

## **The National Health and Nutrition Examination Survey (NHANES)**

### **Reporting 24-Hour Dietary Supplement and Antacids Use**

#### **Overview**

NHANES currently collects data on study participants' use of dietary supplements, in the past 30 days, during the Dietary Supplements Section (DSQ) in the household interview. Asking about dietary supplement use as part of the 24-hour dietary recall interview will provide researchers the ability to combine 24-hour dietary nutrient intake from foods with 24-hour nutrient intake from dietary supplements. This will allow more precise estimates of total nutrient intake. The target group for the questions is the examined sample, all ages, identical to the target group for the 24-hour dietary food recall.

Collection of 24-hour dietary supplement and antacid use was pilot tested as part of the 24-hour dietary recall interview in the Mobile Examination Center (MEC) and as part of the telephone dietary recall from April-July, 2006. Changes based on the pilot testing from the ERB pilot test protocol approved on March 16, 2006 are bolded in the protocol.

Of the 325 respondents in the pilot study, 8% in the MEC 24-hour dietary recall interview and 6.6% in the phone follow-up 24-hour dietary recall interview reported taking a supplement that was not reported in the DSQ household interview. This new component had added minimal extra time to the duration of the dietary recall, with the average time for the component being about 1 minute.

#### **Changes based on the pilot study**

The pilot study helped to develop the final protocol to be used in NHANES 2007-2008. Some changes were made to the protocol based on what worked with the pilot study, such as rewording of questions for easier flow and more probes to help interviewers collect better quality data.

Most of the changes that were made to the questions were slight rewording to make them consistent with wording of questions during the 24-Hour Food Recall. A probe was added to the question that asks how much was taken, to describe units and help to ensure they are collected without confusion. Appendix A contains all the questions and dialog. The reworded questions and probe are in bold print.

## **Procedures and Methods**

### **Study Sample**

All examined subjects responding to the Dietary Recall component will be eligible for the dietary supplement and antacid use questions.

### **NHANES Operations**

Dietary supplement and antacid questions will be added to the MEC 24-Hour Dietary Recall component and the Phone Follow-up 24-Hour Dietary Recall component. The MEC dietary interview rooms (2 MEC interview rooms per MEC) afford privacy and are currently used for the 24-Hour Dietary Recall. Data collection for the dietary supplement and antacid questions will be administered by the dietary interviewers.

### **Participant Burden for Respondents**

The total respondent burden for the dietary supplement and antacid questions mainly depends upon the number of supplements reported in the household interview and new supplements reported in the 24-hour recall. In the pilot, the average time for this new component was 1 minute.

### **Interviewer Training**

The NHANES MEC and phone interviewers are already trained to ask questions on what the participant reported eating during the past 24 hours. Questions about supplement use will be similar. [Appendix A](#) depicts the questions and the interview flow for both the MEC and follow-up phone interview components of this pilot study. Interviewers will be trained on all procedures prior to beginning the pilot study.

### **Data Production**

Supplements and antacids that are reported during the MEC and follow-up phone interviews will be processed and reviewed by the co-investigators. Data will be released in 2-year cycles.

## **Study population**

### **Informed Consent Procedures for Respondents**

Survey participants will read and sign the appropriate informed consent/permission/assent forms, but no changes will be made to the survey forms. Parental consent will be obtained for minors participating in the survey.

### **Protection of Human Subjects**

The investigators have used the guidance in 46.116 (a) in developing the information provided to all potential study participants. The interviewers will be instructed to ensure that the information is understood and that the person agrees to participate in the survey before proceeding. Informed consent/permission/assent forms state that participation is voluntary.

### **Justification for Using Vulnerable Populations**

Pregnant women and minors are included in this study because they are part of the target population which includes all NHANES participants. The risks associated with the questions present no more than minimal risk to subjects.

