

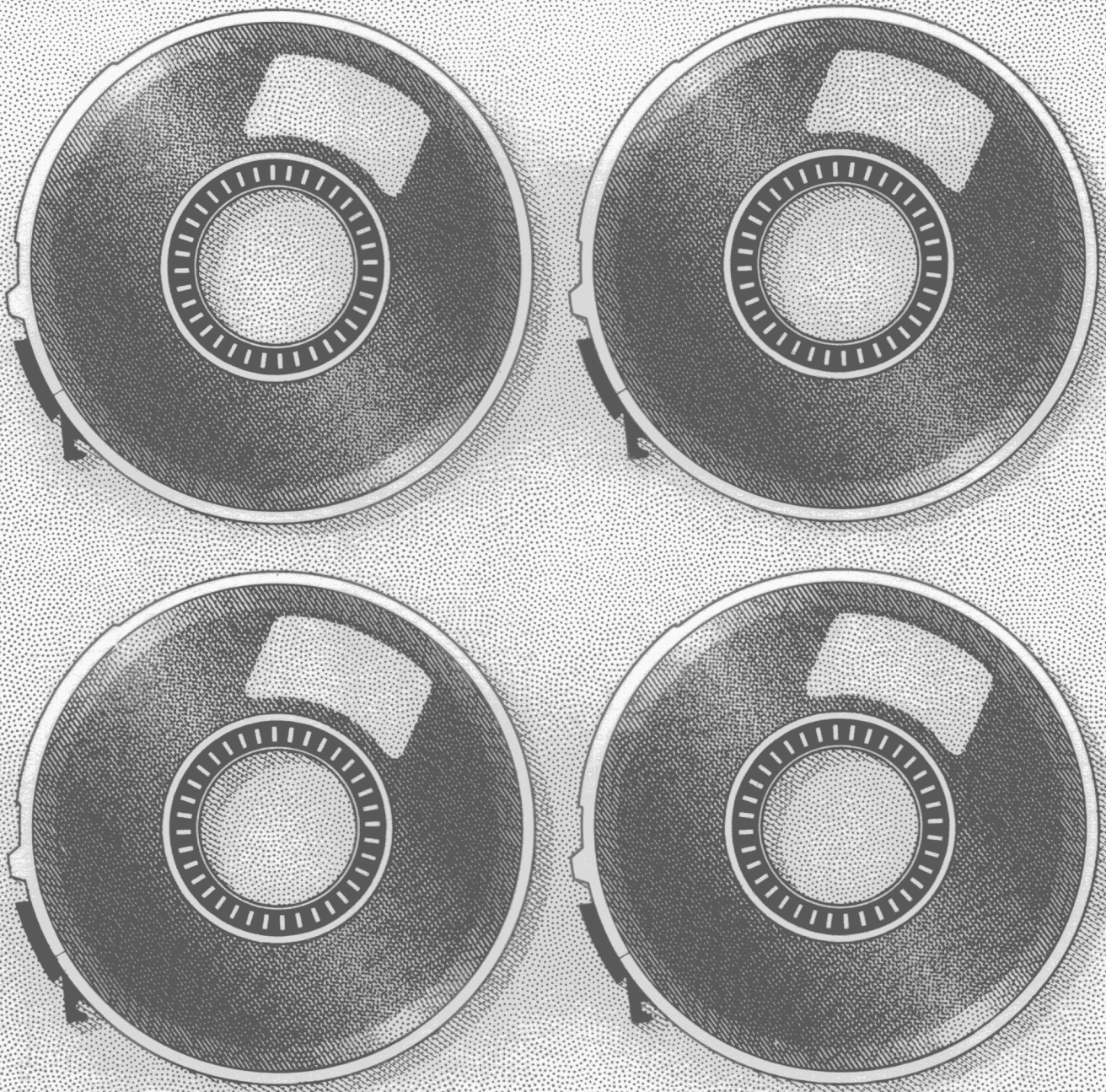


# Public Use Data Tape Documentation

Dietary Frequency and Adequacy  
Ages 1-74  
Tape Number 4701

National Health and Nutrition Examination Survey, 1971-75

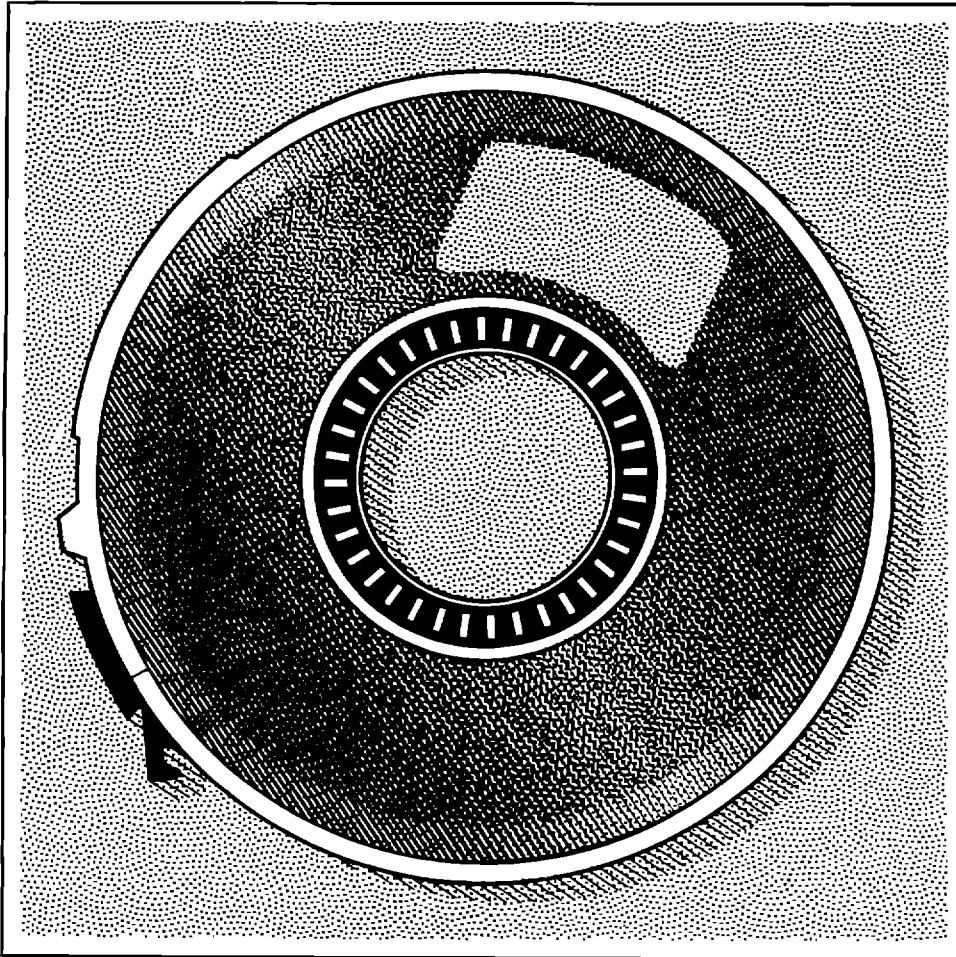
U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES • Public Health Service • Centers for Disease Control • National Center for Health Statistics



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U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
Public Health Service  
Centers for Disease Control  
National Center for Health Statistics

Hyattsville, Maryland  
May 1981

The data compilation and documentation necessary for the Dietary Frequency and Adequacy Data Tape were done by Dale Hitchcock, Margaret Carroll, Connie Dresser, Everette Collins, Evelyn Stanton, and Rita M. Weinberger of the Division of Health Examination Statistics, National Center for Health Statistics. A special note of gratitude is due Darian Varga and Eugene Sides who patiently typed and retyped this material.

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## DIETARY FREQUENCY AND ADEQUACY DATA TAPE

### Health and Nutrition Examination Survey, HANES I, 1971-1975

Description of Survey: A detailed description of the design, content and operation of HANES I is provided in the following reports: Plan and Operation of the Health and Nutrition Examination Survey, DHEW Pub. No. (HSM) 73-1310, Series 1, Nos. 10a and 10b, Public Health Service, Washington, D. C., U. S. Government Printing Office, February 1973. Also provided is a draft report on the augmentation survey of adults describing the relevant field work conducted between July 1974 and October 1975.

Target Population: HANES I was conducted on a nationwide probability sample of approximately 28,000 persons, ages 1-74 years, from the civilian, noninstitutionalized population of the coterminous United States, excepting those persons residing on Indian reservations. The survey started in April 1971 and for many survey components was completed in June 1974. The HANES I sample was selected so that certain population groups thought to be at high risk of malnutrition (persons with low incomes, preschool children, women of childbearing age and the elderly) were oversampled at known rates. Adjusted sampling weights were then computed within 60 age, sex, and race categories in order to inflate the sample in such a manner as to closely reflect the noninstitutionalized population, ages 1-74 years, of the United States at the mid-point of the survey.

Although the main emphasis of HANES I was on nutrition, a subset of those sample persons aged 25-74 received a more detailed health examination which was continued through October 1975. No particular oversampling of subgroups of the population was done in this subsample (e.g., women of childbearing age were not oversampled as they were for the major nutrition component of HANES I). This subsample is also representative of the United States population aged 25-74 during the time of HANES I.

After the nutrition survey was completed, the detailed examination given to the 25-74 age group was continued until the total number of examined persons was approximately double the number of examinees who received the detailed examination during the nutrition survey.

Data Collection: Information for all examined sample persons in HANES I was obtained by means of a household interview, a general medical history, a 24-hour dietary intake recall interview, a food frequency interview, a food program questionnaire, a general medical examination, dental, dermatological and ophthalmological examinations, anthropometric measurement, hand-wrist x-rays (of those ages 1-17 only) and 24 hematological, blood chemistry, and urological laboratory determinations.

In addition to the information received on all examined persons by means of the above questionnaires, procedures and measurements, the following data were gathered on the subsample of adults aged 25-74: a medical history supplement; supplementary questionnaires concerning

arthritis, respiratory and cardiovascular conditions (when applicable);  
a health care needs questionnaire; a general well-being questionnaire;  
an extended medical examination; x-rays of the chest and hip and knee  
joints; audiometry; electrocardiography; goniometry; spirometry;  
pulmonary diffusion and tuberculin tests; along with additional  
laboratory determinations.

### Use of HANES Data

With the goal of mutual benefit, NCHS requests the cooperation of recipients of data tapes in certain actions related to their use:

- A. Any published material derived from the data should acknowledge the National Center for Health Statistics as the original source. It should include also a disclaimer which credits any analyses, interpretations, or conclusions reached to the author (recipient of the tape) and not to NCHS, which is responsible only for the initial data.
  
- B. Consumers who wish to publish a technical description of the data will make a reasonable effort to insure that the description is not inconsistent with that published by NCHS. This does not mean, however, that NCHS will review such descriptions.



