United States Department of Agriculture

Added Sugars: Food Pattern Modeling Exercise 3

2020 Dietary Guidelines Advisory Committee

Food Pattern Modeling Report

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The food pattern modeling exercises were conducted by the 2020 Dietary Guidelines Advisory Committee in collaboration with the food pattern modeling team at the Center for Nutrition Policy and Promotion, Food and Nutrition Service, U.S. Department of Agriculture (USDA). All Food Pattern Modeling reports from the 2020 Advisory Committee Project are available at: https://www.dietaryguidelines.gov/2020-advisory-committee-report/food-pattern-modeling/FPM-added-sugars.

The food pattern modeling analyses help explain how changes to food-based dietary recommendations could potentially affect Americans' ability to meet their nutrient needs. The exercises help inform USDA's development of relevant dietary patterns for the American population that reflect health-promoting patterns identified in systematic reviews and meet nutrient recommendations. The results should not be interpreted as dietary guidance. This report provides the documentation for Added Sugars Food Pattern Modeling Exercise 2 of 3. To view the results in the context of the 2020 Advisory Committee's Scientific Report visit: https://www.dietaryguidelines.gov/2020-advisory-committee-report.

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INTRODUCTION

This report describes the results the *Added Sugars Food Pattern Modeling Exercise 3: Estimating excess energy from added sugars with typical versus nutrient dense choices*. This exercise was conducted by the 2020 Dietary Guidelines Advisory Committee, supported by USDA's food pattern modeling team, to help answer the following question:

- How much added sugars can be accommodated in a healthy diet while still meeting food group and nutrient needs?

The Added Sugars Food Pattern Modeling Exercises 1 and 2 also supported the answering of this question. To access the results of these exercises, visit: https://www.dietaryguidelines.gov/2020-advisory-committee-report/food-pattern-modeling/FPM-added-sugars.

The food pattern modeling exercises were conducted by the 2020 Dietary Guidelines Advisory Committee with support from the food pattern modeling team. The food pattern modeling team included nutrition scientists and data analysts on the Nutrition and Economic Analysis Team at the USDA Center for Nutrition Policy and Promotion within the Food and Nutrition Service. To answer the food pattern modeling questions, the Committee, with support from Federal staff, developed a protocol, or plan, that described the food pattern exercises that would be used to answer the question. The protocol included an *analytic framework* that described the overall scope and the approach used to answer the question and an *analytic plan* that described the data and subsequent analyses to be considered.

More information about the 2020 Dietary Guidelines Advisory Committee is available at the following website: https://www.DietaryGuidelines.gov.

The Committee developed conclusion statements for each question answered using food pattern modeling. The conclusion statements describe the results of the analyses in order to answer the specific question examined. The conclusion statements are available in the 2020 Dietary Guidelines Advisory Committee's Scientific Report, available at: https://www.dietaryguidelines.gov/2020-advisory-committee-report.

METHODS

The Added Sugars Food Pattern Modeling Exercise 3 relied on data from the U.S. Department of Agriculture Food and Nutrient Database for Dietary Studies (FNDDS) 2015-2016. The Food Patterns Equivalents Database (FPED) 2015-2016 and the National Nutrient Database for Standard Reference, Release 28 (2016 version) provided supporting data. The U.S. population ages 2 years and older, including women who are pregnant or lactating, was considered. The following are key definitions for the food pattern modeling added sugars exercise 3:

- **USDA Food Pattern:** A pattern of consumption designed to articulate the evidence on the relationship between diet and health and meet the known nutrient needs of targeted age-sex groups within calorie constraints. A pattern includes the recommended amounts to eat from 5 major food groups—Fruits, Vegetables, Grains, Protein Foods, and Dairy. The recommendations for Vegetables and Grains are further defined by subgroups. The USDA Food Patterns do not account for beverages that are not constituents of food groups or subgroups such as soft drinks and coffee or tea.
- **Item Cluster:** An identified grouping of the same or similar foods within each food group and subgroup. Item clusters are used to calculate the composite nutrient profile for each food group and subgroup used to define a USDA Food Pattern.
- **Nutrient Profile:** The anticipated nutrient content for each food group and subgroup that could be obtained by eating a variety of foods from that group/subgroup in nutrient-dense forms. The nutrient profiles are based on a weighted average of nutrient-dense forms of foods. The weighted average calculation considers a range of American food choices, but in nutrient-dense forms, and results in a food pattern that can be adapted to fit an individual's preferences.
- **Nutrient-Dense Representative Food:** The food within an item cluster with the least amount of added sugars, sodium, and solid fats. For some item clusters, the nutrient-dense representative food contains some added sugars, solid fats, and/or sodium.
- **Typical Choice Representative Food**: The most frequently consumed food within an item cluster of foods, including any added sugars, solid fats, and/or sodium.
- **Essential Calories:** the energy associated with the foods and beverages ingested to meet nutritional goals through choices that align with the USDA Food Patterns in forms with the least amounts of saturated fat, added sugars and sodium.

For more information about the food pattern modeling definitions, visit: https://www.dietaryguidelines.gov/2020-advisory-committee-report/food-pattern-modeling/FPM-2-and-older.

Exercise 3 estimated excess energy from added sugars and solid fats in the scenario that the USDA Food Patterns were developed with typical choices rather than nutrient-dense representative foods. Energy and nutrient excesses and deficiencies that exist when typical vs nutrient-dense representative foods comprise the pattern were evaluated.

The overall food pattern modeling methodology outlined in food pattern modeling for ages 2 and older included the following steps: (1) identifying appropriate energy levels for the patterns, (2) identifying nutritional goals for the patterns, (3) establishing food groupings, (4) developing a Nutrient Profile by determining the amounts of nutrients that would be obtained by consuming various foods within each group, and (5) evaluating nutrient levels in each pattern compared to nutritional goals. Exercise 3 modified step 4 in which the Nutrient Profile was developed. The anticipated nutrient content, or Nutrient Profile, of each food group was calculated using a typical rather than a nutrient dense representative food for each item cluster. In step 5, we evaluated the energy, added sugar and other

dietary components in the Healthy U.S.-Style Pattern when nutrient dense vs typical food choices were modeled.

For additional information on the USDA Food Patterns methods, visit: https://www.dietaryguidelines.gov/2020-advisory-committee-report/food-pattern-modeling/FPM-added-sugars.

LIST OF INCLUDED RESULTS

EXERCISE 3 STEP 4: DETERMINE THE AMOUNTS OF NUTRIENTS THAT WOULD BE OBTAINED BY CONSUMING VARIOUS FOODS WITHIN EACH GROUP

The process for updating the USDA food patterns requires that a composite nutrient profile (nutrients per cup or ounce equivalent) be developed for each food group and subgroup used to define the patterns. These nutrient profiles are then used to calculate energy and nutrients provided by each pattern. More information on the development of the nutrient profiles using nutrient dense representative foods and the resulting nutrient profiles are available at: https://www.dietaryguidelines.gov/2020-advisory-committee-report/food-pattern-modeling/FPM-2-and-older.

In this analysis, we replaced the "nutrient dense" representative foods used to develop the Healthy U.S.-Style Pattern with more "typical" representative foods, and determined how that changed the amount of energy, nutrient and other food components in the patterns. Food consumption data from NHANES 2015-2016[1] were used to calculate the percent contribution of individual foods to intake (ounce or cup equivalents) of each item cluster, and foods were sorted from highest to lowest contributor. Generally, the food selected as typical for each item cluster was the top contributor to intake of the cluster. If the top consumed food was part of a mixture, the representative food was identified from the recipe and selected. For example, the highest consumed food for the cheese on sandwiches item cluster was a grilled cheese sandwich. The American cheese found in the recipe was selected as the representative food for this item cluster.

To more accurately identify typical choices for some item clusters, similar foods within clusters were categorized together based on their type, form, or cooking method before a representative food that characterized the cluster was selected. For example, foods contributing to meat item clusters were categorized as lean only versus lean and fat eaten. Foods contributing to fish item clusters were categorized by cooking method as fried, baked/broiled, or steamed/poached. Cereals were categorized by their added sugars content.

Separate item clusters were established for milk item clusters based on fat and added sugars content. In this analysis, the typical representative food was matched to the item cluster description. So, for example, whole milk (3.25% milk fat) represents the item cluster of unflavored whole milks, and lowfat chocolate milk (1% milk fat) represents the item cluster of flavored lowfat milks. Reduced fat milk (2% milk fat) represents item clusters of milk in mixed dishes. In contrast, nonfat milk is the representative food for all milk item clusters integrated in the nutrient dense nutrient profiles.

A table listing each item cluster, proportion of consumption and the nutrient dense representative food is provided in the food pattern modeling report for ages 2 years and older, available at: https://www.dietaryguidelines.gov/2020-advisory-committee-report/food-pattern-modeling/FPM-2-and-older. Table E3.1 is similar, except that the representative foods are in typical forms. Table E3.2 illustrates the primary reasons for the nutritional differences between the nutrient dense and typical forms of the representative foods. Table E3.3 compares nutrient dense and typical food group nutrient profiles for selected nutrients. Generally, the energy, energy from added sugars, sodium, and saturated fatty acids are higher for nutrient profiles based on typical rather than representative "ideal" choices.

