Documentation, Codebook, and Frequencies

Dietary Interview - Total Nutrient Intakes, Second Day

Survey Years:
2005 to 2006

SAS Transport File:
DR2TOT_D.XPT

nhanes

NHANES 2005–2006 Data Documentation

Dietary Interview (DR1IFF_D, DR2IFF_D, DR1TOT_D, and DR2TOT_D)

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Component Description	The objective of the dietary interview component is to obtain detailed dietary intake information from NHANES participants. The dietary intake data are used to estimate the types and amounts of foods and beverages consumed during the 24-hour period prior to the interview (midnight to midnight), and to estimate intakes of energy, nutrients, and other food components from those foods and beverages. Beginning in 2005-2006, water drunk throughout the day is collected as part of the 24-hour dietary recall (see more details in the "What's New with the 2005-2006 WWEIA Release" section). Following the dietary recall, participants are asked questions on salt use, whether the person's intake on the previous day was usual or unusual, and whether the respondent is on any type of special diet. Survey participants 1 year or older were asked questions on frequency of fish and shellfish consumed during the past 30 days.

The dietary interview component, called What We Eat in America (WWEIA), is conducted as a partnership between the U.S. Department of Agriculture (USDA) and the U.S. Department of Health and Human Services (DHHS). Under this partnership, DHHS' National Center for Health Statistics (NCHS) is responsible for the sample design and data collection and USDA's Food Surveys Research Group (FSRG) is responsible for the dietary data collection methodology, maintenance of the databases used to code and process the data, and data review and processing.

All NHANES examinees are eligible for two 24-hour dietary recall interviews. The first dietary recall interview is collected in-person in the Mobile Examination Center (MEC) and the second interview is collected by telephone 3 to 10 days later.

As in previous years, two types of dietary intake data are available for the 2005-2006 survey cycle - Individual Foods files and Total Nutrient Intakes files. Each of these dietary intake data files is accompanied by a PDF file containing its documentation, codebook, and frequencies. The structure of the PDF file for the 2005-2006 dietary intake data files has been modified slightly from earlier survey years so that the documentation section of the file for each of the two types of dietary intake data files is identical.

What's New with the 2005-2006 WWEIA Release: One of the major changes to this release is that beginning with the 2005-2006 WWEIA, the consumption of all types of water (including tap and bottled water, plain and carbonated, sweetened and unsweetened water) was collected during the 24-hour recall. As a result, each report of water intake throughout the day was collected and coded as a separate food item. These water intake items now appear in the Individual Foods file with food codes designating the type of water. As with other foods, a variable is present to indicate if the water was consumed at home or away. For bottled waters, a variable is present indicating where the water was obtained. For tap water, the variables DR1TWS and DR2TWS in the Total Nutrient Intake files indicate the main source of tap water drunk by the participant. In 2003-2004, only sweetened bottled waters were collected during the 24-hour recall and included in the Individual Foods file. Information on daily intake of non-sweetened waters (total plain water, total tap water and the source of tap water, total bottled water, and plain carbonated water) were collected after the 24-hour dietary recall and included in the Total Nutrient Intake file for 2003-2004. In 2005-2006, summary water variables that are compatible with previous data cycles are included in the Total Nutrient Intake files with the exception of plain carbonated water. These water totals (DR1_320Z, DR2_320Z, DR1_330Z, DR2_330Z, DR1BWATZ and DR2BWATZ) represent total water consumed as a beverage by itself. Therefore, they do not include the moisture content of foods and beverages (such as watermelon, coffee, lettuce) that are available for each food reported in the Individual Foods files.

The table in **Appendix 1** summarizes additional changes among the 3 latest cycles of data collection.

Dietary Interview Data Files: Four data files were produced from the information collected in the dietary interview: two Individual Foods files and two Total Nutrient Intake files. Each file includes one day of intake data. The number "1" or "2" in the file name identifies the day (and mode) of the interview: 1 = first day (in-person), 2 = second day (phone). File names are the following:

File Names for Dietary Interview Data

File	Day 1	Day 2
Individual Foods File	DR1IFF_D	DR2IFF_D
Total Nutrient Intakes File	DR1TOT_D	DR2TOT_D

The nutrient amounts in these files reflect only nutrients obtained from foods, beverages, and water including tap and bottled water. They do not include nutrients obtained from dietary supplements, antacids, or medications.

Individual Foods Files (DR1IFF_D and DR2IFF_D): Detailed information about the types and amounts of individual foods reported by each participant, as well as amounts of nutrients from each food are included in the Individual Foods files. The names for both Day 1 and Day 2 variables are listed in **Appendix 2**.

Two supporting files are also included with the Individual Foods files: the Food Code Description file (DRXFCD_D) and the Modification Code Description file (DRXMCD_D). The DRXFCD_D file includes abbreviated descriptions (up to 60 characters) and complete descriptions (up to 200 characters) associated with each USDA food code identified in the Individual Foods files. The DRXMCD_D file includes descriptions (up to 200 characters) associated with each modification code identified in the Individual Foods files. Modification codes represent adjustments to predefined recipe ingredients that reflect more closely the food as described by the respondent. **Appendix 3** provides SAS code examples that may be used to link the food code or the modification code description to the Individual Foods file.

The Individual Foods files include, for each interview day, one record for each food consumed by a survey participant. Each food record is sequentially numbered and contains the information listed below:

- Number of days of complete intake obtained from participant
- Day of the week of the intake
- Time of eating occasion when the food was eaten
- Eating occasion name
- Food, water, or beverage identified by a USDA food code
- Amount of food, water, and beverages consumed, in grams
- Whether the food was eaten in combination with other foods, such as in a sandwich
- Whether the food was eaten at home or not
- Where the food was obtained
- Amounts of energy and 63 nutrients/food components (listed in

Appendix 4) from each food, as calculated using USDA's Food and Nutrient Database for Dietary Studies, 3.0 (FNDDS 3.0)

- Whether nutrients were calculated directly from the food as identified in FNDDS 3.0 or the FNDDS item was modified by adjusting recipe ingredients

Total Nutrient Intakes Files (DR1TOT_D and DR2TOT_D): For each participant, daily total energy and nutrient intakes from foods and beverages and whether the amount of food consumed was usual, much more than usual, or much less than usual are included in the Total Nutrient Intakes files. The Day 1 file also includes information on salt use in cooking and at the table; whether the participant is currently on any kind of diet to lose weight or for other health-related reason and, if so, the type of diet; and for participants 1 year or older, information on frequency of fish and shellfish consumption. The names for both Day 1 and Day 2 variables are listed in **Appendix 5**.

The Total Nutrient Intakes files provide a summary record of total nutrient intakes for each individual. Each total intake record contains the following information:

- Number of days of complete intake obtained from participant

- Day of the week of the intake

- Daily aggregates of food energy and 63 nutrients/food components (listed in Appendix 4) from all foods, as calculated using USDA's Food and Nutrient Database for Dietary Studies 3.0 (FNDDS 3.0)

- The daily aggregates of water (moisture), DR1TMOIS and DR2TMOIS, consist of all moisture present in foods and beverages, including tap and bottled waters consumed as beverages

- Total amount of water consumed (plain water, tap water and the source of tap water, and bottled water)

- Total number of foods reported for that participant for that day's intake

- Whether the amount of food consumed was usual, much more than usual, or much less than usual

- Type of salt used and how often added at the table and in food preparation (Day 1 file only)

- Whether the participant is currently on any kind of diet to lose

weight or for other health-related reason and, if so, the type of diet (Day 1 file only)

- Frequency of fish and shellfish consumption in the past 30 days (examinees one year or older, Day 1 file only)

Eligible Sample

All NHANES examinees are eligible for the dietary interview component. However, only examinees one year or older are eligible for the frequency of fish and shellfish consumption questions following the 24-hour recall.

Protocol and Procedure

The examination protocol and data collection methods are fully documented in the NHANES dietary interviewers procedures manuals (1, 2).

Interviews were conducted for survey participants less than six years of age with a proxy who was generally the person most knowledgeable about the survey participant's intake. With children ages 6 to 11, the interviews were conducted with the child and the assistance of an adult familiar with the child's intake. Dietary interviews were conducted in English and Spanish. Translators were used to conduct interviews in other languages.

The in-person interview was conducted in a private room in the NHANES mobile examination center (MEC). A set of measuring guides (various glasses, bowls, mugs, drink boxes and bottles, household spoons, measuring cups and spoons, a ruler, thickness sticks, bean bags, and circles) was available in the MEC dietary interview room for the participant to use for reporting amounts of foods (3). Upon completion of the in-person interview, participants were given measuring cups, spoons, a ruler, and a food model booklet, which contained two-dimensional drawings of the various measuring guides available in the MEC, to use for reporting food amounts during the telephone interview. Telephone dietary interviews were collected 3 to 10 days following the MEC dietary interview but not on the same day of the week as the MEC interview. Any participant who did not have a telephone was given a toll-free number to call so that the recall could be conducted.

