipe, canned or dehydrated? Prepared with canned soup, skimmed broth, meat juices, or bouillon? If bouillon, regular or low sodium?

- Plain, milk base, or water base? If milk, what percent fat?

23.   ICE CREAM

- Brand name?

- Type (i.e., regular, ice milk, dietetic, imitation)?

-        Form (i.e., regular, soft serve or a stick)?

-    Flavor?

-    Any additions (i.e., cone, topping, whipped cream, nuts)?

-    For milkshakes, flavor and ingredients (e.g., hard ice cream, soft serve ice cream, nondairy fast food "thick shake")?

24.   LAMB

-    What cut?

-    What fat trimmed or not trimmed?

-    How was it prepared?

-    Was anything added before, during, or after cooking, e.g., marinade or coating? If marinated, was it a soy sauce or non-soy sauce mixture? If coated, was coating eaten?

-    Fat and salt added in preparation?

25.   LUNCHMEATS

-    Brand name?

-    Kind (e.g., bologna, ham, salami, frankfurter)?

-    Meat base (e.g., chicken, beef, pork)?

-    Form (e.g., canned, loaf, thin sliced, spread, minced, chopped)?

-    Regular or low sodium?

26.   MILK

-    Kind (i.e., white, chocolate, buttermilk,, substitute)?

-    Type (i.e., whole, 2%, 1%, skim)?

-    Form (i.e., regular, evaporated, dry, condensed)? If evaporated, was it diluted or undiluted?

-    Flavorings or additions (i.e., egg, malt, sugar, chocolate)?

-    Brand name for milk-based breakfast or diet mixtures.

-    For milk substitutes, ask base (i.e., soy-based, filled saturated fat).

27.   **MIXED DISHES**

A.   **Mixed Dishes**

-       Name of mixture (e.g., chili, beef stew, macaroni and cheese).

-       Recipe or commercial (i.e., dry mix like tuna helper or frozen entrees)?

-       Main ingredient (e.g., beef chicken, noodles, tuna). Obtain information on main ingredient in the manner outlined under appropriate food group.

-       Additional ingredients (i.e., vegetables, cheese, sauce or gravy)? Obtain information as directed above.

-       Fat and salt in preparation?

-       Any additions?

B.   **Pizza**

-       Thin, thick, French bread, or double (priazzo) crust?

-       Toppings (e.g., pepperoni, cheese, sausage, olives, mushrooms)?

28.   **NOODLES**

-       Name (i.e., macaroni, spaghetti, noodles)?

-       Type of pasta (i.e., white, wheat, spinach, egg)?

-       Fat and salt in preparation?

-       Any additions after cooking?

29.   **NUTS AND SEEDS**

A.   **Nuts**

-       Kind?

-       Type (i.e., raw or blanched; dry, oil, honey roasted; sugar or chocolate coated, or a nut butter)?

-       Salted or unsalted?

-       Nut mixture (e.g., mixed with dried fruit)?

B. Seeds

- Kind?

- Salted or unsalted?

- Whole (unshelled) or kernels (shelled)?

- Type (i.e., raw, dry or oil roasted)?

30. ORGAN MEATS

- Name and from what animal (e.g., beef liver or pork brains)?

- Was fat trimmed or not trimmed?

- How was it prepared?

- Was anything added before, during, or after cooking?

- Fat and salt added in preparation?

31. PIES

A. Pies/tarts

- Kind (e.g., apple, lemon, chocolate)?

- Single or double crust?

- Regular or individual size?

- Prepared at home or commercially prepared?

- Type of fat used in crust?

- Type of fat used in filling (if appropriate)?

- Additions (i.e., meringue, whipped cream, ice cream, cheese)?

B. Turnovers

- Baked, fast food, or fried? If fast food, get name of establishment. If baked, get flavor. If fried get type of fat used in frying? Prepared commercially or at home? If commercial, get brand name (e.g., Hostess).

C.   **Cobblers/crisps**

                -        Flavor?

                -        Type of topping (i.e., streusel, pastry, biscuit)?

                -        For cobbler, type of fat used in topping? For crisps, type of fat used in recipe?

                -        Additions, (e.g., ice cream, cheese, whipped cream)?

32.   PORK

                -        Was it a steak, roast, chop, or ground?

                -        What cut?

                -        Was fat trimmed or not trimmed?

                -        Fresh or cured?

                -        How was it prepared?

                -        Was anything added before, during, or after cooking, e.g., marinade or coating? If
                        marinated, was it a soy sauce or non-soy sauce mixture? If coated, was coating eaten?

                -        Fat and salt added in preparation?

33.   POULTRY

                -        What part or was it light or dark meat?

                -        How was it prepared?

                -        Was anything added before, during or after cooking, e.g., marinade or coating? If
                        marinated, was it a soy sauce or non-soy sauce mixture? If coated, was coating eaten?

                -        Fat and salt added in preparation?

                -        Cooked with skin or without? If with skin, skin eaten or not eaten?

34.   SALAD DRESSING

                -        Brand name or kind if brand is unknown?

                -        Commercial or homemade? If homemade, type of fat used in preparation?

\-   Low calorie? Low sodium?

\-   Clear, creamy, or tomato base?

35. SALADS

    A.   **Tossed Salad**

- Major ingredients (i.e., lettuce, spinach)?

- Raw, cooked, canned, or marinated? If cooked, from fresh or frozen? If canned, regular or low sodium?

- For cooked, marinated, and canned, get fat and/or salt used in preparation.

- Additional ingredients (i.e., dressing, cheese, croutons, bacon bits)?

    B.   **Fruit Salad**

- Kind of fruit?

- Fresh, frozen, or canned?

- With dressing? What kind (mayo-type, whipped cream, etc.)

- Additional items (i.e., nuts, cream cheese)?

    C.   **Other Salads**

- Type (i.e., tuna, macaroni, egg, potato, coleslaw)?

- With or without eggs?

- Major ingredients (i.e., meat, cheese, etc.)? Obtain information on main ingredient in manner outlined under appropriate food group.

- Type of fat used in preparation?

36. SAUCE

- Name (i.e., Bearnaise, cheese, hollandaise, steak, soy, spaghetti)?

- Homemade or commercial, where applicable?

- Ingredients, where applicable (i.e., meat or meatless spaghetti sauce, green or red enchilada sauce, or salsa)?

- Type of fat used in recipe?

- Regular or low sodium, where applicable (i.e., soy or tomato sauce)?

37. SAUSAGE

- Brand name?

- Pork, beef, or other?

- Fresh, smoked, or brown and serve?

38. SNACKS

- Brand name for cheese puffs, corn chips, microwave-type popcorn, granola bars, potato chips, party-type mixes and tortilla chips. Otherwise, ask name of item (e.g., cornuts, pretzels, etc)?

- Salted or unsalted?

- For popcorn, method of preparation and whether plain, cheese flavored, or coated? If popped in oil, get type of oil. If commercially popped, was it "buttered" (butter-flavor) or not "buttered"?

- Any additions such as dip or salsa to chips or butter and salt to popcorn?

39. SOUP

- Kind (e.g., onion, mushroom, asparagus, chicken noodle)?

- Form (i.e., canned, dry mix, homemade)? If canned, regular, chunky, or low sodium? If condensed, diluted or undiluted? If diluted, what liquid was used? If milk, specify percent fat.

- For cream soups, type of fat in preparation?

- Any additions (e.g., crackers, croutons, etc)?

40. SPECIAL FORMULATED PRODUCTS

    A. Bar/Wafer

- Brand name?

- Kind (breakfast bar, diet meal, high protein)?

    B. Drink

- Brand name?

-        Kind (i.e., fluid/electrolyte replacement solution, low calorie gelatin beverage, low or high calorie milk beverages, meal replacement drink)?

- For low calorie milk beverages, was it canned or prepared from a powder? What flavor?

- For meal replacement drink, was it gelatin, milk, or soy based? High protein? Predigested protein?

C.   Protein Supplement Tablet

- No further probing necessary.

D.   Dry Unprepared Powder

- Brand name?

- Kind (e.g., instant breakfast, high calorie, meal replacement, nutrient supplement, protein supplement)?

- For instant breakfast, was it regular or sugar free? What flavor?

- For meal replacements, was it diet (and fortified)? If so, what flavor? If not was it a gelatin base, soy based with herbs, or was it high protein (milk based)?

- For nutrient supplements, was it regular or low calorie?

- For protein supplements, was it a beverage? If so, was it regular or sugar free? If not, was it low calorie, low lactose, milk or soy based or sodium controlled?

- Reconstituted with what type of liquid? If milk, specify percent fat?

41.   SWEETENERS

- Kind of sweetener?

- For jams, jellies, and preserves: regular, low sugar, or dietetic?

- Type of sugar (i.e., white, brown, powdered)? If brown, was it crystal or liquid?

- Type of syrup (i.e., pancake, pure or mixture)? If pancake syrup, was it regular, low calorie, diet, maple flavor, buttered blend, or fruit flavor? If pure mixture, specify base(s).

- Brand name of artificial sweetener? If unknown, specify whether saccharin or aspartame; liquid or dry?

42.   VEAL

- Was it steak, roast, chop, or ground?

-        What cut?

-　　　　Was fat trimmed or not trimmed?

-　　　　How was it prepared?

-　　　　Was anything added before, during, or after cooking, e.g., marinade or coating? If marinated, was it a soy sauce or non-soy sauce mixture? If coating, was coating eaten?

-　　　　Fat and salt added in preparation?

43.　　VEGETABLES

-　　　　Kind?

-　　　　Form (i.e., raw, cooked, canned, or dehydrated)? If raw, was the vegetable plain or marinated? If cooked, from fresh or frozen? If canned, regular or low sodium?

-　　　　Method of preparation?

-　　　　Fat and salt in preparation?

-　　　　Anything added before, during or after preparation (e.g., fat, cream sauce, sour cream)?

-　　　　For potatoes, eaten with or without peel?

-　　　　For juices, kind? Was the juice regular or low sodium (as in tomato juice)?

44.　　YOGURT

-　　　　Brand name?

-　　　　Type (i.e., plain, fruited, flavored, with fruits and nuts, or frozen)? If frozen, get form (i.e., sandwich, on a stick, coated bar) or flavor?

-　　　　Made from whole, low fat or nonfat milk?

-　　　　Any additions (e.g., toppings, sweeteners, or fruit)?

Exhibit 8-3 Abbreviated probing guide for hard copy interview

PROBING GUIDE			
ITEM	**SPECIFICATION**	**INGREDIENT PROBES**	**ADDITIONS**
GRAIN PRODUCTS Pasta/Rice	Kind: Macaroni, noodle, rice Type: Egg noodle, brown rice, white rice; instant, regular, converted Prep: Salt added to water	Fat (specify)	Sauce Meat Cheese Butter Margarine
Bread	Kind: French, Italian, white, WW Type: Diet, low sodium, high fiber; bakery, scratch Prep: Toasted, untoasted		Spreads Jelly
Rolls	Kind: White, whole wheat, hoagie Type: Diet; high fiber Prep: Scratch, mix, commercial		Spreads Jelly
Biscuits	Kind: Baking powder, whole wheat Prep: Mix, refrigerated dough, scratch*	*Fat (specify)	Spreads Jelly
Muffins	Kind: Bran, corn, wheat Type: W/fruit, w/nuts, plain Prep: Mix, commercial, scratch	Fat (specify)	Spreads Jelly
Crackers	Brand Kind: Melba, animal, graham Type: Low sodium, unsalted		Spreads Deli meat Cheese
Tortillas	Kind: Corn, white or WW flour Prep: Fried*, plain	*Fat (specify)	Spreads Cheese
Pancakes/Waffles	Kind: White, whole wheat*, buckwheat Type: W/fruit, w/nuts	*Fat (specify)	Syrup Butter/Margarine Sugar Whipped Topping
Cereal RTE	Brand: Include generic Kind: Wheat flake, puffed corn Type: Pre-sweetened, plain		Milk/cream W/fruit Sweetener
Cooked	Kind: Oatmeal, grits, cream of wheat Type: Instant, quick cooking, regular Prep: W/milk*, or water; w/salt	*Milk (% fat)	Butter/margarine
Granola	Brand Prep: Scratch* or commercial Scratch: W/coconut, w/nuts	*Fat (specify)	

ITEM	SPECIFICATION	INGREDIENT PROBES	ADDITIONS
FRUIT/ VEGETABLE/ SALAD/JUICE Fruit	Kind: Apple, orange, banana Form: Fresh, canned, dried, frozen Canned: Type of liquid Type: Sweetened; w/peel Prep: Cooked* or raw	*Fat (specify)	Sweetener
Vegetable	Kind: Broccoli, corn, green beans Form: Fresh, frozen, canned Canned: Regular or low sodium Prep: Cooked*, marinated*	*Fat (specify) *Salt	Butter Margarine Sauce
Salad	Kind: Type of lettuce; spinach Prep: Raw, cooked*, canned*, marinated*	*Fat (specify) *Salt	Croutons Dressing Seeds
Juice	Kind: Orange juice, carrot juice Tomato base: Regular or no salt Form: Fresh, frozen, RTD Type: Sweetened		

MIXED DISH/ PIZZA
Mixed dish
	Brand
	Name: Macaroni & cheese, quiche
	Ingred: Sauce or gravy (kind); milk or
	        cheese (kind and % fat), pasta
	        (kind), vegetables (kind); meat
	        (kind and % fat)
	Prep: Baked*, fried*, boiled*
		*Fat (specify)
		*Salt
			Garnishes
			Toppings:
			      crackers
			      croutons
			      cheese

Pizza	Crust: Thin, thick, French bread Topping: Meat, vegetables		Additional toppings
FAST FOOD	Location: McDonald's, Burger King Kind: Big Mac, french fries, soda Soda: Flavor; regular or diet		Condiments Lettuce Tomato Pickle Onion
SOUP/GRAVY/ SAUCE Soup	Kind: Tomato, split pea, vegetable Form: Scratch, mix, canned Canned: RTS or condensed Type: Regular, chunk, low sodium Prep: W/water or milk*, diluted or undiluted	*Milk (% fat) Fat (for cream soup)	Croutons Crackers

ITEM	SPECIFICATION		INGREDIENT PROBES	ADDITIONS
Gravy/Sauce	Kind:	Brown, beef, spaghetti	*Milk (% fat)	
	Form:	Canned, mix, scratch		
	Prep:	W/milk*, water, bouillon, wine, other		
FATS Margarine/Butter	Brand:	Major oil		
	Type:	Diet, blend, whipped, spread; salted or unsalted		
	Form:	Tub, stick, liquid		
Oil/Shortening	Brand			
	Type:	Animal, vegetable, combination		
Salad Dressing	Brand			
	Kind:	French, Italian	*Fat (specify)	
		Low calorie, low sodium; scratch*		
	Type:	Clear, creamy or tomato-base		
DESSERTS Pudding/Custard	Kind:	Tapioca, chocolate, rice	*Milk (% fat)	Whipped topping
	Form:	RTE, scratch*, mix*		
	Type:	Low calorie, regular; plain, w/fruit		
Cookies	Brand		*Fat (specify)	Icing
	Kind:	Oatmeal, sugar, coconut		Filling
	Type:	Mix, scratch*, RTE, low calorie		W/chips, nuts, raisins
Cakes	Kind:	White, yellow, pound	*Fat (specify)	Frosting*
	Type:	Mix*, scratch*, RTE, low calorie		Filling
	Form:	Cupcake or sheet		Topping
Pies	Kind:	Cherry, apple, peach	*Fat (specify)	Whipped cream
	Form:	Single or double crust		Ice cream
	Snack pie: Brand			Cheese
Gelatin	Type:	Regular or low calorie	*Specify kind and prep	Whipped topping
		Clear or whipped		
	Prep:	W/fruit*, w/cream cheese		
Sweet Roll/ Danish	Prep*:	W/fruit, nuts, filling	*Fat (specify)	Margarine
				Butter
				Frosted*
Doughnut	Kind:	Cake or yeast	*Flavor	Coconut flakes
	Type:	Chocolate flavor, WW		
	Prep:	Frosted*, glazed, filled		

BEVERAGES (Non-Dairy) Coffee/Tea	Form: Instant, brewed, other Type: Regular, decaf, other Mix: Sweetened: regular or artificial sweetener		Sweetener Cream(er) Milk

ITEM	SPECIFICATION	INGREDIENT PROBES	ADDITIONS
BEVERAGES (Non-Dairy) (Continued) Carbonated	Brand: Flavor Type: Caffeine free; diet		
Fruit Drinks	Brand: Flavor Form: Mix, RTD, other Type: Low calorie; fortified w/ vitamin C		
Beer	Type: Low alcohol, light, other		
Wine	Name: Cabernet, Chenin Blanc Type: Red, white, low calorie, other Table or dessert		Cooler Spritzer
Liquor	Kind: Gin, rum, scotch, other Type: Mixed or plain		Fruit Olive Onion
BEVERAGES (Dairy) Milk	Kind: Cow, goat, substitute, other Type: Whole, low fat, skim Form: Dry, canned, fluid		Sweetener Flavored
Milkshakes	Type: Soft serve* or hardened ice cream* Flavor	*Milk (% fat)	Whipped topping
Cocoa	Brand Form: Dry mix, scratch* Mix: Made w/water or milk* Type: Regular, low calorie, sugar free	*Milk (% fat)	Marshmallows Whipped topping
DAIRY/NON-DAIRY PRODUCTS Eggs Egg Substitute	Prep*: Size of egg; white and yolk Brand Form: Liquid, powder	*Fat (specify) *Salt	Catsup Hot sauce Cheese

Cream	Kind: Light, half and half, other	*Cream (type)	
Whipped	Brand Form: Aerosol, frozen, powder Type: Dairy or non-dairy Scratch*: Sweetened		
Creamer	Brand Form: Liquid, frozen, powder		
Cheese	Brand Name: American, cheddar, other Type: Natural, processed, other Low fat, low sodium		

ITEM	SPECIFICATION	INGREDIENT PROBES	ADDITIONS
DAIRY/NON-DAIRY PRODUCTS (Continued) Cottage Cheese	Kind: Creamed, uncreamed Type: Low fat, low sodium, regular		Sweetener Fruit Vegetables
Yogurt	Brand: Flavor Type: Whole, low fat, nonfat Form: Regular, frozen, liquid		Sweetener Fruits/nuts Toppings
Ice Cream/ Ice Milk	Brand: Flavor Type: Regular, imitation, dietetic Form: Soft serve, hard, bar		Cone Syrup Fruits/nuts Whipped topping
MEAT/POULTRY/ FISH Meat Ground meat	Kind: Beef, lamb, veal Cut: Round, rib-eye, chuck Form: Steak, chop, roast Type: Fresh, cured, canned, dried Trimmed, untrimmed Prep: Coated*, baked*, marinated in soy sauce or non-soy sauce mixture Type: Regular, lean, extra lean	*Fat (specify) *Salt	Sauces Gravy Garnish
Poultry	Kind: Chicken, turkey, goose Part: Breast, thigh, wing; or dark/light meat Prep: W/skin, w/o skin; breaded*; fried*, baked*, marinated in soy sauce or non-soy sauce mixture	*Fat (specify) *Salt	Sauce Gravy
Fish	Kind: Shrimp, cod, tuna Form: Fresh, frozen, raw, dried Canned: In water; drained; rinsed; low sodium Prep: Breaded*, grilled*, marinated in soy sauce or non-soy sauce mixture	*Fat (specify) *Salt	Margarine Butter Tartar Sauce
LUNCHMEATS/ SAUSAGE Lunchmeat/Hot Dog/Ham	Brand Kind: Beef, bologna, pork, salami Type: Regular, low sodium, low fat Form: Loaf, roll, spread		

Sausage	Brand		
	Kind: Beef, pork, other		
	Type: Fried, smoked, breakfast		

ITEM	SPECIFICATION	INGREDIENT PROBES	ADDITIONS
SNACKS/NUTS/ SEEDS Nuts/Seeds	Kind: Cashew, sunflower Type: W/salt; coated; raw, blanched, roasted; dry, oil, honey		Mixed w/dried fruit
Chips	Brand Kind: Potato, corn, tortilla Type: W/salt		Dip Salsa
Popcorn	Brand: Microwave-type only Type: Cheese, caramel coated, plain Prep: In oil*, microwave, hot air	*Fat (specify) Salt	Topped w/margarine or butter
SUGAR/SUGAR PRODUCTS Candy	Brand Type: Hard, dietetic, taffy Form: Candy bar, pieces, coated pieces Prep: W/nuts, raisins, w/chocolate		
Syrup	Kind: Corn, pancake, flavored Type: Regular, low calorie, diet		
Sugar Substitute	Kind: White, brown, raw, substitute Form: Crystal, liquid, powder Brand Kind: Saccharin or aspartame Form: Liquid or powdered		
Jam/Jelly/ Preserves	Type: Regular, low sugar, dietetic		
CONDIMENTS	Kind: Mustard, catsup, BBQ sauce* Type: Low sodium, low calorie	*Fat (specify)	
BABY FOOD Breast Milk	Time on each breast		
Formula	Brand Type: W/iron; milk, soy or meat-based		Cereal Sweetener
Cereal	Brand Kind: Oatmeal, rice, mixed Type: W/egg, w/fruit, plain Form: Instant or jarred		Formula Milk Sweetener Juice
Meats/Fruit	Brand Kind: Applesauce, turkey Type: Plain or mixed Form: Strained, junior		
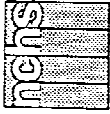
Exhibit 8-4. 24-hour recall form (front)

NATIONAL CENTER FOR HEALTH STATISTICS

CDC / CENTERS FOR DISEASE CONTROL

OMB No. 0920-0237

____ of ____ pages

24-HOUR DIETARY RECALL FORM – WORKSHEET

Name: ____   ID#: ____   Date & Day of Recall: ____

Foods & Beverages Consumed

Line #	Time of Day (Hour / A M N)	Meal Code	Place	Food Item	Description	Type of combination	Salt added in prep.	Fat added in prep.	Amount	Line #
01										01
02										02
03										03
04										04
05										05
06										06
07										07
08										08
09										09
10										10
11										11
12										12
13										13
14										14
15										15
16										16
17										17

CODES:

TIME OF DAY
A – Morning
P – Afternoon/evening
M – Midnight
N – Noon

SALT/FAT ADDED IN PREP.
Y = Yes
N = No
DK – Don't know
O – Not Applicable

MEAL
BRK – Breakfast
BRU – Brunch
LUN – Lunch
DIN – Dinner/Supper
SNA – Snack/beverage
INF – Infant feeding
EXT – Extended consumption
OTH – Other

DES – Desayuno
ALM – Almuerzo
COM – Comida
MER – Merienda
CEN – Cena
EMT – Consumaled/comida/bebida

PLACE
HOM – Home
WOR – Work
SCH – School
DAY – Day care/Day camp
FAS – Fast food/Take-out
DEL – Deli
RES – Restaurant
CAF – Cafeteria/Self serve buffet

STO – Store
FRI – Friend's/Someone's house
COM – Community feeding program
TRA – In transit
OTH – Other

TYPE OF COMBINATION
O – Not applicable
SAN – Sandwich
LUN – Dish w/additions
CER – Cereal w/additions
SAL – Salad
BEV – Beverage
MIX – Mixed dish
MEA – Mixed dish w/additions

MEA – Meat, fish, poultry w/additions
VEGA – Vegetable w/additions
VEG – Vegetable combination
DES – Dessert
TOR – Tortilla w/additions
SOU – Soup/Stew
FRO – Frozen meal
OTH – Other/food eaten together

CDC 4.41
REV. 4/91

8-48

Exhibit 8-4. 24-hour recall form (back)

Since the information that you have given me will make an important contribution to this health and nutrition study, I would like to make sure that it is as complete as possible.

On this card are some foods and beverages which are often forgotten.

(Fruits, chips, candy, nuts, cheese

Coffee, tea, soft drinks, juices

Beer, wine, cocktails, or any other alcoholic beverage

Crackers, breads, rolls, tortillas, and cereals.)

Can you think of anything else that you ate or drank yesterday that you haven't mentioned? Y/N

1HELP   5SPA

RECALL REVIEW

Debido a que la informaciÁn que usted me ha dado significar una contribuciÁn importante a este estudio de salud y nutriciÁn, quisiera estar segura de que est lo m s completa posible. En esta tarjeta hay algunos alimentos y bebidas los cuales frecuentemente se olvidan.

[Frutas, (papitas/papitas fritas), u otro tipo de
merienda de esta clase como fritos/tostadas)

Dulces, nueces, queso, caf, t, refrescos o sodas, jugos

Cerveza, vino, cocteles, alguna otra bebida alcohÁlica

Galletas, panes, panecillos, tortillas, y cereales.]

´Puede recordar cualquier otra cosa que usted comiÁ o bebiÁ ayer que no ha mencionado? Y/N

-　　　How to Record the 24-Hour Recall Data

The process of actually entering the information given by the respondent onto the form is quite simple. Use one line for each food or beverage given by the respondent. Each column requires the entry of a particular piece of information: the hour and time of day ("A," "P," "M," and "N"), the meal code, place, food item, description, type of combination, salt added in preparation, fat added in preparation, and amount. As opposed to following the order used in the automated system, it is acceptable to follow the sequence of categories listed in the columns on the form. A five step approach is outlined below.

Step 1:　　　The time (hour) and foods consumed (food item) are entered first (as done on the Quick List).

Step 2:　　　Probe for the meal code, place, and a detailed food description including the preparation, e.g., broiled, etc. It is only necessary to write the time, meal code and place for the first food item listed for a particular meal or snack.

Step 3:　　　Probe for added fat and salt in preparation; use the symbol for "not applicable" if appropriate.

Step 4:　　　Probe for the amount eaten and, in some cases, the form (density).

Step 5:　　　Fill in the type of combination or use the symbol for "not applicable."

Since the foods and beverages reported by the respondent during the initial listing are written by the interviewer in the order reported, and no allowance is made at that time for extra line space, any additional foods items must be added to the bottom of the list. Since this (these) item(s) are listed out of order, the interviewer must again specify the time, meal, and place in the appropriate columns. To demonstrate to which food the item was added, it is important to write in the food description column the line number and food to which it was added. For example, if, during the initial listing, the SP reported consuming a slice of bread for breakfast at 8:30 a.m., and later indicated that margarine was spread on the bread, the interviewer would list the margarine at the end of the food list as a separate item. Entry of the time, meal, and place would be repeated, and in addition to gathering further information about the margarine, the interviewer would indicate that the margarine was spread on the bread, "w/bread (line 3)".

Exhibit 8-5 illustrates how to record the hard copy data. Note the level of detail entered in the "description" column. The "fat added in prep" and the "salt added in prep" refer only to the preparation of foods before they are served. It does not include any type of preparation done to the food prior to purchase, only what the preparer added to the food in the preparation process. These categories are there to help you; they remind you to probe, thus avoiding possible omissions of important data. Unless otherwise directed by the MEC manager, you will later enter the data from the hard copy into the automated system. Only with sufficient probing on the interviewer's part can the system ultimately code the foods accurately.

In the columns provided, record your answers using the correct abbreviation. For example, if the SP reported eating mashed potatoes, you would probe "Did you prepare your potatoes with or without fat?" and "Did you prepare them with or without salt?" If the SP said "Yes, I added butter," you would record a "Y" on the correct line for that food under the heading "fat added in prep." Also, for your benefit, record next to or below the "Y" what was added, in this case, butter.

However, if the SP said that butter was added at the table, not during preparation this would be listed as another food item. Any descriptors of the fat used are recorded in the food description column. "Salt added in prep" would be handled in the same fashion; however, further probing as to the type of salt is not necessary. (Remember that you do not probe for salt added at the table.)

You may use the fat and salt added categories not only to probe for fat and salt in preparation, but also as a prompt (or reminder) to probe for more details on certain items. For example, the salt category jogs the memory to probe as to whether or not a food item is salted or unsalted, such as butter. In the latter situation, this additional information would be recorded under the food description, not under the "salt added in prep" column.

For amounts of a teaspoon, tablespoon, measuring cup, etc. you may use any abbreviation which is understandable. The same abbreviations used in the automated system should be entered for the food models, such as bowls and glasses, etc. Shapes can be entered by first recording the shape, then the dimensions. For example, Cube H:2" L:3" W:2".

The procedure for the use of type of combination on the hard copy is very similar to the automated system. After completing a multi-component food, write the correct abbreviation for the type of combination. Use brackets to group the foods together.

Exhibit 8-5. 24-hour recall form, partially completed (front)

CDC
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nchs

OMB No. 0910-0237

24-HOUR DIETARY RECALL FORM – WORKSHEET

Name: JOE SMITH

ID#: 5782316

Date & Day of Recall: 8-22-91

_1_ of _1_ page

Foods & Beverages Consumed

Time of Day			Food Item	Description	Type of eating occasion	# of people you ate with	Was this added to this meal	Amount	
Hour	Meal	Place							
12 N	LUN	HOM	POTATO	Mashed from dehyd. Prep w/ whole milk w/ dry salted butter	VEGA	N	Y	1 M2	01
			GRAVY	Au jus> from meat juice	VEGA	N	N	2 TBSP	02
									03
									04
									05
									06
									07
									08
									09
									10
									11
									12
									13
									14
									15
									16
									17

CODES:

TIME OF DAY
A = Morning
P = Afternoon/Evening
N = Midnight
M = Midmorning
O = Not applicable

SALT/FAT ADDED IN PREP
Y = Yes
N = No
DK = Don't know
O = Not applicable

MEAL
BRL = Breakfast
BRU = Brunch
LUN = Lunch
DIN = Dinner/Supper
SNK = Snack (Beverage)
INF = Infant (Beverage)
EXT = Extended eating occasion
OTH = Other

DRK = Beverage
ALM = Alcoholic
COM = Cereals
MTH = Meal/shake
CLM = Cold
AAF = Extra snack(s)

PLACE
HOM = Home
WRK = Work
SCH = School
DAY = Day care/Day camp
FAS = Fast food/Take out
GAS = Gas
RES = Restaurant
CAR = Carbonated at home kitchen

STO = Store
FRI = Friend's/Someone's house
CAM = Community feeding program
TRA = In transit
OTH = Other

TYPE OF COMBINATION
MLA = Meat, fish, poultry mixtures
VGA = Vegetable mixtures
VLG = Vegetable combinations
GRA = Grain
GRI = Grilled
TCN = Tortilla mixtures
SOU = Soup/Stew
FRU = Frozen meal
OTH = Other

O = Not applicable
BAT = In salads
MIK = Bread and additives
CER = Cereal combinations
SAL = Salad
BEV = Beverage
MIX = Mixed dish
MLA = Mixed dish w/ substitutions

CDC 8181
REV. 4/91

8-52

Exhibit 8-5. 24-hour recall form, partially completed (back)

Since the information that you have given me will make an important contribution to this health and nutrition study, I would like to make sure that it is as complete as possible.

On this card are some foods and beverages which are often forgotten.

    (Fruits, chips, candy, nuts, cheese

    Coffee, tea, soft drinks, juices

    Beer, wine, cocktails, or any other alcoholic beverage

    Crackers, breads, rolls, tortillas, and cereals.)

Can you think of anything else that you ate or drank yesterday that you haven't mentioned? Y/N

1HELP   5SPA

RECALL REVIEW

Debido a que la informaciÁn que usted me ha dado significar una contribuciÁn importante a este estudio de salud y nutriciÁn, quisiera estar segura de que est lo m s completa posible. En esta tarjeta hay algunos alimentos y bebidas los cuales frecuentemente se olvidan.

    [Frutas, (papitas/papitas fritas), u otro tipo de
        merienda de esta clase como fritos/tostadas)

    Dulces, nueces, queso, caf, t, refrescos o sodas, jugos

    Cerveza, vino, coctales, alguna otra bebida alcohÁlica

    Galletas, panes, panecillos, tortillas, y cereales.]

´Puede recordar cualquier otra cosa que usted comiÁ o bebiÁ ayer que no ha mencionado? Y/N

Make sure to record the symbol for "not applicable" in all appropriate areas. Not only does this help remind you to probe for all necessary details, but it also shows someone reviewing the form that you did not accidentally forget to probe on that particular item.

As mentioned earlier, unless otherwise directed by the MEC manager, you will enter the hard copy recall into the system. You may find that as you enter the foods into the DDC that you did not probe fully on a specific item. If this should occur, select the unknown option; a note is <u>not</u> necessary. However if there is no unknown option available, select an answer and attach a note stating that you forgot to probe for this detail.

-   Forgotten Food Question

Once the recall portion of the interview has been completed, turn the hard copy form over. Printed on the back of the form in both English and Spanish is the text from the Forgotten Foods screen. Read the text; should any other foods be reported, follow the same procedures as performed in the automated interview.

8.3   The Trailer Questions

Whether you are using paper and pencil or the computer, it is most important that you understand the intent of the questions, that you use neutral probes and that you record the information correctly.

Since the intent of the trailer questions does not change when doing an automated or non-automated interview, review the specifications presented earlier. What does change are certain technical aspects. Refer to Exhibit 8-6 as you learn how to record the answers for the trailer questions.

8.3.1   Recording the Trailer Questions on Hard Copy

Depending on the type of response required for a specific question, there are two ways of recording answers. You may either mark an "x" through the appropriate box (as shown in the first example), or record the answer on the line provided (second example).

Exhibit 8-6. Trailer questions

#	Question	Response
1.	How does the amount of food (you/___) consumed yesterday compare with (your/his/her) usual consumption for that day of the week? Was it much more than usual, usual, or much less than usual?	1 ☐ much more than usual 2 ☐ usual 3 ☐ much less than usual 9 ☐ DK
2.	How much plain water (do you/does ___) usually drink in a 24-hour period? (Include only tap water and spring water.)	000 ☐ none ___ } ☐ glasses/cups _____ specify ounces per glass or cup no. ☐ ounces 999 ☐ DK
3.	What type of salt (do you/does ___) usually add to (your/his/her) food at the table?	1 ☐ none (5) 2 ☐ ordinary salt 3 ☐ lite salt 4 ☐ salt substitute. 9 ☐ DK
4.	How often (do you/does ___) add (ANSWER IN 3) to (your/his/her) food at the table? Is it rarely, occasionally, or very often?	1 ☐ rarely 2 ☐ occasionally 3 ☐ very often 9 ☐ DK
5.	Thinking about the past month, how many days did you have no food or money to buy food (for _____)?	00 ☐ none (7) _____ (6) no. of days 99 ☐ DK (7)
6.	Is that because there wasn't enough money to buy food or is there another reason?	1 ☐ not enough money (7) 2 ☐ another reason (12) 9 ☐ DK (7)
7.	During the past month did (you/___) skip any meals because there wasn't enough food or money to buy food?	1 ☐ Y 2 ☐ N (12) 9 ☐ DK (9)
8.	How many days in the past month did (you/___) skip any meals because there wasn't enough food or money to buy food?	_____ no. of days 99 ☐ DK
9.	Did (you/___) skip any meals yesterday because there wasn't enough food or money to buy food?	1 ☐ Y 2 ☐ N 9 ☐ DK
10.	During the past month, were there any days when (you/___) did not eat at all because there wasn't enough food or money to buy food?	1 ☐ Y 2 ☐ N (12) 9 ☐ DK (12)

8-55

Exhibit 8-6. Trailer questions (continued)

11 In the past month, how many days were there when (you/____) didn't eat at all?	_____ no. of days 99 ☐ DK
12 Are you the person who <u>usually</u> prepares the meals at home?	1 ☐ Y 2 ☐ N 3 ☐ shared preparation 4 ☐ food not prepared at home 9 ☐ DK
13. <u>RESPONDENT CODE</u>:	1 ☐ SAMPLE PERSON 2 ☐ PROXY 3 ☐ SAMPLE PERSON/PROXY
14. <u>LANGUAGE OF INTERVIEW</u>:	1 ☐ ENGLISH 2 ☐ SPANISH 3 ☐ ENGLISH/SPANISH 4 ☐ OTHER 5 _____ specify
15. <u>QUALITY OF RECALL</u>:	1 ☐ RELIABLE 2 ☐ UNRELIABLE 3 ☐ REFUSAL (17) 4 ☐ NOT INTERVIEWED (17)
16. <u>INTERVIEWER'S WORK</u>:	1 ☐ COMPLETED 2 ☐ NOT COMPLETED (17)
17. <u>COMMENTS</u>:	1 _____ _____ _____ _____ _____ _____
18. <u>TIME ENDED</u>:	1 ☐ am ____:____ 2 ☐ pm 3 ☐ noon

Are you the person who usually prepares the meals at home?

[___] Y
[___] N
[___] Shared preparation
[___] Food not prepared at home
[___] DK

In the past month, how many days were there when you did not eat at all?

_____
No. of days

Be careful to record your answer legibly. Make sure that your answer also conforms to whatever unit of measure is specified in the question (e.g., if the question asks for "days," do not record the answer in "weeks").

A "Don't Know" ("DK") choice is included in the list of answer possibilities for each question. Follow the rules set out in Section 3.4.5 on "Don't Know" answers. If the respondent's final answer is "don't know," mark the box as you would for other answer categories.

If the respondent changes his/her mind after you have already marked one answer, clearly mark out ("/") the incorrect answer and write "(R.E.)" to signify "respondent error." On the other hand, if you made the error by writing an incorrect answer, write "M.E.)" to indicate "my error." Place the correct answer so it is easily readable. BE CAREFUL TO MARK ONLY ONE ANSWER. DO NOT ERASE.

You may use the white space available on the form to add any comments, if needed, when recording. Be sure the comments correspond to the answer category in question. If narrative comments are on a different part of the questionnaire (e.g., the bottom of the page), be sure to state the number of the question to which it corresponds.

If a respondent refuses to answer any given question, it is important that you record in the margin verbatim what he/she said when refusing, and any observations of your own as to why the respondent refused. Distinguish your remarks or comments from those of the SP by putting parentheses around your comments.

The automated system has the "skip" patterns built into the program; however, on the hard copy the interviewer must follow the instructions on the form to progress to the next appropriate question. Again, refer to Exhibit 8-6. Notice that in the answer categories of many questions there is an number in parentheses following an answer, e.g., (7). These skip patterns instruct the interviewer to skip to the question indicated in the parentheses if that response is selected. The example below shows the correct skip pattern for question 7 if the SP responded "no."

7.   During the past month did (you/___) skip any meals because there wasn't enough food or money to buy food?

[___]   Y
[___]   N (12)
[___]   DK (9)

12. Are you the person who <u>usually</u> prepares the meals at home?

-       **Question Order on the Hard Copy**

Ask all questions in the order in which they appear in the questionnaire. When questionnaires are designed, the order in which questions are to be asked is always given careful attention. Questionnaire writers repeatedly review the question order to assure that all questions are asked in a logical sequence and to lessen the chance that a respondent's answers to one question will improperly influence his/her answer to another.

Given the care with which the questions have been arranged and the importance of ensuring that respondents hear the questions in the same order, it is essential that interviewers strictly follow the order in which questions are printed in the questionnaire. There is only one exception to this rule. If, during the interview, you discover that you have accidentally skipped one or more questions you should have asked, you may go back to ask the omitted question.

