## The Short Healthy Eating Index Survey

Q1. On average, how many servings of fruit (not including juice) do eat per day?
Example: 1 serving fruit = 1/2 cup cut-up fruit, 1/2 a banana, or one small piece of whole fruit (apple, orange, pear etc.) One small piece of whole fruit is the size of a baseball. 1/2 cup cut-up fruit is the size of a computer mouse.
Less than 1
1234
56 or moreChoose not to answer

Q2. On average, how many servings of $\mathbf{1 0 0 \%}$ fruit juice do you drink per day? Note: Do not include fruit flavored drinks such as Hi-C, Tang, Sunny-D, etc.

Example: 1 serving juice $=1 / 2$ cup $100 \%$ fruit juice (apple, grape, orange, etc.), 1 cup of juice $=$ juice box.
Less than 1123456 or moreChoose not to answer

Q3. Now, think about all the vegetables you eat in a day. On average, how many servings of vegetables do you eat per day? Note: Any vegetable or $100 \%$ vegetable juice counts as a member of the vegetable group.

Example: 1 serving $=1$ cup of raw vegetables, 1 cup of salad, $1 / 2$ cup cooked vegetables, or $1 / 2$ cup $100 \%$ vegetable juice. One cup of raw vegetables is the size of a baseball. $1 / 2$ cup cooked vegetables is the size of a computer mouse.
Less than 112
346 or moreChoose not to answer

Q4. Now, think about just the green vegetables you eat in a day like spinach, green beans, kale, broccoli, zucchini, or other mostly green vegetables. On average, how many servings of green vegetables do you eat per day? NOTE: Do not include starchy vegetables like green peas.

Example: 1 serving $=1$ cup raw vegetables or $1 / 2$ cup cooked vegetables. 1 cup raw vegetables is the size of a baseball. $1 / 2$ cup cooked vegetables is the size of a computer mouse.
Less than 11
$\square \quad 2$3
$\square 4$56 or moreChoose not to answer

Q5. Now, think about just the starchy vegetables you eat in a day like corn, green peas, or potatoes. On average, how many servings of starchy vegetables do you eat per day?
Examples: 1 serving $=1$ cup raw vegetable or $1 / 2$ cup cook vegetables. 1 cup raw vegetables is the size of a computer mouse.
Less than 11234

56 or moreChoose not to answer

Q6. On average, how many servings of grains do you eat per day?
Examples: 1 serving $=1$ slice of bread; $1 / 2$ cup grits, 1 cup of ready-to-eat cereal, $1 / 2$ cup oatmeal, 1 small tortilla, $1 / 2$ cup cooked rice, or $1 / 2$ cup pasta. 1 cup ready-to-eat cereal is the size of a baseball.
Less than 11
$\square \quad 2$3
$\square 4$56 or moreChoose not to answer

## Please answer the next question ONLY if you selected "Less than 1" to the previous question.

Q7. On average, how often do you eat grains?
Examples: 1 serving $=1$ slice of bread; $1 / 2$ cup grits, 1 cup of ready-to-eat cereal, $1 / 2$ cup oatmeal, 1 small tortilla, $1 / 2$ cup cooked rice, or $1 / 2$ cup pasta.
$\square$ A couple times per week
$\square$ A couple times per month
$\square$ A couple times per year
$\square$ Almost neverNever
$\square$ Choose not to answer

Q8. Now, just think about whole grains you eat like whole wheat bread, whole grain crackers, brown rice, or oatmeal. On average, how many servings of whole grains do you eat per day?
Examples: 1 serving $=1$ slice whole wheat bread, 5-6 whole grain crackers, 3 cups popcorn, 1/2 cup cooked brown rice, or $1 / 2$ cup oatmeal.Less than 11
$\square 4$
$\square 5$
$\square 6$ or more
$\square$ Choose not to answer

## Please answer the next question ONLY if you selected "Less than 1" to the previous question.

Q9. On average, how often do you eat whole grains?
Examples: 1 serving $=1$ slice whole wheat bread, 5-6 whole grain crackers, 3 cups popcorn, 1⁄2 cup cooked brown rice, or $1 / 2$ cup oatmeal.
$\square$ A couple times per week
$\square$ A couple times per month
$\square$ A couple times per yearAlmost neverNever
$\square$ Choose not to answer

Q10. On average, how many servings of milk do you eat or drink per day?
Examples: 1 serving $=1$ cup of milk, 1 cup of yogurt, 1.5 ounces of natural cheese, or 2 ounces of processed cheese. 1 cup of milk is the size of a carton of milk. 1 serving of cheese is the size of your index finger.


