PhenX Toolkit

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.

1. Think about your eating habits over the past 12 months. About how often did you eat or drink each of the following foods? Remember breakfast, lunch, dinner, snacks, and eating out. Choose only one answer for each food.

TYPE OF FOOD	Never	Less than Once Per Month	1-3 Times Per Month	1-2 Times Per Week	3-4 Times Per Week	5-6 Times Per Week	1 Time Per Day	2 or More Times Per Day
Cold cereal	O	O	O	O	O	O	O	O
Skim milk, on cereal or to drink	O	O	O	O	O	O	O	O
Eggs, fried or scrambled in margarine, butter, or oil	O	O	O	O	O	O	O	O
Sausage or bacon, regular-fat	O	O	O	O	O	O	O	O
Margarine or butter on bread, rolls, pancakes	O	O	O	O	O	O	O	O

Orange juice or grapefruit juice	O	O	O	O	O	O	O	O
Fruit (not juices)	O	O	O	O	O	O	O	O
Beef or pork hot dogs, regular-fat	O	O	O	O	O	O	O	O
Cheese or cheese spread, regular-fat	O	O	O	O	O	O	O	O
French fries, home fries, or hash brown potatoes	O	O	O	O	O	O	O	O
Margarine or butter on vegetables, including potatoes	O	O	O	O	O	O	O	O
Mayonnaise, regular-fat	O	O	O	O	O	O	O	O
Salad dressings, regular-fat	O	O	O	O	O	O	O	O
Rice	O	O	O	O	O	O	O	O
Margarine, butter, or oil on rice or pasta	O	O	O	O	O	O	O	O

2. Over the past 12 months, when you prepared foods with margarine or ate margarine, how often did you use reduced-fat margarine?

O	O	O	O	O	O
DIDN'T USE MARGARINE	Almost never	About 1/4 of the time	About 1/2 of the time	About 3/4 of the time	Almost always or always

3. Overall, when you think about the foods you ate over the past 12 months, would you say your diet was high, medium, or low in fat?

O	O	O
High	Medium	Low

Scoring Procedures The following procedures are used to convert an individual's responses to an estimate of that individual's percentage energy from fat:

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.

Frequency Response	Times Per Day
Never	0.0
Less than once a month	0.018
1-3 times per month	0.066
1-2 times per week	0.214
3-4 times per week	0.499
5-6 times per week	0.784

1 time per day	1.0
2 or more times per day	2.0

2. The age- and gender-specific portion sizes for each food (see below) are multiplied by the frequency calculated in Step 1. These portion sizes were estimated from the Continuing Survey of Food Intakes by Individuals (CSFII) 1994-96.

Median Serving Sizes (g)						
Age	Skim Milk	Bacon	Cold Cereal	Fruit	Mayo	Dressing
Males						
18-27	366.666667	25.000000	74.666667	131.750000	13.750000	36.720000
28-37	250.000000	40.250000	61.500000	128.000000	13.750000	44.060000
38-47	250.000000	32.000000	57.500000	123.200000	13.750000	31.250000
48-57	245.000000	32.000000	56.000000	127.500000	13.750000	31.250000
58-67	214.375000	27.000000	46.000000	122.000000	9.150000	29.400000
68-77	198.937500	26.000000	39.000000	118.000000	13.750000	29.400000
78+	160.725000	24.000000	33.000000	114.250000	4.580000	29.380000
Females						
18-27	245.000000	26.000000	50.000000	118.000000	13.750000	30.630000

Age						
28-37	245.000000	25.000000	49.500000	118.000000	6.880000	29.400000
38-47	244.800000	24.000000	44.000000	118.000000	9.170000	29.400000
48-57	229.690000	24.000000	43.500000	118.000000	9.183333	29.400000
58-67	196.000000	18.000000	33.000000	118.000000	6.110000	29.380000
68-77	183.750000	19.500000	33.000000	112.427143	10.310000	29.380000
78+	183.750000	16.000000	33.500000	109.000000	4.580000	22.030000

