

### **Dietary Interview Component**

Includes 24-Hour Dietary Recall Interview and Post-Recall Questionnaires

#### **Public Health Objectives:**

Dietary factors are associated with 5 of the 10 leading causes of death in the U.S. population. NHANES is the cornerstone of the National Nutrition Monitoring and Related Research Program (NNMRRP). Policy makers and researchers require NHANES dietary data to assess the quality and adequacy of the U.S. diet in relation to health parameters, to evaluate the impact of program changes including welfare reform, legislation, food fortification policy, and child nutrition programs, and to identify target groups for public health education and awareness programs. Dietary practices and behaviors are used to evaluate the adoption of the *Dietary Guidelines for Americans* and *Five-a-Day Program* recommendations.

The objective of the component is to estimate total intake of food energy (calories), nutrients, and non-nutrient food components from foods and beverages that were consumed during the 24-hour period prior to the interview (midnight to midnight). Following the dietary recall, a short questionnaire will be administered to ascertain whether the person's intake on the previous day was usual or unusual, the source of tap water consumed, use of salt, special diet use, and frequency of fish and shellfish consumptions during the past 30 days. Subsamples of examinees will be asked questions about recent health (1-11 year olds), recent pesticide exposure (6-7 year olds) and individual food security questions (must screen in from responses to Family Questionnaire food security section). These questions are included in **Attachment A**.

#### **Staff:**

Dietary interviewer.

#### **Protocol:**

##### **Methods:**

- All NHANES examinees are eligible for the dietary interview component. A computer-assisted dietary interview software program was developed for use in the survey. The dietary interviewer records detailed information about the foods and beverages reported. Instructions will be provided to the respondent orally in English and/or Spanish. Measurement aids and visuals including charts and drawings will be used by the respondent to quantify the foods and beverages that are reported. Data files are transmitted electronically to a coding center located offsite.
- A telephone follow-up dietary interview will be scheduled 3-10 days after their MEC exam for all the examinees. A set of measuring guides (including a USDA food model booklet, a ruler, a set of household spoons, and a set of measuring cups and measuring spoons), an appointment reminder card with the date and time of the scheduled interview, and a phone contact number will be given to the participants at the end of their MEC dietary interview. The phone follow-up interview will be conducted using the same dietary interview system as used in the MEC and will be made from a telephone center located offsite.
- The interviewers will perform data retrieval by telephone when the information provided by the respondent or a proxy is incomplete; the interviewers will obtain permission from the SP or proxy to conduct data retrieval.
- Each week, dietary interviewers are asked to audio-tape an interview and send it back to the home office for review (approximately 5% of each interviewer's work). The date and session of the taped interview are randomly selected and communicated to the interviewers via email. Home office staffs will review the audio tape to monitor the quality of the interview and provide written feedback to the interviewer. Prior to the taping, interviewers will ask permission and obtain a written informed consent from the SP. If the SP is 17 years or younger, a parental consent will also be obtained. A verbal permission will also be recorded in the audio-tape once the taping begins. At the end of the taping, permission for keeping the audiotape will be

obtained from the SP. If the SP chooses not to allow the audiotape to be kept, the audiotape will be immediately destroyed in the presence of the SP. All audiotapes will be erased after the quality control review process has been completed by survey staff.

**Time Allotment:**

Depending on the types and numbers of foods reported in the dietary recall, the length of the interview ranges from 15-30 minutes per interview.

**Health Measures:**

Not applicable

**Eligibility:**

All survey participants are eligible for the dietary interview component. Translators may assist respondents when needed, and proxy reporting is permitted.

**Exclusion Criteria:**

The only circumstances that would lead to exclusion would be in instances when communication or cognitive difficulties make it impossible for the participant to provide the necessary information, and a proxy reporter is not available to complete the interview.

**Justification for using vulnerable populations:**

- Minors are included in this component because they are an important target population group. Dietary data are linked to other household interview and health component data and are used to track changes that occur in food and nutrient intakes over time.
- There is no reason to exclude mentally impaired or handicapped individuals because there is no contraindication.

**Risks:**

There is no risk associated with this component.

**Report of Findings:**

No findings are reported to respondents.

**ATTACHMENT A. POST-RECALL QUESTIONNAIRE - DRQ**  
**Target Group: SPs Birth + (Questions grouped by age categories)**

**NHANES III**

REC.155 Was the amount of food that {you/NAME} ate yesterday much more than usual, usual, or much less than usual?

- MUCH MORE THAN USUAL..... 1
- USUAL.....2
- MUCH LESS THAN USUAL .....3
- REFUSED.....7
- DON'T KNOW.....9

**CSFII**

REC.265 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?

- COMMUNITY WATER ..... 1
- A WELL OR RAIN CISTERN..... 2
- A SPRING ..... 3
- NEVER DRINK TAP WATER ..... 4
- REFUSED ..... 7
- DON'T KNOW ..... 9
- OTHER (SPECIFY) ..... 91

[RECORD Drinking fountain AS COMMUNITY WATER SUPPLY.]