TABLE E3.1. USDA FOOD PATTERNS--ITEM CLUSTERS, PERCENT OF CONSUMPTION, AND TYPICAL CHOICE REPRESENTATIVE FOODS

Subgroup and Item Clusters	Percent Food Group	Percent Food Subgroup	Representative Food (i.e., nutrient value of the item cluster)
FRUIT GROUP			
Whole fruit	**72.7**		
Apples, cooked or canned	0.5	0.7	Apple, baked, with sugar
Apples, dried	0.3	0.4	Apple, dried, uncooked
Apples, raw	19.5	26.9	Apple, raw
Applesauce	1.1	1.5	Applesauce, stewed apples, unsweetened
Apricot, cooked or canned	0.0	0.0	Apricot, dried, cooked, NS as to sweetened or unsweetened; sweetened, NS as to type of sweetener
Apricot, dried	0.0	0.0	Apricot, dried, uncooked
Apricot, raw	0.1	0.1	Apricot, raw
Bananas, cooked or canned (Incl. red type)	0.1	0.1	Banana, baked
Bananas, dried	0.0	0.0	Banana chips
Bananas, raw (Incl. white, red, Chinese, and apple types)	13.0	17.9	Banana, raw
Blackberries, cooked or canned	0.0	0.0	Blackberries, cooked or canned, NS as to sweetened or unsweetened; sweetened, NS as to type of sweetener
Blackberries, raw	0.3	0.4	Blackberries, raw
Blueberries, cooked or canned	0.2	0.2	Blueberries, cooked or canned, NS as to sweetened or unsweetened; sweetened, NS as to type of sweetener
Blueberries, dried	0.0	0.1	Blueberries, dried
Blueberries, raw	2.7	3.7	Blueberries, raw
Boysenberries, raw	0.1	0.1	Boysenberries, frozen
Cantaloupe, raw	1.5	2.1	Cantaloupe, raw
Casaba Melon, raw	0.0	0.0	Casaba melon, raw
Cherries, cooked or canned (Incl. maraschino)	0.1	0.1	Cherries, sour, red, ckd, unswtnd
Cherries, dried	0.0	0.0	Cherries, dried
Cherries, raw	0.6	0.8	Cherries, sweet, raw (Queen Anne, Bing)
Cranberries, cooked or canned	0.1	0.2	Cranberries, cooked or canned
Cranberries, dried	0.5	0.7	Cranberries, dried

Subgroup and Item Clusters	Percent Food Group	Percent Food Subgroup	Representative Food (i.e., nutrient value of the item cluster)
Whole fruit, continued	**72.7**		
Cranberries, raw	0.0	0.0	Cranberries, raw
Dates, raw and cooked	0.1	0.1	Date
Dewberries, raw	0.0	0.0	Dewberries, raw
Figs, cooked or canned	0.0	0.0	Fig, dried, cooked, with sugar
Figs, dried	0.0	0.0	Fig, dried, uncooked
Figs, raw	0.0	0.0	Fig, raw
Grapefruit, cooked or canned	0.0	0.0	Grapefruit, canned or frozen, NS as to sweetened or unsweetened; sweetened, NS as to type of sweetener
Grapefruit, raw	0.4	0.6	Grapefruit, raw
Grapes, cooked or canned	0.0	0.1	Grapes, seedless, cooked or canned, NS as to sweetened or unsweetened; sweetened, NS as to type of sweetener
Grapes, raw	4.5	6.1	Grapes, raw, NS as to type
Guava, cooked or canned	0.0	0.0	Guava paste
Guava, raw	0.0	0.1	Guava, raw
Honeydew Melon, raw	0.3	0.5	Honeydew melon, raw
Huckleberries, raw	0.0	0.0	Huckleberries, raw
Japanese Pears, raw	0.0	0.0	Pear, Japanese, raw
Juneberry, raw	0.0	0.0	Juneberry, raw
Kiwifruit, raw	0.3	0.4	Kiwifruit, raw
Kumquat, cooked or canned	0.0	0.0	Kumquat, raw
Kumquat, raw	0.0	0.0	Kumquat, raw
Lemons, raw or cooked (Incl. citron)	0.0	0.0	Lemon, raw
Lime, raw (Incl. calamondin)	0.0	0.0	Lime, raw
Loganberries, raw	0.0	0.0	Loganberries, raw
Longans, raw	0.0	0.0	Longans, raw
Lychee, cooked or canned	0.0	0.0	Lychee, raw
Lychee, dried	0.0	0.0	Lychee, dried (lychee nuts)
Lychee, raw	0.0	0.0	Lychee, raw
Mango, cooked or canned	0.0	0.0	Mango, cooked
Mango, dried	0.1	0.1	Mango, dried
Mango, raw	0.9	1.2	Mango, raw

Subgroup and Item Clusters	Percent Food Group	Percent Food Subgroup	Representative Food (i.e., nutrient value of the item cluster)
Whole fruit, continued	**72.7**		
Mixed Other Fruit (NOT citrus)	0.0	0.0	Applesauce, stewed apples, unsweetened
Mulberries, raw	0.0	0.0	Mulberries, raw
Nectarine, cooked or canned	0.0	0.0	Nectarine, cooked
Nectarine, raw	0.3	0.4	Nectarine, raw
Oranges, cooked or canned	0.0	0.0	Orange, sections, canned, juice pack
Oranges, raw	3.5	4.8	Orange, raw
Papaya, cooked or canned (Incl. green)	0.0	0.0	Papaya, cooked or canned, in sugar or syrup
Papaya, dried	0.0	0.0	Papaya, dried
Papaya, raw	0.3	0.4	Papaya, raw
Passion Fruit, raw	0.0	0.0	Passion Fruit, raw
Peaches, cooked or canned	0.7	0.9	Peach, cooked or canned, drained solids
Peaches, dried	0.0	0.0	Peach, dried, uncooked
Peaches, raw	1.4	1.9	Peach, raw
Pears, cooked or canned	0.3	0.4	Pear, cooked or canned, drained solids
Pears, dried	0.0	0.0	Pear, dried, unckd
Pears, raw	1.6	2.2	Pear, raw
Persimmons, raw	0.2	0.2	Persimmon, raw
Pineapple, cooked or canned	0.4	0.6	Pineapple, cooked or canned, drained solids
Pineapple, dried	0.0	0.0	Pineapple, dried
Pineapple, raw	0.8	1.1	Pineapple, raw
Plums, dried (include dried prunes)	0.1	0.1	Prune, dried, unckd
Plums, raw	0.4	0.5	Plum, raw
Plums/Prunes, cooked or canned	0.0	0.0	Prune, dried, cooked, NS as to sweetened or unsweetened; sweetened, NS as to type of sweetener
Pomegranate, raw	0.0	0.0	Pomegranate, raw
Raisins, cooked or canned	0.3	0.4	Raisins, cooked
Raisins, raw (Incl. raw & dried currants)	1.4	1.9	Raisins
Raspberries, cooked or canned	0.0	0.0	Raspberries, cooked or canned, NS as to sweetened or unsweetened; sweetened, NS as to type of sweetener
Raspberries, raw (incl. black & red)	0.5	0.7	Raspberries, red, raw

Subgroup and Item Clusters	Percent Food Group	Percent Food Subgroup	Representative Food (i.e., nutrient value of the item cluster)
Whole fruit, continued	**72.7**		
Rhubarb, cooked or canned	0.0	0.0	Rhubarb, cooked or canned, in heavy syrup
Rhubarb, raw	0.0	0.0	Rhubarb, raw
Star Fruit (Carambola), cooked	0.0	0.0	Carambola (starfruit), raw
Star Fruit (Carambola), raw	0.0	0.0	Carambola (starfruit), raw
Strawberries, cooked or canned (Incl. dried)	0.0	0.1	Strawberries, cooked or canned, NS as to sweetened or unsweetened; sweetened, NS as to type of sweetener
Strawberries, raw	4.2	5.8	Strawberries, raw
Tamarind, dried	0.0	0.0	Tamarind pulp, dried, sweetened
Tamarind, raw or cooked	0.0	0.1	Tamarind drink (Refresco de tamarindo)
Tangerine, raw or canned/cooked	1.2	1.7	Tangerine, raw
Unknown Citrus Fruit	0.5	0.6	Strawberries, cooked or canned, in syrup
Unknown Dried Fruit	0.1	0.1	Raisins
Unknown Other Fruit	0.8	1.0	Peach, cooked or canned, in light or medium syrup
Watermelon, raw	6.2	8.6	Watermelon, raw
Youngberries, raw	0.0	0.0	Youngberries, raw
Fruit Juice	**27.3**		
Apple Juice	7.2	26.3	Apple juice
Apricot Juice/Nectar	0.0	0.0	Apricot nectar
Banana Juice/Nectar	0.1	0.4	Banana nectar
Blackberry Juice	0.1	0.5	Blackberry juice
Cantaloupe Juice/Nectar	0.0	0.0	Cantaloupe nectar
Cherry Juice	0.0	0.0	Cherry juice, tart
Cranberry Juice	0.6	2.1	Cranberry juice blend, 100% juice, with calcium added
Grape Juice	2.7	9.8	Cranberry juice blend, 100% juice
Grapefruit Juice	0.2	0.9	Grapefruit juice, 100%, with calcium added
Guava Juice/Nectar	0.0	0.0	Guava nectar
Lemon Juice	0.8	3.1	Lemon juice, cnd or bottled
Lime Juice	0.1	0.3	Lime juice, 100%, freshly squeezed
Mango Juice/Nectar	0.2	0.7	Mango nectar

Subgroup and Item Clusters	Percent Food Group	Percent Food Subgroup	Representative Food (i.e., nutrient value of the item cluster)
Fruit Juice, continued	**27.3**		
Mixed Fruit Juice (Citrus)	0.0	0.0	Orange jce, chilled, incl. from concentrate
Mixed Fruit Juice (NOT citrus)	0.2	0.7	Vegetable and fruit juice, 100% juice, with high vitamin C
Orange Juice (Incl. tangerine & acerola jces)	12.9	47.2	Orange juice, 100%, canned, bottled or in a carton
Papaya Juice/Nectar	0.0	0.1	Papaya juice
Passion Fruit Juice/Nectar	0.0	0.1	Passion fruit juice
Peach Juice/Nectar	0.0	0.1	Peach nectar
Pear Juice/Nectar	0.0	0.1	Pear nectar
Pineapple Juice	0.9	3.4	Pineapple juice
Plum Juice	0.0	0.0	Plum sauce, Asian style
Pomegranate Juice	0.1	0.4	Pomegranate juice
Prune Juice	0.1	0.5	Prune juice
Raspberry Juice	0.0	0.0	Blackberry juice
Soursop Juice/Nectar	0.0	0.0	Soursop (Guanabana) nectar
Strawberry Juice	0.1	0.4	Strawberry juice
Unknown Citrus Fruit Juice	0.3	1.0	Capri Sun, fruit juice drink
Unknown Other Fruit Juice	0.5	1.9	Capri Sun, fruit juice drink
Watermelon Juice	0.0	0.1	Watermelon juice
Vegetable Group			
Dark Green Vegetables	**9.3**		
Arugula Lettuce	0.2	1.9	Lettuce, arugula, raw
Bak Choy (Chinese Cabbage)	0.3	2.7	Cabbage, Chinese, cooked, made with oil
Broccoli, cooked	3.1	33.6	Broccoli, cooked, from fresh, fat not added in cooking
Broccoli, raw	0.5	5.4	Broccoli, raw
Butterhead Lettuce (Boston, Bibb)	0.0	0.3	Lettuce, Boston, raw
Chard, raw and cooked (Incl. escarole, ckd)	0.0	0.1	Chard, cooked, fat not added in cooking