What We Eat in America data were collected using USDA's dietary data collection instrument, the Automated Multiple Pass Method (AMPM) (4). The AMPM was designed to provide an efficient and accurate means of collecting intakes for large-scale national surveys. The AMPM is a fully computerized recall method that uses a 5-step interview outlined below:

1. **Quick List** - Participant recalls all foods and beverages consumed the day before the interview (midnight to midnight).

2. **Forgotten Foods** - Participant is asked about consumption of foods commonly forgotten during the Quick List step.

3. **Time and Occasion** - Time and eating occasion are collected for each food.

4. **Detail Cycle** - For each food, a detailed description, amount eaten, and additions to the food are collected. Eating occasions and times between eating occasions are reviewed to elicit forgotten foods.

5. **Final Probe** - Additional foods not remembered earlier are collected.

The AMPM includes an extensive compilation of standardized food-specific questions and possible response options. Routing of questions is based on previous responses. The AMPM is updated yearly to reflect the changing food supply and to address research needs from the data user community. Additional information about the AMPM is provided in Raper et al. ([5]).

FSRG conducted the AMPM Validation Study to evaluate the accuracy of this dietary intake method. Completed in 2004, this extensive research project included 524 healthy, weight-stable volunteers, aged 30-69 years. The accuracy of the AMPM was evaluated by comparing reported energy intake (EI) to total energy expenditure (TEE) using the doubly labeled water technique ([6]). Among the findings were that EI compared to TEE was under-reported by 11% overall and by less than 3% for normal weight subjects with body mass index (BMI) <25.

Other studies have also reported on the validity of the AMPM to measure group energy intake (EI). Blanton reported that EI was not significantly different from TEE for a sample of 20 adult females ([7]). Rumpler and colleagues found that mean EIs were accurately reported for a sample of 12 adult males ([8]).

For additional information about the dietary interview component and related survey protocols, please go to the **Survey Operations Manual, Consent Documents, Brochures** site at: http://www.cdc.gov/nchs/about/major/nhanes/nhanes2005-2006/current_nhanes_05_06.htm.

Quality Assurance & Quality Control

All dietary interviewers were required to complete an intensive one-week training course and to conduct supervised practice interviews before working independently in the field. Retraining sessions were conducted annually to reinforce the proper protocols and technique.

Interviewers were monitored throughout the data collection period. Monitoring consisted of the following:

- Data transmittal sheets were reviewed to verify receipt of data files.

- Reviews of audio-taped interviews or in-person observations were conducted for approximately 5% of each interviewer's work.

- Interviews were checked for completeness of the recalls, missing information, inconsistent reports, and unclear notes. Written notification and feedback were provided to the interviewers.

Data Processing and Editing

Interview data files were sent electronically from the field and were imported into Survey Net, a computer-assisted food coding and data management system developed by USDA (5).

USDA's Food and Nutrient Database for Dietary Studies, 3.0 (FNDDS 3.0), was used for processing the 2005-2006 intakes. The FNDDS includes comprehensive information that can be used to code individual foods and portion sizes reported by participants and also includes nutrient values for calculating nutrient intakes. The underlying nutrient values for FNDDS 3.0 were based on values in the USDA National Nutrient Database for Standard Reference, release 20, produced by USDA's Nutrient Data Lab (9). FNDDS values are updated for every 2-year WWEIA, NHANES release cycle. FNDDS 3.0 corresponds with WWEIA 2005-2006. Additional information about the FNDDS and related tools is available on the Food Surveys Research Group website (5, 10, 11, 12, 13).

Coders were required to pass a certification test after the initial training. They were routinely monitored to ensure the quality and completeness of their work. Approximately 10 percent of the coder's work was randomly selected to be independently coded by another coder. Results from the two codings were compared and adjudicated, if necessary.

After intake data were coded, various types of reviews were conducted to ensure the quality of the data. An overview of quality assurance

procedures conducted during the data processing stage is available in Anand, et al. ([11](#)). Examples of reviews include the following:

- Overall acceptability of each recall. This review determined if the recall met the two minimum criteria listed below. A recall was considered unacceptable if it failed to meet either of these criteria:

    1. The first 4 steps of the 5-step AMPM are completed. Failure to meet this criterion occurs infrequently and is usually due to the participant stopping the interview before completion of the fourth step. This step collects the details (description and amount consumed) for each reported food.

    2. Foods consumed for each reported meal must be identified.

- Interviewers' and coders' questions and comments are reviewed to ensure that they have been accounted for in coding.

- Decisions are made about how to code new or unusual foods or food quantities reported by participants.

    Foods or portions that could not be matched to items in the database are resolved by FSRG scientists. New food items and new portion sizes are added as needed to the FNDDS. Information about new foods and package sizes are collected using internet resources, direct contact with manufacturers, or food labels. Unusual food mixtures are coded using multiple food codes to represent the mixture, linking those foods with a combination food number, and specifying the type of food mixture (such as a salad or soup).

- Specific data integrity checks for reasonableness, consistency, and logic.

    Many quality control features are built into the AMPM software, including automated routing based on the participant's previous answers and extensive checks which prevent illogical responses. Nevertheless, over 50 unique checks are conducted across all dietary data. Examples are meals reported at unusual times (e.g., school lunch at 12:30 a.m.), foods not usually consumed by certain age groups (e.g., baby foods consumed by respondents over 2 years of age), and extremely large quantities of foods.

- Intakes with extreme levels for individual nutrients.

Nutrient intakes are reviewed separately for various age and sex groups. Unusual values are examined and corrected when necessary.

During data processing, the following edits were made to ensure the logical consistency and analytic usefulness of the data:

- Adjusted sodium values for certain foods.

  Sodium values for home-prepared foods are based on the sodium values of recipe ingredients in the FNDDS. In some cases, the amount of salt in recipes was reduced or eliminated if the participant answered dietary interview questions about salt use in cooking or preparing foods with the response "occasionally", "rarely" or "never," respectively.

- Modified nutrient values for some food mixtures.

  During the food coding process, predefined recipes for some food mixtures are modified to match more closely the food as described by the respondent. Nutrients are modified by substituting ingredients in a predefined recipe for the mixture. An example of a modified recipe is an egg fried in butter instead of margarine. Each modification is assigned a unique 6-digit identification number. Recipe modification numbers appear in the variable DR1MC in the DR1IFF_D file and in the variable DR2MC in the DR2IFF_D file. Descriptions for each modification are provided in a separate file called DRXMCD.

Analytic Notes

Each Individual Foods file (Day 1 and Day 2) is comprised of food records. For most survey participants, there are multiple records in each file. For each Total Nutrient Intakes file (Day 1 and Day 2) there is one record for each participant. These files can be linked with other NHANES files by the respondent sequence number (SEQN).

Variable names: For data collected on both Day 1 and Day 2, variable names are differentiated by having the number "1" or "2" in the third position of the variable name to identify the collection day. For example, the USDA food code variable (in the Individual Foods File), which identifies the food reported by the participant, is named DR1IFDCD in the Day 1 file and DR2IFDCD in the Day 2 file. Appendices 2 and 5 list the Day 1 and Day 2 variable names for the Individual Foods file and the Total Nutrient Intakes file, respectively.

Names for the following variables are the same for both days in the

Individual Foods file and the Total Nutrient Intakes file:

Variables with the Same Name for Both Days in the Dietary Interview Files

Day 1 and Day 2 variable name	Label
SEQN	Respondent sequence number
WTDRD1	Dietary day one sample weight
WTDR2D	Dietary two-day sample weight
DRABF	Breast-fed infant (either day)
DRDINT	Number of days of intake

Number of days of intake: Because two days of data are included in the 2005-2006 release, a variable has been included to indicate the number of days of intake available for each participant. The variable name is DRDINT.

Dietary recall status code: A status code (DR1DRSTZ or DR2DRSTZ) is used in both the Individual Foods and Total Nutrient Intake files to indicate the quality and completeness of a survey participant's response to the dietary recall section. The codes are the following:

1 = Reliable and met the minimum criteria

   For individuals with a code 1, all relevant variables associated with the 24-hour dietary recall contain a value.

2 = Not reliable or did not meet the minimum criteria

   Individuals with a code 2 have incomplete records. No data on total nutrient intakes and the total number of foods reported are provided for these cases. These individuals have no records in the Individual Foods files.

3   [Code 3 is not included in the current datasets. It was only used for data from the 1999-2000 survey cycle.]

