

6 — Dietary Specifications

The [Healthy, Hunger-Free Kids Act of 2010](#) (Public Law 111-296) required the USDA to update school meal nutrition standards to reflect current dietary science based on the [Dietary Guidelines for Americans](#). The purpose of the USDA's nutrition standards (known as dietary specifications) is to provide nutrient-dense school meals that help combat the dual problems of childhood obesity and hunger.

School meals must meet weekly dietary specifications for calories (minimum and maximum levels), saturated fats, and sodium. In addition, all food products and ingredients used to prepare school meals must contain zero grams of trans fats per serving, as indicated by the Nutrition Facts label or manufacturer's specifications. For information on the dietary specifications for each grade group, see the lunch and breakfast meal patterns in section 1.

Menu Planning

The daily and weekly servings of the food components required by the NSLP and SBP meal patterns are intended to meet the calorie and nutrient needs for each grade group. However, the types of foods selected by the menu planner affect the calorie and nutrient content of school meals. The examples below show how different food choices within the same food component vary in nutrient content.

- **Grains:** A 1-ounce equivalent serving of 100 percent whole-grain bread provides more fiber and nutrients, and less calories and fat than a 1-ounce serving of blueberry muffin made with 50 percent whole-grain flour and 50 percent enriched flour.
- **Fruits:** A ½-cup serving of fresh fruit salad provides fiber, more nutrients, and less calories than ½ cup of 100 percent apple juice.
- **Vegetables:** A ½-cup serving of baked potato provides more fiber and nutrients, and less calories, fat, and sodium than ½ cup of oven-baked french fries.
- **Meat/meat alternates:** A 1-ounce serving of skinless turkey breast provides less calories, fat, and sodium than a 1-ounce serving of beef salami.



The CSDE strongly encourages SFAs to provide the healthiest choices within each food component. Menu planners must determine how foods with solid fats and added sugars affect the menu's nutrient analysis and plan menus appropriately. All foods served as part of reimbursable meals count toward the weekly dietary specifications and are included in the CSDE's nutrient analysis of school menus, when a nutrient analysis is required as part of the Administrative Review of school nutrition programs. For more information, see "Nutrient Analysis" in section 2.

Compliance Strategies

This section contains specific strategies to help menu planners meet the calorie ranges for school meals, and limit solid fats, added sugars, and sodium. The USDA has many nutrition and menu planning resources that can assist SFAs with providing healthy meals that meet the dietary specifications. The USDA's [Healthier School Day](#) website includes topic-specific policy and resource materials to assist schools in meeting the nutrition standards. The USDA's [Recipes for Healthy Kids Cookbook for Schools](#) features healthy recipes that are low in saturated fats, added sugars, and sodium; and include more dark green and orange vegetables, dry beans and peas, and whole grains. The USDA's [What's Cooking? USDA Mixing Bowl](#) website is a searchable collection of recipes and other resources for the federal nutrition assistance programs. Some additional resources are listed below.

- Child Nutrition Sharing Site (CNSS) (ICN):
<https://theicn.org/cnss/>
- Food Buying Guide for Child Nutrition Programs (USDA):
<https://www.fns.usda.gov/tn/food-buying-guide-for-child-nutrition-programs>
- Fruits & Vegetables Galore: Helping Kids Eat More (USDA):
<https://www.fns.usda.gov/tn/fruits-vegetables-galore-helping-kids-eat-more>
- Menu Planning Tools:
<https://healthymeals.nal.usda.gov/menu-planning/menu-planning-tools>
- Team Nutrition Resource Library (USDA):
<https://www.fns.usda.gov/tn/resource-library>
- USDA Food (Commodity) Resources:
<https://healthymeals.nal.usda.gov/menu-planning/usda-food-commodity-resources>

The CSDE's handout, [Menu Planning Resources for School Meals](#), includes key menu planning resources for the NSLP and SBP. For additional resources and guidance, see "Recipe Resources" in section 2, the CSDE's [Menu Planning for Child Nutrition Programs](#) webpage, and the CSDE's resource list, [Menu Planning and Food Production](#). For additional guidance on menu planning and the dietary specifications, see chapter 3 in the USDA's [Menu Planner for School Meals](#).

Calories

The dietary specifications require age-appropriate minimum and maximum calorie levels for lunches and breakfasts offered to each grade group. The calorie ranges apply on a weekly basis. Meals offered on average over the week must be within the specific calorie range for each grade group. Individual meals offered may be above or below the calorie range.

The calorie ranges do not apply to meals selected by individual students. Student selections may be above or below the weekly ranges. For information on the calorie ranges for each grade group, see the NSLP and SBP meal patterns in section 1.

Deviations for developmental issues

Schools are allowed, on a case-by-case basis, to offer age-appropriate meals to individual students in unique situations, such as older or younger students who are placed in the grade group for developmental or other exceptional reasons. An example is a 16-year-old teen with developmental issues who is placed with students in grades K-5. SFAs must seek written permission from the CSDE prior to deviating from the required meal pattern for the prevalent grade group.

Students with special energy needs

The USDA designed the nutrition standards for school meals based on age-appropriate nutrition and physical activity habits of the average student. Meals for students with special energy needs (such as athletes and pregnant teens), who may require additional calories and protein, must still meet the weekly calorie limits. Schools can provide opportunities for all students to select additional meal pattern components if meals do not exceed the weekly calorie limit. Students may obtain extra needed calories from other USDA meals such as breakfast and ASP snacks, and can also purchase additional a la carte foods. For more information, see the USDA's handout, *Fact Sheet: Athletic Programs and Afterschool Meal Service* and *Fact Sheet: Calories in School Meals*.

Meeting weekly calorie ranges

The daily and weekly servings of each food component in the lunch and breakfast meal patterns are intended to meet the minimum and maximum calories for each grade group. The strategies on pages 320 to 333 assist menu planners with adjusting school menus that are not within the required weekly calorie ranges.

Increasing Calories

When a school menu requires more calories to meet the minimum weekly calories, the menu planner should add calories from nutrient-dense foods, following the recommendations of the *Dietary Guidelines for Americans*. Nutrient-dense foods provide substantial amounts of naturally occurring vitamins, minerals and other nutrients with relatively few calories. Examples include fruits, vegetables, whole grains, low-fat or nonfat dairy products, lean meat, skinless poultry, fish, and eggs.

For best nutrition, additional calories should come from more servings of naturally nutrient-dense vegetables (especially the dark green, red/orange, and legumes subgroups), fruits, and whole grains. Meals can include larger amounts of any food component if the weekly menu does not exceed the weekly calorie limit and other dietary specifications. For more information, see “Second Servings” and “Extra Servings of Vegetables and Fruits” in section 1.



Increasing complex carbohydrates

Increasing Calories with Complex Carbohydrates

The 2015-2020 *Dietary Guidelines for Americans* encourages increased consumption of complex carbohydrate foods such as whole grains, vegetables, legumes, fruits, nuts, and seeds. These foods are naturally rich in fiber and other nutrients. They provide a variety of health benefits, such as decreasing the risk of cardiovascular disease.

When a school menu does not meet the minimum weekly calories, the menu planner should add calories from additional servings of naturally nutrient-dense fiber-rich vegetables (especially the dark green, red/orange, and legumes subgroups), fruits, and whole grains. To increase complex carbohydrates in school meals, menu planners should adjust menus to:

- provide whole unprocessed or minimally processed fruits and vegetables most often;
- increase the frequency of legumes (dry beans and peas), e.g., such as kidney beans, lentils, black beans, lentils, split peas, and garbanzo beans (chickpeas);
- provide additional servings of vegetables and fruits, e.g., serving three kinds of fruits or vegetables instead of two;
- increase the serving size of vegetables and fruits, as appropriate to the grade group being served; and
- increase the frequency of whole-grains and cereals, e.g., whole-wheat pasta, whole-grain breads, oatmeal, bulgur, and brown rice. For information on whole grains, see “Whole Grains” in part B of section 3.