### Errors in the Data Sets and Survey Differences

The data users tapes have been subjected to a great deal of careful editing. However, due to the large volume of data in the series, it is likely that a small number of errors or discrepancies remain undetected. We would appreciate if any such errors are detected that they be brought to our attention so that new corrected copies of the tape can be created and errata sheets issued to previous purchasers.

Some of the continuous data items have extremely high or low values and we have verified that they do in fact appear that way on the hard documents; that is, we have verified that the values have not been incorrectly keyed.

In general, we have not attempted to resolve any differences that may exist between estimates derived from the various subsamples of HANES I. Nor have we made any comparisons between estimates from HANES I and previous surveys conducted by the Division of Health Examination Statistics.

### Variance Estimation

Because the Health and Nutrition Examination Survey is based upon a complex sample design, the assumptions of many statistical tests and routinely available statistical programs are not met. For this reason, when estimates of the variances of statistics from HANES are computed, the technique of estimation must be based upon complex sampling theory. In order to provide the user with the capability of estimating the complex sample variances, we have provided Strata and Primary Sampling Unit (PSU) codes on the HANES user tapes in tape positions 194-198. However, these codes are suitable for making variance estimates only for examination locations 1-65 and 1-100. To compute variance estimates for examination locations 1-35 or 66-100, it is necessary to recode the current Strata-PSU codes according to the specifications that follow. The resultant recoded Strata-PSU codes should be used only for locations 1-35 and 66-100.

One computer program that should be widely available sometime around the summer of 1978 as part of the Statistical Analysis System (available from the SAS Institute, Inc., Post Office Box 10066, Raleigh, North Carolina 27605) is capable of using the Strata-PSU codes provided for HANES to compute complex sample variances. Other programs may also be available.

In those Strata, referred to as certainty or self-representing Strata, the PSU codes are actually the segment numbers. Neither the Strata codes nor the PSU codes are the original codes used in the formation of the HANES sample design, but are none-the-less a unique recoding of the original codes. For further discussion of the sample design of HANES, the user should consult the publications of the National Center for Health Statistics-- Series 1-Nos. 10a and 14 and the detailed note for tape positions 158-193.

Recode Specifications for Strata-PSU Codes

First.--Create a file with only those records in the file for examination locations 1-35.\*

Second.--Retain the original Strata-PSU codes in Strata 7-10 and 13 in the original form as the recoded Strata-PSU codes.

Third.--Recode the remaining strata according to the chart below.

Fourth.--Repeat the process for examination locations 66-100.\*

<u>Old Strata #</u> <u>(tape positions 194-195)</u>	<u>New Strata #</u>	<u>New PSU #</u>
01	01	001
02	01	002
03	03	001
06	03	002
04	04	001
05	04	002
11	11	001
12	11	002
14	14	001
21	14	002
15	15	001
16	15	002
17	17	001
20	17	002
18	18	001
19	18	002
22	22	001
25	22	002
23	23	001
24	23	002
26	26	001
27	26	002
28	28	001
29	28	002
30	30	001
35	30	002
31	31	001
32	31	002
33	33	001
34	33	002

\*See detailed note for tape positions 158-193.

Tape Characteristics

**Title:** Dietary Frequency and Adequacy Data Tape

**Catalog Number:** 4701

**Data Set Name:** HEHANESI.DU470105

**Record Length:** 513

**Blocksize:** 5130

**Number of Records:** 20,749

**Number of Reels:** 1

**Recording Mode:** Fixed Block, EBCDIC

**Channel:** 9 Track

**Created by:** Division of Health Examination Statistics  
National Center for Health Statistics  
Hyattsville, Maryland

(Revised--September 1980)

### General Notes

Demographic Information: An advance letter, announcing the forthcoming arrival of an interviewer from the U. S. Bureau of the Census, was mailed to each household that fell into the sample area. The interviewer subsequently visited the household to ascertain its composition and to administer a questionnaire, the primary purpose of which was to obtain demographic information. The questionnaire was administered to each potential sample person that was available and competent enough to respond to questions. In the event that a potential sample person was not at home at the time of the interview, any responsible adult in the household was asked to respond to the questions for the absent person.

Demographic information for each of the examinees appears in tape positions 1-200.

Dietary Frequency and Adequacy Tape: Information on each sample person's usual pattern of food intake was obtained during the first National Health and Nutrition Examination Survey (HANES I) conducted by the National Center for Health Statistics from April 1971 through June 1974 on a national probability sample of persons 1-74 years of age in the U. S. civilian noninstitutionalized population. A dietary interview, conducted by professional dietary staff, consisted of a 24-hour recall and food frequency questionnaire. The dietary data bank and information derived from interviewing techniques are available on three sets of data tapes: (1) the Model Gram and Nutrient Composition Tapes; (2) the 24-Hour Food Consumption Intake Tape; and (3) the Dietary Frequency and Adequacy Tape.

The Model Gram Tape, which is the first of the HANES I dietary data bank tapes, consists of food items in numeric order with designated food group numbers, food codes, alphameric descriptions, preferred model codes and their gram conversion factors. This section is the basis for coding all reported food items for the 24-Hour Recall Intake Tape.

The Nutrient Composition data bank tape is the actual nutrient analysis in 100 gram edible portions of all codes listed in the Model Gram Section. Tape 1 is essential for recording and analyzing the actual 24-Hour Recall Intake data.

The 24-Hour Recall Intake Tape provides such information as specific food items and their quantities ingested for all regular meals, between meal foods or snacks consumed on the day midnight to midnight preceding the interview for each sample person interviewed.

The first half of the Dietary Frequency and Adequacy Tape consists of the food frequency data. The frequency of consumption of foods from 18 groups ingested daily and/or weekly in the usual pattern (taken as being that which had prevailed over the three-month interval prior to the nutrition interview) accounted for all regular meals eaten as well as for between meal foods or snacks, Monday through Sunday, weekends and holidays. The food frequency method served as a quality control technique for the 24-hour recall method of obtaining data while depicting diet profiles over a longer period of time.

The adequacy portion of the tape summarizes the total nutrient intake from the 24-hour recall record by selected nutrient for each sample person and evaluates that nutrient intake in relation to selected dietary intake standards used in HANES I. (These standards were developed with the advice from an ad hoc group which considered standards from the World Health Organization, Interdepartmental Committee on Nutrition for the National Defense Manual, the Food and Nutrition Board, National Research Council's Recommended Dietary Allowances, and those used in the Ten-State Nutrition Survey.)

Formats of the 24-Hour Recall and the three-month Food Frequency questionnaires are in the Vital and Health Statistics Series 1, No. 10b.

DEMOGRAPHIC DATA SUMMARY - HANES I

	<u>Tape Positions</u>
Sample sequence number .....	1
Size of place .....	10
SMSA-not SMSA .....	11
Type of living quarters .....	12
Land usage .....	13
If rural, asked - How many acres of land are included .....	14
If 10 acres or more asked - Sale of crops, etc. amount to \$50 or more ..	15
If 10 acres or less asked - Sale of crops, etc. amount to \$250 or more .	16
Age - head of household .....	17
Sex - head of household .....	19
Highest grade attended - head of household .....	20
Race - head of household .....	22
Total number of persons in household .....	23
Total sample persons in household .....	25
Number of rooms in house .....	27
Is there piped water .....	28
If yes, is there hot and cold piped water .....	29
If yes to piped water - Does house have a sink with piped water .....	30
Does house have a range or cook stove .....	31
Does house have a refrigerator.....	32
Are kitchen facilities used by anyone not living in household .....	33
Total family income group .....	34
NOTE: The following income questions were asked <u>only</u> if "Total Family Income" was less than \$7,000	
During Past Year Did you or Any Members of Your Family Receive Money From:	
Wages or salaries .....	36
If yes - How much altogether before deductions .....	37
Social Security or Railroad Retirement .....	41
If yes - How much altogether .....	42
Welfare payments or other public assistance .....	46
If yes - How much altogether .....	47
Unemployment or Workman's Compensation .....	51
If yes - How much altogether .....	52
Government employee pensions or private pensions .....	56
If yes - How much altogether .....	57



Tape  
Positions

Dividends, interest or rent .....	61
If yes - How much altogether .....	62
Net income from own non-farm business, professional practice or partnership .....	66
If yes - How much altogether .....	67
Net income from a farm .....	71
If yes - How much altogether .....	72
Veteran's payments .....	76
If yes - How much altogether .....	77
Alimony, child support or contributions from persons not living in household .....	81
If yes - How much altogether .....	82
Any other income .....	86
If yes - How much altogether .....	87
Total amount .....	91
Family unit code .....	95
Relationship to head of household .....	100
Age at interview .....	101
Race of examined person .....	103
Sex of examined person .....	104
Marital status .....	105
Date of birth (month and year) .....	106
Place of birth .....	110
Highest grade of regular school ever attended .....	112
Did he finish the grade .....	114
Is he attending school now .....	115
Has he ever attended a school of any kind .....	116
If yes - What kind of school .....	117
Is any language other than English frequently spoken in the household .	118
If yes - What language .....	119
What is your main ancestry or national origin .....	120
What was he doing most of past three months .....	122
If "something else" - What was he doing .....	123
If "keeping house" or "something else" - Did he work at a job or business at any time during the past three months .....	124
If "working" - Did he work full-time or part-time .....	125
Did he work at any time last week or the week before (not around house)	126
If no - Even though he did not work during that time, does he have a job or business .....	127

Tape  
Positions

Was he looking for work or on lay-off from a job ..... 128  
If yes - Which ..... 129  
Class of worker ..... 130  
If self-employed in "own" business and not a farm, is the business  
  incorporated ..... 131  
Business or industry code ..... 132

Occupation code ..... 135  
Date of examination ..... 138  
Age at examination ..... 144  
Farm/non-farm ..... 146

Poverty index ..... 147  
Region ..... 150

**FOOD PROGRAMS APPLICABILITY ..... 151**

Are you certified to participate in the food stamp program? ..... 152  
Are you buying food stamps now? ..... 153  
What is the main reason you aren't participating in the program? ..... 154  
Are you certified to participate in the commodity distribution program? 155  
Are you receiving commodity foods now for your family? ..... 156  
Why aren't you participating in the program? ..... 157