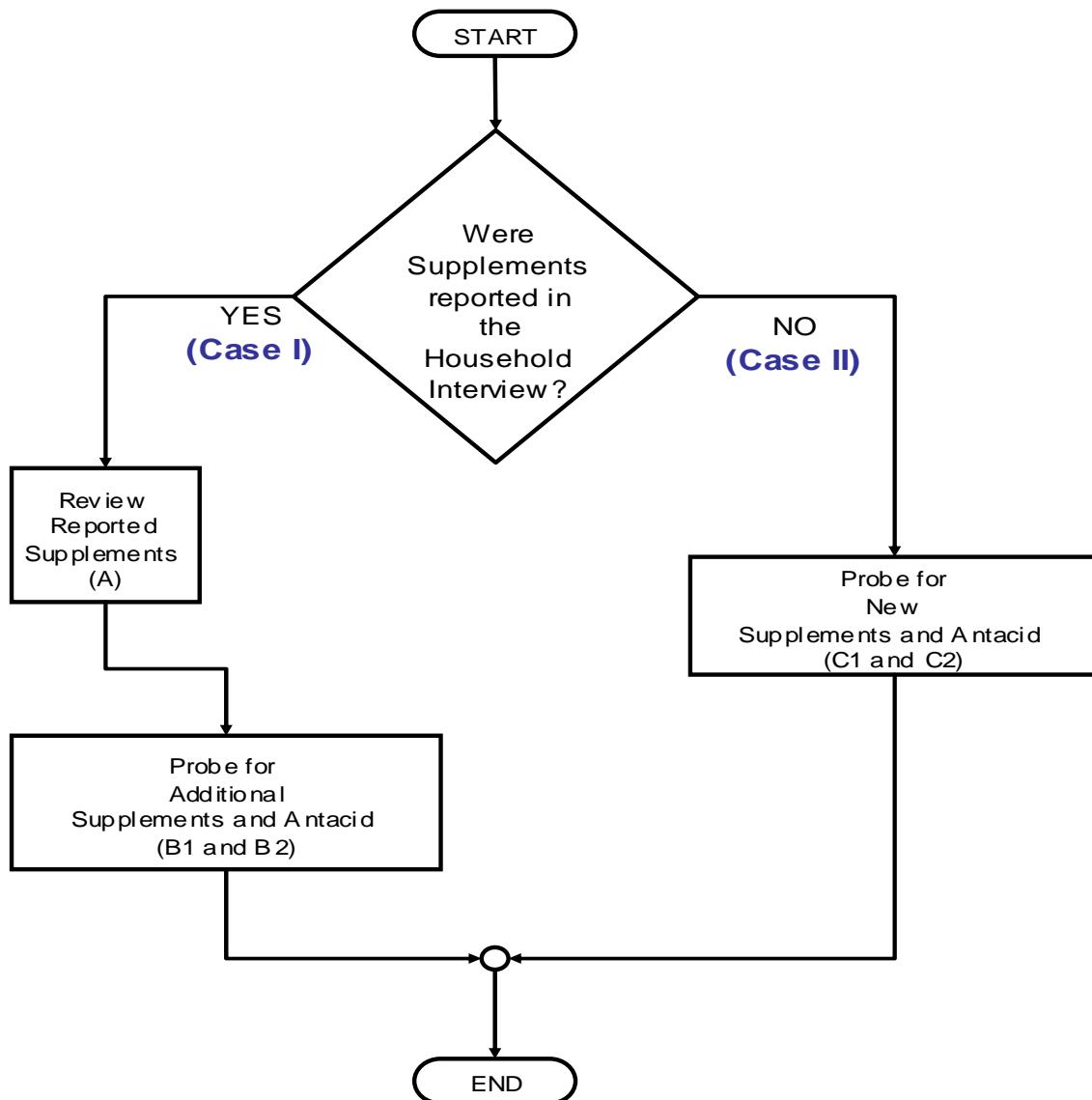
### **Confidentiality Measures**

The protection of individual privacy and confidentiality of personal information is a primary concern to all the programs of NCHS. The survey is conducted with the strongest possible assurances of confidentiality. These include the protections of the Privacy Act of 1974 and an even more rigorous protection of all NCHS data outlined in Section 308(d) of the Public Health Service Act (42 U.S.C. 242m). Confidentiality standards are reinforced with all survey staff. All survey staff are required to sign an NCHS non-disclosure affidavit and watch an NCHS confidentiality training video.

