

BLOCK FOOD FREQUENCY QUESTIONNAIRE (FFQ) PROTOCOL

I. Introduction

Purpose: The primary purpose of the dietary questionnaire is to determine the participant's typical diet so that we can determine the amount of calcium, phosphorous, and protein eaten by the participants in an average week.

General issues: The dietary questionnaire is the dietary questionnaire developed for the National Center for Health Statistics by Dr. Gladys Block and Block Dietary Data Systems (BDDS). We have used a modified version of this questionnaire previously in SOF.

Administration: This FFQ will only be administered to Visit 6 clinic and home visit participants. It will not be administered to questionnaire only participants.

Results: Each participant who completes the full questionnaire will receive a summary page comparing basic aspects of her diet to RDA guidelines.

II. Specific issues for SOF Visit 6 use of BDDS questionnaire

o Instructions for participants

SOF will have a separate instruction page, telling participants how to complete the questionnaire. Specific instructions will include:

- cover page items
- time to complete
- time frame covered by questionnaire
- #2 pencil
- filling in the dots
- multivitamin skip routine
- completeness
- seasonality
- results
- other general instructions

o Cover page

Participants will not have to complete any information on the cover page, as this will be completed by the clinic prior to mailing (height and weight should be entered after measurement during the clinic visit). Age, sex, and id must be entered on the cover page. All the other information is optional, however, including height and weight will enable the program to give feedback to participants on their desirable weight.

o Filling in the dots

Several of the elderly, especially those with arthritic hands, had difficulty filling in the dots completely during the pilot study. Participants will be asked to fill in the dots as completely as they can. If necessary, the clinic staff should finish completely filling in the dot.

o Never eats a particular food

If a participant never or rarely (less than once per month) eats a particular type of food, the serving size should be left blank.

- o Multivitamin questions

Top of page 2 - if a participant has not taken any vitamins regularly over the past year, then she should skip the first 4-5 questions about vitamins and proceed with the section on eating habits. The form does not have an arrow or instructions guiding these participants so we will make this clear in the instruction sheet.

- o Questions on back page

When answering the questions on the last page, if a participant never eats meat or never eats that particular type of food, then they should leave the question blank.

- o Administration

This FFQ will only be administered to clinic and home visit participants. It will not be administered to questionnaire only participants.

- o Descriptions of specific food items

Block Dietary Data Systems (BDDS) has provided us with instructions for completing the questionnaire that includes description of each specific food item. These instructions are included as part of the FFQ protocol for the clinic's use. However, please realize that the specific food descriptions are merely to help you if a participant has a specific question. Don't worry about whether the participants are filling the form out with the correct descriptions in mind (this would be almost impossible to do without incredible burden), only refer to the description if a specific question comes up.

Exception - Cereal list: BDDS provides a list of cereals that are included in the fiber cereal category. We will send this list along with the questionnaire to the participants.

- o Do not fold the questionnaire.

Participants should also be informed not to fold the questionnaire.

III. General dietary protocol instructions:

The dietary questionnaire includes questions about the usual eating habits of the study participants during approximately the past year. The time frame is meant to be a little vague. It is not expected that a participant will be able to remember exactly what she ate during the past year. Rather, the idea is to establish a usual pattern - her current diet at this point in her life. A respondent may object that she "can't remember what I ate yesterday; how could I tell you what I ate in the past year?" Make clear that the idea is not to remember exactly, but to think about the usual pattern or frequency. She does not have to remember how many times she had eggs in the past year. Instead, what she should be able to tell you with reasonable accuracy is that she has eggs "about twice a week."

If parts of the diet questionnaire are incomplete:

- o Ask the participant if she had difficulty answering these questions, and try to find out the nature of the difficulty. This will help focus the explanation of what information is needed from the participant.
- o Go over the instructions and the sample questions in the booklet with the participant.
- o Help the participant complete the dietary questionnaire in interview format.

o Alternatively, if the participant clearly understands what to do, you may ask her to complete the dietary questions in self-administered format.

Some participants will have completed most, but not all of the items. Go over the missing items with the participant in interview format and help her complete them.

Optional script when using interview format

"These questions ask about how often you eat certain foods and about how much of them you eat when you do eat them. I want to know, on average, how many times per day, per week, per month or per year you eat each food. I will also ask you to compare the portion you usually eat with a typical medium portion size."

"Let's try an example together. Can you tell me, please, how often you drink apple juice? How many times per day, per week, per month or per year?"

(Pause) "When you do drink apple juice, how large is your portion in comparison with a medium size glass of apple juice (about 8 ounces)?"

Show the participant how you would record her answer, and then go over the rest of the examples for apple juice.

Specific issues and problems

1. Food frequencies

o The respondent is to indicate the number of times per day, per week, or per month that they eat the item.

o Foods that are eaten rarely, never, or less than once a month should be recorded as "0 times per _____" and not simply skipped over. The serving size should be left blank if they never or rarely (less than once per month) eat a food.

o When two or more foods are included in the same category, i.e. "bread, rolls, crackers," they are to be thought of altogether, i.e. "subject eats bread or rolls or crackers 2 or 3 times every week." In situations where one food in the category is eaten very frequently, i.e. bread twice a week, and the other very infrequently, i.e. crackers twice a year, then record the frequency for the one eaten more often.

o If a participant eats a food much more frequently at one time of the year than another, you need to calculate a weighted average of their consumption. For example, if she drank milk 7 times a week during the four winter months (hot chocolate), but only 3 times a week during the rest of the year, multiply 7 (times a week) x 4 (weeks per month) x 4 (months) = 112 times. Then multiply 3 (times a week) x 4 (weeks per month) x 8 (months) = 96 times. Add the two (112 + 96 = 208 times during the year). To get an average frequency, you can then divide 208 (times per year) by 52 (weeks per year) which gives about 4 times per week. Enter 4 per week as the average frequency.