Subgroup and Item Clusters	Percent Food Group	Percent Food Subgroup	Representative Food (i.e., nutrient value of the item cluster)
Dark Green Vegetables (cont'd)	**9.3**		
Cilantro, raw and ckd	0.1	1.1	Cilantro, raw
Collard Greens, raw and cooked	0.3	2.8	Collards, cooked, from fresh, fat not added in cooking
Grape Leaves, raw and ckd	0.0	0.1	Grape leaves, canned
Kale (Incl. lambsquarters, mustard cabbage, beet greens, bitter melon, horseradish, and jute leaves)	0.4	4.5	Kale, raw
Kale, cooked (Incl. lambsquarters, mustard cabbage, raw & ckd beet greens, bitter melon leaves, horseradish leaves, jute leaves, rad, sweet potato leaves)	0.2	1.8	Kale, cooked, from fresh, fat not added in cooking
Mixed Dark Leafy Greens (includes Romaine, Chicory, Escarole, Endive, and Basil)	1.9	20.7	Endive, chicory, escarole, or romaine lettuce, raw
Mustard Greens, raw and ckd (Incl. dandelion and poke greens)	0.1	1.0	Mustard greens, cooked, from fresh, made with butter
Parsley, raw and ckd (Incl. epazote)	0.0	0.1	Parsley, raw
Seaweed (Laver), high in Vit. A	0.0	0.0	Seaweed, raw
Spinach, cooked (Incl. taro leaves)	0.7	7.1	Spinach, cooked, from fresh, made with oil
Spinach, raw	1.4	15.0	Spinach, raw
Turnip Greens, cooked	0.1	0.6	Turnip greens, cooked, from canned, fat not added in cooking
Unknown dark green veg.	0.1	1.2	Broccoli, cooked, from fresh, made with oil
Watercress (Incl. thistle leaves)	0.0	0.0	Watercress, raw
Beans and Peas (legumes)	**7.7**		
Black beans	1.1	14.3	Black, brown, or Bayo beans, canned, drained, made with oil
Chickpeas	0.4	5.4	Hummus, plain
Cowpeas	0.0	0.3	Cowpeas, dry, cooked, fat not added in cooking
Kidney Beans	0.9	12.1	Beans, kidney, red, mature seeds, canned, solids and liquids
Lentils	0.6	7.6	Lentil soup, home recipe, canned, or ready-to-serve
Lima beans (mature) (Incl. fava and mung beans)	0.0	0.5	Lima beans, dry, cooked, fat not added in cooking
Pinto beans (Incl. pink beans, yellow beans)	3.2	41.9	Pinto, calico, or red Mexican beans, dry, cooked, fat not added in cooking
Soybeans/Edamame	0.1	1.3	Edamame, cooked
Split Peas	0.1	0.8	Split pea soup
Unknown legume	0.2	2.7	Refried beans, fat added in cooking, NS as to type of fat
White beans (Incl. navy and pea beans)	1.0	13.0	Baked beans, vegetarian

Red and Orange Vegetables	**24.2**		
Carrot Juice	0.0	0.0	Carrot juice
Carrots, cooked	2.1	8.8	Carrots, cooked, from fresh, fat not added in cooking
Carrots, raw	2.0	8.3	Carrots, raw
Chili Pepper, hot, red, (Incl. color NS)	0.1	0.5	Peppers, hot, cooked, from fresh, fat added in cooking, NS as to type of fat
Ckd Sweet Potatoes/orange yams	0.7	2.9	Sweet potato, baked, peel not eaten, fat not added in cooking
Ckd Winter Squash	0.1	0.4	Squash, winter type, baked, no fat or sugar added in cooking
Pumpkin	0.1	0.5	Pumpkin, cooked, from canned, NS as to fat added in cooking
Red Peppers (sweet, bell), ckd and raw (Incl. pimentos)	0.3	1.2	Pepper, sweet, red, raw
Tomato Juice	0.9	3.7	Tomato and vegetable juice, 100%
Tomatoes, cooked	10.4	43.2	Spaghetti sauce
Tomatoes, raw	6.8	28.2	Tomatoes, raw
Unknown red/orange veg.	0.6	2.3	Carrots, cooked, NS as to form, fat not added in cooking
Starchy Vegetables	**27.8**		
Cassava (Tapioca) (Incl. taro, burdock root, and white yam)	0.1	0.5	Fufu
Corn (white) (Incl. hominy)	0.3	1.2	Corn, white, cooked, from fresh, made with butter
Corn (yellow)	2.3	8.4	Corn, yellow, cooked, from fresh, fat not added in cooking
Cowpeas, Field Peas, Blackeye Peas, not dried (Incl. pigeon peas)	0.1	0.2	Peas, cowpeas, field peas, or blackeye peas, not dried, cooked, from canned, NS as to fat added in cooking
French Fries	3.8	13.5	Potato, french fries, fast food
Green Peas, ckd and raw	1.0	3.7	Peas, green, cooked, from frozen, fat not added in cooking
Home Fries/Hash Browns	2.4	8.5	Potato, home fries, NFS
Lima Beans, immature	0.2	0.6	Beans, lima, immature, cooked, from frozen, fat not added in cooking
Plantains (incl. green banana)	0.3	1.2	Plantain, boiled, NS as to green or ripe
Potato Chips/Puffs/Sticks	5.2	18.8	Potato chips, plain
Potatoes, baked	4.3	15.6	Potato, baked, peel eaten
Potatoes, boiled (Incl. breadfruit)	7.4	26.5	Potato, mashed, from fresh, made with milk
Vegetable starches and unknown starchy veg.	0.3	1.0	Vegetable chips
Waterchestnuts (Incl. lotus root)	0.1	0.2	Lotus root, cooked, NS as to fat added in cooking

Subgroup and Item Clusters	Percent Food Group	Percent Food Subgroup	Representative Food (i.e., nutrient value of the item cluster)
Other Vegetables	**31.1**		
Artichoke	0.1	0.2	Artichoke, globe (French), cooked, from fresh, fat not added in cooking
Asparagus, ckd and raw	0.3	1.0	Asparagus, cooked, from fresh, fat not added in cooking
Avocado	1.6	5.2	Avocado, raw
Bamboo Shoots, cooked	0.0	0.1	Bamboo shoots, cooked, fat added in cooking
Beets, raw and ckd	0.1	0.3	Beets, cooked, NS as to form, NS as to fat added in cooking
Brussels Sprouts	0.2	0.6	Brussels sprouts, cooked, from frozen, fat not added in cooking
Cactus (Nopales), ckd and raw	0.1	0.2	Cactus, cooked, fat not added in cooking
Cauliflower, ckd and raw (Incl. broccoflower)	0.8	2.5	Cauliflower, raw
Celery, cooked	0.3	1.0	Celery, cooked, NS as to fat added in cooking
Celery, raw	0.6	2.1	Celery, raw
Chili Pepper, hot, green, ckd and raw (Incl. serrano and dwarf green)	0.3	1.1	Peppers, hot, cooked, from fresh, fat added in cooking, NS as to type of fat
Chives, ckd and raw	0.0	0.0	Chives, raw
Cucumber (Incl. flowers of sesbania, squash, lily, pumpkin)	2.2	6.9	Cucumber, raw
Cucumber Pickles (Incl. relish and capers)	1.3	4.3	Cucumber pickles, dill
Edible-pod Green Peas, ckd and raw (Incl. snowpeas, fern shoots)	0.2	0.5	Snowpeas, raw
Eggplant (Incl. hearts of palm), raw and ckd	0.2	0.5	Eggplant, cooked, NS as to fat added in cooking
Garlic, ckd and raw	0.1	0.4	Garlic, cooked
Green Beans, ckd and raw (Incl. snap and yellow beans)	3.2	10.2	Beans, string, green, cooked, from canned, fat not added in cooking
Green Cabbage, cooked	0.9	3.0	Cabbage, green, cooked, made with oil
Green Cabbage, raw (Incl. savoy cabbage; squash & pumpkin leaves)	1.4	4.6	Cabbage salad or coleslaw, from fast food / restaurant
Green Peppers, cooked, sweet, bell	0.9	3.0	Peppers, green, cooked, made with oil
Green Peppers, raw, sweet, bell (Incl. color NS)	0.5	1.6	Pepper, raw, NFS
Horseradish (Incl. ginger root, wasabi)	0.0	0.1	Horseradish
Lettuce (Incl. Iceberg, manoa)	5.6	17.9	Lettuce, raw
Miscellaneous Additional Vegetables	0.1	0.2	Seaweed, cooked, made with oil
Mungbeans Sprouts, ckd and raw (Incl. alfalfa and buckwheat sprouts)	0.1	0.4	Bean sprouts, cooked, from fresh, fat added in cooking

Subgroup and Item Clusters	Percent Food Group	Percent Food Subgroup	Representative Food (i.e., nutrient value of the item cluster)
Other Vegetables, continued	**31.1**		
Mushrooms, ckd and raw (Incl. shiitake)	0.8	2.4	Mushrooms, raw
Okra, cooked (Incl. horseradish pods)	0.2	0.6	Okra, cooked, from fresh, made with oil
Olives (raw or ckd)	0.3	1.0	Olives, NFS
Onions, mature, cooked (includes Leeks)	2.4	7.8	Onions, cooked, from fresh, made with oil
Onions, mature, raw	3.1	10.0	Onions, mature, raw
Radish, daikon, cooked	0.0	0.0	Radish, daikon, cooked, NS as to fat added in cooking
Radishes	0.1	0.2	Radish, raw
Red Cabbage (Incl. radicchio), raw and ckd	0.1	0.4	Cabbage, red, raw
Spring Onions/Scallions, ckd and raw	0.2	0.5	Onions, green, cooked, from fresh, fat added in cooking
Summer Squash, ckd and raw, yellow and zucchini (Incl. spaghetti squash, chayote, bitter and winter melons)	0.8	2.5	Squash, summer, yellow or green, cooked, from fresh, made with oil
Tomatillos, ckd and raw (Incl. green tomatoes)	0.1	0.2	Tomatoes, cooked, from fresh, NS as to method
Turnips, ckd and raw (Incl. rutabaga, kohlrabi, celeriac, fennel bulb)	0.2	0.5	Rutabaga, cooked, made with oil
Unknown other veg.	1.9	6.0	Onions, cooked, from fresh, made with oil
Grain Group			
WHOLE GRAINS	**14.9**		
Bars Containing Whole Grains	0.4	2.9	Granola bar, NFS
Brown Rice	0.9	5.7	Rice, brown, cooked, fat not added in cooking
Oatmeal and other cooked cereals	1.5	10.1	Oatmeal, regular or quick, made with water, fat not added in cooking
Other Foods Containing Whole Grains	0.1	0.8	Rice cake, cracker-type
Popcorn	0.8	5.6	Popcorn, microwave, butter flavored
Whole Grain Bagels & Eng. Muffins	0.2	1.5	Bagel, wheat
Whole Grain Bread	5.0	33.4	Bread, whole wheat
Whole Grain Breading	0.1	0.7	Bread, whole wheat
Whole Grain Chips	0.8	5.1	Corn chips, plain
Whole Grain Crackers	0.4	2.4	Crackers, graham
Whole Grain Pasta	0.6	3.7	Pasta, whole grain, cooked
Whole Grain Pizza Crust	0.4	2.7	Bread, chappatti or roti (Indian bread), wheat
Whole Grain Quick Bread	0.2	1.6	Pancakes, gluten free

