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 recommendations by the Dietary Guidelines for Americans.

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 intake of alcoholic beverages (18+ years). 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.

- All dietary interviews are eligible to be digitally audio recorded. Home office staff will review the digital recordings to monitor the quality of the interview and provide written feedback to the interviewer (approximately 5% of each interviewer’s work will be reviewed). Verbal permission to record the interview will also be recorded. Parental consent for SPs 12-17 years will be obtained. If the SP refuses the recording, the interviewer will stop the recording. The audio recordings will be kept for three years and then destroyed.

**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 more than minimal risk associated with this component.

**Report of Findings:**
No findings are reported to respondents.
Alcohol question:

ALQ.160 is related to alcohol questions included in the MEC Interview, but in 2017-2018 only appears in the post-dietary recall questionnaire. It is included here to reduce the number of recall time periods a respondent is asked about during the MEC Interview, from 3 to 2 (i.e., previously, the time periods included a lifetime, last 12 months and last 30 day recall). Cognitive testing by NCHS’s Questionnaire Design Research Laboratory determined that it was less confusing for the respondent to have fewer recall time periods in the ALQ section of the MEC Interview; and therefore, ALQ.160 was included in the post-dietary recall. This addition to the post-dietary recall made sense because the post-dietary recall includes other 30-day recall questions. Additionally, to align the NHANES and NHIS survey instruments, the 2013-2014 question wording for ALQ.160 changed from a “2 hour or less” period of alcohol consumption to “on an occasion”. Both surveys use “on an occasion”.
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 salt, sea 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 this salt 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 sea salt added in cooking or preparing foods in your household? Is it never, rarely, occasionally, or very often?

<table>
<thead>
<tr>
<th>Response</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEVER</td>
<td>1</td>
</tr>
<tr>
<td>RARELY</td>
<td>2</td>
</tr>
<tr>
<td>OCCASIONALLY</td>
<td>3</td>
</tr>
<tr>
<td>VERY OFTEN</td>
<td>4</td>
</tr>
<tr>
<td>REFUSED</td>
<td>7</td>
</tr>
<tr>
<td>DON'T KNOW</td>
<td>9</td>
</tr>
</tbody>
</table>

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

**CSFII**

**REC.336** This next question is about [your/NAME's] use of salt at the table yesterday. Did (you/SP) add any salt to [your/her/his] food at the table yesterday? Salt includes ordinary salt, sea salt, lite salt, or a salt substitute.

<table>
<thead>
<tr>
<th>Response</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>1</td>
</tr>
<tr>
<td>NO</td>
<td>2    (REC.340)</td>
</tr>
<tr>
<td>REFUSED</td>
<td>7    (REC.340)</td>
</tr>
<tr>
<td>DON'T KNOW</td>
<td>9   (REC.340)</td>
</tr>
</tbody>
</table>

**CSFII**

**REC.337** What type of salt was it? (Was it ordinary salt, sea salt, lite salt, or a salt substitute?)

<table>
<thead>
<tr>
<th>Type of Salt</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORDINARY, SEA, SEASONED, OR OTHER FLAVORED SALT</td>
<td>1</td>
</tr>
<tr>
<td>[includes regular iodized salt, sea salt and seasoning salts made with regular salt]</td>
<td></td>
</tr>
<tr>
<td>LITE SALT</td>
<td>2</td>
</tr>
<tr>
<td>SALT SUBSTITUTE</td>
<td>3</td>
</tr>
<tr>
<td>REFUSED</td>
<td>7</td>
</tr>
<tr>
<td>DON'T KNOW</td>
<td>9</td>
</tr>
</tbody>
</table>

**CSFII**

**REC.340** {Are you/Is NAME} currently on any kind of diet, either to lose weight or for some other health-related reason?

<table>
<thead>
<tr>
<th>Response</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>1</td>
</tr>
<tr>
<td>NO</td>
<td>2    (Box 1)</td>
</tr>
<tr>
<td>REFUSED</td>
<td>7    (Box 1)</td>
</tr>
<tr>
<td>DON'T KNOW</td>
<td>9   (Box 1)</td>
</tr>
</tbody>
</table>

**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?]

<table>
<thead>
<tr>
<th>Diet Type</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEIGHT LOSS OR LOW CALORIE DIET</td>
<td>1</td>
</tr>
<tr>
<td>LOW FAT OR CHOLESTEROL DIET</td>
<td>2</td>
</tr>
<tr>
<td>LOW SALT OR SODIUM DIET</td>
<td>3</td>
</tr>
<tr>
<td>SUGAR FREE OR LOW SUGAR DIET</td>
<td>4</td>
</tr>
<tr>
<td>LOW FIBER DIET</td>
<td>5</td>
</tr>
<tr>
<td>HIGH FIBER DIET</td>
<td>6</td>
</tr>
<tr>
<td>DIABETIC DIET</td>
<td>7</td>
</tr>
<tr>
<td>LOW CARBOHYDRATE DIET</td>
<td>8</td>
</tr>
<tr>
<td>HIGH PROTEIN DIET</td>
<td>9</td>
</tr>
<tr>
<td>WEIGHT GAIN DIET</td>
<td>10</td>
</tr>
<tr>
<td>GLUTEN-FREE OR CELIAC DIET</td>
<td>11</td>
</tr>
<tr>
<td>RENAL OR KIDNEY DIET</td>
<td>12</td>
</tr>
<tr>
<td>OTHER</td>
<td>91</td>
</tr>
<tr>
<td>(SPECIFY)</td>
<td></td>
</tr>
<tr>
<td>REFUSED</td>
<td>77</td>
</tr>
<tr>
<td>DON'T KNOW</td>
<td>99</td>
</tr>
</tbody>
</table>
**Box 1**

IF SP < 1 YEAR OLD, GO TO THE END OF THE SECTION. 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.

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**Box 2**

IF SP 1-11 YEARS OLD, CONTINUE. OTHERWISE, GO TO BOX 4.

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**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

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**BOX 3**

IF SP 6-7 YEARS OLD, CONTINUE.
OTHERWISE, GO TO BOX 4.

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**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

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**BOX 4**

IF SP ≥ 18 YEARS, CONTINUE.
OTHERWISE, GO TO THE END OF THE SECTION.
The next question is about drinking alcoholic beverages. Included are liquor (such as whiskey or gin), beer, wine, wine coolers, and any other type of alcoholic beverage. By a drink, I mean a 12 oz. beer, a 5 oz. glass of wine, or one and a half ounces of liquor.

HANDCARD ALQ1 (Here are some examples of an alcoholic drink)

ALQ.160 Considering all types of alcoholic beverages, during the past 30 days, how many times did {you/SP} have (DISPLAY NUMBER) or more drinks on an occasion?

ENTER '0' FOR NEVER.

CAPI INSTRUCTION:
IF SP = MALE, DISPLAY = 5
IF SP = FEMALE, DISPLAY = 4

SOFT EDIT: IF RESPONSE IS > 60 TIMES, THEN DISPLAY “YOU SAID THAT IN THE PAST 30 DAYS, YOU HAD {DISPLAY NUMBER} OR MORE DRINKS OF ANY KIND OF ALCOHOL ON AN OCCASION, (DISPLAY QUANTITY) TIMES. IS THAT CORRECT”?

|___|___|
ENTER QUANTITY

REFUSED ..................................................... 777
DON'T KNOW ................................................ 999