



INSTRUCTIONS FOR THE DIETARY INTAKE (DTI) FORM

I. GENERAL INSTRUCTIONS

The Dietary Intake Form is completed during the interview portion of the participant's clinic visit. The interviewer must be certified and should be familiar with and understand the document titled "General Instructions For Completing Paper Forms" prior to completing this form. ID Number, Contact Year, and Name are completed as described in that document.

The physical setting should be quiet and private to put the participant at ease. The standard food unit models, help screens, instructions, and participant response cards (RC) must be readily accessible. The participant's form is checked for completeness of I.D.

Note: The clinic staff receptionist should alert the interviewer in advance if participant is illiterate or has any problem in reading. In those instances, response cards must be read each time by the interviewer.

Greet the participant cordially. Explain that the purpose of the interview is to obtain information about what they usually eat and drink, that there will be questions on specific foods and portion sizes, and that you need to find out how often, on average, the specified amount was eaten or drunk during the past year. Explain that any difference from the stated portion size must be reported only if it is at least twice as much or half as much. Frequency of eating will be based on number of times either per day, week or month. Assure the participant that he/she should feel free to have instructions repeated or to ask questions.

The interviewer must show an interest in the interview, using a pleasant non-judgmental tone and posture. In introducing the questionnaire the interviewer may use his/her own words but must cover the relevant points. The suggested statement follows:

"Hello (participant's name). My name is _____. In this part of the clinic visit we want to obtain information on your usual eating habits. We will go over specific foods by groups. I'll name a food and a portion size and you tell me how often, on average, you ate that during the past year."

"If your portion was much different from the amount I say, please tell me if it was at least twice as much, or half the portion size or less. We have a few sizes of cups and glasses here for reference.

Here are the choices for "how often" (show RC 1). The choices are number of times a day or week or month. Please answer with the appropriate letter. For example, "once a day" would be "D". If you ate or drank something less than twelve times a year, that would be the same as "less than once a month," which is "I".

It is important that your answer be brief in order to save time, but we want you to be as accurate as possible. Feel free to ask questions or have me repeat instructions if I am not being clear. First, the dairy group: In the past year, how often on average did you eat...?"

Make sure that the appropriate response card, as indicated on the form, is given to the participant. Remove response cards for questions that do not call for them.

All interviewers must be consistent in reading the Food and Amounts list to the participant. Read the questions clearly, using the exact wording on the form. It is imperative that there be no exclusions or inclusions in reading the food list. Do not add any interpretations.

For sections A through G, these instructions list items that may be included for each category. Refer to them only if the participant asks if he/she should include certain food items. For example, the participant may ask if skim or low fat milk includes cocoa mix. By referring to these instructions, the interviewer can see that it does.

Periodically the interviewer may have to reiterate the comment "on average, the number of times in the past year", or may remind the participant of the stated portion size.

Problem items should be recorded in the note log. Resolution of these items will be handled by a nutritionist.

Enter frequency of intake in the appropriate column utilizing the help screen for portion/frequency conversions (this table appears at the end of these instructions). For example, the portion size for ice cream is 1/2 cup. If the participant reports a portion of 1 cup, 2-4 times per week, the interviewer calls up the portion/frequency help screen and finds the 2X Row in the Multiple of the Amount column. The interviewer reads across to the 2-4 Week column to obtain the adjusted frequency. The adjusted frequency is entered as 5-6 per week, or "E". If the amount is 3X or more, calculate the adjusted frequency or record the information in a note log and calculate later.

If the participant reports a seasonal intake of a food item which would total to more than 12 times per year, the average frequency must be calculated for the year (or the help screen for seasonal intake can be used). For example, if peaches are eaten only in season, but two peaches are eaten every week for three months, the frequency would be calculated as follows: 2 peaches x 4 weeks x 3 months = 24 divided by 12 (months in year) = 2 per month. The seasonal intake help screen is reprinted at the end of these instructions.

II. DETAILED INSTRUCTIONS FOR EACH ITEM

0a. Enter the date on which the participant was seen in the clinic.

0b. Enter the staff ID for the person who completed this form.

A. DAIRY FOODS [RC 1]

1. {Skim or low fat milk} This includes 1/2%, 1%, and 2% milk; reconstituted non-fat dry milk; cold or hot chocolate milk made with skim or lowfat milk and **not made with water + hot chocolate mix**.
2. {Whole milk} This includes whole; "homogenized"; jersey milk; ; whole buttermilk; cold or hot chocolate milk made from whole milk and **not made with water + hot chocolate mix**; unknown milk.
3. {Yogurt} This includes whole milk yogurts, regular or frozen, 2% or low fat yogurts, regular or frozen.
4. {Ice cream} This includes all brands, not ice milk.
5. {Cottage cheese or ricotta cheese} This includes any cottage or ricotta cheese including any in recipes; farmer's cheese.
6. {other cheeses, plain or as part of a dish} This includes processed, cheddar and all hard natural cheeses.
7. Margarine added at any time, such as at the table.
8. Butter added at any time, such as at the table.