### **Data Management**

The technical issues related to data storage and transmittal will be coordinated with information technology staff at NCHS and Westat. The training for the information technology staff will reinforce the procedures for the processing and storing of confidential data. The contract agreement requires a guarantee from the contractor that data will not be tabulated, analyzed, released or used without prior written approval from the NCHS project officer and the NCHS Confidentiality Officer.

## Appendix A: Script/Questions for 24-Hour Dietary Supplements/Antacids Interview



NOTES:

Probe for New Supplements process flow is identical for Case I and Case II; question content is the only difference.

**NOTE: Questions that have been reworded are in bold**

Information will be obtained on all vitamins, minerals, herbals and other dietary supplements that were consumed during a 24-hour time period (midnight to midnight). The information that is obtained for dietary supplements includes the following:

- a. Verifying that dietary supplement(s) reported during the Dietary Supplement Section in the Household Interview was also taken during the 24-Hour time period. – Dietary supplement information is collected during the SP Household Interview. The interviewer will first ask if the supplements reported during the Household Interview were also taken during the 24-Hour time period.
- b. Dietary supplement Name – The name of any new/additional dietary supplements are typed and selected from a list of dietary supplement names.
- c. Amount of dietary supplement taken – The amount of dietary supplement consumed by the respondent during the 24-Hour time period.

24-Hour Dietary Supplement Recall Interview Scripts – In-Person Interview:

1. Script for respondents that reported taking a dietary supplement or antacid during the Dietary Supplements Section in the Household Interview:

**“The next questions are about {your/SPs} use of dietary supplements, vitamins, minerals and herbals all day yesterday, {day}, between midnight and midnight. This includes prescription and over the counter dietary supplements.**

During the interview in your home {you/SP reported taking} {supplement}.

**Did {you/SP} take this supplement yesterday {day}. (between midnight and midnight)?**

Was {supplement} a {form}?

You said {you/SP} took \_\_\_, is that correct? Was that a liquid or powder?

**Between midnight and midnight, how much did {you/SP} take?**

**It was also reported {you/SP} took {supplement}.**

**All day yesterday, {day}, between midnight and midnight, did {you/SP} take any other vitamins, minerals, herbals or other dietary supplements? Include any prescription and over the counter dietary supplements.**

What is the name of the supplement {you/SP} took?

**Between midnight and midnight, how much did {you/SP} take?**

Any others?

The next questions are about {your/SPs} use of non-prescription antacids.

During the interview in your home {you/SP reported taking} {antacid}.

**Did {you/SP} take this antacid yesterday (between midnight and midnight )?**

**Between midnight and midnight how much did {you/SP} take?**

It was also reported {you/SP} took {antacid}.

**All day yesterday, {day}, between midnight and midnight did {you/SP} take any other antacids?**

What is the name of the antacid {you/SP} took?

**Between midnight and midnight how much did {you/SP} take?**

Any others?"

2. Script for respondents that did not report taking a dietary supplement or antacid during the Dietary Supplement Section in the Household Interview:

**“The next questions are about {your/SPs} use of dietary supplements, including prescription and over the counter supplements. All day yesterday, {day}, between midnight and midnight did {you/SP} take any vitamins, minerals, herbals or other dietary supplements?**

What is the name of the supplement {you/SP} took?

**Between midnight and midnight how much did {you/SP} take?**

Any others?