4 = Reported consuming breast milk

   For infants and children who consumed human milk, there is a record in the Individual Foods files for each report of human milk. However, because amounts of human milk intake are not quantified, these records contain missing values for the amount consumed and for the amounts of energy and nutrients from human milk. Also, records of human milk have a missing value

for the food source variable (DR1FS, DR2FS) and the eaten at home variable (DR1_040Z, DR2_040Z) in the Individual Foods files. Records for any other foods and beverages consumed by breast-fed infants and children are included in the Individual Foods files along with their amounts and nutrient information. Because of the missing nutrient information for human milk, no total nutrient intakes (contained in the Total Nutrient Intakes files) were computed for participants with a code 4.

A variable that identifies breast-fed children, DRABF, is included. This variable has a code of 1 if a child consumed breast milk in either intake day.

5 = Not done

This code is assigned when the dietary recall section of the interview did not take place due to various reasons (such as arrived late/left early, refusal, illness, emergency, or equipment failure). These individuals have no records in the Individual Foods files. These individuals have a record in the Total Nutrients file with values only for the following variables: the respondent sequence number (SEQN), the dietary recall status code (DR1DRSTZ or DR2DRSTZ) and for participants one year or older, the fish and shellfish questions in the DR1TOT_D file (DRD340, DRD350A-K, DRD350AQ-JQ, DRD360, DRD370A-V, and DRD370AQ-UQ)

Although there are four possible values, only codes 1 and 4 appear in the Individual Foods file. In addition to the status code described above, the variable DR1_300 and DR2_300 in the Total Nutrients file, denotes the participant's assessment of whether the amount of food he/she consumed on the recall day was usual, much more than usual, or much less than usual.

Participants who reported consuming only water: In 2001-2002 and 2003-2004, individuals who reported consuming only water had no records in the Individual Foods file for that specific day. Their dietary recall status variable for the day was coded as "1" (complete and reliable) in the Total Nutrients file, and the total number of foods and all total nutrient intake variables were coded as "0". Values were present for other variables collected during the dietary recall.

In 2005-2006, information on all waters were collected during the 24-hour recall and reported in the Individual Foods file, including tap water and bottled water. Therefore, records are now included in the Individual

Foods file for participants who consumed only water. There are 3 such individuals in the 2005-2006 datasets. Their dietary recall status variable for the day is coded as "1" (complete and reliable) in the Total Nutrients file and the total number of foods is coded based on how many times water was reported. There are 5 nutrients for the tap water and plain bottled water codes that have values greater than zero - calcium, magnesium, sodium, zinc, and copper. Individuals with just water intake and no food intake will have zero energy intake for the day. Depending on the type of analysis, these individuals may need to be excluded from the analysis.

Food source: The source of each food (where it was obtained, e.g., from a store, fast food restaurant, cafeteria) is included with the 2005-2006 release as it was for 2003-2004. The variable names are DR1FS and DR2FS and are located in the Individual Foods file. Food source information was also collected in 2002, but was not publicly released because of confidentiality issues concerning single-year data. For 2005-2006, a food source for fundraiser sales has been added to reflect a frequently reported response in the "other, specify" field; its food source code number is 26. The code descriptions for this variable are:

Code Description for Source of Food Variable

Code	Description	Code	Description
1	Store	13	Community program, no additional information
2	Restaurant with waiter/waitress	14	Vending machine
3	Restaurant fast food/pizza	15	Common coffee pot or snack tray
4	Bar/tavern/lounge	16	From someone else/gift
5	Restaurant, no additional information	17	Mail order purchase
6	Cafeteria not at school	18	Residential dining facility
7	Cafeteria at school	19	Grown or caught by you or someone you know
8	Child care center	20	Fish caught by you or someone you know
9	Family/adult day care center	24	Sport, recreation, or entertainment
10	Soup kitchen/shelter/food pantry facility	25	Street vendor, vending truck
11	Meals on Wheels	26	Fundraiser sales
12	Community food program – other	91	Other, specify

Eating occasion: The variables DR1_030Z and DR2_030Z are located in the Individual Foods file. The code descriptions for the eating

occasion variables are shown in the table below.

Code Description for Eating Occasion Variable

Code	Description	Code	Description
1	Breakfast	11	Almuerzo
2	Lunch	12	Comida
3	Dinner	13	Merienda
4	Supper	14	Cena
5	Brunch	15	Entre comida
6	Snack	16	Botana
7	Drink	17	Bocadillo
8	Infant feeding	18	Tentempie
9	Extended consumption	19	Bebida
10	Desayuno	91	Other

Eating occasion is designated by the respondent. During the interview, a list of eating occasion names is available to the respondent for reference. However, eating occasion names are not defined for the respondent and the interpretation may differ from one person to another.

Combination foods: Foods that are eaten in combination with other foods, such as cereal with milk, are identified by a combination food type (DR1CCMTX) and a combination food number (DR1CCMNM). They are located in the Individual Foods file. About half of the foods reported in 2005-2006 were consumed in combination with other foods. The code descriptions for this variable are the following:

Code Description for Type of Combination Food Variable

Code	Description	Code	Description
0	Non-combination food	8	Ice cream/frozen yogurt w/ additions
1	Beverage w/ additions	9	Dried beans and vegetable w/ additions
2	Cereal w/ additions	10	Fruit w/ additions
3	Bread/baked prod w/ additions	11	Tortilla products
4	Salad	12	Meat, poultry, fish
5	Sandwiches	13	Lunchables®
6	Soup	14	Chips w/ additions
7	Frozen meals	90	Other mixtures

Special diet: Information on whether the participant is currently on any kind of diet to lose weight or for other health-related reason and, if so,

the type of diet, is included. The variable DRQSDIET identifies whether a participant is on a special diet. The variables DRQSDT1 through DRQSDT8 and DRQSDT91 identify the type of diet(s) that the participant is following. These variables can be found in the Total Nutrient Intakes file.

Note: A participant could report more than one type of diet, and all the responses were recorded. The variable DRQSDT1 denotes the type of diet the participant followed specifically for weight loss purposes, including a variety of low calorie diets, low carbohydrate diets, and/or high protein diets. If the participant reported being on a high protein diet for the purpose of gaining weight or muscle building instead of weight loss, the response was coded in variable DRQSDT8 (Weight gain/Muscle building diet).

Sample weights for dietary intake data: The NHANES participants were selected on the basis of a national probability design. In order to increase the number of participants for specific demographic groups, a multi-stage, unequal probability of selection design was implemented. The NHANES oversamples African Americans, Mexican Americans, low income persons, adolescents 12-19 years, and persons 60 years and older. Sample weights are constructed that encompass the unequal probabilities of selection, as well as adjustments for non-participation by selected sample persons. In order to produce national, representative estimates, the appropriate sample weights must be used.

For the 2005-2006 NHANES, there were 12,862 persons selected; of these 9950 were considered respondents to the MEC examination and data collection. However, only 9349 of the MEC respondents provided complete dietary intakes for Day 1. Furthermore, of those providing the Day 1 data, only 8429 provided complete dietary intakes for Day 2.

Most analyses of NHANES data use data collected in the MEC and the variable WTMEC2YR should be used for the sample weights. However, for the WWEIA dietary data, different sample weights are recommended for analysis. Although attempts are made to schedule MEC exams uniformly throughout the week, proportionally more exams occur on weekend days than on weekdays. Because food intake can vary by day of the week, use of the MEC weights would disproportionately represent intakes on weekends.

A set of weights WTDRD1 is provided that should be used when an analysis uses the Day 1 dietary recall data (either alone or when Day 1 nutrient data are used in conjunction with MEC data). The set of

weights WTDRD1 is applicable to the 9349 respondents with Day 1 data. Day 1 weights were constructed by taking the MEC sample weights (WTMEC2YR) and further adjusting for (a) the additional non-response and (b) the differential allocation by day of the week for the dietary intake data collection. These Day 1 weights are more variable than the MEC weights, and the sample size is smaller, so estimated standard errors using Day 1 data and Day 1 weights are larger than standard errors for similar estimates based on MEC weights.

When analysis is based on both days of dietary intake, only 8429 sample persons have valid data. The NHANES protocol requires an attempt to collect the second day of dietary data at least 3 days after the first day, but the actual number of days between the two interviews is variable. A set of adjusted weights, WTDR2D, is to be used only when analysis uses both Day 1 and Day 2 dietary data. This two-day weight was constructed for the 8429 respondents by taking the Day 1 weights (WTDRD1) and further adjusting for (a) the additional non-response for the second recall and (b) for the proportion of weekend-weekday combinations of Day 1 and Day 2 recalls.