B. FRUITS [RC 1]

9. (Fresh apples or pears)
10. {Oranges} This includes tangerines.
11. {Orange or grapefruit juice} Small glass is equivalent to a 4 to 6 ounce glass.
12. {Peaches, apricots or plums} This includes nectarines.
13. (Bananas)
14. {other fruits} This includes cantaloupe; grapefruit; strawberries; papaya; raspberries; raisins; grapes; pineapple; kiwi.

C. VEGETABLES [RC 1]

Do not include small amounts in mixed dishes.

15. {String beans or green beans} Frozen or fresh; this includes wax beans; fava beans.
16. {Broccoli} Raw or cooked.
17. {Cabbage, cauliflower, brussels sprouts} Raw or cooked; coleslaw; sauerkraut.

18. {Carrots} Raw or cooked.
19. {Corn} Fresh, frozen or canned; niblets, cream style, cob.
20. {Spinach, collards or other greens} Raw or cooked; includes beet greens, chard, kale, mustard greens, turnip greens, and romaine. Do not include lettuce.
21. Salad made with any type of lettuce; ask the participant if there were additional ingredients in the salad, including cucumber, tomato, carrots, etc.
22. {Peas or lima beans} This includes mixed vegetables (peas, carrots, corn and limas), frozen or canned butter beans; not dried limas.
23. {Dark yellow, winter squash} This includes hubbard, danish, buttercup, delicious, and crookneck squash.
24. {Sweet potatoes} This includes pumpkin, yams, fresh or canned.
25. {Beans or lentils} This includes red, brown, navy, northern, kidney, blackeye, garbanzo, split peas, refried beans, dried limas, and bean or lentil soup.
26. {Tomatoes} This includes fresh or canned tomatoes; V-8 juice; and tomato soup.

D. MEATS [RC 1]

27. {Chicken or turkey, without skin} This includes cornish hen; pheasant.
28. {Chicken or turkey, with skin} This includes cornish hen; turkey roll; pheasant
29. {Hamburgers} This includes any ground beef in patty form.
30. {Hot dogs} This does not include chicken-type hot dogs.
31. {Processed meats such as salami, bologna, sausage} This includes cold cuts; luncheon meats, packaged or canned; tongue; (liver spread goes with liver).
32. {Bacon} This does not include Canadian style; Canadian bacon is coded in next category.
33. {Beef, pork, or lamb as a sandwich or mixed dish, casserole, stew, lasagna or in spaghetti sauce} This includes hot dish; meat pies; pizza; meatloaf; meatball; barbeque; chitterlings; Canadian bacon; soured meat; pigs feet.
34. {Beef, pork, or lamb as a main dish} This includes chops, corned beef.
35. {Canned tuna fish} This includes all kinds, about 1/2-2/3 can.
36. {Dark meat fish} This includes canned salmon; lake trout; shad; herring; fresh tuna; capelin; dogfish; eel; halibut; sablefish; Atlantic sturgeon; Arctic char; lake whitefish.
37. {Other fish} This includes cod, perch, catfish, orange roughy; grouper; walleye; crappie; whiting; unknown.
38. {Shrimp, lobster, scallops} This includes clams; oysters; crab.

39. {Eggs} This includes boiled; poached; fried; scrambled; omelets; egg salad; and quiche. This does NOT include egg substitutes such as Egg Beaters.
- E. SWEETS, BAKED GOODS, CEREALS [RC 1]
40. {Chocolate bars or pieces} Average bar = about 1 oz. Chocolate cream = 1/2 oz. This includes chocolate fudge and chocolate chips. This does not include peanut M&M's (recorded with nuts in section F).
41. {Candy without chocolate} About 3-4 pieces = 1 oz. This includes hard candies; gum drops; and 1 pkg. life savers. This does not include "dietetic" candies.
42. {Pie, homemade from scratch, commercially made or from a bakery} This includes any kind of pie or tarts, mix or frozen dough or restaurant; cheese cake; cream puff; pound cake.
43. {Donut} This includes all kinds.
44. Biscuits, cornbread, pancakes or waffles
45. Danish pastry, sweet rolls, coffee cake, muffins, or croissant
46. {Cake or brownie} This includes cupcake; all cakes and bars.
47. Cookies or granola bars: 2 cookies = 1 sv or 1 granola bar = 1 sv.
48. {Cold breakfast cereal} This includes all ready-to-eat; wheat germ
49. {Cooked cereals} This includes all cooked cereals.
50. {White bread} This includes French; Italian; raisin; 1/2 bagel; 1/2 white English muffin; average dinner roll; 1/2 frankfurter roll; 1/2 hamburger bun; pita bread; and matzoh 4" x 6".
51. {Dark or whole grain bread} This includes whole wheat; mixed grain; rye or pumpernickel; 2 graham cracker squares (2 1/2"); 3 rye wafers (2" x 3").
- F. MISCELLANEOUS [RC 1]
52. {Peanut butter} This includes any kind.
53. {Potato chips or corn chips} This includes nachos, or other salty snack (Cheetos, cheese puffs, popcorn; 1 oz. = about 1 c.
54. [Crackers, any] such as graham crackers, saltines, pretzels, Ritz, Triscuits, Wheat Thins, etc.
55. {French fried potatoes} 4 oz. = 1 c.
56. {Nuts} This includes all nuts, peanuts; mixed nuts; M&M peanut candy; 1 oz. = about 3 tbsp.
57. {Potatoes} This includes boiled but not French fries.
58. {Rice} This includes white rice; brown rice; wild rice; Rice-a-Roni.