Once you finish the trailer questions, complete the form by filling in the respondent code, language of interview, quality of recall, completion code, comments, and the time ended. Notice that if a language other than English or Spanish is spoken, you must specify the language.

8.4   Editing the Hard Copy

An integral part of the interviewing procedure is editing. This step should not be underestimated. It ranks in importance with other interviewer responsibilities. As soon as possible after you complete the interview, read through the hard copy to make any necessary corrections or explanations while it is still fresh in your mind. Even if you asked a question, probed, and obtained a full answer, the entire response can be lost if you cannot understand what you wrote.

Making sure the form is filled out accurately, clearly, and complete, is known as editing. You will always edit the form in blue pencil. NEVER ERASE.

You are already familiar with the purposes of editing for the automated interview; however, there are additional reasons for editing the hard copy form.

1. **TO CATCH AND CORRECT, OR EXPLAIN ERRORS AND OMISSIONS IN RECORDING** -- Common errors that can be caught in editing are omissions, unnecessary questions asked, errors in marking answers, and inadequately probed responses. In the pressure of the interview situations the interviewer may make any of these errors. Not all, but most of them, can be corrected by the interviewer if the questionnaire is edited carefully immediately after the interview.

    If you have omitted a question, do not try to correct it by guessing at the answer. Instead indicate in parentheses next to the omitted question that you are aware of the error ("omitted in error"). When entering the hard copy into the system, attach a note to the question explaining the error.

2. **TO CLARIFY HANDWRITING AND WRITE OUT ABBREVIATIONS** -- The clerical aspect of editing is an obvious one. This includes checking handwriting to make sure all of the words are legible, and spelling out any abbreviations that are not commonly understood.

3. **TO ADD YOUR COMMENTS WHICH MIGHT HELP TO UNDERSTAND A RESPONSE OR AN INTERVIEW AS A WHOLE** -- Add notes concerning the respondent, the interview situation, or anything else which might help in the correct interpretation of the interview.

When entering the information from the hard copy into the system, it is important to enter the date the interview was actually conducted. The time recorded by the system will be incorrect since you are entering the interview after-the-fact, but the Dietary Interviewer Log (Chapter 10) will accurately reflect the correct time. Attach a note to the interviewer's work code stating "entered from hard copy collected on xx/xx/xx." Send the hard copy form(s) along with your other weekly transmittals. For those recalls that were subsequently entered into the system, clearly mark "entered" on the hard copy form.

9.0   THE FOOD FREQUENCY

9.1   General Introduction to Food Frequency

The instructions for administering the food frequency (FF) and the specifications are included in this chapter. It is important that you are familiar with all the categories of the FF and the specifications for each group. The FF will be administered on an automated system if conducted in English; Spanish interviews will be done on hard copy. (Refer to Appendix J which includes the English and Spanish versions of the hard copy FF.)

This questionnaire will only be administered in the MEC to SPs who are 12 through 16 years old. If an SP was 11 years old at the time of the household interview, he/she would not be eligible for the FF, even if he/she had a birthday before the exam date. If the SP was 16 years old at the time of the household interview but turned 17 before the MEC appointment, he/she would receive the FF. The eligibility age is determined by the <u>age of the SP at the time of the household interview</u>. A proxy situation is unlikely to occur for this age range; however, should a proxy interview be necessary, simply change the wording to refer to the SP (e.g., "how often did John eat ...").

When introducing this questionnaire to the SP, it is important to emphasize the following points:

- The recall period is for the past month only. This is not a specific month, such as January, but approximately the last four weeks.

- We are interested in the general or usual pattern which is usually the SP's first response. We do not want respondents to try and actually count the total number of times in the past month. Also, usual diet means that if the SP had an "unusual" few days during the month because of illness or travel or whatever, then ignore these days. We are more interested in the usual pattern most of the month.

- The SP may answer number of times per day, per week or per month.

- Give an example as part of the introduction.

- Explain to the SP that he or she may follow along using the flashcard (Appendix I) if desired.

An introduction is written at the beginning of the questionnaire. Begin by reading this introduction verbatim; then you will usually have to expand or review the major points, and as mentioned, give an example.

Note the instruction to give the SP the HAND CARD, then read the introduction, "Now I'm going to ask you how often you usually eat certain foods. When answering think about your <u>usual</u> diet over the <u>past month</u>. Tell me how often you usually ate or drank these foods per day, per week, per month, or not at all." After reading the instructions, continue by giving an example and a more detailed explanation. To keep the interview flowing efficiently, it is important that the SP understand from the start what type of answers are expected. The following addition to the introduction is lengthy, but effective. You may want to adapt it to accommodate your own interview style. After reading the introduction, add a statement similar to: "For example, if I ask about oranges, and you ate them every day, tell me how many times per day, such as once, twice or three times per day. If you ate them less often, tell me how many times per week, such as once, twice or five times per week. If, in the past month you ate them infrequently, tell me how many times in the past month, such as twice, three times, or not at all. Exact answers are not expected."

For the FF, no portion sizes are asked. If questioned by the respondent, tell him/her that we want to know how often, that is how many times a day, week or month, he/she ate that food. For instance, compare an SP who eats a three egg omelet at breakfast to one who eats one egg for breakfast and one for dinner. The former is considered one time per day, whereas, the latter twice per day. If an SP drank two mugs of coffee at breakfast, the answer would be one time per day; however, if three cups of coffee were drunk at separate times during the day, it would be counted as three times per day. In most situations, a "few sips" of someone else's beverage should not be counted as a "time."

Ordinarily, the FF interview will be conducted right after the 24-hour recall; therefore, you do not need to repeat the confidentiality statement. If, however, the interview was interrupted and the SP returned at a later time to do the FF, remember to tell the SP that all the information given will be kept confidential. [For quality control purposes, you will need to record one Food Frequency per stand (Section 9.8). Since the person reviewing the tape will not know whether the FF was completed immediately after the 24-hour recall or after an interrupted period, be sure that your quality control tape includes the confidentiality statement.]

9.2   Making Comments

If the SP asks about a specific food during the interview, and you are unsure as to the category in which it belongs, write down the food and how often it was eaten by the SP. Record this information so that it is easily apparent which category the SP questioned. If you are using the hard copy, this can usually be written in the margin of the category; if you are using the automated system, you will be able to enter this information as a comment.

In general, respondents do not ask many questions regarding how to categorize different foods during the food frequency. When this does happen, it is important not to slow down the interview trying to make a decision as to where to classify the food; it is much better to just make a comment, record the frequency of the intake, then continue to the next category. As will be discussed later, at the end of the interview the SP will be given an opportunity to list any other foods, not mentioned on the food frequency, that were consumed at least once per week in the past month. Also remember that this questionnaire is not designed to cover all foods that the SP might eat, but instead focuses on specific food items or groups that are commonly consumed, and are high in certain nutrient values (specifically vitamins A and C and calcium).

9.3   Probing for the Food Frequency

Probing for the FF usually takes the form of encouraging the SP to answer within the correct categories. Often the SP will give a vague response such as "I rarely eat that," "not very much," or "not much lately." Of course, you can never assume that you know what the SP means; you must probe these responses by saying something like "how often in the past month did you eat...?" Responses such as "a few times," "a couple times," "every day," etc. must also be probed for the number of times per day, week or month. Don't assume that every day means once a day. If the SP answers "every day," probe for how many times per day. If the SP says "5 days per week," probe for an average of how many times (not days) per day, week or month. On the occasion that an SP responds with "a couple times per day," ask the SP how he/she defines "a couple."

It is common for the SP to initially answer with complete responses such as, "three times in the past month," then change his/her pattern and begin saying something like "twice" or "four times." Do not assume that the SP is still responding in times per month. Probe "was that twice per day, week, or month?"

Another type of response which requires further probing is "I had two beers last week." Do not immediately record this as "two times per week." Before entering a response, probe to determine how often in the past month the SP consumed beer, not how many beers. Say something like, "So, how many times did you drink beer and lite beer in the past month?"

SPs also have a tendency to respond to items such as fruits and vegetables with "when they are in season." Remind the SP that the time frame is the past month and probe as to whether or not it was consumed in that period of time. If asked, you may also add that even though the fresh fruit may not have been in season in the past month, the canned, frozen or dried form is acceptable. Examples of these are peaches, apricots and frozen melon balls.

Many SPs will give a range such as "three to four times per week." Try to have the SP estimate which is more usual, but if he/she cannot, then record the lower number (round down).

Since we emphasize the past month as the recall period, SPs tend to report the number of times per month. This is not a problem except that it might be more difficult for the SP to count the total number of times per month. If the interviewer feels that this is happening, you may say something like "If you have (food) every day or every week, you can give me the number of times per day or week."

9.4   Recording

The CASS automated system will be used to record food frequencies conducted in English. However, those conducted in Spanish will be recorded and edited on hard copy in the MEC, then either entered into CASS if time allows or shipped to NCHS for processing.

On the hard copy, recording is done by writing the number of times on the two lines provided and checking the appropriate box to indicate day, week, month or not at all. A DK is provided but is not often used. You do not need to zero fill on the hard copy. The example below shows how the answers to several questions are recorded when the SP said that she ate "yogurt and frozen yogurt 5 times a week" and "ice cream, ice milk, and milk shakes 3 times per month."

(example:)

(example:)

e	Yogurt and frozen yogurt	___5__ per ₁☐ D ₂☒ W ₃☐ M or ₄☐ N ₅☐ DK
f	Ice cream, ice milk, and milkshakes	___3__ per ₁☐ D ₂☐ W ₃☒ M or ₄☐ N ₅☐ DK

Recording answers on the automated system requires the interviewer to record the number of times, enter that number into the system by hitting the carriage return, and then enter the interval day, week, month or not at all. (See CASS instructions.)

9.5   Food Specifications

Note that any specifications stating "store bought" also include eaten out, such as in a restaurant or at a fast food establishment.

1.   MILK AND MILK PRODUCTS

First are milk and milk products. Do not include their use in cooking.

a.   How often did you have chocolate milk and hot cocoa?

Include chocolate milk or cocoa prepared with whole, low fat, or skim milk, including chocolate Quik added to milk. Include the individual boxes of chocolate milk and chocolate flavored drinks such as Yoohoo. Include also regular, sugar-free and low calorie hot chocolate mixes (which are made from nonfat dry milk).

b. *How often did you have milk to drink or on cereal? Do not count <u>small</u> amounts of milk added to coffee or tea.*

This includes all kinds of milk - whole, low or nonfat, Lactaid, buttermilk, acidophilus, evaporated milk, and reconstituted dry milk. It does not include chocolate milk, cocoa, or non-dairy products such as non-dairy powdered creamers, nor milkshakes made with milk. If the SP says that he/she adds a <u>significant</u> amount of milk to coffee or tea, approximately <u>1/3 or more of the total volume</u>, include this as milk. Otherwise do not include <u>small</u> amounts added to coffee or tea.

c. *CHECK ITEM. REFER TO RESPONSES IN 1a AND 1b.*

If the SP's responses for both 1a and 1b are "never," mark the appropriate box and skip to 1e. However, if the SP has consumed an item from either 1a or 1b, mark "other" and continue to the next questions. (The CASS system will automatically skip to the appropriate question.)

d. *What type of milk was it? Was it usually whole, 2%, 1%, skim, nonfat, or some other type? IF SP CAN NOT PROVIDE USUAL TYPE MARK ALL THAT APPLY.*

Note that this question refers to the fat content or type of milk of either the chocolate or white milk previously reported.

Although buttermilk and evaporated milk are not read as part of the question, each has its own answer category. If these are reported, enter the answer in the appropriate area; do not list them under "other."

It is preferable to have only one answer to this question. If the SP gives two or more answers, probe for the USUAL type. <u>If the SP insists that there is not one usual type, then mark or enter all that apply</u>.

If an SP now reports using a small amount ("about 2 teaspoons") of 2% milk in his/her tea, yet drinks skim milk by the glassful, record skim milk since this is "usual." But since the 2% milk used in the tea is an insignificant amount (e.g., less than 1/3 of total volume), you should verify that the SP did not include the 2% milk in the answer of 1b. If the SP did include the 2% milk, do not go back to the original question and change the answer; instead add a comment at this point explaining the situation.

Space has been allotted to enter or write verbatim any answer that is an "other." If the SP says "don't know," you may reread the answer categories to see if this helps; the SP's best guess is preferable to recording DK.

An SP may ask whether skim and nonfat milk are the same, and if so, why are they mentioned separately in the question. Both words are included in the questions should an SP call what he/she drank "nonfat," rather than "skim" or vice versa. Note that the answer category includes both, "skim/nonfat." Also note that "regular" milk is included in the "whole" milk category. Some SPs may refer to whole milk as "Vitamin D" milk.

e.   *Yogurt and frozen yogurt*

Include all kinds of yogurt - plain, with fruit or syrup, regular, low fat, and nonfat. Also include yogurt beverages or drinks, and yogurt smoothies (blenderized beverage).

f.   *Ice cream, ice milk, and milkshakes*

Include any flavor of ice cream, ice milk or milkshakes. Also include fast food milkshakes. Do not include tofutti, non-dairy frozen desserts, or sherbet. Milkshakes are commonly called "frappes" in the Northeast, especially in Boston, and are often called "batidos" or "licuados" in the Hispanic communities.

g.   *Cheese, all types including American, Swiss, cheddar, and cottage cheese*

Include processed or natural cheeses, regular, low sodium or low fat, hard and soft, spreads or pressurized cans. Include also Hispanic cheeses such as queso fresco and queso blanco, and ricotta cheese.

Do not include cheese used as a garnish, cream cheese, or dishes made with cheese as an ingredient. Dishes made with cheese as a primary ingredient will be asked later.

h.   Pizza, calzone, and lasagna

Include homemade, frozen, commercial, or store bought.

i.   Cheese dishes such as macaroni and cheese, cheese nachos, cheese enchiladas, and quesadillas

Cheese is a primary ingredient in these dishes; include dishes with cheese sauces. Also include other Hispanic dishes such as chile con queso and burritos with cheese.

2.   MAIN DISHES, MEAT, FISH, CHICKEN AND EGGS

Next are main dishes, meat, fish, chicken and eggs. Read the introductory phrase, then proceed with the questions.

a.   How often did you eat any type of stew or soup containing vegetables including minestrone, tomato, and split pea?

Key words are <u>containing</u> <u>vegetables</u>. Include store bought and homemade, and pot pies containing vegetables, regular or low sodium, with any base: milk, cream, or water. These may either be vegetarian or contain meat. Do not include consomme unless vegetables were added. Do not include soups which contain an insignificant amount of vegetables, such as Top Ramen, which contains mostly broth, noodles and a few green peas.

b.   Spaghetti and pasta with tomato sauce

Key words are <u>tomato sauce</u>. Recipe may be homemade or store bought. Include "sopa" or "sopa seca de fideo" which is a Mexican-American dish consisting basically of pasta and tomato sauce.

c.   Bacon, sausage (chorizo) and luncheon meats such as hot dogs, salami, and bologna

The parentheses around chorizo indicate that it is an Hispanic food. Whether or not to read "chorizo" to the SP is left to the discretion of the interviewer. In areas where a large number of the population is Hispanic, or if the SP has an Hispanic surname, the Hispanic name in parentheses should be read to the SP.

Include all sausages, Vienna, smoked, Polish, pork, beef, Italian, link and patty, chorizo, bratwurst and blood sausage. Include scrapple.

Do not include bacon substitutes such as "Bacos" or imitation bacon.

Include packaged luncheon meats (bologna, salami, pastrami, corned beef, roast beef, etc.), canned meat spreads and deli luncheon meats. Do not include chicken and turkey luncheon meats or hot dogs; but do include hot dogs made from beef, veal and pork. Include beef jerky.

d.   Liver and other organ meats such as heart, kidney, tongue, and tripe (menudo)

The parentheses around menudo indicate that it is an Hispanic food. Again read this word if you think it is appropriate for the SP.

Include brains, sweetbreads, beef liver, chicken liver, chopped liver and liverwurst. Menudo is an Hispanic beef tripe soup.

e.   Beef, including hamburger, steaks, roast beef, and meatloaf

Include any cut or preparation; homemade or purchased.

f.   Pork and ham, including roast pork, pork chops, and spare ribs

Include ham and pork cuts of meat, not pork luncheon meats. Do not include bacon, sausage or packaged deli ham.

g.   Shrimp, clams, oysters, crab, and lobster

Fresh, frozen or canned are included. Artificial crabmeat may be included here or under the "fish" category; let the SP decide on its classification. Include crab dip, oyster stuffing, and New England clam chowder.

h.   Fish including fillets, fish sticks, fish sandwiches, and tuna fish

Include fresh, frozen or canned and all preparations.

i.   Chicken, all types, including baked, fried, chicken nuggets, and chicken salad. Include turkey.

Include fast food chicken fillet sandwiches and chicken/turkey hot dogs. Include chicken and turkey deli or luncheon meats.

j.   How often did you have eggs including scrambled, fried, omelettes, hard-boiled eggs, and egg salad?

Include dishes where egg is a primary ingredient such as quiches and frittatas. Do not include egg substitutes.

3.   FRUIT AND FRUIT JUICES

Next are fruit juices and fruit. Include all forms - fresh, frozen, canned, and dried.

a.   How often did you have orange juice, grapefruit juice and tangerine juice?

Include only 100% juices; do not include juice substitutes such as orange flavored juice drinks or drinks with 10% juice.

b.   *Other fruit juices such as grape juice, apple juice, cranberry juice, and fruit nectar.*

Include only 100% juice or juice mixes; include nectars and cider. Do not include drinks with 10% juice, such as CapriSun, Hawaiian Punch, or Hi-C.

c.   *Citrus fruits including oranges, grapefruits, and tangerines.*

Include fresh, frozen and canned. Include white and pink grapefruit, tangelos and mandarin oranges.

d.   *Melons including cantaloupe, honeydew, and watermelon*

Include fresh and frozen.

e.   *Peaches, nectarines, apricots, guava, mango, and papaya*

Include fresh, frozen, canned and dried.

f.   *How often did you have any other fruits such as apples, bananas, pears, berries, cherries, grapes, plums, and strawberries? (Include plantains.)*

The parentheses around plantains indicate that they are more commonly used in Hispanic households. Read plantains aloud to all SPs in areas with a heavy concentration of Hispanics or if the SP surname is Hispanic.

Include applesauce, blueberries, raspberries, rhubarb, raisins, prunes, etc. If the SP reports a fruit which actually is in one of the previous categories, do not go back and change the previous answer; make a note stating the fruit and its frequency.

4. VEGETABLES

These next questions are about vegetables. Please remember to include fresh, raw, frozen, canned, and cooked vegetables.

a. How often did you have carrots and vegetable mixtures containing carrots?

Key word is <u>carrots</u>. Include carrots eaten alone or mixed with other vegetables (e.g., frozen vegetable mixtures or stir-fried). Do not include soup containing carrots since this was asked earlier.

b. Broccoli

Include fresh and frozen. Do not include soup containing broccoli since this was asked earlier.

c. Brussels sprouts and cauliflower

Include fresh and frozen. Do not include soup containing cauliflower since this was asked earlier.

d. White potatoes, including baked, mashed, boiled, french-fries, and potato salad

Include fresh, frozen, instant, and canned. Include hash browns, pan fries, and fast food french fries. Do not include canned shoe string potatoes or potato chips.

e. Sweet potatoes, yams, and orange squash including acorn, butternut, hubbard, and pumpkin

Include sweet potato pie and pumpkin pie. Do not include summer squash or zucchini, as these are included later under the other vegetable category.

f. Tomatoes including fresh and stewed tomatoes, tomato juice, and salsa

Do not include tomato soup or pasta with tomato sauce since these were asked earlier. Include use in cooking. Also include tomato paste and tomato sauce used in cooking or as a topping. Include V-8 juice. Do not include catsup used as a condiment.

g.   *Spinach, greens, collards and kale*

Include any greens such as mustard and turnip greens; include use in salads. Do not include use in soups since this was asked earlier.

h.   *Tossed salad*

This also might be called a lettuce or green salad. Include those salads consisting mainly of lettuce, but which may also contain a small amount of shredded carrots or cabbage to add color. All types of lettuce are included.

i.   *Cabbage, coleslaw, and sauerkraut*

Include homemade or store bought. Do not include soup containing cabbage since this was asked earlier.

j.   *Hot red chili peppers. Do not count ground red chili peppers.*

Include hot red chili peppers used in sauces. Do not include the ground red chili peppers (red pepper flakes) which are frequently used on pizza.

k.   *Peppers including green, red, and yellow peppers*

Include hot green peppers (like jalapeno), as well as sweet red, green, purple and yellow peppers. Do not include hot red chili peppers and peppers used in soup as these were asked earlier.

l.   *Any other vegetables such as green beans, corn, peas, mushrooms, and zucchini*

Include any vegetable not already mentioned such as onions, lima beans, celery, beets, eggplant, nopales (cactus), etc. Should the SP report a vegetable previously listed, do not return to that section; make a note stating the vegetable and its frequency.

5.   BEANS, NUTS, CEREALS, AND GRAIN PRODUCTS

a.   How often did you have beans, lentils, and (chickpeas/garbanzos)? Include kidney, pinto, refried, black and baked beans.

Depending on the geographic area of the SP, you must select and read one of the two terms in the parentheses. Use whichever term you feel the SP will best understand.

Include use in salads, soups and mixed dishes (such as chili with beans); include homemade or store bought.

b.   Peanuts, peanut butter, other types of nuts, and seeds

Include raw, roasted, unroasted, honey roasted and/or coated, salted, unsalted, with or without shells. Include all types of nuts, cashews, almonds, macadamia, etc.

Now I'm going to ask how often you ate certain cereals.

c.   How about All-Bran, All-Bran Extra Fiber, 100% Bran, and Fiber One

These four cereals are very high in fiber; do not include any other cereal in this category.

d.   Total, Product 19, Most, and Just Right

These four cereals are highly fortified; do not include any other cereal in this category.

e.   All other cold cereals like corn flakes, Cheerios, Rice Krispies, and presweetened cereals

Include any other cold cereal not mentioned above such as Raisin Bran, Grape Nuts, Puffed Wheat, Shredded Wheat, and presweetened cereals, such as Trix and Froot Loops. Granola type cereals are included here, but not granola bars.

f.   Cooked, hot cereals like oatmeal, cream of wheat, cream of rice, and grits

Include instant, quick cooking and long cooking. Also include grain dishes like bulgar wheat as well as rolled oats, Farina, etc.

Next, I'm going to ask you about white bread products. I'll ask about dark breads later.

g.   White bread, rolls, bagels, biscuits, English muffins, and crackers. Include those used for sandwiches.

Include pita bread, matzo, French toast, and bread stuffing made with white or cracked wheat bread (or white flour). Include rice cakes. Include crackers such as saltines, oyster crackers, cheese crackers, etc. Do not include pancakes and waffles. These will be recorded at the end if they are reported by the SP as eaten at least once per week in the past month.

h.   Dark breads and rolls, including whole wheat, rye and pumpernickel

Include whole wheat pita, whole wheat English muffins, whole wheat crackers, and French toast made with dark bread. Do not include pancakes and waffles.

i.   Corn bread, corn muffins, and corn tortillas

Include homemade, store bought and packaged mixes.

j.   Flour tortillas

Include regular and whole wheat.

k.   *Rice*

Include long cooking, instant, quick, minute and converted rice. Include rice mixtures and rice used in casseroles. Include all types: brown, white, wild and flavored such as yellow rice; include rice pudding.

l.   *Salted snacks such as potato chips, taco chips, corn chips, and salted pretzels and popcorn*

<u>Salted</u> is the key word. Include salted nuts and salted crackers. Unsalted pretzels, popcorn or potato chips are not counted. Count "lightly" salted. Include popcorn prepared with lite salt.

6.   **DESSERTS, SWEETS, AND BEVERAGES**

a.   *How often did you have cakes, cookies, brownies, pies, doughnuts, and pastries?*

Include homemade, store bought and those prepared from packaged mixes. Include granola bars here, not under cereal.

b.   *Chocolate candy and fudge*

Include chocolate covered nuts and raisins, and chocolate candy bars.

Next are hot and iced beverages.

c.   *How often did you have Hi-C, Tang, Hawaiian Punch, Koolaid, and other drinks with added vitamin C?*

Include Sunny Delite, Ssips, and Crantastic; do not include gatorade.

d.   Diet colas, diet sodas, and diet drinks such as Crystal Light

Include any artificially sweetened soft drink (key word is <u>diet</u>) with or without caffeine. Include diet tonic water. Count also diet soda in a mixed drink, such as a rum and diet coke. Do not include seltzer or club soda.

e.   Regular colas and sodas, not diet

Key word is <u>regular</u>, not diet; with or without caffeine. Do include ginger ale and regular tonic water. Count also regular soda in a mixed drink, such as a rum and coke. Do not include club soda or seltzer.

f.   Regular coffee with caffeine

Include instant or ground, flavored coffees such as Cafe Vienna and Suisse Mocha, hot or cold. Do <u>not</u> include decaffeinated coffee or coffee substitutes (e.g., Postum).

g.   Regular tea with caffeine

Include flavored teas such as Earl Grey or orange spice as long as they are not decaffeinated. Exclude all decaffeinated teas and herbal teas (chamomile).

h.   Beer and lite beer

Do <u>not</u> include nonalcoholic beer (e.g., Near Beer). Do include all other types of beer: stout, ale, malt liquor, or any type of low calorie beer.

i.   Wine, wine coolers, sangria, and champagne

Include all types of wine, "light" wines, port and sherry. Do <u>not</u> include nonalcoholic wines.

j.   Hard liquor such as tequila, gin, vodka, scotch, rum, whiskey and liqueurs, either alone or mixed

Include all types of liquor such as brandy and liqueurs, amaretto, creme de menthe, etc. Include other distilled beverages, such as Canadian and blended whiskeys, tequila, etc. Include alcohol in mixed drinks such as daiquiris, white/black Russians, and rum and coke.

7.   FATS

How often were these items added to your foods <u>after preparation?</u> For example, this would include on top of vegetables or baked potatoes or as a spread on bread.

a.   Margarine

Include salted and unsalted, regular and diet, tub, stick or liquid. Include margarine/butter blends and imitation margarines such as Shedd's Spread.

b.   Butter

Include all types, salted and unsalted. Do <u>not</u> include imitation flavorings such as Butter Buds or Molly McButter.

c.   Oil and vinegar, mayonnaise and salad dressings such as Italian and Thousand Island, including those added to salads and sandwiches

Include regular, light, low calorie, low sodium; include homemade and commercial, both bottled and dry mixes. Include real, imitation and mayonnaise type dressings like Miracle Whip. Do <u>not</u> include "oil-free" dressings.

8.   Have I missed any other foods or beverages that you had at least once per week in the past month?

If the SP says "yes," select the appropriate answer and ask what foods or beverages were missed. Write/enter each food or beverage in the space provided, then record the frequency. Record/enter each food and the frequency before doing the next item. Probe for all items by asking the question until the SP says "no." Remember, the food has to have been consumed at least once per week in the past month. Should an SP report an item whose frequency was less than once per week, disregard the answer. If the SP says "no," mark the appropriate box. More instructions on how to enter this answer into the CASS system will be presented in Section 9.7.

9.   *Quality of food frequency interview. (To be completed by interviewer.)*

Mark the appropriate box indicating the quality of the FF interview as reliable, unreliable or refusal. The reliability codes do not pertain to the degree of completeness of the interview. You must write an explanation after "Comments" if the code is anything other than reliable. The definitions for these categories are:

Reliable: If you feel the SP/proxy made a sincere effort to answer the questions, and that the information given is probably correct, then code the FF reliable.

Unreliable: Code unreliable if you feel that the SP/proxy was not able to give information that you think is correct. For example, an SP who is drunk, or an SP who cannot understand the instructions may not provide correct information.

Refusal: A refusal is coded for an SP who refuses to do the interview before you are able to obtain any information.

If for some reason the SP cannot complete the FF, determine whether or not the information obtained to that point was reliable. If it was accurate, select reliable and attach a note as to why the FF was not completed. On the other hand, if the information was not reliable, select unreliable and attach a note stating why the interview was unreliable and why it was not completed.

10.   Respondent

Code the person or persons who participated in the interview. For most of the interviews, the SP will be the respondent and you will mark "sample person." If for some reason the SP cannot respond for himself/herself (e.g., mentally retarded), and the interview is done by proxy, select "proxy." If the SP and proxy both participated in the interview, no matter to what degree, select "sample person/proxy."

Sample person: Select if only the sample person participated in the interview and contributed the information without assistance from another person.

Proxy: Select if someone else answered on behalf of the sample person.

Sample person/proxy: Select if both the sample person and proxy contributed information.

9.6   Completing the Hard Copy Cover Sheet

If you do a food frequency interview on hard copy, remember to fill out the front sheet with the identifying information. Use your schedule and the control record for this information. Place a pre-printed sticker with the SP's sample number into the appropriate box, then record the name, age, and sex of the SP, your interviewer number, the date of exam, and the language in which you will conduct the interview. Don't forget to record the time the interview began and ended.

If you do not have the other identifying numbers (case, family, and SP), at the end of the interview, or when you have time, take the hard copy to the MEC coordinator to get this information.

9.7   Using the Computer Assisted Survey System (CASS) for the Food Frequency

The electronic questionnaire produced by the CASS system provides the interviewer with the ability to back up, change answers, move forward while in backup mode, and enter comments for closed-end questions. Interviewers cannot move ahead at random in the questionnaire.

There are three answer types in this system that are used in the FF:

        1.   Closed-ended answers,

        2.   Open-ended answers, and

        3.   Value answers.

The following sections provide a description of these three question types and other system characteristics. The screens presented at the end of this chapter will be discussed in detail during training, although several are referenced in the following discussion as examples.   Exhibit 9-1 is a summary of the special features of the CASS system. This "HELP" screen can be accessed at certain times during the interview, if needed.

9.7.1   Types of CASS Questions and Answer Prompts

When a question appears on the screen it may or may not prompt for an answer. The rule CASS follows is that closed-ended questions require no prompt other than the list which is displayed on the screen. For example, when the SP is asked to specify an interval for eating certain foods, this is a closed-ended question; the only prompt for response is the list (or menu) which gives the options of answering.

1. Per day   2. Per week   3. Per month

When the interviewer enters a 1, 2 or 3, the questionnaire will move on to the next question.

Exhibit 9-1. CASS HELP summary screen

CASS HELP SUMMARY SCREEN

THESE SPECIAL SINGLE KEYS CAN BE USED ALMOST ANYWHERE	PROMPT	ACCEPTABLE RESPONSE
c = Comment	No prompt	Must be 1 character (close-ended answer) NO ↵ AFTER ENTRY
d = Don't Know or DK		
z = End interview (abort)	?	Anything ↵ or ↵ (open-ended answer) NEED null ↵ TO END
r = Refused		
* = Jump to where backup began	_?	Must be 1+ char. ↵ (open-ended answer) NEED null ↵ TO END
- = Backup		
+ = skip forward	#?	a # or 1 letter ↵ (open-ended numeric)

PRESS ← TO RETURN TO INTERVIEW

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On the other hand, some questions will appear on the screen with a question mark prompt "?" or "_?" or a "#?" prompt. When these prompts appear, the cursor will sit in front of the prompt. Examples of the question mark prompts are shown in the screens presented at the end of the chapter.

A question with a "?" prompt is a full open-ended question. Any kind of answer will be accepted, including an empty return, i.e., a simple pressing of the return key without any previous keyboard entry (see Screen 2A). This type of response or entry, where you don't type anything on a line, but simply press the return key, is called a NULL response or entry. A null response will cause the questionnaire to continue to the next question.

If some other keys are pressed prior to pressing the return key, then the questionnaire will respond with another "?" prompt for more input. If you had finished entering data you would simply reply with an empty or null response on this new line. This will cause the questionnaire to stop text entry for the current question and to bring up a new question.

An exception to this pattern occurs if only a single "d" or "r" character is input in response to the question mark prompt. These characters are "don't know" and "refused" codes. They will always be used for that purpose only. When a single "d" or "r" character is input and followed by a carriage return on an open-end question, the questionnaire will immediately move on to the next question.

Of course, you can always use a "d" or "r" as one of the letters in a word; only the single letter standing alone is interpreted by CASS as meaning "don't know" or "refused."

A question with a "_?" prompt is an open-ended question; an example is shown in Screen 2B. However, no null response is allowed here; you must enter something. Otherwise, this type of prompt is the same as the "?" prompt. You may enter as many characters as you want on as many lines as you want. You terminate your input with a null line. That is, after you have finished typing your last word, you hit the return key twice: once to end that line, and then again to get rid of the question mark prompt (as shown in Screen 2C), to get you out of "input" and onto the next question.

Questions which are followed by a "#?" prompt are similar to an open-ended question, except that the first entry from the keyboard must be a number. The special "d" or "r" codes which stands for "don't know" or "refused" can also be used in the FF questionnaire, but no other alpha character. (The "d" and "r" cannot be used for age.) Sometimes this question type will do range checking. This means that only responses defined by the CASS programmer as valid responses will be accepted. Screens 3A and 3B show an example of a "#?" and what happens if you enter a number not in the accepted range.

9.7.2   Backing-Up

At any time during the interview or exam, the interviewer can back up to a previous question. On closed-end questions this requires that the "-" (minus) key be entered, and each time it is entered in response to a closed-end question, the questionnaire will back up to the previous question. For questions with a "?" or "#?" prompt, entering a "-" key followed by a return key as the VERY FIRST response to the prompt will cause the questionnaire to back up to the previous question.

This previous answer can be changed by entering a new answer to the question at this time. This is true for all question types. However, as before, closed-ended questions need only the answer, while the other types of questions require returns after the answer, or empty (null) returns.

If a new answer is entered while the questionnaire is in backup mode, the new answer REPLACES the previous answer, and the questionnaire moves to the question which appropriately follows the question just answered. We use the word "appropriately" to indicate that the questionnaire may have selected the next question from a set of possible questions on the basis of the response or answer entered. This will be true if the interviewer had backed up more than one question.

However, it is important to remember, if you back up and **change** any answer, the system is no longer in back-up mode and you must re-enter **all** subsequent answers. Therefore, if an SP changes his/her mind about an answer more than two questions back, it is better to enter the information as a comment wherever you are.

9.7.3   Moving Forward After Backing-Up WITHOUT Entering a New Answer

There are two ways to move forward while in backup mode. The first is a fast-forward command which will return the questionnaire to the first appropriate unanswered question. The questionnaire will no longer be in backup mode. The interviewer issues this command by entering a "*" as the response to the question currently on the screen. The second "move forward" command, used while in backup mode, is a step command. It causes the questionnaire to move forward one question each time it is entered. Its use does not change the previous answer. This command is invoked by the interviewer by entering a "+" as an answer to the current question. If an attempt is made to move forward with a "+" or "*" command when the questionnaire is not in backup mode the following message will appear:

Refused - aren't in backup

Screens 7A through 7D show an example of backing up and going forward.

9.7.4 Entering Comments

Every question type has a provision for the interviewer to enter comments. This provision must be used before the question is answered, because answering a question will immediately bring up the next question. Comment mode is invoked by entering a "c" as the response to a question. A "?" prompt will appear and the interviewer may then type in the appropriate comment. The comment behaves just like an open-ended question; input is terminated with an empty (null) return. However, when the comment is ended with an empty (null) return, the questionnaire returns to the original question, and a valid answer must be entered before the questionnaire will proceed to the next question.

When typing a comment you should hit a RETURN as you near the end of the line on the screen; a "?" prompt will appear. If you do not hit a RETURN you will be able to proceed; however, about half way through the second line the "?" prompt will appear. See Screens 11A through 11D.

9.7.5 Screen Refresh

Sometimes during the course of an interview the screen may get too messy or the current question may have been driven off of the top of the screen. If a "tab" is entered as the answer to the question, then the screen will be refreshed and the current question will be displayed at the top of the screen.

9.7.6 Exit Commands

A single "z" followed by a carriage return, entered as a response to a closed-ended or value type question will cause the questionnaire to go to its "close-out" questions and skip the remaining portion of the interview. The system will announce, at the top of the screen, the question number from which the exit occurred. The message will be of the form:

*z'd out from q:

Screens 12A through 12E show the progression of screens that appear after you enter the Z and RETURN. Screens 13A through 13D show the sequence for restarting an interview.

9.7.7   Starting the Food Frequency

The food frequency will usually be done immediately following the 24-hour recall. At the end of the 24-hour recall, the interviewer will exit from the DDC by selecting that option from the list at the end of the interview. You will then select the food frequency from the main menu.

If the food frequency is conducted immediately following the 24-hour recall, you do not need to restate the confidentiality statement (unless you are taping the FF for quality control purposes). If for some reason, however, the SP left the interview and returned to do the food frequency later, remember to tell the SP that all the information given will remain confidential.

9.7.8   Specific Food Frequency Screens

The following screens show examples of the points just discussed and questions and procedures which require special attention.

Screen 1A

```
        Computer Assisted Survey Systems    tm
   Q U E S T I O N N A I R E    D R I V E R   Ver 3.
(C) Copyright 1983,1987 COMPUTER ASSISTED SURVEY SYSTEMS--All Rts Reserved
 Serial no: 2000/PC-II.K.293


By what name do you introduce yourself ? susan          ◄━  Enter first name

Enter 3 initials, please ...  sng
```

This is the first
screen that will
appear. After
entering your
initials, press
RETURN.

Screen 1B

```
8/10/87   Leased to: NATIONAL CENTER FOR HEALTH STATISTICS CONTRACTOR      ⟋ 2

Enter Sample Number Desired   09018801                    Note Screen Number
       Now Enter Check Digit   x                  ◄━ Enter SP number.
```
Any alpha character
will serve as a check
digit.

```
8/10/87   Leased to: NATIONAL CENTER FOR HEALTH STATISTICS CONTRACTOR        2A
waiting for next sample point
  ****  09018801.CBX  NOT FOUND.  THIS MAY BE AN ERROR.
09018801-1\\\\\\

PLEASE SELECT:

        ⏎ to proceed with the FOOD FREQUENCY interview.

        z if you have the wrong interview or wrong SP #.

?                                           ◄──  Enter NULL response to proceed.
```

```
09018801-1\\\\\\                                                             2N

ENTER NAME OF SAMPLE PERSON:

_?                              ◄──   Open-end prompt
```

```
09018801-1\\\\\\                                                             2N

ENTER NAME OF SAMPLE PERSON:

_? stephanie daniels
?                               ◄──   Enter NULL response to proceed.
```

```
09018801-1\FOOD\\stephanie daniels\\\          ◄━━   Note ID and name              5

ENTER AGE OF SP AT TIME OF SAMPLE SELECTION:

#?                                              ◄━━   Open ended question prompt
```

Screen 3B

```
09018801-1\FOOD\\stephanie daniels\11\\   ◄━  age                               6

ENTER AGE OF SP AT TIME OF SAMPLE SELECTION:

#? 11

ERROR!  SP MUST HAVE BEEN 12 TO 16 YEARS OLD AT THE TIME OF
SAMPLE SELECTION.  IF SP WASN'T, YOU SHOULDN'T BE DOING THIS INTERVIEW.

SELECT:

        - to go back and enter correct age.   ◄━  Note: use "-" to back up

        z to terminate.

?
```

This is what happens if you try to
interview an SP not in the correct
age range or make a typing error.