Fiber content

The CSDE recommends providing minimally processed whole foods instead of processed convenience foods supplemented with fiber. Whole foods contain a large variety of naturally occurring nutrients and other health-enhancing compounds that cannot be duplicated in processed foods.

Food labels indicate the amount of fiber as “dietary fiber” in grams (g). The food label can state that a product is “a good source” of fiber if it contributes 10 percent of the Daily Value (2.5 grams of fiber per serving). The package can claim “high in,” “rich in,” or “excellent source of” fiber if the product provides 20 percent of the Daily Value (5 grams of fiber per serving).

Increasing complex carbohydrates

Processed foods fortified with added fiber (such as cereal bars or cookies with added cellulose, inulin, or chicory root) are not nutritionally equivalent to nutrient-dense whole-grain foods with naturally occurring fiber. Some processed convenience high-fiber foods such as breakfast cereals and snack bars may also contain added fat, sugars, and sodium. Read Nutrition Facts labels to compare nutrient content and ingredients. For more information, see “[Using Food Labels](#)” in this section.

The following guidance assists SFAs with meeting the weekly calorie ranges by increasing nutrient-dense fiber-rich complex carbohydrate foods through menu planning, purchasing, meal preparation, and modifying recipes. The foods and ingredients listed below may or may not credit in school meals. For more information, consult the USDA’s [Food Buying Guide for Child Nutrition Programs](#) and visit the CSDE’s [Crediting Foods in School Nutrition Programs](#) webpage.

Menu planning

- Review recipes and commercial products for fiber content. Choose nutrient-dense foods that are naturally high in fiber.
- Plan menus to include more 100 percent whole-grain products than WGR products. For more information, see “Whole Grains” and “Part C: WGR Criteria” in section 3.
- Add more legumes (e.g., chickpeas, lentils, and pinto beans) and whole grains (e.g., barley, bulgur, and brown rice) to menus and recipes. For example, menu planners can include more legumes in school menus by serving legume-based dishes instead of meat, poultry, or cheese dishes at least once a week; serving more legume side dishes such as three-bean salad, split pea or lentil soup, and hummus (pureed garbanzo beans); using whole or pureed beans to replace some or all of the meat in entree recipes, e.g., chili, burritos, and tacos; and adding legumes to commercial foods, e.g., adding kidney beans to commercial Minestrone soup. To increase acceptability to students, plan nutrition education activities and taste tests around the new food items. For resources on legumes, see “Menu planning resource for legumes” under “Meat/Meat Alternates” in section 3.
- Serve fresh fruit or vegetables instead of fruit or vegetable juice. Juice is not nutritionally equivalent to whole fruits and vegetables, and provides more calories
- Serve whole or cut-up fruits and vegetables most often. Serve fresh fruits (whole or cut-up) instead of canned fruits. Serve a variety of raw vegetables regularly.

Increasing complex carbohydrates

- Serve whole-grain pasta-vegetable salads made with low-fat dressings.
- Serve baked potatoes instead of mashed potatoes.
- Serve more salads and offer a variety of vegetable and fruit ingredients.
- Serve 100 percent whole-grain RTE breakfast cereals and hot breakfast cereals (such as oatmeal or buckwheat) most often.
- Serve applesauce or other fruit purees (e.g., strawberries) as an alternative to maple syrup on pancakes and waffles.
- Serve dried fruit (such as raisins or dried apricots) or a trail mix containing dried fruits and whole-grain low-sugar cereals.
- Add vegetable-based soups to the menu. **Note:** Only certain commercial vegetable soups credit in school meals. Soups made on site by the SFA credit based on the amount of vegetables in the standardized recipe. For more information, see “Soups” in section 3. Review commercial soups for sodium content.



Purchasing

- Request that vendors provide nutrition information for all products. Read Nutrition Facts labels and ingredients to identify products that are naturally high in fiber.
- Compare brands before purchasing to determine if a comparable product is higher in fiber.
- Purchase a variety of fresh fruits and vegetables regularly.
- Purchase cruciferous vegetables frequently, such as broccoli, cauliflower, cabbage, and Brussels sprouts.
- Purchase 100 percent whole-grain foods most often. Write food specifications to include more 100 percent whole-grain foods, e.g., whole-grain bread products, oatmeal, quinoa, and brown rice. Make sure products received are the ones specified. For information on whole grains, see “Whole Grains” in section 3.



Increasing complex carbohydrates

- Purchase legumes (dried beans and peas) frequently. For examples of legumes, see table 3-14 in section 3.
- Compare product information and purchase whole-grain breakfast cereals containing at least 2.5 grams of fiber per manufacturer's serving. At least 5 grams of fiber per serving is ideal.

Meal preparation

- Add whole-grain pasta, brown rice, quinoa, and other whole grains to soups, stews, and casseroles.
- Sprinkle oat bran or wheat germ over salad, soups, breakfast cereals, and yogurt. **Note:** Bran and germ add calories and fiber to recipes but are not creditable grains. For information on noncreditable grains, see table 3-33 in section 3.
- Use crushed whole-grain unsweetened RTE breakfast cereals or rolled oats as breading for baked fish and chicken.
- Serve fruits and vegetables with their skins.

Modifying recipes

- Add chopped dried fruits (e.g., apricots, raisins, dates, figs, and prunes), finely chopped nuts, oatmeal, and pureed vegetables and fruits (e.g., canned pumpkin and applesauce) to baked goods such as muffins and breads.
- Substitute whole-wheat or other whole-grain flours for enriched white flour in recipes.
- Use whole-grain products (e.g., whole-grain bread, cracker crumbs, or RTE breakfast cereals) as a topping for casseroles or breading for chicken.
- Add rolled oats to entree recipes such as meatloaf, tacos, and meat sauce.



Increasing complex carbohydrates

- Add lentils or bulgur to hamburger dishes. **Note:** Lentils credit as either the vegetables or meat/meat alternates component. For more information, see “Crediting Legumes as Vegetables” and “Crediting Legumes as Meat/Meat Alternates” in section 3. Bulgur is a whole grain and credits as the grains component.
- Add legumes (whole, mashed, or pureed) such as kidney beans, lentils, black beans, and garbanzo beans (chickpeas) to entrees, stews, side dishes, and salads. For example, black beans added to burritos and lentils added to brown rice pilaf. **Note:** Legumes credit as either the vegetables or meat/meat alternates component. For more information, see “Crediting Legumes as Vegetables” and “Crediting Legumes as Meat/Meat Alternates” in section 3.
- Add legumes such as kidney beans and black beans to commercial soups, e.g., kidney beans added to minestrone soup. **Note:** Only certain commercial vegetable soups credit in school meals. For more information, see “Crediting Soups” in section 3.
- Add pureed beans to taco mix, meat sauce, and similar entrees. They will thicken the mixture and take on the flavor of the dish. **Note:** Pureed beans credit as the meat/meat alternates component but not the vegetables component, unless the food also contains an adequate amount of recognizable creditable vegetables. For more information, see “Crediting Pureed Vegetables” in section 3.
- Add rolled oats to entree recipes such as meatloaf and tacos.
- Increase the amount of whole grains (e.g., brown rice, quinoa, and whole-grain pasta) and vegetables in stews, soups, casseroles, and similar entrees.
- Make bread items such as French toast and garlic bread from 100 percent whole-grain bread.