**NHANES III**

REC.325 Now I'll be asking some questions about {your/NAME's} use of table salt. What type of salt {do you/does NAME} usually add to {your/his/her} food at the table? Would you say it is ordinary or seasoned salt, lite salt, or a salt substitute?

- ORDINARY, SEA, SEASONED, OR OTHER FLAVORED SALT  
[includes regular iodized salt,  
sea salt and seasoning salts  
made with regular salt] ..... 1
- LITE SALT ..... 2
- SALT SUBSTITUTE ..... 3
- NONE ..... 4 (REC.335)
- REFUSED ..... 7 (REC.335)
- DON'T KNOW ..... 9 (REC.335)

**NHANES III**

REC.330 How often {do you/does NAME} add {REC325 ANSWER} to {your/his/her} food at the table? Is it rarely, occasionally, or very often?

- RARELY, ..... 1
- OCCASIONALLY ..... 2
- VERY OFTEN ..... 3
- REFUSED ..... 7
- DON'T KNOW ..... 9

**CSFII**

REC.335 How often is ordinary salt or seasoned salt added in cooking or preparing foods in your household? Is it never, rarely, occasionally, or very often?

- NEVER ..... 1
- RARELY ..... 2
- OCCASIONALLY ..... 3
- VERY OFTEN ..... 4
- REFUSED ..... 7
- DON'T KNOW ..... 9

[THIS QUESTION APPLIES ONLY TO USE OF ORDINARY SALT OR SEASONED SALT AND NOT TO LITE SALT OR SALT SUBSTITUTES.]

**CSFII**

REC.340

{Are you/Is NAME} currently on any kind of diet, either to lose weight or for some other health-related reason?

- YES ..... 1
- NO ..... 2 (Box 1)
- REFUSED ..... 7 (Box 1)
- DON'T KNOW ..... 9 (Box 1)

**CSFII**

REC.345

What kind of diet {are you/is NAME} on?

[READ AS NEEDED: Is it a weight loss or low calorie diet; low fat or cholesterol diet; low salt or sodium diet; diabetic diet; or another type of diet?]

- WEIGHT LOSS OR LOW CALORIE DIET ..... 1
- LOW FAT OR CHOLESTEROL DIET ..... 2
- LOW SALT OR SODIUM DIET ..... 3
- SUGAR FREE OR LOW SUGAR DIET ..... 4
- LOW FIBER DIET ..... 5
- HIGH FIBER DIET ..... 6
- DIABETIC DIET ..... 7
- LOW CARBOHYDRATE DIET ..... 8
- HIGH PROTEIN DIET ..... 9
- WEIGHT GAIN DIET ..... 10
- OTHER ..... 91
- (SPECIFY) \_\_\_\_\_
- REFUSED ..... 77
- DON'T KNOW ..... 99

**BOX 1**

IF SP < 1 YEAR OLD, GO TO BOX 2.  
OTHERWISE, CONTINUE.

**NHANES 1999**

DRQ.361

Please look at this list of fish. During the past 30 days, did you eat any types of fish listed on this card? Include any foods that had fish in them such as sandwiches, soups, or salads.

- YES ..... 1
- NO ..... 2 (DRQ.380)
- REFUSED ..... 7 (DRQ.380)
- DON'T KNOW ..... 9 (DRQ.380)

**NHANES 1999**

DRQ. 370

During the past 30 days, which types of fish did you eat and how many times did you eat them?

Type listed: breaded fish products, tuna (canned or fresh), bass, catfish, cod, flatfish, haddock, mackerel, perch, pike, pollock, porgy, salmon, sardines, sea bass, shark, swordfish, trout, walleye, other type of fish and unknown type of fish.

Interviewer instruction:

Check each type of shellfish the SP reports eating, and then ask and record the number of times each type was eaten.

**NHANES 1999**

DRQ.380 Please look at this list of shellfish. During the past 30 days, did you eat any types of shellfish listed on this card? Include any foods that had shellfish in them such as sandwiches, soups, or salads.

- YES ..... 1
- NO ..... 2 (Box 2)
- REFUSED ..... 7 (Box 2)
- DON'T KNOW ..... 9 (Box 2)

**NHANES 1999**

DRQ. 390 During the past 30 days, which types of shellfish did you eat and how many times did you eat them?

Type listed: clams, crab, crayfish (crawfish), lobster, mussels, oysters, scallops, shrimp, other shellfish (for example, octopus, squid) and unknown type of shellfish.

Interviewer instruction:

Check each type of shellfish the SP reports eating, and then ask and record the number of times each type was eaten.

**BOX 2**

If the response to FSQ.032 'A', 'B', 'C', 'D' or 'E' is 'often true' (code 1), 'sometimes true' (code 2), 'refuse' (code 7), 'don't know' (code 9), continue with Box 3.  
Otherwise, go to Box 5.

**BOX 3**

If SP 16 years or older, continue;  
If SP less than 12 years old, go to the second FSQ.421 listed.  
Otherwise, go to the end of the section.

**USDA-FNS**

FSQ.401 The next questions are about whether you were always able to afford enough food in the last 30 days.