09018801-1\FOOD\\stephanie daniels\12\\   ◄── correct age   7

ENTER SEX OF SP;

    1. Male
    2. Female

.

Closed end question; press 1 or 2

.

Screen 4B

.

09018801-1\FOOD\\stephanie daniels\12\\   7c

Before we begin, I want to assure you that all of your responses
will be kept strictly confidential.

PRESS ◄─┘ TO CONTINUE.

?

This statement does not need to be
read if you have just completed the
24 hour recall,

Screen 5A

09018801-1\FOOD\\stephanie daniels\12\\   100

HAND SP CARD FF.   ◄━ note instruction

Now I'm going to ask you how often you usually eat certain foods. When
answering think about your usual diet over the past month. Tell me
how often you usually ate or drank these foods per day, per week, per month,
or not at all.

1. MILK AND MILK PRODUCTS

First are milk and milk products. Do not include their use in cooking,

a. How often did you have chocolate milk and hot cocoa?

                                        OR 0 0 = never
(number)
                                        OR 0 d = DK

#?   ◄━   Open end question prompt

                                         Acceptance range is 1-90 through-
                                         out questionnaire. Will accept "r"
                                         refusal and "d" for don't know.

                                         Remember that Never is "0" (not n)

                                         Entering r, d, or 0 will
                                         automatically skip past the
                                         interval response.

Screen 5B

09018801-1\FOOD\\stephanie daniels\12\\   101

HAND SP CARD FF.

Now I'm going to ask you how often you usually eat certain foods. When
answering think about your usual diet over the past month. Tell me
how often you usually ate or drank these foods per day, per week, per month,
or not at all.

1. MILK AND MILK PRODUCTS

First are milk and milk products. Do not include their use in cooking,

a. How often did you have chocolate milk and hot cocoa?

                                        OR 0 0 = never
(number)
                                        OR 0 d = DK

#? 1   ◄━   Enter number; hit RETURN

     1. per day   2. per week   3. per month

                                         Enter 1, 2, or 3
                                         Will not accept r, or d.

9-31

083011-1\FOOD\\diane adams\13\\   153

(Over the past month, how often did you have....)

b. Other fruit juices such as grape juice, apple juice, cranberry juice
    and fruit nectars?

(number)   OR 0 0 = never

                                            OR 0 d = DK

#? 3

        1. per day   2. per week   3. per month

r   please respond again
d   please respond again

09018801-1\FOOD\\stephanie daniels\12\\   104

d.   What type of milk was it? Was it usually whole, 2%, 1%, skim,
     nonfat, or some other type?

IF SP CANNOT PROVIDE USUAL TYPE, ENTER m.   ◄—   note instruction

          1.   whole/regular
          2.   2%/low fat
          3.   1%
          4.   skim/nonfat
          5.   buttermilk
          6.   evaporated   If "7" is entered, you will have an
          7.   other   ◄—   opportunity to specify "other". (See
                                                     Screen #13)
          m.   more than one type
          d.   DK

                                                     If SP cannot give one answer enter
                                                     "m" for "more than one type."

9-33

IF SP CANNOT PROVIDE USUAL TYPE, ENTER m.

```
    1.  whole/regular
    2.  2%/low fat
    3.  1%
    4.  skim/nonfat
    5.  buttermilk
    6.  evaporated
    7.  other

    m.  more than one type
    d.  DK
```

m   ◄—   Entered

ENTER ONE OF THE TYPES HERE:

```
    1.  whole/regular
    2.  2%/low fat
    3.  1%
    4.  skim/nonfat
    5.  buttermilk
    6.  evaporated
```

ENTER ONE OF THE TYPES HERE:

```
    1.  whole/regular
    2.  2%/low fat
    3.  1%
    4.  skim/nonfat
    5.  buttermilk
    6.  evaporated
```

1   ◄—   "1" is entered here. Note in-
                                                            structions below.

ENTER THE SECOND TYPE HERE. (IF ONE OF THE TYPES IS other, DO NOT
ENTER 7. other UNTIL ALL THE REST HAVE BEEN ENTERED):

[ALREADY ENTERED: 1] ◄— Previous response   └ "Other" should be entered last

```
    1.  whole/regular
    2.  2%/low fat
    3.  1%
    4.  skim/nonfat
    5.  buttermilk
    6.  evaporated
    7.  other
```

```
        2.  2%/low fat
        3.  1%
        4.  skim/nonfat
        5.  buttermilk
        6.  evaporated
        7.  other
```

4   ◄—— Second type entered

IF SP SPECIFIED A THIRD TYPE, ENTER HERE; IF NOT, ENTER 0. ◄——
(DO NOT ENTER 7. other UNTIL ALL THE REST HAVE BEEN ENTERED):   note instruction

[ALREADY ENTERED: 1 and 4]   ◄—— Previous responses

```
        0.  no others

        1.  whole/regular
        2.  2%/low fat
        3.  1%
        4.  skim/nonfat
        5.  buttermilk
        6.  evaporated
        7.  other
```

```
        0.  no others

        1.  whole/regular
        2.  2%/low fat
        3.  1%
        4.  skim/nonfat
        5.  buttermilk
        6.  evaporated
        7.  other
```

7   ◄—— Third response is "7", Other

SPECIFY OTHER TYPE(S) OF MILK SP USUALLY DRINKS. LIST EACH ON A SEPARATE
LINE. DO NOT LIST:

```
        chocolate
        whole/regular
        2%/low fat
        1%
        skim/nonfat
        buttermilk
        evaporated
```

                                           ◄—— After entering first answer, press
_? acidophilus   RETURN. A "?" will appear.
                                                Enter "other" response or, if no
                                                "other", press RETURN (NULL
                                                response)

9-35

08318805-0\FOOD\\helen lewis\13\\   Note →   138

(Over the past month, how often did you have....)

h. Fish including fillets, fish sticks, fish sandwiches
    and tuna fish?

                                          OR 0 0 = never
(number)   **Current Question**
                                          OR 0 d = DK

#? -

                                              ←   **If SP wants to know "how often**
                                                     did I say I ate shrimp?" back
                                                     up by hitting "-" and RETURN.

08318805-0\FOOD\\helen lewis\13\\   Note →   137

(Over the past month, how often did you have....)

h. Fish including fillets, fish sticks, fish sandwiches
    and tuna fish?

                                          OR 0 0 = never
(number)
                                          OR 0 d = DK

#? -   ←   **Back up again for # of times.**
                                                     Hit "-" only (Not RETURN).
Previous Response Was: 137 :2
        1. per day   2. per week   3. per month

                                              Answer was per week

Screen 7C

```
08318805-0\FOOD\\helen lewis\13\\                                    Note ➤   136
Previous Response Was: 136 :1              ◄── Once per week was previous
                                                answer
(Over the past month, how often did you have....)

g.  Shrimp, clams, oysters, crab and lobster?

                                           OR  0 0 = never
(number)
                                           OR  0 d = DK

#?
```

If SP changes an answer, simply re-enter. If not, hit "+" to go forward one screen or "*" to go forward to where you were.

Screen 7D

```
08318805-0\FOOD\\helen lewis\13\\                                           137
Previous Response Was: 136 :1

(Over the past month, how often did you have....)

g.  Shrimp, clams, oysters, crab and lobster?

                                           OR  0 0 = never
(number)
                                           OR  0 d = DK

#? +    ◄──    Goes forward only one screen. You may change the interval at this time. Otherwise,
               enter "+" to return to screen 138.
Previous Response Was: 137 :2
          1.  per day            2.  per week            3.  per month
```

9-37

```
09018801-1\FOOD\\stephanie daniels\12\\                              206
Previous Response Was: -

Now I'm going to ask how often you ate certain cereals.  (over the past month.)

c.   How about All-Bran, 100% Bran, and Fiber One?

                                       OR   0  0 = never
(number)
                                       OR   0  d = DK

                                       OR   0  h = summary of milk consumption

#?
```

SP: "How often did I say I used   HELP Screen available on all
milk?" (Enter "h", RETURN)   cereal questions.

```
09018801-1\FOOD\\stephanie daniels\12\\                              214


SP'S PREVIOUS REPORT ON MILK ◄ Note
CONSUMPTION, INCLUDING USE ON CEREAL:     Answer ►   "3 TIMES PER DAY"


PRESS A0 TO CONTINUE.

?
```

09018801-1\FOOD\\stephanie daniels\12\\   256

7. FATS

How often were these items added to your foods after preparation?
For example, this would include on top of vegetables or baked potatoes
or as a spread on bread. (Over the past month.)

a. Margarine?

                                              OR 0 0 = never
(number)
                                              OR 0 d = DK

                                              OR 0 h = summary of bread consumption

#?

        SP: "How often did I say I ate bread?"   Use HELP Screen

---

09018801-1\FOOD\\stephanie daniels\12\\   260

SP'S PREVIOUS REPORT ON BREAD CONSUMPTION:

        WHITE BREAD, ROLLS, BAGELS, BISCUITS, ENGLISH
        MUFFINS, AND CRACKERS (INCLUDES SANDWICHES):   "ONCE PER DAY"

        DARK BREADS AND ROLLS, INCLUDING WHOLE WHEAT,
        RYE, AND PUMPERNICKEL: "2 TIMES PER MONTH"

        CORN BREAD, CORN MUFFINS, AND CORN TORTILLAS: "NEVER"

PRESS A0 TO CONTINUE.

?

                                    Shows consumption on the three
                                    questions above only. Notice that
                                    "NEVER" shows up also.

```
1-7\FOOD\\sam\16\\                                                    262
```

(Over the past month, how often did you add these to foods after preparation?)

c. Oil and vinegar, mayonnaise and salad dressings such as Italian and
    Thousand Island, including those added to salads and sandwiches?

(number)   OR Û 0 = never

                                  OR Û d = DK

                                  OR Û h = summary of salad and bread
                                              consumption

#?

```
09018801-1\FOOD\\stephanie daniels\12\\                               264
```

SP'S PREVIOUS REPORT ON TOSSED SALAD CONSUMPTION: "DON'T KNOW"

PRESS ⏎ TO CONTINUE.

?

Screen 11A

08318-0\FOOD\\george\14\\   226

(Over the past month, how often did you have....)

1. Salted snacks such as potato chips, taco chips, corn chips,
    and salted pretzels and popcorn?

                                                OR   0 0 = never
(number)
                                                OR   0 d = DK

#? c
c? eats popcorn once a day but does not add salt- did not include in this
? count of snacks   ◄── Enter "c"
?   ◄──   Continue or hit RETURN if comment is "complete.

_____

Screen 11B

08318-0\FOOD\\george\14\\   227

(Over the past month, how often did you have....)

1. Salted snacks such as potato chips, taco chips, corn chips,
    and salted pretzels and popcorn?

                                                OR   0 0 = never
(number)
                                                OR   0 d = DK

#? c
c? eats popcorn once a day but does not add salt- did not include in this
? count of snacks
? 2   ◄──   Must hit RETURN (NULL response) to get out of comment mode.
?
Comment received -- please respond again
#? 2

           1. per day   2. per week   3. per month

9-41

Screen 11C

(Over the past month, how often did you have....)

g. Cheese, all types including American, Swiss, cheddar, and cottage cheese?

```
                                          OR  0  0 = never
(number)
                                          OR  0  d = DK
```

```
#? c
c? sp is not sure whether the type of cheese that she eats is real or imitation
she says that the name ? of the cheese is queso nueva
?                note                    .
Comment received -- please respond again
#? 2
```

Interviewer should hit RETURN near the end of line to prevent prompt from appearing in middle of second sentence.

```
       1.  per day           2.  per week          3.  per month
```

Screen 11D

Previous Response Was: 116 :2

(Over the past month, how often did you have....)

g. Cheese, all types including American, Swiss, cheddar, and cottage cheese?

```
                                          OR  0  0 = never
(number)
                                          OR  0  d = DK
```

```
#? c
c? previous response did not include the questionable type of
? cheese that was mentioned in previous note
?                                    ◄─   NULL response to continue
```

Interviewer backed up to enter additional comment to clarify. The first comment (in S-11C) will not appear; however, both comments will be saved in the verbatim file.

```
08318-0\FOOD\\marsha smith\15\\                                          999s
120 : z'd-out  from: 120
08318-0\FOOD\\marsha smith\15\\
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

YOU HAVE INITIATED THE Z-OUT (TERMINATION) SEQUENCE.  PLEASE ENTER:

          -    IF YOU GOT HERE BY ACCIDENT.
          1.   IF THIS IS AN INTERRUPTED (PARTIAL) INTERVIEW.
          2.   IF THIS IS A REFUSAL.
```

This is the screen you will see
if you "Z-OUT by typing Z.
You may back up if it was an
error. By entering either 1
or 2 you will go on to the next
screen.

```
08318-0\FOOD\\marsha smith\15\\                                          275
120 : z'd-out  from: 120
08318-0\FOOD\\marsha smith\15\\
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
Previous Response Was: 275 ;1

9.  QUALITY OF FOOD FREQUENCY INTERVIEW.

          1.   reliable
          2.   unreliable
          3.   refusal
```

Evaluate quality of interview up
until you "Z-ed OUT." Only use
refusal if you were unable to
obtain any information at all.

```
08318-0\FOOD\\marsha smith\15\\                                    275a
120 : z'd-out  from: 120
08318-0\FOOD\\marsha smith\15\\
------------------------------------------------------------------
Previous Response Was: 275 :3

9.   QUALITY OF FOOD FREQUENCY INTERVIEW.

            1.   reliable
            2.   unreliable
            3.   refusal

2

COMMENTS REQUIRED:

_? sp seemed confused and unable to understand how to answer the questions
?
```

If 2 or 3 are selected, a comment
is mandatory.

```
08318-0\FOOD\\marsha smith\15\\                                    999f
120 : z'd-out  from: 120
08318-0\FOOD\\marsha smith\15\\
------------------------------------------------------------------

PREVIOUS COMMENTS:

sp said that brother is very upset and needs take him home right  ◄ Comment from
now -sp is also very upset -can't convince her to finish            1st "Z-OUT"

ADDITIONAL COMMENTS, INCLUDING REASON FOR Z-ING OUT:

_? sp came in the room and asked to finish then got up and left again
? I'm reluctant to try anymore
?                                                    ┃
                                                     ┃_____ Comment from
                                                              second "Z-OUT"
```

```
08318-0\FOOD\\marsha smith\15\\                                          999m
   2D:2
   5 :15
   7 :2
 999 : 120
 999f: sp heard brother crying in the hall and wanted to see him -said that
 she would return
 102 :d
 103 :1
 -------------------------------------------------------------------------

    D O W N L O A D I N G
 INTERVIEW FILE CLOSED -- PRESS RETURN TO CONTINUE
```

Last screen before downloading

```
8/10/87   Leased to: NATIONAL CENTER FOR HEALTH STATISTICS CONTRACTOR          2A
waiting for next sample point
..............
08318-0\FOOD\\marsha smith\15\\


PLEASE SELECT:

          ◢| to proceed with the FOOD FREQUENCY interview.

          z if you have the wrong interview or wrong SP #.

?
```

**To restart the interview, enter
SP's sample number. SP name an
age will appear at the top of the
screen.**

```
08318-0\FOOD\\marsha smith\15\\                                    2ξ

CONFIRM NAME OF SAMPLE PERSON:                                     ɔρ

Are you marsha smith?

        1.  Yes
        2.  No
```

**Confirm that this is the correct
SP.**

```
08318-0\FOOD\\marsha smith\15\\                                    ɛɒ

COMMENTS FROM PREVIOUS PARTIAL INTERVIEW:

sp heard brother crying in the hall and wanted to see him -said that
she would return
Z'D OUT FROM: 120                              ◄
```

**nis is where to start. Comment
vailable to review if necessary.**

```
DO YOU WISH TO...

        1.  start at the beginning?
        2.  start somewhere other than the beginning?
        9.  quit?
        h.  look at the Summary Help Screen first?
```

08318-0\FOOD\\marsha smith\15\\   2G

COMMENTS FROM PREVIOUS PARTIAL INTERVIEW:

sp heard brother crying in the hall and wanted to see him -said that
she would return
Z'D OUT FROM: 120

DO YOU WISH TO...

            1.   start at the beginning?
            2.   start somewhere other than the beginning?
            9.   quit?
            h.   look at the Summary Help Screen first?

2   ◄── Entered
WHAT IS THE SCREEN NUMBER WHERE YOU WISH TO START?

[NOTE: In some cases you will be taken directly to the question you have
requested. In others you will be taken to the beginning of a group of
related questions.]

? 120
?   ◄── Enter screen number;
                                                    ◄── Then NULL response to continue

---

08318-0\FOOD\\marsha smith\15\\   Note ➤ 120

2. MAIN DISHES, MEAT, FISH, CHICKEN AND EGGS

Next are main dishes, meat, fish, chicken and eggs.

a. How often did you eat any type of stew or soup containing vegetables,
    including minestrone, tomato, and split pea? (Over the past month.)

                                        OR 0 0 = never
(number)
                                        OR 0 d = DK

#?

09018801-1\FOOD\\stephanie daniels\12\\   274

8. Have I missed any other foods or beverages that you had at least once per
    week in the past month?

IF YES, SPECIFY ONE ITEM HERE.   OR   0 0 = no others
(IF NECESSARY, ASK WHICH.)

_? hummus
?

                                            Be sure to enter only one food at
                                            a time.

09018801-1\FOOD\\stephanie daniels\12\\   274b

How often did you have hummus? (Over the past month.)

(number)   OR   0 d = DK

#? 3   ◄   Enter number of times and
                                   interval.
        1. per day   2. per week   3. per month

```
09018801-1\FOOD\\stephanie daniels\12\\                                    274c

Have I missed any other foods or beverages that you had at least once
per week?  (Over the past month.)


IF YES, SPECIFY ONE ITEM HERE.              OR   0 0 = no others
(IF NECESSARY, ASK WHICH.)

_? hummus
? prunes
?
```

Interviewer accidentally entered
two foods before getting
frequency of first. Note text of
question in Screen 14D.

```
09018801-1\FOOD\\stephanie daniels\12\\                                    274d

How often did you have hummus
prunes?  (Over the past month.)


(number)                              OR   0 d = DK

#?
```

9.8 Quality Control for the Food Frequency

As with the 24-hour recall, quality control for the food frequency will be done by field observation and tape recording of interviews. After receiving permission from the SP or proxy, the interviewer will record the first food frequency of the stand. The CASS system does not allow the interviewer to go back into the system and edit; however, you will be expected to edit your hard copy interviews. Field observation and review of tapes will include evaluation of the introduction and confidentiality statement, mannerism and eye contact, use of neutral probes, proper use of the automated system, and review of the dietary logs.

Food frequency interviews done on CASS will be evaluated in the home office to look for problem interviews (incompletes, refusals, etc.), trends in selecting certain codes, additional food items and notes, and comments.

Interviewers will be expected to edit every hard copy interview. Editing should be done in blue pencil and should include the following:

- Make sure that every answer has a number of times recorded and an interval code (unless it is "never" or "don't know");

- Make sure that "other" responses are legible and complete;

- Check to see that no questions were missed and that skips were done correctly;

- Notes in the margin should be legible and complete;

- The front sheet should be filled out completely;

- Your comments should be legible and, if in the margin, in parentheses;

- If the interview is anything other than reliable, a comment must be attached.

Each hard copy interview should be scan-edited immediately after completing the interview, while the SP is still in the room. If you have time to enter the interview into CASS as soon as the SP leaves the room, it is preferable to do so; otherwise, complete a thorough edit as soon as possible.

10.0   NON-EXAM FIELD PROCEDURES

10.1   Daily Appointment Schedule

During the pilot phase of NHANES III a hard copy Daily Appointment Schedule was maintained; however, some time during the main study, the hard copy schedule may be phased out and replaced with an automated version.

Each day, the coordinator will give you a copy of the schedule for the next exam day. The Daily Appointment Schedule will be a typed copy providing the name, age and sample number for each examinee for that day (Exhibit 10-1). It also lists the number of examinees that are expected for the session. In most cases the number of examinees per session will be ten.

There are three basic purposes for the Daily Appointment Schedule. First, this list should be used to verify your entries in your Dietary Interviewer Log (Section 10.3); check the SP number and name you recorded for accuracy. Second, use the Daily Appointment Schedule after each session to verify that all SPs have been interviewed. Since you will administer the 24-hour recall to only half the SPs examined per session, it is very important that you check off (_) the SP's name on your schedule once he/she has been interviewed. Before leaving the MEC, after completing your share of the interviews for the session, meet with your dietary counterpart to assure that all names on the schedule have a check mark. And third, the schedule is used to verify the SP's fasting status. The column describing the fasting status of each examinee does not have a heading, but is located in the column prior to the NCHS number. Since you are interested only in those SPs in the morning session who have fasted for 12 hours, look for the symbol "S" in the appropriate column which indicates that a "standard" 12-hour fast was requested of that individual. After referring to the fasting status information, determine whom you are to ask the fasting status question.

At times, changes will be made to the schedule. Be sure to make any necessary deletions or additions to your copy so that you have the updated and correct version.

10.1.1   Surplus and Replicate SPs

The Daily Appointment Schedule should also be used to determine if there are any "surplus" or "replicate" SPs. Sometimes the field office finds it necessary to allow a family member to participate in the study who was not actually selected as part of the sample. This occurs occasionally when, for instance, the children and mother of a particular household were selected as participants, but the father was not. The father may refuse to allow the other household members to participate in the study unless he is also examined. So that the study will not lose those SPs, the father is allowed to participate as a surplus examinee. He receives the results from his examination; however, they are not included in the actual study data. You do not need to conduct dietary interviews on surplus examinees. If one should

Exhibit 10-1. Daily appointment schedule

NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY   1
                    DAILY APPOINTMENT SCHEDULE FOR STAND 882
                         FOR WEDNESDAY OCTOBER 19, 1988

APPT TIME		NCHS NUMBER			AGE/SEX /LANGUAGE			NAME	TRANS	RMKS
08:15 AM	S	882	001	4	68	F	E	ROSA PONSELLE	S	
08:15 AM	S	882	002	2	69	M	E	BORIS CHALIAPIN	S	*
08:30 AM	U	882	029	4	1	M	E	LEONARD WARREN	S	
08:30 AM	S	882	049	9	85	M	E	RICHARD TUCKER	T	

APPT TIME		NCHS NUMBER			AGE/SEX /LANGUAGE			NAME	TRANS	RMKS
06:00 PM	U	882	041	3	4	F	E	NELLIE MELBA	S	
06:00 PM	U	882	056	1	8m	M	E	EZIO PINZA	S	
06:00 PM	U	882	087	1	30m	F	E	KIRSTEN FLAGSTAFF	S	
06:00 PM	M	882	094	4	77	F	S	GLADYS SWARTHOUT	S	*
06:00 PM	M	883	095	2	24	F	E	LILY PONS	S	

specifically request the dietary component, conduct the interview if there is time. Priority, though, should be given to actual SPs. (Surplus SPs who were not interviewed should be entered into the system with the code "not interviewed" and a note stating that the examinee was a "surplus SP.")

During each stand, SPs (in a specific age range) are asked if they would be willing to return to the MEC to be examined again. SPs who agree to return are considered "replicates." Unlike surplus examinees, replicates should receive the dietary interview since the reason for doing replicate exams is to study the variability in diet for the same person.

10.2   The Control Record

During the pilot phase of the study, a hard copy Control Record was utilized. During the main study, the hard copy Control Record may be phased out and replaced with an automated version; however, the hard copy would be used if the automated management system went down. The Control Record is an NCHS master form for summarizing information about all the procedures performed and questionnaires administered to an SP. The coordinator uses this form to direct the SP to various stations in the MEC. Furthermore, the coordinator uses this form to determine whether all procedures and questionnaires that should be administered have been completed. A copy of the Control Record is shown in Exhibit 10-2.

Column (1) lists the 22 procedures that may be administered to an SP. Column (2) indicates the age group for which the procedure is relevant. The dietary interviewer is responsible for completing the information for Procedure #4, "24-Hour Recall" on all SPs, and for procedure #13, the "Food Frequency." The latter, however, is only applicable to those SPs 12-16 years old. You should record the time the interview began (column 3) and ended (column 4) in hours and minutes using a zero fill if necessary. "Time-in" refers to the time you began entering information on the Recall Header. "Time-out" indicates the time at which the interview ended. Enter your four-digit interviewer ID number in column (5).

Exhibit 10-2. Control Record

CONTROL RECORD

NOTICE - Information contained on this form which would permit identification of any individual or establishment has been collected with a guarantee that it will be held in strict confidence, will be used only for purposes stated for this study, and will not be disclosed or released to others without the consent of the individual or the establishment in accordance with section 308(d) of the Public Health Service Act (42 USC 242m).

Sample No	a. Age ☐ Mos ☐ Yrs	b. ☐ Male ☐ Female	c. Coordinator	d. Examination Date ___/___/___ Month Day Year
e. Date of Birth ___/___/___ Month Day Year	f. Temperature	g. GTT priority	PREGNANT: ☐ YES - NO BONE SCAN ☐ DK - NO BONE SCAN ☐ NO	

Name (First, Middle, Last)

Procedure	Age Group	Time In	Time Out	Staff
Physician's Exam	All	___:___	___:___	___
Body Measurements	All	___:___	___:___	___
MEC Interview	All	___:___	___:___	___
24-hour Recall	All	___:___	___:___	___
Venipuncture	1 and older	___:___	___:___	___
Dentist's Exam	1 and older	___:___	___:___	___
Urine Specimen	6 and older	___:___	___:___	___
Allergy Test	20-59 Even 6-19 All	___:___	___:___	___
Audiometry/Tympanometry	6-19	___:___	___:___	___
WISC and WRAT	6-16	___:___	___:___	___
Spirometry	8 and older	___:___	___:___	___
Exit Interview	12 and older	___:___	___:___	___
Food Frequency	12-16	___:___	___:___	___
Bone Densitometry	20 and older	___:___	___:___	___
Gallbladder Ultrasound	20-74	___:___	___:___	___
CNS	20-59 Odd	___:___	___:___	___
ECG	40 and older	___:___	___:___	___
Fundus Photography	40 and older	___:___	___:___	___
Glucose Challenge	40-74	___:___	___:___	___
Venipuncture 2	40-74	___:___	___:___	___
Joint Radiographs	60 and older	___:___	___:___	___
Performance Test	60 and older	___:___	___:___	___

PHS 6300
Rev 3-89   TIME IN: _____   TIME OUT: _____

10.2.1 Result Codes

You are responsible for writing a result code for the 24-hour recall and food frequency on the hard copy Control Record. Exhibit 10-3 lists the result codes and the specifications for dietary interviews. At the end of each examination session, the MEC coordinator will enter these final result codes into his/her computer.

10.3   Completing the Dietary Interviewer Log

The Dietary Interviewer Log (Exhibit 10-4) serves two purposes; it provides certain information to NCHS and Westat and also serves as a record keeping mechanism for you. Since only eight SPs can be listed per log, use one Dietary Interviewer Log per session. Use a black pen when filling out the logs; otherwise, it is very difficult to read xeroxed copies transmitted to NCHS (Section 10.5).

In the upper left-hand corner, record your name and ID number, the interview date, and circle the day the interviews were completed. Note that you must fill in the "page ___ of ___" located in the upper right-hand corner to document how many pages were used for that day.

A folder which contains the Control Record accompanies each SP throughout his/her examination in the MEC. Included in this folder is a sheet of printed stickers with the SP's identification number. To record the SP number on your log, peel a sticker from this sheet and place it in first column labeled "SP number." Any SP who came into the MEC for an examination, but was "not interviewed" by a dietary interviewer due, for example, to lack of time, a severe language problem, etc., must be accounted for on one of the two Dietary Interviewer Logs. Decide which interviewer will enter the SP number into the system with the "not interviewed" code and, subsequently, record the number on his/her log. Also, should an examination day be cancelled for whatever reason, e.g., the doctor was sick, no SPs showed for their scheduled appointments, a holiday, etc., you should complete a log (fill in the date, etc.) for that day and specify the reason why no interviews were conducted. Sometimes information regarding cancelled sessions is not conveyed to the NCHS staff member reviewing the logs which makes for some confusion.

Exhibit 10-3. Result codes and specifications

October 19, 1989

DIETARY INTERVIEWS

Result Code**	Category	Instructions
110	Interview Complete	Dietary interview procedures completed. Code "Complete" even if data retrieval is unfinished or if the interview is "unreliable".
111	Interview Incomplete	Code "Incomplete" if SP left dietary station before completing the dietary interview due to personal time constraints and there is no chance of conducting data retrieval. (e.g. no telephone)
113	Refused or Uncooperative	SP initiated non-response. SP refused dietary interview or would not comply with instructions from the dietary interviewer. Also, if SP leaves because SP or family member became ill, or SP comes late and no data were collected.
114	Out of Time	SP comes on time; Adequate staff in MEC; It's the end of session and no time to conduct the interview.
115	Physically Unable to Cooperate	Seldom used for dietary component. Code reserved for instances when a physical problem such as massive obesity prevents SP from completing a component—could not fit in chair, office, etc.
116	SP Unable to Understand Instructions	Code if unable to conduct the dietary interview due to language, mental, or handicap condition (deaf, mute, etc.) and a proxy is not available.
117	Equipment Problem	Use this code if the recall was not saved and a hard copy interview was not obtained. Printer problems not included.
118	Other Reasons	Code reserved for special circumstances such as when the MEC closes early due to an emergency or SP sent home by the physician and above categories cannot be used for coding. Explain in comments.
210	Done at prior session	SP rescheduled and dietary interview was completed at the previous visit.

Note.** Result codes: Coordinator

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Exhibit 10-4. Dietary Interviewer Log

DIETARY INTERVIEWER LOG

Interviewer ____

Interview Date ___/___/___

Day M Tu W Th F Sa Su

* Interview taped

Session Backup AM ____ PM ____ EVE ____

Date Sent ___/___/___

SP Number (circle for verification)	24-Hour Recall							Food Frequency		Additional Information
	In	Out	Proxy P SP/P	Outstanding Work	Date Completed	Orig Edit	Final Edit	In	Out	
	..	..						..	..	
	..	..						..	..	
	..	..						..	..	
	..	..						..	..	
	..	..						..	..	
	..	..						..	..	
	..	..						..	..	
	..	..						..	..	

Comments _____

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10-7

The first section of the Dietary Interviewer Log labeled "24-Hour Recall" is composed of four parts: interview time, proxy information, outstanding work, and edit status. Record the time that you began the interview under "In," and when you have completed the interview, record the time under "Out." The time-in and time-out columns can be used to enter two separate times (one above the other) if an SP/proxy interview took place. The times recorded should be the length of the actual interview conducted in the MEC.

The next column is for proxy interviews only. Check "P" if the interview was conducted through a proxy with no assistance from the SP; whereas "SP/P" should be checked when both the SP and proxy participated in the interview.

"Outstanding work," as its name implies, refers to any work still pending for a specific SP. This may include searching the system for a missing food, data retrieval, completing a Request Form, or the need to check a grocery store for a specific detail about a food item. Due to limited space, enter the tasks pending by using abbreviations, such as "DR" for data retrieval, "MF" for missing food, etc. This column is not intended for duplicating notes already entered into the DDC, but rather to provide you with a clearer picture of the amount of work left to be done and allow you to organize your time appropriately. If more space is required, use the area entitled "additional information." Once the work has been completed, indicate the date in the next column. "Outstanding work" and "date completed" can be ignored for those interviews where no additional work is needed.

The next section of the log is for recording the status of the edit process. It is important to keep up-to-date and accurate information on the edit status. Depending upon whether a recall has work pending, the edit may consist of two parts, the "original edit" and the "final edit." The original edit is the first edit of the entire interview, ideally completed immediately following the interview, or as soon as possible thereafter. When additional information is collected (e.g., data retrieval) which results in changes to the original edited version, a second or "final edit" is necessary to assure that the recall has again been reviewed in its entirety. Therefore, "original edit" should be checked for all recalls; "final edit" may or may not also be checked depending on the individual situation.

The second section labeled "Food Frequency" is self-explanatory. Simply enter the time the interview began and ended.

There are two areas to record additional comments, one entitled "additional information" and the other "comments." The "additional information" area is to be utilized for specific information and/or problems related to the SP, interview, DDC (aborts), and/or FF. Documentation concerning hard copy interviews should also be included here, for example, "Done on hard copy - entered into system on xx/xx/xx" or "Not entered into system due to ...." In addition, use this area to note when the hard copy recall of a sibling was used during a multiple interview by recording something like "Used Recall Report of SP# xxxxxxx to enter into system." If it is unclear whether a comment refers to the recall or FF, preface the notation with "FF" or "recall." The comments area may be used for more general comments, such as insufficient disk space, etc. Feel free to use this space for your own convenience.

"Session Backup" and "Date Sent" are located in the upper right-hand corner of the log. Section 10.4 explains these two procedures. In short, it is critical that you back up (make a copy of) the data at the end of each interview session. And, once all data retrieval has been completed and the interviews thoroughly edited for a specific day, it is imperative to remove (send) the recalls from the PC to the VAX via the main menu. Simply check the appropriate session "am," "pm," or "eve" when recalls for that session have been backed-up, and record the month, day and year once the recalls have been sent.

Two other very important places of information must be available on your logs. First, circle the SP number of the interview given to your dietary counterpart for verification. Second, put an asterisk beside the interview recorded for quality control purposes. You only need to tape one recall and one food frequency per stand. Also, it is helpful for reviewing purposes to place a bracket around multiple interviews indicating whether it was a double, triple, etc.

10.4   Procedure for Backing Up and Removing (Sending) Recalls

Prior to this point, selection numbers 3 (End of session data backup) and 4 (Remove recalls from PC to the VAX) on the dietary interview menu have been alluded to briefly. Both of these features, simply speaking, deal with storing the recalls collected in a second location.

-   End of Session Data Backup

        To prevent the loss of data, a mechanism was developed to duplicate the recalls saved on the Vaxmate. When you select number 3 (End of session data backup) on the dietary interview menu, at the end of the examination session, all original and edited recalls are duplicated and saved on the mini computer (VAX) in the back of the MEC.

        Since you frequently need to return to a previous interview to enter further data, e.g., data retrieval information, intermediate versions of recent interviews may be accessed by setting the correct active day, and retrieving the recall through the edit mode. When editing, it is extremely important to set the proper active day; however, the mechanism for backing up data functions differently. Newly created (original) and modified recalls are duplicated regardless of active day. Final edited recalls will replace, e.g., copy over, the intermediate versions that had been previously backed up. Recalls that have been backed up once will not be backed up again unless they have been changed. In this way, several edited versions do not accumulate. Thus, in addition to the original recall, the final edited version is the one ultimately retained as a duplicate on the VAX.

        Backing up data is an easy process; simply enter number 3 (End of session data backup) at the choice prompt on the dietary interview menu.

-   Removing Recalls From PC to the VAX

        Since the Vaxmate has a finite space allotted for saving output files (recalls), a mechanism was developed to prevent the accumulation of recalls. When too many recalls are saved on the Vaxmate, the system has a tendency to decrease its efficiency in processing data by slowing down. Selection number 4 (Remove recalls from PC to the VAX) on the dietary interview menu was developed not only as a means to prevent this accumulation, but also to function as a means for saving the recalls in an efficient manner for easy shipment to NCHS.

        There are two very significant differences between "backing up" and "removing." As you recall, the back up feature does not require setting a specific active day. In addition, after its use, you are still able to retrieve a recall should further editing be necessary. However, when menu selection number 4 is entered, it is not only necessary to set the active day, but you must be aware that he/she will not be able to access those recalls again for further editing; they are essentially erased from the Vaxmate memory. Therefore, this selection is used only when you has completed all follow-up work necessary for an active day's interviews. In other words, all recalls for that specific active day are in their final form for shipment to NCHS for processing.

The procedure for removing (or sending) the recalls to the VAX is also very easy. A two-step process is required; first enter number 4 at the choice prompt on the dietary interview menu, then select the active day desired on the following menu. The interviewer should try to complete this process within a few days of the final collection of the recall, a week at the latest.

At the end of each stand, part of study protocol requires that you check to make sure that all recalls have been removed from the hard disk of the computer prior to your departure. Use selection number 7 on the dietary interview menu to verify that all recalls have been removed.

10.5   Transmittal of Data to NCHS

Each week a great deal of administrative and data collection paper forms accumulate. These forms include: (1) Recall Reports, (2) Food Frequencies, (3) Request Forms and Market Check Forms, (4) Dietary Interviewer Logs, (5) Malfunction Report Forms, (6) Verification Problem Sheets, (7) DDC problem screens (explained shortly), (8) the taped Food Frequency with the hard copy if conducted in Spanish, and (9) the taped 24-hour recall with a second copy of the Recall Report. To prevent the loss of important data, it is essential to keep all forms as organized as possible in your dietary room.

Since these forms need to be reviewed at NCHS on a regular basis and to avoid excessive accumulation of these forms in the field, a systematic process is followed weekly to transmit forms to NCHS from the MEC. The MEC manager is responsible for overseeing this process and he/she will notify you of the transmittal date.