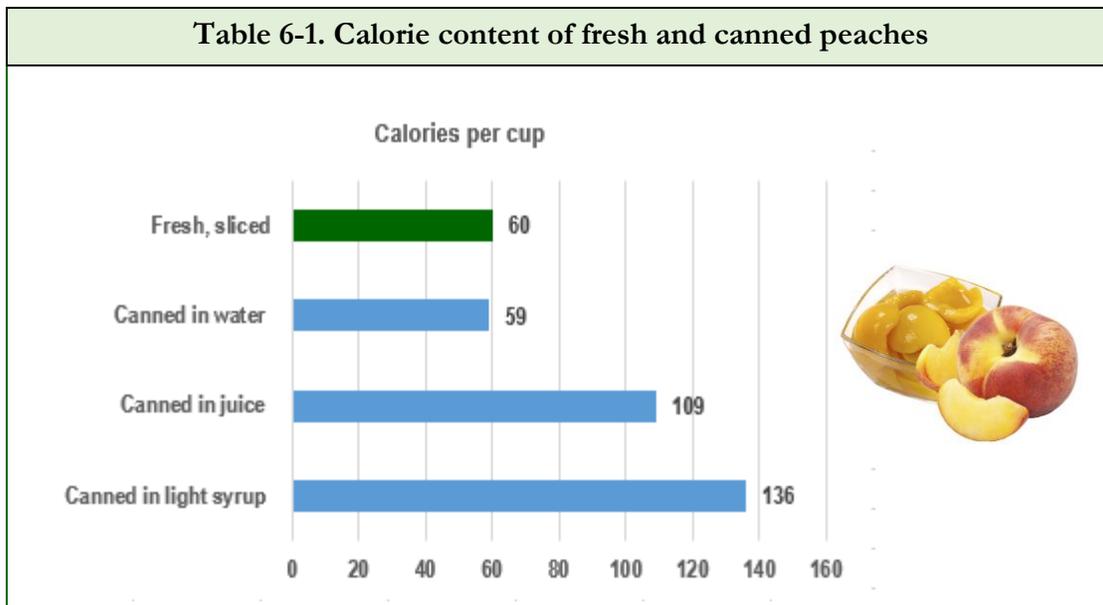


Decreasing Calories

When school menus exceed the weekly calorie limit, menu planners should reduce the amount of noncreditable foods and limit creditable foods that are higher in saturated fats and added sugars. The recommendations below help menu planners decrease calories in school meals.

- Serve less juice. Juice is more calorie dense than whole fruits and vegetables. For example, $\frac{1}{2}$ cup of grape juice contains about 80 calories while $\frac{1}{2}$ cup of fresh grapes contains about 52 calories. In addition, juice does not provide the same nutritional benefits as whole fruits. For more information, see “Fruits Component” in section 3 and “Weekly Juice Limits at Lunch” and “Weekly Juice Limits at Breakfast” in section 4.
- Serve less canned fruit. Canned fruits in juice and light syrup contain more calories than whole fruits and canned fruits in water. Substituting whole fruits for canned fruits decreases calories and provides more nutrients. For example, peaches in juice and light syrup contain about twice the amount of calories as fresh peaches and canned peaches in water (see table 6-1).

Table 6-1. Calorie content of fresh and canned peaches



Source: USDA Food Data Central, <https://fdc.nal.usda.gov/>

- Serve frozen fruit without added sugar.

- Use low-fat dairy products in school recipes. Menu planners can decrease calories and saturated fats in school recipes by substituting low-fat or fat-free milk for whole or reduced-fat (2%) milk, and substituting low-fat dairy products (e.g., low-fat cheese and low-fat or fat-free yogurt) for full-fat dairy products. **Note:** Milk offered in school meals must meet the meal pattern requirements. SFAs must offer a variety of low-fat milk (unflavored or flavored) and fat-free milk (unflavored or flavored). For more information, see “Milk Component” in section 3.
- Serve whole or cut-up fruits and vegetables most often. Whole fruits and vegetables are low in calories, high in nutrients, and do not contain any added fats, sugars, or salt. For more information, see “Fruits Component” and “Vegetables Component” in section 3.
- Serve only enough of the meat/meat alternates component to meet the minimum daily and weekly requirement for each grade group. Additional amounts of meat/meat alternates provide more calories and may provide more saturated fats and sodium. Other strategies to reduce calories from meat/meat alternates include limiting or eliminating processed meats such as luncheon meats, hot dogs, and sausage; using reduced-fat or low-fat cheese in recipes and purchasing commercial products made with reduced-fat or low-fat cheese; and writing purchasing specifications for the fat content of commercial meat/meat alternate products such as pizza, chicken nuggets, and hot dogs.
- Serve only enough of the grains component to meet the minimum daily and weekly requirement for each grade group. Additional servings of grains provide more calories.
- Eliminate grain-based desserts, such as brownies, cookies, cakes, cupcakes, coffee cakes, pies, cinnamon rolls, doughnuts, cereal bars, granola bars, breakfast bars, sweet rolls, pastries, and toaster pastries. Grain-based desserts often contain more calories, solid fats, and added sugars. **Note:** Lunch menus must limit grain-based desserts to no more than 2 ounce equivalents per week. For more information, see “Limit for Grain-based Desserts” in section 3.
- Limit the frequency and amount of noncreditable foods. Noncreditable foods typically contain few nutrients and are higher in added sugars, saturated fats, and sodium. Examples include bacon, potato chips, pudding, gelatin, ice cream, jam, maple syrup, butter, cream cheese, salad dressing, ketchup, mayonnaise, and mustard. For more information, see “Noncreditable Foods” in section 3.

For more information on the calorie maximums and tips to improve acceptance of school meals, see the USDA’s handout, *Fact Sheet: Calories in School Meals*.

Decreasing added sugars**Decreasing Calories by Limiting Added Sugars**

The 2015-2020 *Dietary Guidelines for Americans* recommends limiting added sugars to less than 10 percent of daily calories. This recommendation is intended to help people achieve a healthy eating pattern by meeting nutrient and food group needs through nutrient-dense food and beverage choices, and staying within calorie limits. Eating patterns that include lower intake of added sugars are associated with reduced risk of cardiovascular disease, obesity, type 2 diabetes, and some types of cancer.

Added sugars provide calories without any nutrients. The *Dietary Guidelines for Americans* indicate that Americans consume an average of almost 270 calories per day (more than 13 percent of daily calories) from added sugars. Intakes of added sugars as a percent of calories are particularly high among children, adolescents, and young adults. Limiting foods with added sugars helps school menus stay under the required weekly calorie limit for each grade group.

Sources of added sugars

Manufacturers often add sugars to foods in processing or preparation, most commonly as white table sugar (sucrose) and corn sweeteners. Beverages (soft drinks, fruit drinks, sweetened coffee and tea, energy drinks, alcoholic beverages, and flavored waters) account for almost half of all added sugars in the United States. The other major source is snacks and sweets, which includes:

- grain-based desserts such as cakes, pies, cookies, brownies, doughnuts, sweet rolls, and pastries;
- dairy desserts such as ice cream, other frozen desserts, and puddings;
- candies;
- sugars;
- jams; syrups; and
- sweet toppings.



Research shows that it is difficult for people to meet their nutrient needs while staying within calorie limits if they consume more than 10 percent of total daily calories added sugars. Effective July 26, 2018, the Nutrition Facts label requires manufactures to list added sugars in grams and as a percent Daily Value. For more information, see [“Using Food Labels”](#) in this section.

Decreasing added sugars

Table 6-2 lists common sugars and sweeteners. School meals should consist of foods that are naturally nutrient rich and low in added sugars.

| Table 6-2. Common sugars and sweeteners | | |
|---|---|--|
| Added sugars | | |
| Brown rice syrup | Glucose | Maple syrup |
| Brown sugar | High-fructose corn syrup | Nectars, e.g., peach nectar, pear nectar |
| Corn sweetener | Honey | Raw sugar |
| Corn syrup | Invert sugar | Sorghum syrup |
| Corn syrup solids | Lactose | Sucrose |
| Dextrin | Malt syrup | Syrup |
| Dextrose | Maltose | |
| Fructose | Molasses | |
| Fruit juice concentrate | | |
| Artificial and nonnutritive sweeteners ¹ | | |
| Common artificial sweeteners | Sugar alcohols | “Natural” nonnutritive sweeteners ² |
| Acesulfame potassium (acesulfame-k, sunett, sweet & safe, sweet one) Aspartame (nutrasweet, equal) Neotame Saccharin (sweet and low, sweet twin, sweet ‘n low brown, necta sweet) Sucralose (splenda) tagatose | Erythritol Isomalt Lactitol Maltitol Mannitol Sorbitol Xylitol Hydrogenated starch hydrolysates (e.g., hydrogenated glucose syrups, maltitol syrups and sorbitol syrups) | Stevia (rebiana, rebaudioside A, truvia, purevia, sweetleaf) |
| <p>¹ Unless medically necessary, the CSDE does not recommend using foods that contain artificial sweeteners, nonnutritive sweeteners, or sugar alcohols as a replacement for high-sugar foods in school meals. Choose nutrient-dense foods that are naturally low in sugars.</p> <p>² The term “natural” is not defined by the FDA and does not have any consistent meaning when used to describe foods or beverages.</p> | | |

Decreasing added sugars

The following guidance assists SFAs with meeting the weekly calorie ranges by reducing added sugars through menu planning, purchasing, meal preparation, and modifying recipes. These strategies will help menu planners reduce calories in school meals. The foods and ingredients listed below may or may not credit in school meals. For more information, consult the USDA's *Food Buying Guide for Child Nutrition Programs* and visit the CSDE's [Crediting Foods in School Nutrition Programs](#) webpage.