Subgroup and Item Clusters	Percent Food Group	Percent Food Subgroup	Representative Food (i.e., nutrient value of the item cluster)
WHOLE GRAINS, continued	**14.9**		
Whole Grain Rolls (not sweet)	0.5	3.2	Roll, whole wheat, hamburger bun
Whole Grains in other foods, incl desserts	0.1	0.6	Cookie, oatmeal, with raisins
Whole Oat RTE Cereals	1.4	9.6	Honey Nut Cheerios
Whole Wheat RTE Cereals	1.5	10.3	Frosted Mini-Wheats
REFINED GRAINS	**85.1**		
Bagel, English Muffin	3.4	4.0	Bagel
Bars Containing Refined Grains	0.2	0.3	Clif Bar
Biscuit	1.7	2.0	Biscuit, baking powder or buttermilk type, commercially baked
Breading, Stuffing	3.8	4.4	Bread, white
Cooked Cereal	0.4	0.4	Grits, regular or quick, made with water, fat added in cooking
Corn Tortilla	6.6	7.8	Tortilla, corn
Flour-based Desserts (cakes, cookies, etc)	7.9	9.3	Cookie, chocolate chip
French Bread	2.2	2.6	Bread, French or Vienna
Other Foods Containing Refined Grains	0.5	0.6	Croissant
Pasta & Noodles	7.5	8.9	Pasta, cooked
Pie and Pastry Crusts	1.6	1.9	Pie Shell
Pizza Crust	7.6	8.9	Naan, Indian flatbread
Pretzels and Crackers	3.9	4.6	Pretzels, hard, plain, salted
Quick Breads	3.3	3.9	Pancakes, plain
Refined Grain as Thickener	0.5	0.6	Gravy, beef or meat
Refined grain RTE Cereal	1.9	2.2	Frosted Flakes, Kellogg's
Wheat Flour Tortilla	9.3	10.9	Tortilla, Flour (Wheat)
White Bread	8.2	9.6	Bread, white
White Rice	5.9	7.0	Rice, white, cooked, fat not added in cooking
White Roll	8.6	10.1	Roll, white, hoagie, submarine

Subgroup and Item Clusters	Percent Food Group	Percent Food Subgroup	Representative Food (i.e., nutrient value of the item cluster)
Dairy			
MILK	**49.6**		
Unflavored cow milks, whole	8.3	16.6	Milk, whole
Unflavored cow milks, 2%	11.3	22.7	Milk, reduced fat (2%)
Unflavored cow milks, 1%	4.8	9.6	Milk, low fat (1%)
Unflavored cow milks, fat-free	3.6	7.3	Milk, fat free (skim)
Low lactose, calcium-fortified, acidopholus, buttermilk, goat's milk & imitation milks, whole and NFS	0.2	0.3	Goat's milk, whole
Low lactose, calcium-fortified, acidopholus, buttermilk, goat's milk & imitation milks, 2%	0.3	0.6	Milk, lactose free, reduced fat (2%)
Low lactose, calcium-fortified, acidopholus, buttermilk, goat's milk & imitation milks, 1% and fat-free	0.2	0.4	Milk, lactose free, fat free (skim)
Dry & evaporated milks, whole, reduced fat, and NFS	0.1	0.2	Milk, evaporated, whole
Dry & evaporated milks, 1% and fat-free	0.0	0.0	Milk, dry, reconstituted, fat free (skim)
Milk NFS	0.5	1.0	Milk, NFS
Flavored milks (chocolate milk, cocoa), whole	0.8	1.6	Chocolate milk, ready to drink, whole
Flavored milks (chocolate milk, cocoa), 2%	1.1	2.1	Chocolate milk, ready to drink, reduced fat (2%)
Flavored milks (chocolate milk, cocoa), 1%	0.5	1.1	Chocolate milk, ready to drink, low fat (1%)
Flavored milks (chocolate milk, cocoa), fat-free	0.3	0.5	Chocolate milk, ready to drink, fat free (skim)
Flavored milks (chocolate milk, cocoa), NFS	0.5	1.0	Chocolate milk, NFS
Flavored milks (chocolate milk, cocoa), reduced sugar, milk whole and NS	0.4	0.9	Chocolate milk, ready to drink, reduced sugar, NS as to milk
Flavored milks (chocolate milk, cocoa), no sugar, 1%	0.0	0.1	Nesquik, chocolate milk, ready to drink, low fat (1%), no sugar added
Flavored milks (chocolate milk, cocoa), reduced sugar, 2% milk	0.0	0.0	Chocolate milk, made from reduced sugar mix with reduced fat milk (2%)
Flavored milks (chocolate milk, cocoa), no sugar, whole milk	0.1	0.2	Hot chocolate / Cocoa, made with no sugar added dry mix and whole milk
Flavored milks (chocolate milk, cocoa), no sugar, 2% milk	0.0	0.0	Nesquik, chocolate milk, made from no sugar added dry mix with reduced fat milk (2%)

Subgroup and Item Clusters	Percent Food Group	Percent Food Subgroup	Representative Food (i.e., nutrient value of the item cluster)
MILK, continued	**49.6**		
Flavored milks (chocolate milk, cocoa), no sugar, fat-free	0.0	0.0	Hot chocolate / Cocoa, made with no sugar added dry mix and water
Flavored milks (chocolate milk, cocoa), reduced sugar, 1% milk	0.0	0.0	Chocolate milk, made from reduced sugar mix with low fat milk
Flavored milks (chocolate milk, cocoa), reduced sugar, fat-free milk	0.0	0.0	Chocolate milk, made from light syrup with fat free milk (skim)
Milk in coffee drinks, lattes, and other bev., etc.	1.5	3.1	Milk, reduced fat (2%)
Skim milk in coffee drinks, lattes, etc.	0.3	0.5	Milk, fat free (skim)
Milk shakes, malted milk drinks, fruit-milk drinks/smoothies, fat-free	0.0	0.0	Milk, fat free (skim)
Milk shakes, malted milk drinks, fruit-milk drinks/smoothies, NFS	1.8	3.7	Milk shake, fast food, flavors other than chocolate
Milk shakes, malted milk drinks, fruit-milk drinks/smoothies, light	0.0	0.0	Milk shake, home recipe, flavors other than chocolate, light
Meal supplements/replacement drinks/diet drinks	0.1	0.3	Slim Fast Shake, meal replacement, sugar free, ready-to-drink
Milk powder drinks (recon+not recon), milk in eggnog or other bev.	0.1	0.2	Carnation Instant Breakfast, nutritional drink mix, regular, powder
Milk in soups	0.5	1.0	Milk, NFS
Milk in cream, sour cream	0.4	0.8	Cream, half and half
Milk in casseroles, “mixtures,” coatings/batters, frozen meals, main dishes & other dishes	2.5	5.0	Milk, NFS
Milk in scrambled eggs/omelets	2.2	4.5	Milk, NFS
Milk in mashed potatoes, creamed/sauced veg., sauces, gravies, salad dressings	1.3	2.5	Milk, whole
Milk in puddings (caloric & low cal sweeteners), custards, milk-based desserts, other desserts, sweetened condensed milk	0.6	1.1	Pudding, flavors other than chocolate, prepared from dry mix, milk added
Milk in candies and “bars” and cookies	0.7	1.5	Milk, whole
Milk in bread, baked products and cereals	2.3	4.6	Milk, NFS
Ice cream (caloric and low cal sweeteners), light and fat-free	0.3	0.6	Light ice cream, soft serve, flavors other than chocolate (formerly ice milk)
Ice cream (caloric sweeteners), regular and rich	1.6	3.2	Ice cream, regular, flavors other than chocolate

Subgroup and Item Clusters	Percent Food Group	Percent Food Subgroup	Representative Food (i.e., nutrient value of the item cluster)
MILK, continued	**49.6**		
Ice cream sundaes, cones, sticks/bars/novelties (caloric+low cal sweeteners), light and lowfat	0.1	0.3	Light ice cream, soft serve, flavors other than chocolate (formerly ice milk)
Ice cream sundaes, cones, sticks/bars/novelties (caloric+low cal sweeteners), regular, rich, and NFS	0.3	0.5	Ice cream, regular, flavors other than chocolate
YOGURT	**4.5**		
Frozen yogurt (caloric+low cal sweeteners) and sherbet, regular, lowfat, fat-free, and NFS	0.4	8.5	Yogurt, frozen, flavors other than chocolate, NS as to type of milk
Unflavored Yogurts, kefir, whole and NFS	0.3	7.2	Yogurt, plain, whole milk
Unflavored Yogurts, lowfat	0.1	2.8	Yogurt, plain, low fat milk
Unflavored Yogurts, fat-free	0.0	1.1	Yogurt, plain, nonfat milk
Flavored Yogurts (caloric sweeteners), lowfat	0.1	3.0	Yogurt, low fat milk, flavors other than fruit
Flavored Yogurts (caloric sweeteners), fat-free	0.1	2.0	Yogurt, nonfat milk, flavors other than fruit
Flavored Yogurts (caloric sweeteners), NFS	0.1	2.6	Yogurt, NS as to type of milk, flavors other than fruit
Flavored Yogurts (low calorie sweeteners), fat-free	0.0	0.0	Yogurt, nonfat milk, flavors other than fruit
Flavored Yogurts (low calorie sweeteners), lowfat	0.0	0.0	Yogurt, nonfat milk, flavors other than fruit
Fruit Yogurts (caloric sweeteners) incl.yogurt NS, whole	0.1	3.0	Yogurt, plain, whole milk
Fruit Yogurts (caloric sweeteners), incl. yogurt NS, lowfat	0.7	15.2	Yogurt, plain, low fat milk
Fruit Yogurts (caloric sweeteners) incl.yogurt NS, fat-free	0.4	8.0	Yogurt, nonfat milk, flavors other than fruit
Fruit Yogurts (caloric sweeteners) incl.yogurt NS, fat NFS	0.3	6.1	Yogurt, plain, low fat milk
Fruit Yogurts (low calorie sweeteners), lowfat	0.0	0.0	Yogurt, nonfat milk, flavors other than fruit
Fruit Yogurts (low calorie sweeteners), fat-free	0.0	0.0	Yogurt, nonfat milk, flavors other than fruit
Yogurt in other foods	0.1	1.3	Yogurt, Greek, plain, whole milk
Greek yogurt, unflavored, whole and NFS	0.0	1.0	Yogurt, Greek, plain, whole milk
Greek yogurt, unflavored, lowfat	0.2	3.7	Yogurt, Greek, plain, low fat
Greek yogurt, unflavored, nonfat	0.2	3.4	Yogurt, Greek, plain, nonfat milk
Greek yogurt, flavored, whole and NFS	0.1	2.7	Yogurt, Greek, NS as to type of milk, flavors other than fruit
Greek yogurt, flavored, lowfat	0.2	4.2	Yogurt, Greek, low fat milk, flavors other than fruit
Greek yogurt, flavored, nonfat	0.2	4.0	Yogurt, Greek, nonfat milk, flavors other than fruit
Greek yogurt, fruit, whole and NFS	0.1	2.4	Yogurt, Greek, plain, low fat
Greek yogurt, fruit, lowfat	0.3	7.4	Yogurt, Greek, plain, low fat
Greek yogurt, fruit, nonfat	0.5	10.5	Yogurt, Greek, plain, nonfat milk