**SAMPLE WEIGHTS ..... 158**

**STRATA - Primary Sampling Unit (PSU) ..... 194**

**DIETARY FREQUENCY AND ADEQUACY DATA SUMMARY - HANES I**

	<u>Tape Positions</u>
CATALOG NUMBER - 4701 .....	201
Respondent Code .....	216
 <u>DIETARY FREQUENCY</u>	
How often are the following food items eaten?	
Milk (whole) .....	217
Milk (skim) .....	221
Meat and poultry .....	225
Fish or shellfish .....	229
Eggs .....	233
Cheese and cheese dishes .....	237
Dry beans and peas .....	241
Fruits and vegetables (all kinds) .....	245
Fruits and vegetables (rich in vitamin A) .....	249
Fruits and vegetables (rich in vitamin C) .....	253
Bread .....	257
Cereals .....	261
Butter and margarine .....	265
Desserts and sweets .....	269
Candy .....	273
Beverages (sweetened, carbonated and non-carbonated) .....	277
Cold drinks (artificially sweetened or diet drinks) .....	281
Coffee or tea .....	285
Snack foods .....	289
Interviewer code .....	293
Completion code .....	296
 <u>24-HOUR RECALL SECTION</u>	
Respondent .....	312
Day of recall .....	313
Is what you ate yesterday the way you usually eat? .....	314
Has your diet changed recently? .....	315
Are you taking vitamins or minerals? If yes, what kinds? .....	316
How many times a week do you eat a meal at a restaurant? .....	318
How often do you use a salt shaker at the table? .....	319
Weight in pounds .....	320
Height in inches .....	325

Tape  
Positions

NUTRIENTS

Actual daily dietary intake per individual during 24-hour recall period:

Calories .....	328
Protein .....	336
Fat .....	344
Total carbohydrates .....	352
Calcium .....	360
Phosphorus .....	368
Iron .....	376
Sodium .....	384
Potassium .....	392
Vitamin A .....	400
Thiamine .....	408
Riboflavin .....	416
Niacin .....	424
Vitamin C .....	432

ADEQUACY

Individual's caloric and nutrient intake as the percent of HANES I dietary standards:

Calories .....	445
Protein .....	451
Calcium .....	457
Iron .....	463
Vitamin A .....	469
Vitamin C .....	475
Imputation code .....	481

ADDENDA TO NUTRIENTS

Saturated fatty acid .....	482
Oleic acid .....	490
Linoleic acid .....	498
Cholesterol (Dietary) .....	506

HEALTH AND NUTRITION EXAMINATION SURVEY (HANES I)

ALL SAMPLE PERSONS  
LOCATIONS 1-65

DEMOGRAPHIC DATA TAPE  
(n=20749)

Item #	Tape Loc.	No. of Positions	ITEM DESCRIPTION & CODES	Control Counts	HANES I Data Source
			<u>DEMOGRAPHIC DATA</u>		
	1-5	5	<u>Sample Sequence Number</u>		
	6-9	4	<u>Catalog Number</u> 4271	20749	
	10	1	<u>Size of Place</u> 1 - Urbanized area with 3,000,000 or more 2 - Urbanized area with 1,000,000 to 2,999,999 3 - Urbanized area with 250,000 to 999,999 4 - Urbanized area under 250,000 5 - Urban place 25,000 or more outside urbanized area 6 - Urban place 10,000 to 24,999 outside urbanized area 7 - Urban place 2,500 to 9,999 outside urbanized area 8 - Rural	3368 2423 2514 2534 364 1030 1159 7357	Household Questionnaire See Detailed Notes
	11	1	<u>SMSA - Not SMSA</u> 1 - In SMSA, in central city 2 - In SMSA, not in central city 4 - Not in SMSA	7221 5420 8108	Household Questionnaire See Detailed Notes
	12	1	<u>Type of Living Quarters</u> 1 - Housing Unit 2 - Other unit	20563 186	Household Questionnaire
	13	1	<u>Land Usage</u> 1 - All other 2 - Rural	13613 7136	Household Questionnaire
	14	1	<u>If Rural, asked</u> <u>How Many Acres of Land Are Included?</u> 1 - 10 or more acres 2 - Less than 10 acres 9 - Not applicable	1932 5204 13613	Household Questionnaire

HEALTH AND NUTRITION EXAMINATION SURVEY (HANES I)

Item #	Tape Loc.	No. of Positions	ITEM DESCRIPTION & CODES	Control Counts	HANES I Data Source
15		1	If 10 acres or more, asked if <u>Sale of Crops, Etc. Amount to \$50 or more?</u>		Household Questionnaire
			2 - Yes	1160	
			4 - No	772	
			9 - Not applicable	18817	
16		1	If 10 acres or less, asked if <u>Sale of Crops, Etc. Amount to \$250 or more?</u>		Household Questionnaire
			3 - Yes	131	
			5 - No	5073	
			9 - Not applicable	15545	
17-18		2	<u>Age - Head of Household</u>		Household Questionnaire
			16-92 as given	20744	
			00 Blank, but applicable	5	
19		1	<u>Sex - Head of Household</u>		Household Questionnaire
			1 - Male	16660	
			2 - Female	4089	
20-21		2	<u>Highest Grade Attended - Head of Household</u>		Household Questionnaire
			10 - None	223	
			21 - 1st grade	82	
			22 - 2nd grade	190	
			23 - 3rd grade	379	
			24 - 4th grade	427	
			25 - 5th grade	421	
			26 - 6th grade	681	
			27 - 7th grade	702	
			28 - 8th grade	2405	
			31 - 9th grade	1121	
			32 - 10th grade	1458	
			33 - 11th grade	1133	
			34 - 12th grade	6153	
			41 - First year of college	746	
42 - Second year of college	1081				
43 - Third year of college	485				
44 - Fourth year of college	1317				
45 - Graduate	1084				
88 - Blank, but applicable	661				

HEALTH AND NUTRITION EXAMINATION SURVEY (HANES I)

Item #	Tape Loc.	No. of Positions	ITEM DESCRIPTION & CODES	Control Counts	HANES I Data Source
	22	1	<u>Race - Head of Household</u> 1 - White 2 - Negro 3 - Other	16387 4149 213	Household Questionnaire See Detailed Notes
	23-24	2	<u>Total Number of Persons in Household</u> 01-19 - As given	20749	Household Questionnaire
	25-26	2	<u>Total Sample Persons in Household</u> 01-07 - As given	20749	Household Questionnaire
	27	1	<u>Number of Rooms in House</u> 1-8 - As given 9 - 9 or more	19747 1002	Household Questionnaire
	28	1	<u>Is there piped water?</u> 1 - Yes 2 - No	20043 706	Household Questionnaire
	29	1	If yes <u>Is there hot and cold piped water?</u> 1 - Yes 2 - No 9 - Not applicable	19527 518 704	Household Questionnaire
	30	1	If yes to piped water - <u>Does House Have a Sink with Piped Water?</u> 1 - Yes 2 - No 9 - Not applicable	19866 181 702	Household Questionnaire
	31	1	<u>Does House Have a Range or Cook Stove?</u> 1 - Yes 2 - No	20513 236	Household Questionnaire

HEALTH AND NUTRITION EXAMINATION SURVEY (HANES I)

Item #	Tape Loc.	No. of Positions	ITEM DESCRIPTION & CODES	Control Counts	HANES I Data Source
32		1	<u>Does House have a Refrigerator?</u>		Household Questionnaire
			1 - Yes	20487	
			2 - No	262	
33		1	<u>Are kitchen facilities used by anyone not living in household?</u>		Household Questionnaire
			1 - Yes	641	
			2 - No	19418	
			9 - Not applicable	690	
34-35		2	<u>Total Family Income Group</u>		Household Questionnaire See Detailed Notes
			11 - Under \$1,000 (including loss)	509	
			12 - \$1,000-1,999	1248	
			13 - \$2,000-2,999	1413	
			14 - \$3,000-3,999	1389	
			15 - \$4,000-4,999	1282	
			16 - \$5,000-5,999	1147	
			17 - \$6,000-6,999	1030	
			18 - \$7,000-9,999	4655	
			19 - \$10,000-14,999	4175	
			20 - \$15,000-19,999	1830	
			21 - \$20,000-24,999	741	
			22 - \$25,000 and over	612	
			88 - Blank, but applicable	718	
			<u>NOTE: The following income questions were asked <u>only</u> if "Total Family Income" was less than \$7,000.</u>		
			DURING PAST YEAR DID YOU OR ANY MEMBERS OF YOUR FAMILY RECEIVE MONEY FROM:		
36		1	<u>Wages or Salaries?</u>		Household Questionnaire
			1 - Yes	4738	
			2 - No	3384	
			8 - Blank, but applicable	614	
			9 - Not applicable	12013	



HEALTH AND NUTRITION EXAMINATION SURVEY (HANES I)

Item #	Tape Loc.	No. of Positions	ITEM DESCRIPTION & CODES	Control Counts	HANES I Data Source
37-40		4	<u>If yes to above, how much altogether before deductions?</u> 0001-8000 - As given 8888 - Blank, but applicable 9999 - Not applicable	4468 884 15397	Household Questionnaire
41		1	<u>Social Security or Railroad Retirement?</u> 1 - Yes 2 - No 8 - Blank, but applicable 9 - Not applicable	2914 5226 595 12014	Household Questionnaire
42-45		4	<u>If yes to above, how much altogether?</u> 0001-6999 - As given 8888 - Blank, but applicable 9999 - Not applicable	2852 657 17240	Household Questionnaire
46		1	<u>Welfare Payments or Other Public Assistance?</u> 1 - Yes 2 - No 8 - Blank, but applicable 9 - Not applicable	2414 5716 605 12014	Household Questionnaire
47-50		4	<u>If yes to above, how much altogether?</u> 0001-6999 - As given 8888 - Blank, but applicable 9999 - Not applicable	2383 636 17730	Household Questionnaire
51		1	<u>Unemployment or Workmen's Compensation?</u> 1 - Yes 2 - No 8 - Blank, but applicable 9 - Not applicable	441 7690 604 12014	Household Questionnaire

HEALTH AND NUTRITION EXAMINATION SURVEY (HANES I)

Item #	Tape Loc.	No. of Positions	ITEM DESCRIPTION & CODES	Control Counts	HANES I Data Source
52-55		4	<u>If yes to above, how much altogether?</u> 0001-6999 - As given 8888 - Blank, but applicable 9999 - Not applicable	423 622 19704	Household Questionnaire
56		1	<u>Government Employee Pensions or Private Pensions?</u> 1 - Yes 2 - No 8 - Blank, but applicable 9 - Not applicable	569 7561 605 12014	Household Questionnaire
57-60		4	<u>If yes to above, how much altogether?</u> 0001-6999 - As given 8888 - Blank, but applicable 9999 - Not applicable	553 621 19575	Household Questionnaire
61		1	<u>Dividends, interest or rent?</u> 1 - Yes 2 - No 8 - Blank, but applicable 9 - Not applicable	918 7212 602 12017	Household Questionnaire
62-65		4	<u>If yes to above, how much altogether?</u> 0001-6999 - As given 8888 - Blank, but applicable 9999 - Not applicable	870 650 19229	Household Questionnaire
66		1	<u>Net income from own non-farm business, professional practice or partnership?</u> 1 - Yes 2 - No 3 - Loss 8 - Blank, but applicable 9 - Not applicable	350 7772 17 596 12014	Household Questionnaire