There are two types of transmittal forms of which you should be aware. The NCHS transmittal form (Exhibit 10-5) is printed in triplicate and consists of a white, pink, and yellow copy. On the other hand, the NHANES III Record of Data Transmittal (Exhibit 10-6) consists of just one printed form. Depending on the type of dietary data, one of these two forms will be utilized. The following describes the transmittal process for the dietary component:

Use the NCHS transmittal form to send:

1.   Recall Reports (printed recalls),

2.   Food Frequencies (both English and Spanish), and

3.   Request Form/Market Check Forms

Exhibit 10-5. NCHS transmittal form

PHS-4184
Rev. 7/88

DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE
Centers for Disease Control
National Center for Health Statistics

NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY III
RECORD OF TRANSMITTAL

TO:

Box Number(s)	DATE	STAND NUMBER
	TOTAL NUMBER OF RECORDS	
	TOTAL NUMBER OF BOXES	
	COMPLETED BY	

Here are the _____ For _____
(Type of Record)   (Deck Number)   (Stand Location)

Examinations were conducted from _____ through _____
(Date)   (Date)

Sample numbers of records included are circled below:

001	041	081	121	161	201	241	281	321	361	401	441	481	521	561	601	641	681	721	761	801	841	881	921	961
002	042	082	122	162	202	242	282	322	362	402	442	482	522	562	602	642	682	722	762	802	842	882	922	962
003	043	083	123	163	203	243	283	323	363	403	443	483	523	563	603	643	683	723	763	803	843	883	923	963
004	044	084	124	164	204	244	284	324	364	404	444	484	524	564	604	644	684	724	764	804	844	884	924	964
005	045	085	125	165	205	245	285	325	365	405	445	485	525	565	605	645	685	725	765	805	845	885	925	965
006	046	086	126	166	206	246	286	326	366	406	446	486	526	566	606	646	686	726	766	806	846	886	926	966
007	047	087	127	167	207	247	287	327	367	407	447	487	527	567	607	647	687	727	767	807	847	887	927	967
008	048	088	128	168	208	248	288	328	368	408	448	488	528	568	608	648	688	728	768	808	848	888	928	968
009	049	089	129	169	209	249	289	329	369	409	449	489	529	569	609	649	689	729	769	809	849	889	929	969
010	050	090	130	170	210	250	290	330	370	410	450	490	530	570	610	650	690	730	770	810	850	890	930	970
011	051	091	131	171	211	251	291	331	371	411	451	491	531	571	611	651	691	731	771	811	851	891	931	971
012	052	092	132	172	212	252	292	332	372	412	452	492	532	572	612	652	692	732	772	812	852	892	932	972
013	053	093	133	173	213	253	293	333	373	413	453	493	533	573	613	653	693	733	773	813	853	893	933	973
014	054	094	134	174	214	254	294	334	374	414	454	494	534	574	614	654	694	734	774	814	854	894	934	974
015	055	095	135	175	215	255	295	335	375	415	455	495	535	575	615	655	695	735	775	815	855	895	935	975
016	056	096	136	176	216	256	296	336	376	416	456	496	536	576	616	656	696	736	776	816	856	896	936	976
017	057	097	137	177	217	257	297	337	377	417	457	497	537	577	617	657	697	737	777	817	857	897	937	977
018	058	098	138	178	218	258	298	338	378	418	458	498	538	578	618	658	698	738	778	818	858	898	938	978
019	059	099	139	179	219	259	299	339	379	419	459	499	539	579	619	659	699	739	779	819	859	899	939	979
020	060	100	140	180	220	260	300	340	380	420	460	500	540	580	620	660	700	740	780	820	860	900	940	980
021	061	101	141	181	221	261	301	341	381	421	461	501	541	581	621	661	701	741	781	821	861	901	941	981
022	062	102	142	182	222	262	302	342	382	422	462	502	542	582	622	662	702	742	782	822	862	902	942	982
023	063	103	143	183	223	263	303	343	383	423	463	503	543	583	623	663	703	743	783	823	863	903	943	983
024	064	104	144	184	224	264	304	344	384	424	464	504	544	584	624	664	704	744	784	824	864	904	944	984
025	065	105	145	185	225	265	305	345	385	425	465	505	545	585	625	665	705	745	785	825	865	905	945	985
026	066	106	146	186	226	266	306	346	386	426	466	506	546	586	626	666	706	746	786	826	866	906	946	986
027	067	107	147	187	227	267	307	347	387	427	467	507	547	587	627	667	707	747	787	827	867	907	947	987
028	068	108	148	188	228	268	308	348	388	428	468	508	548	588	628	668	708	748	788	828	868	908	948	988
029	069	109	149	189	229	269	309	349	389	429	469	509	549	589	629	669	709	749	789	829	869	909	949	989
030	070	110	150	190	230	270	310	350	390	430	470	510	550	590	630	670	710	750	790	830	870	910	950	990
031	071	111	151	191	231	271	311	351	391	431	471	511	551	591	631	671	711	751	791	831	871	911	951	991
032	072	112	152	192	232	272	312	352	392	432	472	512	552	592	632	672	712	752	792	832	872	912	952	992
033	073	113	153	193	233	273	313	353	393	433	473	513	553	593	633	673	713	753	793	833	873	913	953	993
034	074	114	154	194	234	274	314	354	394	434	474	514	554	594	634	674	714	754	794	834	874	914	954	994
035	075	115	155	195	235	275	315	355	395	435	475	515	555	595	635	675	715	755	795	835	875	915	955	995
036	076	116	156	196	236	276	316	356	396	436	476	516	556	596	636	676	716	756	796	836	876	916	956	996
037	077	117	157	197	237	277	317	357	397	437	477	517	557	597	637	677	717	757	797	837	877	917	957	997
038	078	118	158	198	238	278	318	358	398	438	478	518	558	598	638	678	718	758	798	838	878	918	958	998
039	079	119	159	199	239	279	319	359	399	439	479	519	559	599	639	679	719	759	799	839	879	919	959	999
040	080	120	160	200	240	280	320	360	400	440	480	520	560	600	640	680	720	760	800	840	880	920	980	

Sample numbers of records not included and reasons why are listed below:

Exhibit 10-6. NHANES III Record of data transmittal

Department of Health and Human Services
Public Health Service
Centers for Disease Control
National Center for Health Statistics

NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY III
RECORD OF DATA TRANSMITTAL

SHIP TO:

DATE OF SHIPMENT: _____

STAND NO#: _____

LOCATION: _____

TOTAL # OF ITEMS: _____

PREPARED BY (ID #): _____

Description of Item Enclosed:

ID#: _____

Component: _____

Item: _____

Examination Dates Recorded on Data Item:

FROM: _____   THROUGH: _____
     (date)   (date)

COMMENTS:

8/88

A separate transmittal form, with the appropriate SP numbers circled, should be completed for each item listed above. Organize the forms in order by SP number and attach the white copy of the transmittal form. Use either a paper clip or rubber band to properly bind each "pile." Give the pink copies to the MEC manager who will send them to NCHS Receipt and Control under separate cover. The yellow copies are retained in the MEC until the end of the stand, at which time they are sent to Westat.

It is not necessary to separate the Recall Reports by age, only SP number. A single transmittal form can be used for both the English and Spanish Food Frequencies. If more than one SP consumed the exact same item, and that item was a missing food, it is acceptable to note these multiple SP numbers on one Request Form. In this case, circle all applicable SP numbers on the transmittal form.

Use the NHANES III Record of Transmittal form to send:

1.   Copies of the Dietary Interviewer Logs,

2.   Copies of the Malfunction Report Forms,

3.   Verification Problem Sheets,

4.   Printed DDC screens,

5.   Taped FF (with hard copy if completed in Spanish), and

6.   Taped 24-hour recalls with a copy of the Recall Report.

Fill in the Record of Data Transmittal form with the requested information. Use one transmittal form for each item listed above and bind these forms with either a paper clip or rubber band.

Do not send the original Dietary Interviewer Logs with the weekly transmittals; send a copy. The originals will be sent to Westat at the end of the stand for further review.

-       **Requesting information from NCHS**

If you have any questions about missing foods or entering reported foods into the DDC system, contact NCHS to discuss them. If a screen is unclear, print the screen and document your question or comment directly on the printout. Send the printout to NCHS along with other weekly transmittals.

10.6   Pre-Interview Activities

10.6.1   Contacting the Local Nutritionist

Participation in the pre-interview activities is an important part of your job and will contribute to the overall success of the dietary data collection effort. These activities include calling local nutritionist(s) who are knowledgeable about the foods and food habits of the community, and informally surveying the local grocery stores and restaurants.

The primary purpose of the phone contact with the local nutritionist is to gather information about food consumption patterns, local food products, local nutrition programs, colloquial or regional cooking practices, characteristics of the population and sources for nutritional referrals.

Knowledge of the local practices will enable you to understand the respondent better and to probe more effectively. It will also provide you with referral sources when needed.

The cooperation and support of local professionals is important because often these are people who the respondent has learned to trust and may consult before participating in the study.

Prior to your arrival at each stand, a letter explaining the survey (Exhibit 10-7) will be sent by NCHS to the appropriate person requesting his/her assistance in providing nutrition information for you. The MEC manager should provide you with the name and phone number of the contact person (usually a local nutritionist) at least one week prior to your departure from the preceding stand. You can then establish contact with the nutritionist before you arrive at the new site. When making the phone contact you should try to find out the following types of information:

- Nutrition programs available, both state and local,

- Food enrichment laws,

- Availability of printed education materials,

- The referral process for local health and nutrition resources,

- Characteristics of the population,

- Dietary and cooking practices and patterns,

- Common shopping practices and patterns,

- Traditional foods of the area,

Exhibit 10-7. NCHS letter to local nutritionists explaining the survey

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service
Centers for Disease Control

National Center for Health Stat.
3700 East-West Highway
Hyattsville, MD 20782

Occupant

Dear Ms. Occupant:

The National Center for Health Statistics is conducting a major study of the health of persons living in the United States aged two months and older. Los Angeles County has been selected as one of the survey locations for the third National Health and Nutrition Examination Survey (NHANES III). The enclosed fact sheet describes the survey which will be used to gather information to assess the health and nutrition status of children and adults and their needs for health care.

This survey is part of the U.S. Public Health Service's continuing study of the Nation's health. During the past 27 years similar surveys have been successfully conducted on various segments of the U.S. population and have provided us with important data on health conditions and concerns in this country. Data are collected through household interviews and standardized medical examinations in our mobile examination center.

Our personnel will be conducting the survey in your area from November 13, 1989 through March 31, 1990. A sample of 1,194 people from Los Angeles County will be selected and asked to participate in the survey. Interviewers will be calling on selected households throughout the area. They will obtain the demographic information used to identify and select people for the examination.

Since we do not provide nutrition counseling services, it is our policy to find out as much as possible about local nutrition programs and resources so that we can refer survey respondents who have nutrition questions to appropriate places. We also need to obtain information on local dietary practices to improve the accuracy and interpretation of the data we collect. After we arrive in the area, one of our dietary interviewers will contact you to obtain information you may have in these areas.

Shortly before we begin operations, we will send you additional information including the addresses and telephone numbers of our field office and mobile examination center. Please contact Dr. Ronette Briefel, (301) 436-7080, or Mr. Clifford Johnson, (301) 436-7072, if you have questions about the nutrition component or me at (301) 436-8267 for further information about other aspects of the survey.

Sincerely yours,

David L. Larson
Chief, Survey Operations Branch
Division of Health Examination
Statistics

Enclosure

-        Local names and colloquialisms for common foods or food preparation methods,

-        Area grocery stores and restaurants most commonly used by the general and Hispanic population,

-        School lunch and breakfast menus for period of the stand, and

-        Names and phone numbers for further contact.

The task of contacting the local nutritionist is the responsibility of one dietary interviewer per stand. Decide who is to make the initial contact, then alternate this pre-interview activity from that point.

-        **Other Community Activities**

Other community screening activities will be handled less formally but nonetheless, will be an important part of your job. After contacting the local nutritionist, meet with your dietary counterpart to discuss the phone conversation and plan the other activities. Based on the information received from the local nutritionist, other activities may include the following:

-        Supermarket visits including the most frequently used large chains, small neighborhood markets, or local ethnic markets (if appropriate),

-        Visits to other frequently used restaurants, particularly fast food chains, and

-        Visits to other food suppliers such as bakeries, cafeterias and street markets.

When visiting local food establishments, look for the following:

-        What kinds of meats, poultry and fish are available?

-        What kinds of fruits and vegetables are available?

-        What kinds of breads and grains are available?

-        What other kinds of foods seem to be used by the community?

-        What are the local fast food chains and what foods are on the menu?

-        What types of snack and convenience foods are available and which seem to be most frequently purchased?

-        What types of Hispanic foods are used?

Depending on the size of the community, plan your itinerary. If there are few supermarkets, restaurants, etc., in the area, you may do the visits together. Go separately in larger communities to cover more ground. Take notes during your observation visit to use as reference during the stand. Should you do these visits separately, set time aside to share your observations with your dietary counterpart.

In making these observations, you should not only look at what is available but also talk to store owners and managers. Introduce yourself and explain the purpose of your visit before asking any questions. Remember that your relationship with the community is vitally important to the success of the survey.

10.6.2 Formatting Discs

It is your responsibility to make sure that your room is set up properly at the beginning of each stand. This includes unpacking and displaying the food models and accessories. In addition, one box of diskettes must be formatted in case of a system problem/abort during the stand. Formatting is a mandatory computer procedure before copying information or files onto a diskette; otherwise, the information cannot be copied. This simple procedure follows:

1.   Type "format a:" at the "choice __" prompt. A warning will appear stating, "This program will destroy any data currently on your disk!"

2.   The next instruction on the screen is to "insert diskette for Drive A: and strike Enter when ready." Insert the diskette into the floppy disk drive and close the drive door. Press RETURN/ENTER. A red light next to the floppy disk drive indicates that the system is performing the task. In addition, the system will keep you posted as it proceeds by showing which track it is formatting and verifying.

3.   The next set of instructions asks whether you wish to format another diskette. Since you are formatting 10 diskettes, enter "Y" to proceed. The interviewer does not need to type "format a:" again at this time, but must follow the remaining procedures.

4.   Transfer the formatted diskettes to the original box and keep them in the dietary room.

10.7   End of Stand Activities

10.7.1   Parking Your Hard Disk at the End of Each Stand

The two dietary station VAXmates and the VAXmate in the staff room (lounge) have hard disks. The hard disk is located in the box under the monitor. In order to ensure that they are not damaged while the MEC is in transit, the hard disk requires special care at the end of each stand.

After all work on the computer is completed for a particular stand, it is your responsibility to "park" the hard disk. The procedure is very easy; simply type "park" at the "Choice __" prompt. Press return. The screen will display a message indicating that it is ready to be shipped. It will also "beep" twice. Turn off the computer and unplug it.

If, for some reason, you need to restart the computer, remember to run the "park" procedure again when you are finished using the computer so that it will be ready for transit.

10.7.2   Storing Food Models and Supplies

At the end of each stand, store extra dietary forms in a cardboard box in the dietary room. Label the box as "dietary" and tape it shut. Pack the contents carefully as there is a great deal of movement when the trailers are transported from site to site. In addition, place the food models/accessories in a box. To prevent them from becoming dirty, wrap the models in SP gowns as they are packed. Do not use newspaper as the print stains the food models. Store this box also in the dietary room.

Appendix A. Four-Letter Indexed Keys

```
Key    Key Description
----   ------------------------------------------------------------------
ABAL   abalone
ACER   acerola
AKUL   akule
ALAK   a la king - chicken
ALBO   albondigas (meatballs)
ALMO   almonds              Alexander - brandy
AMAR   amaretto
AMBR   ambrosia
AMER   American cheese
ANCH   anchovy (anchoa)
ANGE   angel food cake
       angel wings pastry
ANIM   animal cracker
ANIS   anisette (mandlebrodt toast)
       anisette liqueur
ANTI   antipasto (ham, fish, cheese, vegetables)
APER   aperitif
APPL   apple
APRI   apricot
AQUA   aquavit
ARBY   Arby's
ARTI   artichoke (alcachofa)
       artificial sweetener
ASPA   asparagus
ASPI   aspic - tomato
ATOL   atole (sweetened gruel-like beverage)
AVOC   avocado
AWAK   Awake
BABK   babka
BABY   baby food
BACA   bacalao
       Bacardi cocktail
BACO   bacon
BAGE   bagel
BAKE   baked beans
BAKL   baklava
BAMB   bamboo shoots
BANA   banana
BARB   barbeque sauce
BARL   barley (regular or egg)
BARR   barracuda
BASS   bass (lobina)
BATI   batida
BEAN   beans
BEAU   Beaujolais wine
BEEF   beef
BEER   beer
BEET   beets (remolachas)
BENE   Benedictine
BERR   berries (bayas)
BEVE   beverages
```

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Key    Key Description
----   ------------------------------------------------------------------
BIER   bierock (turnover with beef & cabbage)
BIGD   Big Deluxe (with che, dre, let, oni, pic, tom)
BIGM   Big Mac (with che, dre, let, oni, pic)
BISC   biscuit
BISM   Bismark or Long John
BIST   bistec encebollado (beef steak with onions)
BITT   bittermelon - cooked
BLAC   black-eyed peas/cowpeas
       blackberries (zarzamoras)
       blackfish
BLIN   blintz
BLOO   Bloody Mary
BLTS   bacon-lettuce and tomato sandwich
BLUE   blue cheese
       blueberries (moras azules/arandanos azules)
       bluefish
BOKC   bok choy
BOLI   bolillo
BOLO   bologna
BORD   Bordeaux - claret wine
BOST   Boston brown bread
       Boston cream pie
BOUI   bouillabaisse
       bouillon
BOUR   bourbon
       Bourguignonne - beef
BOYS   boysenberries
BRAI   brains
BRAN   bran
       brandy
BRAT   bratwurst
BRAU   braunschweiger
BRAZ   Brazil nuts
BREA   bread
BRIC   brick cheese
BRIE   Brie cheese
BRIO   brioche
BRIS   Bristol Cream - Harvey's
BROC   broccoli
BROT   brotwurst
BROW   brownie
BRUS   brussels sprouts (repollitos de brusela)
BULG   bulgur (wheat pilaf)
BULL   bullhead
BUNS   buns
BURD   burdock
BURG   Burger Chef
       Burger King
       Burgundy - beef
       Burgundy wine
BURR   burrito (white flour tortilla and filling)
```

```
Key    Key Description
----   --------------------------------------------------------------
BUTT   butter
CABB   cabbage
CACC   cacciatore
CACT   cactus pads (nopales) - cooked
CAES   Caesar salad (oil-based dressing)
CAFE   cafe au lait
CAKE   cake
CALA   calabacitas
       calabaza
       calamari
CALZ   calzone
CAME   Camembert cheese
CAND   candy
CANN   canneloni
CANT   cantaloupe
CAPP   cappuccino
CARA   caramel
CARN   carne guisada (Mexican stewed beef)
CARO   carob (algarroba)
CARP   carp
CARR   carrots
CASH   cashews (nueces de cajuil/de pajuil)
CASI   clams casino
CASS   cassava (yuca)
CATF   catfish (chapin/barbo)
CATS   catsup
CAUL   cauliflower
CAVI   caviar
CELE   celery
CERE   cereal
CFAT   fats for commercial use
CHAB   Chablis wine
CHAL   challah bread
       chalupas (with filling,lettuce, & tomatoes on corn tortilla)
CHAM   champagne
       champagne punch
CHAN   Chantilly creme
CHAR   chard (acelga)
       chardonnay wine
       Chartreuse
CHAT   chateau wine
CHAY   chayote
CHED   Cheddar cheese
CHEE   cheese
       cheeseburger on a bun
CHEF   chef's salad (no dressing)
CHEN   chenin blanc
CHER   cherries (cerezas)
CHES   chestnuts (castanas)
       Cheshire cheese
CHEW   chewing gum
```

```
Key     Key Description
----    -------------------------------------------------------------
CHIA    Chianti wine
CHIC    chicken
        chickpeas/garbanzo beans
CHIL    chili
CHIM    chimichanga
CHIN    Chinese cabbage
CHIP    chips - snack type
CHIT    chitterlings/intestines (asaduras/intestinos)
CHIV    chives
CHOP    chop suey (noodles not included)
CHOW    chow mein (noodles not included)
        chowder
CHRI    christophine
CHUB    chub (coto)
CHUR    Church's Fried Chicken
CHUT    chutney
CIDE    cider
CILA    cilantro
CINN    cinnamon (ground)
CLAM    clams (almejas)
CLUB    club sandwich (with dressing)
        club soda
COBB    cobb salad
        cobbler with fruit
COCK    cocktail
COCO    cocoa or hot chocolate
        coconut
CODS    cod
COFF    coffee
COGN    cognac
COIN    Cointreau
COKE    Coke
COLA    cola
COLB    Colby cheese
COLE    cole slaw
COLL    collards (berza)
COND    condiments
CONE    ice cream cone - no ice cream
COOK    cookies and bars
COOL    cooler - wine
        Cool Whip dessert topping
COQU    Coquito - Puerto Rican
CORD    cordial or liqueur
        Cordon Blue
CORN    corn
COTT    cottage cheese
COUG    cough drops
COUS    couscous
COWP    cowpeas
CRAB    crab (cangrejo/jaiba/jueyes)
CRAC    crackers
```

```
Key    Key Description
----   ----------------------------------------------------------------
CRAN   cranberries (arandanos/frambuesas acidas)
CRAP   crappie
CRAY   crayfish
CREA   cream
       cream cheese
CREM   creme de menthe
       Cremora
CREO   creole (rice not included)
CREP   crepe - dessert type
       crepe - meat filled
       crepe - plain
CRIS   crisp - fruit
CROI   croissant
CROQ   croquette
CROU   croutons
CRUM   crumpet
CRUS   pie crust or shell
CUBA   Cuban coffee
       Cuban sandwich
CUCU   cucumber
CURA   Curacao
CURR   currants
       curry sauce
CUST   custard
DAIK   daikon (Oriental radish)
DAIQ   daiquiri
DAIR   Dairy Queen
DAND   dandelion greens
DANI   Danish pastry
DATE   dates (datiles)
DEMI   demi-tasse
DESS   desserts - miscellaneous
DEWB   dewberries
DIMS   dim sums - meat filled
DIPS   dips
DIVA   divan
DIVI   divinity
DOLP   dolphinfish
DOMI   Domino's
DORI   Doritos
DOUG   doughnut
DRAM   Drambuie
DREA   Dream Whip dessert topping
DRES   dressing for salads
DRUM   drumfish
       drumstick - ice cream type
DUCK   duck
DUMP   dumplings with fruit
       dumplings with meat or plain
ECLA   eclair
EDAM   Edam cheese
```

```
Key    Key Description
----   -----------------------------------------------------------------------
EELS   eel (anguila)
EGGF   egg foo yung with sauce
EGGN   eggnog
EGGP   eggplant (berenjena)
EGGR   egg rolls
EGGS   eggs
ELDE   elderberries (bayas del sauco)
EMPA   empanadas
ENCH   enchiladas (corn tortilla with filling and sauce)
ENDI   endive
ENGL   English muffin
ESCA   escarole
ESPR   espresso
FAJI   fajitas (white flour tortilla, tomato, green peppers & guac)
FALA   falafel
FARI   farina
FARM   farmer cheese
FAST   fast foods
FATS   fats
FBAS   fat used in basting or browning
FCRU   fat used in crust or pastry
FETA   feta cheese
FETT   fettucini Alfredo
FFIL   fat used in filling
FFRO   fat used in frosting or glaze
FFRY   fat used in frying
FIDE   fideo
FIGS   figs (higos)
FILB   filberts (avellanas)
FILL   fillings - dessert type
FISH   fish and seafood
FIVE   Five Alive
FLAN   flan
FLAT   flatfish (lenguado)
FLAU   flauta (fried rolled corn tortilla w/filling - no topping)
FLOU   flounder
FONT   Fontina cheese
FORM   formula
FRAN   frankfurter
FREC   fat used in recipe
FREN   French bread
       French fries
       French toast
FRIC   fricasse
FRIT   fritter
       fritter - dessert
       Fritos
FROG   frog legs
FROS   frosting
FRST   frosting
FRUI   fruit
```

```
Key    Key Description
----   --------------------------------------------------------------------
FSAU   fat used in sauce
FSEA   fat used as seasoning
FTOP   fat used in topping
FUDG   fudge
GAME   game
GARB   garbanzo beans/chickpeas
GARF   garfish
GARL   garlic bread with "butter"
GATO   Gatorade
GEFI   gefilte fish
GELA   gelatin
GENI   genip
GIBL   giblets
GIBS   Gibson
GIML   Gimlet
GING   ginger ale
GINK   ginkgo nuts (canned)
GINS   gin
GIZZ   gizzard
GJET   gjetost/primost cheese
GLAZ   glaze
GLUG   glug (wine punch)
GLZE   glaze
GNOC   gnocchi
GOAT   goat (cabrito/chivo)
GOET   goetta (fried)
GOOS   goose
GORD   gordita (masa shell - no filling)
GORP   gorp (nuts/seeds/dried fruit)
GOUD   Gouda cheese
GOUL   goulash (tomato base)
GRAI   grains
GRAN   granola
       granola bars
       Grand Marnier
GRAP   grapefruit
       grapes
GRAS   Grasshopper
GRAV   gravy
GRAY   grayfish
GREE   green peas
       green pepper - sweet (pimiento morron)
       green/string beans
       greens
GREN   grenadine
GRIG   grignolia wine
GRIN   grinder/submarine sandwich
GRIT   grits
GROU   ground beef
       grouper (mero)
GRUY   Gruyere cheese
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```
Key    Key Description
----   ----------------------------------------------------------------
GUAC   guacamole
GUAR   guarapo (sugar cane beverage)
GUAV   guava
GYRO   gyro sandwich (pita bread, beef, lamb, and condiments)
HABI   habichuelas/frijoles - Hispanic
HADD   haddock
HAKE   hake (merluza)
HALI   halibut
HALL   hallacas (pork and hominy)
HAMA   hamantaschen
HAMB   hamburger on a bun
       hamburger/ground beef
HAMS   ham
HARD   Hardee's
HARV   Harvey Wallbanger
HASH   hash
       hashed brown potatoes
HAUT   haut wine
HAVA   havarti cheese
HEAR   heart
HELP   "Helper" mixtures
HERR   herring (arenque/arenca)
HIGH   high ball
HIHO   HiHo crackers
HOAG   hoagie/submarine sandwich
HOMI   hominy
HONE   honey
       honeydew melon
HORC   horchata
HORS   horseradish
HOTD   hot dogs/frankfurters
HUMM   hummus (chick-pea dip)
HUNG   Hungarian goulash
HUSH   hushpuppy (fried cornbread)
HYDR   Hydrox cookie
ICEC   ice cream and frozen desserts
INDI   Indian pudding
INGR   ingredient
INJE   injera (Ethiopian bread)
INST   Instant Breakfast
IRIS   Irish coffee with alcohol
ITAL   Italian bread
JACK   Jack In The Box
JALA   jalapeno pepper
JAMB   jambalaya - shrimp
JAMS   jams or preserves
JARL   Jarlsberg cheese
JELL   jelly
       Jello - gelatin
JICA   jicama or yambean
JOBO   jobo
```

```
Key    Key Description
----   ------------------------------------------------------------------
JOHN   Johnnycake
JUIC   juice/nectar/flavored drink
JULI   julienne salad (no dressing)
JUNE   juneberries
JUNK   junket (milk-based)
KADA   Kadayif
KAHL   Kahlua
KALE   kale
KASH   kasha (buckwheat groats)
KENT   Kentucky Fried Chicken
KETC   ketchup
KIDN   kidney
       kidney beans
KIEL   kielbasa
KIEV   Kiev - chicken
KIRS   kirsch
KIWI   kiwi fruit
KNIS   knish
KNOC   knockwurst
KOHL   kohlrabi
KOOL   Kool-Aid
KREP   kreplach (dumpling)
KUGE   kugel/noodle pudding
KUMM   kummel
KUMQ   kumquat
KUNG   kung pao chicken
LAMB   lamb
LARD   lard
LASA   lasagna
       lasagna noodles
LAUL   lau lau (pork or fish in leaves)
LEEK   leeks (porro/puerro)
LEFS   lefse
LEMO   lemon
LENT   lentils
LETT   lettuce
LICO   licorice
LICU   licuado
LIED   Liederkranz cheese
LIMA   lima beans
LIMB   Limburger cheese
LIME   lime
LING   lingonberries - cooked
       linguini noodles
LIQU   liquor
LIVE   liver
LOAF   loaf - meat or fish
LOBS   lobster (langosta)
LOGA   loganberries
LOHB   loh baak
LOLL   lollipop
```

```
Key    Key Description
----   --------------------------------------------------------------------
LOME   lo mein
LOMI   lomi (salmon with tomato and onions)
LONG   Long John or Bismark
       Long John Silver's
       Longhorn cheese
LORN   Lorna Doones
LOTU   lotus root - cooked
LOXS   lox
LUFF   luffa - Chinese okra
LUNC   lunchmeats and sausages
LYCH   lychee
MACA   macadamia nuts
       macaroni mixed dish or recipe
       macaroni noodles
       macaroni salad ("mayo" dressing)
MACK   mackerel (macarela)
MADU   maduro (platano maduro)
MAHI   mahi mahi
MAIT   Mai Tai
MALA   malanga (tannier or yautia)
MANA   manapua (filled bun)
MAND   mandarin orange
       mandingo
MANG   mango
MANH   Manhattan
MANI   manicotti - filled
       manicotti noodles
MAPL   pure maple syrup
MARA   maraschino cherries
MARE   marengo - veal
MARG   margarine
MARI   marionberries
MARM   marmalade
MARS   marshmallow
       Marsala - veal
MART   martini
MASH   mashed potatoes
MATE   mate - sweetened tea
MATZ   matzo/matzoth
MAVI   mavi drink
MAYO   mayonnaise or mayo type dressing
MAYP   Maypo
MCCH   McChicken (with dressing, lettuce)
MCDL   McDLT (with cat, che, dre, let, mus, oni, pic, tom)
MCDO   McDonald's
MCMU   McMuffin
MEAT   meat
       meat balls
       meat or fish loaf
MEDI   media noche (ham, pork, cheese, & condiments on a bun)
MELB   melba
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```
Key    Key Description
----   --------------------------------------------------------------
MELO   melon
MENH   menhaden
MENU   menudo
MERI   meringue
MILK   milk
MILL   millet
MINE   mineral water
MINT   mint julep
MIRA   Miracle Whip
MISO   miso
MIXE   mixed dish
MOLA   molasses
MOLE   mole
MONK   monkfish
MONT   Monterey jack cheese
MOOG   moo goo gai pan
MOUS   mousse - dessert
       mousse - fish
MOZZ   Mozzarella cheese
MUEN   Muenster cheese
MUFF   muffins
MULB   mulberries (moras de color morado)
MUNG   mung beans
MUSH   mushrooms
MUSK   muskmelon
MUSS   mussels (mejillones)
MUST   mustard
NACH   nacho chips - plain
       nachos (vegetables not included)
NAPO   Napoleon
NATT   natto
NAVY   navy beans
NECT   nectarine
NEED   needlefish
NERD   Nerds
NEUF   Neufchatel cheese spread
NEWB   Newburg
NOOD   noodles
NORF   Norfolk lobster (buttered)
NUTM   nutmeg
NUTS   nuts and seeds
OATM   oatmeal
OATS   oats
OCTO   octopus (pulpo)
OILS   oils
OKRA   okra (quimbombo)
OLDF   Old-Fashioned
OLIV   olives
OMAR   oil used in marinade
OMEL   omelet
ONIO   onion
```

```
Key     Key Description
----    ---------------------------------------------------------------
ORAN    orange
OREG    oregano (ground)
OREO    Oreos
ORGA    organ meats
ORZO    orzo
OUZO    ouzo
OVAL    Ovaltine
OYST    oyster (ostra/ostion)
PAEL    paella
PANC    pancake
PAPA    papaya
PAPR    paprika
PARM    Parmesan cheese
PARS    parsley
PASS    passion fruit
PAST    pasta
        pastrami
        pastry
        pastry stuffed with vegetables
PATE    pate
PEAC    peach
PEAN    peanuts
PEAR    pear
PEAS    peas
PECA    pecans (pacanas)
PEDI    Pedialyte
PENU    penuche (brown sugar)
PEPP    pepperoni
        peppers
PEPS    Pepsi
PERC    perch (perca)
PERR    Perrier water
PERS    persimmon - fresh (persimo)
PEST    pesto sauce
PHEA    pheasant
PICA    picante sauce
PICK    pickle relish
        pickles
PICO    pico de gallo
PIER    pierogies
PIES    pies
PIGE    pigeon peas - cooked
PIGS    pigs feet
PIKE    pike (pica)
PILA    pilaf - rice
PINA    Pina Colada
PINE    pineapple
PINT    pinto beans
PIST    pistachio nuts
PITA    pita
PIZZ    pizza
```

```
Key    Key Description
----   ----------------------------------------------------------------
PLAN   plantains
PLAT   platanos
PLUM   plum
POCH   pochito (frankfurter and beef chili wrapped in tortilla)
POLL   pollo guisado (stewed chicken)
       pollock (pollack)
POLV   polvorones
POME   pomegranate (granada)
POOR   poorboy/submarine
POPC   popcorn
POPO   popover
POPP   poppy seeds
POPS   popsicle
POPT   pop tart or toaster pastry
PORK   pork
PORT   port wine (red,white, or tawny)
       Port du Salut cheese
POST   Postum
POTA   potato
POTP   pot pie
POUL   poultry
POZO   pozole with pork and hominy
PRAW   prawns
PREA   Pream
PRES   preserves or jams
PRET   pretzels
PRIC   prickly pear (tuna)
PRIM   primavera salad
PRON   pronto pup or corn dog
PROV   provolone cheese
PRUN   prune
PUDD   pudding
PUMP   pumpernickel bread
       pumpkin
PUNC   fruit punch
QUES   quesadilla - flour tortilla  with cheese and chili peppers
QUIC   quiche
QUIK   Quik
QUIN   quinine water
RABB   rabbit/hare
RADI   radish
RAIS   raisins
       raisins - coated
RASP   raspberries (frambuesas)
RATA   ratatouille
RAVI   ravioli
REDD   Reddi wip
REFR   refried beans
RELI   relish
RELL   relleno with cheese (fried)
REUB   Reuben sandwich (with sauerkraut, cheese, dressing)
```

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Key    Key Description
----   ------------------------------------------------------------------
RHUB   rhubarb
RIBS   ribs
RICE   rice
RICO   ricotta cheese
RITZ   Ritz crackers
ROCK   rockfish
ROLL   rolls
ROMA   Romano cheese
       Romanoff - noodles
ROMP   Rompope (Mexican eggnog with alcohol)
ROOT   root beer
ROQU   Roquefort cheese
ROSE   rose wine
ROYR   Roy Roger's
RUFF   Ruffles
RUMS   rum
RUTA   rutabaga
RYEB   rye bread (de centeno)
RYEW   rye whiskey
RYKR   RyKrisp
SABL   sablefish (pez sable)
SAKI   saki or sake
SALA   salad
       salami
SALI   salisbury steak with gravy
SALM   salmon
SALS   salsa
       salsify/vegetable oyster - cooked
SALT   salt
SAMB   sambuca
SAND   sandwich
SANG   Sangria
SAPO   sapodilla (zapote)
SARD   sardines
SASH   sashimi - raw fish
SATS   satsuma (like tangerine)
SAUC   sauce
SAUE   sauerkraut
SAUS   sausage
SAUT   sauterne wine
SAUV   sauvignon blanc wine
SCAL   scallions or spring onions
       scallops (callos de acha)
       Scallopini - veal
SCAM   scampi - shrimp
SCHN   schnapps - all flavors
SCON   scone
SCOT   scotch
SCRA   scrambled egg
       scrapple
SCRE   screwdriver
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Key   Key Description
----  ------------------------------------------------------------
SCRO  scrod
SEAW  seaweed
SEED  seeds
SELT  seltzer water
SESA  sesame seeds (ajonjoli)
SEVE  Seven-Up
SHAD  shad (sabalo)
SHAK  shake/malt
SHAL  shallot
SHAR  shark (cazon)
SHEP  shepherd's pie
SHER  sherbet
      sherry
SHIS  shish kebab - beef
SHOR  shortcake
      shortening
SHRI  shrimp (camaron)
SING  Singapore sling
SLEN  Slender
SLIC  Slice
SLOE  sloe gin
SLOP  sloppy Joe mixture (no roll)
SLUR  slurpee/slush
SLUS  slush/slurpee
SNAC  snacks
SNAI  snails (caracoles)
SNAP  snapper (huachinango/pargo)
SNOW  snow peas or edible pea pods
SODA  soda pop/soft drink
      soda water
SOLE  sole
SOME  somen salad
SOPA  sopa seca
      sopaipillas
SOPE  sope (masa shell - no filling)
SORB  sorbet
SOUF  souffle
SOUP  soup
SOUR  sour cream
      sourdough bread
SOUT  Southern Comfort
SOYB  soybeans
SOYS  soy sauce
SPAD  spadefish
SPAE  spaetzle or spatzen
SPAG  spaghetti noodles
      spaghetti or other pasta recipe
      spaghetti sauce
SPAM  spam
SPAN  spanakopita (spinach pie) - with crust
SPAR  sparkling or carbonated water
```

Key	Key Description
SPEC	special formulated products
SPIC	spices
SPIN	spinach
SPLI	split peas - yellow or green
SPOO	spoonbread
SPPL	supplements - vitamins/minerals/miscellaneous
SPRI	Sprite
SPRO	sprouts
SQUA	squash
SQUI	squid (calamares)
	Squirt
STEA	steak - beef
STEW	stew
STIN	Stinger
STOM	stomach (tripe)
STRA	strawberries
STRI	string/green beans
STRO	Stroganoff
STRU	strudel
STUF	stuffing
STUR	sturgeon (esturion)
SUBM	submarine/hoagie sandwich
SUCC	succotash
SUGA	sugar
SUKI	sukiyaki - beef
SUNF	sunfish
	sunflower seeds (girasol)
SURG	surgeonfish
SUSH	sushi (rice with vinegar sauce)
SWEE	sweeteners
SWIS	Swiss cheese
	Swiss steak
SWOR	swordfish (pez espada)
SYRU	syrup
TABA	tabasco sauce
TABB	tabbouleh salad
TACO	taco or tortilla chips
	taco salad (corn chips, beef, cheese, lettuce & chili sauce)
	taco sauce
	taco shell
	tacos - filled (lettuce,tomato,and taco sauce in taco shell)
TAHI	tahini
TAMA	tamale
	tamale - sweet
	tamarind
TANG	tangerine
	Tang
TAPI	tapioca pudding
TAQU	taquitos (with corn tortilla, ground beef, and onions)
TARO	taro - dasheen
TART	tartar sauce

```
Key    Key Description
----   ------------------------------------------------------------
TEAS   tea
TEMP   tempura
TEQU   tequila
TERI   teriyaki
       teriyaki sauce
TETR   Tetrazzini - chicken with spaghetti
TEXT   textured vegetable protein
THUR   Thuringer
TIAM   Tia Maria
TILE   tilefish
TILS   Tilsit cheese
TIMB   timbale - fish
TOAS   toast
TOFU   tofu
TOMA   tomato
TOMC   Tom Collins
TONG   tongue
TONI   tonic water
TOPP   toppings
TORS   torsk
TORT   tortellini
       tortilla
TOSS   tossed or garden salad (no dressing)
TOST   tostada (w/ lettuce, tomato, & taco sauce on corn tortilla)
       tostada salad
       tostones
TRAI   trail mix (nuts/seeds/dried fruit/candy)
TREA   treats (frozen prepackaged)
TRIF   trifle
TRIP   Triple Sec
TRIS   Triscuits
TROU   trout (trucha)
TUNA   tuna (atun)
TURB   turbot (rodabolla)
TURK   turkey
TURN   turnip (nabo)
       turnip greens
       turnover - fruit filled
       turnover entrees
UDDE   udder
VEAL   veal
VEGE   vegetables
VELV   Velveeta
VENI   venison/deer (carne de venado)
VERM   vermicelli
       vermouth
VIEN   Vienna bread
VINE   vinegar based dressing
VINO   vino rosso wine
VODK   vodka
WAFF   waffles
```