Subgroup and Item Clusters	Percent Food Group	Percent Food Subgroup	Representative Food (i.e., nutrient value of the item cluster)
CHEESE	**44.8**		
Natural cheeses (incl low sodium cheeses), regular	8.4	18.7	Cheese, Cheddar
Natural cheeses (incl low sodium cheeses), reduced-fat	1.4	3.1	Cheese, Mozzarella, part skim
Natural cheeses (incl low sodium cheeses), lowfat and fat-free	0.2	0.4	Cheese, Swiss, reduced fat
Natural cheeses (incl low sodium cheeses), fat NFS	0.5	1.1	Cheese, Mozzarella, NFS
Cottage cheeses, regular	0.2	0.4	Cheese, cottage, creamed, large or small curd
Cottage cheeses, lowfat and fat NFS	0.4	0.9	Cheese, cottage, lowfat (1-2% fat)
Processed cheeses (incl low sodium cheeses), regular	3.2	7.2	Cheese, American
Processed cheeses (incl low sodium cheeses), reduced-fat	0.1	0.3	Cheese, American, reduced fat
Processed cheeses (incl low sodium cheeses), lowfat and fat-free	0.0	0.1	Cheese, American, nonfat or fat free
Cheese spreads, dips, sauces, soups	0.6	1.4	Cheese spread, American or Cheddar cheese base
Cheese on sandwiches	4.4	9.9	Cheese, American
Cheese in grains products, snacks (incl breads and cereals), desserts/sweets, regular and NFS	0.6	1.3	Cheese, mozzarella, whole milk
Cheese in grains products (incl fried cheese, gnocchi), desserts/sweets, reduced fat, lowfat, nonfat	0.4	0.9	Cheese, mozzarella, whole milk
Cheese in Mexican dishes	7.8	17.4	Cheese, Cheddar
Cheese in egg or meat dishes and frozen meals	2.0	4.4	Cheese, mozzarella, whole milk
Cheese on pizza and calzone, regular and NFS	8.5	18.9	Cheese, Mozzarella, part skim
Cheese on pizza and calzone, reduced-fat and lowfat	0.3	0.6	Cheese, Mozzarella, part skim
Cheese in pasta and Italian dishes, regular and NFS	3.1	6.9	Cheese, Cheddar
Cheese in pasta and Italian dishes, reduced fat, lowfat, and nonfat	0.0	0.0	Cheese, Mexican, blend, reduced fat
Cheese on vegetables (cheese sauce), in salads & dressings	1.2	2.6	Cheese, Cheddar
Cheese NFS	1.6	3.5	Cheese, NFS
SOYMILK	**1.0**		
Soymilk	1.0	100.0	Soymilk
PROTEIN FOODS			
Eggs	**9.43**		
Eggs	9.43	100.00	Egg, whole, boiled or poached

Subgroup and Item Clusters	Percent Food Group	Percent Food Subgroup	Representative Food (i.e., nutrient value of the item cluster)
High omega-3 fish	**2.72**		
Anchovy	0.01	0.32	Anchovy, canned
Herring	0.02	0.64	Herring, baked or broiled, fat added in cooking
Mackerel	0.04	1.35	Mackerel, baked or broiled, fat not added in cooking
Pompano	0.13	4.67	Pompano, baked or broiled, fat added in cooking
Salmon	1.71	63.06	Salmon, baked or broiled, made with oil
Sardines	0.07	2.43	Sardines, canned in oil
Sea bass	0.08	2.81	Sea bass, steamed or poached
Swordfish	0.01	0.43	Swordfish, steamed or poached
Trout	0.13	4.86	Trout, baked or broiled, made with oil
Roe	0.00	0.00	Roe, mixed species, cooked, dry heat
Unknown Fish, High Omega-3	0.23	8.48	Fish, NS as to type, cooked, NS as to cooking method
Tuna - High Omega-3	0.30	10.89	Tuna, canned, NS as to oil or water pack
Ray	0.00	0.05	Ray, baked or broiled, fat added in cooking
Shark	0.00	0.00	Shark, steamed or poached
Smelt	0.00	0.00	Smelt, rainbow, cooked, dry heat
Low omega-3 fish	**6.00**		
Shrimp	1.14	19.02	Shrimp, baked or broiled, made with oil
Unknown Fish, Low Omega-3	0.46	7.74	Fish, NS as to type, cooked, NS as to cooking method
Fish sticks	0.00	0.00	Haddock, cooked, dry heat
Restructured fish	0.03	0.52	Seafood restructured
Carp	0.01	0.14	Carp, steamed or poached
Catfish	0.34	5.75	Catfish, coated, fried, made with oil
Cod	0.62	10.36	Cod, coated, fried, made with oil
Croaker	0.02	0.32	Croaker, baked or broiled, fat added in cooking
Tilapia	1.24	20.60	Tilapia, baked or broiled, made with oil
Flounder	0.08	1.32	Flounder, steamed or poached
Haddock	0.07	1.14	Haddock, coated, baked or broiled, fat added in cooking
Mullet	0.00	0.02	Mullet, steamed or poached
Perch	0.12	2.05	Perch, coated, fried, made with oil
Pike	0.00	0.00	Pike, northern, cooked, dry heat
Porgy	0.06	0.99	Porgy, coated, fried
Tuna - Low Omega-3	1.00	16.73	Tuna, canned, NS as to oil or water pack

Subgroup and Item Clusters	Percent Food Group	Percent Food Subgroup	Representative Food (i.e., nutrient value of the item cluster)
Low omega-3 fish, continued	**6.00**		
Whiting	0.03	0.46	Whiting, baked or broiled, made with oil
Frog	0.00	0.02	Frog legs, NS as to cooking method
Octopus/squid	0.04	0.60	Squid, coated, fried
Clams	0.06	0.92	Clams, steamed or boiled
Crab	0.30	5.03	Crab, hard shell, steamed
Lobster	0.08	1.34	Lobster, baked or broiled, fat added in cooking
Oysters	0.09	1.42	Oysters, raw
Scallops	0.01	0.13	Scallops, cooked, NS as to cooking method
Mussels	0.06	1.03	Mussels, steamed or poached
Snapper	0.06	1.01	Porgy, steamed or poached
Halibut	0.05	0.87	Halibut, baked or broiled, made with oil
Eel	0.00	0.08	Eel, steamed or poached
Turtle/terrapin	0.01	0.13	Turtle, cooked, NS as to cooking method
Abalone	0.00	0.00	Abalone, steamed or poached
Crayfish	0.01	0.12	Crayfish, boiled or steamed
Snails	0.01	0.15	Snails, cooked, NS as to cooking method
Turbot	0.00	0.00	Flatfish (flounder and sole), cooked, dry heat
Nuts & Seeds	**12.50**		
Almond milk	0.15	1.19	Almond milk, unsweetened
Almonds and almond butter	1.92	15.37	Almonds, unsalted
Brazil nuts	0.01	0.11	Brazil nuts
Cashews	0.78	6.20	Cashew nuts, roasted, salted
Chestnuts	0.01	0.10	Chestnuts
Chia seeds	0.07	0.57	Chia seeds
Filberts/hazelnuts	0.05	0.41	Hazelnuts
Flax seeds	0.14	1.13	Flax seeds
Macadamia nuts	0.00	0.02	Macadamia nuts, roasted, salted
Mixed nuts	1.43	11.40	Mixed nuts, roasted, with peanuts
Peanut butter	3.61	28.87	Peanut butter
Peanuts	2.65	21.20	Peanuts, dry roasted, salted
Pecans	0.20	1.61	Pecans, unsalted
Pine nuts	0.01	0.11	Pine nuts
Pistachio nuts	0.13	1.07	Pistachio nuts, roasted, salted

Subgroup and Item Clusters	Percent Food Group	Percent Food Subgroup	Representative Food (i.e., nutrient value of the item cluster)
Nuts & Seeds	**12.50**		
Pumpkin/squash seed kernels	0.04	0.35	Pumpkin and/or squash seeds, hulled, roasted, salted
Sesame seeds	0.29	2.35	Tahini
Sunflower seeds	0.19	1.54	Sunflower seeds, hulled, roasted, salted
Walnuts	0.80	6.40	Walnuts, roasted, salted
Poultry	**29.38**		
Luncheon meats and bacon, poultry	3.43	11.66	Turkey, prepackaged or deli, luncheon meat
Chicken	24.35	82.90	Chicken breast, grilled without sauce, skin not eaten
Turkey	1.60	5.44	Turkey, light meat, roasted, skin not eaten
Red meats	**38.19**		
Beef	9.05	23.71	Beef steak, broiled or baked, lean only eaten
Beef, ground	10.36	27.12	Ground beef patty, cooked
Game meat	0.35	0.91	Venison/deer steak, cooked, NS as to cooking method
Lamb	0.32	0.83	Lamb chop, NS as to cut, cooked, lean and fat eaten
Liver	0.23	0.61	Beef, liver, pan-fried
Luncheon meats and bacon, beef	3.34	8.75	Frankfurter or hot dog, beef
Luncheon meats and bacon, pork	4.71	12.34	Ham, sliced, prepackaged or deli, luncheon meat
Pork, cured	2.42	6.35	Ham, smoked or cured, cooked, lean only eaten
Pork, fresh	4.87	12.76	Ham or pork with barbecue sauce (mixture)
Sausage	2.53	6.62	Pork sausage
Processed Soy Products	**1.78**		
Tofu	0.19	10.48	Soybean curd (includes stir fried, soybean cake, bean curd, tofu)
Processed Soy	1.59	89.52	Soy protein isolate