HEALTH AND NUTRITION EXAMINATION SURVEY (HANES I)

Item #	Tape Loc.	No. of Positions	ITEM DESCRIPTION & CODES	Control Counts	HANES I Data Source
67-70		4	<u>If yes to above, how much altogether?</u>		Household Questionnaire
			0000-7500 - As given	316	
			8888 - Blank, but applicable	647	
			9999 - Not applicable	19786	
71		1	<u>Net income from a farm?</u>		Household Questionnaire
			1 - Yes	406	
			2 - No	7705	
			3 - Loss	26	
			8 - Blank, but applicable	598	
			9 - Not applicable	12014	
72-75		4	<u>If yes to above, how much altogether?</u>		Household Questionnaire
			0000-7500 - As given	388	
			8888 - Blank, but applicable	642	
			9999 - Not applicable	19719	
76		1	<u>Veteran's Payments</u>		Household Questionnaire
			1 - Yes	452	
			2 - No	7679	
			8 - Blank, but applicable	601	
			9 - Not applicable	12017	
77-80		4	<u>If yes to above, how much altogether?</u>		Household Questionnaire
			0001-6999 - As given	441	
			8888 - Blank, but applicable	612	
			9999 - Not applicable	19696	
81		1	<u>Alimony, child support or contributions from persons not living in household?</u>		Household Questionnaire
			1 - Yes	439	
			2 - No	7691	
			8 - Blank, but applicable	602	
			9 - Not applicable	12017	

HEALTH AND NUTRITION EXAMINATION SURVEY (HANES I)

Item #	Tape Loc.	No. of Positions	ITEM DESCRIPTION & CODES	Control Counts	HANES I Data Source
82-85		4	<u>If yes to above, how much altogether?</u> 0001-6999 - As given 8888 - Blank, but applicable 9999 - Not applicable	426 615 19708	Household Questionnaire
86		1	<u>Any other income?</u> 1 - Yes 2 - No 8 - Blank, but applicable 9 - Not applicable	325 7799 607 12018	Household Questionnaire
87-90		4	<u>If yes to above, how much altogether?</u> 0001-6999 - As given 8888 - Blank, but applicable 9999 - Not applicable	313 619 19817	Household Questionnaire
91-94		4	<u>Total Amount (Total of Positions 37-90)</u> 0000-6999 - As given 8888 - Blank, but applicable 9999 - Not applicable	7676 1060 12013	Household Questionnaire
95-99		5	<u>FAMILY UNIT CODE</u> 00001-23180	20749	Computer generated See Detailed Notes
100		1	<u>Relationship to Head of Household</u> 1 - Head (1 person living alone or with non-relatives) 2 - Head (2 or more related persons in family) 3 - Wife 4 - Child 5 - Other relative	1920 4912 5256 7733 928	Household Questionnaire
101-2		2	<u>Age at Interview</u> 01-74 - As given	20749	Household Questionnaire

HEALTH AND NUTRITION EXAMINATION SURVEY (HANES I)

Item #	Tape Loc.	No. of Positions	ITEM DESCRIPTION & CODES	Control Counts	HANES I Data Source
103		1	<u>Race of Examined Person</u> 1 - White 2 - Negro 3 - Other	16351 4163 235	Household Questionnaire See Detailed Notes
104		1	<u>Sex of Examined Person</u> 1 - Male 2 - Female	8820 11929	Household Questionnaire
105		1	<u>Marital Status</u> 1 - Under 17 2 - Married 3 - Widowed 4 - Never married 5 - Divorced 6 - Separated 8 - Blank, but applicable	6781 9338 1292 2265 596 465 12	Household Questionnaire
106-9		4	<u>Date of Birth (month, year)</u> 01-12 - Month as given 00-99 - Year (1896-1973) as given	20749 20749	Household Questionnaire
110-11		2	<u>Place of Birth</u> 01-02 04-06 08-13 15-42 } As given 44-51 53-56 60-81 91-97 88 - Blank, but applicable	20605      144	Household Questionnaire See Detailed Notes

HEALTH AND NUTRITION EXAMINATION SURVEY (HANES I)

Item #	Tape Loc.	No. of Positions	ITEM DESCRIPTION & CODES	Control Counts	HANES I Data Source
112-13		2	<u>Highest Grade of regular school ever attended?</u>		Household Questionnaire
			10 - None	240	
			21 - 1st Grade	438	
			22 - 2nd Grade	445	
			23 - 3rd Grade	556	
			24 - 4th Grade	660	
			25 - 5th Grade	654	
			26 - 6th Grade	757	
			27 - 7th Grade	833	
			28 - 8th Grade	1897	
			31 - 9th Grade	1070	
			32 - 10th Grade	1263	
			33 - 11th Grade	968	
			34 - 12th Grade	4642	
			41 - First year of college	659	
			42 - Second year of college	809	
			43 - Third year of college	343	
			44 - Fourth year of college	883	
			45 - Graduate	540	
			77 - Special School	18	
88 - Blank, but applicable	108				
99 - Not applicable	2966				
114		1	<u>Did he finish the grade?</u>		Household Questionnaire
			1 - Yes	11380	
			2 - No	5929	
			8 - Blank, but applicable	234	
			9 - Not applicable	3206	
115		1	<u>Is he attending school now?</u>		Household Questionnaire
			1 - Yes	3857	
			2 - No	476	
			8 - Blank, but applicable	0	
			9 - Not applicable	16416	

HEALTH AND NUTRITION EXAMINATION SURVEY (HANES I)

Item #	Tape Loc.	No. of Positions	ITEM DESCRIPTION & CODES	Control Counts	HANES I Data Source
116		1	<u>Has he ever attended a school of any kind?</u> 1 - Yes 2 - No 8 - Blank, but applicable 9 - Not applicable	668 1127 0 18954	Household Questionnaire
117		1	<u>If yes, what kind of school?</u> 1 - Nursery 2 - Kindergarten 3 - Other 4 - Headstart 5 - Daycare 8 - Blank, but applicable 9 - Not applicable	150 362 73 45 38 0 20081	Household Questionnaire
118		1	<u>Is any language other than English frequently spoken in the household?</u> 1 - Yes. 2 - No 8 - Blank, but applicable	2437 18110 202	Household Questionnaire
119		1	<u>If yes, what language?</u> 0 - German 1 - Italian 2 - French 3 - Polish 4 - Russian 5 - Spanish 6 - Chinese 7 - Other language 8 - Blank, but applicable 9 - Not applicable	146 137 410 82 19 1202 31 400 212 18110	Household Questionnaire

## HEALTH AND NUTRITION EXAMINATION SURVEY (HANES I)

Item #	Tape Loc.	No. of Positions	ITEM DESCRIPTION & CODES	Control Counts	HANES I Data Source
	120-21	2	<u>What is your main ancestry or national origin?</u> 00 - German 01 - Irish 02 - Italian 03 - French 04 - Polish 05 - Russian 06 - English 07 - Spanish 08 - Mexican 09 - Chinese 10 - Japanese 11 - American Indian 12 - Negro 13 - Jewish 14 - American 15 - Other 88 - Blank, but applicable 99 - Don't know	3385 2592 643 1104 525 188 2541 436 685 40 45 352 4173 56 1455 1956 66 507	Household Questionnaire
	122	1	<u>What was he doing most of past three months?</u> 1 - Working 2 - Keeping house 3 - Something else 8 - Blank, but applicable 9 - Not applicable	6371 4869 2712 27 6770	Household Questionnaire
	123	1	<u>If "something else" from above, what was he doing?</u> 0 - Laid off 1 - Retired 2 - Student 3 - Other 4 - Ill 5 - Staying home 6 - Looking for work 7 - Unable to work 8 - Blank, but applicable 9 - Not applicable	28 1320 792 117 123 56 57 220 26 18010	Household Questionnaire



HEALTH AND NUTRITION EXAMINATION SURVEY (HANES I)

Item #	Tape Loc.	No. of Positions	ITEM DESCRIPTION & CODES	Control Counts	HANES I Data Source
124		1	<u>If "keeping house" or "something else" from above, did he work at a job or business at any time during the past three months?</u> 1 - Yes 2 - No 8 - Blank, but applicable 9 - Not applicable	1054 6522 36 13137	Household Questionnaire
125		1	<u>If "Working" from above, did he work full-time or part-time?</u> 1 - Full-time 2 - Part-time 8 - Blank, but applicable 9 - Not applicable	5705 1714 38 13292	Household Questionnaire
126		1	<u>Did he work at any time last week or the week before? (not around house)</u> 1 - Yes. 2 - No 8 - Blank, but applicable 9 - Not applicable	6600 755 103 13291	Household Questionnaire
127		1	<u>If "no" to above, even though he did not work during that time, does he have a job or business?</u> 1 - Yes 2 - No 8 - Blank, but applicable 9 - Not applicable	397 6878 104 13370	Household Questionnaire
128		1	<u>If "no" in Position 126, was he looking for work or on lay-off from a job?</u> 1 - Yes 2 - No 8 - Blank, but applicable 9 - Not applicable	537 6738 104 13370	Household Questionnaire

HEALTH AND NUTRITION EXAMINATION SURVEY (HANES I)

Item #	Tape Loc.	No. of Positions	ITEM DESCRIPTION & CODES	Control Counts	HANES I Data Source
	129	1	<u>If yes to above - which?</u> 1 - Looking 2 - Lay-off 3 - Both 8 - Blank, but applicable 9 - Not applicable	405 109 24 104 20107	Household Questionnaire
	130	1	<u>Class of Worker</u> 1 - Private paid 2 - Government-Federal 3 - Government-Other 4 - Own 5 - Non-paid 6 - Never worked 8 - Blank, but applicable 9 - Not applicable	5462 248 1001 745 122 60 25 13086	Household Questionnaire
	131	1	<u>If self-employed in "own" business and not a farm, is the business incorporated?</u> 1 - Yes 2 - No 8 - Blank, but applicable 9 - Not applicable	83 535 26 20105	Household Questionnaire
	132-34	3	<u>Business or Industry Code</u> 017-999 - As given	20749	Household Questionnaire See Detailed Notes
	135-37	3	<u>Occupation Code</u> 001-995 As given	20749	Household Questionnaire See Detailed Notes
	138-43	6	<u>Date of Examination</u> Month - 01-12 as given Day - 01-31 as given Year - 71-75 as given	20749	Control Record

HEALTH AND NUTRITION EXAMINATION SURVEY (HANES I)

Item #	Tape Loc.	No. of Positions	ITEM DESCRIPTION & CODES	Control Counts	HANES I Data Source
	144-45	2	<u>Age at Examination</u> 01-75 - As given	20749	Computer generated
	146	1	<u>Farm</u> 1 - Farm 2 - Nonfarm	1291 19458	Computer generated See Detailed Notes
	147-49	3	<u>Poverty Index (X.XX)</u> 001-997 - As given 998 - Index computed 998 or greater 999 - Unknown	20002 25 722	Computer generated See Detailed Notes
	150	1	<u>Region</u> 1 - Northeast 2 - Midwest 3 - South 4 - West	4442 5101 5603 5603	Computer generated See Detailed Notes
	151	1	<u>FOOD PROGRAMS APPLICABILITY</u> 1 - Not applicable 2 - No program available 3 - Food stamps available 4 - Commodities available 8 - Blank, but applicable	14683 112 5142 760 52	Food Programs Quest.
	152	1	<u>Are you certified to participate in the food stamp program?</u> 1 - Yes 2 - No 9 - Don't know Blank	2374 1934 126 16315	Food Programs Quest.