Less than 1
1
$\square 2$3
$\square 4$6 or more
$\square$ Choose not to answer

## Please answer the next question ONLY if you selected "Less than 1" to the previous question.

Q11. On average, how often do you drink or eat milk products?
Examples: 1 serving $=1$ cup of milk, 1 cup of yogurt, 1.5 ounces of natural cheese, or 2 ounces of processed cheese.
$\square$ A couple times per week
$\square$ A couple times per month
$\square$ A couple times per year
$\square$ Almost neverNever
$\square$ Choose not to answer

Q12. Now, just think about the milk products you eat per day. On average, how many servings of low-fat milk products do you eat per day?
Examples: 1 serving $=1$ cup of skim milk, 1 cup of low-fat yogurt, or 1.5 ounces of low-fat cheese. 1 cup of milk is the size of a milk carton. 1 serving of cheese is the size of your index finger.
Less than 1
$\square 1$
$\square 2$
$\square 3$4
56 or moreChoose not to answer

Please answer the next question ONLY if you selected "Less than 1" to the previous question. Q13. On average, how often do you drink or eat low-fat milk products?

Examples: 1 serving $=1$ cup of skim milk, 1 cup of low-fat yogurt, or 1.5 ounces of low-fat cheese.
$\square$ A couple times per week
$\square$ A couple times per monthA couple times per year
$\square$ Almost never
$\square$ Never
$\square$ Choose not to answer

Q14. On average, how many servings of beans (legumes) do you eat per day? Note: All foods made from dry beans, canned beans, peas, and lentils are considered part of this group.

Examples: 1 serving $=1 / 2$ cup cooked beans. $1 / 2$ cup cooked beans is the size of a computer mouse.
Less than 11
2456 or moreChoose not to answer

Q15. On average, how many servings of nuts or seeds do you eat per day?
Examples: 1 serving $=1$ tablespoon of peanut butter; $1 / 2$ ounces of nuts or seeds. 1 tablespoons of peanut butter is the size of the tip of your thumb.
Less than 1
1
$\square 2$3456 or moreChoose not to answer

Q16. On average, how many servings of seafood do you eat per day? Note: All foods made of fish, shrimp, crab, and shellfish are considered part of this group.

Examples: 1 serving $=3$ ounces of fish. 3 ounces of fish is the size of a deck of cards.

$\square \quad$ Less than 1123456 or more
$\square$ Choose not to answer

Please answer the next question ONLY if you selected "Less than 1" to the previous question.
Q17. On average, how often do you eat seafood? Note: All foods made of fish, shrimp, crab, and shellfish are considered part of this group.

Examples: 1 serving $=3$ ounce of fish.
A couple times per week
$\square$ A couple times per month
$\square$ A couple times per yearAlmost neverNever
$\square$ Choose not to answer

Q18. On average, how many sugar-sweetened beverages do you drink per day?
Examples: 12 ounces of soft drinks/soda, fruit flavored drinks, sweetened coffee, and sweet tea. Do not include milk or $100 \%$ fruit juice. 12 ounces of soda is the size of one can.

Less than 11
$\square \quad 2$
$\square 3$
$\square 4$
$\square 5$6 or more
$\square$ Choose not to answer

Please answer the next question ONLY if you selected "Less than 1" to the previous question. Q19. On average, how often do you drink sugar-sweetened beverages?

Examples: 12 ounces of soft drinks/soda, fruit flavored drinks, sweetened coffee, and sweet tea. Do not include milk or $100 \%$ fruit juice.
$\square$ A couple times per week
$\square$ A couple times per month
$\square$ A couple times per yearAlmost neverNever
$\square$ Choose not to answer

Q20. On average, how much added sugars do you consume per day? Note: Added sugars are often in foods such as breads, cakes, candy, sweet tea, jam, ice cream, or sugar added to food at the table. Do not include naturally occurring sugars such as lactose in milk or fructose in fruits.

