

1 — MEAL PATTERNS

This guide helps menu planners comply with the meal pattern requirements for the National School Lunch Program (NSLP), School Breakfast Program (SBP), and Seamless Summer Option (SSO) of the NSLP. It is based on federal regulations and policy from the U.S. Department of Agriculture (USDA) and Connecticut statutes and regulations.

Overview of Nutrition Standards for School Meals

The meal pattern requirements for school meals are defined by the USDA final rule, *Nutrition Standards for the National School Lunch and School Breakfast Programs* (77 FR 4088), as required by the *Healthy, Hunger-Free Kids Act of 2010* (Public Law 111-296). Table 1-1 summarizes the application of the final rule to the Child Nutrition Programs.

Table 1-1. Application of USDA Final Rule on Nutrition Standards for School Meals	
<p>APPLIES TO</p> <ul style="list-style-type: none"> • National School Lunch Program (NSLP) • School Breakfast Program (SBP) • Seamless Summer Option (SSO) of the NSLP * 	<p>DOES NOT APPLY TO</p> <ul style="list-style-type: none"> • Afterschool Snack Program (ASP) ² • Child and Adult Care Food Program (CACFP) ² • Special Milk Program (SMP) ** • Summer Food Service Program (SFSP) • Preschoolers (ages 3-4) in the NSLP and SBP ** • Meals for children with recognized disabilities that restrict their diet ***
<p>* Meals in the SSO follow the meal patterns of the NSLP and SBP.</p> <p>** The milk provisions of the final rule apply to the ASP, CACFP, SMP, and preschoolers (ages 3-4) in the NSLP and SBP. For more information, see table 2-2 in section 2.</p> <p>*** For information on the requirements for special diets, see the CSDE’s <i>Accommodating Special Diets in School Nutrition Programs</i>.</p>	

School nutrition programs must provide all meal pattern components in the appropriate serving size to receive reimbursement for meals served to children. The USDA meal patterns consist of specific serving sizes of food components for each age/grade group. A food component is:

- one of the five food groups that comprise the reimbursable lunch (milk, fruits, vegetables, grains, and meat/meat alternates); and
- one of the three foods groups that comprise the reimbursable breakfast (milk, fruit, and grains).



Reimbursable meals consist of creditable foods, i.e., foods that credit toward the meal pattern requirements.

Table 1-2 summarizes the daily food components for the lunch and breakfast meal patterns.

Table 1-2. Daily Food Components for the NSLP and SBP

LUNCH (NSLP) *

Five Food Components

- One serving of milk (variety of low-fat (1%) unflavored or fat-free unflavored or flavored)
- One serving of fruits
- One serving of vegetables
- One serving of whole grain-rich grains
- One serving of meat/meat alternates

BREAKFAST (SBP) *

Three Food Components **

- One serving of milk (variety of low-fat (1%) unflavored or fat-free unflavored or flavored)
- One serving of fruits (or optional vegetable substitutions)
- One serving of whole grain-rich grains (or optional meat/meat alternate substitutions)

* The required serving size for each food component is based on the minimum daily amounts for each grade group specified in the meal patterns for lunch and breakfast. For more information, see the lunch and breakfast meal patterns in this section.

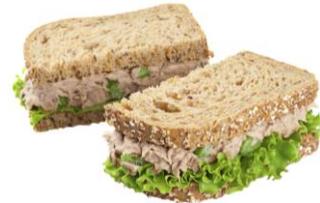
** These are the breakfast requirements without offer versus serve (OVS). When schools choose to implement OVS at breakfast, different requirements apply. For more information on OVS, see [section 4](#).



OVERVIEW OF REQUIREMENTS

The key menu planning requirements of the NSLP and SBP are described below. [Appendix A](#) summarizes the implementation timeline for all meal pattern requirements.

- Menu Planning Approach:** There is one food-based menu planning approach for both lunch and breakfast, with the same three age/grade groups (K-5, 6-8, and 9-12).
- Offer versus Serve (OVS):** For a reimbursable lunch, students must select at least $\frac{1}{2}$ cup of fruits or vegetables and the minimum daily serving of at least two other components. For a reimbursable breakfast, menus must offer at least four food items including two grains (or one grain and one meat/meat alternate substitution), one fruit, and one milk, or one grain, two fruits, and one milk. Students must select at least $\frac{1}{2}$ cup of fruits (or vegetables, if offered in place of fruits) and the minimum daily serving of at least two other food items. For more information on OVS, see [section 4](#).
- Milk:** Schools must offer at least two different varieties (fat content and/or flavor) of unflavored low-fat (1%) or fat-free unflavored or flavored milk at lunch and breakfast. Whole, reduced-fat (2%), and flavored low-fat milk cannot be served.
- Meat/Meat Alternates:** Schools must offer minimum daily and weekly servings of meat/meat alternates at lunch. The breakfast meal pattern does not require meat/meat alternates. However, schools may substitute 1 ounce equivalent of meat/meat alternate for 1 ounce equivalent of grain at breakfast, after offering the minimum daily grains requirement of 1 ounce equivalent. For more information, see “Meat/Meat Alternates at Breakfast” in [section 2](#).
- Grains:** Schools must offer minimum daily and weekly servings of grains at lunch and breakfast. All grains must be whole grain-rich (WGR). WGR products contain at least 50 percent whole grains, any remaining grains are enriched, and any noncreditable grains are less than 2 percent ($\frac{1}{4}$ ounce equivalent) of the product formula. To comply with this limit, the combined total of all noncreditable grains in a product cannot exceed 3.99 grams for groups A-G (baked goods) or 6.99 grams for groups H (cereal grains) and I (ready-to-eat breakfast cereals). WGR foods include 100 percent whole-grain products, which are the most nutritious choices. For more information, see “Grains” in [section 2](#).
- Fruits:** Schools must offer minimum daily and weekly servings of fruits at lunch and breakfast. The fruits component includes fresh fruit, frozen fruit (with or without added sugar), canned fruit in light syrup, water or juice, and dried fruit. All fruits credit based on the actual volume served except dried fruit, which credits as twice the volume served, e.g., $\frac{1}{4}$ cup of dried fruit credits as $\frac{1}{2}$ cup of fruit.