In the last 30 days, did you cut the size of your meals because there wasn't enough money for food?

- Often ..... 1
- Sometimes ..... 2
- Never ..... 3
- Refused ..... 7
- Don't Know ..... 9

**USDA-FNS**

FSQ.411 In the last 30 days, did you skip meals because there wasn't enough money for food?

- Often ..... 1
- Sometimes ..... 2
- Never ..... 3
- Refused ..... 7
- Don't Know ..... 9

**USDA-FNS**

FSQ.421 In the last 30 days, did you eat less than you felt you should because there wasn't enough money for food?

- Often ..... 1
- Sometimes ..... 2
- Never ..... 3
- Refused ..... 7
- Don't Know ..... 9

**USDA-FNS**

FSQ.431 In the last 30 days, were you hungry but didn't eat because you couldn't afford enough food?

- Often ..... 1
- Sometimes ..... 2
- Never ..... 3
- Refused ..... 7
- Don't Know ..... 9

**USDA-FNS**

FSQ.440 In the last 30 days, did you lose weight because you didn't have enough money for food?

- Yes..... 1
- No ..... 2
- Refused ..... 7
- Don't Know ..... 9

**BOX A**

IF (FSQ401 OR FSQ411 OR FSQ421 OR FSQ431 = 1 or 2) OR IF (FSQ440=1),  
CONTINUE;  
OTHERWISE, GO TO THE END OF THE SECTION.

**USDA-FNS**

FSQ.451 In the last 30 days, did you not eat for a whole day because there wasn't enough money for food?

- Often ..... 1
- Sometimes ..... 2
- Never ..... 3
- Refused ..... 7
- Don't Know ..... 9

**BOX 4**

Go to the end of the section.

**USDA-FNS**

FSQ.421 The next questions are about whether you were always able to afford enough food for (NAME) in the last 30 days.

In the last 30 days, did (NAME) eat less than you felt (he/she) should because there wasn't enough money for food?

- Often ..... 1
- Sometimes ..... 2
- Never ..... 3
- Refused ..... 7
- Don't Know ..... 9

**USDA-FNS**

FSQ.401 In the last 30 days, did you cut the size of (NAME's) meals because there wasn't enough money for food?

- Often ..... 1
- Sometimes ..... 2
- Never ..... 3
- Refused ..... 7
- Don't Know ..... 9

**USDA-FNS**

FSQ.491 In the last 30 days, was (NAME) hungry but you just couldn't afford more food?

- Often ..... 1
- Sometimes ..... 2
- Never ..... 3
- Refused ..... 7
- Don't Know ..... 9

**USDA-FNS**

FSQ.501 In the last 30 days, did (NAME) skip a meal because there wasn't enough money for food?

- Often ..... 1
- Sometimes ..... 2
- Never ..... 3
- Refused ..... 7
- Don't Know ..... 9

**BOX B**

IF (FSQ421 OR FSQ401 OR FSQ491 OR FSQ501= 1 OR 2), CONTINUE;  
OTHERWISE, GO TO THE END OF THE SECTION.

**USDA-FNS**

FSQ.521 In the last 30 days, did (NAME) not eat for a whole day because there wasn't enough money for food?

- Often ..... 1
- Sometimes ..... 2
- Never ..... 3
- Refused ..... 7
- Don't Know ..... 9

**BOX 5**

IF SP 1-11 YEARS OLD, CONTINUE.  
OTHERWISE, GO TO THE END OF THE SECTION.

**NHIS ACN.350**

HSQ.500 The next questions are about {your/SP's} recent health during the 30 days outlined on the calendar.

Did {you/SP} have a head cold or chest cold that started during those 30 days?

- YES ..... 1
- NO ..... 2
- REFUSED ..... 7
- DON'T KNOW ..... 9

**NHIS ACN.360**

HSQ.510 Did {you/SP} have a stomach or intestinal illness with vomiting or diarrhea that started during those 30 days?

- YES ..... 1
- NO ..... 2
- REFUSED ..... 7
- DON'T KNOW ..... 9

**NHANES III (M)**

HSQ.520 Did {you/SP} have flu, pneumonia, or ear infections that started during those 30 days?

- YES ..... 1
- NO ..... 2
- REFUSED ..... 7
- DON'T KNOW ..... 9

**BOX 6**

IF SP 6-7 YEARS OLD, CONTINUE.  
OTHERWISE, GO TO THE END OF THE SECTION.

05PUQ.100 In the **past 7 days**, were any chemical products used in {your/his/her} home to control fleas, roaches, ants, termites, or other insects?

- YES ..... 1
- NO ..... 2
- REFUSED ..... 7
- DON'T KNOW ..... 9

05PUQ.110 In the **past 7 days**, were any chemical products used in {your/his/her} lawn or garden to kill weeds?

CODE 'NO' IF THE RESPONDENT SAYS S/HE DOES NOT HAVE A LAWN OR GARDEN.

- YES ..... 1
- NO ..... 2
- REFUSED ..... 7
- DON'T KNOW ..... 9