**The next questions are about {your/SPs} use of non-prescription antacids All day yesterday, {day}, between midnight and midnight did {you/SP} take any antacids?**

What is the name of the antacid {you/SP} took?

**Between midnight and midnight how much did {you/SP} take?**

Any others?"

## 24-Hour Dietary Supplement Recall Interview Scripts – Telephone Interview:

Same as above, except respondent is asked to get their dietary supplements and read from the container the name of any new supplements they have taken since the 24-hour dietary supplement recall in-person interview.

1. Script for respondents that reported taking a dietary supplement or antacid during the Dietary Supplements Section in the Household Interview or during the 24-hour dietary supplement recall in-person interview:

**“The next questions are about {your/SPs} use of dietary supplements, vitamins, minerals and herbals all day yesterday, {day}, between midnight and midnight. This includes prescription and over the counter dietary supplements.**

During the interview in your home and our exam center {you/SP reported taking} {supplement}.

**Did {you/SP} take this supplement yesterday {day}. (between midnight and midnight)?**

Was {supplement} a {form}?

You said {you/SP} took \_\_\_, is that correct? Was that a liquid or powder?

**Between midnight and midnight, how much did {you/SP} take?**

It was also reported {you/SP} took {supplement}.

**All day yesterday, {day}, between midnight and midnight, did {you/SP} take any other vitamins, minerals, herbals or other dietary supplements? Include any prescription and over the counter dietary supplements.**

Can you please locate the containers for all the dietary supplements {you/SP} took?  
I will wait while you get them.

Can you please read to me all the words on the front label?

What is the name of the supplement {you/SP} took?

**Between midnight and midnight, how much did {you/SP} take?**

Any others?

The next questions are about {your/SPs} use of non-prescription antacids.

During the interview in your home and our exam center {you/SP reported taking} {antacid}.

**Did {you/SP} take this antacid yesterday (between midnight and midnight )?**

**Between midnight and midnight how much did {you/SP} take?**

It was also reported {you/SP} took {antacid}.

**All day yesterday, {day}, between midnight and midnight did {you/SP} take any other antacids?**

What is the name of the antacid {you/SP} took?

**Between midnight and midnight how much did {you/SP} take?**

Any others?"

2. Script for respondents that did not report taking a dietary supplement or antacid during the Dietary Supplement Section in the Household Interview or the 24-hour dietary supplement recall in-person interview :

**"The next questions are about {your/SPs} use of dietary supplements, including prescription and over the counter supplements. All day yesterday, {day}, between midnight and midnight did {you/SP} take any vitamins, minerals, herbals or other dietary supplements?**

Can you please locate the containers for all the dietary supplements {you/SP}took?  
I will wait while you get them.

Can you please read to me all the words on the front label?

What is the name of the supplement {you/SP} took?

**Between midnight and midnight how much did {you/SP} take?**

Any others?

**The next questions are about {your/SPs} use of non-prescription antacids All day yesterday, {day}, between midnight and midnight did {you/SP} take any antacids?**

What is the name of the antacid {you/SP} took?

**Between midnight and midnight how much did {you/SP} take?**

Any others?"

Probes (optional questions to clearly identify new products reported during 24-hour supplement recall)

1. Probes for collecting dietary supplement names

Multivitamin and/or Multimineral:

- “What is the brand name?”
- “Did it also include minerals like iron, zinc, or calcium?”
- “Iron only”
- “Was it a special type?(silver, women’s, men’s, prenatal, liquid)”

Single / double nutrient:

- “What is the brand name?”
- “How much (ingredient name) was in it?(or what was the strength of X)”

Other supplement type:

- “Please describe the label name or type of supplement”
- “What is the brand name?”

2. Probes for collecting antacid names

“What is the brand name?”

“Was it extra strength, regular strength, ultra, maximum strength?”

**3. Probes for collecting the quantity the respondent took – UNIT**

**“Was it a tablet, capsule, pill, caplet, softgel, or something else?”**