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Key    Key Description
----   ----------------------------------------------------------------------
WALD   Waldorf salad
WALN   walnuts (nueces de nogal ingles o nogal negro)
WATE   water - bottled
       water - drinking
       waterchestnuts
       watercress
       watermelon
WAXB   wax/yellow beans
WEAK   weakfish
WELL   Wellington - beef
WEND   Wendy's
WHEA   wheat bread
WHIP   whipped cream and/or dessert toppings
WHIS   whiskey
WHIT   white bread
WHOP   Whopper
WILD   wild rice
WINE   wine
WONT   won ton
WORC   Worcestershire sauce
WREA   wreakfish
YAMS   yams
YAUT   yautia
YELL   yellow/wax beans
YOGU   yogurt
YOLK   yolk only
YORK   Yorkshire pudding
YOUN   youngberries
YUCA   yuca
ZINF   zinfandel wine
ZITI   ziti - baked
ZUCC   zucchini
ZWIE   zwieback
```

Appendix B. Introduction Scripts

<div align="center">INTRODUCTION</div>

"Hello, my name is <u>(NAME)</u>. This is the dietary interview (or the nutrition component of the study). Everything you say here will be kept confidential.

What we want to do first is to make a list of all the foods and beverages that you have had in a 24-hour period of time, a complete day. This includes alcoholic beverages, soda, mineral water like Perrier, but not tap or spring water. Remember to include all snacks.

Today is <u>(DAY)</u>. I'd like you to tell me everything you ate and drank all day   <u>(DAY)</u> starting from <u>(DAY)</u> at midnight to midnight last night. This means if you went to bed late on <u>(DAY)</u> after midnight, and you ate or drank something, you'd start there. If you were asleep at that time, start with the first thing you ate or drank after you woke up yesterday.

I'd also like you to classify the foods as to what time you had them. For example, at 8:00 I had this, at 10:00 I had that.

We'll make a very general list at first, then we'll go back and fill it in with more detail."

"Did you change the way you ate last night between the hours of 8:30 pm and twelve midnight because of the fasting requirement?"

"Now we're going to fill your list in with more detail. There are two charts on the wall, one says 'list of meals' and the other 'where eaten.' For each food or group of foods that you've listed, I'll have you select an answer from each card. There is no right or wrong answer. (In addition, you do not have to be specific on the location. You can say 'home,' not which room the food was eaten.)

The reason the models are on the table is for you to show me about how much you ate or drank of something. If a shape would better describe the food, you may use the shape chart by pointing to a shape and using the ruler to show me the size. You may use the grid for rectangular or square shapes (use your hands to show SP how it is used) and the circles (point to the plastic and floppy discs) for circular or round shapes. To show me the thickness of an item, you may use these thickness bars. (Give example.)

For the cups, bowls, and glasses, show me which line best describes the portion you ate or drank. (Point to one of the lines on the models.)

When you use any of the spoons, please tell me the quantity in level spoonfuls."

INTRODUCCION A LA ENTREVISTA DE LA NUTRICION

"(Buenos días/Buenas tardes/Buenas noches.). Mi nombre es (NAME). Esta es la entrevista de la nutrición. Todo lo que diga será mantenido confidencial.

Basicamente lo que queremos hacer es una lista de todas las comidas y bebidas que usted ha consumido en un período de tiempo de 24 horas, un día completo. Esto incluye bebidas alcohólicas, soda, agua mineral como Perrier, pero no agua de la (llave/pluma) ni agua de manantial. Recuerde incluír también todo lo que comió o bebió entre comidas.

Hoy es (DAY). Quisiera que me diga todo lo que usted comió y bebió ayer, empezando el (DAY) a la medianoche hasta (DAY) a la medianoche. Esto significa que si usted se acostó tarde el (DAY) después de medianoche y comió o bebió algo, debe empezar ahí. Si usted estaba dormido(a) a esa hora, empiece con la primera cosa que comió o bebió después que se levantó ayer.

Quisiera además clasificar las comidas en cuanto a la hora en que las consumió. Por ejemplo, a las 8:00 yo tuve esto, a las 10:00 yo tuve lo otro.

Primero, haremos una lista muy general, y después regresaremos a ella para detallarla."

"Cambió la manera en que usted comió anoche entre las ocho y media y las doce de la noche, debido al requerimiento de ayuno?"

"Ahora vamos a completar la lista con más detalles. Hay dos listas en la pared: una dice "LISTA DE COMIDAS" y la otra "DONDE COMIO." Para cada comida o grupo de comidas que ha mencionado, quisiera que escoja una respuesta de cada lista. No hay respuestas correctas o incorrectas. (Además no necesita ser específico en la ubicación. Puede decir "casa," en vez del cuarto donde comió.)

La razón por la cual los modelos están sobre la mesa es para que me muestre cuanto comió o bebió de alguna cosa. Si alguna de las formas en esta tarjeta se acerca más a la forma del alimento, puede utilizarla y podemos medir el tamaño con la regla. Puede usar el reticulado para enseñarme formas rectangulares o cuadradas, también las formas circulares, y estas barras para demonstrar lo grueso de un alimento.

Para las tazas, platos hondos, y vasos, muéstreme cual línea describe mejor la porción que comió o bebió.

Cuando use cualquiera de las cucharas, por favor dígame la cantidad en cucharadas niveladas."

INFANT INTRODUCTION

"Hello, my name is (<u>NAME</u>). This is the dietary interview. Everything you say here will be kept confidential.

I need to know everything that (<u>BABY'S NAME</u>) ate and drank in a 24-hour period of time, beginning from midnight (<u>DAY</u>) to midnight (<u>DAY</u>). I also need to know the time of each feeding.

Let me know if (<u>BABY'S NAME</u>) is breast-fed or uses formula. If formula is used, tell me if it is plain or whether anything is added. Also include any baby foods, table foods, or any other fluids that may have been introduced. Do not include plain tap or spring water.

We will make a general list at first, then fill it in with more detail later."

"Now we're going to fill the list in with more detail. There is a flash card on the wall which says "where eaten". Select one of the answers to indicate the location of the feeding.

The reason the models are on the table is for you to show me about how much (<u>BABY'S NAME</u>) ate or drank of something. If a shape would better describe the food, you may use the shape chart by pointing to a shape and using the ruler to show me the size. You may use the grid for rectangular or square shapes and the circles for circular or round shapes. To show me the thickness of an item, you may use these thickness bars.

For the cups, bowls, and glasses, show me which line best describes the portions (<u>BABY'S NAME</u>) ate or drank.

When you use any of the spoons, please tell me the amount in level spoonfuls."

"(Buenos días/Buenas tardes/Buenas noches). Mi nombre es (NAME). Esta es la entrevista de la nutrición. Todo lo que usted me diga será mantenido confidencial.

Necesito saber todo lo que (BABY'S NAME) comió y bebió por un período de tiempo de 24 horas, empezando a medianoche el (DAY) hasta medianoche el (DAY). También necesito saber la hora de cada comida.

Dígame si le da (el) pecho a (BABY'S NAME) o si recibe una fórmula infantil. Si recibe una fórmula infantil, dígame si la toma sola o si se le agrega algo. También incluya las comidas para bebé, otros alimentos, o cualquier otro líquido que le haya ofrecido. No incluya agua de la (llave/pluma) ni agua de manantial solas.

Primero haremos una lista muy general, y después regresaremos a ella para detallarla."

"Ahora vamos a completar la lista con más detalles. Hay una lista en la pared que dice "DONDE COMIO". Escoja una de las respuestas para indicar el lugar de cada comida.

La razón por la cual los modelos están sobre la mesa es para que me muestre cuanto comió o bebió (BABY'S NAME) de alguna cosa. Si alguna de las formas en esta tarjeta se acerca más a la forma del alimento, puede utilizarla y podemos medir el tamaño con la regla. Puede usar el reticulado para enseñarme formas rectangulares o cuadradas, también las formas circulares, y estas barras para demonstrar lo grueso de un alimento.

Para tazas, platos hondos, y vasos, muéstreme cual línea describe mejor la porción que (BABY'S NAME) comió o bebió.

Cuando use cualquier de las cucharas, por favor dígame la cantidad en cucharadas niveladas."

Appendix C. Quick Coding Reference Guide

This appendix contains coding guidelines and rules that might be helpful in the following situations:

- The DDC does not display appropriate descriptors for an item.

- You cannot find an item in the DDC database.

- An amount option is not available.

The guidelines and rules are arranged alphabetically by food category. Refer to the list below for the page number:

ITEM	ISSUE	HOW TO ENTER
beverages, general	with lemon	enter "wedge" of lemon or amount of juice if > 1 TB
	purchased at fast food restaurant, not listed under restaurant name	enter as appropriate generic beverage
	purchased at fast food restaurant, FSU states "with ice", ice not consumed	enter volume amount
	purchased at fast food restaurant, beverage listed, FSUs not available	enter volume amount
apple cider	hot spiced	disregard spice & enter as apple cider
beer	16 FO can or bottle	enter K amount and attach note
	imported	enter as regular beer
cocktail	typical (e.g., rum & cola), unknown proportions of ingredients	enter under COCK
	atypical (e.g., rum & diet cola), unknown proportions of ingredients	enter each ingredient & "U" amount; attach note specifying total amount with or without ice
	iced tea cocktail	enter as "Long Island iced tea" under COCK
coffee	"weak" or "strong" brew	disregard strength of brew
Dole orange-pineapple-banana juice drink	unable to locate	enter under JUIC brand name listing
ginger beer	unable to locate	enter as ginger ale
juice or drink, unknown mixed type	unable to locate	enter under JUIC.MIX
juice, sweetened vs. unsweetened	SP states, "It tasted sweet."	explain that "sweetened" means the package states that sugar added
Kool-Aid	presweetened, unknown sweetener	enter as "presweetened"
Malta - India	unable to locate	enter under SODA brand name listing

ITEM	ISSUE	HOW TO ENTER
margarita, fruit flavored	with flavoring only	enter as margarita & attach note
	with real fruit	enter as a Missing Food
soda	16 FO can	enter K amount and attach note
	unknown if with juice or not	enter as "fruit flavored"
tea	canned	enter as "purchased ready-to-drink"
	instant, without artificial sweetener	enter as appropriate generic tea
	served in restaurant, unknown if instant or brewed	enter as unknown type
	sun tea, regular	enter as brewed tea
	sun tea, herbal	enter as herbal tea
	"weak" or "strong" brew	disregard strength of brew
water, bottled, unsweetened	flavor essence added	disregard flavor essence & enter type of bottled water
water, seltzer	very low sodium	enter as "salt-free"
wine	blush	disregard blush & enter type of wine
	unknown type	enter as "other table type (<15% alcohol)"

CANDY

ITEM	ISSUE	HOW TO ENTER
chocolate eggs	plain, unable to locate	enter under CAND as "chocolate pieces, milk chocolate, plain"
	cream-centered, unable to locate	enter under CAND as "chocolate pieces, cream-centered"
	amount option not available	enter "K" amount & attach note to specify brand & dimensions of egg
chocolate rabbits	amount option not available	enter "K" amount & attach note to specify brand & dimensions of rabbit
Chocolate Sprinkles	unable to locate	enter under CAND brand name listing
Jimmies	unable to locate	enter under CAND brand name listing
Sunkist Fun Fruits	unable to locate	enter under CAND brand name listing
Tiger's Milk Bar	unable to locate	enter under CAND brand name

CONDIMENTS

ITEM	ISSUE	HOW TO ENTER
mustard (brown, Dijon or flavored)	unable to locate	enter as regular mustard

DAIRY

ITEM	ISSUE	HOW TO ENTER
cheese, individually wrapped with cellophane	unknown if natural or processed	enter as processed
cheese, processed with jalapeno peppers	unable to locate	enter under CHEE, "unknown variety of processed cheese, processed cheese - with vegetables"
cheese, Cracker Barrel	unable to locate	enter under CHEE brand name listing
cream cheese	flavored	enter as plain cream cheese
	soft tub type	enter as "volume - solid"
cream or milk added to coffee	purchased in restaurant, unable to specify further	enter "unknown if cream or creamer"
fried cheese sticks	unable to locate	enter under CHEE, "deep fried"
ice cream or ice milk	$\geq$ 1/2 chocolate	enter as "chocolate or coffee flavors"
	chocolate chip flavor	enter as "other flavors"
	Heavenly Hash	enter as "chocolate or coffee flavors"
ice cream bar	with nuts	use print screen procedure described in manual
milk	0.5% fat, unable to locate	enter as "skim"
	1.5% fat, unable to locate	enter as "low fat"
"Quik" reported by Hispanic respondents	frequently refers to chocolate milk	clarify & enter as appropriate beverage
yogurt	frozen	enter as "frozen" on first Food Selection screen; enter flavor or form on next Food Selection

DESSERTS

ITEM	ISSUE	HOW TO ENTER
cookie	unable to locate in COOK hierarchy	try to locate in CRAC hierarchy
	with nuts	use print screen procedure described in manual
cupcake, pre-packaged	unable to locate	enter under SNAC, DESS, or CAKE hierarchies
doughnut	with nuts	use print screen procedure described in manual
"freezie"	unable to locate	enter by type (e.g., popsicle) & K amount with dimensions noted
honeybun	unable to locate	enter as sweet roll, frosted or glazed, cinnamon
kugel (noodle pudding)	unable to locate	enter under PAST recipes
marzipan (almond paste)	unable to locate	enter under ALMO
pie	amount eaten	obtain diameter, number of slices in whole pie & number of slices eaten; enter amount as fraction of whole
pudding	canned, shelf-stable, refrigerated or deli-style	enter as "purchased ready-to-eat"

Fast Food

Item	Issue	How to Enter
beverages, general	unable to locate under restaurant name	enter as appropriate generic beverage
	FSU states "with ice", ice not consumed	enter volume amount
	FSUs not available	enter volume amount
breaded chicken or fish patties	unable to locate appropriate restaurant in FAST hierarchy	enter as "commercial pre-breaded" selection & attach note to specify name of restaurant
sandwiches	unable to locate appropriate restaurant in FAST hierarchy	enter under generic SAND hierarchy and attach note with name of restaurant
	condiment removed (e.g., catsup removed from Hardees hamburger)	enter appropriate selection & attach note
	extra condiment added (e.g., extra special sauce added to McDonalds	enter appropriate selection & attach note

FATS

ITEM	ISSUE	HOW TO ENTER
fats, general	specific fat reported unavailable on variable ingredient screen	enter as unknown type of fat and attach a note to specify type of fat used (use print screen procedure described in manual)
butter, margarine	unknown if butter or margarine	enter as FATS, unknown type
	amount described as "pat"	"pat" acceptable if it is a standard-sized pat as served in restaurants; otherwise, use shape or food model
fat back	used in preparation	enter as fat back
	eaten separately	enter as fat back
margarine, spread	misunderstanding of "spread"	probe if package states "spread" or if margarine spread on bread
Pam	used in preparation	enter as appropriate preparation & specify no fat used
safflower oil	Spanish translation	aceite de cártamo
salad dressing	eaten in restaurant	enter as appropriate commercial salad dressing
	prepared from mix, unable to locate in DRES hierarchy	enter as homemade (or most appropriate hierarchy selection) and attach note to specify type of fat, if necessary
salt pork	used in preparation	enter as salt pork

FRUITS

ITEM	ISSUE	HOW TO ENTER
fruits, general	canned, drained	disregard drained & enter as appropriate amount with liquid
apple	≥ 1/2 of skin eaten	enter "with skin"
Chinese plum or Chinese candy	unable to locate	enter as PLUM, "dried rock salt"
prunes	in liquid	enter "canned"
	packaged	enter "dried"
raisins	amount added to cooked cereal	enter measurement of uncooked raisins
saladito	unable to locate	enter as PLUM, "dried rock salt"

GRAINS

ITEM	ISSUE	HOW TO ENTER
bagel	cinnamon raisin	disregard cinnamon & enter as appropriate type "with raisins"
	garlic, onion, poppyseed & sesame	disregard seasonings & enter as appropriate base (e.g., white, egg, etc.)
	honey wheat	enter as "wheat"
	marbled	enter as Missing Food
bread	crushed wheat	enter as cracked wheat
	diet, not thin-sliced	enter amount as shape option
	whole wheat	probe if 100% whole wheat or some other kind
grains (e.g., rice)	cooked with regular bouillon	enter as "cooked in salted water" & attach note
	cooked with low sodium bouillon	enter "cooked in unsalted water" & attach note

GRAINS, continued

ITEM	ISSUE	HOW TO ENTER
honeybun	unable to locate	enter as sweet roll, frosted or glazed, cinnamon
quick breads (e.g., cornbread)	prepared from mix, unknown type of fat added	enter as "unknown-prepared from commercial mix"
	prepared from mix, no fat added	enter as "unknown-prepared from commercial mix"
Rice-a-Roni, all flavors	unable to locate	enter as RICE, recipe or mixed dish

HISPANIC FOODS

ITEM	ISSUE	HOW TO ENTER
arroz	plain	enter as rice
	with other ingredients (e.g., tomatoes)	probe as to "arroz a la mexicana", "sopa seca de arroz" or other, & enter as appropriate
caldo de pollo solo	unable to locate	enter as SOUP, chicken, broth
caldo de res solo	unable to locate	enter as SOUP, beef, broth
caldo de res con arroz	unable to locate	enter as SOUP, beef, with rice
caldo de res y fideos	unable to locate	enter as SOUP, beef, with noodles
cilantro, fresh	unable to locate	enter as VEGE, coriander, raw
enchilada	without sauce	probe for better description, & enter as separate ingredients or as Missing Food
Mexican chocolate	unable to locate	enter under INGR, Mexican chocolate
pico de gallo (similar to red salsa)	prepared with oranges & jicama	enter as Missing Food
pollo con arroz	plain	enter as chicken & rice
	with other ingredients (e.g., tomatoes)	probe as to other ingredients & enter as appropriate, or enter as Missing Food
saladito	unable to locate	enter as PLUM, "dried rock salt"

HISPANIC FOODS, continued

ITEM	ISSUE	HOW TO ENTER
sopa seca (tomato, broth & rice, vermicelli)	diluted or soupy	enter as sopa seca if ingredients are the same
tamale	> 1 filling, unable to locate	see appropriate section of the manual
	prepared with dried shredded beef	enter as Missing Food
tortilla, corn	red or green in color	enter under TORT.COR & attach note to specify color
tostada	in fried tortilla basket	enter separate ingredients & enter fried tortilla basket as a Missing

LEGUMES, BEANS

ITEM	ISSUE	HOW TO ENTER
pork and beans	unable to locate	enter under BAKE
refried beans	more than one appropriate name	enter as refritos, refried beans or frijoles (refritos)

ITEM	ISSUE	HOW TO ENTER
meats, general	blenderized	enter amount before blenderized, or enter volume-solid & attach note
	chipped	probe if "shaved" as with deli luncheon meats or meat with gravy as "chipped beef"
	marinated in salad dressing	enter marinated "in non-soy sauce mixture" & attach note to specify type of salad dressing
bacon bits	real	enter as bacon bits, REA (real)
	imitation	enter as bacon bits, TVP (textured vegetable protein)
chicken	buffalo wings	enter as chicken wings, broiled, & default amount of barbecue sauce
	drummies, eaten as appetizer	enter amount as 1/2 small drumstick
	prepared by dipping in flour and frying	enter as battered/breaded, home prepared
	prepared at fast food restaurant, breaded & fried, skin not eaten	enter as CHIC, "fried" & "breaded/batter dipped - coating not eaten"
	shredded	enter amount as "volume - cut pieces"
chicken prepared in crock pot	preparation not available	enter chicken as "baked or microwaved" if small amount of liquid used; enter chicken as "stewed or boiled" if large amount of liquid used
chopped steak	unable to locate	enter under HAMB/ground beef
Cornish game hen	unable to locate	enter under POUL
fish	marinated in lemon juice or orange juice	enter marinated in non-soy sauce mixture
hog maws	unable to locate	enter under PORK, organ meats, stomach
meat substitute (e.g., hot dog made from TVP)	unable to locate	enter under the food name (e.g., hot dog) & enter appropriate selection
wurst	unable to locate	enter under SAUS hierarchy

MIXED DISHES, PIZZA

ITEM	ISSUE	HOW TO ENTER
corn dog	unable to locate	enter as PRONto pup
Mexican-American mixed dishes	unable to locate	see Hispanic Foods in QCRG or appropriate section of the manual
pizza	amount eaten	obtain diameter, number of slices in whole pie & number of slices eaten; enter amount as fraction of whole
	Little Caesar's 5 Meat Pizza	enter as pizza, 3 or more meat toppings
	Pizza Hut Meat Lover's Pizza	enter under FAST.PIZ
	ready-to-eat (not frozen)	enter as "restaurant, take-out or similar"
	school lunch pizza	enter as "restaurant, take-out or similar"
pork & beans	unable to locate	enter under BAKE (baked beans)
spinach pie (spanakopita)	unable to locate	enter under SPIN or MIXE
stuffed grape leaves (dolmas)	unable to locate	enter under MIXE.RIC; select beef, lamb or meatless

SANDWICHES

ITEM	ISSUE	HOW TO ENTER
grilled cheese	unknown amount of fat used for grilling	enter 1/2 TB per 1 slice of bread

SAUCES

ITEM	ISSUE	HOW TO ENTER
enchilada sauce	prepared with milk instead of cream	enter "unknown if made with cream" & attach note to specify type of milk (use print screen procedure described in manual)

SNACKS

ITEM	ISSUE	HOW TO ENTER
Chinese plum or Chinese candy	unable to locate	enter as PLUM, "dried rock salt"
chips, snack	generic, flavored	enter as appropriate regular chip
cracker	unable to locate in CRAC hierarchy	try to locate in COOK hierarchy
"freezie"	unable to locate	enter by type (e.g., popsicle) & K amount with dimensions noted
Fun Fruits (Sunkist)	unable to locate	enter under CAND brand name listing
popcorn	prepared in microwave, not commercially packaged	enter as "hot air popped"
saladito	unable to locate	enter as PLUM, "dried rock salt"
Tiger's Milk Bar	unable to locate	enter under CAND brand name

SOUP

ITEM	ISSUE	HOW TO ENTER
soup, canned	ready-to-eat, unable to locate	enter as Missing Food
	regular or thin consistency	enter as "regular" style
	stew-like	enter as "chunky" style
soup, homemade from a recipe	unable to locate	use general hierarchy selection if available
beef-based soup with tomatoes	unable to locate	enter as SOUP, tomato, beef
dry onion soup mix	unable to locate	enter under SOUP or INGR
Hispanic soups	unable to locate	see Hispanic Foods in QCRG or check appropriate section of the manual
pepperpot soup	unable to locate	enter under SOUP.BEE
sopa seca (tomato, broth & rice or vermicelli)	diluted or soupy	enter as sopa seca if ingredients are the same

ITEM	ISSUE	HOW TO ENTER
corn syrup	Dark or Light Karo Syrup	enter as corn syrup
fruit spread (e.g., Polaner)	unable to locate	enter as JAMS, without added sugar or artificial sweetener (all

VEGETABLES

ITEM	ISSUE	HOW TO ENTER
vegetables, canned	home-canned with salt	enter as "canned, regular" & attach note
	home-canned without salt	enter as "canned, low sodium" & attach note
	prepared with fat & salt	enter as "boiled" preparation & specify fat & salt
vegetables, cooked	ham or bacon used to season (ham or bacon not eaten)	enter ham or bacon as "fat used in seasoning"
	ham or bacon used to season (ham or bacon eaten)	enter ham or bacon as "fat used in seasoning" & as separate item
	marinated in oil or oil mixture before cooking	enter appropriate preparation & "fat used in seasoning" to specify type of fat
	marinated in salad dressing	enter as Missing Food
	prepared from home-frozen	enter as "cooked from frozen"
	prepared from commercially-frozen, with butter sauce, unable to locate	enter at end of food selection screen
vegetables, "dark green"	inclusions and exclusions	include broccoli and dark green leafy vegetables (e.g., spinach); exclude green beans and peas
vegetables, typically cooked, eaten raw (e.g., raw sweet potato)	choice not available	enter as cooked or baked & attach note
vegetables, raw or blanched	marinated in oil mixture	enter as "raw or blanched - marinated in oil mixture"
	marinated in salad dressing	enter as above & attach note to specify type of salad dressing

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VEGETABLES, continued

ITEM	ISSUE	HOW TO ENTER
carrots prepared in crock pot with chicken	preparation not available	enter carrots as "baked or roasted in meat drippings" if small amount of liquid used; enter carrots as "boiled" if large amount of liquid used
french fries, purchased at cafeteria	unknown preparation	enter as "unknown if cooked from fresh or frozen"
kim chee	unable to locate	enter as cabbage, kim chee style
onion rings, frozen	baked not fried	enter as "fried"
potato	$\geq$ 1/2 of peel eaten	enter "with peel"
	mashed, prepared without milk	enter as POTA, boiled, & "volume - mashed"
	sauteed, unable to locate	enter as "American fried"
tomato	red or green, in salad	enter as "red"
	yellow, unable to locate	enter as "red"

MISCELLANEOUS

ITEM	ISSUE	HOW TO ENTER
SALTS AND SEASONINGS		
Molly McButter (dried butter replacement)	used in preparation or seasoning	enter as Missing Food if > 1 TB; otherwise disregard
salts (e.g., Accent, lite salt, garlic salt, seasoning salts such as Old Bay, etc.)	used in preparation	enter salt used in preparation
salt substitute	used in preparation	enter no salt added in preparation
SHAPES		
	oblong shape	enter as cube
	oval shape	enter as circle
	shape has no uniform thickness	instruct SP to visualize folding portion eaten to make equal thickness; enter appropriate shape
	thickness is 1/2 of thickness bar	enter as 1/16 on the Amount screen
SPICES AND FLAVORINGS (e.g., cinnamon, cloves, etc.)	added to foods	disregard
TYPES OF PREPARATIONS		
broasted or sauteed	choices not available	enter as "fried"
roasted	choice not available	enter as "baked or microwaved"
self-basting	Spanish translation	pre-preparado
stewed	with fat	attach note to specify type of fat

COMMENTARY

Nutrient data for Mexican-American foods: Are current data adequate?

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According to recent census reports (1), the Hispanic population is growing five to six times faster than the US population as a whole. Mexican Americans constituted almost two thirds of this subpopulation in 1988 and had the largest rate of growth of any single Hispanic-origin group between 1980 and 1988 (1). The rapid increase in the number of Mexican Americans has probably contributed to the increased interest in the diet and nutritional status of this ethnic group (2-7). The focus on the diet of Mexican Americans raises concerns about how well their dietary intakes can be assessed given available nutrient data for foods they commonly consume.

Mexican Americans eat both Mexican and American foods. Nutrient data for the American foods are readily available in a variety of databases, whereas data for Mexican foods are more difficult to find. Because the US Department of Agriculture (USDA) survey databases are widely used and are often the foundation for other databases, the adequacy of the USDA databases for use in the estimation of Mexican-American dietary intakes is discussed in this article.

When nutrient data are unavailable or inappropriate for Mexican Americans, alternative strategies must be considered for finding food composition data. Commonly used strategies include substituting nutrient data for similar foods for which food composition data are available, asking respondents to list ingredients in foods consumed, and supplementing data with data from other sources. The appropriateness of using such strategies for calculating nutrient intakes in studies where the diet of Mexican Americans is of primary interest is examined from both a nutritional and statistical viewpoint. Although the issues are discussed here with respect to Mexican foods, they can be generalized to traditional foods consumed by members of any ethnic group living in the United States.

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Currently available USDA food composition data

Mexican foods in the USDA databases are limited to relatively few foods consumed by Mexican Americans—usually those Mexican foods that are commonly consumed by the non-Hispanic population too. Many foods eaten by Mexican Americans are not included because they were probably not reported or not reported frequently enough in national food consumption surveys. For instance, stews such as carne guisada or pollo guisado cannot be found in the survey databases.

Nutrient data for Mexican foods in the USDA databases are based on commercially prepared, Americanized versions of these foods, which are often not representative of recipes, ingredients, and preparations used by Mexican Americans in the home. For example, Americanized tacos are usually made with a fried tortilla, a filling, and shredded lettuce, whereas Mexican tacos often consist of a tortilla cooked without fat, which is wrapped around a filling and eaten without lettuce. Another example is that of tamales—filled dough steamed in cornhusks. Mexican tamales are made with masa harina, a flour made from lime-treated corn, whereas commercially prepared tamales are often prepared with degermed cornmeal, as are those in the USDA databases. A tamale made with masa harina contains 47 mg calcium per 100 g (8) compared with only 11 mg calcium per 100 g for one made with degermed cornmeal (9).

If Mexican Americans are not eating commercially prepared Mexican foods but instead are eating more traditional versions of these foods, then the nutrient data in the USDA databases will generally be inappropriate for assessing their dietary intakes. This raises an important issue for all mixed dishes in nutrient databases, not just Mexican ones: How much variability should a typical recipe incorporate before more than one recipe is needed? This issue deserves more attention but is beyond the scope of our article. However, Americanized and traditional versions of many Mexican mixed dishes clearly vary too much for a single recipe and its associated nutrients to be appropriate for both versions.

Finding nutrient data for traditional Mexican foods

When nutrient data are unavailable or inappropriate for estimating nutrient intakes of Mexican Americans, other sources of food composition data must be found or

Table 1. Selected nutrient values for similar foods (per 100 g)

food	energy (kcal)	fat (g)	sodium (mg)	carbohydrate (g)	vitamin A (IU)	vitamin C (mg)	potassium (mg)
sopa seca[a]	150	7.4	508	...[c]	...	...	...
spaghetti[b]	63	0.3	171	...	...	...	...
tomatillos[a]	...	...	...	...	42	6	400
tomatoes[b]	...	...	...	...	1,133	18	207
tomato-chili sauce[b]	104	0.3	1,138	25	1,400	16	...
salsa, uncooked[a]	18	0.2	389	4	1,691	36	...
salsa, cooked[a]	111	9.8	199	6	2,676	10	...

[a]Reference 8.
[b]Reference 9.
[c]... = Not relevant.

alternative strategies must be developed for collecting data on and coding traditional foods that are reported.

Substituting nutrient data for "similar" American foods

The simplest approach is to substitute nutrient data for American foods that might be nutritionally similar to Mexican foods. Although this may work well for some foods, others are more problematic and the substitutions become inappropriate for calculating dietary intakes of Mexican Americans.

Some Mexican foods are so unique that no similar food for which nutrient data already exist can be identified. Mole poblano (a spicy sauce eaten with poultry, enchiladas, and tamales) consists of a paste made from rehydrated dried chili peppers that is thinned with chicken or turkey stock and mixed with tomatoes or tomatillos, ground nuts, sesame seeds, raisins, chocolate, oil, lard, various spices, and a tortilla for thickening. This is such an unusual combination of ingredients that no suitable substitute exists in the USDA databases.

Some Mexican foods resemble "American" foods but have distinct enough recipes that their nutrient contents differ. The meatless version of sopa seca de fideo (dry noodle soup) looks very much like spaghetti with meatless tomato sauce. But unlike spaghetti, sopa seca de fideo is prepared by browning uncooked noodles before adding tomatoes and broth and cooking them until the liquid is absorbed. As shown in Table 1, the nutrients for a typical sopa seca de fideo recipe prepared with half lard and half vegetable oil are very different from those for spaghetti with meatless tomato sauce; sopa contains more fat, cholesterol, and sodium than does spaghetti with meatless tomato sauce.

Some Mexican foods that are widely consumed by non-Hispanic Americans have much more variability in ingredients and preparations among Mexican Americans and require more than one substitution. In the USDA databases, salsa has been assigned the nutrients for tomato-chili sauce that is commercially prepared, thicker than salsa, and similar to catsup. Among Mexican Americans, salsa can refer to a variety of spicy sauces, their common ingredient being chilies. Salsa can

be made with red tomatoes or with tomatillos, a green, tomatolike vegetable that is covered with a papery husk and is botanically unrelated to red tomatoes. Tomatillos contain more potassium and much less vitamin A and C than do red tomatoes (see Table 1). A further distinction among salsas is that they can either be cooked or uncooked; the cooked version is usually prepared with fat and dried red chilies, whereas the uncooked version is usually made with fresh green chilies and without fat.

Table 1 contains selected nutrient values for two red salsa recipes; both are made with red tomatoes, but one is cooked and the other is uncooked. Also shown are values for tomato-chili sauce. The following conclusions can be drawn from these nutrient data: (a) tomato-chili sauce has a much higher sodium content than either red salsa; (b) the red salsas differ in their vitamin A and C content; this difference is almost entirely attributable to the differences in vitamin content between red and green chilies; (c) cooked salsa contains more fat than uncooked salsa and tomato-chili sauce; (d) uncooked red salsa has a much lower caloric and carbohydrate content than cooked salsa or tomato-chili sauce. Thus, important nutrient differences are overlooked by coding these two salsas as tomato-chili sauce.

Substituting data for foods from another Hispanic group

Another option is to substitute nutrient data from another Hispanic group if such data are available. The USDA databases contain data for foods reported in a special study done in Puerto Rico (10). Many fruits, vegetables, and other single-item foods are consumed by both Puerto Ricans and Mexican Americans; examples of such foods include guava, tamarind, and fresh coriander. The nutritive values for these foods can be used to assess Mexican-American dietary intakes.

Food composition data for recipe-type dishes, though, should be used cautiously as many Puerto Rican foods have the same name as Mexican foods but contain different ingredients or have different preparations. For example, many Puerto Rican recipes for mixed dishes contain ham and salt pork, whereas Mexican versions of these same dishes do not.

Picadillo, a dish of ground meat sauteed with tomatoes and spices, is usually made by Mexican Americans with ground beef, whereas the Puerto Rican version contains beef, pork, ham, and salt pork. The Puerto Rican version of picadillo contains 926 mg sodium per 100 g (9) compared with only 233 mg sodium per 100 g (8) for the all-beef Mexican version of picadillo. The frequent substitution of Puerto Rican recipes that include ham and salt pork may artificially inflate sodium intakes calculated for Mexican Americans.

Another difference is that Puerto Rican recipes generally call for vegetable oil, whereas Mexican recipes are more varied and can be prepared with lard, shortening, or vegetable oil. This difference is reflected in responses to a question asked in the Hispanic Health and Nutrition Examination Survey (11) conducted by the National Center for Health Statistics. Most Puerto Ricans (91.7%) reported that oil (Figure 1) was the type of fat they most frequently used to fry foods. In comparison, only slightly more than half of Mexican Americans (57.0%) said that they used oil; the remainder reported using lard or shortening (20.7% and 16.8%, respectively). Saturated fat intakes for Mexican Americans may be underestimated if Puerto Rican recipes with vegetable oil are frequently substituted for Mexican dishes.

Listing ingredients in reported foods

One method of obtaining intake data is to ask respondents during the interview to itemize the ingredients in the foods that they consumed and then use nutrient data for the individual items. This method is useful for multiple-item foods that have variable types and amounts of ingredients. For example, a taco usually consists of a tortilla, a filling, and possibly a sauce; however, a corn or flour tortilla may be used, the tortilla may or may not be fried, and many different types of fillings and sauces can be used.

Listing ingredients for mixed dishes is equivalent to obtaining recipes and may be critical in studies where much precision is needed on an individual level, such as in studies concerning the relationship between diet and health, although it is less important in studies of population groups in which average intakes are of interest. Also, gathering recipe-level information may be easier when diet records are collected but less feasible when 24-hour recalls are conducted.

Asking the respondent to give the component parts of foods may result in more detailed information but has several disadvantages: (a) respondent burden is increased; (b) interview times will be longer; (c) basic ingredients may be forgotten or omitted; (d) the nutrient composition of foods combined in this way may not take into account the effects of preparation unless appropriate retention factors are applied; (e) portion sizes may be difficult to estimate; and (f) the identity of the complete food is difficult to code, thereby limiting the use of such data.

In addition, this method requires that nutrient data be available for ingredients commonly used in Mexican dishes. However, the USDA databases lack food composition data on some basic Mexican ingredients such as masa harina, tomatillos, fresh and dried chili peppers, and dried meat. Substituting nutrient data for ingredients may lead to the same problems encountered with substituting similar foods.