59. {Spaghetti, noodles or other pasta} This includes macaroni; fettucini; noodles in lasagne.
60. {Home-fried food} This includes any food fried at home except french fries.
61. {Food fried away from home} This includes any deep fried foods; fish sticks; fish patties; and McNuggets. This does not include french fries.
- G. BEVERAGES [Remove RC2, show RC 1]
62. Coffee, caffeinated or decaffeinated. This includes brewed or instant or other coffee drinks.
63. Regular or caffeinated, herbal or decaffeinated tea, includes hot or cold tea.
64. *Hot chocolate or cocoa beverage made from water and a hot chocolate mix such as Swiss Miss, Ghirardelli, Nestle Rich Chocolate Mix, Serendipity, Starbucks, Caribou, etc.
65. Diet or low calorie soft drinks or diet fruit drinks and punch. This includes diet or low calorie beverages such diet colas, diet 7-up, diet sprite, diet fruit flavored soda, diet Tang, diet Kool-aid, diet Hawaiian Punch, other diet drinks.
66. Sugar-sweetened (Regular) soft drinks, fruit drinks, or punch. This includes sugar-sweetened or non-diet carbonated or non-carbonated beverages/sodas, such as colas, 7-up, sprite, fruit flavored beverages, Tang, Kool-aid, Hawaiian Punch, Gator Aid, etc.
- H SOUP [Remove RC 1; show RC 2]
67. Chicken noodle soup or other clear broth soups
68. Cream-based soups, such as chowders, Cream of mushroom, soups made with milk
- I. OTHER DIETARY ITEMS
69. {Liver} Remove Response Card (RC) 1; show participant RC 2. After this item, remove RC 2.
70. [RC3] {Fat used for frying or sautéing at home} Ask for the most often used, showing Response Card 3. If A, B, F, G, H, I, J, or K skip to item 72.
71. If "Margarine" was answered above, record the 3-digit code found in the "MARGARINE" listing. If "Vegetable Oil" or "Vegetable Shortening," record the code found in the "COOKING OILS" listing. If no code is given, draw two horizontal lines through the boxes.
- 72-74. Complete as for items 70-71 above.
72. [Show RC4] Note that the question refers to type of fat used at the table. Use Response Card 4, removing it after this item.
73. [Show RC5] Record the form of margarine used; if no margarine is used, select A.

74. Record 3-digit code number found in "MARGARINE" list. If none is given, draw two horizontal lines through the boxes.
Record the brand name of the margarine.
75. Look up the brand name in the "CEREALS" list, and enter the 3-digit code found there. If none is given, look up the cereal online to find a cereal that matches on sugar and fiber. If no cereal seems to match – email Dr. Steffen (steffen@umn.edu).
Record the brand name of the cereal.
76. [Show RC6]. Water intake, including tap, bottled unsweetened (no artificially sweetened water).
77. [Show RC6]. Meal replacement, energy or protein beverage or **bars**
78. Record "Yes" if participant is currently on one or more special diets.
79. [Show RC7]. The question refers to the current diet(s) only. If the person is currently on more than one diet, the question refers to the diet of longest duration.
Read each type of diet, record the diet of longest duration (if any).
80. Record the number of teaspoons of sugar added to beverages, cereal, and other foods. Note 1 tablespoon = 3 teaspoons.
81. [Show RC6]. Select the frequency of artificial sweetener use, including Equal, Sweetn'Low, Splenda, Stevia, etc.
82. Record [Y/N] about use of salt or salt-containing seasoning use.
83. Record [Y/N] about consuming lower salt foods such as reduced sodium or reduced salt, no salt, or unsalted chips, nuts, crackers, cheese, or salad dressing; show participant RC 8.

J. ADMINISTRATIVE INFORMATION

84. Evaluate the quality of the interview, emphasizing the dietary portion.

CONVERSION OF NONSTANDARD PORTION SIZES TO FREQUENCIES

FREQUENCY

MULTIPLE OF AMOUNT	A > 6 per day	B 4-6 per day	C 2-3 per day	D 1 per day	E 5-6 per wk	F 2-4 per wk	G 1 per wk	H 1-3 per mo	I Almost never
2X	A	A	B	C	D	E	F	H	I
3X	A	A	A	C	C	D	F	G	I
0.5X	B	C	D	F	F	G	H	I	I