Menu planning

- Determine the amount of added sugars in menu items. Review recipes for foods made on site. Review the Nutrition Facts label for commercial products. Choose recipes and foods that are lowest in added sugars. Replace foods containing high levels of sugars with those containing moderate levels of sugars.
- Increase the frequency of 100 percent whole-grain foods and fresh vegetables and fruits, instead of processed high-sugar foods.
- Serve whole fruits or unsweetened cooked fruit (such as baked apples with raisins) instead of desserts. Add spices like cinnamon, nutmeg, cloves, and allspice to enhance the flavor of cooked fruit.
- Eliminate or limit grain-based foods such as cakes, cobblers, cookies, doughnuts, sweet rolls, toaster pastries, and coffee cake. **Note:** Grain-based desserts cannot credit for more than 2 ounce equivalents per week in the NSLP. For more information, see “Limit for Grain-based Desserts” in section 3.
- Eliminate or limit highly sweetened breakfast cereals. Replace with low-sugar whole-grain cereals.
- If serving baked goods, choose foods made with less sugar and more nutritious ingredients like whole-wheat flour, oatmeal, chopped nuts, peanut butter, and fruits and vegetables, e.g., pumpkin, zucchini, cranberries, raisins, and carrots. **Note:** Grain-based desserts cannot credit for more than 2 ounce equivalents per week in the NSLP. For more information, see “Limit for Grain-based Desserts” in section 3.
- Eliminate or limit servings of high-sugar noncreditable foods such as gelatin, jams, jellies, syrups, and sweet toppings.



Decreasing added sugars**Purchasing**

- Purchase foods that are low in added sugars. Request that vendors provide nutrition information for all products. Review the Nutrition Facts label to determine the amount of added sugars in commercial products. Compare brands before purchasing to determine if a comparable product is lower in added sugars.
- Write food specifications to include food items without added sugars. Examples include canned fruit packed in natural juices or water instead of syrup, frozen fruit without added sugar, dried fruit without added sugar, and whole-grain breakfast cereals that are unsweetened or low in added sugars. Make sure the products received are the ones specified.
- Compare nutrition information for condiments such as salad dressings and barbecue sauce. Some are high in added sugars.
- Purchase vanilla or lemon yogurt as an alternative to higher-sugar fruit flavors, or mix half plain yogurt and half fruited yogurt.
- Eliminate or limit purchases of foods that are high in added sugars, such as certain snack foods and commercial convenience foods.

Meal preparation

- Do not add sugars or sweeteners to recipes when they are not listed as an ingredient.
- Compare recipes and use those that are lowest in sugars and sweeteners.

Decreasing added sugars

Modifying recipes

- Use cinnamon and vanilla to increase the sweet flavor of a food, while reducing the sugar content.
- If serving cake, sprinkle with powdered sugar or top with fruit instead of frosting or icing. **Note:** Grain-based desserts cannot credit for more than 2 ounce equivalents per week in the NSLP. For more information, see “Limit for Grain-based Desserts” in section 3.
- Replace canned pie fillings with unsweetened, spiced cooked fruit when making cobblers or pies. **Note:** Grain-based desserts cannot credit for more than 2 ounce equivalents per week in the NSLP. For more information, see “Limit for Grain-based Desserts” in section 3.
- Reduce sugar in baked goods. Usually the amount of sugar can be reduced by one-third to one-half without altering the flavor. Adding spices, dried fruits, vanilla, lemon zest, and other similar ingredients can make up for missing sugar. **Note:** Grain-based desserts cannot credit for more than 2 ounce equivalents per week in the NSLP. For more information, see “Limit for Grain-based Desserts” in section 3.



Limiting Saturated and Trans Fats

The 2015-2020 *Dietary Guidelines for Americans* recommends limiting saturated fats to less than 10 percent of daily calories. Replacing saturated fats with unsaturated fats, especially polyunsaturated fats, is associated with reduced blood levels of total cholesterol and low-density lipoprotein (LDL) cholesterol, and a reduced risk of cardiovascular events (heart attacks) and related deaths.

The 2015-2020 *Dietary Guidelines for Americans* recommends keeping trans fats consumption as low as possible by limiting foods that contain artificial sources of trans fats, such as partially hydrogenated oils in margarines, and by limiting other solid fats. Trans fats increase the risk of cardiovascular disease by raising LDL cholesterol.

Saturated fats

The USDA's dietary specifications require that school meals contain less than 10 percent of calories from saturated fats, based on the menu's weekly average. All dietary fats contain a mix of saturated and unsaturated fats. Most animal foods are high in saturated fats, except for fish. Most plant foods are high in unsaturated fats, except for coconut oil, palm oil, and palm kernel oil.

- **Solid fats:** Fats with a higher amount of saturated fats are usually solid at room temperature and are referred to as “solid fats.” Fats containing trans fats are also classified as solid fats, although they may or may not be solid at room temperature.
- **Oils:** Fats with a higher amount of polyunsaturated and monounsaturated fats are usually liquid at room temperature and are referred to as “oils.”



Table 6-3 shows examples of types of fats. SFAs can help school meals comply with the dietary specifications by switching from saturated fats (e.g., butter, stick margarine, and shortening) to healthier monounsaturated or polyunsaturated oils (e.g., canola, corn, olive, safflower, sesame, soybean, and sunflower).

The major source of saturated fats in the United States include mixed dishes, especially those dishes containing cheese, meat, or both (including burgers, sandwiches, and tacos; rice, pasta, and grain dishes; pizza; meat, poultry, and seafood dishes; and soups). Other food categories that provide saturated fats are snacks and sweets, protein foods, and dairy products. **Menu planners can have the greatest impact on reducing saturated fats in school meals through careful purchasing.** This includes comparing product nutrition labels and writing

specifications for foods that are lower in saturated fats and do not contain partially hydrogenated oils.

| Saturated (solid) fats | | Unsaturated fats | |
|-------------------------------|-----------------------------|-------------------------|------------------------|
| Beef fat (tallow, suet) | Partially hydrogenated oils | Monounsaturated | Polyunsaturated |
| Butter | (contain trans fats) | Canola | Soybean |
| Chicken fat | Pork fat (lard) | Olive | Corn |
| Coconut oil | Shortening | Safflower | Cottonseed |
| Cream | Stick margarine | | Sunflower |
| Hydrogenated oils | | | |
| Milk fat | | | |
| Palm oil | | | |
| Palm kernel oil | | | |

Trans fats

The USDA's dietary specifications require that Nutrition Facts labels and manufacturer specifications indicate zero grams of trans fats per serving for all food products and ingredients used to prepare school meals. Menu planners must obtain this information from the manufacturer. SFAs cannot use nutrient databases to determine trans fats values for foods used in school meals because nutrient databases do not currently have complete data for trans fats.



Trans fats are unsaturated fats that are structurally different from the unsaturated fats that occur naturally in plant foods. Most trans fats are artificially made as the result of “hydrogenation,” a manufacturing process where liquid vegetable oils are made into a solid (saturated) fat to increase shelf life. Sources of trans fats include partially hydrogenated vegetable oils used in processed foods such as desserts, microwave popcorn, frozen pizza, some margarines, and coffee creamer. Eliminating processed foods with partially hydrogenated oils will significantly lower children’s trans fats intake.