HEALTH AND NUTRITION EXAMINATION SURVEY (HANES I)

Item #	Tape Loc.	No. of Positions	ITEM DESCRIPTION & CODES	Control Counts	HANES I Data Source
153		1	<u>Are you buying stamps now?</u> 1 - Yes, regularly 2 - Yes, occasionally 3 - No 8 - Blank, but applicable Blank	1965 89 307 13 18375	Food Programs Quest.
154		1	<u>What is the main reason you aren't participating in the program?</u> 1 - No need 2 - Not enough money at the time 3 - No transportation 4 - Pride 5 - Other 8 - Blank, but applicable Blank	33 121 16 8 111 18 20442	Food Programs Quest.
155		1	<u>Are you certified to participate in the commodity distribution program?</u> 1 - Yes 2 - No 9 - Don't know Blank	215 423 25 20086	Food Programs Quest.
156		1	<u>Are you receiving commodity foods now for your family?</u> 1 - Yes, regularly 2 - Yes, occasionally 3 - No 8 - Blank, but applicable Blank	159 14 39 3 20534	Food Programs Quest.
157		1	<u>Why aren't you participating in the program?</u> 1 - No need 2 - No transportation 3 - Pride 4 - Other 8 - Blank, but applicable Blank	16 5 2 15 1 20710	Food Programs Quest.

HEALTH AND NUTRITION EXAMINATION SURVEY (HANES I)

Item #	Tape Loc.	No. of Positions	ITEM DESCRIPTION & CODES	Control Counts	HANES I Data Source
			<u>SAMPLE WEIGHTS</u>		
	158-63	6	Detailed Persons, Location 01-35 Blanks	1892 18857	See Detailed Notes
	164-69	6	All Sample Persons, Locations 01-35 Blanks	10127 10622	See Detailed Notes
	170-75	6	Detailed Persons, Locations 01-65 Blanks	3854 16895	See Detailed Notes
	176-81	6	All Sample Persons, Locations 01-65 Blanks	20749 0	See Detailed Notes
	182-193	12	Work Area		
	194-195	2	STRATA <sup>1/</sup>	20749	
	196-198	3	Primary Sampling Unit <sup>1/</sup>	20749	
	199-200	2	Work Area		
			<sup>1/</sup> Use only for producing variance estimates for examination locations 1-65 or 1-100. See the General Note titled "Variance Estimation" for producing variance estimates for examination locations 1-35 or 66-100.		

HEALTH AND NUTRITION EXAMINATION SURVEY (HANES I)

DIETARY FREQUENCY AND ADEQUACY  
(n=20749)

Item #	Tape Loc.	No. of Positions	ITEM DESCRIPTION & CODES	Control Counts	HANES I Data Source
	201-204	4	<u>Catalogue Number</u> 4701		
	205-215	11	Data User Work Area		
	216	1	<u>Respondent Code</u> 1 - Sample Person 2 - Spouse 3 - Parent 4 - Grandparent 5 - Combination of above 6 - Other 9 - Unknown	15535 110 3928 78 604 487 7	Dietary Frequency Recording Form
			<u>DIETARY FREQUENCY</u> <u>How often are the following food items eaten?</u> (xxx.x) Decimal not shown on tape		
	217-220	4	<u>Milk (whole)</u> 0000 - Never 0005 - Less than once a week 0010-0060 - One to six times per week 1010-1240 - One to 24 times per day 9999 - Unknown	2979 1333 4530 11474 433	See Detailed Notes
	221-224	4	<u>Milk (skim) or Buttermilk</u> 0000 - Never 0005 - Less than once a week 0010-0060 - One to six times per week 1010-1100 - One to 10 times per day 9999 - Unknown	15407 1823 1512 1581 426	See Detailed Notes

## HEALTH AND NUTRITION EXAMINATION SURVEY (HANES I)

## DIETARY FREQUENCY AND ADEQUACY

Item #	Tape Loc.	No. of Positions	ITEM DESCRIPTION & CODES	Control Counts	HANES I Data Source
	225- 228	4	<u>Meat and Poultry</u> 0000 - Never 0005 - Less than once a week 0010-0060 - One to six times per week 1010-1090 - One to nine times per day 9999 - Unknown	57 81 3571 16586 454	Dietary Frequency Recording Form
	229- 232	4	<u>Fish or Shellfish</u> 0000 - Never 0005 - Less than once a week 0010-0060 - One to six times per week 1010-1020 - One to two times per day 9999 - Unknown	1990 7326 10824 188 421	
	233- 236	4	<u>Eggs</u> 0000 - Never 0005 - Less than once a week 0010-0060 - One to six times per week 1010-1070 - One to seven times a day 9999 - Unknown	1288 2263 13144 3628 426	
	237- 240	4	<u>Cheese and Cheese Dishes</u> 0000 - Never 0005 - Less than once a week 0010-0060 - One to six times per week 1010-1070 - One to seven times per day 9999 - Unknown	1687 3185 13316 2115 446	
	241- 244	4	<u>Dry Beans and Peas</u> 0000 - Never 0005 - Less than once a week 0010-0060 - One to six times per week 1010-1080 - One to eight times per day 9999 - Unknown	1805 4599 11848 2057 440	

## HEALTH AND NUTRITION EXAMINATION SURVEY (HANES I)

## DIETARY FREQUENCY AND ADEQUACY

Item #	Tape Loc.	No. of Positions	ITEM DESCRIPTION & CODES	Control Counts	HANES I Data Source
- 33 -	245-248	4	<u>Fruits and Vegetables (All kinds)</u> 0000 - Never 0005 - Less than once a week 0010-0060 - One to six times per week 1010-1090 - One to nine times per day 9999 - Unknown	26 99 2243 17896 485	Dietary Frequency Recording Form
	249-252	4	<u>Fruits and Vegetables (Rich in Vitamin A)</u> 0000 - Never 0005 - Less than once a week 0010-0060 - One to six times per week 1010-1070 - One to seven times per day 9999 - Unknown	2287 4835 12135 1008 484	
	253-256	4	<u>Fruits and Vegetables (Rich in Vitamin C)</u> 0000 - Never 0005 - Less than once a week 0010-0060 - One to six times per week 1010-1090 - One to nine times per day 9999 - Unknown	914 2169 9796 7369 501	
	257-260	4	<u>Bread</u> 0000 - Never 0005 - Less than once a week 0010-0060 - One to six times per week 1010-1080 - One to eight times per day 9999 - Unknown	104 180 2481 17546 438	
	261-264	4	<u>Cereals</u> 0000 - Never 0005 - Less than once a week 0010-0060 - One to six times per week 1010-1070 - One to seven times per day 9999 - Unknown	4610 2870 9039 3804 426	



## HEALTH AND NUTRITION EXAMINATION SURVEY (HANES I)

## DIETARY FREQUENCY AND ADEQUACY

Item #	Tape Loc.	No. of Positions	ITEM DESCRIPTION & CODES	Control Counts	HANES I Data Source
	265-268	4	<u>Butter and Margarine</u> 0000 - Never 0005 - Less than once a week 0010-0060 - One to six times per week 1010-1080 - One to eight times per day 9999 - Unknown	1192 1040 4447 13623 447	Dietary Frequency Recording Form
	269-272	4	<u>Desserts and Sweets</u> 0000 - Never 0005 - Less than once a week 0010-0060 - One to six times per week 1010-1070 - One to seven times per day 9999 - Unknown	844 1932 9453 8077 443	
	273-276	4	<u>Candy</u> 0000 - Never 0005 - Less than once a week 0010-0060 - One to six times per week 1010-1100 - One to 10 times per day 9999 - Unknown	3256 4427 8770 3849 447	
	277-280	4	<u>Beverages--sweetened, carbonated and non-carbonated</u> 0000 - Never 0005 - Less than once a week 0010-0060 - One to six times per week 1010-1100 - One to 10 times per day 9999 - Unknown	3460 2306 7717 6828 438	
	281-284	4	<u>Cold Drinks--artificially sweetened or diet drinks</u> 0000 - Never 0005 - Less than once a week 0010-0060 - One to six times per week 1010-1090 - One to nine times per day 9999 - Unknown	16557 1389 1529 852 422	

HEALTH AND NUTRITION EXAMINATION SURVEY (HANES I)  
DIETARY FREQUENCY AND ADEQUACY

Item #	Tape Loc.	No. of Positions	ITEM DESCRIPTION & CODES	Control Counts	HANES I Data Source	
- 35 -	285- 288	4	<u>Coffee or Tea</u> 0000 - Never 0005 - Less than once a week 0010-0060 - One to six times per week 1010-1160 - One to 16 times per day 9999 - Unknown	4188 1260 3078 11787 436	Dietary Frequency Recording Form	
	289- 292	4	<u>Snack Foods</u> 0000 - Never 0005 - Less than once a week 0010-0060 - One to six times per week 1010-1070 - One to seven times per day 9999 - Unknown	3900 4049 10149 2212 439		
	293- 295	3	<u>Interviewer Code</u> 032-051 - As given 999 - Blank	20688 61		
	296	1	<u>Completion Code</u> 1 - Satisfactory 2 - Unsatisfactory	20338 411		See Detailed Notes
	297- 311	15	Blank--Data User Work Area			
			<u>24-HOUR RECALL</u>			
	312	1	<u>Respondent</u> 1 - Sample Person 2 - Spouse 3 - Parent 4 - Grandparent 5 - Combination of above 6 - Other	15429 95 3199 67 1379 580		24-Hour Recall Form