Examples: white sugar, brown sugar, raw sugar, corn syrup, corn-syrup solids, high-fructose corn syrup, malt syrup, maple syrup, pancake syrup, fructose sweetener, liquid fructose, honey, molasses, and dextrose.

None/almost none
Some
$\square$ A lotChoose not to answer

Q21. How many servings of saturated fat do you consume on average per day? Note: Saturated fats for these purposes should be considered to be solid fats. Solid fats are fats that are solid at room temperature.

Examples: butter, cakes, cookies, Crisco, coconut oil, beeffat (tallow, suet), chicken fat (lard), stick margarine, and shortening.
$\square$ None/almost none
$\square$ Some
$\square$ A lotChoose not to answer

Q22. On average, how much water do you drink per day?
$\square$ None/almost none
$\square$ Some
$\square$ A lot
$\square$ Choose not to answer

Q23. What is your gender?
Female
$\square$ Male
$\square$ Choose not to answer

## Short Healthy Eating Index Scoring Instructions

Prior to scoring the survey, please code each question response as indicated in the "Response Coding Rules" section of this document. The Short Healthy Index (sHEI) survey can provide an estimated total diet quality score and an estimation of food group consumption. These scoring rules are included in this document. Please note that code for R can be provided for both sets of scoring rules, upon request. Please email scolby1@utk.edu to request this code.

The following citation is recommended for the sHEI survey:
Colby S, Zhou W, Allison C, Mathews A, Olfert MD, Morrell J, Byrd-Bredbenner C, Greene G, Brown O, Kattelmann K, Shelnutt K. Development and validation of the Short Healthy Eating Index (sHEI) survey with a college population to assess dietary quality and intake. Nutrients. 2020;12(9):2611.

## Response Coding Rules

Prior to scoring either set of rules, please code responses as indicated below.

| Variable used in scoring | Response $=$ assigned code |
| :---: | :---: |
| Q1 (fruit), Q2 (fruit juice), Q3 (vege), Q4 (greenvege), Q5 (starchy), Q6 (grains), Q8 (whole grains), Q10 (milk), Q12 (lowfatmilk), Q14 (beans), Q15 (nutseeds), Q16 (seafood), Q18 (ssb) | Less than $1=1$ $\begin{aligned} & 1=2 \\ & 2=3 \\ & 3=4 \\ & 4=5 \\ & 5=6 \end{aligned}$ <br> 6 or more $=7$ <br> Choose not to answer $=8$ |
| $\begin{aligned} & \text { Q7 (grains2), Q9 (wholegrians2), Q11 } \\ & \text { (milk2), Q13 (lowfatmilk2), Q17 (seafood2), } \\ & \text { Q19 (ssb2) } \end{aligned}$ | A couple times per week $=1$ <br> A couple times per month $=2$ <br> A couple times per year $=3$ <br> Almost never $=4$ <br> Never $=5$ <br> Choose not to answer $=6$ |
| To score diet quality and consumption, you will need to create the following variables. <br> Q6_7 (grains_combo) includes Q6 and Q7 Q8_9 (wholegrains_combo) includes Q8 and Q9 <br> Q10_11 (milk_combo) includes Q10 and Q11 <br> Q12_13 (lowfatmilk_combo) includes Q12 and Q13 <br> Q16_17 (seafood_combo) includes Q16 and Q17 <br> Q18_19 (ssb_combo) includes Q18 and Q19 | Replace the Q6 with the foundation question (e.g., main consumption question) and Q7 (the follow up question if the participant reports less than 1 serving per day) for the appropriate items for each variable. <br> If Q6 $=1$ and $\mathrm{Q} 7=6$, then Q6_7 $=$ missing <br> If $\mathrm{Q} 6=1$ and $\mathrm{Q} 7=5$, then $=$ Q6_7 $=1$ <br> If Q6 $=1$ and $\mathrm{Q} 7=4$, then $=$ Q6_7 $=2$ <br> If $\mathrm{Q} 6=1$ and $\mathrm{Q} 7=3$, then $=\mathrm{Q} 6 \_7=3$ <br> If $\mathrm{Q} 6=1$ and $\mathrm{Q} 7=2$, then $=$ Q6_7 $=4$ <br> If Q6 $=1$ and $\mathrm{Q} 7=1$, then $=$ Q6_7 $=5$ <br> If $\mathrm{Q} 6=2$, then Q 6 _7 $=6$ <br> If $\mathrm{Q} 6=3$, then Q 6 _7 $=7$ <br> If $\mathrm{Q} 6=4$, then Q 6 _7 $=8$ <br> If Q6 $=5$, then Q6_7 $=9$ <br> If Q6 $=6$, then Q6_7 $=10$ <br> If $\mathrm{Q} 6=7$, then Q6_7 $=11$ <br> If Q6 $=8$, then Q6_7 = missing |
| Q20 (addedsugars), Q21 (satfat), Q22 (water) | $\begin{aligned} & \text { None/almost none }=1 \\ & \text { Some }=2 \\ & \text { A lot }=3 \\ & \text { Choose not to answer }=4 \end{aligned}$ |