Trans fats are also present naturally in foods that come from ruminant animals (e.g., cattle and sheep), such as dairy products, beef, and lamb. Because natural trans fats are present in dairy products and meats in only small quantities and these foods can be important sources of nutrients, the *Dietary Guidelines for Americans* does not recommend eliminating these foods from the diet.

In June 2015, the FDA issued the final rule, [Final Determination Regarding Partially Hydrogenated Oils](#) (80 FR 34650), indicating that partially hydrogenated oils are not “generally recognized as safe” (GRAS) for any use in human food. This final rule required manufacturers to remove artificial trans fats from all products by June 18, 2018. However, the FDA is allowing until January 1, 2020, for products produced prior to this time to work their way through distribution. Therefore, SFAs must continue to review Nutrition Facts labels and manufacturer specifications to ensure that all products used in school meals contain zero grams of trans fat per serving. For more information, see the FDA’s webpage, [Final Determination Regarding Partially Hydrogenated Oils \(Removing Trans Fat\)](#).

To meet the USDA’s dietary specifications for saturated and trans fats, menu planners must be careful to limit foods with solid fats. Limiting solid fats also helps to lower total fat and cholesterol, and keep school meals within the weekly calorie range for each grade group.

The following guidance provides strategies to assist SFAs with reducing saturated fats and eliminating artificial trans fats through menu planning, purchasing, meal preparation, and modifying recipes. The foods and ingredients listed below may or may not credit in school meals. For more information, consult the USDA’s [Food Buying Guide for Child Nutrition Programs](#) and visit the CSDE’s [Crediting Foods in School Nutrition Programs](#) webpage.

Menu planning

- Determine the amount of saturated fats in menu items. Review recipes for foods made on site. Review the Nutrition Facts label for commercial products. Choose recipes and foods lowest in saturated fats. **Note:** Commercial convenience items and snack foods are often high in saturated fats.
- Review Nutrition Facts labels and manufacturer specifications for all food products and ingredients to ensure they indicate zero grams of trans fats per serving. To eliminate trans fats, avoid products that list partially hydrogenated oils in the ingredients statement.
- Increase servings of legumes, fruits, vegetables, and whole grains. **Note:** Legumes credit as either the vegetables or meat/meat alternates component. For more information, see “Crediting Legumes as Vegetables” and “Crediting Legumes as Meat/Meat Alternates” in section 3. For information on determining if a product is whole grain, see “Whole Grains” in section 3.
- Plan only enough of the meat/meat alternates component to meet the minimum daily and weekly requirement for each grade group. Additional servings of meat/meat alternates provide more saturated fat.

- Limit use of foods that are higher in saturated fats.
- Limit frequency of processed meats such as luncheon meats, hot dogs, and sausage. **Note:** Meat products with binders and extenders credit based on the percentage of meat in the product formula, without the weight of the binders and extenders. For more information, see “Liquids, Binders, and Extenders” in section 3.
- Eliminate or limit the amount of full-fat cheese served. Replace with low-fat or reduced-fat 100 percent natural cheese.
- Limit servings of battered or breaded foods that are fried in fat during processing. This includes foods that are “set in breading,” i.e., deep fried just long enough to set the breading.
- Use broth-based soups instead of cream-based soups or prepared bases. **Note:** Only certain commercial vegetable soups credit in school meals. For more information, see “Soups” in section 3.
- Eliminate or limit high-fat foods such as cookies, cake, doughnuts, and brownies. **Note:** Grain-based desserts cannot credit for more than 2 ounce equivalents per week in the NSLP. For more information, see “Limit for Grain-based Desserts in section 3.
- Offer mustard, ketchup, and low-fat mayonnaise as alternatives to high-fat spreads such as regular mayonnaise. **Note:** Read Nutrition Facts labels for sodium content. For more information, see “[Limiting Sodium](#)” in this section.
- Offer low-fat or fat-free salad dressings instead of regular full-fat varieties. **Note:** Read Nutrition Facts labels for sodium content. For more information, see “[Limiting Sodium](#)” in this section.



Purchasing

- Request that vendors provide nutrition information for all products. Read Nutrition Facts labels to determine the amount of saturated fats per serving. Compare brands before purchasing to determine if a comparable product is lower in saturated fats.
- Read Nutrition Facts labels and ingredients to determine trans fats content. Be sure all food products and ingredients used to prepare school meals contain zero grams of trans fats per serving.
- Write food specifications to include the amount of saturated and trans fats per serving. For example, specify zero trans fats and the percentage of saturated fats for entree items, side dishes, and snack foods. To eliminate trans fats, specify that products cannot contain any partially hydrogenated oils. Make sure products received are the ones specified.
- Purchase ground chicken or turkey (without skin) to mix with or substitute for lean ground beef.
- Limit purchases of processed meats, e.g., hotdogs and deli meats. If purchased, specify reduced-fat products. **Note:** Meat products with binders and extenders credit based on the percentage of meat in the product formula, without the weight of the binders and extenders. For more information, see “Liquids, Binders, and Extenders” in section 3.
- Purchase leaner meats, e.g., ground beef with no more than 15 percent fat.
- Purchase tuna packed in water instead of oil.
- Avoid products with animal fat (lard), saturated vegetable oils (coconut oil, palm oil, and palm kernel oil), hydrogenated shortening, and stick-type margarine.
- Purchase lean ham as a substitute for bacon or sausage. **Note:** Regular bacon is high in fat and low in protein, and does not contribute to the meat/meat alternates component. If used as an ingredient in a menu item, the SFA must evaluate the recipe for compliance with the meal pattern requirements. Other types of bacon such as turkey bacon might credit, based on the product’s CN label or PFS. For more information, see “Noncreditable Meat/Meat Alternates,” “Crediting Deli Meats, Hot Dogs, and Sausage” and “Crediting Meat/Meat Alternates in Commercial Products” in section 3.
- Purchase low-fat mayonnaise and salad dressings. Avoid commercial barbecue sauces and canned sauces. **Note:** Read Nutrition Facts labels for sodium content. For more information, see “[Limiting Sodium](#)” in this section.

- Purchase lower fat 100 percent whole-grain breads (e.g., bagels, pita bread, corn tortillas, and English muffins) most often, instead of higher fat grain products such as muffins, croissants, doughnuts, Danish pastries, and sweet rolls. **Note:** Grain-based desserts cannot credit for more than 2 ounce equivalents per week in the NSLP. For more information, see “Limit for Grain-based Desserts” in section 3.
- Instead of full-fat cheese, purchase low-fat or reduced-fat natural cheese and products made with these cheeses, e.g., pizza with part-skim mozzarella cheese instead of regular mozzarella.
- Limit use of convenience and prepared food items that are higher in saturated fats. Compare nutrition information for processed foods such as pizza and hot dogs. A different brand of the product may contain less saturated fat.
- Purchase soft margarine, which is lower in saturated fats than stick margarine and butter. Compare brands and choose margarine that is highly polyunsaturated and does not contain any partially hydrogenated oils.
- If using commercial baking mixes such as muffins and pancakes, purchase products to which fat must be added so the food service operation can control the type and amount of fat added during preparation.



Meal preparation

- Prepare items from scratch to control the type and amount of fat.
- Avoid frying foods. Bake, broil, steam, poach, braise, or stir-fry instead.
- Brown meats by broiling or cooking in nonstick pans with little or no oil.
- Instead of fat, baste or coat foods with herbs, seasonings, broth, fruit juices, or an oil-based marinade made from an oil low in saturated fats, e.g., canola, corn, olive, safflower, sesame, soybean, and sunflower.
- Use nonstick cooking spray instead of oil or shortening for braising and sautéing.
- Roast meat, poultry, and fish on a rack so fat will drain off. Completely drain fat from precooked ground meats. Drain in a colander or use a meat baster to remove fat that has cooked out of product.