Subgroup and Item Clusters	Percent Food Group	Percent Food Subgroup	Representative Food (i.e., nutrient value of the item cluster)
Oils and Solid Fats			
	Estimated percent[1]		
Oils			
Unhydrogenated soy oil	53%		Oil, soybean, salad or cooking
Canola oil	22%		Oil, canola
Olive oil	4%		Oil, olive, salad or cooking
Corn oil	10%		Oil, corn, industrial and retail, all purpose salad or cooking
Sunflower oil	3%		Oil, sunflower, linoleic (approx. 65%)
Cottonseed oil	4%		Oil, cottonseed, salad or cooking
Peanut oil	1%		Oil, peanut, salad or cooking
Safflower oil	0%		Oil, safflower, salad or cooking, high oleic
Margarine (1/2 total)	3%		Margarine-like, veg. oil spread, 60% fat, tub, with salt, without vit. D
Solid Fats			
Palm oil	8%		Palm oil
Palm Kernel oil	3%		Palm kernel oil
Coconut oil	4%		Coconut oil
Dairy fat (incl. butter)	24%		Butter, salted
Pork fat (incl. lard)	7%		Lard
Vegetable shortening	19%		Vegetable shortening,household,composite
Beef fat (incl. tallow)	18%		Beef fat (tallow)
Hydrogentated soy oil	15%		Soy oil, hydrogenated
Margarine (1/2 total)	3%		60% fat stick margarine, without Vit. D

[1]Estimates calculated from Economic Research Service Food Availability and Loss-Adjusted Food Availability tables for fats and oils (added), 2010. (http://www.ers.usda.gov/data-products/food-availability-(per-capita)-data-system/.aspx#26715)

TABLE E3.2. NUMBER AND PERCENTAGE OF ITEM CLUSTERS (ICS) WITH DIFFERENT REPRESENTATIVE FOODS FOR "TYPICAL" VERSUS "NUTRIENT DENSE" ITEM CLUSTERS AND PRIMARY REASONS FOR DIFFERENCES

Food Group	Number of Different and Total ICs (% Different)	Primary Reasons for Differences: Compared to Nutrient Dense Representative Food, the Typical Representative Food is …
GRAINS		
Non-whole	11 of 20 (55%)	• Higher fat – grain dessert, biscuit item clusters, bars containing refined grains • Salted instead of unsalted rice, pasta, pretzel, and cereal • Sugared ready-to-eat cereal versus without added sugar
Whole	11 of 17 (65%)	• Graham cracker instead of reduced fat cracker • Oatmeal cookie for snack item cluster versus dry oats • Granola bar for bars containing refined grains item cluster versus dry oats • Oil-popped micro-waved versus air-popped popcorn • Sugared cereal versus without added sugar
FRUIT	34 of 124 (27%)	• Fruits packed in syrup or juice instead of water • Juice with added sugar (e.g., cranberry, lemonade) instead of unsweetened • Raw or cooked forms matched to same form for nutrients
VEGETABLES		
Legumes (Beans & Peas)	8 of 11 (73%)	• Canned with salt instead of cooked from dry without salt
Starchy	13 of 14 (93%)	• Cooked with salt/fat versus no salt/fat • Fast food fries versus unsalted frozen oven-heated • Regular potato chips versus fat-free potato chips
Dark Green	8 of 20 (40%)	• Cooked with salt/fat versus no salt/fat
Red and Orange	6 of 12 (50%)	• Marinara sauce versus salt-free tomato puree • Cooked with salt/fat versus no salt/fat
Other	27 of 39 (69%)	• Cooked with salt/fat versus no salt/fat

TABLE E3.3. TYPICAL CHOICES NUTRIENT PROFILES[1] FOR FOOD GROUPS AND SUBGROUPS

Food Groups	**FRUIT**	**VEGETABLES**					**GRAINS**		**PROTEIN FOODS**							**DAIRY**	**OIL**
Subgroups		**Dark Green**	**Red-Orange**	**Beans & Peas**	**Starchy**	**Other**	**Whole Grains**	**Refined Grains**	**Meats**	**Poultry**	**Fish-Hi n3**	**Fish-Lo n3**	**Eggs**	**Soy Prdts**	**Nuts/ Seeds**		
Amount	1 c eq	1 c eq	1 c eq	1 c eq	1 c eq	1 c eq	1 oz eq	1 oz eq	1 oz eq	1 oz eq	1 oz eq	1 oz eq	1 oz eq	1 oz eq	1 oz eq	1 c eq	1 g
Macronutrients																	
Calories, kcal	104.8	37.3	102.6	275.0	232.8	68.4	111.5	106.3	74.5	48.2	53.3	46.4	71.0	46.5	88.7	162.6	8.8
Protein, g	1.0	2.7	1.7	14.6	3.9	1.7	3.3	2.6	7.6	8.1	7.2	6.0	6.2	11.7	3.1	9.3	0.0
Carbohydrate, g	26.5	6.4	26.4	42.2	33.0	9.2	19.5	17.8	0.8	0.1	0.0	1.0	0.4	0.1	3.2	11.2	0.0
Fiber, total dietary, g	2.4	3.4	1.9	13.5	3.0	2.6	2.3	0.9	0.0	0.0	0.0	0.1	0.0	0.0	1.1	0.1	0.0
Total lipid (fat), g	0.3	0.9	0.3	6.6	10.1	3.3	2.6	2.8	4.4	1.5	2.6	1.9	4.7	0.7	7.7	9.0	1.0
Saturated Fatty acids, g	0.1	0.2	0.1	1.0	2.0	0.5	0.6	0.9	1.6	0.3	0.5	0.4	1.6	0.1	1.1	5.3	0.1
Monounsat. Fatty acids, g	0.0	0.2	0.0	2.8	4.5	1.5	0.7	0.7	2.0	0.5	0.9	0.7	1.8	0.1	3.8	2.5	0.3
Polyunsat Fatty acids, g	0.1	0.4	0.1	2.3	2.9	1.1	0.9	0.9	0.4	0.4	0.7	0.7	0.9	0.3	2.2	0.4	0.5
18:2 Linoleic acid, g	0.1	0.2	0.1	2.0	2.7	0.9	0.9	0.8	0.4	0.3	0.4	0.5	0.8	0.3	2.1	0.3	0.4
18:3 Linolenic acid, g	0.0	0.1	0.0	0.3	0.2	0.2	0.0	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.2	0.1	0.1
EPA, g	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
DHA, g	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Cholesterol, mg	0.0	0.1	0.1	0.3	4.2	0.6	0.1	1.3	25.2	26.0	17.3	25.7	184.5	0.0	0.0	30.7	0.0
Added Sugars, g	2.4	0.0	1.5	2.1	0.0	0.4	3.3	2.7	0.6	0.0	0.0	0.1	0.0	0.0	0.3	2.9	0.0
Minerals																	
Calcium, mg	20.5	78.5	28.5	89.3	22.8	38.3	42.9	25.5	6.0	2.1	6.6	12.1	28.0	29.9	31.9	324.4	0.0
Iron, mg	0.4	1.4	0.6	3.9	0.9	0.6	2.5	1.3	0.6	0.1	0.2	0.3	0.9	1.9	0.4	0.2	0.0
Magnesium, mg	19.0	37.3	21.1	79.6	37.5	17.9	28.5	10.8	6.8	7.9	9.8	9.1	6.0	6.7	28.9	21.4	0.0
Phosphorus, mg	26.2	63.5	45.4	262.6	104.8	42.8	88.0	47.9	67.5	66.0	87.1	73.9	98.5	104.6	59.8	238.1	0.0
Potassium, mg	293.1	388.9	445.5	665.5	589.2	253.9	96.1	45.4	114.8	101.2	122.7	81.6	68.5	18.1	92.9	238.3	0.0
Sodium, mg	5.4	233.4	766.1	581.3	320.1	254.6	139.2	168.3	222.2	122.5	118.4	127.9	214.5	128.1	49.0	231.0	0.2
Zinc, mg	0.2	0.5	0.3	2.3	0.6	0.3	1.3	0.3	1.3	0.3	0.2	0.5	0.6	0.6	0.5	1.3	0.0
Copper, mg	0.1	0.1	0.1	0.4	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.2	0.1	0.0	0.0
Selenium, µg	0.5	1.4	0.7	9.2	1.1	1.0	6.5	5.9	8.9	8.1	12.5	13.1	15.3	0.7	2.6	9.3	0.0