## Short Healthy Eating Index Total Diet Quality Score Rules

The sHEI total dietary quality score includes the following components. Below are the components included and their maximum score. The range of sHEI total dietary score is $0-100$ points.

| Component | Questions included in score | Maximum <br> Points |
| :--- | :--- | :---: |
| Total fruits (total_fruits) | Q1 (fruit), Q2 (fruitjuice) | 5 |
| Whole fruits (whole_fruits) | Q1 (fruit) | 5 |
| Total vegetables (total_veg) | Q4 (greenvege), Q5 (starchy) | 5 |
| Greens and beans (greens_beans) | Q4 (greenvege), Q14 (beans) | 5 |
| Whole grains (whole_grains) | Q8 (wholegrains), GENDER | 10 |
| Dairy (dairy) | Q10 (milk), Q12 (lowfatmilk), GENDER | 10 |
| Total protein (tot_protein) | Q16_17 (seafood_combo), GENDER | 5 |
| Seafood and plant protein <br> (seafood_plant) | Q15 (nutseeds), GENDER |  |
| Fatty acids (fatty_acid) | Q10 (milk), Q21 (satfat), Q10_11 <br> (milk_combo), Q12_13 <br> (lowfatmilk_combo), | 5 |
| Refined grains (refined_grains) | Q4 (greenvege), Q6 (grains), Q16 <br> (seafood), Q15 (nutseeds) | 10 |
| Sodium (sodium) | Q1 (fruit), Q6 (grains), Q22 (water) | 10 |
| Added Sugars (added_sugars) | Q18 (ssb), Q20 (addedsugars) | 10 |
| Saturated Fats (sat_fat) | Q18 (ssb), Q6 (grains), Q15 (nutseeds), | 10 |
| Total DQ score |  | 100 |

## Total Fruit Component Score

To calculate the total fruit component score:
Total fruit score $=Q 1($ fruit $)+Q 2($ fruitjuice $)$; if total fruit score $>5$, then the score $=5$
Q1 (fruit)

| If... | Points awarded |
| :--- | :---: |
| Q1(fruit) $=1$ | 0 |
| Q1(fruit)=2 | 2 |
| Q1(fruit)=3 | 3.5 |
| Q1(fruit) $=4,5,6,7$ | 5 |

Q2 (fruitjuice)

| If... | Points awarded |
| :--- | :---: |
| Q2(fruitjuice)=1 | 0 |
| Q2(fruitjuice)=2 | 2 |
| Q2(fruitjuice)=3 | 3.5 |
| Q2(fruitjuice)=4,5,6,7 | 5 |

Whole Fruit Component Score

| If... | Points awarded |
| :--- | :---: |
| Q1 (fruit)=1 | 0 |
| Q2 (fruit)=2 | 2.5 |
| Q2 (fruit) $=3,4,5,6,7$ | 5 |

Total Vegetable Component Score

| If... | Points awarded |
| :--- | :---: |
| Q4 (greenvege)=1 | 1.60 |
| Q5 (starchy) $=2,3,4,5,6,7$ AND Q4(greenvege) $=2$ | 2.46 |
| Q5 (starchy) $=2,3,4,5,6,7$ AND Q4(greenvege) $=3,4,5,6,7$ | 3.24 |
| Q5 (starchy)=1 AND Q4(greenvege) $=2,3,4,5,6,7$ | 3.56 |

## Green and Beans Component Score (greens_beans)

To calculate the greens and beans component score:
Q4 (greenvege) + Q14 (beans), if total greens and beans (greens_beans) > 5, then the
component score $=5$