HEALTH AND NUTRITION EXAMINATION SURVEY (HANES I)  
DIETARY FREQUENCY AND ADEQUACY

Item #	Tape Loc.	No. of Positions	ITEM DESCRIPTION & CODES	Control Counts	HANES I Data Source
313		1	<u>Day of Recall</u> 1 - Sunday 2 - Monday 3 - Tuesday 4 - Wednesday 5 - Thursday 6 - Friday 7 - Saturday 8 - Blank	98 3832 4252 3967 3668 4887 40 5	24-Hour Recall Form
314		1	<u>Is what you ate yesterday the way you usually eat?</u> 1 - Yes 2 - No, ill 3 - No, no money 4 - No, Sunday 5 - No, other reason	16933 533 26 112 3145	
315		1	<u>Has your diet changed recently?</u> 0 - No 1 - Yes, eating more 3 - Yes, eating less 4 - Yes, on a prescribed diet	14120 2908 3173 548	
316		1	<u>Are you taking vitamins or minerals?</u> 0 - No 1 - Yes, regularly 2 - Yes, irregularly	13869 4728 2152	
317		1	<u>If yes to above</u> 0 - Unknown, prescriptions 1 - Multiple vitamins 2 - Multiple vitamins and minerals 3 - Iron only 4 - Multiple vitamins with iron 5 - Vitamins E, A and D 6 - Vitamin C 7 - Calcium 8 - Not applicable/Vitamin B 9 - Miscellaneous	123 1776 899 265 1781 1717 179 26 13955 28	See Detailed Notes

## HEALTH AND NUTRITION EXAMINATION SURVEY (HANES I)

## DIETARY FREQUENCY AND ADEQUACY

Item #	Tape Loc.	No. of Positions	ITEM DESCRIPTION & CODES	Control Counts	HANES I Data Source
	318	1	<u>How many times a week do you eat a meal at a restaurant?</u> 0 - Seldom, never 1 - 1-3 times per week 2 - 4-6 times per week 3 - 7 or more times per week Blank	11199 5871 2790 888 1	24-Hour Recall Form
	319	1	<u>How often do you use salt shaker at the table? (20 years old or over)</u> 0 - Rarely, never 1 - Occasionally, seldom 2 - Frequently, always 8 - Not applicable (less than 20 yrs. old) Blank	6077 3004 4226 7431 11	
	320- 324	5	<u>Weight in Pounds (xxx.xx)</u> Decimal not shown on tape 01375-40000 - As given	20749	Body Measurement Record Form
	325- 327	3	<u>Height in Inches (xx.x)</u> Decimal not shown on tape 203-795 - As given	20749	
			<u>NUTRIENTS (xxxxxx.xx)</u> Decimal not shown on tape (Actual dietary intake per individual during 24-hour recall period)		Computed for food items listed in 24-Hour Recall
	328- 335	8	<u>Calories</u> 00003097-01097860 - As given	20749	See Detailed Notes
	336- 343	8	<u>Protein (in grams)</u> 00000001-00038228 - As given	20749	
	344- 351	8	<u>Fat (in grams)</u> 00000001-00070292 - As given	20749	
	352- 359	8	<u>Total Carbohydrate (in grams)</u> 00000357-00107942 - As given	20749	
	360- 367	8	<u>Calcium (in milligrams)</u> 00000000-00684530 - As given	20749	

HEALTH AND NUTRITION EXAMINATION SURVEY (HANES I)  
DIETARY FREQUENCY AND ADEQUACY

Item #	Tape Loc.	No. of Positions	ITEM DESCRIPTION & CODES	Control Counts	HANES I Data Source
368-375		8	<u>Phosphorus</u> (in milligrams) 00000000-00738274 - As given	20749	Computed for food items listed in 24-Hour Recall
376-383		8	<u>Iron</u> (in milligrams) 00000000-00007571 - As given	20749	See Detailed Notes
384-391		8	<u>Sodium</u> (in milligrams) 00000000-01756018 - As given	20749	
392-399		8	<u>Potassium</u> (in milligrams) 00000000-01215755 - As given	20749	
400-407		8	<u>Vitamin A</u> (International Units) 00000001-24511085 - As given	20749	
408-415		8	<u>Thiamine</u> ( in milligrams) 00000001-00001574 - As given	20749	
416-423		8	<u>Riboflavin</u> (in milligrams) 00000001-00002014 - As given	20749	
424-431		8	<u>Niacin</u> ( in milligrams) (niacin from food sources) 00000001-00017455 As given	20749	
432-439		8	<u>Vitamin C</u> (in milligrams) 00000001-00200713 - As given	20749	
440-444		5	Blank - Data User Work Area		
			INDIVIDUAL'S CALORIC AND NUTRIENT INTAKE AS THE PERCENT OF HANES I DIETARY STANDARDS (XXXXXX)		
445-450		6	<u>Calories</u> 000002-000522 - As given	20749	

## HEALTH AND NUTRITION EXAMINATION SURVEY (HANES I)

## DIETARY FREQUENCY AND ADEQUACY

Item #	Tape Loc.	No. of Positions	ITEM DESCRIPTION & CODES	Control Counts	HANES I Data Source
451- 456		6	<u>Protein</u> 000000-000972 - As given	20749	Computed for food items listed in 24-Hour Recall
457- 462		6	<u>Calcium</u> 000000-001711 - As given	20749	See Detailed Notes
463- 468		6	<u>Iron</u> 000000-000755 - As given	20749	
469- 474		6	<u>Vitamin A</u> 000000-007003 - As given	20749	
475- 480		6	<u>Vitamin C</u> 000000-004038 - As given	20749	
481		1	<u>Imputation Code</u> 0 - Not imputed 2 - Imputed	20270 479	See Detailed Notes

HEALTH AND NUTRITION EXAMINATION SURVEY (HANES I)

Item #	Tape Loc.	No. of Positions	ITEM DESCRIPTION AND CODES	Control Counts	HANES I Data Source
			ADDENDA TO NUTRIENTS (xxxxxx.xx) Actual dietary intake per individual during 24-hour recall period		Computed for food items listed in 24-hour recall
	482-489	8	Saturated fatty acid (in grams) 00000000-00033410 - As given 99999 - Blank, but applicable	20669 80	
	490-497	8	Oleic acid (in grams) 00000000-00028223 - As given 99999999 - Blank, but applicable	20499 80	
	498-505	8	Linoleic acid (in grams) 00000000-00013011 - As given 99999999 - Blank, but applicable	20669 80	
	506-513	8	Cholesterol (in milligrams) 00000000-00367932 99999999 - Blank, but applicable	20669 80	

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(Revised-September 1980)

## DETAILED NOTES

### TAPE POSITION 10

#### Size of Place

Size of place classification was derived from the 1960 census. According to the definition used in the 1960 census, the urban population was comprised of all persons living in (a) places of 2,500 inhabitants or more incorporated as cities, boroughs, villages and towns (except towns in New York, New England, and Wisconsin); (b) the densely settled urban fringe, whether incorporated or unincorporated, of urbanized areas; (c) towns in New England and townships in New Jersey and Pennsylvania which contained no incorporated municipalities as subdivisions and had either 2,500 inhabitants or more, or a population of 2,500 to 25,000 and a density of 1,500 persons or more per square mile; (d) counties in states other than the New England states, New Jersey, and Pennsylvania, that had no incorporated municipalities within their boundaries and had a density of 1,500 persons per square mile; and (e) unincorporated places of 2,500 inhabitants or more not included in any urban fringe. The remaining population was classified as rural.

Urban areas are further classified by population size for places within urbanized areas and other places outside urbanized areas.



DETAILED NOTES

TAPE POSITION 11

SMSA

A standard metropolitan statistical area is basically a county or a group of contiguous counties which contains at least one city of 50,000 inhabitants or more, or "twin cities" with a combined population of at least 50,000. In addition to the county or counties containing such a city or cities, contiguous counties are included in an SMSA if, according to the 1960 Census, they are socially and economically integrated with the central city. Each SMSA must include at least one central city, and the complete title of an SMSA identifies the central city or cities.

## DETAILED NOTES

### TAPE POSITIONS 22 AND 103

#### Race

The race of the respondent was marked by observation and it was assumed the race of all related persons was the same as the respondent unless otherwise learned. The race categories were "White", "Negro" or "other." If the appropriate category could not be marked by observation, then race was asked. Persons of races other than White or Negro, such as Japanese, Chinese, American Indian, Korean, Hindu, Eskimo, etc. were reported as "Other." Mexicans were included with "White" unless definitely known to be American Indian or of other nonwhite race.

DETAILED NOTES

TAPE POSITIONS 34-35

Total Family Income Group

The income group represents the total combined family income for the past twelve (12) months. It includes income from all sources such as wages, salaries, social security or retirement benefits, help from relatives, rent from property and so forth. The income groups were not reconciled to the component parts (tape positions 36-94). The income component parts were not asked when the gross income was greater than \$6,999 per annum. However, amounts greater than \$6,999 appear in tape positions 37-40, 67-70, and 72-75. Some respondents reported a loss of income from their nonfarm business, professional practice, partnership or farm and this explains why some data fields are greater than \$6,999, but the individual total in tape positions 91-94 does not exceed this figure.

DETAILED NOTES  
TAPE POSITIONS 95-99

Family Unit Code

All related sample persons in the same family unit have the same computer generated family unit code. This will enable detailed analysis of the individual family unit.

DETAILED NOTES  
TAPE POSITIONS 110-111

UNITED STATES			OUTLYING AREAS OF THE U.S.	
	Standard Abbreviation	Code	Name of Place	Code
ALABAMA	Ala.	01	American Samoa	60
ALASKA	Alaska	02	Canal Zone	61
ARIZONA	Ariz.	04	Canton and Enderbury Islands	62
ARKANSAS	Ark.	05	Caroline Islands	63
CALIFORNIA	Calif.	06	Cook Islands	64
COLORADO	Colo.	08	Gilbert and Ellice Islands	65
CONNECTICUT	Conn.	09	Guam	66
DELAWARE	Del.	10	Johnston Atoll	67
DIST. OF COLUMBIA	D.C.	11	Line Islands - Southern	68
FLORIDA	Fla.	12	Mariana Islands	69
GEORGIA	Ga.	13	Marshall Islands	70
HAWAII	Hawaii	15	Midway Islands	71
IDAHO	Idaho	16	Puerto Rico	72
ILLINOIS	Ill.	17	Ryukyn Islands - Southern	73
INDIANA	Ind.	18	Swan Islands	74
IOWA	Iowa	19	Tokelau Islands	75
KANSAS	Kans.	20	U.S. Misc. Caribbean	76
KENTUCKY	Ky.	21	U.S. Misc. Pacific Islands	77
LOUISIANA	La.	22	Virgin Islands	78
MAINE	Maine	23	Wake Islands	79
MARYLAND	Md.	24	Cuba	80
MASSACHUSETTS	Mass.	25	West Indies	81
MICHIGAN	Mich.	26	North America	91
MINNESOTA	Minn.	27	South America	92
MISSISSIPPI	Miss.	28	Europe	93
MISSOURI	Mo.	29	Africa	94
MONTANA	Mont.	30	Asia	95
NEBRASKA	Nebr.	31	Australasia	96
NEVADA	Nev.	32	Pacific Islands	97
NEW HAMPSHIRE	N.H.	33		
NEW JERSEY	J.J.	34		
NEW MEXICO	N. Mex.	35		
NEW YORK	N.Y.	36		
NORTH CAROLINA	N.C.	37		
NORTH DAKOTA	N. Dak.	38		
OHIO	Ohio	39		
OKLAHOMA	Okla.	40		
OREGON	Oreg.	41		
PENNSYLVANIA	Pa.	42		
RHODE ISLAND	R.I.	44		
SOUTH CAROLINA	S.C.	45		
SOUTH DAKOTA	S. Dak.	46		
TENNESSEE	Tenn.	47		
TEXAS	Tex.	48		
UTAH	Utah	49		
VERMONT	Vt.	50		
VIRGINIA	Va.	51		
WASHINGTON	Wash.	53		
WEST VIRGINIA	W. Va.	54		
WISCONSIN	Wis.	55		
WYOMING	Wyo.	56		

## DETAILED NOTES

TAPE POSITIONS 132-134 AND 135-137

### Industry and Occupation Codes

A person's occupation may be defined as his principal job or business. For this survey purpose, the principal job or business of a respondent is defined in one of the following ways: If the person worked during the two week interview period or had a job or business, the question concerning his occupation (or work) applies to his job during that period. If the respondent held more than one job, the question is directed to the one at which he spent the most time. It refers to the one he considers most important when equal time is spent at each job. A person who has not begun work at a new job, is looking for work, or is on layoff from work is questioned about his last full-time civilian job. A full-time job is defined as one at which the person spent 35 or more hours per week and which lasted two consecutive weeks or more. A person who has a job to which he has not yet reported and has never had a previous job or business is classified as a "new worker."