TABLE E3.3 CONTINUED. TYPICAL CHOICES NUTRIENT PROFILES[1] FOR FOOD GROUPS AND SUBGROUPS

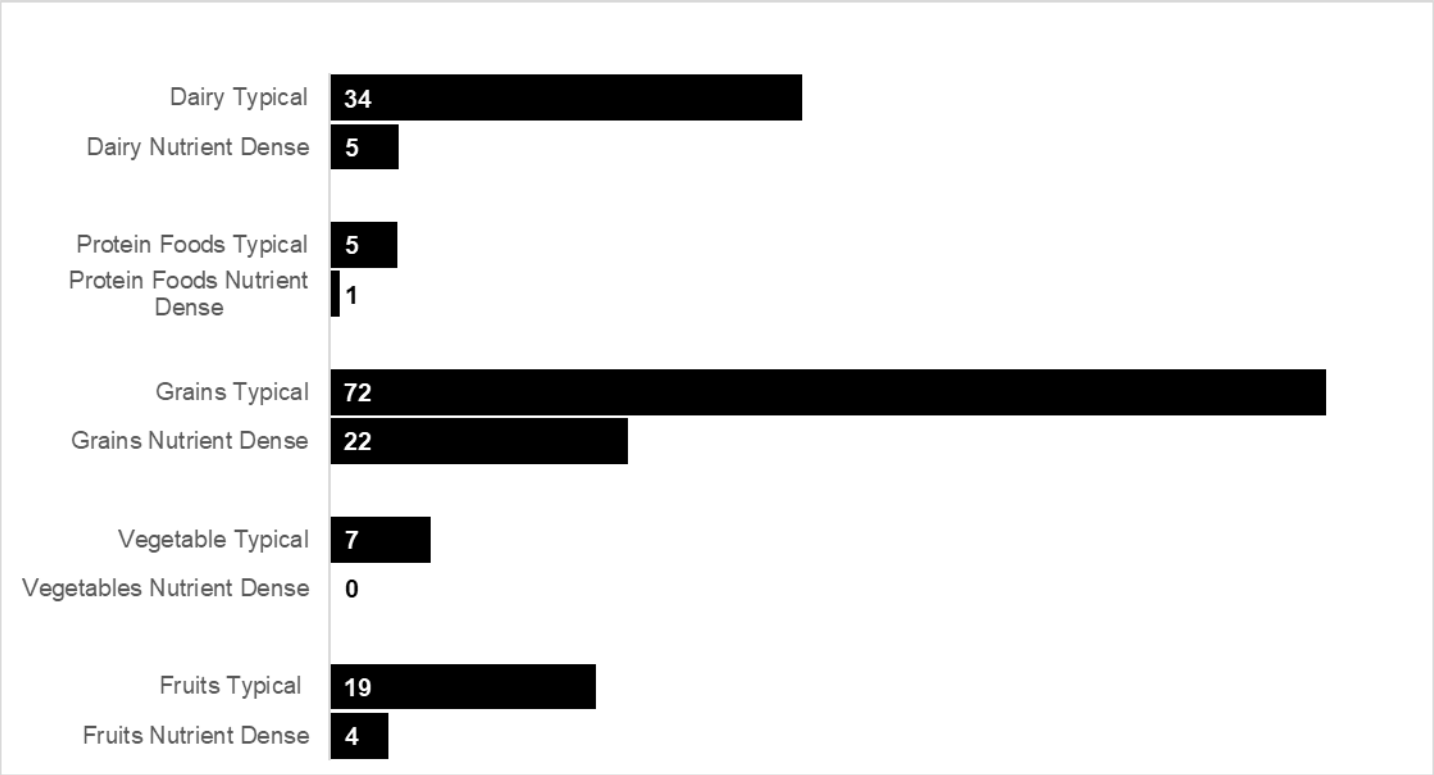
Food Groups	FRUIT	VEGETABLES					GRAINS		PROTEIN FOODS							DAIRY	OIL
Subgroups		Dark Green	Red-Orange	Beans & Peas	Starchy	Other	Whole Grains	Refined Grains	Meats	Poultry	Fish-Hi n3	Fish-Lo n3	Eggs	Soy Prdts	Nuts/ Seeds		
Amount	1 c eq	1 c eq	1 c eq	1 c eq	1 c eq	1 c eq	1 oz eq	1 oz eq	1 oz eq	1 oz eq	1 oz eq	1 oz eq	1 oz eq	1 oz eq	1 oz eq	1 c eq	1 g
Vitamins																	
Vitamin A, µg_RAE	15.4	256.7	334.6	7.6	24.7	20.5	35.4	6.3	15.2	2.2	11.2	7.1	79.5	0.0	3.7	133.1	0.2
Vitamin E, mg AT	0.4	1.6	1.8	1.5	1.8	0.6	0.3	0.2	0.1	0.2	0.3	0.4	0.5	0.0	1.5	0.2	0.1
Vitamin D, IU	0.0	0.0	0.0	0.0	0.0	0.3	7.7	2.5	5.3	0.5	136.5	22.9	40.0	0.0	3.4	70.2	0.0
Vitamin C, mg	33.9	50.7	20.1	3.1	12.2	18.5	0.9	0.4	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.3	0.0
Thiamin, mg	0.1	0.1	0.1	0.3	0.1	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Riboflavin, mg	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.2	0.0	0.1	0.4	0.0
Niacin, mg	0.5	0.6	1.7	1.1	2.4	0.5	2.1	1.4	1.9	2.9	2.5	1.3	0.0	0.2	1.3	0.2	0.0
Vitamin B-6, mg	0.2	0.2	0.2	0.3	0.4	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.0	0.1	0.1	0.0
Vitamin B-12, µg	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.1	0.6	0.1	1.2	0.8	0.4	0.0	0.1	0.9	0.0
Choline, mg	9.5	31.6	16.7	62.2	26.5	13.7	7.5	4.4	25.9	20.5	29.1	22.4	116.7	26.0	8.4	27.7	0.0
Vitamin K, µg	3.9	278.3	10.7	11.0	9.3	32.4	1.6	2.6	0.3	0.6	1.2	1.8	0.2	0.1	0.7	0.8	1.2

[1]Based on NHANES 2015-16 consumption data, 2 days of food intake, FNDDS 15-16 nutrient data

TABLE E3.4. ENERGY, ADDED SUGARS, SODIUM, AND SATURATED FATTY ACIDS PER OUNCE OR CUP EQUIVALENT IN FOOD GROUP NUTRIENT PROFILES FOR USDA FOOD PATTERNS WITH "NUTRIENT DENSE" AND "TYPICAL" FOOD CHOICES

		Energy (kcal)	Added Sugars (kcal)	Sodium (mg)	Saturated Fatty Acids (g)
Fruits (per cup eq)	Typical	104.8	9.7	5.4	0.1
	Nutrient Dense	98.3	2.1	4.9	0.1
Vegetables (per cup eq)					
Dark Green	Typical	37.3	0	233.4	0.2
	Nutrient Dense	32.5	0	45.9	0.1
Red-Orange	Typical	80.1	6	551.2	0.3
	Nutrient Dense	45.2	0	33.3	0
Legumes	Typical	275	8.3	581.3	1.0
	Nutrient Dense	242.7	0	2.8	0.3
Starchy	Typical	232.8	0	320.1	2.0
	Nutrient Dense	180.7	0	81.5	0.4
Other	Typical	68.4	1.4	254.6	0.5
	Nutrient Dense	52.2	0	24.8	0.2
Grains (per oz eq)					
Whole Grain	Typical	111.5	13.1	139.2	0.6
	Nutrient Dense	91.5	2.3	74.9	0.3
Refined Grain	Typical	106.3	11	168.3	0.9
	Nutrient Dense	86.4	4.9	104.5	0.3
Protein Foods (per oz eq)					
Meats	Typical	72.7	2.2	192.1	1.6
	Nutrient Dense	43.6	0.1	99.6	0.5
Poultry					
	Typical	48.2	0	122.5	0.3
	Nutrient Dense	51	0	51.6	0.5
Fish: High Omega 3	Typical	53	0	118	0.5
	Nutrient Dense	56	0	23	0.6
Fish: Low Omega 3	Typical	46.4	0.3	127.9	0.4
	Nutrient Dense	32.5	0	97.9	0.1
Eggs	Typical	71	0	214.5	1.6
	Nutrient Dense	77.5	0	62	1.6
Soy Products	Typical	46.5	0	128.1	0.1
	Nutrient Dense	47.6	0	128.4	0.1
Nuts & Seeds	Typical	88.7	1.1	49	1.1
	Nutrient Dense	88.4	1.1	7.6	1.2
Dairy (per cup eq)	Typical	162.6	11.4	231	5.3
	Nutrient Dense	84.8	1.7	193.7	0.6

FIGURE E3.1. ENERGY FROM ADDED SUGARS IN THE 2000 KCAL HEALTHY U.S.-STYLE PATTERN CONSTRUCTED WITH NUTRIENT DENSE AND TYPICAL CHOICE NUTRIENT PROFILES



EXERCISE 3 STEP 5: EVALUATE NUTRIENT LEVEL IN EACH PATTERN AGAINST NUTRITIONAL GOALS

The estimated nutrient composition of the Healthy U.S.-Style Pattern was calculated using the typical choice nutrient profiles and the food group amounts for ages 2 years and older. Table E3.5 provides the estimated nutrient composition for each energy level. The nutrient composition compared to the nutrient goals for each age-sex group are provided in Tables E3.6. Notably, the estimated energy from the food groups and subgroups exceeds the intended energy level of the pattern.

TABLE E3.5. NUTRIENTS AND OTHER FOOD COMPONENTS IN HEALTHY U.S. STYLE PATTERN CALCULATED WITH TYPICAL CHOICE NUTRIENT PROFILES

ENERGY LEVEL	1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200
Macronutrients												
Calories, kcal	1297	1589	1817	2078	2322	2535	2771	2999	3240	3465	3682	3883
Protein, g	46	61	72	86	91	95	103	109	115	122	124	124
Total lipid (fat), g	62	75	81	97	107	118	127	139	149	156	171	187
Carbohydrate, g	144	173	207	225	259	283	315	341	375	409	428	444
Fiber, total dietary, g	15	19	22	26	30	32	36	39	43	47	49	50
Cholesterol, mg	142	189	223	273	277	301	319	339	343	362	367	374
Saturated Fatty acids, g	22	26	27	32	35	39	41	44	47	49	52	57
Monounsat. Fatty acids, g	21	25	27	33	36	40	43	47	51	53	59	64
Polyunsat Fatty acids, g	15	18	20	24	27	30	33	36	39	41	47	51
18:2 Linoleic acid, g	13	16	17	21	24	26	29	31	34	37	41	45
18:3 Linolenic acid, g	1.6	1.9	2.0	2.5	2.8	3.1	3.4	3.6	4.0	4.2	4.8	5.3
EPA + DHA (mg)	47	71	93	122	122	126	136	391	148	160	160	160
Added Sugars (g)	18	23	28	30	33	35	38	41	44	49	49	49
Minerals												
Calcium, mg	837	1062	1118	1324	1372	1388	1452	1492	1551	1600	1622	1622
Iron, mg	8	11	14	16	18	18	21	23	26	28	29	29
Magnesium, mg	174	229	269	316	346	360	403	428	467	501	518	518
Phosphorus, mg	932	1226	1378	1634	1732	1780	1931	2035	2154	2269	2317	2317
Potassium, mg	1684	2202	2520	2997	3315	3512	3870	3992	4324	4590	4817	4817
Sodium, mg	1641	2210	2512	2953	3350	3441	3847	4083	4444	4674	4864	4881
Zinc, mg	7	9	11	13	14	14	16	17	18	19	20	20
Copper, mg	0.6	0.8	1.0	1.2	1.3	1.4	1.6	1.7	1.9	2.0	2.1	2.1
Selenium, mcg	58	78	94	109	116	121	133	143	151	162	163	163

Continued on next page.