Note that all sample weights are person-level weights and each set of dietary weights should sum to the same population control total as the MEC weights (WTMEC2YR). In addition, the MEC weights (WTMEC2YR) are appropriate for use in the analysis of the fish and shellfish consumption data (i.e., variables DRD340, DRD350A-K, DRD350AQ-JQ DRD360, DRD370A-V, and DRD370AQ-UQ) located in the Day 1 Total Nutrient Intake File (DR1TOT_D), if no other dietary data are included in the analysis. Additional explanation of sample weights and appropriate uses are included in the **NHANES Analytic Guidelines**. Please also refer to the Analytic Guidelines for further details on other analytic issues at: http://www.cdc.gov/nchs/about/major/nhanes/nhanes2003-2004/analytical_guidelines.htm.

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Appendix 1. Changes between WWEIA 2001-2002, WWEIA 2003-2004 and WWEIA 2005-2006

Item	WWEIA 2001-2002	WWEIA 2003-2004	WWEIA 2005-2006
Number of days of intake data released on each respondent	1 day	2 days	2 days
Nutrients included	Food energy and 60 nutrients/food components	Food energy and 62 nutrients/food components. "Added vitamin E" and "Added vitamin B12" were added.	Food energy and 63 nutrients/food components. Total choline added.
Food source (Where food obtained)	Collected only in 2002; not publicly released.	Collected and released. Values for 25 food sources.	Collected and released. Values for 26 food sources; added "fundraiser sales".
Combination food types	Values for 14 combination types	Values for 15 combination types; added "chips with additions".	Values for 15 combination types
Eating occasion names	18 values	20 values; 3 existing values modified and 2 new values.	20 values
Special diet variables	Collected only in 2002; not publicly released.	Collected and released.	Collected and released.
Water consumed (does not include the moisture content of foods)	Total amount of non-sweetened water collected after the 24-hour recall and reported in the Total Nutrient Intake files. Minerals in tap water and plain bottled water not included.	Total amount of non-sweetened water collected after the 24-hour recall and reported in the Total Nutrient Intake files. Minerals in tap water and plain bottled water not included.	All waters, including tap water and bottled water, were collected during the 24-hour recall and reported in the Individual Foods file, complete with food codes, gram weights and nutrient values. Summary water variables compatible with previous data cycles are included in the Total Nutrient Intake files with the exception of plain carbonated water.
Number of intakes that include only water consumption for the day	1 intake, no records in Individual Foods file	3 intakes (1 intake in Day 1 and 2 intakes in Day 2 data), no records in Individual Foods file	3 intakes (1 intake in Day 1 and 2 intakes in Day 2 data), records are included in Individual Foods file
Eligible sample for questions on fish/ shellfish consumptions in the past 30 days	Children 1-5 years and women 16-49 years of age.	Children 1-5 years and women 16-49 years of age.	All examinees one year or older.

Appendix 2. Variables in the Individual Foods Files (DR1IFF_D and DR2IFF_D) by Position

Day 1 Name	Day 2 Name	Variable Label
SEQN	SEQN	Respondent sequence number
DR1ILINE	DR2ILINE	Food/Individual component number
WTDRD1	WTDRD1	Dietary day one sample weight
WTDR2D	WTDR2D	Dietary two-day sample weight
DR1DRSTZ	DR2DRSTZ	Dietary recall status
DR1EXMER	DR2EXMER	Interviewer ID code
DRABF	DRABF	Breast-fed infant (either day)
DRDINT	DRDINT	Number of days of intake
DR1DAY	DR2DAY	Intake day of the week
DR1LANG	DR2LANG	Language respondent used mostly
DR1CCMNM	DR2CCMNM	Combination food number
DR1CCMTX	DR2CCMTX	Combination food type
DR1_020	DR2_020	Time of eating occasion (HH:MM)
DR1_030Z	DR2_030Z	Name of eating occasion
DR1FS	DR2FS	Source of food
DR1_040Z	DR2_040Z	Did you eat this meal at home?
DR1IFDCD	DR2IFDCD	USDA food code
DR1MC	DR2MC	Modification code
DR1IGRMS	DR2IGRMS	Grams
DR1IKCAL	DR2IKCAL	Energy (kcal)
DR1IPROT	DR2IPROT	Protein (gm)
DR1ICARB	DR2ICARB	Carbohydrate (gm)
DR1ISUGR	DR2ISUGR	Total sugars (gm)
DR1IFIBE	DR2IFIBE	Dietary fiber (gm)
DR1ITFAT	DR2ITFAT	Total fat (gm)
DR1ISFAT	DR2ISFAT	Total saturated fatty acids (gm)
DR1IMFAT	DR2IMFAT	Total monounsaturated fatty acids (gm)
DR1IPFAT	DR2IPFAT	Total polyunsaturated fatty acids (gm)
DR1ICHOL	DR2ICHOL	Cholesterol (mg)
DR1IATOC	DR2IATOC	Vitamin E as alpha-tocopherol (mg)

Day 1 Name	Day 2 Name	Variable Label
DR1IATOA	DR2IATOA	Added alpha-tocopherol (Vitamin E) (mg)
DR1IRET	DR2IRET	Retinol (mcg)
DR1IVARA	DR2IVARA	Vitamin A, RAE (mcg)
DR1IACAR	DR2IACAR	Alpha-carotene (mcg)
DR1IBCAR	DR2IBCAR	Beta-carotene (mcg)
DR1ICRYP	DR2ICRYP	Beta-cryptoxanthin (mcg)
DR1ILYCO	DR2ILYCO	Lycopene (mcg)
DR1ILZ	DR2ILZ	Lutein + zeaxanthin (mcg)
DR1IVB1	DR2IVB1	Thiamin (Vitamin B1) (mg)
DR1IVB2	DR2IVB2	Riboflavin (Vitamin B2) (mg)
DR1INIAC	DR2INIAC	Niacin (mg)
DR1IVB6	DR2IVB6	Vitamin B6 (mg)
DR1IFOLA	DR2IFOLA	Total folate (mcg)
DR1IFA	DR2IFA	Folic acid (mcg)
DR1IFF	DR2IFF	Food folate (mcg)
DR1IFDFE	DR2IFDFE	Folate, DFE (mcg)
DR1ICHL	DR2ICHL	Total choline (mg)
DR1IVB12	DR2IVB12	Vitamin B12 (mcg)
DR1IB12A	DR2IB12A	Added vitamin B12 (mcg)
DR1IVC	DR2IVC	Vitamin C (mg)
DR1IVK	DR2IVK	Vitamin K (mcg)
DR1ICALC	DR2ICALC	Calcium (mg)
DR1IPHOS	DR2IPHOS	Phosphorus (mg)
DR1IMAGN	DR2IMAGN	Magnesium (mg)
DR1IIRON	DR2IIRON	Iron (mg)
DR1IZINC	DR2IZINC	Zinc (mg)
DR1ICOPP	DR2ICOPP	Copper (mg)
DR1ISODI	DR2ISODI	Sodium (mg)
DR1IPOTA	DR2IPOTA	Potassium (mg)
DR1ISELE	DR2ISELE	Selenium (mcg)
DR1ICAFF	DR2ICAFF	Caffeine (mg)
DR1ITHEO	DR2ITHEO	Theobromine (mg)

Day 1 Name	Day 2 Name	Variable Label
DR1IALCO	DR2IALCO	Alcohol (gm)
DR1IMOIS	DR2IMOIS	Moisture (gm)
DR1IS040	DR2IS040	SFA 4:0 (Butanoic) (gm)
DR1IS060	DR2IS060	SFA 6:0 (Hexanoic) (gm)
DR1IS080	DR2IS080	SFA 8:0 (Octanoic) (gm)
DR1IS100	DR2IS100	SFA 10:0 (Decanoic) (gm)
DR1IS120	DR2IS120	SFA 12:0 (Dodecanoic) (gm)
DR1IS140	DR2IS140	SFA 14:0 (Tetradecanoic) (gm)
DR1IS160	DR2IS160	SFA 16:0 (Hexadecanoic) (gm)
DR1IS180	DR2IS180	SFA 18:0 (Octadecanoic) (gm)
DR1IM161	DR2IM161	MFA 16:1 (Hexadecenoic) (gm)
DR1IM181	DR2IM181	MFA 18:1 (Octadecenoic) (gm)
DR1IM201	DR2IM201	MFA 20:1 (Eicosenoic) (gm)
DR1IM221	DR2IM221	MFA 22:1 (Docosenoic) (gm)
DR1IP182	DR2IP182	PFA 18:2 (Octadecadienoic) (gm)
DR1IP183	DR2IP183	PFA 18:3 (Octadecatrienoic) (gm)
DR1IP184	DR2IP184	PFA 18:4 (Octadecatetraenoic) (gm)
DR1IP204	DR2IP204	PFA 20:4 (Eicosatetraenoic) (gm)
DR1IP205	DR2IP205	PFA 20:5 (Eicosapentaenoic) (gm)
DR1IP225	DR2IP225	PFA 22:5 (Docosapentaenoic) (gm)
DR1IP226	DR2IP226	PFA 22:6 (Docosahexaenoic) (gm)

Appendix 3. Adding Food Code Descriptions or Modification Code Descriptions to Your Files

Two technical support files are included with the Individual Foods files: the Food Code Description file (DRXFCD_D) and the Modification Code Description file (DRXMCD_D).

