

Data Collection Worksheet

Please Note: The Data Collection Worksheet (DCW) is a tool to aid integration of a PhenX protocol into a study. The PhenX DCW is not designed to be a data collection instrument. Investigators will need to decide the best way to collect data for the PhenX protocol in their study. Variables captured in the DCW, along with variable names and unique PhenX variable identifiers, are included in the PhenX Data Dictionary (DD) files.

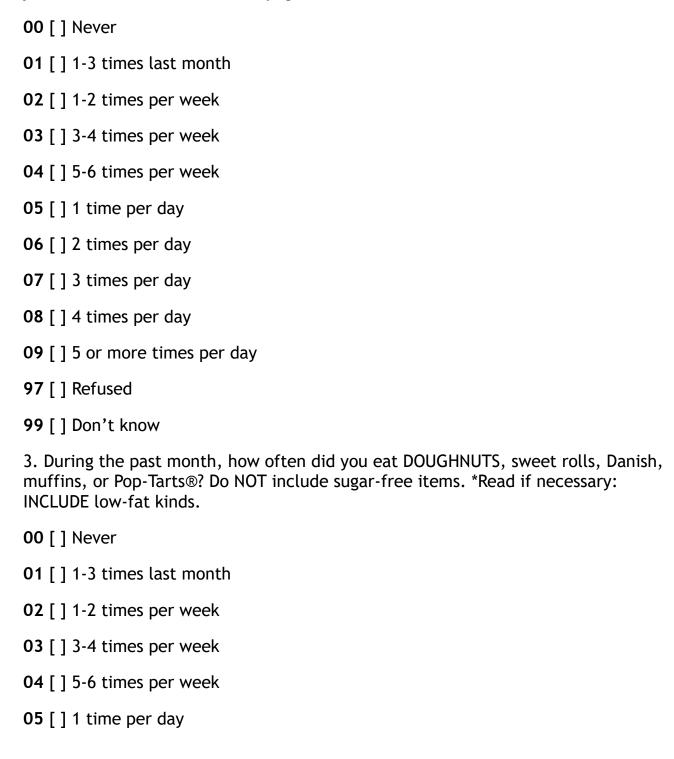
These questions are about the different kinds of foods you ate or drank during the PAST MONTH, that is, the past 30 days. When answering, please include meals and snacks eaten at home, at work or school, in restaurants, and anyplace else.

- *Read text if the respondent needs further clarification about the information requested.
- 1. During the past month, how often did you drink regular, carbonated SODA OR SOFT DRINKS that contain sugar? Do NOT include diet soda.
- *Read if necessary: Do NOT include diet or sugar-free fruit drinks. Do NOT include juices or tea in cans. DO NOT include diet mineral water or diet flavored waters.
- 00 [] Never
 01 [] 1-3 times last month
 02 [] 1-2 times per week
 03 [] 3-4 times per week
 04 [] 5-6 times per week
 05 [] 1 time per day
 06 [] 2 times per day
 07 [] 3 times per day
 08 [] 4 times per day
 09 [] 5 or more times per day
 97 [] Refused
 99 [] Don't know

NOW we are going to ask about FRUIT-FLAVORED drinks WITH ADDED SUGAR.

2. How often did you drink FRUIT-FLAVORED DRINKS with sugar (such as Kool-Aid®, Hi-C®, lemonade, or cranberry cocktail)? Do NOT include diet drinks.

*Read if necessary: INCLUDE Gatorade® and other sports drinks with added sugar. INCLUDE Tampico®, Sunny Delight®, and Twister®. Do NOT include 100% fruit juices or soda. Do NOT include yogurt drinks or carbonated water.



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06 [ ] 2 times per day
07 [ ] 3 times per day
08 [ ] 4 times per day
09 [] 5 or more times per day
97 [ ] Refused
99 [ ] Don't know
4. During the past month . . . How often did you eat COOKIES, CAKE, PIE, or
BROWNIES? Do NOT include sugar-free kinds. *Read if necessary: INCLUDE low-fat
kinds. Do NOT include ice cream and other frozen desserts or candy.
00 [ ] Never
01 [ ] 1-3 times last month
02 [ ] 1-2 times per week
03 [ ] 3-4 times per week
04 [ ] 5-6 times per week
05 [ ] 1 time per day
06 [ ] 2 times per day
07 [ ] 3 times per day
08 [ ] 4 times per day
09 [ ] 5 or more times per day
97 [ ] Refused
99 [ ] Don't know
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Scoring Procedures The following procedures are used to convert an individual's responses to an estimate of that individual's daily intake of added sugars in teaspoons: 1. The frequency reported categorically on the questionnaire is converted to the number of times consumed per day as shown below. In general, the midpoint of the frequency range was used.