TABLE E3.5 CONTINUED. NUTRIENTS AND OTHER FOOD COMPONENTS IN HEALTHY U.S. STYLE PATTERN CALCULATED WITH TYPICAL CHOICE NUTRIENT PROFILES

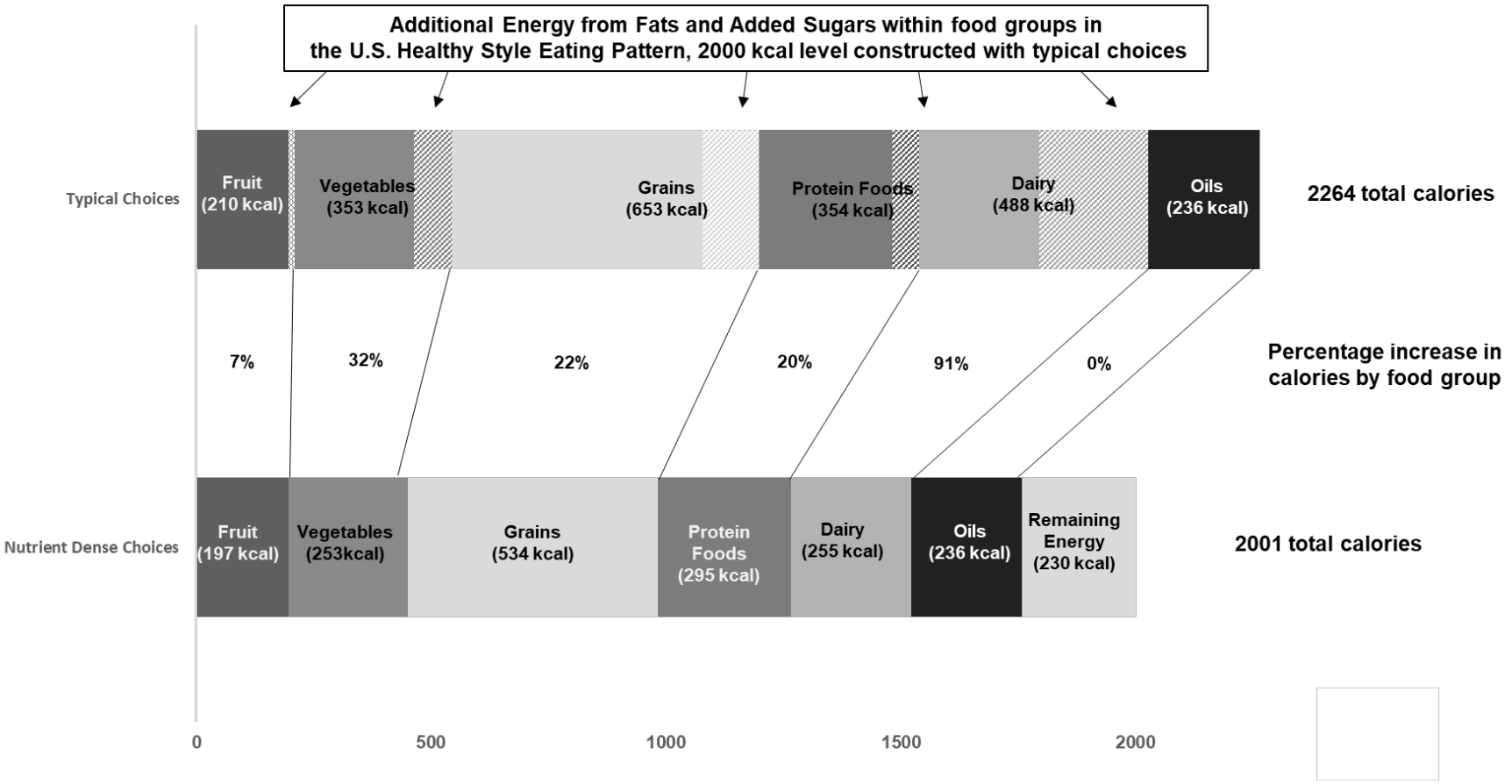
ENERGY LEVEL	1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200
Vitamins												
Vitamin A, mcg RAE	546	693	735	905	997	1024	1105	1141	1239	1277	1320	1336
Vitamin E, mg AT	7	9	10	12	13	15	16	17	19	20	22	23
Vitamin D, IU	188	244	264	321	325	331	343	357	363	376	378	380
Vitamin C, mg	55	66	83	94	102	119	129	130	140	158	165	165
Thiamin, mg	0.9	1.1	1.4	1.5	1.7	1.8	2.0	2.2	2.4	2.7	2.7	2.7
Riboflavin, mg	1.4	1.8	2.0	2.3	2.4	2.5	2.7	2.9	3.0	3.2	3.3	3.3
Niacin, mg	12	17	21	24	27	28	32	34	37	40	41	41
Vitamin B-6, mg	1.2	1.7	2.0	2.3	2.6	2.7	3.0	3.2	3.5	3.8	3.9	3.9
Vitamin B-12, mg	4	5	5	7	7	7	7	8	8	9	9	9
Choline, mg	168	226	265	323	342	363	397	418	439	465	479	481
Vitamin K, mcg	71	104	109	144	159	166	201	207	241	248	269	278
Folate, mcg DFE	291	387	464	525	599	612	712	778	874	949	977	977

TABLE E3.6. HEALTHY U.S.-STYLE PATTERN CALCULATED WITH TYPICAL CHOICE NUTRIENT PROFILES: COMPARISON OF SELECT NUTRIENTS TO NUTRIENT GOALS FOR SELECT ENERGY LEVELS PER AGE-SEX GROUPS

ENERGY LEVEL		1000	1200	1400	1600		1800			2000		2200		2400
		M/F 1 to 3	F 4 to 8	M 4 to 8	F 9 to 13	F 51 to 70	M 9 to 13	F 14-18	F 31-50	M 51-70	F19-30	M 14-18	M 31-50	M 19-30
Energy	% kcal level	130%	132%	130%	130%	130%	129%	129%	129%	127%	127%	126%	126%	125%
Protein	%RDA	351%	323%	378%	252%	186%	266%	197%	197%	169%	205%	198%	184%	195%
Protein	% kcal	14%	15%	16%	16%	16%	16%	16%	16%	15%	15%	15%	15%	15%
Fat	% kcal	43%	42%	40%	42%	42%	41%	41%	41%	42%	42%	41%	41%	42%
Carbohydrate	%RDA	110%	133%	159%	173%	173%	199%	199%	199%	218%	218%	242%	242%	262%
Carbohydrate	% kcal	44%	44%	46%	43%	43%	45%	45%	45%	45%	45%	45%	45%	46%
Saturated Fatty acids	% of kcal	15%	15%	14%	14%	14%	14%	14%	14%	14%	14%	13%	13%	13%
Monounsat. Fatty acids	% of kcal	14%	14%	13%	14%	14%	14%	14%	14%	14%	14%	14%	14%	14%
Polyunsat Fatty acids	% of kcal	10%	10%	10%	10%	10%	10%	10%	10%	11%	11%	11%	11%	11%
18:2 Linoleic acid	%AI	189%	160%	174%	209%	190%	197%	215%	197%	187%	218%	180%	170%	181%
18:3 Linolenic acid	%AI	227%	212%	225%	247%	225%	232%	253%	253%	192%	279%	210%	210%	226%
Fiber, total dietary	14g/1000kcal	106%	112%	114%	117%	117%	119%	119%	119%	114%	114%	118%	118%	115%
Calcium	%RDA	120%	106%	112%	102%	110%	106%	106%	137%	116%	139%	112%	145%	149%
Iron	%RDA	121%	114%	139%	196%	196%	221%	118%	98%	226%	101%	190%	261%	288%
Magnesium	%RDA	218%	177%	207%	132%	99%	144%	96%	108%	86%	116%	98%	96%	107%
Phosphorus	%RDA	203%	245%	276%	131%	233%	139%	139%	247%	254%	254%	154%	276%	291%
Potassium	%AI	84%	96%	110%	130%	115%	133%	144%	127%	103%	135%	129%	114%	117%
Sodium	%CDRR	137%	147%	167%	164%	128%	186%	146%	146%	150%	150%	167%	167%	178%
Zinc	%RDA	236%	189%	220%	164%	164%	172%	153%	172%	129%	178%	143%	143%	154%
Copper	%RDA	188%	193%	231%	170%	132%	191%	150%	148%	156%	156%	178%	176%	187%
Selenium	%RDA	289%	260%	312%	273%	198%	290%	211%	211%	219%	219%	241%	241%	260%
Vitamin A	%RDA	182%	173%	184%	151%	129%	166%	142%	142%	114%	146%	123%	123%	127%
Vitamin E	%RDA	117%	124%	137%	107%	78%	123%	90%	90%	98%	98%	108%	108%	115%
Vitamin D	%RDA	31%	41%	44%	54%	54%	54%	54%	54%	55%	55%	57%	57%	60%
Vitamin C	%RDA	365%	263%	334%	209%	125%	226%	156%	136%	132%	158%	172%	144%	144%
Thiamin	%RDA	172%	191%	230%	170%	139%	193%	174%	158%	149%	163%	170%	170%	185%
Riboflavin	%RDA	273%	295%	331%	256%	210%	272%	245%	223%	194%	229%	209%	209%	221%
Niacin	%RDA	205%	211%	259%	200%	172%	224%	192%	192%	176%	201%	197%	197%	214%
Vitamin B-6	%RDA	245%	276%	331%	234%	156%	255%	213%	197%	159%	208%	233%	233%	248%
Vitamin B-12	%RDA	397%	396%	455%	365%	274%	371%	278%	278%	287%	287%	307%	307%	328%
Choline	%AI	84%	91%	106%	86%	76%	91%	86%	80%	66%	85%	72%	72%	76%
Vitamin K	%AI	238%	189%	198%	240%	160%	265%	212%	177%	138%	185%	269%	168%	173%
Folate	%RDA	194%	193%	232%	175%	131%	200%	150%	150%	153%	153%	178%	178%	194%
Cholesterol	300 mg	47%	63%	74%	91%	91%	92%	92%	92%	100%	100%	106%	106%	113%

2020 Dietary Guidelines Advisory Committee
Added Sugars: Food Pattern Modeling Exercise 3
https://www.dietaryguidelines.gov/2020-advisory-committee-report/food-pattern-modeling/FPM-added-sugars

FIGURE E3.2. ADDITIONAL ENERGY FROM FATS AND ADDED SUGARS WITHIN FOOD GROUPS IN THE HEALTHY U.S.-STYLE PATTERN, 2000 KCAL LEVEL CONSTRUCTED WITH TYPICAL CHOICE NUTRIENT PROFILES



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