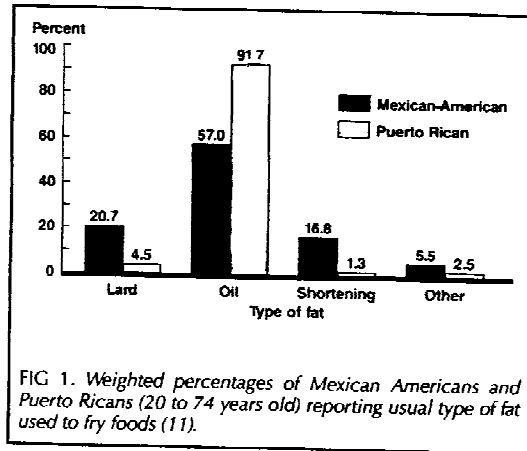
FIG 1. Weighted percentages of Mexican Americans and Puerto Ricans (20 to 74 years old) reporting usual type of fat used to fry foods (11).

Using other sources of nutrient data

Nutrient data for Mexican foods are available from Mexico (12). However, Mexican foods consumed in the United States, especially recipe-type dishes, may have been modified because of the unavailability of certain ingredients or exposure to another culture's eating habits. Food composition data may also be incomplete because of the unavailability of certain nutrients or foods in Mexican databases, leading researchers to use a combination of sources. The use of multiple sources may introduce biases attributable to inconsistencies in analytic methods, sampling procedures, and methods of estimating nutrient changes because of food preparation techniques (13).

Analytic issues

Systematic biases may be introduced into intake data as a result of using one or more of the aforementioned strategies for finding nutrient data. The use of multiple sources of food composition data can systematically bias nutrient intakes in ways that may be difficult to quantify. The substitution of nutrient values for foods from other Hispanic groups or other "similar" foods may also contribute to systematic bias. If, as a result of substitution, a nutrient is overestimated in some commonly consumed foods and underestimated in others, it becomes difficult to predict the overall effect on total nutrient intakes and the contributions of these foods to those intakes.

The variability in dietary intakes may be artificially reduced if one food's nutrient data are used for many nutritionally different foods. As a result, it may be difficult to detect differences among subgroups of Mexican Americans, among Hispanic groups, or between Hispanic and non-Hispanic populations, depending upon the kind of substitutions that are made. Additionally, dietary intakes with artificially reduced variability or those containing substitution biases may contribute to the misclassification of individuals, which, in turn, will affect the power of detecting important relationships between intakes and other health-related variables.

Listing ingredients in reported foods can contribute to measurement error in at least two ways: important nutrient sources may be omitted and portion-size estimation may be complicated.

Substituting food composition data for similar foods may lead to the loss of the reported food's identity, unless another coding system is devised for recording this information. Loss of this information has an impact on studies concerned with eating behavior. The ability to evaluate dietary habits and detect changes in eating patterns will be limited because not all foods can be accurately identified. Also, it becomes impossible to draw conclusions about what foods are major contributors to the intake of specific nutrients, which in turn limits the ability to recommend dietary changes.

Implications

If currently available nutrient data or one of the aforementioned approaches are used for a few Mexican foods in studying a general population, only a small amount of error may be introduced into nutrient intake estimates and the impact will be minimal. In contrast, the amount of error may be larger and less tolerable if a study focuses on Mexican-American diets and inappropriate nutrient data must be used for many, frequently reported foods. Dietary data are subject to many sources of error, so error contributed by lack of specificity of nutrient databases should be reduced or eliminated whenever possible.

Ideally, a single source of nutrient data for Mexican and American foods should be used in the assessment of Mexican-American diets. In practice, most researchers are forced to use food composition data that are not quite appropriate because better data are unavailable. Reliance on one source of nutrient data as much as possible is recommended in this situation, and the above approaches should be used in ways that minimize the amount of error they contribute to dietary intakes.

A more desirable approach is to create better nutrient data for Mexican foods. The oversampling of Mexican Americans during the third National Health and Nutrition Examination Survey (14) has prompted the National

Center for Health Statistics and the Human Nutrition Information Service of the USDA to add and improve nutrient data for Mexican foods in future versions of the USDA nutrient databases. In addition to providing a more complete source of nutrient data for Mexican foods, the use of a common nutrient database in calculating dietary intakes of Mexican Americans should make the results from different studies more comparable.

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NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY, CYCLE III

Questions and Answers

The following set of questions and answers has been compiled
to assist staff in responding to inquiries from survey respondents
and community and health officials about the content, purpose
and operations of NHANES III. It will be updated periodically
based on changes in the survey and comments received from field
and office staff.

BACKGROUND

1. WHAT IS THE NATIONAL CENTER FOR HEALTH STATISTICS?

The National Center for Health Statistics (NCHS) is an agency
of the Public Health Service, Centers for Disease Control,
whose primary job is the collection and dissemination of health
statistics for the Nation. NCHS conducts health surveys and
manages the U.S. vital statistics system, producing a wide
range of data used for health research, administration, planning
and education.

2. WHAT IS THE NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY?

The National Health and Nutrition Examination Survey (NHANES)
is a program of the National Center for Health Statistics which
collects data on the health of persons living in the United
States through interviews and direct examinations. Operating
from mobile examination centers, NHANES staff travel across
the country to reach the people selected to participate in
the survey. Standardized examinations and laboratory tests are
performed to produce estimates of chronic illness and its severity,
nutritional status, need for health services, and other data that
describe physical and physiological characteristics of people
living in the United States.

3. WHAT IS THE THIRD NATIONAL HEALTH AND NUTRITION EXAMINATION
SURVEY?

The third National Health and Nutrition Examination Survey
III (NHANES III) is the seventh and the largest health examination
survey conducted by NCHS. It is similar to the examination
surveys conducted through the 1960's and 1970's, with several
major differences. Unlike previous health examination surveys,
NHANES III has no upper age limit. In order to produce reliable
statistics for Blacks and Mexican-Americans these groups are
included in greater numbers in this study than in previous national
surveys. In addition, these areas have special emphasis in NHANES
III: child health, health of older Americans, occupational health,
nutrition, and environmental health.

4. WHAT IS THE PAST HISTORY OF NHANES?

NHANES III is the seventh in a series of health examination surveys which began in 1960. The National Health and Nutrition Examination Survey was first conducted in 1971-75 and again in 1976-80. The Hispanic Health and Nutrition Examination Survey focusing on the health of Mexican-Americans, Puerto Ricans, and Cuban-Americans was conducted in 1982-84. NHANES was formed in 1970 when a nutrition component was added to the health examination surveys which had been conducted in three cycles for adults, children and youth in the 1960's.

5. WHAT IS WESTAT?

Westat is a research organization which is conducting NHANES III under contract to NCHS. Westat is located in Rockville, Maryland, and has been responsible for many large projects in the health and scientific fields, sponsored by NCHS, the National Institutes of Health, and others.

SAMPLE SELECTION

6. HOW ARE INDIVIDUALS CHOSEN FOR THE SURVEY?

Some 40,000 individuals living in 88 communities across the country will be asked to participate in NHANES III. Individuals are chosen on a random, scientific basis to ensure that they form a sample that is representative of the U.S. population ages 2 months and older. People are not selected by name, but on the basis of living in a household and neighborhood chosen for the survey.

7. HOW ARE NEIGHBORHOODS CHOSEN FOR THE SURVEY?

Because the survey cannot travel to every part of the United States, the country is divided into large areas, such as counties or groups of counties. Smaller areas are scientifically selected, until finally neighborhoods are identified. Within the neighborhoods selected for the survey, households are identified and residents in those homes become the official survey sample.

8. WHY DOES THE SURVEY INCLUDE SO MANY MORE MEXICAN-AMERICANS AND BLACKS, PROPORTIONATELY, THAN WHITES?

In order to produce reliable statistics for Blacks and Mexican-Americans these groups are selected in larger numbers for the survey. The survey will include 12,000 Blacks, 12,000 Mexican-Americans, and 16,000 Whites. The number of respondents in the race/ethnic categories have been chosen at a level necessary to ensure that data specifically for each group will be reliable and useful. The statistical weighting for final analysis puts all the information from individuals back into their proportions in the population.

9. WHY HAS THE SURVEY EXCLUDED PUERTO RICANS, CUBAN AMERICANS
AND OTHER CENTRAL AND SOUTH AMERICAN HISPANICS?

No population group has been excluded from NHANES III. All
Hispanics are included in the survey. However, Mexican-Americans
are included in larger numbers because they are the only subgroup
of Hispanics with sufficiently large numbers in the United
States to make subgroup estimates. All other Hispanics are
eligible but not oversampled.

The Hispanic HANES conducted from 1982 to 1984 focused solely
on the health of the Hispanic population and produced data
for Mexican-Americans, Puerto Ricans and Cuban-Americans.

10. WHY HAVEN'T OTHER ETHNIC GROUPS SUCH AS CHINESE OR VIETNAMESE
BEEN TARGETED FOR THIS SURVEY? OR A SEPARATE SURVEY?

NHANES III is a national survey designed to describe the health
of the entire civilian, noninstitutionalized population of
the United States. In this survey, sufficient numbers of people
are being sampled so that statements can be made about the
health of infants, persons over 75, Blacks, and Mexican-Americans.
If the survey were to produce data on groups that represent
even smaller proportions of the population it would have to
be expanded to a size that is not economically or operationally
feasible.

At this time, there are no plans to conduct a special health
examination survey of another minority group such as Asian-
Americans. The Hispanic HANES was conducted in 1982-84 after many
years of planning. The methodology of NHANES or HHANES could be
used to develop surveys of other population groups such as American
Indian or Asian-American. A survey focusing on another minority
group in the population would be an enormous undertaking requiring
extensive planning and collaboration with minority organizations
and researchers.

11. WHY DOESN'T THE SURVEY GO TO EVERY STATE? HOW CAN IT
BE REPRESENTATIVE OF ALL AREAS?

It is not necessary for the NHANES III sample to include residents
of every State to form a nationally representative sample.
Since all areas have a chance to be selected for the survey,
a scientific sampling process can ensure that the final sample
is representative of the U.S. population.

12. WHY DO WE EXCLUDE CERTAIN GROUPS FROM THE SURVEY, SUCH
AS PERSONS IN THE MILITARY, NURSING HOME RESIDENTS, PRISONERS?

NHANES III is a household-based survey and includes those
individuals who can be reached through that methodology. The
populations which are excluded are often quite transient and are
hard to sample scientifically in such a way that the data collected
can be meaningfully combined with data collected in a household-
based survey. In addition, it would not be feasible for

institutionalized persons to leave their institutions to participate in the health examination in the mobile examination centers.

NCHS conducts a separate survey of the health of nursing home residents. Other Federal programs collected extensive data on military personnel and the prison population.

PURPOSE

13. WHAT IS THE MAIN PURPOSE OF THIS SURVEY? WHAT ARE THE MAJOR FACTS AND INFORMATION WHICH WILL BE OBTAINED IN NHANES III?

The main purpose of NHANES III is to provide current statistics on the extent of illness and its severity in the population, on the relationship of risk factors to the major chronic diseases, and on the nutritional status of the population. These data are used to measure progress in preventing disease and to plan programs to improve health. The public health programs to combat the major chronic diseases such as heart disease, diabetes and cancer rely heavily on the NHANES III to target groups at risk and provide the information to design the most effective prevention and treatment programs. Through the health examination programs, the Nation has been able to monitor trends in health for a quarter of a century and to learn how much has been accomplished and where problems still exist.

NHANES III data will also be the basis for national standards for such measurements as height, weight, blood pressure, blood cholesterol, and iron levels. NHANES III will produce data on previously undiagnosed conditions as well as those known to the respondent. Thus, conditions such as hypertension and diabetes, which are frequently present but undiagnosed, can be accurately measured and programs to reach groups at risk be developed.

14. WHAT FACTS WERE DISCOVERED IN EARLIER HEALTH EXAMINATION SURVEYS WHICH HAVE MADE A DIFFERENCE IN THE HEALTH OF AMERICANS?

Earlier health examination survey findings have identified populations with high blood lead levels and iron deficiency anemia which led to policies and programs to address those problems. National health promotion efforts to reduce hypertension and cholesterol levels have used NHANES data to target education and prevention programs and to measure the success in combating the risk factors associated with heart disease, the Nation's leading cause of death. Deaths from heart disease and stroke have decreased significantly in recent years, due in part, to health promotion programs and changes in lifestyles and medical care. Data from the survey on height, weight and body measurements were used to develop the growth charts of children used in pediatric care and for public health monitoring throughout the world.

15. IS THIS NATION OVER-STUDIED? AREN'T THE MAJOR HEALTH PROBLEMS ALREADY KNOWN AND SHOULDN'T RESOURCES BE CONCENTRATED ON HEALTH EDUCATION AND TREATMENT RATHER THAN SURVEYS?

Many of the serious health problems facing the Nation today are known. The major chronic diseases and conditions are being studied in NHANES III. While the medical and research community knows much about the causes and treatment of those diseases, there is still a great deal which can be learned to prevent and treat such diseases as diabetes, hypertension, osteoporosis, and heart disease. NHANES III will provide data on the occupational or environmental factors which cause disease or worsen conditions. NHANES III builds on existing knowledge, while providing the opportunity to measure progress in preventing disease and improving health. The results also help direct medical research and public health resources more efficiently to deal with the current priorities.

16. WHY IS THE SURVEY ANY USE TO AN INDIVIDUAL ALREADY UNDER MEDICAL CARE WITH A PRIVATE PHYSICIAN OR CLINIC?

The medical examination in NHANES III does include many of the standard tests which are usually performed during a regular physical examination. However, the survey also includes a number of specialized tests requiring sophisticated and expensive equipment. Tests such as those to measure lung capacity are not usually provided during a routine physical examination and provide important information to individuals which could help them to prevent a health problem or take corrective action as indicated.

17. FOR OLDER PERSONS, TRAVELLING TO THE MOBILE EXAMINATION CENTER MAY BE DIFFICULT. HOW WILL THEY BENEFIT FROM THE SURVEY?

NHANES III staff will provide transportation and assistance in getting to the mobile examination center. The staff is especially sensitive to those who may have problems travelling to the center and will make every effort to schedule the appointment at a convenient hour or day.

A special home health examination, consisting of an abbreviated set of tests and measurements, will be offered to those persons who cannot or will not travel to the mobile examination center.

The survey is of particular use to older Americans for two reasons. One, there are a number of tests in the survey which focus on the health problems of the aged or conditions which are more frequent or disabling in older populations. Survey participants may learn facts about their own health which will be useful. In addition, the survey offers a real opportunity to learn more about the health of all older Americans. For the first time the survey includes respondents of all ages, with no upper age limit. Data from older respondents will be available for health researchers and analysts who are addressing the

health concerns of a growing segment of the American population. One in eight Americans is now over 65; by the year 2025 that number will grow to one in five. It's important that people grow old in the best health possible.

NHANES III is partially funded by the National Institute on Aging and has been endorsed by the American Association of Retired Persons.

18. WHY IS NUTRITION A MAJOR PART OF NHANES III? DON'T WE ALREADY KNOW WHAT MAKES A GOOD DIET?

A good deal is known about what constitutes a healthy diet, but much less is known about who has one. Much of the information on diet and nutrition comes from earlier NHANES surveys. NHANES surveys identified nutritional deficiencies in the population, such as iron deficiency in women of certain age groups. However, much more can be learned about the complex relationship between diet and health. As new diet patterns emerge it is important to measure their impact on health, not only in a general way, but related to specific conditions so that programs to educate and inform can be adapted to the current problems.

SURVEY RESULTS

19. WHY DOES THE SURVEY TAKE SO LONG? ARE THE RESULTS OUT OF DATE BY THE TIME THE FINDINGS ARE RELEASED?

Many surveys are conducted in a shorter time than the NHANES surveys. Surveys which draw their data from interviews or from medical records are often done on an annual basis. Telephone surveys offer an even faster turn-around. NCHS conducts these types of surveys as well as NHANES III and the data from all of these programs are extremely useful.

There is also the need, however, for a survey which obtains data from direct medical examinations of a large sample of the population. To ensure the level of accuracy and produce the extensive, detailed data of NHANES III a large sample is necessary. Some 40,000 people in 88 communities across the country will be participating in the survey. It will take 6 years to reach all the survey locations. This is the largest examination survey NCHS has ever conducted and probably the largest national survey of its type ever performed in the world. It takes time to conduct a survey of this magnitude and precision.

Although the survey will be conducted over a 6-year period, it has been designed to have data-available after the first half of the survey is completed. NHANES III has been designed in two segments to allow earlier release of the data and data collection and processing have been automated so that data will be available earlier than in any previous survey.

NHANES III has also been designed to produce data on the types of conditions, diseases and measurements which are more constant and where change is measured over years rather than on a weekly or monthly basis. NHANES data are unique and irreplaceable.

20. HOW IS THE INFORMATION FROM NHANES PROVIDED BACK TO THE COMMUNITY? AND TO OTHER USERS?

A major aspect of the mission of NCHS is the dissemination of the findings from the surveys it conducts. Data are provided to users in many different formats. A series of publications are produced with the major findings of the survey. These publications are distributed to libraries, health programs, researchers, analysts, and others. NCHS maintains a mailing list to inform interested individuals and organizations as soon as the data are published. Health departments and community and other officials in each location are notified before the survey begins in each area and have the opportunity to sign up to receive survey publications.

Presentations at scientific meetings, articles in health and medical journals, and information provided to the media are other ways the findings are made known in local areas as well as nationally. To allow researchers access to the full range of statistical information, public use data tapes are produced. These tapes are most often used by universities, other government agencies, health organizations and business to analyze specific findings.

21. WHO USES THE NHANES DATA? FOR WHAT PURPOSE?

The primary purpose of NHANES is to produce the data needed to direct the Nation's health programs, conduct its research, and develop health policy. Among the major users of NHANES data are the Federal health programs: the National Institutes of Health, the Food and Drug Administration, and the Centers for Disease Control. These national health programs provide partial funding for the survey and rely on NHANES III to produce data on such major chronic conditions as heart disease, diabetes, and arthritis.

Other Federal agencies, for example, the Environmental Protection Agency, use the information from NHANES III to study environmental pollution and its impact on health.

State and local governments and health programs; the major research institutes across the country dealing with heart disease, cancer, and other formidable health problems; businesses, ranging from manufacturing to transportation; educators; the media; and the public all have access to and utilize the findings from NHANES.

22. HOW DOES A PERSON OBTAIN INFORMATION FROM NHANES?

For data from NHANES or other programs of the National Center for Health Statistics, write or call the Scientific and Technical Information Branch, 3700 East-West Highway, Hyattsville, Maryland 20782, (301) 436-8500.

SURVEY OPERATIONS

23. WHAT DOES THE SURVEY COST? WHY SO MUCH?

The costs of conducting NHANES III for the 6-year period are estimated at approximately $100 million. This figure includes an extensive planning period, data collection and analysis. NHANES III is an expensive survey since three mobile examination centers will be operation throughout the full survey. The mobile exam centers are equipped with high tech equipment and are staffed by a highly trained team of health specialists.

24. IF NCHS HAS DONE THE SURVEY FOR YEARS, WHY IS THE FULL SURVEY NEEDED AGAIN? CAN'T PORTIONS JUST BE UPDATED?

NHANES III does build on earlier surveys and many of the conditions and diseases which are studied in the current survey were included in the health examination surveys conducted over the past two decades. The last national survey was conducted in the late 1970's. It is necessary to update the data on chronic diseases and physiological measurements to determine the changes which have taken place since then. Many new tests and procedures have been developed and are included in NHANES III to take advantage of the latest diagnostic technology and to obtain data on newly emerging health problems and diseases.

25. HOW CAN EXTENSIVE HEALTH EXAMINATIONS BE PERFORMED IN A MOBILE EXAMINATION CENTER?

The NHANES mobile examination centers are specially-built and designed to contain specialized medical equipment and to utilize the latest technology to collect and process health information. The mobile exam centers are actually four trailers with interconnecting passageways, comprising well over 1,000 square feet of examination space. Each exam component has been carefully planned and its space allocated in the mobile exam center complex. The mobile exam center includes a laboratory, special sound-proof room for hearing tests, bone densitometry scan room, ultrasonography measurement area, interviewing offices, dental examination room, and stations for various other tests. Sample persons enter the mobile examination center at a central reception area where a coordinator greets them and schedules their examination at the center.

26. WHY DOESN'T THE SURVEY USE LOCAL HEALTH PERSONNEL AND FACILITIES?

The staff of the NHANES III survey are not only trained in a variety of health professions: medicine, dentistry, medical technology, they are also trained in the specialized procedures and practices required to conduct this complex survey. Special methods of recording survey results and standardizing each procedure must be adhered to in an identical way in each survey location. Therefore, while qualified personnel could be hired in local areas, they would need extensive

training to carryout the NHANES III survey.. It is more efficient to train NHANES teams and have them travel to each survey site. Occasionally, office or administrative personnel may be hired in the local area.

27. WHAT ASSURANCES DOES NHANES III PROVIDE THAT THE MEDICAL EXAM AND TESTS WILL BE PERFORMED BY TOP-NOTCH MEDICAL PERSONNEL? WHAT ARE THEIR CREDENTIALS?

Each member of the medical team conducting NHANES III is formally trained and experienced in his or her profession and certified as necessary to perform the tests and procedures. In addition, they are screened, interviewed and carefully trained to conduct the NHANES examinations and interviews.

28. IF THE SURVEY IS SO BENEFICIAL TO THE COUNTRY AND TO PARTICIPANTS, WHY DO YOU HAVE TO PAY PEOPLE TO TAKE PART?

Paying participants is simply an added incentive for taking part in the survey and compensates them in part for the time they contributed.

29. CAN SURVEY PARTICIPANTS RECEIVE AN AMOUNT EQUAL TO THAT WHICH IS LOST BY NOT GOING TO WORK?

NHANES III provides a standard reimbursement of $30 to all survey participants who complete the interview and examination. Those who agree to either a morning appointment or an afternoon appointment as indicated by the sampling plan will receive an additional $20.

Participants are offered Saturday and Sunday appointments, as well as some week nights, to avoid time lost from work and to be as convenient as possible.

30. CAN A PERSON WITHDRAW AT ANY POINT DURING THE EXAMINATION
AND STILL RECEIVE COMPENSATION?

Participants must complete both the personal interview and most of
the physical examination to receive payment for participation.
However, if it is impossible for a participant to complete a
particular test in the medical exam, reimbursement may still be
made. Participants may refuse a minimum number of examination
components and still receive payment.

SURVEY CONTENT AND PROCEDURES

31. WHAT DOES THE EXAMINATION CONSIST OF?

All examinees receive a physical examination, body measurements,
and dietary interview. Depending upon the age of the participant,
the rest of the examination includes a dental examination,
health interview, laboratory tests, hearing examination, allergy
skin test, spirometry, electrocardiogram, x-rays, ultrasound
examination of the gallbladder, and a measurement of bone density.

32. HOW LONG IS THE EXAMINATION? ARE THE PROCEDURES CLEARLY
DESCRIBED?

The examination takes approximately 3_ hours. Each procedure
will be carefully explained to the respondent. Participants
are encouraged to ask questions or seek more information throughout
the examination process.

33. HOW CAN NHANES III ENSURE PARENTS THAT INFANTS AND CHILDREN
WILL NOT BE EXPOSED TO GERMS AND COMMUNICABLE DISEASES IN THE
MOBILE EXAMINATION CENTER?

There is no special risk in going into the mobile examination
center, since other individuals who are in the canter are not
there due to illness or to seek medical care, as in a physician's
office or hospital. Thus the infant or child is no more exposed
to germs or disease in the mobile exam center than in any place
outside the home.

Rigid standards of cleanliness and strict application of
appropriate laboratory procedures are maintained in the mobile
examination center. For example, all supplies and materials and
handled properly. Materials, such as needles, are disposable and
are used only once.

34. SHOULD PARENTS BE CONCERNED THAT A CHILD WILL BUILD UP
A FEAR OF THE DOCTOR AT THE MOBILE EXAMINATION CENTER?

The NHANES III staff are specially trained to work well with
people of all ages and are adept at creating a very positive
atmosphere. The staff are friendly, courteous and reassuring.
In the part 25 years, the health examination survey has experienced
an excellent response from the thousands of children who have
taken the examination.

35. IS A RESPONDENT LIKELY TO SEE A NEIGHBOR IN THE MOBILE
EXAMINATION CENTER? HOW IS PRIVACY MAINTAINED?

Each participant is ensured full privacy from other participants
during the examinations and interviews conducted in the mobile
examination center. It is possible that there may be several
participants in the reception or waiting area at any time.
However, no personal questions are asked in this area, which
is simply a comfortable location to spend a few minutes between
examination components. The confidentiality of all information
collected in the interview or examination is protected by law.

36. IF A PERSON TAKES THE NHANES III EXAMINATION, CAN THAT
PERSON SKIP A ROUTINE PHYSICAL CHECK-UP? IF NOT, CAN A PRIVATE
PHYSICIAN'S EXAMINATION RESULTS BE SENT TO NHANES III?

Although the NHANES III examination includes many of the standard
medical tests performed in a routine physical examination, the
NHANES survey is different in a number of important ways. First,
because of its research purpose, the NHANES III exam includes
specialized tests not

generally provided in a routine checkup. In addition, the NHANES
tests are performed in a standardized way for each participant in
order to ensure comparable results for all respondents throughout
the survey. Finally, a health examination with an individual's
personal physician would be geared to his or her personal situation
and medical history. For those reasons, NHANES III cannot use the
results from a visit to a person's private physician or clinic nor
can the NHANES III examination substitute for a person's regular
medical care.

37. DOES THE SURVEY TEST FOR COLO-RECTAL CANCER AND CERVICAL
CANCER.

There are no internal examinations, such as pap smears and
rectal examinations, in NHANES III.

38. CAN A RESPONDENT TELL THE DOCTORS ABOUT CURRENT SYMPTOMS AND RECEIVE A DIAGNOSIS?

Survey staff will alert a person to any serious health problem which is discovered during the course of the examination. However, the NHANES III staff do not provide medical care or advice. With the respondent's permission, medical findings are either sent to the respondent's physician or usual source of health care or directly to the respondent. This information may assist the medical personnel in diagnosing and treating a current or potential health problem.

39. IS BLOOD DRAWN DURING THE EXAMINATION?

Blood is drawn from a vein in the arm for adults and children one year of age and older. Tests run on the blood include measurements of cholesterol, triglycerides, hematocrit, and hemoglobin.

40. WILL A PERSON BE OVEREXPOSED TO X-RAY OR RADIATION IN YOUR SURVEY?

NHANES III includes several minimum-dose x-rays and a bone density scan depending upon the age of the participant. The x-rays in the survey pose only a very minimal health threat. All procedures have been approved as posing no more than minimal risk to the individual by an Institutional Review Board. However, respondents who wish may decline to have the x-rays.

41. HOW DO YOU ASSURE PEOPLE OF THE SURVEY'S VALIDITY? THERE ARE MANY CONSUMER SCAMS. HOW DO YOU MAKE SURE PEOPLE DON'T CONFUSE NHANES III WITH THEM?

In each location where the survey is conducted, local health and government officials are notified. Households in the survey receive an advance letter to introduce the survey. Interviewers carry official identification. A phone number is provided in the introductory material and respondents may call to verify that NHANES III is an official program of the U.S. Public Health Service. Often the local media will carry an article about the survey in the newspapers or feature it on a local news show.

42. WHAT'S THE RESPONSE TO THE NHANES III SURVEY? ARE PEOPLE WILLING TO PARTICIPATE?

For more than 25 years, the National Center for Health Statistics has been conducting health examination surveys. Throughout these years, response from the public has been good. Approximately 95 percent of the household interviews are completed and about 75 percent of the sample persons complete the examination phase of the study.

43. WHAT ENSURES THE CONFIDENTIALITY OF NHANES DATA?

The confidentiality of the information collected by NCHS is protected by Section 308(d) of the Public Health Service Act. Information which would permit identification of any individual has been collected with a guarantee that it will be held in strict confidence. Identifying information about an individual who participates in the survey is released only to a physician or other sources of medical care and only with the written consent of the examinee. All survey staff are legally bound to follow the confidentiality procedures. NCHS has been operating under these principles for over 25 years and never has violated them.

AIDS-RELATED QUESTIONS

44. IS NHANES III COLLECTING DATA ON HIV infection--the AIDS virus?

NHANES III includes a test to identify the HIV antibody as one of the blood tests performed in the survey. The blood test for HIV will be conducted in complete anonymity, that is, with no names or identifiers attached to the tested blood sample. Therefore, neither the researchers nor the respondents will know the results on an individual basis. The purpose of this type of test is to produce statistics on the number of positive results to the HIV infection while completely protecting the identification of the survey respondent.

45. IS IT ETHICAL TO TEST FOR HIV, FIND A POSITIVE, AND NOT PROVIDE THAT INFORMATION TO THE RESPONDENT? ISN'T THERE A PUBLIC HEALTH CONCERN TO PREVENT THE SPREAD OF AIDS?

It is important to produce accurate estimates of the prevalence of the HIV infection. This information is needed in the efforts to prevent the disease, to direct research and education efforts and to ensure that adequate health resources are available where needed. In order to ensure the highest rate of participation in the survey and in this test, respondents will be assured of the complete anonymity of the results. Those individuals who wish to be tested for HIV and obtain the results. will be referred to local alternative test sites upon request. There is no charge for the test.

46. SINCE SOME PEOPLE BELIEVE THAT DRAWING BLOOD IS A METHOD OF TRANSMITTING HIV, HOW CAN SURVEY PARTICIPANTS BE PERSUADED THAT THEY WILL BE NOT BE EXPOSED TO THE AIDS VIRUS?

Having blood drawn or donating blood is not a method of transmission of HIV infection. HIV transmission through needles has been associated with the multiple use of contaminated needles by intravenous drug users. For NHANES III, a new sterilized needle is used for each person. The package for each needle is opened only when the person is in the room.

47. WHY IS NHANES III COLLECTING INFORMATION ON HIV? WHAT CAN BE LEARNED THAT IS NOT ALREADY KNOWN?

NHANES III offers the opportunity to test for the prevalence of HIV infection in a general population. Currently, most efforts to measure the extent of HIV have focused on looking at special population groups. Through NHANES we will be able to document the distribution of the HIV virus in the general population.

48. HOW CAN FINDINGS FROM NHANES III BE USEFUL IN TRACKING AIDS, SINCE THE FIRST RESULTS WILL NOT BE AVAILABLE FOR MANY YEARS?

NHANES III data on HIV infection will be only one source of information used in monitoring the spread of the disease. Research is now underway to test the feasibility of doing a national seroprevalence study that would be a major source of information on the spread of the virus throughout the U.S. population. Other programs in the Centers for Disease Control, will continue the weekly monitoring of cases of and deaths from AIDS and a number of surveys which include data gathered in clinics, hospitals, and other health care settings. NHANES III data would provide additional insight into positive seroprevalence in the population.

49. WHAT IS THE NATIONAL HOUSEHOLD SEROPREVALENCE SURVEY BEING CONDUCTED BY THE NATIONAL CENTER FOR HEALTH STATISTICS?

The National Household Seroprevalence Survey (NHSS) is a two-phase project to determine the feasibility of collecting data on the prevalence of the HIV infection in the general population. The survey has recently completed phase one or the pilot testing phase. The first pilot test was conducted in Allegheny County, Pennsylvania. A second pilot test took place in Dallas, Texas. The results of these pilot tests are being evaluated and a decision will be made in 1990 as to whether a national survey will be done.

50. IS IT NECESSARY FOR BOTH NHANES III AND THE NATIONAL HOUSEHOLD SEROPREVALENCE SURVEY TO COLLECT DATA ON HIV INFECTION?

Data on HIV infection are being drawn from many sources. While both the NHANES III program and the National Household Seroprevalance Survey would address the issue of the prevalence of HIV infection in the general population, the NHANES III program does not duplicate the NHSS. NHANES III is a broad program of data collection and analysis with a major concentration on chronic disease, nutrition, and growth and development. NHANES III includes an anonymous test for the HIV infection as only one of many laboratory tests which will be performed. NHANES II I is an established survey program with over 25 years of experience in collecting data in communities across the country.