Median Serving Sizes (g)

Age	Eggs	Fruit Juice	Hot Dogs	Cheese	French Fries	Margarine	Rice
Males							
18-27	92.000000	373.200000	114.000000	33.360000	112.500000	9.540000	213.625000
28-37	92.000000	311.000000	85.500000	28.350000	114.000000	9.540000	195.000000
38-47	92.000000	249.000000	88.000000	28.350000	100.000000	9.460000	166.000000
48-57	92.000000	249.000000	114.000000	28.350000	100.000000	9.200000	165.000000
58-67	92.00000	248.00000	57.000000	28.35000	85.500000	7.883333	165.00000

	0	0		0			0
68-77	80.000000	186.750000	57.000000	24.000000	85.500000	7.100000	158.000000
78+	80.000000	186.750000	57.000000	22.880000	97.000000	7.000000	158.000000
Females							
18-27	80.000000	249.000000	57.000000	26.175000	79.500000	7.000000	158.000000
28-37	80.000000	248.800000	57.000000	21.000000	70.000000	6.290000	158.000000
38-47	69.000000	248.800000	57.000000	22.500000	70.000000	5.925000	158.000000
48-57	80.000000	217.875000	114.000000	22.063333	70.000000	7.095000	155.000000
58-67	68.000000	186.750000	57.000000	24.000000	66.000000	5.296667	122.250000
68-77	56.000000	186.600000	57.000000	21.000000	70.000000	5.320000	158.000000
78+	46.000000	186.750000	57.000000	25.800000	64.000000	4.865000	83.000000

3. The proportion of the margarine and butter added to foods that was regular fat is estimated. First, the frequency of the margarine and butter added is calculated. This is the sum of the frequencies for the three questions in question 1 for margarine and butter added to food (on bread, rolls, pancakes; vegetables

including potatoes; and rice or pasta). totfat = sum (marg on bread, marg on veg, marg on rice) Then the information in the instrument's second question, "how often was reduced-fat margarine used?" was applied, using the following equivalents.

Response to Question 2	Value of Regfat
Didn't use or almost never	totfat
About 1/4 of the time	totfat*0.75
About 1/2 of the time	totfat*0.50
About 3/4 of the time	totfat*0.25
Almost always or always	0

4. The individual's percentage energy from fat is estimated by applying regression coefficients to each food item (below):

Estimated Regression Coefficients for Foods as Predictors of Percentage Energy from Fat, by Gender		
Parameter	Male	Female
Intercept (b_0)	30.795765	29.865870
Cold Cereals (b_1)	-0.022086	-0.045171
Skim Milk (b_2)	-0.009666	-0.010393
Eggs (b_3)	0.026997	0.036787

Bacon or Sausage (b_4)	0.109569	0.198808
100% Fruit Juice (b_5)	-0.004946	-0.010141
Fruit (b_6)	-0.009346	-0.012103
Hot Dogs (b_7)	0.040118	0.106686
Cheese (b_8)	0.069945	0.103239
Fried Potatoes (b_9)	0.024262	0.040374
Regular Mayonnaise (b_{10})	0.145026	0.287044
Regular Salad Dressing (b_{11})	0.114649	0.182758
Rice (b_{12})	-0.017017	-0.014224
Regular Fat (b_{13})	0.167937	0.326702

5. The following equation is used to estimate percentage energy from fat, for each gender: estpcalfat = intercept + b_1 (daily frequency times Gender/Age Specific Portion Size per Mention for cold cereals) + b_2 (daily frequency times Gender/Age Specific Portion Size per Mention for skim milk) + … + b_{13} (daily frequency times Gender/Age Specific Portion Size per Mention for regular fat) Please note that a SAS Program to calculate Percentage Energy from Fat is available here: Nutrition and Dietary Supplements - Additional Information.

Protocol source: https://www.phenxtoolkit.org/protocols/view/50801