The 1970 census of population Alphabetical Index of Industries and Occupations was used in the coding of both the industry and occupation.

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**DETAILED NOTES**

**TAPE POSITION 146**

**Land used for farming purposes (Code 1 in Tape Position 146) was identified as being rural land (Code 2 in Tape Position 13) consisting of 10 or more acres (Code 1 in Tape Position 14) with crop sales amounting to \$50 or more (Code 2 in Tape Position 15), or rural land (Code 2 in Tape Position 13) consisting of less than 10 acres (Code 2 in Tape Position 14) with crop sales amounting to \$250 or more (Code 3 in Tape Position 16). All Other land is classified as nonfarm (Code 2 in Tape Position 146).**

## DETAILED NOTES

### TAPE POSITIONS 147-149

Poverty Index--Income status was determined by the Poverty Income Ratio (PIR). Poverty statistics published in the Census Bureau reports<sup>1/</sup> were based on the poverty index developed by the Social Security Administration in 1964. (For a detailed discussion of the SSA poverty standards, see reference 2.) Modifications in the definition of poverty were adopted in 1969.<sup>3/</sup> The standard data series in poverty for statistical use by all executive departments and establishments has been established.<sup>4/</sup>

The two components of the PIR are the total income of the household (numerator) and a multiple of the total income necessary to maintain a family with given characteristics on a nutritionally adequate food plan<sup>3/</sup> (denominator). The dollar value of the denominator of the PIR is constructed from a food plan (economy plan) necessary to maintain minimum recommended daily nutritional requirements. The economy plan is designated by the Department of Agriculture for "emergency or temporary use when funds are low."

For families of three or more persons, the poverty level was set at three times the cost of the economy food plan. For smaller families and persons living alone, the cost of the economy food plan was adjusted by the relatively higher fixed expenses of these smaller households.

The denominator or poverty income cutoff adjusts the family poverty income maintenance requirements by the family size, the sex of the family head, the age of the family head in families with one or two members, and the place of residence (farm, nonfarm). Annual revisions of the poverty income cutoffs are based on the changes in the average cost of living as reflected in the Consumer Price Index.

As shown in the table, the annual income considered to be the poverty level increases as the family size increases. A family with any combination of characteristics and with the same income as shown in the table has been designated as having a PIR or poverty level of 1.0. The same family with twice the income found in the table would have a PIR of 2.0. Ratios of less than 1.0 can be described as "below poverty," ratios greater than or equal to 1.0, as "at or above poverty."

Poverty thresholds are computed on a national basis only. No attempt has been made to adjust these thresholds for regional, State, or other local variation in the cost of living (except for the farm, nonfarm difference). None of the noncash public welfare benefits such as food stamp bonuses or free food commodities are included in the income of the low income families receiving these benefits.

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<sup>1/</sup>Current Population Reports, "Consumer Income," Series P-60, No. 77, May 7, 1971

<sup>2/</sup>Orshansky, M.: "Counting the Poor: Another Look at the Poverty Profile," Social Security Bulletin, January 1965; "Who's Who Among the Poor: A Demographic View of Poverty," Social Security Bulletin, July 1965.

<sup>3/</sup>Current Population Reports, "Special Studies," Series P-23, No. 28, August 12, 1969.

<sup>4/</sup>Circular No. A-46, Transmitted Memorandum No. 9, Executive Office of the President, Bureau of the Budget, August 29, 1969, and Exhibit L (rev.).



DETAILED NOTES

TAPE POSITIONS 147-149

Weighted average thresholds at the low income level in 1971 by size of family and sex of head, by farm-nonfarm residence

Size of family	Total	Nonfarm			Farm		
		Total	Male <sup>1</sup> head	Female <sup>1</sup> head	Total	Male <sup>1</sup> head	Female <sup>1</sup> head
All unrelated individuals-----	\$2,033	\$2,040	\$2,136	\$1,978	\$1,727	\$1,783	\$1,669
Under 65 years-----	2,093	2,098	2,181	2,017	1,805	1,853	1,715
65 years and over-----	1,931	1,940	1,959	1,934	1,652	1,666	1,643
All families-----	3,700	3,724	3,764	3,428	3,235	3,242	3,079
2 persons-----	2,612	2,633	2,641	2,581	2,219	2,224	2,130
Head under 65 years-----	2,699	2,716	2,731	2,635	2,317	2,322	2,195
Head 65 years and over-----	2,424	2,448	2,450	2,437	2,082	2,081	2,089
3 persons-----	3,207	3,229	3,246	3,127	2,745	2,749	2,627
4 persons-----	4,113	4,137	4,139	4,116	3,527	3,528	3,513
5 persons-----	4,845	4,880	4,884	4,837	4,159	4,159	4,148
6 persons-----	5,441	5,489	5,492	5,460	4,688	4,689	4,656
7 persons or more-----	6,678	6,751	6,771	6,583	5,736	5,749	5,516

<sup>1</sup>For unrelated individuals, sex of the individual.

SOURCE: U.S. Department of Commerce, Social and Economic Statistics Administration, U.S. Bureau of the Census "Characteristics of the Low Income Population: 1971," Current Population Reports, Series P-60, No. 86, p. 18.

DETAILED NOTES

TAPE POSITION 150

Region

The United States was divided into four broad geographic regions of approximately equal population. Those regions, which deviate somewhat from the groups used by the Bureau of the Census, are as follows:

<u>Region</u>	<u>States Included</u>
Northeast	Maine, Vermont, New Hampshire, Massachusetts, Connecticut, Rhode Island, New York, New Jersey, and Pennsylvania
South	Delaware, Maryland, District of Columbia, West Virginia, Virginia, Kentucky, Tennessee, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, and Arkansas
Midwest	Ohio, Illinois, Indiana, Michigan, Wisconsin, Minnesota, Iowa, Missouri
West	Washington, Oregon, California, Nevada, New Mexico, Arizona, Texas, Oklahoma, Kansas, Nebraska, North Dakota, South Dakota, Idaho, Utah, Colorado, Montana, and Wyoming.

## DETAILED NOTES

### TAPE POSITIONS 158-193

HANES is a multistage, stratified, probability sample of loose clusters of persons in land-based segments. In addition, HANES is composed of two distinct examination components--a nutrition screening examination (taken by all examinees) and a more detailed examination taken by a pre-selected subsample of all examinees, ages 25-74. For the nutrition screening examination, locations 1-35 and 1-65 constituted national probability samples and for the detailed examination, locations 1-35, 1-65, 66-100 and 1-100 all constitute national probability samples. In other words, HANES is composed of six distinct subsamples of the U.S. population. For a more detailed discussion of the sample design see Series 1, No. 10a.

Since each of these six subsamples is a distinct subsample of the U.S. population, each subsample requires a different set of weights. The weights are based upon the probability of selection into the sample, adjustments for nonresponse and further adjustments to approximate the U.S. noninstitutionalized population as of the midpoint of each subsample.

In order to select all of those examinees in a particular subsample, i.e. received a particular exam component, it is necessary to exclude all examinees with a weight of zero or blank. It is also necessary to exclude all zero or blank weights because that is the only way to differentiate missing data due to nonresponse from data that is missing because the sample design dictated that a particular examinee was not supposed to receive a particular examination component.

It is suggested that any analyses that are desired by the researcher be performed using the greatest number of examinees possible; that is, if the researcher is interested in an exam component of the nutrition screening examination he should use the weight and consequently the data from the 65 location subsample rather than the 35 location subsample. For the detailed examination, the researcher should use the 100 location subsample rather than one of the others. However, some exam components were only done in a particular subsample; for example, only at the first 35 locations. In that case, the researcher has no choice in selecting a particular subsample.

There may be occasions when a researcher may want to make comparisons of estimates obtained from various subsamples. For example, the prevalence of some disease condition as estimated from the first 35 locations could be compared with an estimate based upon locations 66-100. The researcher may also want to formulate hypotheses using one subsample and test those hypotheses using another subsample.

**DETAILED NOTES**

**TAPE POSITIONS 217-224**

**Includes only milk drunk as a beverage or used on cereal. Flavored milk drinks and cocoa made from milk are included.**

**Include "1% milk" with skim milk; "2% milk" with whole milk.**

DETAILED NOTES  
TAPE POSITIONS 217-292

A. Background information on nutritional importance of specified food groups

Whole Milk

All homogenized white milk (3-4 percent, 2 percent and 1 percent skim) contribute to the diet a significant amount of high quality protein, calcium, phosphorus, magnesium, zinc, vitamins, riboflavin, niacin, and vitamins A and D (when fortified). Dietitians feel that adults of all ages should include at least 2 cups of fluid milk per day, or its equivalent. This allowance should be increased to 3 cups for school children and pregnant women and to 4 cups for adolescents and lactating women. When it is desirable or necessary to minimize milk fats, whole milk should be substituted with skim milk.

Meats, Poultry, Fish and Shellfish

Meat is an excellent source of high quality protein with a variable amount of fat. Meat also contributes phosphorus, calcium, iron, sodium, potassium, chloride, sulfur, magnesium, and zinc to the diet. Vitamin A in the fat of beef and liver, and factors of the vitamin B-complex are the vitamins abundant in meat.

Poultry also contributes to the diet an excellent source of high quality protein, phosphorus, sulfur, iron and the B-complex vitamins, especially niacin.