The DRXFCD_D file includes abbreviated descriptions (up to 60 characters) and complete descriptions (up to 200 characters) associated with each USDA food code identified in the Individual Foods files. The DRXMCD_D file includes descriptions associated with each modification code identified in the Individual Foods files.

The Food Code Description file (DRXFCD_D) contains three variables:

DRDIFDCD a numeric value corresponding to DR1IFDCD in the file
DR1IFF_D or DR2IFDCD in the file DR2IFF_D;
DRXFCSD a short description (up to 60 characters) of the food code.
DRXFCLD a long description (up to 200 characters) of the food code.

The Modification Code Description file (DRXMCD_D) contains two variables:

DRDMC a numeric value corresponding to DR1MC in the file DR1IFF_D or
DR2MC in the file DR2IFF_D;
DRMCD a description (up to 200 characters) of the modification code.

The following SQL code is an example of appending the modifications code description (here called DR1MCD) to one of the Individual Foods files. This code is for SAS® Proc SQL. Other SQL implementations may be different. This same technique may be used for the Food Code Description file as well.

```
create table dr1iff_d_plus as
    select a.*,b.drxmcd as dr1mcd
    from nhanes.dr1iff_d a
        left join
        nhanes.drxmcd_d b
    on a.dr1mc = b.drxmc
    order by seqn , dr1iline;
```

SAS® users may wish to use Proc Format to assign labels to the food codes or to the modification codes. The following example assigns a permanent format to the food code based on the short description. It is assumed that the user has stored the Individual Foods files and the Food Code Description file in a library called NHANES and wishes to store the formats there as well.

```
Options FmtSearch = (NHANES);

Data DRXFMT;
      Set NHANES.DRXFCD_D;
      Retain FMTNAME 'DRIFDCD';
      Rename DRDIFDCD = Start;
      Rename DRXFCSD = Value;
      Drop DRXFCLD; Run;

Proc Format CntlIn= DRXFMT
      Library=NHANES;
      Run;

Proc DataSets Lib=NHANES;
      Modify DR1IFFC;
      Format DR1IFDCD DRDIFDCD.;
      Modify DR2IFFC;
      Format DR2IFDCD DRDIFDCD.;
      Quit;
```

Appendix 4. List of Nutrients/Food Components (Unit)

Energy and Macronutrients

Food energy (kcal)

Protein (g)

Carbohydrate (g)

Fat, total (g)

Alcohol (g)

Sugars, total (g)

Dietary fiber, total (g)

Water (moisture) (g)*

Saturated fatty acids, total (g)

Monounsaturated fatty acids, total (g)

Polyunsaturated fatty acids, total (g)

Cholesterol (mg)

Individual fatty acids:

    4:0 (g)

    6:0 (g)

    8:0 (g)

    10:0 (g)

    12:0 (g)

    14:0 (g)

    16:0 (g)

    18:0 (g)

    16:1 (g)

    18:1 (g)

    20:1 (g)

    22:1 (g)

    18:2 (g)

    18:3 (g)

    18:4 (g)

    20:4 (g)

    20:5 n-3 (g)

    22:5 n-3 (g)

    22:6 n-3 (g)

Vitamins, Minerals, and Other Components

Vitamin A as retinol activity equivalents (µg)

Retinol (µg)

Carotenoids:

    Carotene, alpha (µg)

    Carotene, beta (µg)

    Cryptoxanthin, beta (µg)

    Lycopene (µg)

    Lutein + zeaxanthin (µg)

Vitamin E as alpha-tocopherol (mg)

    Added vitamin E as alpha-tocopherol (mg)

Vitamin K as phylloquinone (µg)

Vitamin C (mg)

Thiamin (mg)

Riboflavin (mg)

Niacin (mg)

Vitamin B-6 (mg)

Folate, total (µg)

    Folate as dietary folate equivalents (µg)

    Folic acid (µg)

    Food folate (µg)

Choline, total (mg)

Vitamin B-12 (µg)

    Added vitamin B-12 (µg)

Calcium (mg)

Iron (mg)

Magnesium (mg)

Phosphorus (mg)

Potassium (mg)

Sodium (mg)

Zinc (mg)

Copper (mg)

Selenium (µg)

Caffeine (mg)

Theobromine (mg)

* Value reflects moisture present in all foods, beverages, and water consumed as a beverage (variables DR1IMOIS, DR2IMOIS, DR1TMOIS, DR2TMOIS)

Appendix 5. Variables in the Total Nutrient Intakes Files (DR1TOT_D and DR2TOT_D) by Position

Day 1 Name	Day 2 Name	Variable Label
SEQN	SEQN	Respondent sequence number
WTDRD1	WTDRD1	Dietary day one sample weight
WTDR2D	WTDR2D	Dietary two-day sample weight
DR1DRSTZ	DR2DRSTZ	Dietary recall status
DR1EXMER	DR2EXMER	Interviewer ID code
DRABF	DRABF	Breast-fed infant (either day)
DRDINT	DRDINT	Number of days of intake
DR1DAY	DR2DAY	Intake day of the week
DR1LANG	DR2LANG	Language respondent used mostly
DR1MNRSP	DR2MNRSP	Main respondent for this interview
DR1HELPD	DR2HELPD	Helped in responding for this interview
DBQ095Z	N/A	Type of table salt used
DBD100	N/A	How often add salt to food at table
DRQSPREP	N/A	Salt used in preparation?
DRQSDIET	N/A	On special diet?
DRQSDT1	N/A	Weight loss/Low cal/Low carb/Hi pro diet
DRQSDT2	N/A	Low fat/Low cholesterol diet
DRQSDT3	N/A	Low salt/Low sodium diet
DRQSDT4	N/A	Sugar free/Low sugar diet
DRQSDT5	N/A	Low fiber diet
DRQSDT6	N/A	High fiber diet
DRQSDT7	N/A	Diabetic diet
DRQSDT8	N/A	Weight gain/Muscle building diet
DRQSDT91	N/A	Other special diet
DR1TNUMF	DR2TNUMF	Number of foods reported
DR1TKCAL	DR2TKCAL	Energy (kcal)
DR1TPROT	DR2TPROT	Protein (gm)
DR1TCARB	DR2TCARB	Carbohydrate (gm)
DR1TSUGR	DR2TSUGR	Total sugars (gm)
DR1TFIBE	DR2TFIBE	Dietary fiber (gm)

Day 1 Name	Day 2 Name	Variable Label
DR1TTFAT	DR2TTFAT	Total fat (gm)
DR1TSFAT	DR2TSFAT	Total saturated fatty acids (gm)
DR1TMFAT	DR2TMFAT	Total monounsaturated fatty acids (gm)
DR1TPFAT	DR2TPFAT	Total polyunsaturated fatty acids (gm)
DR1TCHOL	DR2TCHOL	Cholesterol (mg)
DR1TATOC	DR2TATOC	Vitamin E as alpha-tocopherol (mg)
DR1TATOA	DR2TATOA	Added alpha-tocopherol (Vitamin E) (mg)
DR1TRET	DR2TRET	Retinol (mcg)
DR1TVARA	DR2TVARA	Vitamin A, RAE (mcg)
DR1TACAR	DR2TACAR	Alpha-carotene (mcg)
DR1TBCAR	DR2TBCAR	Beta-carotene (mcg)
DR1TCRYP	DR2TCRYP	Beta-cryptoxanthin (mcg)
DR1TLYCO	DR2TLYCO	Lycopene (mcg)
DR1TLZ	DR2TLZ	Lutein + zeaxanthin (mcg)
DR1TVB1	DR2TVB1	Thiamin (Vitamin B1) (mg)
DR1TVB2	DR2TVB2	Riboflavin (Vitamin B2) (mg)
DR1TNIAC	DR2TNIAC	Niacin (mg)
DR1TVB6	DR2TVB6	Vitamin B6 (mg)
DR1TFOLA	DR2TFOLA	Total folate (mcg)
DR1TFA	DR2TFA	Folic acid (mcg)
DR1TFF	DR2TFF	Food folate (mcg)
DR1TFDFE	DR2TFDFE	Folate, DFE (mcg)
DR1TCHL	DR2TCHL	Total choline (mg)
DR1TVB12	DR2TVB12	Vitamin B12 (mcg)
DR1TB12A	DR2TB12A	Added vitamin B12 (mcg)
DR1TVC	DR2TVC	Vitamin C (mg)
DR1TVK	DR2TVK	Vitamin K (mcg)
DR1TCALC	DR2TCALC	Calcium (mg)
DR1TPHOS	DR2TPHOS	Phosphorus (mg)
DR1TMAGN	DR2TMAGN	Magnesium (mg)
DR1TIRON	DR2TIRON	Iron (mg)
DR1TZINC	DR2TZINC	Zinc (mg)