Table 1. Conversion of Frequency Response to Times per Day

| Frequency Response | Times per Day |
|-------------------------|---------------|
| Never | 0 |
| 1-3 times per month | 0.067 |
| 1-2 times per week | 0.214 |
| 3-4 times per week | 0.5 |
| 5-6 times per week | 0.786 |
| 1 time per day | 1 |
| 2 times per day | 2 |
| 3 times per day | 3 |
| 4 times per day | 4 |
| 5 or more times per day | 5 |

2. The age- and gender-specific portion sizes (below) for each food are multiplied by the frequency calculated in Step 1. For added sugar, a Pyramid serving is 1 teaspoon.

Table 2. Median Portion Size in Pyramid Servings per Mention by Gender and Age for Added Sugar

| Food Group | Age Group | | | | | | |
|------------|-----------|-------|-------|-------|-------|-------|-------|
| | 18-27 | 28-37 | 38-47 | 48-57 | 58-67 | 68-77 | 78-99 |

| Men | | | | | | | |
|---------------------------------------------------------|-----------|----------|----------|----------|----------|----------|----------|
| Soda (P ₁) | 11.835000 | 9.990000 | 9.947000 | 9.683000 | 9.683000 | 9.631000 | 9.605000 |
| Fruit drinks (P ₂) | 9.627000 | 8.561000 | 8.985000 | 8.194000 | 6.815000 | 5.463000 | 5.307000 |
| Doughnuts, sweet rolls, muffins (P ₃) | 4.3080000 | 4.196000 | 3.707000 | 3.095000 | 2.897000 | 2.837000 | 2.781500 |
| Cookies, pie, cake, brownies (P ₄) | 5.189000 | 5.027000 | 4.845000 | 4.716000 | 4.730000 | 4.428000 | 3.968000 |
| Women | | | | | | | |
| Soda (P ₁) | 9.815000 | 9.683000 | 9.683000 | 9.644000 | 8.443500 | 8.370000 | 9.683000 |
| Fruit drinks (P ₂) | 7.997000 | 7.876000 | 6.418000 | 6.002000 | 6.418000 | 5.116000 | 5.116000 |
| Doughnuts, sweet rolls, muffins (P ₃) | 2.966000 | 2.966000 | 2.797000 | 2.966000 | 2.498000 | 2.627000 | 2.627000 |
| Cookies, pie, cake, brownies (P4) | 4.133000 | 3.650000 | 3.842000 | 3.719000 | 4.027500 | 3.571000 | 3.166500 |

^{3.} Regression coefficients (see below) are applied according to the equation below.

Table 3. Estimated Regression Coefficients for Sum of Foods Predicting Teaspoons of Added Sugar, by Gender

| Parameter | Men | Women |
|-----------------------------|----------|----------|
| Intercept (b ₀) | 1.672746 | 1.591494 |
| b_1 | 0.534485 | 0.491231 |

To estimate Pyramid teaspoons of added sugars, the model is:

E (Dietary Factor^{1/3}) =
$$b_0 + b_1 (N_{FG1}P_1 + N_{FG2}P_2 + ... + N_{FG4}P_4)^{1/3}$$

Teaspoons of added sugars was cube-root-transformed to approximate normality; N_{FGk} is the usual number of times per day an individual consumed food group k; P_k is the median portion size of group k; and k indexes the 4 added sugar food groups.

For men:

Cube root of Daily Pyramid Servings (i.e., teaspoons) of Added Sugars = 1.672746 + 0.534485 (cube root of (Daily Frequency * Gender/Age Specific Portion Size per Mention for Soda + Daily Frequency * Gender/Age Specific Portion Size per Mention for Fruit Drinks + Daily Frequency * Gender/Age Specific Portion Size per Mention for Doughnuts, sweet rolls, muffins + Daily Frequency * Gender/Age Specific Portion Size per Mention for Cookies, pie, cake, brownies))

For women:

Cube root of Daily Pyramid Servings of Added Sugars = 1.591494 + 0.491231 (cube root of (Daily Frequency * Gender/Age Specific Portion Size per Mention for Soda + Daily Frequency * Gender/Age Specific Portion Size per Mention for Fruit Drinks + Daily Frequency * Gender/Age Specific Portion Size per Mention for Doughnuts, sweet rolls, muffins + Daily Frequency * Gender/Age Specific Portion Size per Mention for Cookies, pie, cake, brownies))

Pop-Tarts® is a registered trademark, Kellogg NA Co.; Kool-Aid ® is a registered trademark, Kraft Foods Inc.; Hi-C® is a registered trademark, The Coca-Cola Company; Gatorade® is a registered trademark, PepsiCo Inc.; Tampico® is a registered trademark, Tampico Beverages, Inc.; Sunny Delight® is a registered trademark, Sunny Delight Beverages Co.; Twister® is a registered trademark, Tropicana Products, Inc.

Protocol source: https://www.phenxtoolkit.org/protocols/view/51001