Similarly, if a participant eats hot cereal 2 times a week for 6 months only, then this is 1 time a week for the past 12 months.

o If the participant says that the frequency "varies" unsystematically from time to time, ask them to choose an average. For example, say: "If you had to choose just one pattern as typical for you, how often would you say you eat [FOOD]?""

2. Serving size

o Serving sizes are obtained by comparison with a typical medium serving, which is listed next to the food on the questionnaire.

o For all the food items listed, a small portion is about one-half the medium serving size shown, or less. A large portion is about one and one-half times as much or more. Eggs can be used as a simple example of what large and small portion sizes are in comparison to a medium; one egg is considered "small" and three eggs would be considered "large".

o If the respondent says she doesn't know what the medium portion size is (e.g. 8 ounces of milk) in relation to what she usually has, just check large if she usually has substantially more than other people her age, and small if she usually has substantially less than other people her age.

o A respondent who checks the same serving size for every food may not be thinking very hard about her answers. The interviewer should query her about the portion sizes to see if the portion size checked is really her best estimate. However, it is not uncommon for most (e.g. 70%) of portion sizes even in a well thought through questionnaire to be "medium." Only if ALL the portion sizes are the same is there any cause for concern.

3. Do not expand the categories to include similar foods, e.g. cheese and cheese spreads do not include cottage cheese because cottage cheese has a much lower calcium content per serving. As another example, egg whites are not equivalent to whole eggs, because the whites of large eggs have only 3 mg of calcium while the yolks have about 27 mg of calcium.

Certain foods that are very similar to the food on the list, and have the about the same calcium content, such as nonfat dairy products, can be included. These foods are limited to the following:

o Dairy products

- 1) lowfat cheese can be included with "cheeses" (Nonfat cheese should not be
- 2) nonfat milk can be included with "milk"
- 3) nonfat yogurt and frozen yogurt can be included with "yogurt"

included

o Breads

- 1) diet breads can be included with "breads"

o Sweets

- 1) ice milk (194 mg of calcium per cup) can be included with "ice cream" (204 mg calcium per cup)

4. Summary review of diet questionnaire

- o Review the questionnaire for omissions (skipped foods, missing information) and other special problems.
- o All frequencies should be filled in. Portion size should be completed for all foods except those eaten rarely or never or less than once per month. If the participant simply can't estimate a portion size or frequency, leave it blank and write over the answer space "DON'T KNOW."
- o Foods that are eaten rarely, never, or less than once a month should be recorded as "0 times per ____" and not simply skipped over.
- o Check for unreasonable frequencies (i.e. ice cream 5 times per day) and verify them with the participant.
- o If the answers are all the same (i.e. all "1 time per day" or all "medium" servings) go over each answer with the participant until it can be determined that the answers are valid.
- o Check to be sure that milk has not been double counted. Milk poured on cereal should not be double counted as milk consumed as a beverage, and vice versa.

IV. Edit system

The Block Dietary Edit System will check for the following:

- o too many food questions skipped
- o too many coded using same frequency column
- o too many coded as "small"
- o too many coded as "medium"
- o too many coded as "large"
- o too many foods per day
- o too few foods per day
- o questionably high food frequencies

Although these edits will be checked by the system, try to catch them while reviewing the questionnaire in the clinic so that the participant can clarify any discrepancy immediately.

V. Block Instructions

For further instructions on completing the Block FFQ, refer to the Block Dietary Data System handout on "Helping Respondents to Self-Administer the Block 95 Food Questionnaire".

VI. Shipments / Data system

First shipment: Send one month's worth (approx. 60 or more) of FFQs to Block Dietary Data Systems (BDDS) at the address below.

Future shipments should be made in batches of 125 or more (approx. 2 months worth).

Mail completed and edited FFQs to:

Block Dietary Data Systems
2634 LeConte Avenue
Berkeley, CA 94709
Phone or fax: 510-704-8514

Include a short note indicating the study and clinic, and to whom the questionnaires and edit reports should be mailed including a contact name, address, and phone #.

Edit reports: Block Dietary Data Systems (BDDS) will scan the forms in batches of 500 or more (combining clinics). A one combined edit report will be sent to each clinic approximately every 2 months. These reports will be on IBM disk, in ascii format. They can be read by any IBM word processing program (if you need help reading the file, call Gabrielle Milani at the CC). Results for each clinic will be grouped together so that you can print out the report for your clinic only. At present, you do not need to follow up on these edits with the participants. The report will just let us know if there are any participants whose data we might want to throw out as unbelievable (this should be rare). The BDDS is designed to just analyze the data once, using common assumptions to adjust for gross errors as necessary during the analysis. Hence, since the data are only analyzed once (the first time you send the data in), it is very important for the FFQ to be reviewed as best as possible for completeness and accuracy prior to sending it to BDDS.

For the first month, Dana Seeley or Katie Stone will be reviewing the edits at the CC. If we feel that the edits are jeopardizing the validity of the data, then we will revisit the edit process.

Dietary data: BDDS will send the CC an ascii file for each clinic approximately every 2 months that contains the dietary data for all participants. These are the data that will be used in analysis. The CC will generate a one page summary report for participants that will compare her diet to the RDA on several key nutrients. The CC will send these reports to the clinics monthly for distribution to the participants.