Day 1 Name	Day 2 Name	Variable Label
DR1TCOPP	DR2TCOPP	Copper (mg)
DR1TSODI	DR2TSODI	Sodium (mg)
DR1TPOTA	DR2TPOTA	Potassium (mg)
DR1TSELE	DR2TSELE	Selenium (mcg)
DR1TCAFF	DR2TCAFF	Caffeine (mg)
DR1TTHEO	DR2TTHEO	Theobromine (mg)
DR1TALCO	DR2TALCO	Alcohol (gm)
DR1TMOIS	DR2TMOIS	Moisture (gm)
DR1TS040	DR2TS040	SFA 4:0 (Butanoic) (gm)
DR1TS060	DR2TS060	SFA 6:0 (Hexanoic) (gm)
DR1TS080	DR2TS080	SFA 8:0 (Octanoic) (gm)
DR1TS100	DR2TS100	SFA 10:0 (Decanoic) (gm)
DR1TS120	DR2TS120	SFA 12:0 (Dodecanoic) (gm)
DR1TS140	DR2TS140	SFA 14:0 (Tetradecanoic) (gm)
DR1TS160	DR2TS160	SFA 16:0 (Hexadecanoic) (gm)
DR1TS180	DR2TS180	SFA 18:0 (Octadecanoic) (gm)
DR1TM161	DR2TM161	MFA 16:1 (Hexadecenoic) (gm)
DR1TM181	DR2TM181	MFA 18:1 (Octadecenoic) (gm)
DR1TM201	DR2TM201	MFA 20:1 (Eicosenoic) (gm)
DR1TM221	DR2TM221	MFA 22:1 (Docosenoic) (gm)
DR1TP182	DR2TP182	PFA 18:2 (Octadecadienoic) (gm)
DR1TP183	DR2TP183	PFA 18:3 (Octadecatrienoic) (gm)
DR1TP184	DR2TP184	PFA 18:4 (Octadecatetraenoic) (gm)
DR1TP204	DR2TP204	PFA 20:4 (Eicosatetraenoic) (gm)
DR1TP205	DR2TP205	PFA 20:5 (Eicosapentaenoic) (gm)
DR1TP225	DR2TP225	PFA 22:5 (Docosapentaenoic) (gm)
DR1TP226	DR2TP226	PFA 22:6 (Docosahexaenoic) (gm)
DR1_300	DR2_300	Compare food consumed yesterday to usual
DR1_320Z	DR2_320Z	Total plain water drank yesterday (gm)
DR1_330Z	DR2_330Z	Total tap water drank yesterday (gm)
DR1BWATZ	DR2BWATZ	Total bottled water drank yesterday (gm)
DR1TWS	DR2TWS	Tap water source

Day 1 Name	Day 2 Name	Variable Label
DRD340	N/A	Shellfish eaten during past 30 days
DRD350A	N/A	Clams eaten during past 30 days
DRD350AQ	N/A	# of times clams eaten in past 30 days
DRD350B	N/A	Crabs eaten during past 30 days
DRD350BQ	N/A	# of times crabs eaten in past 30 days
DRD350C	N/A	Crayfish eaten during past 30 days
DRD350CQ	N/A	# of times crayfish eaten past 30 days
DRD350D	N/A	Lobsters eaten during past 30 days
DRD350DQ	N/A	# of times lobsters eaten past 30 days
DRD350E	N/A	Mussels eaten during past 30 days
DRD350EQ	N/A	# of times mussels eaten in past 30 days
DRD350F	N/A	Oysters eaten during past 30 days
DRD350FQ	N/A	# of times oysters eaten in past 30 days
DRD350G	N/A	Scallops eaten during past 30 days
DRD350GQ	N/A	# of times scallops eaten past 30 days
DRD350H	N/A	Shrimp eaten during past 30 days
DRD350HQ	N/A	# of times shrimp eaten in past 30 days
DRD350I	N/A	Other shellfish eaten past 30 days
DRD350IQ	N/A	# of times other shellfish eaten
DRD350J	N/A	Other unknown shellfish eaten past 30 days
DRD350JQ	N/A	# of times other unknown shellfish eaten
DRD350K	N/A	Refused on shellfish eaten past 30 days
DRD360	N/A	Fish eaten during past 30 days
DRD370A	N/A	Breaded fish products eaten past 30 days
DRD370AQ	N/A	# of times breaded fish products eaten
DRD370B	N/A	Tuna eaten during past 30 days
DRD370BQ	N/A	# of times tuna eaten in past 30 days
DRD370C	N/A	Bass eaten during past 30 days
DRD370CQ	N/A	# of times bass eaten in past 30 days
DRD370D	N/A	Catfish eaten during past 30 days
DRD370DQ	N/A	# of times catfish eaten in past 30 days
DRD370E	N/A	Cod eaten during past 30 days

Day 1 Name	Day 2 Name	Variable Label
DRD370EQ	N/A	# of times cod eaten in past 30 days
DRD370F	N/A	Flatfish eaten during past 30 days
DRD370FQ	N/A	# of times flatfish eaten past 30 days
DRD370G	N/A	Haddock eaten during past 30 days
DRD370GQ	N/A	# of times haddock eaten in past 30 days
DRD370H	N/A	Mackerel eaten during past 30 days
DRD370HQ	N/A	# of times mackerel eaten past 30 days
DRD370I	N/A	Perch eaten during past 30 days
DRD370IQ	N/A	# of times perch eaten in past 30 days
DRD370J	N/A	Pike eaten during past 30 days
DRD370JQ	N/A	# of times pike eaten in past 30 days
DRD370K	N/A	Pollock eaten during past 30 days
DRD370KQ	N/A	# of times pollock eaten in past 30 days
DRD370L	N/A	Porgy eaten during past 30 days
DRD370LQ	N/A	# of times porgy eaten in past 30 days
DRD370M	N/A	Salmon eaten during past 30 days
DRD370MQ	N/A	# of times salmon eaten in past 30 days
DRD370N	N/A	Sardines eaten during past 30 days
DRD370NQ	N/A	# of times sardines eaten past 30 days
DRD370O	N/A	Sea bass eaten during past 30 days
DRD370OQ	N/A	# of times sea bass eaten past 30 days
DRD370P	N/A	Shark eaten during past 30 days
DRD370PQ	N/A	# of times shark eaten in past 30 days
DRD370Q	N/A	Swordfish eaten during past 30 days
DRD370QQ	N/A	# of times swordfish eaten past 30 days
DRD370R	N/A	Trout eaten during past 30 days
DRD370RQ	N/A	# of times trout eaten in past 30 days
DRD370S	N/A	Walleye eaten during past 30 days
DRD370SQ	N/A	# of times walleye eaten in past 30 days
DRD370T	N/A	Other fish eaten during past 30 days
DRD370TQ	N/A	# of times other fish eaten past 30 days
DRD370U	N/A	Other unknown fish eaten in past 30 days

Day 1 Name	Day 2 Name	Variable Label
DRD370UQ	N/A	# of times other unknown fish eaten
DRD370V	N/A	Refused on fish eaten past 30 days

Locator Record

Title: Dietary Interview - Total Nutrient Intakes, Second Day (DR2TOT_D)

Contact Number: 1-866-441-NCHS

Years of Content: 2005–2006

First Published: July 2008

Revised: NA

Access Constraints: None

Use Constraints: None

Geographic Coverage: National

Subject: Dietary interview component provides detailed dietary intake information from NHANES participants.

Record Source: NHANES 2005–2006

Survey Methodology: NHANES 2005–2006 is a stratified multistage probability sample of the civilian non-institutionalized population of the U.S.

Medium: NHANES Web site; SAS transport files

National Health and Nutrition Examination Survey
Codebook for Data Production (2005-2006)

Dietary Interview - Total Nutrient Intakes, Second Day (DR2TOT_D)

July 2008

SEQN	Target
	B(0 Yrs. to 150 Yrs.)
Hard Edits	**SAS Label**
	Respondent sequence number

English Text: Respondent sequence number.

