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.
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', 'E', or 'F' 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.525 listed. Otherwise, go to the end of the section.

USDA-FNS
FSQ.525 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 ever cut the size of your meals because there wasn't enough money for food?

Yes.................................1
No.................................2 (FSQ.531)
Refused.............................7 (FSQ.531)
Don't Know.......................9 (FSQ.531)

USDA-FNS
FSQ.528 Did that happen often, sometimes or just once or twice?

Often.................................1
Sometimes..........................2
Once or Twice..................3
Refused............................7
Don't Know......................9
USDA-FNS
FSQ.531 In the last 30 days, did you ever eat less than you felt you should because there wasn't enough money for food?

Yes...............................1
No.................................2 (FSQ.537b)
Refused..........................7 (FSQ.537b)
Don't Know......................9 (FSQ.537b)

USDA-FNS
FSQ.534 Did that happen often, sometimes or just once or twice?

Often.............................1
Sometimes.........................2
Once or Twice....................3
Refused...........................7
Don't Know......................9

USDA-FNS
FSQ.537b In the last 30 days, were you ever hungry but didn't eat because you couldn't afford enough food?

Yes.................................1
No.................................2 (FSQ.543b)
Refused..........................7 (FSQ.543b)
Don't Know......................9 (FSQ.543b)

USDA-FNS
FSQ.540b Did that happen often, sometimes or just once or twice?

Often..............................1
Sometimes.........................2
Once or Twice....................3
Refused...........................7
Don't Know......................9

USDA-FNS
FSQ.543b In the last 30 days, did you ever skip meals because there wasn't enough money for food?

Yes.................................1
No.................................2 (FSQ.549)
Refused..........................7 (FSQ.549)
Don't Know......................9 (FSQ.549)

USDA-FNS
FSQ.546b Did that happen often, sometimes or just once or twice?

Often..............................1
Sometimes.........................2
Once or Twice....................3
Refused...........................7
Don't Know......................9

USDA-FNS
FSQ.549 In the last 30 days, did you lose weight because you didn't have enough money for food?

Yes.................................1
No.................................2 (Box A)
Refused..........................7 (Box A)
Don't Know......................9 (Box A)
FSQ.552 Did that happen often, sometimes or just once or twice?

Often............................... 1
Sometimes...................... 2
Once or Twice................. 3
Refused .......................... 7
Don’t Know.................... 9

**BOX A**
IF (FSQ.525 OR FSQ.531 OR FSQ.537b OR FSQ.543b OR FSQ.549=1), CONTINUE; OTHERWISE, GO TO THE END OF THE SECTION.

FSQ.555 In the last 30 days, did you ever not eat for a whole day because there wasn't enough money for food?

Yes......................... 1
No............................ 2 (End of Section)
Refused ................... 7 (End of Section)
Don’t Know ............. 9 (End of Section)

FSQ.558 Did that happen often, sometimes or just once or twice?

Often............................... 1
Sometimes...................... 2
Once or Twice................. 3
Refused .......................... 7
Don’t Know.................... 9

**BOX 4**

Go to the end of the section.

FSQ.525 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 you ever cut the size of (NAME’s) meals because there wasn’t enough money for food?

Yes......................... 1
No............................ 2 (FSQ.531)
Refused ................... 7 (FSQ.531)
Don’t Know ............. 9 (FSQ.531)

FSQ.528 Did that happen often, sometimes or just once or twice?

Often............................... 1
Sometimes...................... 2
Once or Twice................. 3
Refused .......................... 7
Don’t Know.................... 9
**USDA-FNS**

**FSQ.531**  In the last 30 days, did (NAME) ever eat less than you felt (he/she) should because there wasn't enough money for food?

- Yes...................... 1
- No ......................... 2 (FSQ.537a)
- Refused .................. 7 (FSQ.537a)
- Don’t Know ............. 9 (FSQ.537a)

**USDA-FNS**

**FSQ.534**  Did that happen often, sometimes or just once or twice?

- Often.................... 1
- Sometimes.............. 2
- Once or Twice......... 3
- Refused ............... 7
- Don’t Know........... 9

**USDA-FNS**

**FSQ.537a**  In the last 30 days, was (NAME) ever hungry but you just couldn't afford more food?

- Yes...................... 1
- No ......................... 2 (FSQ.543a)
- Refused .................. 7 (FSQ.543a)
- Don’t Know ............. 9 (FSQ.543a)

**USDA-FNS**

**FSQ.540a**  Did that happen often, sometimes or just once or twice?

- Often.................... 1
- Sometimes.............. 2
- Once or Twice......... 3
- Refused ............... 7
- Don’t Know........... 9

**USDA-FNS**

**FSQ.543a**  In the last 30 days, did (NAME) ever skip a meal because there wasn't enough money for food?

- Yes...................... 1
- No ......................... 2 (Box B)
- Refused .................. 7 (Box B)
- Don’t Know ............. 9 (Box B)

**USDA-FNS**

**FSQ.546a**  Did that happen often, sometimes or just once or twice?

- Often.................... 1
- Sometimes.............. 2
- Once or Twice......... 3
- Refused ............... 7
- Don’t Know........... 9

**BOX B**

IF (FSQ.525 OR FSQ.531 OR FSQ.537a OR FSQ.543a= 1), CONTINUE; OTHERWISE, GO TO THE END OF THE SECTION.
In the last 30 days, did (NAME) ever not eat for a whole day because there wasn't enough money for food?

- Yes ............................................. 1
- No ............................................. 2  (End of Section)
- Refused ...................................... 7  (End of Section)
- Don’t Know ................................. 9  (End of Section)

Did that happen often, sometimes or just once or twice?

- Often ........................................... 1
- Sometimes ................................... 2
- Once or Twice ............................... 3
- Refused ...................................... 7
- Don’t Know .................................. 9

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

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

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
In the past 7 days, were any chemical products used in your home to control fleas, roaches, ants, termites, or other insects?

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

In the past 7 days, were any chemical products used in your 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