The National Household Seroprevalence Survey is in the pilot stage of development and will be fielded nationally only if results from the pilot tests indicate that a full survey program is feasible.

Appendix F. Food Glossary

-A-

Aceite de cártamo	-	Spanish translation of safflower oil.
Achiote	-	Dark red seeds from the annatto tree; used for coloring and flavor.
Alcapurrias	-	Tannier (malanga, yautía) fritter stuffed with beef and ham.
Atole	-	Gruel-like beverage with cinnamon, sugar, milk and/or water; may be prepared from corn, rice or oatmeal.
Ajiaco	-	A kind of stew; made with Cuban root vegetables, corn, malanga, yuca, ñame, pork and dried beef.
Akule	-	Hawaiian fish known also as "bigeye scad." Hawaiians usually salt and dry the fish.
Alubias	-	A kind of stew; made with kidney beans cooked with different kinds of sausage, flavored with olive oil, garlic and onions.
Amarillo	-	Yellow, ripe plantain.
Apple betty	-	Similar to apple crisp with a brown sugar, oatmeal, and margarine or butter topping.
Apple dumpling	-	Pie type crust wrapped around an apple, baked with sugar and cream mixture and basted with a syrup.
Aquavit	-	Strong clear Scandinavian liquor distilled from potato or grain mash and flavored with caraway seed.
Arepitas	-	Corn meal and cheese pancakes or fritters.
Arroz con leche	-	Rice pudding; cooked with cinnamon, sugar, and milk; raisins optional.

Babka	-	A light sweet yeast cake/bread, containing raisins, often glazed and flavored with rum; often an Easter treat made in a fluted tube pan.
Bacalao	-	Dried, salted codfish.
Back ribs	-	Cut from blade and center section of loin; contains rib bones; layer of meat covering ribs comes from loin eye muscle.
Baked Alaska	-	Cake with ice cream covered with meringue and browned.
Baklava	-	Near East or Greek dessert consisting of phyllo dough with a sweet nut filling; after baking, sweet syrup is poured over the dough.
Barbacoa	-	A pit in the ground in which meat covered with maguey leaves is placed for cooking; lamb is most popular.
Batida	-	A milkshake (or blendarized beverage) consisting of fruit, milk, and sugar.
Bialy	-	Jewish-American baked roll sprinkled with onion flakes.
Besitos de novia	-	Rum and syrup soaked small cakes.
Bien me sabe	-	Coconut cream custard; usually served on sponge cake.
Bierwurst sausage	-	Blend of beef and pork, usually spicy.
Biznaga	-	Candied cactus; used as an ingredient in desserts or eaten as a candy (acitrón).
Black pudding	-	Type of sausage whose main ingredients are pig's blood, groats, fat, oatmeal and seasonings.
Blintz	-	Crepe or pancake filled with any of several fillings, most commonly a cottage cheese mixture, but may also include jam, fish, fruits, or potatoes; may be served with toppings.
Bolillo	-	Small, elongated yeast roll; smaller version of French bread.
Bratwurst	-	Made in longish links, this rather pale German sausage contians pork and/or veal, bacon, milk and chopped onions; it is highly seasoned with salt, pepper and mace.

Buñelo	-	Round pastry deep-fried and sprinkled with sugar.
Burdock	-	Wild thistle-like plant; young leaf stems used in salads; in Japan called "gobo."
Burritos	-	Flour tortillas rolled around sliced, ground or shredded meat, grated cheese, refried beans or leftovers, and chile sauce; may be topped with additional chile sauce and grated cheese.

-C-

Caesar salad	-	Consists of romaine lettuce; garlic, olive oil, croutons, Parmesan cheese, Worcestershire sauce, and often, anchovies and a raw or coddled egg.
Cafe au lait	-	Coffee with milk or cream.
Cajeta	-	A caramel-like sweet, traditionally made with a portion of goat's milk and sugar.
Campechana	-	Oval-shaped puff of pastry with shiny, caramelized top.
Cannoli	-	Italian type pastry; fried shell stuffed with sweetened ricotta cheese.
Capirotada I	-	Bread pudding using bolillos (small yeast rolls); the bread is fried and contains piloncillo (unrefined dark brown sugar). See below.
Capirotada II	-	Bread pudding made with repeated layers of bread and seedless raisins, peanuts, Montery Jack cheese, brown sugar and butter.
Cappuccino	-	Traditional beverage of Italy consisting of dark coffee served with a foamy head of milk or cream.
Carambola	-	Star fruit; when opened gives the appearance of a "star."
Carnitas	-	Fried pork or beef usually made with fried pork scraps which are pre-fried; served with tortillas, chili sauce and guacamole. May also refer to a dish of little pieces of browned pork.
Catawba juice	-	Juice from the American Labrusca grapes.
Cecina	-	Name given to thin strips of dried meat or jerky; may also translate as corned beef.
Cellophane noodles	-	Also called transparent noodles; made from either mung-bean starch paste, or pea or wheat starch. Used in soups, or with meat and vegetables.
Ceviche	-	A dish made basically of fish and chiles; marinated in lime juice.
Cervelat	-	There are many different varieties of this sausage in many parts of Europe. Generally it is a finely minced mixture of beef and pork smoked until golden brown.
Challah	-	Traditional Jewish loaf of rich white, slightly sweetened bread coated with an egg-white glaze.

Chalupa	-	Tortilla formed in shape of a little boat and filled with various ingredients, such as shredded pork, beef, poultry, tomatoes, onion, or cheese.
Champurrado	-	Gruel-like beverage (usually cornmeal), with cinnamon, sugar, milk, and flavored with chocolate; type of atole.
Chantilly creme	-	Fresh cream beaten to the consistency of a mousse, sweetened and flavored with vanilla or other flavors.
Chayote	-	Squashlike fruit, pale green in color and shaped like a pear; also known as "vegetable pear," "mirliton," and "christophine."
Cheese, natural	-	Made directly from milk, usually heat and an enzyme are added to form the curd. (See also "pasteurized process" and "cold pack.")
Chicharron	-	Crisp, fried pork skin.
Chicos	-	Sweet corn dried on the cob, recipe includes chicos with pork, water, salt, garlic, red chili powder, and oregano.
Chilaquiles	-	A casserole made of cut up tortillas and red or green chile sauce; also may contain cheese, meat or chicken.
Chile con carne	-	Meat with beans, tomatoes and seasonings.
Chile con queso	-	Chile with cheese; prepared with green chile peppers, Monterey Jack cheese, tomatoes, onions and butter.
Chiles	-	There are many varieties, mild to very hot. The most frequently used in Mexico are generally the green (used fresh) and the red (used dried). Many varieties are sold fresh, canned or as powders.

Fresh

Anaheim	-	Mild, long (4-6"), light green chile with a rounded tip also called "California."
Güero	-	Pale, medium-size and tapering, yellowish-green chile; flavor varies from mild to medium-hot.

Jalapeño	-	A small (2-3" long), fat green chile; varies from hot to very hot.
Poblano	-	Mild to medium hot, large, triangular-shaped, plump, dark green chile; also called "chile ancho."
Serrano	-	A small (1-1/2" long), tapering, smooth-skinned green chile; very hot flavor.

Dried

Ancho	-	Ripened, dried chile poblano with a medium to dark reddish-brown skin; full-flavored, ranging from mild to medium-hot.
Mulato	-	Trianguler-shaped, large chile with a wrinkled, blackish-brown skin; medium-hot.
Pasilla	-	Long, slender, medium-size chile with wrinkled, blackish-colored skin; may be mild to quite hot; also called "chile negro."
Pequín	-	Very hot tiny chiles, shaped like oval beads; slightly wrinkled, orangish-red skins.

Chiles rellenos	-	Green chile peppers stuffed with Monterey Jack cheese, hard boiled eggs or meat, dipped in flour and egg batter, fried until golden brown on both sides; often served with tomato sauce.
Chimichanga	-	Deep fried flour tortilla stuffed with minced beef or chicken, potatoes, and seasonings.
Chinese candy or plum	-	A dried plum covered with salt. Located under plum as "dried with salt."
Chinese pastry	-	Contains rice flour, brown sugar, white sugar, corn oil, sesame seeds and water.
Cilantro	-	Fresh coriander; also called Chinese parsley.
Chocolate con leche (Leche con chocolate)	-	Chocolate, sugar, cinnamon and spices in milk; Mexican chocolate found in ingredient hierarchy.
Chocolate gravy	-	Contains sugar, flour, cocoa powder, butter and milk. Found in gravy hierarchy.
Chongos	-	A dessert made from cooked sweetened milk curds.

Chop Suey	-	Chinese-American dish of widely varying ingredients, but usually contains bamboo shoots, water chestnuts, bean sprouts, celery, soy sauce, and either pork or chicken.
Chorizo	-	A Spanish sausage with many variations but always including pork and pimiento.
Chow Mein	-	Chinese-American dish made of stewed vegetables and meat with fried noodles. A wide variety of ingredients, often similar to those in chop suey, may go into chow mein.
Churros	-	Twisted doughnuts; made with flour, water, sugar, eggs, butter, and salt; fried in deep fat.
Cioppino	-	Seafood-type stew associated with San Francisco, CA; may contain a variety of fish/shellfish and vegetables, such as tomatoes, onions, carrots, and celery.
Clams casino	-	Small clams topped with a breadcrumb mixture and piece of bacon.
Cocido	-	Beef stew; made with soup bones, bone marrow or beef ribs, and fresh vegetables in season, such as potatoes, celery, carrots, cabbage, spinach leaves, corn on the cob, green beans, stewed or fresh tomatoes, zucchini, onions and garlic.
Coconut cream	-	The liquid expressed from grated coconut meat with sweetener added.
Coconut milk	-	The liquid expressed from grated coconut meat with water added.
Coconut water	-	The liquid inside a coconut.
Cold pack cheese and cheese food	-	Blends of cheeses made from pasteurized milk and mixed without the aid of heat. Fat and moisture contents are similar to pasteurized process cheese and cheese food.
Colonche	-	Wine made from prickly pears.
Concha	-	Sweet Mexican yeast roll with sugar decoration in the form of a shell; round, spongy buns with thin, sugar topping etched with a curved, shell-like design.
Converted rice	-	Parboiled to remove surface starch, thus leaving many nutrients.
Country ham	-	See Ham, country.
Corndog	-	Hot dog, batter dipped and fried; found under "PRON" for pronto pup.

Corn pone	-	Cornmeal mixture formed into thin cakes, then baked or fried until crisp.
Country-style ribs	-	Made by splitting blade end of loin into halves lengthwise; contains part of the loin eye muscle and either rib bones or back bones.
Couscous	-	North African specialty (frequently found in Armenian and Moroccan restaurants) made with millet flour, crushed rice or other crushed grain, and meat (mutton, chicken, etc.). Couscous may also signify cereal processed from semolina into tiny pellets.
Cowberry	-	The berries of a low creeping shrub of the heath family (which includes heather, blueberry, and cranberry); dark-red acid berry.
Cream puff and (eclair shells)	-	Found in ingredient hierarchy; use these for non-dessert types.
Creamed potatoes	-	In some southern states this is another way of saying "mashed potatoes." Try to discern whether the potatoes were creamed or mashed. Creamed potatoes contain flour.
Creole sauce	-	Primarily tomatoes with sweet green peppers, spices and thickened flour. Usually served with rice. If shrimp creole, assume significant amount of shrimp per cup.
Crumpet	-	Batter cake baked on a griddle.

-D-

Diplomat pudding	-	Contains fruit cocktail, pound cake, liquor, milk, eggs and sugar.
Dewberry	-	Small black berry with white blush to the skin; usually cooked in desserts or made into jam.
Dolly Varden	-	Char or trout which is a multicolored, spotted fish found from Alaska to northern CA, in both salt and fresh water.
Dungeness crab	-	Pacific rock crab found from Alaska to Baja.

-E-

Eclair	-	Elongated cream puff usually filled with custard or whipped cream; often iced.
Egg cream	-	New York soda fountain confection made from chocolate syrup, milk, and seltzer. Does not contain eggs or cream.
Egg foo yung	-	Chinese-American dish of beaten eggs and Chinese vegetables; may contain small pieces of shrimp, pork, etc.
Empanada	-	Fried turnover pastry of Spanish origin; may either be a sweet turnover filled with fruits, vegetables, or pudding, or a meat turnover filled with chopped meat, hard cooked eggs, mushrooms and/or cooked vegetables.
Enchiladas	-	Soft fried corn tortillas; dipped in chile sauce (either red or green) and wrapped around sliced, shredded or ground beef (or chicken), cheese, legumes or vegetables. Topped with additional chile sauce and grated cheese. New Mexican-style enchiladas (enchiladas chatas or empalmadas) contain the same basic ingredients as the rolled type, but are flat layers of tortillas with filling and sauce.
Epazote	-	Pungent aromatic herb used in Mexican cooking.
Escabeche	-	Prepared in a light pickling solution.
Espresso	-	Very dark, strong, bitter Italian coffee.

Falda	-	Skirt or flank steak.
Fajitas	-	Marinated and grilled beef, chicken, or shrimp; usually served with tortillas and vegetables, such as grilled onions and fresh salsa.
Fatback	-	Fatback is a the fat from a hog's back which is used in preparation in many regions of the country.
Flan	-	Custard with caramel sauce.
Flautas	-	Tightly rolled (usually corn) tortillas; filled with chicken or beef, then fried.
Fontaine cheese	-	Cow's milk cheese from Italy; has a delicate nutty, slightly smoky taste and is often used to make an Italian-style Swiss fondue.
Frappe	-	Common term in Boston meaning milkshake.
Frittata	-	Italian "omelet" which usually has the fillings mixed into the eggs before they are cooked; may be baked.
Fritter	-	Recipe in which foods are folded into a batter made up of flour, egg and milk, and dropped by level tablespoons into hot oil and fried; Hispanic fritters are somewhat different and are often prepared with root vegetables or tubers, such as yautia (malanga) or plantains.
Fry	-	To cook over direct heat in hot oil or fat.
Funnel cake	-	Pennsylvania Dutch deep-fried pastry made from batter dripped through a funnel, then served with sugar or maple syrup.

-G-

Gandinga - Stew made of organs, especially pork liver and heart, and vegetables.

Garnachas - Small fried tortillas; covered with ground beans, chili sauce, bits of chicken, meat or crumbled sausage, and lettuce.

Genip - Tropical American fruit, also known as a "Spanish lime;" yellow, sweet, edible fruit.

Gjetost/primost cheese - Norwegian whey cheese; fudge-like taste and appearance.

Glaze - Very thin frosting or icing type layer which is less than 1/8 inch thick; whereas, frosting is approximately 1/4 inch thick.

Glug/glogg/ gluhwein - Typically a hot European "Christmas" mixture containing wine, cognac, vodka, sugar, spices and dried fruit.

Gnocchi - Basic recipe contains either a farina, flour or cornmeal mixture, milk, egg and cheese.

Goetts - Pork-containing recipe similar to scrapple, except oats are used instead of cornmeal.

Gorda/Gordita - A small fried and garnished tortilla; may be topped with refried beans, shredded chicken, lettuce, and onion. May also be referred to by some Hispanics as "sopes."

Guacamole - Mashed avocado mixed with finely chopped chile pepper, tomato and onion.

Gumbo - Louisiana soup or stew usually containing okra and a variety of meats, seafood, and vegetables.

Guarapo - Sugar cane beverage.

-H-

Hallaca	-	Corn dough; stuffed with chicken, beef, pork, wrapped in a banana leaf.
Ham, fresh versus smoked	-	Fresh ham is tan or beige in color whereas, smoked ham has a pinkish tone.
Ham	-	Hind leg of pig.
Ham, country	-	Dry salt cured, hickory smoked and aged. They are saltier and have a distinctive flavor and texture unlike regular ham. These are sold at meat counters, and tend to be more expensive because of the lengthier curing and aging process.
Ham, Kentucky	-	Dry cured country ham, treated with cure throughout the maturing process.
Ham, regular	-	Cured by being injected with a brine solution.
Ham, Smithfield/ Virginia	-	Given two rubbings of salt and saltpeter, washed and smoked, then rubbed with pepper and matured up to 18 months. This is sometimes called "Virginia ham," but that name is more generally applied to a specific method of roasting a smoked ham.
Ham, Westphalian	-	Raw ham type, dry-cured with salt, sugar, and saltpeter, kept for two weeks, then brined for two more weeks and smoked.
Headcheese	-	Sausage made from calf's or pig's head molded in its own jelly and seasoned.
Heaven's Delight	-	Egg dessert, custard-like, made with water and sugar (include tocino del cielo).
Horchata	-	A refreshing, milky-looking drink, traditionally made from ground rice, ground dried melon seeds or almonds.
Hot Sauce	-	A variety of commercially bottled seasoning sauces (usually from Louisiana) made with chili peppers, salt, and perhaps vinegar.
Huachinango	-	Red snapper.

Huevos con migas	-	Omelet with tortilla chips; ground tomatoes, chile and onions are poured over scrambled eggs; tortillas are fried and placed in scrambled eggs.
Huevos rancheros	-	Mexican dish of fried eggs set on tortillas and covered with a tomato-and-chile pepper sauce.
Hush-puppy	-	Bread composed of a cornmeal and buttermilk mixture, and fried in hot oil.

-I-

Indian pudding - Cornmeal pudding dessert made with milk and molasses, and seasoned with spices and butter.

-J-

Jai Monk's food - Lotus, ginger root, tofu, water chestnuts, and oriental mushrooms.

Jamaica - Dried hibiscus blossoms made into teas with sugar added.

Jams - Crushed or chopped fruit blended with a sweet gel.

Jambalaya - Cajun-Creole main dish of rice, pork, ham, sausage, shrimp, crayfish, and seasonings--or any combination of the above.

Jícama - A white, sweetish, juicy bulb; it is sliced and eaten in salads or with lemon or chile. Similar in texture to a water chestnut.

Jelly - Fruit juice made into a sweet gel.

Jobo (de la India) - Golden apple.

-K-

Kadayif	-	Similar in ingredients to baklava.
Kielbasa	-	A Polish pork sausage (sometimes containing beef or veal) seasoned with garlic, smoked and pre-cooked, and sold in long links.
Kipper	-	To cure by salting and drying or smoking.
Knish	-	Jewish-American pastry which may be stuffed with mashed potato, cheese, buckwheat groats, chopped liver, or spinach.
Kreplach	-	Dumpling, containing chopped meat or cheese, and often served in soup.
Kugel	-	Noodle or potato pudding.

-L-

Lamb rack	-	Refers to either lamb chops or a roast, and is the same as rib.
Latke (potato pancake)	-	Jewish pancake, usually made from potatoes.
Lebkuchen	-	Made with eggs, sugar, flour, cinnamon, nuts, and citron; baked and frosted with confectioners sugar, and cut into strips.
Lingonberry	-	Same as cowberry.
Loganberry -		Cross between a raspberry and blackberry; highly acidic purplish-red fruit.
Lomi-salmon	-	Salted salmon dish of Hawaii, prepared with tomatoes and onions.

Majarete/manjar blanco	-	Rice flour and cream pudding (in the DDC system); most often called blancmange and is a cornstarch pudding.
Mazamorra/mundo nuevo	-	Fresh corn custard made with coconut milk.
Malt liquor	-	Malt beverage higher in alcohol than beer.
Marmalade	-	Small pieces of fruit or the fruit's juice made into a sweet gel.
Manapua	-	Hawaiian dough bun, filled with pork, bean paste, and other stuffings that is steamed.
Masa	-	The dough made of dried corn kernels boiled with unslaked lime; used for making tortillas.
Maté	-	Sweetened beverage made with dried green leaves.
Menudo	-	Beef tripe soup; made with hominy, onions, lemon juice, oregano or chile sauce.
Mettwurst sausage	-	Basically a mixture of beef and pork, comes in both a smooth and coarse version.
Mixiotes	-	Parchment-like skin stripped from the outside of the maguey leaf; also, name given to packages of seasoned meat cooked in the maguey "parchment."
Mole Poblano	-	Highly flavored sauce made from a paste of chiles, nuts, chocolate, and other ingredients; prepared both homemade and commercially.
Mole rojo	-	Cooked sauce usually prepared with red tomatoes, red chiles, herbs and spices.
Mole verde	-	Cooked sauce usually prepared with green tomatoes, sprigs of fresh coriander, green chiles, pumpkin seeds or nuts; may contain other ingredients.
Morongo/Morcilla	-	Blood sausage.
Mortadella	-	One of the largest types of sausage; usually consists of pork, garlic and seasonings though the ingredients may vary; available plain or with pistachio nuts.

-N-

Napoleon - Puff pastry that is cut into bar shapes and sliced into three layers, with sweetened whipped cream between layers, and iced.

Nonpareil - Small flat disk of chocolate covered with white and/or multicolored sugar pellets.

Nopales - The tender paddle-shaped leaves of the nopal cactus, eaten as a cooked vegetable; may be purchased canned.

Nougat - Tend to be syrups which may be made with egg albumen or gelatin. Various ingredients may be added, such as coconut, nuts, or dried fruits. Plain nougat refers to a product without added nuts or fruits.

-O-

Ojo - Name given to circular Mexican pastry; flaky pastry around the outside and spongecake in the middle.

-P-

Paella	-	Yellow rice mixed dish which may be made with fish, shellfish, chicken, pork, chorizo, peas and/or pimentos.
Panettone	-	Festive Italian yeast cake made with candied fruit peels and raisins.
Pasteurized process	-	Blend of natural cheeses heated to the point at which all cheese further aging stops (pasteurization).
Pasteurized process food	-	Similar to pasteurized process cheese except the fat and protein cheese contents are lower, and the water content is higher.
Pasteurized process spread	-	Similar to pasteurized process cheese food except the fat and cheese protein contents are even lower, and the water content is still higher.
Pepitas	-	Hulled unsalted pumpkin seeds or squash seeds; they are usually salted and served as a snack.
Pernuts	-	Soynuts.
Picadillo	-	Mincemeat stew of the Southwest whose name is taken from the Spanish word for hash; mixture of ground or shredded meat and other ingredients, used as a stuffing; also ground beef dish, prepared with onion, garlic, green pepper, tomato sauce, capers, raisins, and usually served with rice.
Pico de gallo	-	A fresh vegetable salsa prepared with tomatoes, onions, cilantro, serrano chiles and lime juice.
Pierogi	-	Polish dish, appearing as little pouches filled with cheese, potatoes, mushrooms or sauerkraut. Also served filled with meat and egg mixture or with fruit.
Piloncillo	-	A cone of dark brown unrefined sugar with a strong molasses flavor; also called "panocha."
Pigs in a blanket	-	Hot dog wrapped in pastry or biscuit and baked; in some regions, SPs may use this term to refer to cabbage leaves stuffed with ground beef and rice in tomatoes or tomato sauce. Probe as to which recipe the SP is referring.
Pim	-	Round cake of tortilla dough and lard baked on a griddle.

Pinacbet	-	Recipe includes eggplant, tomatoes, green pepper, and bitter melon.
Pinole	-	A sweetened and toasted corn flour sometimes eaten dry as dessert.
Pipián	-	A sauce made of ground pumpkin seeds, nuts, spices and chiles.
Pizzelle	-	Italian style wafer.
Plantain	-	A type of banana, green or ripe (yellow) which needs cooking to be edible.
Plátano	-	May either translate as banana or plantain; to differentiate, probe "para cocinar o no?" or "plátano macho o no?"
Poi	-	Staple of the Hawaiian diet consisting of a pasty preparation of taro, breadfruit, sweet potato, or banana.
Polvorones	-	Shortbread cookie.
Port de salut	-	Mild French cheese with firm paste and washed rind; made from cow's milk.
Pozole	-	Pork with hominy; made with pig's head, cubed boneless pork loin, pig's feet (cooked and boned), chili powder, salt and garlic.
Pre-preparado	-	Spanish translation of self-basting.
Preserves	-	Whole fruits in a sugar solution, ranging from thick syrup to jelly type.
Prosciutto	-	Italian type of ham with a distinctive flavor and usually served very thinly sliced.
Pulque	-	A milky white fermented drink made from aguamiel, the liquid from the maguey cactus.

-Q-

Quanimes	-	Boiled cornmeal sticks.
Quesadilla	-	A tortilla filled with cheese or other filling, then folded over and fried.
Queso Añejo	-	This "aged" cheese is white and crumbly, often very dry and salty, rather resembling a dry feta. The color ranges from creamy to pale-yellow with an orange outer coating of paprika.
Queso Asadero	-	The literal translation of the cheese's name is "broiler" or "roaster"; the cheese itself is made by the same method as the braided Oaxaca cheese and, presumably, mozzarella. Rennet is stirred into warmed raw milk to which a certain proportion of soured milk has been added. As soon as the curd is firmly set, it is cooked and stirred until tough, skeinlike curds have formed. The "skeins" are broken off into lengths, wound into small balls, and cooked. The cheese melts easily when heated and strings appropriately.
Queso Chihuahua (Menonita)	-	A mild, spongy (semi-soft), pale-yellow cheese originally made in great wheels in the Mennonite farming communities in the State of Chihuahua; there are many copies now. Having a high fat content, it melts easily and is rather like a mild Cheddar.
Queso Cotija	-	An aged cheese similar to queso añejo.
Queso de oaxaca	-	Oaxaca cheese or "quesillo" is a light stringy cheese often served as an appetizer. It is sold in many sizes ranging from miniature to large balls. This cheese melts easily when heated. (See queso asadero.)
Queso flameado	-	Mexican version of Swiss cheese fondue; also known as "queso fundido" or "queso asado."
Queso fresco	-	Soft, moist, white crumbly cheese made from cow's milk with a mild, slightly sour flavor.
Queso manchego	-	Popular Spanish cheese made from cow's milk.
Queso panela	-	Mexican native ranch-style cheese, which resembles cottage cheese, made from partially skimmed cow's or goat's milk, and sold in patties or wedges.
Queso ranchero:	-	This "farm-house" cheese is a dry white cheese with a slightly strong flavor.

-R-

Rajas de chiles	-	Strips of peeled roasted green chiles; used in cooking.
Recado colorado	-	A paste of achiote and seasonings, such as pepper, cloves, cumin, garlic, oregano, salt and vinegar; also known as "adobo de achiote" or "recado rojo."
Roast	-	To cook with little or no moisture as in an oven.
Rompope	-	A Mexican eggnog, made of eggs, milk, cinnamon and sugar, and spiked with rum.
Ropa vieja	-	Shredded flank steak, seasoned with onions, green pepper, wine, garlic and other seasonings.
Rosca de los reyes	-	Tradition on January 6 to have "Ring of the Kings:" a ring shaped sweet bread with a tiny favor baked inside; the person who gets the slice of bread with the favor must give a party on February 2, a religious holiday.

-S-

Saladito - A dried plum covered with salt. Found under plum as "dried rock salt."

Salpicón - Cold shredded meat salad; prepared with flank steak, potatoes, olive oil, onion, and seasonings, garnished with avocado, lettuce leaves, tomato, and onion.

Salsa Mexicana - Usually prepared with raw chopped tomatoes, serrano chiles, cilantro leaves, onion, and salt; also referred to as "salsa cruda."

Salsa de chile rojo - Red chile sauce; cooked sauce usually consisting of tomatoes, chile ancho, onions, oil, and seasonings.

Salsa verde - The primary ingredients are green tomatoes, onions, and serrano chile; may be blenderized or mashed by hand. There are many varieties of green chile sauce, cooked or raw, and with or without the onions and tomatoes.

Salsify/vegetable - White skinned root vegetable; used for soups, casseroles, as oyster cooked vegetable, etc.; may acquire a glossy appearance when cooked.

Sangría - A refreshing drink, consisting of mixed citrus juices, to which red wine and chopped fruit have been added.

Sangrita - A chaser for tequila and mezcal, usually made from Seville oranges, lime juice and chile; however, the ingredients vary, and sometimes include pepper and other spices.

Sashimi - Japanese dish of carefully sliced raw fish.

Satsuma - Similar to the tangerine in taste and appearance, with loose, smooth skin and pale orange flesh.

Sauté - To fry quickly with a little fat; select "fried" preparation.

Scampi - Shrimp cooked in garlic butter, and white wine.

Scone - Biscuit, often quadrant-shaped and sweetened; richer than ordinary biscuits due to addition of cream and eggs.

Scrapple - Pork-containing recipe similar to goetta except with cornmeal instead of oats.

Shepherd's pie	-	English dish similar to a hash, made of chopped lamb or mutton, beef or ham, topped with mashed potatoes, and then browned in the oven.
Smithfield/Virginia ham	-	See Ham, Smithfield.
Sofrito	-	Basic sauce of tomato, onion, green pepper, vinegar, garlic, oil, salt and pepper.
Sopaipilla	-	Deep-fried fritter usually served with honey; it is supposed to resemble a puffed-up pillow.
Sopa de arroz (seca)	-	Made with raw rice sauteed in oil until brown; garlic, onions, tomatoes are added and fried; water or broth added and simmered; probe for additions of meat (beef, chorizo, etc.).
Sopa de fideo (seca)	-	Made with raw vermicelli sauteed in oil until brown; garlic, onions, tomatoes are added and fried; water or broth added and simmered; probe for additions of meat (beef, chorizo, etc.).
Sope	-	A small fried and garnished tortilla.
Souse	-	Pieces of pork meat in vinegar-spiked gelatin base to which dill pickles, sweet red peppers, and bay leaves are sometimes added.
Spareribs	-	Cut from side; contain long rib bones with thin covering of meat on outside and between ribs.
Spoonbread	-	Soft custard-like dish made with cornmeal, milk, and fat.
Stir-fry	-	To fry quickly in a small amount of oil over high heat while stirring constantly.
Stromboli	-	A filling is placed on rolled-out pizza dough; the dough is then rolled like a pinwheel or jelly roll, and baked; commonly contains pepperoni and cheese.
Streusel	-	Crumb topping of flour, butter, and spices.
Stew	-	To cook by simmering or boiling slowly in a large amount of liquid.
Strudel	-	Rolled pastry filled with nuts, streusel mixture, fruit or cheese.
Stuffing, dry versus moist	-	Dry stuffing is dry and crumbly; moist stuffing is dense, soggy or condensed.

Sugar free	-	Refers to no <u>sugar</u> added, but may have artificial sweetener.
Sukiyaki	-	Japanese dish of stir-fried meat and vegetables, then simmered together.
Surullos/Surullitos	-	Cornmeal sticks.
Sushi	-	Japanese dish consisting of thin slices of fresh raw fish and/or seaweed wrapped around a cake of cooked seasoned rice. May be served with a soy-type sauce, horseradish and raw ginger. The options for sushi are briefly described below:
Without fish or vegetables	-	Contains only vinegared rice.
With fish and vegetables	-	Contains rice, raw fish and vegetables. <u>No seaweed</u>.
With vegetables	-	Contains rice and a variety of Oriental vegetables. <u>No</u> <u>seaweed</u>.
With vegetables in seaweed	-	Contains seaweed.
Swiss steak	-	Sliced beef rump or round baked with tomatoes, onions, peppers, and seasonings.

-T-

Taco	-	A tortilla wrapped around a filling, sometimes fried in lard.
Tamal(e)	-	Cornmeal flour dough placed inside a folded leaf or corn husk, then steamed; many versions from appetizer to sweet dessert.
Tamarindo	-	Fruit of the tamarind tree. It comes in brown pods with the pulp clinging to large seeds inside; the pods may be mixed with water and sugar to make a beverage "agua de tamarindo," or made into a candy with the sweetened pulp.
Tepache	-	A fermented pineapple drink.
Timbale	-	A custard-like highly flavored dish, made with chicken, lobster, fish, etc. and baked in a small drum-shaped mold.
Tomatillos verdes)	-	Small, firm green tomatoes commonly used for sauces; they (Tomates are covered with a paper-like husk which is removed before they are cooked.
Torta	-	Sandwich usually consisting of a "bolillo" and various fillings.
Tortillas	-	The mainstay of Mexican cuisine, these thin, flat breads are made of corn, or white or whole wheat flour. Other Hispanics may use "tortilla" to mean "omelet."
Torula yeast	-	Type of yeast which does not produce an alcoholic fermentation.
Tostadas	-	Toasted tortillas; fried until golden brown and topped with refried beans, meat, lettuce, tomatoes and cheese.
Tostones	-	Green plantain, fried and flattened with added fat.
Totopos	-	Small, triangular pieces of crisp-fried tortilla; frequently used to adorn frijoles and to scoop up guacamole or other food.
Trifle	-	Recipe containing sponge cake cubes often soaked in sherry, jam, usually custard, and whipping cream.
Tuna	-	The prickly pear, the fruit of the mature nopal cactus.
Turron	-	Nougat; sugar paste made with nuts.
TVP	-	Textured vegetable protein.

-U-

Unsweetened   -   Refers to the fact that no extra sweetener was added in any form.

-V-

Vegetarian   -   Refers to a dish that does not contain any meat, fish or poultry.

Verdolagas   -   Purslane; a ground creeper, with small oval, fleshy leaves that are mid-green in color and fleshy, pinkish-green stems; it grows wild in CA and MD.

-W-

Westphalian ham   -   See Ham, Westphalian

-Y-

Yakitori   -   Japanese dish of skewered, broiled chicken pieces that have been dipped in a soy sauce marinade.

Yorkshire pudding   -   Puffy, bread-like side dish made by cooking an egg-and-milk batter in the hot fat and pan drippings from a roast beef.

Appendix G. System Glossary

BOX: A portion on the display screen that is outlined completely.

CURSOR: The blinking line or block on the display screen which indicates the computer is waiting for you to enter something at that location.

DDC: Dietary Data Collection.

DEFAULT: When you are unable to specify the food completely, you forfeit the selection to the computer which has been programmed to assign a choice. A default is assigned when the unknown is chosen.

DESCRIPTIONS: Words used to describe the food, ingredients, preparation methods or units of measurement in a food specification.

END: Key used to return highlight to the end of the selection list.

FOOD CATEGORY: One of several food groupings. Entering the first four letters of the food category name on the Food Entry screen displays a list of the foods in that category.

FOOD ENTRY SCREEN: The screen appearing with the words "meal time, name, place, and food name". This screen is where the food specification process begins. From this screen, you can access a list of food categories (or indexed foods). You can also access the Quick List screen or exit the system.

FOOD HIERARCHY: The hierarchical order in which a stated food/beverage progresses through a series of food groupings, resulting in a detailed description of that item (e.g., bread, loaf, white, regular, commercial, toasted).

FOOD NAME: Automatically appears on the Food Entry screen. It is forwarded from the Quick List.

FOOD SELECTION: The process of initially describing a food. This does not include the specification of unit and amount, ingredients, and preparation methods. Food selection begins on the Food Entry screen with the initial entry of indexed food or category.

FOOD SELECTION SCREENS: Screens listing choices for describing the food being entered.

FOOD SPECIFIC UNIT: A way of measuring the amount of food without using standard weights and volumes. For example, a special unit could be a "slice," a "medium" size, or "each."

FOOD SPECIFICATION: The process of describing the food completely. This includes the food selection, the unit and amount, ingredients, and preparation methods.

HIGHLIGHT: This makes an area on the display screen appear brighter.

HOME: Key used to return highlight to the beginning of the selection list.

INDEXED FOOD: A food that can be accessed by typing in the first four letters of the food's name.

INGREDIENT: A food that is used either in a recipe or in a preparation method. Amounts of ingredients are based on standard recipes or preparation methods and are computer calculated based on amount of food entered in the food selection process.

INGREDIENT SCREENS: Screens that list the choices describing the ingredient used either in a recipe or in a preparation method.

KEYLIST: The string of abbreviations which identify a specific food.

MEASUREMENT: The way the amount of food can be measured. Options used in the system are:

> weight as eaten,
> weight before cooking,
> weight with refuse,
> weight with refuse before cooking,
> volume before cooking,
> volume after cooking,
> volume - physical form (diced, chopped, shredded, etc.),
> food models,
> food-specific units as listed on the screen, and
> shapes.

MISSING FOOD: A food that cannot be described by the computer system. A missing food is entered by writing a paragraph describing the food and the amount eaten.

NOTE SCREEN: A comment screen available at different stages throughout the interview. It is used to add relevant additional information.

PREPARATION METHOD: A common process used to prepare the food for eating. Amounts of the ingredients used in preparation are computer calculated based on the amount of the basic food entered by the interviewer.

PREPARATION SCREENS: Screens that list the choices of preparation methods that could be applied to a food.

PROMPT: The character ">" which indicates the computer is waiting for you to enter something.

QUICK LIST SCREEN: The initial screen used to collect a list of foods eaten by the respondent and the time they were eaten. Meal code and place eaten may be entered at this time, but it is not necessary.

RECALL HEADER SCREEN: The screen where information identifying the respondent, interviewer ID, and date is entered.

RECALL REVIEW SCREEN: The final screen allowing corrections to be made to the meal and/or food information. Changes may be made to meal time, name and place information. The food name, type of combination, missing food descriptions, notes and amounts may also be edited.

SCREEN: The visual display unit, sometimes called the VDU or display screen or monitor. You enter data and read the screen for verification.

SCROLL BAR: A vertical column on the right of the menu box which indicates the location of the highlight in a list of description.

STANDARD RECIPE: A recipe with specified ingredients and amounts commonly used to prepare a food product. The recipes are often taken from popular cookbooks or USDA publications.

Appendix H. Food Model Sources

Coffee Mug - Rubbermaid Casual Dinnerware, 10 oz. white mug; Rubbermaid Incorp., Wooster, OH 44691

Glasses - 5 1/2 oz., 9 1/2 oz., 12 oz., 16 oz. and 32 oz. clear tumblers; manufactured by Cambro Manufacturers, Huntington Beach, CA; purchased from DePalo & Sons, Inc., Baltimore, MD 21206