English Instructions:

WTDRD1	Target
	B(0 Yrs. to 150 Yrs.)
Hard Edits	**SAS Label**
	Dietary day one sample weight

English Text: Dietary day one sample weight

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
587.82468143 to 338460.18501	Range of Values	9349	9349	
.	Missing	601	9950	

WTDR2D	Target
	B(0 Yrs. to 150 Yrs.)
Hard Edits	**SAS Label**
	Dietary two-day sample weight

English Text: Dietary two-day sample weight

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
790.46780496 to 358726.40791	Range of Values	8429	8429	
.	Missing	1521	9950	

DR2DRSTZ	Target
	B(0 Yrs. to 150 Yrs.)
Hard Edits	**SAS Label**
	Dietary recall status

English Text: Dietary recall status

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
1	Reliable and met the minimum criteria	8264	8264	
2	Not reliable or not met the minimum criteria	87	8351	
4	Reported consuming breast-milk	165	8516	
5	Not done	1434	9950	
.	Missing	0	9950	

DR2EXMER	Target
	B(0 Yrs. to 150 Yrs.)
Hard Edits	**SAS Label**
	Interviewer ID code

English Text: Interviewer ID code

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
11 to 97	Range of Values	8516	8516	
.	Missing	1434	9950	

DRABF	Target
	B(0 Yrs. to 150 Yrs.)
Hard Edits	**SAS Label**
	Breast-fed infant (either day)

English Text: Indicates whether the sample person was an infant who was breast-fed on either of the two recall days.

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
1	Yes	184	184	
2	No	9165	9349	
.	Missing	601	9950	

DRDINT	Target
	B(0 Yrs. to 150 Yrs.)
Hard Edits	**SAS Label**
	Number of days of intake

English Text: Indicates whether the sample person has intake data for one or two days.

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
1	Day 1 only	920	920	
2	Day 1 and day 2	8429	9349	
.	Missing	601	9950	

DR2DAY	Target
	B(0 Yrs. to 150 Yrs.)
Hard Edits	**SAS Label**
	Intake day of the week

English Text: Intake day of the week

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
1	Sunday	1442	1442	
2	Monday	1964	3406	
3	Tuesday	1792	5198	
4	Wednesday	2052	7250	
5	Thursday	441	7691	
6	Friday	631	8322	
7	Saturday	194	8516	
.	Missing	1434	9950	

DR2LANG	Target
	B(0 Yrs. to 150 Yrs.)
Hard Edits	**SAS Label**
	Language respondent used mostly

English Text: The respondent spoke mostly:

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
1	English	7481	7481	
2	Spanish	1099	8580	
3	English and Spanish	87	8667	
4	Other	2	8669	
.	Missing	1281	9950	

	DR2MNRSP	Target
		B(0 Yrs. to 150 Yrs.)
	Hard Edits	SAS Label
		Main respondent for this interview

English Text: Who was the main respondent for this interview?

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
1	SP	6083	6083	
2	Mother of SP	2089	8172	
3	Father of SP	106	8278	
4	Wife of SP	40	8318	
5	Husband of SP	6	8324	
6	Daughter of SP	13	8337	
7	Son of SP	3	8340	
8	Grandparent of SP	39	8379	
9	Friend, Partner, Non Relative	4	8383	
10	Translator, not a HH member	0	8383	
11	Child care provider, Caretaker	4	8387	
12	Other Relative	36	8423	
14	Other specify	1	8424	
77	Refused	0	8424	
99	Don't know	3	8427	
.	Missing	1523	9950	

DR2HELPD	Target
	B(0 Yrs. to 150 Yrs.)
Hard Edits	**SAS Label**
	Helped in responding for this interview

English Text: Who helped in responding for this interview

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
1	SP	318	318	
2	Mother of SP	286	604	
3	Father of SP	52	656	
4	Wife of SP	162	818	
5	Husband of SP	21	839	
6	Daughter of SP	14	853	
7	Son of SP	3	856	
8	Grandparent of SP	13	869	
9	Friend, Partner, Non Relative	5	874	
10	Translator, not a HH member	6	880	
11	Child care provider, Caretaker	11	891	
12	Other Relative	38	929	
13	No one	7474	8403	
14	Other specify	0	8403	
77	Refused	0	8403	
99	Don't know	5	8408	
.	Missing	1542	9950	

DR2TNUMF	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	Number of foods reported			

English Text: Total number of foods reported in the individual foods file

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
1 to 49	Range of Values	8429	8429	
.	Missing	1521	9950	

DR2TKCAL	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	Energy (kcal)			

English Text: Energy (kcal)

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 9119	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TPROT	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	Protein (gm)			
English Text: Protein (gm)				
English Instructions:				

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 354.03	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TCARB	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	Carbohydrate (gm)			
English Text: Carbohydrate (gm)				
English Instructions:				

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 1416.53	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TSUGR	Target
	B(0 Yrs. to 150 Yrs.)
Hard Edits	**SAS Label**
	Total sugars (gm)

English Text: Total sugars (gm)

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 952.98	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TFIBE	Target
	B(0 Yrs. to 150 Yrs.)
Hard Edits	**SAS Label**
	Dietary fiber (gm)

English Text: Dietary fiber (gm)

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 100.9	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TTFAT	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	Total fat (gm)			
English Text: Total fat (gm)				
English Instructions:				

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 361.86	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TSFAT	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	Total saturated fatty acids (gm)			
English Text: Total saturated fatty acids (gm)				
English Instructions:				

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 137.599	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TMFAT	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	Total monounsaturated fatty acids (gm)			
English Text: Total monounsaturated fatty acids (gm)				
English Instructions:				

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 169.237	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TPFAT	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	Total polyunsaturated fatty acids (gm)			
English Text: Total polyunsaturated fatty acids (gm)				
English Instructions:				

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 117.203	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TCHOL	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	SAS Label			
	Cholesterol (mg)			

English Text: Cholesterol (mg)

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 3428	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TATOC	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	SAS Label			
	Vitamin E as alpha-tocopherol (mg)			

English Text: Vitamin E as alpha-tocopherol (mg)

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 63.96	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TATOA	Target
	B(0 Yrs. to 150 Yrs.)
Hard Edits	**SAS Label**
	Added alpha-tocopherol (Vitamin E) (mg)

English Text: Added alpha-tocopherol (Vitamin E) (mg)

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 62.84	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TRET	Target
	B(0 Yrs. to 150 Yrs.)
Hard Edits	**SAS Label**
	Retinol (mcg)

English Text: Retinol (mcg)

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 19389	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TVARA	Target
	B(0 Yrs. to 150 Yrs.)
Hard Edits	**SAS Label**
	Vitamin A, RAE (mcg)

English Text: Vitamin A as retinol activity equivalents (mcg)

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 19726	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TACAR	Target
	B(0 Yrs. to 150 Yrs.)
Hard Edits	**SAS Label**
	Alpha-carotene (mcg)

English Text: Alpha-carotene (mcg)

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 25710	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TBCAR	Target
	B(0 Yrs. to 150 Yrs.)
Hard Edits	**SAS Label**
	Beta-carotene (mcg)

English Text: Beta-carotene (mcg)

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 59688	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TCRYP	Target
	B(0 Yrs. to 150 Yrs.)
Hard Edits	**SAS Label**
	Beta-cryptoxanthin (mcg)

English Text: Beta-cryptoxanthin (mcg)

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 4746	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TLYCO	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	Lycopene (mcg)			
English Text: Lycopene (mcg)				
English Instructions:				

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 244578	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TLZ	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	Lutein + zeaxanthin (mcg)			
English Text: Lutein + zeaxanthin (mcg)				
English Instructions:				

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 54705	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TVB1	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	Thiamin (Vitamin B1) (mg)			
English Text: Thiamin (Vitamin B1) (mg)				
English Instructions:				

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 12.616	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TVB2	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	Riboflavin (Vitamin B2) (mg)			
English Text: Riboflavin (Vitamin B2) (mg)				
English Instructions:				

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 18.822	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TNIAC	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	Niacin (mg)			
English Text: Niacin (mg)				
English Instructions:				

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 158.858	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TVB6	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	Vitamin B6 (mg)			
English Text: Vitamin B6 (mg)				
English Instructions:				

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 27.448	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TFOLA	Target
	B(0 Yrs. to 150 Yrs.)
Hard Edits	**SAS Label**
	Total folate (mcg)

English Text: Total folate (mcg)

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 5451	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TFA	Target
	B(0 Yrs. to 150 Yrs.)
Hard Edits	**SAS Label**
	Folic acid (mcg)

English Text: Folic acid (mcg)