Q4 (greenvege)

| If... | Points awarded |
| :--- | :--- |
| Q4(greenvege) $=1$ | 0 |
| Q4(greenvege) $=2,3,4,5,6,7$ | 5 |

Q14 (beans)

| If... | Points awarded |
| :--- | :--- |
| Q14(beans) $=1$ | 0 |
| Q14(beans) $=2,3,4,5,6,7$ | 5 |

Whole Grains Component Score

| $I f \ldots$ | Points awarded |
| :--- | :---: |
| Q8(wholegrains)=1 | 0.51 |
| Gender=M AND Q8(wholegrains) $=2,3,4,5,6,7$ | 2.97 |
| Gender=F AND Q8(wholegrains) $=2,3$ | 5.20 |
| Gender=F AND Q8(wholegrains) $=4,5,6,7$ | 6.94 |

## Dairy Component Score

| If... | Points awarded |
| :--- | :---: |
| Gender $=$ M AND Q10 $($ milk $)=1,2,3$ | 3.22 |
| Gender=F AND Q10(milk) $=1,2,3$ AND Q12(lowfatmilk) $=1$ | 3.32 |
| Gender=F AND Q10(milk) $=1,2,3$ AND Q12(lowfatmilk) $=2,3,4,5,6,7$ | 4.81 |
| Q10 $($ milk $)=4,5,6,7$ | 6.51 |

Total Protein Foods Component Score

| If... | Points awarded |
| :--- | :---: |
| Gender=M AND Q16_17(seafood_combo) $=1,2,3,4$ | 4.11 |
| Gender=M AND Q16_17(seafood_combo) $=5,6,7,8,9,10,11$ | 4.98 |
| Gender=F | 4.97 |

## Seafood and Plant Protein Component

| If... | Points awarded |
| :--- | :---: |
| Q15(nutseeds) $=1,2$ AND Gender=M | 0.49 |
| Q15(nutseeds) $=1,2$ AND Gender=F | 1.50 |
| Q15(nutseeds) $=3,4,5,6,7$ | 4.20 |

Fatty Acid Ratio Component

| If... | Points awarded |
| :--- | :---: |
| Q10(milk $)=4,5,6,7$ | 2.56 |
| Q21(satfat) $=2,3$ AND Q10_11(milk_combo) $=1,2,3,4,5,6,7$ AND | 2.63 |
| Q12_13(lowfatmilk_combo) $=1,2$ | 4.54 |
| Q21(satfat) $=2,3$ AND 10 <br> Q12_13(lowfatmilk_combo) $=3,4,5,6,7,8,9,10,11$ | 5.93 |
| Q21(satfat) $=1$ AND Q10_11(milk_combo) $=1,2,3,4,5,6,7$ |  |

## Refined Grains Component

| If. | Points awarded |
| :---: | :---: |
| Q4(greenvege)=1 | 2.13 |
| Q6(grains) $=3,4,5,6,7$ AND Q16(seafood) $=2,3,4,5,6,7$ AND Q4(greenvege) $=2,3,4,5,6,7$ | 2.27 |
| Q6(grains) $=3,4,5,6,7$ AND Q15(nutseeds) $=1,2$ AND Q16(seafood) $=1$ AND Q4(greenvege) $=2,3,4,5,6,7$ | 4.73 |
| $\begin{aligned} & \text { Q6(grains)=3,4,5,6,7 AND Q15(nutseeds) }=3,4,5,6,7 \text { AND } \\ & \text { Q16(seafood) }=1 \text { AND Q4(greenvege) }=2,3,4,5,6,7 \end{aligned}$ | 8.45 |
| Q6(grains) $=1,2$ AND Q4(greenvege) $=2,3,4,5,6,7$ | 9.25 |

## Sodium Component

| $I f \ldots$ | Points awarded |
| :--- | :---: |
| Q1(fruit)=1,2 AND Q6(grains)=3,4,5,6,7 AND Q22(water)=3 | 0.70 |
| Q1(fruit)=3,4,5,6,7 AND Q6(grains)=3,4,5,6,7 AND Q22(water)=3 | 2.30 |
| Q6(grains) $=3,4,5,6,7$ AND Q22(water) $=1,2$ | 4.94 |
| Q6(grains) $=1,2$ | 6.07 |