Fish and shellfish are excellent sources of high quality protein, phosphorus, and magnesium. Shellfish also contributes to the diet zinc, iodine, sulfur, fluorine, cobalt, iron, copper, calcium, and cholesterol. Fatty fish are sources of vitamins A and D. As a food, fish is equal in nutritive value to meat, except by ounce it has a lower caloric value. It is recommended that at least 5-6 ounces of meat, poultry, or fish be consumed each day. Those who are calorie conscious usually limit their intake of red meats and substitute poultry or fish which is lower in calories per ounce. Some people are allergic to shellfish.

Eggs

Eggs are an excellent source of complete high quality protein and also contribute to the diet, sulfur, zinc, copper, phosphorus, iron, vitamin A, riboflavin, vitamin B<sub>12</sub>, vitamin D, and cholesterol. Egg yolk should be limited for those on a cholesterol restricted diet.

Cheese

Cheese is a source of high quality protein and contributes calcium, phosphorus and the B-complex vitamins to the diet. Cheese should be used as an alternative if milk or meat is limited or excluded from the diet.

### Dry Beans/Legumes and Nuts

These foods provide significant protein, iron and niacin levels in the diet. This group also contributes to the diet, phosphorus, magnesium, potassium, copper, manganese, thiamin, and riboflavin. In general, they are inexpensive and offer variety to the diet. This group can be used to substitute for meat, poultry, or fish only if adequate amounts of cheese and milk are still included in the diet.

### Fruits and Vegetables

Fruits and vegetables lend a great variety to the diet in terms of color, flavor and texture. Unlike most of the food groups, fruits and vegetables supply roughage and water. This group is unique for its contribution to the ascorbic acid and vitamin A value of the diet. Fruits and vegetables make an excellent contribution to the iron level of the diet as well as minerals and B-complex vitamins. At least four servings of a combination of fruits and vegetables per day is recommended.

### Breads and Cereals

Bread and grain products supply the diet with carbohydrates, chromium, manganese, and iron, along with the B-complex vitamins when fortified. Because of its availability, moderate cost, and excellent keeping qualities, grain is used more abundantly than any other food material. Three or more servings of enriched bread or bread group items (rice and pastas) are recommended daily for all age groups.

Cereal foods are, for the most part, a primary source of energy for most of the world's people. Because of the sugar content of many cereals on the market, many omit this food item from their diet but lose many nutrient benefits provided by whole-grain and enriched grain products. Cereals supply the diet with carbohydrates, phosphorus, magnesium, potassium, and iron along with thiamin, riboflavin, and niacin (when fortified).

### Butter/Margarine and Oils

These visible fats in the diet are a concentrated source of energy. Butter, regular margarine, and hydrogenated fat contain a higher proportion of saturated fatty acids than do oils. Butter is a source of saturated fat, cholesterol, and vitamin A. Margarine is an unsaturated fat and provides vitamin A, if specified. Oils provide the diet with polyunsaturated fat with few exceptions. For those who must restrict their cholesterol intake, butter and hydrogenated fats should be substituted with vegetable oil.

### Desserts/Candy and Cold drinks prepared with sugar

Sufficient calories to maintain optimum body weight are obtained by eating large amounts of any of the food groups or by adding fats, sweets, and desserts. Usually these foods offer satisfactory calories, some protein, minerals, and vitamins. It is necessary to emphasize that excessive use of fats, desserts, and candies may jeopardize the satisfactory intake of essential nutrients.

### Cold Beverages, artificially sweetened, or Diet Drinks

Cold beverages which are artificially sweetened or diet drinks contribute no nutrition to the diet unless specified as fortified.

### Coffee or Tea

Coffee and tea offer variety to the diet but have no nutritious value by themselves. Cream and sugar added to these beverages contribute fats and carbohydrate for a source of energy.

### Snack Foods

The snack food category includes potato chips, puffed salty snack foods, pretzels, etc. These food items add variety to a meal but contribute significant amounts of fats, sodium, and carbohydrates. Like desserts and sweets, excessive amounts of these foods usually jeopardize the satisfactory intake of essential nutrients from the other food groups.

DETAILED NOTES  
TAPE POSITION 296

Completion Code "1" is used when a satisfactory interview has been completed. An incomplete code "2" is used when the dietary interviewer feels the data are inaccurate or unsatisfactory. She bases her opinion on the sample person's physical and/or mental inability to complete the interview.

Physical and mental considerations are blindness, deafness, muteness, language barrier (when an interpreter is unavailable); mental retardation, etc. The attitude of the sample person also plays an important part in deciding the completion code. If the sample person is belligerent, intoxicated, uncooperative or indifferent about giving accurate or ample information, the completion code is deemed unsatisfactory and coded as "2."



DETAILED NOTES  
TAPE POSITION 317

Vitamins or Minerals

The codes include these specific items:

- 0 - unknown, prescriptions
- 1 - multiple vitamins, multiple vitamins with additional supplements
- 2 - multiple vitamins and minerals, multiple vitamins and minerals with additional supplements
- 3 - iron only
- 4 - multiple vitamins with iron; iron with additional supplements--geritol
- 5 - Vitamin E, vitamin E with additional supplements  
Vitamin A, vitamin A with additional supplements  
Vitamin D, vitamin D with additional supplements
- 6 - Vitamin C, vitamin C with additional supplements
- 7 - Calcium, calcium with additional supplements; dolomite--minerals with calcium and magnesium
- 8 - If column 316 is 0, 8 means not applicable.  
If column 316 is 1 or 2, 8 means vitamin B complex, vitamin B complex with additional supplements.
- 9 - Miscellaneous; cod liver oil; brewer's yeast, kelp lectchiein, yeast tablets, alfalfa tablets, liver tablets, K (potassium), folrums 24, iodine, bone meal, bone marrow, protein pills, amino acid pills, fluoride, energol-wheat germ concentrate

## DETAILED NOTES

TAPE POSITIONS 328-439

Actual dietary intake is given in appropriate units for calories and the selected nutrients. These values were obtained by a computerized process which utilized the results of the HANES I 24-Hour Recall Dietary Interview. Each food item that a respondent had eaten over the 24-hour period was assigned a unique food code and the approximate portion or amount of that food item which was ingested was coded through the use of standardized food models. The food codes matched those assigned to data on the nutrient composition of over 3,000 food items which were obtained from the U. S. Department of Agriculture, food manufacturers, and other sources. From the above information, all food intake during the 24-hour period was then reduced by a computer program to standard units of measure for each nutrient.

DETAILED NOTES

TAPE POSITIONS 445-480

As a guide to interpreting the dietary data, a set of recommended daily allowances for the evaluation of HANES data was developed with advice from an ad hoc advisory group. The group considered recommended daily allowances from the World Health Organization, the Interdepartmental Committee on Nutrition for the National Defense Manual, the Food and Nutrition Board, National Research Council's Recommended Daily Allowances, and from those standards used in the Ten-State Nutrition Survey. The recommended allowances are designed for the maintenance of good nutrition in healthy persons in the United States. They allow for some margin above what is really needed by most individuals with the objective of maintaining good health in all. Except for protein and calories, the recommended daily allowances as presented in Table VI are all related to age, physiological state, or to caloric intake.

Table VI. Standards for evaluation of daily dietary intake used in the Health and Nutrition Examination Survey, United States, 1971-72

Age and sex	Calories (per kg)	Protein (gm per kg)	Calcium (mg)	Iron (mg)	Vitamin A <sup>1</sup> (I.U.)	Vitamin C (mg)
1-5 years:						
12-23 months, male and female-----	90	1.9	450	15	2,000	40
24-47 months, male and female-----	86	1.7	450	15	2,000	40
48-71 months, male and female-----	82	1.5	450	10	2,000	40
6-7 years, male and female-----	82	1.3	450	10	2,500	40
8-9 years, male and female-----	82	1.3	450	10	2,500	40
10-12 years-----Male----	68	1.2	650	10	2,500	40
Female--	64	1.2	650	18	2,500	40
13-16 years-----Male----	60	1.2	650	18	3,500	50
Female--	48	1.2	650	18	3,500	50
17-19 years-----Male----	44	1.1	550	18	3,500	55
Female--	35	1.1	550	18	3,500	50
20-29 years-----Male----	40	1.0	400	10	3,500	60
Female--	35	1.0	600	18	3,500	55
30-39 years-----Male----	38	1.0	400	10	3,500	60
Female--	33	1.0	600	18	3,500	55
40-49 years-----Male----	37	1.0	400	10	3,500	60
Female--	31	1.0	600	18	3,500	55
50-54 years-----Male----	36	1.0	400	10	3,500	60
Female--	30	1.0	600	18	3,500	55
55-59 years-----Male----	36	1.0	400	10	3,500	60
Female--	30	1.0	600	10	3,500	55
60-69 years-----Male----	34	1.0	400	10	3,500	60
Female--	29	1.0	600	10	3,500	55
70 years and over-----Male----	34	1.0	400	10	3,500	60
Female--	29	1.0	600	10	3,500	55
Pregnancy (fifth month and beyond), add to basic standard-----	200	20	200		1,000	25
Lactating, add to basic stand- ard-----	1,000	25	500		1,000	5

<sup>1</sup>Assumed 70 percent carotene, 30 percent retinol.

<sup>2</sup>For all pregnant women.

Standards for assessing caloric and protein allowances for adults are based on expected median body weight for sex and height at ages 20-29 years. More specifically, an expected body weight at ages 20-29 years was computed for each individual adult based on height and sex. The median of the distribution of expected weight for each height and sex group was determined. The standardized allowance for each individual 20 years and over was then calculated by multiplying the median expected weight for height and sex by the recommended nutrient allowance per kilogram of body weight. The resultant product was then taken as that individual's sex-height-standardized allowance. The reported caloric or protein intake for each individual was then divided by this standardized allowance to arrive at the "percent of recommended daily allowance." Height-sex-specific weight at ages 20-29 is used because at these ages it is thought to most closely approximate the body's cell mass. Cell mass, the metabolically active part of the body, is the major determinant of adult nutrient needs. Weight gain after 20-29 years is presumed to be fat, with little increase of the body's cell mass. In fact, cell mass tends to decrease with age even as weight increases, which indicates that these standardized allowances tend to overstate the nutrient needs of older people as compared with younger. This bias is much less, however, than the presentation of nutrient intake per kilogram of body weight.

A similar method was used to obtain height-sex-standardized allowances for assessing caloric and protein dietary intakes of children. The expected median body weight for age, sex, and height was derived from anthropometric data collected in HANES.

**DETAILED NOTES**

**TAPE POSITION 481**

Nutrient intake values for 479 sample persons with unsatisfactory dietary interview results were imputed by randomly assigning the nutrient intake values of a sample person of the same age, sex, race, region and residential area population size. An inspection of the records with the imputed values revealed that a further adjustment based on the sample person's body weight needed to be performed for approximately one-fourth of the records involved. This additional step was then carried out to complete the imputation process.