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 5252	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TFF	Target
	B(0 Yrs. to 150 Yrs.)
Hard Edits	**SAS Label**
	Food folate (mcg)

English Text: Food folate (mcg)

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 1320	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TFDFE	Target
	B(0 Yrs. to 150 Yrs.)
Hard Edits	**SAS Label**
	Folate, DFE (mcg)

English Text: Folate as dietary folate equivalents (mcg)

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 9131	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TCHL	Target
	B(0 Yrs. to 150 Yrs.)
Hard Edits	**SAS Label**
	Total choline (mg)

English Text: Total choline (mg)

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 1665	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TVB12	Target
	B(0 Yrs. to 150 Yrs.)
Hard Edits	**SAS Label**
	Vitamin B12 (mcg)

English Text: Vitamin B12 (mcg)

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 208.73	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TB12A	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	Added vitamin B12 (mcg)			
English Text: Added vitamin B12 (mcg)				
English Instructions:				

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 80.09	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TVC	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	Vitamin C (mg)			
English Text: Vitamin C (mg)				
English Instructions:				

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 1308.4	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TVK	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	Vitamin K (mcg)			

English Text: Vitamin K (mcg)

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 2363.8	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TCALC	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	Calcium (mg)			

English Text: Calcium (mg)

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
14 to 5374	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TPHOS	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	Phosphorus (mg)			
English Text: Phosphorus (mg)				
English Instructions:				

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 5460	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TMAGN	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	Magnesium (mg)			
English Text: Magnesium (mg)				
English Instructions:				

Code or Value	Description	Count	Cumulative	Skip to Item
4 to 1476	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TIRON	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	Iron (mg)			

English Text: Iron (mg)

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 129.41	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TZINC	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	Zinc (mg)			

English Text: Zinc (mg)

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
0.05 to 390.74	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TCOPP	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	Copper (mg)			
English Text: Copper (mg)				
English Instructions:				

Code or Value	Description	Count	Cumulative	Skip to Item
0.043 to 37.571	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TSODI	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	Sodium (mg)			
English Text: Sodium (mg) (adjusted for salt use in food preparation)				
English Instructions:				

Code or Value	Description	Count	Cumulative	Skip to Item
19 to 18372	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TPOTA	Target
	B(0 Yrs. to 150 Yrs.)
Hard Edits	**SAS Label**
	Potassium (mg)

English Text: Potassium (mg)

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 10419	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TSELE	Target
	B(0 Yrs. to 150 Yrs.)
Hard Edits	**SAS Label**
	Selenium (mcg)

English Text: Selenium (mcg)

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 867.2	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TCAFF	Target
	B(0 Yrs. to 150 Yrs.)
Hard Edits	**SAS Label**
	Caffeine (mg)

English Text: Caffeine (mg)

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 2578	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TTHEO	Target
	B(0 Yrs. to 150 Yrs.)
Hard Edits	**SAS Label**
	Theobromine (mg)

English Text: Theobromine (mg)

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 799	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TALCO	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	Alcohol (gm)			

English Text: Alcohol (gm)

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 214.5	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TMOIS	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	Moisture (gm)			

English Text: Moisture (gm)

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
55.32 to 12187.7	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TS040	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	SFA 4:0 (Butanoic) (gm)			

English Text: SFA 4:0 (Butanoic) (gm)

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 4.666	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TS060	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	SFA 6:0 (Hexanoic) (gm)			

English Text: SFA 6:0 (Hexanoic) (gm)

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 2.904	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TS080	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	SFA 8:0 (Octanoic) (gm)			

English Text: SFA 8:0 (Octanoic) (gm)

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 10.414	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TS100	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	SFA 10:0 (Decanoic) (gm)			

English Text: SFA 10:0 (Decanoic) (gm)

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 7.707	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TS120	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	SAS Label			
	SFA 12:0 (Dodecanoic) (gm)			

English Text: SFA 12:0 (Dodecanoic) (gm)

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 34.656	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TS140	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	SAS Label			
	SFA 14:0 (Tetradecanoic) (gm)			

English Text: SFA 14:0 (Tetradecanoic) (gm)

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 15.763	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TS160	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	SFA 16:0 (Hexadecanoic) (gm)			
English Text: SFA 16:0 (Hexadecanoic) (gm)				
English Instructions:				

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 67.868	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TS180	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	SFA 18:0 (Octadecanoic) (gm)			
English Text: SFA 18:0 (Octadecanoic) (gm)				
English Instructions:				

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 37.123	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TM161	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	MFA 16:1 (Hexadecenoic) (gm)			
English Text: MFA 16:1 (Hexadecenoic) (gm)				
English Instructions:				

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 9.659	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TM181	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	MFA 18:1 (Octadecenoic) (gm)			
English Text: MFA 18:1 (Octadecenoic) (gm)				
English Instructions:				

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 164.17	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TM201	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	MFA 20:1 (Eicosenoic) (gm)			
English Text: MFA 20:1 (Eicosenoic) (gm)				
English Instructions:				

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 5.775	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TM221	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	MFA 22:1 (Docosenoic) (gm)			
English Text: MFA 22:1 (Docosenoic) (gm)				
English Instructions:				

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 2.494	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TP182	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	PFA 18:2 (Octadecadienoic) (gm)			

English Text: PFA 18:2 (Octadecadienoic) (gm)

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 101.004	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TP183	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	PFA 18:3 (Octadecatrienoic) (gm)			

English Text: PFA 18:3 (Octadecatrienoic) (gm)

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 16.128	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TP184	Target
	B(0 Yrs. to 150 Yrs.)
Hard Edits	**SAS Label**
	PFA 18:4 (Octadecatetraenoic) (gm)

English Text: PFA 18:4 (Octadecatetraenoic) (gm)

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 0.584	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TP204	Target
	B(0 Yrs. to 150 Yrs.)
Hard Edits	**SAS Label**
	PFA 20:4 (Eicosatetraenoic) (gm)

English Text: PFA 20:4 (Eicosatetraenoic) (gm)

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 1.629	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TP205	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	PFA 20:5 (Eicosapentaenoic) (gm)			

English Text: PFA 20:5 (Eicosapentaenoic) (gm)

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 2.527	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TP225	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	PFA 22:5 (Docosapentaenoic) (gm)			

English Text: PFA 22:5 (Docosapentaenoic) (gm)

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 0.611	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2TP226	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	PFA 22:6 (Docosahexaenoic) (gm)			

English Text: PFA 22:6 (Docosahexaenoic) (gm)

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 4.36	Range of Values	8264	8264	
.	Missing	1686	9950	

DR2_300	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	Compare food consumed yesterday to usual			

English Text: Was the amount of food that {you/NAME} ate yesterday much more than usual, usual, or much less than usual?

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
1	Much more than usual	517	517	
2	Usual	6938	7455	
3	Much less than usual	1031	8486	
7	Refused	3	8489	
9	Don't know	27	8516	
.	Missing	1434	9950	

DR2_320Z	Target
	B(0 Yrs. to 150 Yrs.)
Hard Edits	**SAS Label**
	Total plain water drank yesterday (gm)

English Text: Total plain water drank yesterday - including plain tap water, water from a drinking fountain, water from a water cooler, bottled water, and spring water.

English Instructions: Calculated from water consumption records reported as part of the 24-hour dietary recall interview.

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 11376	Range of Values	8429	8429	
.	Missing	1521	9950	

DR2_330Z	Target
	B(0 Yrs. to 150 Yrs.)
Hard Edits	**SAS Label**
	Total tap water drank yesterday (gm)

English Text: Total tap water drank yesterday - including filtered tap water and water from a drinking fountain.

English Instructions: Calculated from tap water consumption records reported as part of the 24-hour dietary recall interview.

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 11376	Range of Values	8429	8429	
.	Missing	1521	9950	

DR2BWATZ	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	Total bottled water drank yesterday (gm)			

English Text: Total bottled water drank yesterday. (gm)

English Instructions: Calculated from bottle water consumption records reported as part of the 24-hour dietary recall interview.

Code or Value	Description	Count	Cumulative	Skip to Item
0 to 8217.77	Range of Values	8429	8429	
.	Missing	1521	9950	

DR2TWS	Target			
	B(0 Yrs. to 150 Yrs.)			
Hard Edits	**SAS Label**			
	Tap water source			

English Text: When you drink tap water, what is the main source of the tap water? Is the city water supply (community water supply); a well or rain cistern; a spring; or something else?

English Instructions:

Code or Value	Description	Count	Cumulative	Skip to Item
1	Community supply	5241	5241	
2	Well or rain cistern	1039	6280	
3	Spring	127	6407	
4	Don't drink tap water	1703	8110	
91	Other	6	8116	
99	Don't know	400	8516	
.	Missing	1434	9950	