## Added Sugars Component

To calculate the added sugars component score:
Add calories consumed from Q18 + Q20; Then search for the appropriate calorie level, and award the respective points.
Q18. Sugar-sweetened Beverages

| If... | Calories |
| :--- | :---: |
| Q18(ssb) $=1$ | 0 |
| Q18(ssb) $=2$ | 156 |
| Q18(ssb) $=3$ | 312 |
| Q18(ssb) $=4$ | 468 |
| Q18(ssb) $=5$ | 624 |
| Q18(ssb) $=6$ | 780 |
| Q18(ssb) $=7$ | 936 |

Q20. Added Sugars

| $I f \ldots$ | Calories |
| :--- | :---: |
| Q20(addedsugars) $=1$ | 130 |
| Q20(addedsugars) $=2$ | 260 |
| Q20(addedsugars) $=3$ | 520 |

## Calorie Levels

| If... | Points Awarded |
| :--- | :---: |
| Q18 calories + Q20 calories $\geq 520$ | 0 |
| Q18 calories + Q20 calories $<520$ AND $>130$ | 5 |
| Q18 calories + Q20 calories $\leq 130$ | 10 |

## Saturated Fats Component

| If... | Points Awarded |
| :--- | :---: |
| Q18(ssb) $=3,4,5,6,7$ | 1.82 |
| Q6(grains) $=1,2$ AND Q18(ssb) $=1,2$ | 3.20 |
| Q6(grains) $=3,4,5,6,7$ AND Q15(nutseeds) $=1,2$ AND Q18(ssb) $=1,2$ | 4.64 |
| Q6(grains) $=3,4,5,6,7$ <br> Q18(ssb) $=1,2$ | 6.56 |

## Short Healthy Eating Index Food Group Consumption Rules

The sHEI food group consumption amounts include the following components. Below are the components and the questions included in each of the consumption scoring calculations.

| Component | Questions included in score |
| :--- | :--- |
| Total Fruit and Vegetable Servings in Cup Equivalents <br> Including Legumes and French Fries (DSQfvl) | Q1 (fruit), GENDER |
| Total Fruit and Vegetable Servings in Cup Equivalents <br> Including Legumes and Excluding French Fries <br> (Dsqfvlnf) | Q1 (fruit), GENDER |
| Total Fruit Servings in Cup Equivalents (Dsqfrt) | Q1 (fruit) |
| Total Vegetable Servings in Cup Equivalents Including <br> Legumes and French Fries (Dsqvlall) | Q3 (vege), GENDER |
| Total Vegetable Servings in Cup Equivalents Including <br> Legumes and Excluding French Fries (Dsqvlnf) | Q3 (vege), GENDER |
| Dairy Servings in Cup Equivalents (Dsqdairy) | Q10 (milk), GENDER |
| Added Sugars in Teaspoon Equivalents (Dsqsug) | Q18_19 (ssb_combo), Q18 (ssb) |
| Whole Grains in Ounce Equivalents (DSQwhgr) | Q8_9 (wholegrains_combo), Q6_7 <br> (grains_combo), |
| Fiber in Grams (DSQfib) | GENDER, Q1 (fruit) |
| Calcium in Milligrams (DSQcalc) | GENDER, Q10 (milk) |
| Green Vegetables in Cup Equivalents | Q4 (greenvege), Q3 (vege) |

Total Fruit and Vegetable Servings in Cup Equivalents Including Legumes and French
Fries (DSQfvl)

| $I f \ldots$ | Cup Equivalents |
| :--- | :---: |
| Q1(fruit)=1 | 1.81 |
| Gender=F AND Q1(fruit)=2,3 | 2.22 |
| Gender=M AND Q1(fruit)=2,3 | 2.53 |
| Q1(fruit)=4,5,6,7 | 3.21 |

Total Fruit and Vegetable Servings in Cup Equivalents Including Legumes and Excluding French Fries (Dsqfvlnf)

| If... | Cup Equivalents |
| :--- | :---: |
| Q1(fruit)=1 | 1.72 |
| Gender=F AND Q1(fruit) $=2,3$ | 2.15 |
| Gender=M AND Q1(fruit) $=2,3$ | 2.43 |
| Q1(fruit) $=4,5,6,7$ | 3.10 |