- To thicken gravies and sauces without adding fat, mix cornstarch with a small amount of cold water to make a slurry. Slowly stir this mixture into the liquid to be thickened and bring back to a boil. Cornstarch can also be used to replace a roux (a butter-flour mixture used for thickening). Use an amount of cornstarch equal to one-half the amount of flour indicated.
 - Reduce ground beef in chili and similar entrees by half, and add more beans. Note: Legumes credit as either the vegetables or meat/meat alternates component. For more information, see “Crediting Legumes as Vegetables” and “Crediting Legumes as Meat/Meat Alternates” in section 3.
- 
- Cook soups, stews, sauces, broths, and boiled meat ahead of time. Refrigerate and remove congealed fat. Make gravies after fat has hardened and is removed from liquid.
 - Replace shortening and butter in recipes with vegetable oil or soft margarine (liquid oil should be the first ingredient and trans fats must be zero). Choose oils low in saturated fats such as canola, corn, olive, safflower, sesame, soybean, and sunflower.
 - Reduce the amount of cheese in entree items. For example, use ¼ ounce of cheese instead of ½ ounce of cheese. Increase the amount of lean meat or meat alternates, if needed, to meet the minimum daily amount of the meat/meat alternates component for each grade group.
 - Make casserole toppings by reducing the amount of cheese and combining with dry whole-grain bread crumbs and herbs. Boost cheese flavor with enhancers such as dry mustard and lemon juice.
 - Use low-fat (1%) or fat-free milk in recipes instead of reduced-fat (2%) or whole milk.
 - For sauces and dressings, use low-calorie bases such as vinegar, mustard, tomato juice, and fat-free sodium-free bouillon instead of high-calorie bases such as creams, fats, oils, and mayonnaise. **Note:** Read Nutrition Facts labels for sodium content. For more information, see “[Limiting Sodium](#)” in this section.
 - Cut mayonnaise in recipes with low-fat yogurt (up to half).
 - Use only enough low-fat salad dressing to lightly coat salad. **Note:** Read Nutrition Facts labels for sodium content. For more information, see “[Limiting Sodium](#)” in this section.
 - Use the leanest cuts of meat and trim away all fat. Remove all fat and skin from poultry.

- Prepare cooked vegetables without added fat, e.g., butter, margarine, or oil. Use herbs and spices to boost flavor.
- When sautéing or stir-frying, use only a small amount of vegetable oil. Choose oils that are low in saturated fats, e.g., canola, corn, olive, safflower, sesame, soybean, and sunflower.
- Use nonstick skillet and baking pans when possible.
- For baked goods or other foods, use pan liners and nonstick cooking spray instead of greasing sheet pans.
- Use nonstick cooking spray instead of oil when pan-frying or sautéing foods.
- Brush breads and rolls with egg white or fat-free or low-fat milk instead of butter, before baking to improve browning.

Modifying recipes

- Substitute ground turkey or chicken (without skin) for half of the ground beef in recipes such as chili, spaghetti, lasagna, and meat loaf.
- Reduce fat in recipes by as much as half, starting with one-quarter less fat and testing the recipe.
- Substitute vegetable oil or margarine for butter. Choose margarine brands that are lowest in saturated fats and contain zero grams of trans fats per serving.
- Replace one-quarter of the ground meat in a recipe with mashed beans. For example, use Great Northern beans in tacos. **Note:** Legumes credit as either the vegetables or meat/meat alternates component. For more information, see “Crediting Legumes as Vegetables” and “Crediting Legumes as Meat/Meat Alternates” in section 3.
- Substitute low-fat yogurt, applesauce, or fruit puree (e.g., applesauce, plum puree, or prune puree) for oil, shortening, margarine, or butter in recipes for baked goods. Generally, the amount of fat can be reduced by half and fruit products can be substituted for an equal amount of fat in muffin or quick bread recipes. **Note:** Pureed fruit cannot credit as the fruits component when used to improve the nutrient profile of a food, e.g., using applesauce to replace the oil in brownies or pureed prunes to replace the butter in spice cake. Grain-based desserts cannot credit for



more than 2 ounce equivalents per week in the NSLP. For more information, see “Crediting Pureed Fruit” and “Limit for Grain-based Desserts” in section 3.

- Substitute low-fat cheese such as ricotta, farmer, cottage, or mozzarella for regular cheese in recipes.
- Eliminate fat from recipes when possible. For example, instead of sautéing onions in oil for spaghetti sauce, cook the onions in the sauce.
- Substitute two egg whites for one whole egg in recipes or use an egg substitute product. **Note:** Egg whites and egg substitutes do not credit in the school meal patterns. If used as an ingredient in a menu item, the recipe must be evaluated for meal pattern compliance.
- Make pizza with lean ham or Canadian bacon instead of sausage or pepperoni.
- Make low-fat recipe substitutions. For example, substitute low-fat or fat-free yogurt or low-fat or fat-free sour cream for sour cream; cocoa powder for chocolate; nonfat milk or nonfat dry milk for whole and reduced-fat milk; and part-skim mozzarella cheese for regular mozzarella.

Limiting Sodium

The 2015-2020 *Dietary Guidelines for Americans* recommends limiting daily sodium intake to 2,300 milligrams for children ages 14 and older, and adults. The sodium limits for younger children are 1,500 milligrams for ages 1-3, 1,900 milligrams for ages 4-8, and 2,200 milligrams for ages 9-13.

On average, Americans ages 1 year and older consume 3,440 milligrams of sodium per day. A high-sodium diet increases the risk of high blood pressure in individuals who are sodium sensitive. Keeping blood pressure in the normal range reduces the risk of heart disease, congestive heart failure, and kidney disease.



The USDA's dietary specifications for school meals require gradual reductions in sodium levels to meet specific targets for sodium over the next ten years. The first sodium target took effect on July 1, 2014. The USDA's final rule, *Child Nutrition Programs: Flexibilities for Milk, Whole Grains, and Sodium Requirements*, (83 FR 63775) published on December 12, 2018, provides more time for gradual sodium reduction in school meals. The final rule:

- retains sodium target 1 through the end of school year 2023-24;
- requires compliance with sodium target 2 in school year 2024-25 (which begins July 1, 2024); and
- eliminates the final sodium target that would have taken effect in school year 2022-23.

Table 6-4 indicates the sodium reduction targets for the SBP. Table 6-5 indicates the sodium reduction targets for the SBP. Sodium levels are listed in milligrams (mg).

| Table 6-4. Sodium reduction targets for the NSLP | | |
|--|--|--|
| Grade Group | Target 1 (mg) Meet by July 1, 2014 (school year 2014-15) | Target 2 (mg) Meet by July 1, 2024 (school year 2024-25) |
| K-5 | ≤ 1,230 | ≤ 935 |
| 6-8 | ≤ 1,360 | ≤ 1,035 |
| 9-12 | ≤ 1,420 | ≤ 1,080 |

| Table 6-5. Sodium reduction targets for the SBP | | |
|---|--|--|
| Grade Group | Target 1 (mg) Meet by July 1, 2014 (school year 2014-15) | Target 2 (mg) Meet by July 1, 2024 (school year 2024-25) |
| K-5 | ≤ 540 | ≤ 485 |
| 6-8 | ≤ 600 | ≤ 535 |
| 9-12 | ≤ 640 | ≤ 570 |

Sources of sodium

Sodium is found in almost all food categories. Food manufacturers use sodium extensively in processed foods as a flavor and color enhancer, binder, preservative, and stabilizer. Sodium content varies even among very similar products, due to the way foods are processed and prepared.

Mixed dishes account for almost half of the sodium consumed in the United States, including:

- burgers, sandwiches, and tacos;
- rice, pasta, and grain dishes;
- pizza;
- meat, poultry, and seafood dishes; and
- soups.



The foods in many of these categories are often commercially processed or prepared. Other high-sodium food categories include protein foods, dairy, sweets and snacks, vegetables, and accompaniments such as condiments, gravies, spreads, and salad dressings.