Wine Glasses - Acrylic champagne glasses; manufactured by Epic, Fountain Valley, CA; purchased at China Closet, Kensington, MD

Measuring Cups and Spoons - Stainless steel Foley measuring sets; purchased at Kitchen Bazaar

Floppy Discs - Cut from heavy brown vinyl

Discs and thickness sticks - Translucent white acrylic, 1/8" thick

Mounds - Constructed from pigmented polyester resin

Purchased from Nasco, Fort Atkinson, WI; 1987 catalog no. 237:

Bowls - Arrowhead Envoy Open Stock Dinnerware: 10 oz. nappy bowl (#WA4829H), 16 oz. chowder bowl (#WA4826H)

Household spoons - Peer teaspoon (#W5016H) and tablespoon (#W5185H)

Coffee cup - Arrowhead Envoy Open Stock Dinnerware, 7 oz. ovide cup (#WA4824H)

Bran muffin model - 2 1/2" diameter (#WA8838H)

Pizza model - sausage and pepperoni, one 5 1/2" sector, 1/8 of 14" diameter (#W7379H)

Appendix H. 24-Hour Recall Food Models

1.	Bowls	B1	=	9 oz =	1 1/8 cp	(rim = 10 oz; marked in 1/3's)
		B2	=	16 oz	(marked in 1/4's)

2.	Glasses	G1	=	4 oz (rim = 5 oz; marked in 1/2)
		G2	=	8 oz (rim = 9 oz; marked in 1/4's)
		G3	=	11 oz (rim = 12 oz; marked in 1/4's)
		G4	=	15 oz (rim = 16 oz; marked in 1/4's)
		G5	=	6 oz (rim = 7 oz; marked in 1/3's)
		G6	=	32 oz (fill to 32 oz line; marked in 1/4's)

3.	Mounds	M1	=	1/3 cp (2.7 oz)
		M2	=	3/4 cp (6 oz)
		M3	=	1 3/4 cp (14 oz)

4.	Mug	MUG	=	10 oz (rim = 11 oz; marked in 1/4's)

5.	Coffee Cup	COF	=	6 oz (rim = 7 oz; marked in 1/3's)

6.	Household	SP1	=	1 1/2 TS	teaspoon
	Spoons	SP2	=	1 TB	tablespoon

1.	Measuring Cups	1 cup, 1/2 cup, 1/3 cup, 1/4 cup
	and Spoons	1 TB, 1 tsp, 1/2 tsp, 1/4 tsp
2.	Ruler	12" wooden ruler
3.	Thickness Sticks	Set of eight, 1/8" each
4.	Discs	Sizes: 2", 2½", 3", 3½", 4", 5", 6" (plastic, 1/8" thick)
5.	Floppy discs	Sizes: 5", 6", 7", 8", 9", 14", 16"
6.	Muffin Model	Special unit selection for muffin and cupcake in the DDC.
7.	Pizza Model	Special unit slice for pizza (1/8 of 14") in the DDC.
8.	Cardboard Cartons	1/2 pint and 1 pint plain cardboard containers for beverages.

Appendix I. English and Spanish Food Frequency Flash Cards

Food Frequency Flash Cards

1. MILK AND MILK PRODUCTS

HOW OFTEN DID YOU EAT OR DRINK :

Chocolate milk and hot cocoa?

Milk? What type?

Yogurt and frozen yogurt?

Ice cream, ice milk, and milkshakes?

Cheese, all types including American, Swiss, cheddar, and cottage cheese?

Pizza, calzone, and lasagna?

Cheese dishes such as macaroni and cheese, cheese nachos, cheese enchiladas, and quesadillas?

HOW OFTEN IN
THE PAST MONTH?

Number of times a day
Number of times a week
Number of times a month
or
Never in the past month

---

2. MAIN DISHES, MEAT, FISH, CHICKEN, AND EGGS

HOW OFTEN DID YOU EAT:

Stew or soup containing vegetables such as minestrone, tomato, and split pea?

Spaghetti and pasta with tomato sauce?

Bacon, sausage and luncheon meats such as hot dogs, salami and bologna?

Liver and other organ meats such as heart, kidney, tongue, and tripe?

Beef, including hamburger, steaks, roast beef, and meatloaf?

Pork and ham, including roast pork, pork chops, and spare ribs?

Shrimp, clams, oysters, crab, and lobster?

Fish including fillets, fish sticks, fish sandwiches, and tuna fish?

Chicken, all types, including baked, fried, chicken nuggets, and chicken salad? Include turkey.

Eggs including scrambled, fried, omelettes, hard-boiled eggs, and egg salad?

HOW OFTEN IN
THE PAST MONTH?

Number of times a day
Number of times a week
Number of times a month
or
Never in the past month

I-1

3. FRUIT AND FRUIT JUICES

HOW OFTEN DID YOU EAT OR DRINK:

	HOW OFTEN IN THE PAST MONTH?
	Number of times a day Number of times a week Number of times a month or Never in the past month

Orange juice, grapefruit juice and tangerine juice?

Other fruit juices such as grape juice, apple juice, cranberry juice, and fruit nectars?

Citrus fruits including oranges, grapefruits, and tangerines?

Melons including cantaloupe, honeydew, and watermelon?

Peaches, nectarines, apricots, guava, mango, and papaya?

Any other fruits such as apples, bananas, pears, berries, cherries, grapes, plums, and strawberries?

4. VEGETABLES

HOW OFTEN DID YOU EAT:

	HOW OFTEN IN THE PAST MONTH?
	Number of times a day Number of times a week Number of times a month or Never in the past month

Carrots and vegetable mixtures containing carrots?

Broccoli?

Brussels sprouts and cauliflower?

White potatoes, including baked, mashed, boiled, french-fries, and potato salad?

Sweet potatoes, yams, and orange squash including acorn, butternut, hubbard, and pumpkin?

Tomatoes including fresh and stewed tomatoes, tomato juice, and salsa?

Spinach, greens, collards, and kale?

Tossed salad?

Cabbage, cole slaw, and sauerkraut?

Hot red chili peppers?

Peppers including green, red, and yellow peppers?

Any other vegetables, such as green beans, corn, peas, mushrooms, and zucchini?

5. BEANS, NUTS, CEREALS, AND GRAIN PRODUCTS

HOW OFTEN DID YOU EAT:

HOW OFTEN IN
THE PAST MONTH?

Number of times a day
Number of times a week
Number of times a month
or
Never in the past month

Beans, lentils, and chickpeas? Include kidney, pinto, refried, black, and baked beans.

Peanuts, peanut butter, other types of nuts, and seeds?

All-Bran, All-Bran Extra Fiber, 100% Bran, and Fiber One?

Total, Product 19, Most, and Just Right?

All other cold cereals like corn flakes, Cheerios, and Rice Krispies, and presweetened cereals?

Cooked, hot cereals like oatmeal, cream of wheat, cream of rice, and grits?

White bread, rolls, bagels, English muffins, biscuits, and crackers?

Dark breads and rolls including whole wheat, rye, and pumpernickel?

Corn bread, corn muffins, and corn tortillas?

Flour tortillas?

Rice?

Salted snacks such as potato chips, taco chips, corn chips, and salted pretzels and popcorn?

6. DESSERTS, SWEETS, AND BEVERAGES

HOW OFTEN DID YOU EAT OR DRINK:

HOW OFTEN IN
THE PAST MONTH?

Number of times a day
Number of times a week
Number of times a month
or
Never in the past month

Cakes, cookies, brownies, pies, doughnuts, and pastries?

Chocolate candy and fudge?

Hi-C, Tang, Hawaiian Punch, Koolaid, and other drinks with added vitamin C?

Diet colas, diet sodas, and diet drinks such as Crystal Light?

Regular colas and sodas, not diet?

Regular coffee with caffeine?

Regular tea with caffeine?

Beer and lite beer?

Wine, wine coolers, sangria, and champagne?

Hard liquor such as tequila, gin, vodka, scotch, rum, whiskey and liqueurs, either alone or mixed?

7. FATS

HOW OFTEN WERE THESE ITEMS ADDED TO FOODS:

Margarine?

Butter?

Oil and vinegar, mayonnaise and salad dressings such as Italian and Thousand Island, including those added to salads and sandwiches?

ANY OTHER FOODS OR BEVERAGES AT LEAST ONCE PER WEEK?

HOW OFTEN IN THE PAST MONTH?

Number of times a day
Number of times a week
Number of times a month
or
Never in the past month

1. **LECHE Y PRODUCTOS DE LECHE**

¿CON QUE FRECUENCIA COMIO O TOMO:

¿Leche con chocolate y cocoa caliente?

¿Leche? ¿Qué tipo?

¿Yogurt y yogurt congelado?

¿(Helados/nieves), "ice milk," y batidos de leche?

¿Queso, de todo tipo incluyendo Americano, Suizo, cheddar y (requesón/"cottage cheese")?

¿Pizza, calzone y lasaña?

¿Platos con queso tales como macarrones y queso, nachos con queso, enchiladas de queso y quesadillas?

> ¿CON QUE FRECUENCIA EN EL MES PASADO?
>
> Número de veces al día
> Número de veces a la semana
> Número de veces al mes
> o
> Nunca en el mes pasado

2. **PLATOS PRINCIPALES, CARNE, PESCADO, POLLO Y HUEVOS**

¿CON QUE FRECUENCIA COMIO:

¿Guisos o sopas conteniendo vegetales, incluyendo menestrón, tomate y chicharos partidos?

¿Espagueti y pasta con salsa de tomate?

¿Tocino, salchichas, chorizo y carnes procesadas tales como (perros calientes/"hot dogs"), salami, boloña?

¿Hígado y otras carnes de órganos (menudencias), tales como corazón, riñón, lengua, tripa, y menudo?

¿Carne de res, incluyendo hamburguesas, bistec, asado de res, y (albondigón/"meat loaf")?

¿(Puerco/cerdo) y jamón incluyendo asado y chuletas de (puerco/cerdo) y costillas?

¿Camarones, almejas, (ostiones/ostras), (jaibas/cangrejo) y langosta?

¿Pescado, incluyendo filetes de pescado, "fish sticks," sandwiches de pescado y atún?

¿Pollo de todo tipo, incluyendo al horno, frito, "nuggets" de pollo, y ensalada de pollo? Incluya pavo.

¿Huevos incluyendo revueltos, fritos (omeletas/tortillas), huevos duros y ensalada de huevos?

> ¿CON QUE FRECUENCIA EN EL MES PASADO?
>
> Número de veces al día
> Número de veces a la semana
> Número de veces al mes
> o
> Nunca en el mes pasado

6. LEGUMBRES, NUECES,CEREALES Y PRODUCTOS DE GRANO

¿CON QUE FRECUENCIA COMIO:

¿(Frijoles/habichuelas), lentejas y garbanzos? Incluya "rojos," pintos, refritos, negros y horneados.

¿(Maní/cacahuate), mantequilla de (maní/cacahuate), otro tipo de nueces y semillas?

¿"All-Bran," "All-Bran Extra Fiber," "100% Bran," y "Fiber One"?

¿"Total," "Product 19," "Most" y "Just Right"?

¿Todo otro tipo de cereales fríos tales como "Corn Flakes," "Cheerios," y "Rice Krispies" y cereales azucarados?

¿Cereales cocidos calientes como avena, crema de trigo, crema de arroz y sémola?

¿Pan blanco, panecitos, "bagels," bisquetes, (panecitos ingleses/"English muffins") y galletas?

¿Panes o panecitos oscuros incluyendo de trigo entero, centeno y negro de centeno?

¿Pan de maíz, panecitos de maíz, y tortillas de maíz?

¿Tortillas de harina?

¿Arroz?

¿Meriendas saladas tales como ("potato chips"/papitas fritas), "taco chips," "chips" de maíz y "pretzels" salados y ("popcorn"/~~tortillas de maíz)?~~

¿CON QUE FRECUENCIA EN EL MES PASADO?

Número de veces al día
Número de veces a la semana
Número de veces al mes
o
Nunca en el mes pasado

---

6. POSTRES, DULCES Y BEBIDAS

¿CON QUE FRECUENCIA COMIO O TOMO:

¿(Queques/bizcochos), "brownies," galletas, pasteles, "donuts" o panes dulces?

¿Dulce de chocolate y ("fudge"/dulce de leche de chocolate)?

¿"Hi-C," "Tang," "Hawaiian Punch," "Koolaid" y otros refrescos con vitamina C agregada?

¿Colas de dieta, sodas de dieta y bebidas tales como "Crystal Light"?

¿Colas y sodas regulares, no de dieta?

¿Café regular con cafeína?

¿Té regular con cafeína?

¿Cerveza y cerveza "lite"?

¿Vino, "wine coolers," sangría y champaña?

¿Licores fuertes tales como tequila, ginebra, vodka, "scotch," ron, wisky y licores, ya sea solos o mezclados?

¿CON QUE FRECUENCIA EN EL MES PASADO?

Número de veces al día
Número de veces a la semana
Número de veces al mes
o
Nunca en el mes pasado

3. FRUTA Y JUGOS DE FRUTA

¿CON QUE FRECUENCIA COMIO O TOMO:

¿CON QUE FRECUENCIA EN EL MES PASADO?
Número de veces al día Número de veces a la semana Número de veces al mes o Nunca en el mes pasado

¿Jugo de (naranja/china), jugo de toronja y jugo de mandarinas?

¿Otros jugos de fruta tales como jugo de uva, jugo de manzana, o jugo de (cranberry/arándano) y néctares de fruta?

¿Frutas cítricas incluyendo (naranjas/chinas), toronjas y mandarinas?

¿Melones, incluyendo melón amarillo y verde y (sandia/melón de agua/patilla)?

¿(Duraznos/melocotones), nectarines, (chavacanes/albaricoques), guayaba, mango y papaya?

¿Cualquier otra fruta tal como manzanas, (plátanos/bananas), peras, moras, cerezas, uvas, y fresas? Incluya plátanos machos.

---

4. VEGETALES

¿CON QUE FRECUENCIA COMIO:

¿CON QUE FRECUENCIA EN EL MES PASADO?
Número de veces al día Número de veces a la semana Número de veces al mes o Nunca en el mes pasado

¿Zanahorias y mezclas de vegetales que contengan zanahorias?

¿(Brócol/brócoli)?

¿Repollitos de Brusela y coliflor?

¿Papas blancas, incluyendo horneadas, puré, hervidas, fritas y ensalada de papa?

¿(Papas dulces/camote/batata), ñame y (calabachas anaranjadas/auyama) incluyendo "acorn," "butternut," "hubbard," y calabaza?

¿Tomates incluyendo frescos y guisados, jugo de tomate y salsa?

¿Espinaca, "greens," "collards" y berzas?

¿Ensalada mixta?

¿Repollo, ensalada de repollo y col agria?

¿Pimientos rojos picantes?

¿(Pimientos/ajíes), incluyendo verdes, rojos y amarillos?

¿Cualquier otro vegetal como (ejotes/habichuelas tiernas), (maíz/elote), (chícharos/guisantes), hongos y (zapalitos italianos/calabacitas)?

I-54

7. GRASAS

¿CON QUE FRECUENCIA LE AGREGO
ESTO A SUS COMIDAS:

¿Margarina?

¿Mantequilla?

¿Aceite y vinagre, mayonesa y aliños
para ensaladas tales como Italiano", y
(Mil Islas/"Thousand Island"), incluyendo
aquéllos agregados a ensaladas y
sandwiches?

¿ALGUNOS OTROS ALIMENTOS O
BEBIDAS AL MENOS UNA VEZ POR
SEMANA?

¿CON QUE FRECUENCIA EN
EL MES PASADO?

Número de veces al día
Número de veces a la semana
Número de veces al mes

o

Nunca en el mes pasado

Appendix J. English and Spanish Food Frequency Questionnaires

Department of Health and Human Services Public Health Service Centers for Disease Control National Center for Health Statistics	Third National Health and Nutrition Examination Survey NHANES III

DIETARY FOOD FREQUENCY
(AGES 12-16 YEARS)

NOTICE information contained on this form which would permit identification of any individual or establishment has been collected with a guarantee that it will be held in strict confidence will be used only for purposes stated for this study and will not be disclosed or released to others without the consent of the individual or the establishment in accordance with section 308(d) of the Public Health Service Act (42 USC 242m)

Public reporting burden for complete participation in the NHANES III is estimated to average five hours Send comments regarding this burden estimate or any other aspect of this collection of information including suggestions for reducing this burden to PHS Reports Clearance Officer, Room 721-H Humphrey Building 200 Independence Avenue SW Washington, DC 20201, ATTN PRA, and to the Office of Information and Regulatory Affairs. Office of Management and Budget, Washington, DC 20503

CASE NO:

Stand No.   Segment No.   Serial No.

FAMILY NO:

NAME (First, Middle, Last)

SP NO:

AGE

SEX
1 ☐ Male
2 ☐ Female

SAMPLE NO:

DECK NO:

619

619

TIME BEGAN
1 ☐ am
2 ☐ pm
3 ☐ noon

TIME ENDED
1 ☐ am
2 ☐ pm
3 ☐ noon

INTERVIEWER NO:

LANGUAGE OF INTERVIEW
1 ☐ English
2 ☐ Spanish
3 ☐ Other
4 _____
SPECIFY

DATE OF EXAMINATION
___/___/___
MO.   DAY   YR.

PHS 6209 2
REV 10-88

J-56

FOOD FREQUENCY

HAND CARD FF.

Now I'm going to ask you how often you usually eat certain foods. When answering think about your usual diet over the <u>past month</u>. Tell me how often you usually ate or drank these foods per day, per week, per month, or not at all

Times		Day	Week	Month		Never	DK
____ per		☐ D	₂☐ W	₃☐ M	or	₄☐ N	₅☐ DK

1. <u>MILK AND MILK PRODUCTS</u>

First are milk and milk products. Do not include their use in cooking.

a   How often did you have chocolate milk and hot cocoa?

____ __ per ☐ D ₂☐ W ₃☐ M   or ₄☐ N ₅☐ DK

b   How often did you have milk to drink or on cereal? Do not count <u>small</u> amounts of milk added to coffee or tea

____ __ per ☐ D ₂☐ W ₃☐ M   or ₄☐ N ₅☐ DK

c   CHECK ITEM. REFER TO RESPONSES IN 1a AND 1b

☐ "Never" in both 1a and 1b (1e)
☐ Other

d   What type of milk was it? Was it <u>usually</u> whole, 2%, 1%, skim, nonfat, or some other type?

IF SP CAN NOT PROVIDE USUAL TYPE MARK ALL THAT APPLY.

☐ whole/regular
☐ 2%/low fat
☐ 1%
☐ skim/nonfat
☐ buttermilk
☐ evaporated
☐ other _____
                                 specify
☐ DK

e.   Yogurt and frozen yogurt

____ __ per ₁☐ D ₂☐ W ₃☐ M   or ₄☐ N ₅☐ DK

f.   Ice cream, ice milk, and milkshakes

____ __ per ₁☐ D ₂☐ W ₃☐ M   or ₄☐ N ₅☐ DK

g   Cheese, all types including American, Swiss, cheddar, and cottage cheese

____ __ per ₁☐ D ₂☐ W ₃☐ M   or ₄☐ N ₅☐ DK

h   Pizza, calzone, and lasagna

____ __ per ₁☐ D ₂☐ W ₃☐ M   or ₄☐ N ₅☐ DK

i.   Cheese dishes such as macaroni and cheese, cheese nachos, cheese enchiladas, and quesadillas

____ __ per ☐ D ₂☐ W ₃☐ M   or ₄☐ N ₅☐ DK

1

J-57

2. MAIN DISHES, MEAT, FISH, CHICKEN, AND EGGS

Next are main dishes, meat, fish, chicken, and eggs

		Times	Day	Week	Month		Never	DK
		____ per	□ D	□ W	□ M	or	□ N	□ DK

a. How often did you eat any type of stew or soup containing <u>vegetables</u>, including minestrone, tomato, and split pea?

____ per □ D □ W □ M or □ N □ DK

b. Spaghetti and pasta with tomato sauce

____ per □ D □ W □ M or □ N □ DK

c. Bacon, sausage (chorizo) and luncheon meats such as hot dogs, salami, and bologna

____ per □ D □ W □ M or □ N □ DK

d. Liver and other organ meats such as heart, kidney, tongue, and tripe (menudo)

____ per □ D □ W □ M or □ N □ DK

e. Beef, including hamburger, steaks, roast beef, and meatloaf

____ per □ D □ W □ M or □ N □ DK

f. Pork and ham, including roast pork, pork chops, and spare ribs

____ per □ D □ W □ M or □ N □ DK

g. Shrimp, clams, oysters, crab, and lobster

____ per □ D □ W □ M or □ N □ DK

h. Fish including fillets, fish sticks, fish sandwiches, and tuna fish

____ per □ D □ W □ M or □ N □ DK

i. Chicken, all types, including baked, fried, chicken nuggets, and chicken salad. Include turkey.

____ per □ D □ W □ M or □ N □ DK

j. How often did you have eggs including scrambled, fried, omelettes, hard-boiled eggs, and egg salad?

____ per □ D □ W □ M or □ N □ DK

3. FRUIT AND FRUIT JUICES

Next are fruit juices and fruit. Include all forms-fresh, frozen, canned, and dried

a. How often did you have orange juice, grapefruit juice and tangerine juice?

____ per □ D □ W □ M or □ N □ DK

b. Other fruit juices such as grape juice, apple juice, cranberry juice, and fruit nectars

____ per □ D □ W □ M or □ N □ DK

c. Citrus fruits including oranges, grapefruits, and tangerines

____ per □ D □ W □ M or □ N □ DK

d. Melons including cantaloupe, honeydew, and watermelon

____ per □ D □ W □ M or □ N □ DK

Times	Day	Week	Month		Never	DK
___ ___ per	☐ D	☐ W	☐ M	or	☐ N	☐ DK

3. FRUIT AND FRUIT JUICES (cont.)

e   Peaches, nectarines, apricots, guava, mango, and papaya

___ ___ per ☐ D ☐ W ☐ M   or ☐ N ☐ DK

---

f   How often did you have any other fruits such as apples, bananas, pears, berries, cherries, grapes, plums, and strawberries? (Include plantains.)

___ ___ per ☐ D ☐ W ☐ M   or ☐ N ☐ DK

---

4. VEGETABLES

These next questions are about vegetables. Please remember to include fresh, raw, frozen, canned, and cooked vegetables.

a   How often did you have carrots and vegetable mixtures containing carrots?

___ ___ per ☐ D ☐ W ☐ M   or ☐ N ☐ DK

---

b   Broccoli

___ ___ per ☐ D ☐ W ☐ M   or ☐ N ☐ DK

---

c   Brussels sprouts and cauliflower

___ ___ per ☐ D ☐ W ☐ M   or ☐ N ☐ DK

---

d   White potatoes, including baked, mashed, boiled, french-fries, and potato salad

___ ___ per ☐ D ☐ W ☐ M   or ☐ N ☐ DK

---

e   Sweet potatoes, yams, and orange squash including acorn, butternut, hubbard, and pumpkin

___ ___ per ☐ D ☐ W ☐ M   or ☐ N ☐ DK

---

f   Tomatoes including fresh and stewed tomatoes, tomato juice, and salsa

___ ___ per ☐ D ☐ W ☐ M   or ☐ N ☐ DK

---

g   Spinach, greens, collards, and kale

___ ___ per ☐ D ☐ W ☐ M   or ☐ N ☐ DK

---

h   Tossed salad

___ ___ per ☐ D ☐ W ☐ M   or ☐ N ☐ DK

---

i   Cabbage, cole slaw, and sauerkraut

___ ___ per ☐ D ☐ W ☐ M   or ☐ N ☐ DK

---

j   Hot red chili peppers. Do not count ground red chili peppers

___ ___ per ☐ D ☐ W ☐ M   or ☐ N ☐ DK

---

k   Peppers including green, red, and yellow peppers

___ ___ per ☐ D ☐ W ☐ M   or ☐ N ☐ DK

---

l   Any other vegetables such as green beans, corn, peas, mushrooms, and zucchini

___ ___ per ☐ D ☐ W ☐ M   or ☐ N ☐ DK

5 BEANS, NUTS, CEREALS, AND GRAIN PRODUCTS

		Times ___ per	Day □ D	Week □ W	Month □ M	or	Never □ N	DK □ DK

a. How often did you have beans, lentils, and (chickpeas/garbanzos)? Include kidney, pinto, refried, black, and baked beans

___ ___ per   □ D   □ W   □ M   or   □ N   □ DK

b. Peanuts, peanut butter, other types of nuts, and seeds

___ ___ per   □ D   □ W   □ M   or   □ N   □ DK

Now I'm going to ask how often you ate certain cereals

c. How about All-Bran, All-Bran Extra Fiber, 100% Bran, and Fiber One?

___ ___ per   □ D   □ W   □ M   or   □ N   □ DK

d. Total, Product 19, Most, and Just Right

___ ___ per   □ D   □ W   □ M   or   □ N   □ DK

e. All other cold cereals like corn flakes, Cheerios, Rice Krispies, and presweetened cereals

___ ___ per   □ D   □ W   □ M   or   □ N   □ DK

f. Cooked, hot cereals like oatmeal, cream of wheat, cream of rice, and grits

___ ___ per   □ D   □ W   □ M   or   □ N   □ DK

Now let's talk about white bread products only. I'll ask about dark breads next.

g. How often did you have white bread, rolls, bagels, biscuits, English muffins, and crackers? Include those used for sandwiches

___ ___ per   □ D   □ W   □ M   or   □ N   □ DK

h. Dark breads and rolls, including whole wheat, rye, and pumpernickel

___ ___ per   □ D   □ W   □ M   or   □ N   □ DK

i. Corn bread, corn muffins, and corn tortillas

___ ___ per   □ D   □ W   □ M   or   □ N   □ DK

j. Flour tortillas

___ ___ per   □ D   □ W   □ M   or   □ N   □ DK

k. Rice

___ ___ per   □ D   □ W   □ M   or   □ N   □ DK

l. Salted snacks such as potato chips, taco chips, corn chips, and salted pretzels and popcorn

___ ___ per   □ D   □ W   □ M   or   □ N   □ DK

		Times per	Day □D	Week □W	Month □M	or	Never □N	DK □DK

6.   DESSERTS, SWEETS, AND BEVERAGES

		Times	Day	Week	Month	or	Never	DK
a	How often did you have cakes, cookies, brownies, pies, doughnuts, and pastries?	___ per	□D	□W	□M	or	□N	□DK
b	Chocolate candy and fudge	___ per	□D	□W	□M	or	□N	□DK

Next are hot and iced beverages

c	How often did you have Hi-C, Tang, Hawaiian Punch, Koolaid, and other drinks with added vitamin C	___ per	□D	□W	□M	or	□N	□DK
d	Diet colas, diet sodas, and diet drinks such as Crystal Light	___ per	□D	□W	□M	or	□N	□DK
e	Regular colas and sodas, not diet	___ per	□D	□W	□M	or	□N	□DK
f	Regular coffee with caffeine	___ per	□D	□W	□M	or	□N	□DK
g	Regular tea with caffeine	___ per	□D	□W	□M	or	□N	□DK
h.	Beer and lite beer	___ per	□D	□W	□M	or	□N	□DK
i	Wine, wine coolers, sangria, and champagne	___ per	□D	□W	□M	or	□N	□DK
j	Hard liquor such as tequila, gin, vodka, scotch, rum, whiskey and liqueurs, either alone or mixed	___ per	□D	□W	□M	or	□N	□DK

7.   FATS

How often were these items added to your foods after preparation? For example, this would include on top of vegetables or baked potatoes or as a spread on bread.

a	Margarine	___ per	□D	□W	□M	or	□N	□DK
b.	Butter	___ per	□D	□W	□M	or	□N	□DK
c.	Oil and vinegar, mayonnaise and salad dressings such as Italian and Thousand Island, including those added to salads and sandwiches	___ per	□D	□W	□M	or	□N	□DK

8. Have I missed any other foods or beverages that you had at least once per week in the past month?

Times		Day	Week	Month			Never	DK	
___ ___ per		☐ D	☐ W	☐ M	or		☐ N	☐ DK	

☐ yes (specify)   ☐ no (9)

_____   ___ ___ per ☐ D   ☐ A   ☐ M   or   ☐ N   ☐ DK

_____   ___ ___ per ☐ D   ☐ A   ☐ M   or   ☐ N   ☐ DK

_____   ___ ___ per ☐ D   ☐ A   ☐ M   or   ☐ N   ☐ DK

_____   ___ ___ per ☐ D   ☐ W   ☐ M   or   ☐ N   ☐ DK

_____   ___ ___ per ☐ D   ☐ A   ☐ M   or   ☐ N   ☐ DK

_____   ___ ___ per ☐ D   ☐ W   ☐ M   or   ☐ N   ☐ DK

9. Quality of food frequency interview.
(To be completed by interviewer)

☐ reliable
☐ unreliable
☐ refusal

Comments _____

_____

_____

_____

10. RESPONDENT

☐ sample person
☐ proxy
☐ sample person/proxy

(Spanish version)

Department of Health and Human Services Public Health Service Centers for Disease Control National Center for Health Statistics	Third National Health and Nutrition Examination Survey NHANES III

DIETARY FOOD FREQUENCY
(AGES 12-16 YEARS)

NOTICE - La información contenida en este formulario que permitiría identificar a cualquier individuo o establecimiento ha sido recolectada con la garantía que será mantenida en la mas estricta confidencialidad, será usada solo para los propósitos establecidos para este estudio y no será divulgada o entregada a otros sin el consentimiento del individuo o del establecimiento de acuerdo con las sección 308(d) de la Ley del Servicio de Salud Publica - Public Health Service Act (42 USC 242 m)

Carga al publico de reportaje para participación completa en el NHANES III se estima que, en promedio, sea cinco horas. Envíe comentarios respecto a esta carga o cualquier otro aspecto de esta colección de información, incluyendo sugerencias para reducir esta carga al PHS Reports Clearance Officer: Room 721-H, Humphrey Building; 200 Independence Avenue, SW; Washington, DC 20201; ATTN: PRA y a Office of information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503

CASE NO:

_____ _____ _____
Stand No   Segment No.   Serial No

FAMILY NO:

SP NO:

NAME (First, Middle, Last)

SAMPLE NO

AGE

SEX
1 ☐ Male
2 ☐ Female

DECK NO:

619

619

TIME BEGAN
1 ☐ am
2 ☐ pm
3 ☐ noon

TIME ENDED
1 ☐ am
2 ☐ pm
3 ☐ noon

INTERVIEWER NO:

LANGUAGE OF INTERVIEW
1 ☐ English
2 ☐ Spanish
3 ☐ Other

4 _____
SPECIFY

DATE OF EXAMINATION

___/___/___
MO   DAY   YR.

PHS 6209-2
REV 10-88

J-63

FRECUENCIA DE COMIDAS

HAND CARD FF.

Ahora le voy a preguntar con qué frecuencia usualmente come ciertas comidas. Cuando esté contestando piense en la dieta usual del mes pasado. Dígame con qué frecuencia usualmente comió o bebió estos alimentos, por día, por semana, por mes, o nunca.

	Veces	Día	Semana	Mes		Nunca	NS
	__ __ por	1☐ D	2☐ S	3☐ M	o	4☐ N	9☐ NS

1.   LECHE Y PRODUCTOS DE LECHE

Primero le voy a preguntar acerca de leche y productos de leche. No incluya su uso para cocinar.

a. ¿Con qué frecuencia toma leche con chocolate y cocoa caliente?

__ __ por 1☐ D 2☐ S 3☐ M o 4☐ N 9☐ NS

b. ¿Con qué frecuencia toma leche o le agrega al cereal? No cuente pequeñas cantidades de leche agregadas al café o té.

__ __ por 1☐ D 2☐ S 3☐ M o 4☐ N 9☐ NS

c. CHECK ITEM. REFER TO RESPONSES IN 1a AND 1b.

☐ "NEVER" IN BOTH 1a AND 1b (1e)

☐ OTHER

d. ¿Qué tipo de leche era ésta? ¿Usualmente, era entera, 2%, 1%, descremada, sin grasa, u otro tipo?

IF SP CANNOT PROVIDE USUAL TYPE, MARK ALL THAT APPLY.

☐ entera/regular

☐ 2%/baja en grasa

☐ 1%

☐ descremada/sin grasa

☐ "buttermilk"

☐ evaporada

☐ otro _____ específique

☐ NS

e. Yogurt y yogurt congelado

__ __ por 1☐ D 2☐ S 3☐ M o 4☐ N 9☐ NS

f. (Helados/nieves), "ice milk," batidos de leche

__ __ por 1☐ D 2☐ S 3☐ M o 4☐ N 9☐ NS

g. Queso, de todo tipo incluyendo Americano, Suizo, cheddar y (requesón/"cottage cheese")

__ __ por 1☐ D 2☐ S 3☐ M o 4☐ N 9☐ NS

h. Pizza, "calzone" y lasaña

__ __ por 1☐ D 2☐ S 3☐ M o 4☐ N 9☐ NS

i. Platos con queso tales como macarrones y queso, nachos con queso, enchiladas de queso y quesadillas

__ __ por 1☐ D 2☐ S 3☐ M o 4☐ N 9☐ NS

2. PLATOS PRINCIPALES, CARNE, PESCADO, POLLO Y HUEVOS

Los siguientes son platos principales, carne, pescado, pollo y huevos.

Veces	Dia	Semana	Mes		Nunca	NS
___ ___ por	1☐D	2☐S	3☐M	o	4☐N	9☐NS

a. ¿Con qué frecuencia comió cualquier tipo de guisos o sopas conteniendo vegetales, incluyendo menestrón, tomate y chícharos partidos?

___ ___ por 1☐D 2☐S 3☐M o 4☐N 9☐NS

b. Espagueti, y pasta con salsa de tomate

___ ___ por 1☐D 2☐S 3☐M o 4☐N 9☐NS

c. Tocino, salchicha (chorizo), carnes procesadas tales como (perros calientes/"hot dogs"), salame y boloña

___ ___ por 1☐D 2☐S 3☐M o 4☐N 9☐NS

d. Hígado y otras (carnes de órganos/menudencias) tales como corazón, riñón, lengua, y tripa (menuda)

___ ___ por 1☐D 2☐S 3☐M o 4☐N 9☐NS

e. Carne de res, incluyendo hamburguesa, bistec, asado de res, y (albondigón/"meat loaf")

___ ___ por 1☐D 2☐S 3☐M o 4☐N 9☐NS

f. (Puerco/cerdo) y jamón, incluyendo asado y chuletas de (puerco/cerdo) y costillas

___ ___ por 1☐D 2☐S 3☐M o 4☐N 9☐NS

g. Camarones, almejas, (ostiones/ostras), (jaiba/cangrejo), y langosta

___ ___ por 1☐D 2☐S 3☐M o 4☐N 9☐NS

h. Pescado, incluyendo filetes de pescado, "fish sticks," sandwiches de pescado y atún

___ ___ por 1☐D 2☐S 3☐M o 4☐N 9☐NS

i. Pollo, de todo tipo, incluyendo al horno, frito, "nuggets" de pollo, y ensalada de pollo. Incluya pavo.

___ ___ por 1☐D 2☐S 3☐M o 4☐N 9☐NS

j. ¿Con qué frecuencia comió huevos incluyendo revueltos, fritos, (omeletas/tortillas), huevos hervidos duros y ensalada de huevos?

___ ___ por 1☐D 2☐S 3☐M o 4☐N 9☐NS

3. FRUTA Y JUGOS DE FRUTA

Los próximos son jugos de fruta y fruta. Incluya todas las formas - frescas, congeladas, enlatadas y secas.

a. ¿Con qué frecuencia tomó jugo de (naranja/china), jugo de toronja y jugo de mandarina?

___ ___ por 1☐D 2☐S 3☐M o 4☐N 9☐NS

b. Otros jugos de fruta tales como jugo de uvas, jugo de manzana, o jugo de (cranberry/arándano) y néctares de fruta

___ ___ por 1☐D 2☐S 3☐M o 4☐N 9☐NS

c. Frutas cítricas incluyendo (naranjas/chinas), toronjas y mandarinas

___ ___ por 1☐D 2☐S 3☐M o 4☐N 9☐NS

d. Melones, incluyendo melón amarillo y verde, y (sandía/melón de agua/patilla)

___ ___ por 1☐D 2☐S 3☐M o 4☐N 9☐NS

3.	FRUTA Y JUGOS DE FRUTA (cont.)							

		Veces	Día	Semana	Mes		Nunca	NS
		___ ___ por	1 ☐ D	2 ☐ S	3 ☐ M	o	4 ☐ N	9 ☐ NS
e.	(Duraznos/melocotones), nectarinas, (chavacanes/ albaricoques), guayaba, mango y papaya	___ ___ por	1 ☐ D	2 ☐ S	3 ☐ M	o	4 ☐ N	9 ☐ NS
f.	¿Con qué frecuencia comió cualquier otra fruta tal como manzanas, (plátanos/bananas), peras, moras, cerezas, uvas, y fresas? (Incluya plátanos machos/plátanos.)	___ ___ por	1 ☐ D	2 ☐ S	3 ☐ M	o	4 ☐ N	9 ☐ NS

4. **VEGETALES**

Las siguientes preguntas son acerca de vegetales. Por favor acuérdese de incluir frescos, crudos, congelados, enlatados, y vegetales cocidos.

		Veces	Día	Semana	Mes		Nunca	NS
a.	¿Con qué frecuencia comió zanahorias y mezclas de vegetales que contengan zanahorias?	___ ___ por	1 ☐ D	2 ☐ S	3 ☐ M	o	4 ☐ N	9 ☐ NS
b.	(Brócoli/brécol)	___ ___ por	1 ☐ D	2 ☐ S	3 ☐ M	o	4 ☐ N	9 ☐ NS
c.	Repollitos de Bruselas y coliflor	___ ___ por	1 ☐ D	2 ☐ S	3 ☐ M	o	4 ☐ N	9 ☐ NS
d.	Papas blancas, incluyendo horneadas, puré, hervidas, fritas y ensalada de papas	___ ___ por	1 ☐ D	2 ☐ S	3 ☐ M	o	4 ☐ N	9 ☐ NS
e.	(Papas dulces/camote/batata), ñame, y (calabacitas anaranjadas/auyama) incluyendo tipo "acorn," "butternut," "hubbard" y calabaza	___ ___ por	1 ☐ D	2 ☐ S	3 ☐ M	o	4 ☐ N	9 ☐ NS
f.	Tomates, incluyendo frescos y guisados, jugo de tomates, y salsa	___ ___ por	1 ☐ D	2 ☐ S	3 ☐ M	o	4 ☐ N	9 ☐ NS
g.	Espinacas, "greens," "collards" y berzas	___ ___ por	1 ☐ D	2 ☐ S	3 ☐ M	o	4 ☐ N	9 ☐ NS
h.	Ensalada mixta	___ ___ por	1 ☐ D	2 ☐ S	3 ☐ M	o	4 ☐ N	9 ☐ NS
i.	Repollo, ensalada de repollo, y col agria	___ ___ por	1 ☐ D	2 ☐ S	3 ☐ M	o	4 ☐ N	9 ☐ NS
j.	Pimientos rojos picantes. No incluya pimientos rojos picantes molidos.	___ ___ por	1 ☐ D	2 ☐ S	3 ☐ M	o	4 ☐ N	9 ☐ N:
k.	(Pimientos/ajíes), incluyendo verdes, rojos, y amarillos	___ ___ por	1 ☐ D	2 ☐ S	3 ☐ M	o	4 ☐ N	9 ☐ NS
l.	Cualquier otro vegetal como (ejotes/habichuelas tiernas), (maíz/elote), (chícharos/guisantes), hongos, y (zapallitos italianos/calabacitas)	___ ___ por	1 ☐ D	2 ☐ S	3 ☐ M	o	4 ☐ N	9 ☐ NS

	Veces	Día	Semana	Mes		Nunca	NS
5. LEGUMBRES, NUECES, CEREALES Y PRODUCTOS DE GRANO	___ ___ por	1☐D	2☐S	3☐M	o	4☐N	9☐NS
a. ¿Con qué frecuencia comió (frijoles/habichuelas), lentejas y garbanzos? Incluya rojos, pintos, refritos, negros y horneados.	___ ___ por	1☐D	2☐S	3☐M	o	4☐N	9☐NS
b. (Cacahuate/maní), mantequilla de (cacahuate/maní), otro tipo de nueces, y semillas	___ ___ por	1☐D	2☐S	3☐M	o	4☐N	9☐NS
Ahora le voy a preguntar con qué frecuencia comió ciertos cereales. c. ¿Qué tanto de "All-Bran," "All-Bran Extra Fiber," "100% Bran," y "Fiber One"?	___ ___ por	1☐D	2☐S	3☐M	o	4☐N	9☐NS
d. "Total," "Product 19," "Most," y "Just Right"	___ ___ por	1☐D	2☐S	3☐M	o	4☐N	9☐NS
e. Todo otro tipo de cereales fríos tales como "Corn Flakes," "Cheerios," "Rice Krispies," y cereales azucarados	___ ___ por	1☐D	2☐S	3☐M	o	4☐N	9☐NS
f. Cereales cocidos calientes como avena, crema de trigo, y crema de arroz y sémola	___ ___ por	1☐D	2☐S	3☐M	o	4☐N	9☐NS
Ahora hablaremos solamente sobre productos de pan blanco. Preguntaré acerca de panes oscuros más adelante. g. ¿Con qué frecuencia comió pan blanco, panecitos, "bagels," bisquites, (panecillos ingleses/"English muffins"), y galletas? Incluya aquéllos, usados para sandwiches.	___ ___ por	1☐D	2☐S	3☐M	o	4☐N	9☐NS
h. Panes o panecitos oscuros incluyendo de trigo entero, centeno, y negro de centeno	___ ___ por	1☐D	2☐S	3☐M	o	4☐N	9☐NS
i. Pan de maíz, panecitos de maíz y tortillas de maíz	___ ___ por	1☐D	2☐S	3☐M	o	4☐N	9☐NS
j. Tortillas de harina	___ ___ por	1☐D	2☐S	3☐M	o	4☐N	9☐NS
k. Arroz	___ ___ por	1☐D	2☐S	3☐M	o	4☐N	9☐NS
l. Meriendas saladas tales como ("potato chips"/papitas fritas), taco "chips," "chips de maíz," "pretzels" salados y ("popcorn"/palomitas de maíz)	___ ___ por	1☐D	2☐S	3☐M	o	4☐N	9☐NS

6. POSTRES, DULCES Y BEBIDAS	Veces	Día	Semana	Mes		Nunca	NS
	____ por	1☐D	2☐S	3☐M	o	4☐N	9☐NS
a. ¿Con qué frecuencia comió (queque/bizcocho), "brownies," galletas, pasteles, "donuts," o panes dulces?	____ por	1☐D	2☐S	3☐M	o	4☐N	9☐NS
b. Dulce de chocolate y ("fudge"/dulce de leche de chocolate)	____ por	1☐D	2☐S	3☐M	o	4☐N	9☐NS
Las siguientes son bebidas calientes y frías.							
c. ¿Con qué frecuencia tomó "HI-C," "Tang," "Hawaiian Punch," "Koolaid," y otros refrescos con vitamina C agregada?	____ por	1☐D	2☐S	3☐M	o	4☐N	9☐NS
d. Colas de dieta, sodas de dieta, y bebidas de dieta tales como "Crystal Light"	____ por	1☐D	2☐S	3☐M	o	4☐N	9☐NS
e. Colas y sodas regulares, no de dieta	____ por	1☐D	2☐S	3☐M	o	4☐N	9☐NS
f. Café regular con cafeína	____ por	1☐D	2☐S	3☐M	o	4☐N	9☐NS
g. Té regular con cafeína	____ por	1☐D	2☐S	3☐M	o	4☐N	9☐NS
h. Cerveza y cerveza "lite"	____ por	1☐D	2☐S	3☐M	o	4☐N	9☐NS
i. Vino, "wine coolers," sangría, y champaña	____ por	1☐D	2☐S	3☐M	o	4☐N	9☐NS
j. Licores fuertes tales como tequila, ginebra, vodka, "scotch," ron, wisky y licores, ya sea sólos o mezclados	____ por	1☐D	2☐S	3☐M	o	4☐N	9☐NS

7. GRASAS							
¿Con qué frecuencia agregó estos productos a las comidas después de la preparación? Por ejemplo, esto incluiría sobre los vegetales o papas horneadas, o puesto sobre el pan.							
a. Margarina	____ por	1☐D	2☐S	3☐M	o	4☐N	9☐NS
b. Mantequilla	____ por	1☐D	2☐S	3☐M	o	4☐N	9☐NS
c. Aceite y vinagre, mayonesa y aliño para ensaladas tales como, Italiano y (Mil Islas/"Thousand Island"), incluyendo aquéllos agregados a ensaladas y sandwiches.	____ por	1☐D	2☐S	3☐M	o	4☐N	9☐NS

8. ¿He olvidado algún otro alimento o bebida que usted haya comido o tomado <u>al menos una vez por semana</u> en el <u>mes pasado</u>?

Veces	Dia	Semana	Mes		Nunca	NS
___ por	1 ☐ D	2 ☐ S	3 ☐ M	o	4 ☐ N	9 ☐ NS

1 ☐ Y (especifíque) ⌐   2 ☐ N (9)

PROBE: ¿Con que frecuencia comió . . . en el mes pasado?

_____

___ por	1 ☐ D	2 ☐ S	3 ☐ M	o	4 ☐ N	9 ☐ NS

_____

___ ___ por	1 ☐ D	2 ☐ S	3 ☐ M	o	4 ☐ N	9 ☐ NS

_____

___ ___ por	1 ☐ D	2 ☐ S	3 ☐ M	o	4 ☐ N	9 ☐ NS

_____

___ por	1 ☐ D	2 ☐ S	3 ☐ M	o	4 ☐ N	9 ☐ NS

_____

___ ___ por	1 ☐ D	2 ☐ S	3 ☐ M	o	4 ☐ N	9 ☐ NS

_____

___ ___ por	1 ☐ D	2 ☐ S	3 ☐ M	o	4 ☐ N	9 ☐ NS

9. Quality of food frequency interivew.
(To be completed by interviewer.)

☐ reliable
☐ unreliable
☐ refusal

Comments _____

_____

_____

_____

10. RESPONDENT

☐ sample person
☐ proxy
☐ sample person/proxy

Appendix K.   Probes and Food Selections for Foods Reported in English by Mexican Americans

Food Reported	Probing Questions: First Probe	Second Probe	How to Enter	Comments
Bread	American	use standard probes		
	Mexican	sweet	pan dulce pan de huevo concha mollete cuernos	Ask for the Mexican name because some amounts are linked to shapes. If unable to specify, use pan dulce.
		white rolls (French-type)	bolillos	
		corn	tortillas	
Casserole w/ tortillas, cheese & sauce	with eggs	eggs added before cooking	chilaquiles	
		eggs added after cooking	chilaquiles; enter egg separately	
	without eggs		chilaquiles	If no eggs added, select chilaquiles, "no egg stirred into recipe."
Chalupa	list each item	type of base	tortilla	
			masa shell	Enter masa shell as Missing Food.
Coffee	American	use standard probes		
	Mexican			If SP cannot specify amount of sugar, enter as Mexican coffee, sweetened w/ sugar.
Ground beef or pork (not patty)	American	use standard probes		
	Mexican	w/ tomatoes	picadillo de carne	
		w/ tomatoes & chile peppers	enter as Missing Food	

Food Reported	Probing Questions: First Probe	Second Probe	How to Enter	Comments
<u>Noodles, spaghetti, vermicelli</u>	American	use standard probes		
	Mexican	browned, boiled w/ tomatoes & chicken broth	sopa seca de fideo	
<u>Oatmeal</u>	American	use standard probes		
	Mexican - beverage	oats w/ milk &/or water	atole de avena	Confirm the type of grain even though the SP calls it "oatmeal."
		cornmeal w/ milk &/or water	atole de maiz	
		masa w/ milk &/or water	atole de masa	
		rice w/ milk &/or water	atole de arroz	
<u>Rice</u>	American	use standard probes		
	Mexican	boiled w/ tomatoes	arroz mexicano	
		browned, boiled w/ tomatoes, chicken broth	sopa seca de arroz	
		browned, boiled w/ tomatoes	enter as Missing Food	
<u>Rice & chicken</u>	cooked separately		enter separate items	
	cooked together		enter as Missing Food	
<u>Sauce</u>: e.g., chili, hot pepper, hot sauce, picante, pico de gallo, salsa, taco	commercial		enter appropriate selection	
	homemade		salsa (then follow screen probes)	

Food Reported	Probing Questions: First Probe	Second Probe	How to Enter	Comments
<u>Soup</u>	American	use standard probes		
	Mexican - beef broth base	broth only	enter in regular soup hierarchy	
		w/ rice	enter in regular soup hierarchy	
		w/ noodles	enter in regular soup hierarchy	
	Mexican - chicken broth base	broth only	enter in regular soup hierarchies	
		w/ rice, little broth, "dry"	sopa seca de arroz	If soup contains chicken pieces, enter as Missing Food. If soup contains other type of meat, specify type on the variable ingredient screen.
		w/ rice, much broth	enter in regular soup hierarchies	
		w/ noodles, little broth, "dry"	sopa seca de fideo	If soup contains chicken pieces, enter as Missing Food. If soup contains other type of meat, specify type on the variable ingredient screen.
		w/ noodles, much broth	enter in regular soup hierarchies	
		w/ carrots, celery, onion	enter in regular soup hierarchies	
		w/ other vegetables	enter per description, or as Missing Food	If description is available, use it to make appropriate selection. Otherwise, enter as Missing Food.
	Mexican - fish broth base	w/ potatoes	sopa de pescado in SOUP.HIS	
		w/ tomatoes	enter as Missing Food	
		w/ potatoes & tomatoes	enter as Missing Food	

Food Reported	Probing Questions: First Probe	Second Probe	How to Enter	Comments
<u>Stew</u>	American	use standard probes		
	Mexican - beef	w/ tomatoes, w/ & w/o potatoes	carne guisada	
		floured, browned	enter as Missing Food	
	Mexican - chicken	w/ tomatoes, w/ & w/o potatoes	pollo guisado	
		floured, browned	enter as Missing Food	
	Mexican - pork	w/ tomatoes & chile peppers	pork w/ tomatoes & chiles under MIXE.HIS	
		w/ tomatoes	enter as Missing Food	
		floured, browned, i.e. chile verde (a stew not salsa)	enter as Missing Food	

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