Total Fruit Servings in Cup Equivalents (Dsqfrt)

| If... | Cup Equivalents |
| :--- | :---: |
| Q1(fruit)=1 | 0.52 |
| Q1(fruit)=2 | 0.78 |
| Q1(fruit)=3 | 0.99 |
| Q1(fruit) $=4,5,6,7$ | 1.52 |

## Total Vegetable Servings in Cup Equivalents Including Legumes and French Fries

(Dsqulall)

| If... | Cup Equivalents |
| :--- | :---: |
| Q3(vege) $=1,2$ | 1.34 |
| Gender=F AND Q3(vege) $=3,4$ | 1.40 |
| Gender=F AND Q3(vege) $=5,6,7$ | 1.68 |
| Gender=M AND Q3(vege) $=3,4,5,6,7$ | 1.84 |

Total Vegetable Servings in Cup Equivalents Including Legumes and Excluding French Fries (Dsqvinf)

| $I f \ldots$ | Cup Equivalents |
| :--- | :---: |
| Q3(vege) $=1,2$ | 1.19 |
| Gender=F AND Q3(vege) $=3,4$ | 1.28 |
| Gender=F AND Q3(vege) $=5,6,7$ | 1.59 |
| Gender=M AND Q3(vege) $=3,4,5,6,7$ | 1.71 |

Dairy Servings in Cup Equivalents (Dsqdairy)

| If... | Cup Equivalents |
| :--- | :---: |
| Q10(milk)=1 | 1.16 |
| Gender=F AND Q10(milk) $=2,3$ | 1.16 |
| Gender=M AND Q10(milk) $=2,3$ | 1.90 |
| Q10(milk) $=4,5,6,7$ | 2.36 |

Added Sugars in Teaspoon Equivalents (Dsqsug)

| $I f \ldots$ | Teaspoon Equivalents |
| :--- | :---: |
| Q18_19(ssb_combo) $=1,2,3,4$ | 13.26 |
| Q18_19(ssb_combo) $=5,6$ | 16.00 |
| Q18(ssb) $=3,4,5,6,7$ | 26.87 |

Added Sugars from Sugar-Sweetened Beverages in Teaspoon Equivalents (DSQssb)

| If... | Teaspoon Equivalents |
| :--- | :---: |
| Gender=F AND Q18_19(ssb_combo) $=1,2,3,4$ | 4.13 |
| Gender=M AND Q18_19(ssb_combo) $=1,2,3,4$ | 5.73 |
| Q18_19(ssb_combo) $=5,6$ | 6.79 |
| Q18(ssb) $=3,4,5,6,7$ | 15.78 |

## Whole Grains in Ounce Equivalents (DSQwhgr)

| If... | Ounce Equivalents |
| :--- | :---: |
| Q8_9(wholegrains_combo)=1,2,3,4 | 0.50 |
| Q6_7(grains_combo) $=1,2,3,4,5,6$ AND Q8_9(wholegrains_combo) $=5,6,7$ | 0.63 |
| Q6(grains) $=3,4,5,6,7$ AND Q8_9(wholegrains_combo) $=5,6,7$ | 0.77 |
| Q8(wholegrains) $=4,5,6,7$ | 1.01 |

## Fiber in Grams (DSQfib)

| If... | Grams |
| :--- | :---: |
| Gender=F AND Q1(fruit) $=1,2,3$ | 13.69 |
| Gender=M AND Q1(fruit) $=1,2,3$ | 16.74 |
| Q1(fruit) $=4,5,6,7$ | 19.32 |

Calcium in Milligrams (DSQcalc)

| $I f \ldots$ | Milligrams |
| :--- | :---: |
| Gender=F AND Q10(milk) $=1,2$ | 851.61 |
| Gender=F AND Q10(milk) $=3,4,5,6,7$ | 1010.78 |
| Gender=M AND Q10(milk $)=1,2$ | 1062.55 |
| Gender=M AND Q10(milk) $=3,4,5,6,7$ | 1319.71 |

## Green Vegetables in Cup Equivalents

| $I f \ldots$ | Cup Equivalents |
| :--- | :---: |
| Q4(greenvege) $=1$ | 0.00 |
| Q3(vege) $=1,2,3,4$ AND Q4(greenvege) $=2,3,4,5,6,7$ | 0.13 |
| Q3(vege) $=5,6,7$ AND Q4(greenvege) $=2,3,4,5,6,7$ | 0.31 |