Menu planners can have the greatest impact on reducing sodium in school meals through careful purchasing. This includes comparing product nutrition labels and specifying foods that are lower in sodium. Foods containing 20 percent or more of the Daily Value for sodium are high in sodium and should be limited in school menus.

The following guidance provides strategies to assist SFAs with reducing sodium through menu planning, purchasing, meal preparation, and modifying recipes. The foods and ingredients listed below may or may not credit in school meals. For more information, consult the USDA's [Food Buying Guide for Child Nutrition Programs](#) and visit the CSDE's [Crediting Foods in School Nutrition Programs](#) webpage. For additional guidance on reducing sodium, see the ICN's website, [Sodium Resources for School Nutrition Professionals](#).

Menu planning

- Determine the amount of sodium in menu items. Review recipes for foods made on site. Review the Nutrition Facts label for commercial products. Choose recipes and foods lowest in sodium.
- When the menu includes entrees that are higher in sodium, plan low-sodium foods to accompany them. For example, serve fresh fruits and vegetables with a breaded chicken patty.
- Serve smaller portions of high-sodium foods.
- Eliminate or limit high-sodium foods such as bacon, pickles, olives, and sauerkraut. **Note:** Regular bacon is high in fat and low in protein, and does not contribute to the meat/meat alternates component. If used as an ingredient in a menu item, the SFA must evaluate the recipe for compliance with the meal pattern requirements. Other types of bacon such as turkey bacon might credit, based on the product's CN label or PFS. For more information, see "Noncreditable Meat/Meat Alternates," "Crediting Deli Meats, Hot Dogs, and Sausage" and "Crediting Meat/Meat Alternates in Commercial Products" in section 3.
- Eliminate processed meats such as luncheon meats, hot dogs, and sausage, or limit to no more than one serving per week. **Note:** Meat products with binders and extenders credit based on the percentage of meat in the product formula, without the weight of the binders and extenders. For more information, see "Liquids, Binders, and Extenders" in section 3.
- Use low-fat or reduced-fat low-sodium natural cheeses (e.g., brick, cheddar, Colby, Monterey Jack, mozzarella, Muenster, provolone, and Swiss) instead of processed cheeses (e.g., pasteurized process cheese food, pasteurized process cheese spread, and pasteurized process cheese product).
- Plan more menu items that are made from scratch to control the amount of added salt.
- Plan unprocessed whole foods more frequently, e.g., vegetables (especially dark green and orange vegetables and legumes), fruits, grains, low-fat dairy, and lean meats.
- Keep table salt and high-sodium condiments away from the serving and dining areas.
- Limit ingredients that contain sodium, e.g., baking powder, baking soda, sodium nitrite, MSG, and soy sauce. For guidance on names of ingredients that contain sodium, see the American Heart Association's article, "[21 Ingredients \(that mean sodium\) to watch on the label.](#)"

- Use fresh vegetables instead of canned when possible.

Purchasing

- Request that vendors provide nutrition information for all products. Read Nutrition Facts labels and ingredients to determine sodium content. Compare brands before purchasing to determine if a comparable product is lower in sodium.
- Write food specifications for food products with no or low sodium. Make sure products received are the ones specified.
- Purchase lower sodium varieties of foods such as tomato products, canned vegetables, and soup. **Note:** Only certain commercial vegetable soups credit in school meals. For more information, see “Soups” in section 3.
- Purchase fresh and frozen vegetables most often. When purchasing canned vegetables, specify low or no sodium.
- Reduce purchases of commercially prepared convenience foods and prepare more foods from scratch. Convenience foods are the greatest source of sodium in school meals.
- Purchase spices and herbs to use instead of salt and seasonings that contain salt.
- Purchase seasoning powders (e.g., garlic and onion) instead of seasoning salts.
- Purchase unsalted or reduced-salt crackers instead of regular crackers.
- Purchase old-fashioned cooked cereals (e.g., rolled oats) instead of instant cooked cereals that are high in salt.



Meal preparation

- If canned vegetables contain added salt, rinse under cold running water for two to three minutes before heating.
- Do not add salt to boiling water when cooking pasta, vegetables, or cereal grains.
- Do not add additional salt to recipes. Eliminate or reduce the amount of added salt when possible.



- Use fresh or frozen vegetables instead of canned vegetables.
- Make cakes, biscuits, pancakes, and desserts from scratch instead of using prepared mixes.
Note: Grain-based desserts cannot credit for more than 2 ounce equivalents per week in the NSLP. For more information, see “Limit for Grain-based Desserts” in section 3.
- Avoid recipes that contain substantial amounts of baking soda or baking powder.
- Use spices and herb blends creatively in place of salt.
- Use seasoning powders instead of seasoning salts, e.g., garlic and onion.

Modifying recipes

- Review recipes and reduce or eliminate the amount of high-sodium ingredients or added salt when possible.



Using Food Labels

Food labels can help SFAs choose foods and plan menus to meet the USDA’s dietary specifications. The Nutrition Facts panel and ingredients statement appear on almost all packaged foods. Menu planners can use this information to compare the nutritional value of similar foods, for example, choosing products with less saturated fats, sodium, and added sugars.

Food labels can also help budget and balance the nutrients in school menus; and identify foods that are good sources of fiber, vitamins and minerals. For example, if a school menu includes a food that is high in fat, sugar, or sodium, food labels can help the menu planner choose other foods that are low in these same nutrients to balance the overall menu.

Determining meal pattern compliance

The Nutrition Facts label and ingredients statement do not provide sufficient information to determine a commercial product’s compliance with the NSLP and SBP meal patterns. SFAs can determine meal pattern compliance for commercial products only by reviewing the product’s CN label or PFS. For more information, see “Documentation for Commercial Products” in section 2.

2018 Food label updates

The FDA’s 2016 final rule, *Food Labeling: Revision of the Nutrition and Supplement Facts Labels* (81 FR 33741), required changes to the Nutrition Facts label to provide consumers with more recent and accurate nutrition information. These changes included modifying the list of required nutrients that manufacturers must declare on the label, updating serving size requirements, and providing a new design. The updated Nutrition Facts label format highlights calories, servings per container, and serving size by increasing the type size and placing the number of calories and serving size declaration in bold type.

Manufacturers were required to comply with these changes by July 26, 2018. Manufacturers with less than \$10 million in annual food sales had an additional year to make the changes.

| Nutrition Facts | |
|-------------------------------|----------------------|
| 8 servings per container | |
| Serving size | 2/3 cup (55g) |
| Amount per serving | |
| Calories | 230 |
| % Daily Value* | |
| Total Fat 8g | 10% |
| Saturated Fat 1g | 5% |
| <i>Trans</i> Fat 0g | |
| Cholesterol 0mg | 0% |
| Sodium 160mg | 7% |
| Total Carbohydrate 37g | 13% |
| Dietary Fiber 4g | 14% |
| Total Sugars 12g | |
| Includes 10g Added Sugars | 20% |
| Protein 3g | |
| Vitamin D 2mcg | 10% |
| Calcium 260mg | 20% |
| Iron 8mg | 45% |
| Potassium 235mg | 6% |

* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

The new Nutrition Facts label includes the changes listed below.

- **Calories from fat:** This information was removed because research shows the type of fat is more important than the amount.
- **Added sugars:** The amount (grams) of added sugars is now listed beneath the amount of total sugars and is also listed as percent Daily Value. Research shows that it is difficult for people to meet their nutrient needs while staying within calorie limits if they consume more than 10 percent of total daily calories from added sugars.
- **Nutrients:** Vitamin D and potassium are now required. Calcium and iron continue to be required. Vitamins A and C are no longer required, but manufacturers can choose to list them voluntarily. The new Nutrition Facts label now lists the actual amount of the mandatory vitamins and minerals, in addition to their percent Daily Value. Manufacturers can voluntarily declare the gram amount for other vitamins and minerals.
- **Daily Values:** Daily values are reference amounts of nutrients to consume or not to exceed. They are used to calculate the percent Daily Value (% DV) that manufacturers include on the label. Daily values for nutrients like sodium, dietary fiber, and vitamin D were updated to reflect new scientific data. In addition, the percent Daily Value has a better explanation. It states: “The % Daily Value tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.”
- **Serving sizes:** Serving sizes are based on what people actually consume. Some serving sizes increased while others decreased. For packages that are between one and two servings, such as a 15-ounce can of soup, the calories and other nutrients must now be labeled as one serving because people typically consume the entire package. **Note:** The serving size on the Nutrition Facts label may be different from the serving size required for the NSLP and SBP meal patterns. SFAs must ensure that commercial products provide the amount of each food component being credited toward the meal patterns. For information on the food components, see section 3.

The resources below provide more information on the updated food labels.

- Changes to the Nutrition Facts Label (FDA webpage):
https://www.fda.gov/food/food-labeling-nutrition/changes-nutrition-facts-label?source=govdelivery&utm_medium=email&utm_source=govdelivery
- Food Facts: New and Improved Nutrition Facts Label (FDA):
<https://www.fda.gov/downloads/food/labelingnutrition/ucm537178.pdf>

- Final Rule (81 FR 33741): Food Labeling: Revision of the Nutrition and Supplement Facts Labels:
<https://www.regulations.gov/document?D=FDA-2012-N-1210-0875>
- Final Rule (81 FR 34000): Food Labeling: Serving Sizes of Foods that Can Reasonably Be Consumed at One Eating Occasion; Dual-Column Labeling; Updating, Modifying, and Establishing Certain Reference Amounts Customarily Consumed; Serving Size for Breath Mints; and Technical Amendments:
<https://www.regulations.gov/document?D=FDA-2004-N-0258-0136>
- The New and Improved Nutrition Facts Label – Key Changes (FDA):
<https://www.fda.gov/downloads/Food/LabelingNutrition/UCM511646.pdf>

For additional resources, see “Food Labels” in the CSDE’s resource list, *Dietary Guidelines and Nutrition Information*.

Label rounding

The FDA regulations include specific requirements for rounding the numbers on the Nutrition Facts label. As a result, the numbers may not add up exactly, or the percentage may be slightly different if the menu planner calculates this information manually. For more information, see “Appendix H: Rounding the Values According to FDA Rounding Rules” in the FDA’s *Guidance for Industry: A Food Labeling Guide*.

Ingredients statement

Ingredients on product labels are listed by weight, from most to least. The closer an ingredient is to the beginning of the list, the more of it the food contains.

The ingredients statement provides important information for school nutrition programs. It assists menu planners with determining if foods meet the USDA’s WGR criteria for the grains component. For more information, see “Part C: WGR Criteria” in section 3. It also provides information for making meal modifications for students with special dietary needs, such as food allergies. For information on meal modifications, see the CSDE’s *Special Diets in School Nutrition Programs* webpage and the CSDE’s guide, *Accommodating Special Diets in School Nutrition Programs*.

Nutrient content claims

Many food labels include nutrient content claims such as “low fat,” “lean,” or “high in fiber.” FDA regulations define these descriptions. They are based on a standard single-serving size set by the FDA and mean the same thing for all foods, regardless of manufacturer.

While the Nutrition Facts panel is required by law, nutrition descriptions are optional. Food manufacturers decide whether to include these terms.

Table 6-6 includes definitions for commonly used nutrient content claims. For additional information on nutrient content claims, see “Appendix A: Definitions of Nutrient Content Claims” and “Appendix B: Additional Requirements for Nutrient Content Claims” in the FDA’s *Guidance for Industry: A Food Labeling Guide*.

Table 6-6. Common nutrient claims on food labels

Extra lean: A serving of meat, poultry, seafood and game meats contains less than 5 grams of fat, 2 grams of saturated fats, and 95 milligrams of cholesterol.

Free: A serving contains none or a very small amount, e.g., less than 5 calories, less than 5 milligrams sodium, less than 0.5 gram of total fat, less than 0.5 gram of saturated fats, less than 0.5 gram of trans fats, less than 2 milligrams of cholesterol, and less than 0.5 gram of sugar. Other terms that may be used include “no,” “zero,” “without,” “trivial source of,” “negligible source of,” “dietarily insignificant source of,” and “non” (nonfat only).

Fresh: 1) A food is raw, has never been frozen or heated and contains no preservatives; or 2) the term accurately describes the products, for example, “fresh milk” or “freshly baked bread.”

Fresh frozen: The food has been quickly frozen while still fresh. Blanching is allowed before freezing to prevent nutrient breakdown.

Good source: A serving contains 10-19 percent of the Daily Value (compared with a standard serving size of the traditional food) for a particular nutrient, for example “good source of fiber.” Other terms that may be used include “contains” and “provides.”

Healthy: A food is low in fat (3 grams or less) and saturated fats (1 gram or less and 15 percent or less of calories) and a serving contains no more than 480 milligrams of sodium, 60 milligrams of cholesterol, and at least 10 percent of the daily value for vitamin A, vitamin C, calcium, iron, protein, and fiber.

High: A serving contains 20 percent or more of the Daily Value (compared with a standard serving size of the traditional food) for a particular nutrient, for example, “high in vitamin C,” “high fiber,” and “high calcium.” Other terms that may be used include “excellent source of” and “rich in.”

Table 6-6. Common nutrient claims on food labels, *continued*

Lean: A serving of meat, poultry, seafood and game meats contains less than 10 grams of fat, 4.5 grams or less of saturated fats, and less than 95 milligrams of cholesterol.

Less: The food contains 25 percent less of a nutrient or 25 percent fewer calories than a reference food.

Light: A food with one-third fewer calories or 50 percent of the fat in a traditional food. A low-calorie, low-fat food with 50 percent less sodium can also be called “light.” Another term that may be used is “lite.”

Low: A serving contains no more than 40 calories, 140 milligrams of sodium, and 3 grams of fat. Other terms that may be used include “few” (calories), “contains a small amount of,” “low source of,” “low in,” “little,” and “a little.”

Organic: A regulatory term for food that meets specific standards set by the USDA. Organic food differs from conventionally produced food in the way it is grown or produced. However, the USDA makes no claims that organically produced food is safer or more nutritious than conventionally produced food. For more information, see the Glossary.

More: A serving contains 10 percent or more of the Daily Value (compared with a standard serving size of the traditional food) for a particular nutrient, for example “more fiber,” or “more iron.” This term does not apply to meat or poultry products. Other terms that may be used include “enriched,” “fortified,” “added,” “plus,” and “more.”

Percent (%) fat free: A product must be low fat or fat free and the percentage must accurately reflect the amount of fat in 100 grams of a food. For example, 2.5 grams of fat in 50 grams of food results in a “95% fat-free” claim.

Natural: For the purposes of food labeling, “natural” means that the food does not contain added colors, artificial flavors, or synthetic substances. However, it does not necessarily mean that a product is healthier or more nutritious. While the FDA allows manufacturers to use this term if a product meets these requirements, the FDA has not developed a definition for use of the term natural or its derivatives.

Reduced: A serving contains 25 percent less of a nutrient (e.g., fat, saturated fats, cholesterol, sodium) or 25 percent fewer calories than a comparable food. “Reduced” cannot be used if the reference food already meets the requirement for a “low” claim. Other terms that may be used include “reduced in,” “___% reduced,” “fewer,” “lower,” “lower in,” and “less.”

Source: *Guidance for Industry: A Food Labeling Guide*. FDA, Revised January 2013.

Health claims

The FDA allows manufacturers to make certain claims linking the effect of a nutrient or food to a disease or health-related condition, if the claim is supported by scientific evidence. These claims can only be used under certain conditions, such as when the food is an adequate source of the appropriate nutrients. A reference to the claim usually appears on the front label, but the claim itself may appear elsewhere on the label. For more information on allowable health claims, see “Appendix C: Health Claims” in the FDA’s *Guidance for Industry: A Food Labeling Guide*.

SFAs can use the FDA’s whole grain health claim to determine whether a product meets the USDA’s WGR requirement. For more information, see “Method 3: Whole grain health claim” in part C of section 3.