- **Vegetables:** The vegetables component includes fresh, frozen, and canned vegetables. At lunch, schools must offer minimum daily and weekly servings of vegetables. Lunch menus must include specific quantities of the five vegetable subgroups each week (dark green, red/orange, legumes, starchy, and other). At breakfast, vegetables from the dark green, red/orange, legumes, and “other” subgroups can be substituted for fruits at any time. Schools may offer starchy vegetables such as hash-brown potatoes only if the weekly menu includes at least two cups of nonstarchy vegetables. For more information, see “Vegetables at Breakfast” in [section 2](#).
- **Juice:** Juice (fruit, vegetable, and fruit/vegetable blends) must be pasteurized 100 percent full-strength juice. At lunch, fruit juice cannot exceed half of the total fruits offered during the week and vegetable juice cannot exceed half of the total vegetables offered during the week. At breakfast, fruit juice together with vegetable juice cannot exceed half of the total fruits offered during the week. All sources of juice served in school meals count toward the weekly limit including:
 - juice that is fresh, frozen, and made from concentrate;
 - frozen juice pops made from 100 percent juice;
 - pureed fruits and vegetables in fruit/vegetable smoothies; and
 - juice from canned fruit served in 100 percent juice, unless the canned fruit is drained.



For more information, see “Fruit Juice” and “Vegetable Juice” in [section 2](#), “Weekly Juice Limits at Lunch” and “Weekly Juice Limits at Breakfast” in [section 3](#), and “Crediting Juice” in [appendix D](#).

- **Calories:** Average weekly menus must meet specific calorie ranges for each grade group at lunch and breakfast. For more information, see “Calories” in [section 5](#).
- **Saturated Fats:** Average weekly lunch and breakfast menus must be less than 10 percent of calories from saturated fats. For more information, see “Saturated Fats” in [section 5](#).
- **Sodium:** Schools must gradually reduce sodium levels so that average weekly menus meet specific sodium targets for lunch and breakfast. The first intermediate sodium target took effect on July 1, 2014. The second target must be met by July 1, 2017, and the last target by July 1, 2022. Implementation of the second and final targets is subject to the USDA’s review of current data on the relationship between sodium intake and health. [Appendix B](#) summarizes the sodium reduction timeline for school meals.
- **Trans Fats:** All nutrition labels or manufacturer specifications for foods and ingredients used in school meals must indicate zero grams of trans fats per serving. For more information, see “Trans Fats” in [section 5](#).

For additional information on the meal pattern requirements, see the meal patterns for lunch (tables [1-3](#) and [1-4](#)) and breakfast (tables [1-6](#) and [1-7](#)) in this section.

IMPLEMENTATION RESOURCES FOR SCHOOLS

Key resources to assist schools with implementing the school meal patterns are highlighted throughout this guide. The [Program Guidance](#) section of the CSDE's Web site provides links to CSDE Web pages with information on federal and state requirements and guidance for the USDA school nutrition programs, including meal patterns, training materials, and technical assistance resources. The CSDE's [Operational Memorandum](#) Web page contains important correspondence for school food authorities (SFAs) regarding the operation of the USDA school nutrition programs. The CSDE updates these Web pages frequently.



The list below includes some USDA resources for school meals.

- Best Practices Sharing Center (Healthy Meals Resource System):
<http://healthymeals.nal.usda.gov/best-practices>
- *Fact Sheet: Calories in School Meals*. U.S. Department of Agriculture, 2012.
www.fns.usda.gov/sites/default/files/HHFKAfactsheet-calories.pdf
- Healthier School Day Tools for Schools (USDA Web page):
www.fns.usda.gov/healthierschoolday/tools-schools
- HealthierUS School Challenge: Smarter Lunchrooms (USDA Web page):
www.fns.usda.gov/hussc/healthierus-school-challenge-smarter-lunchrooms
- Nutrition Standards for CACFP Meals and Snacks (USDA Web page):
www.fns.usda.gov/cacfp/meals-and-snacks
- Nutrition Standards for School Meals (USDA Web page):
www.fns.usda.gov/cnd/Governance/Legislation/nutritionstandards.htm
- Smarter Lunchrooms (USDA Web page):
<http://healthymeals.nal.usda.gov/healthierus-school-challenge-resources/smarter-lunchrooms>
- The School Day Just Got Healthier (USDA Web page):
www.fns.usda.gov/cnd/healthierschoolday/default.htm
- USDA Memo SP 57-2014: *Updated Offer versus Serve Guidance for the National School Lunch Program and School Breakfast Program in School Year 2014-2015*
www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/USDA_OVS_Manual.pdf
- USDA Memo SP 10-2012 (v9): *Questions & Answers on the Final Rule, "Nutrition Standards in the National School Lunch and School Breakfast Programs"* www.fns.usda.gov/qas-final-rule-nutrition-standards-national-school-lunch-and-school-breakfast-programs

For more resources on planning and promoting healthy meals, see "Web Sites" in [section 6](#) and the "Menu Planning and Food Production" section of the CSDE's [Nutrition Resources](#) list.

Lunch

Table 1-3 shows the five-day lunch meal pattern. Programs that regularly operate on a seven-day week such as residential child care institutions (RCCIs) must follow the seven-day meal pattern (see table 1-4). The CSDE's [Meal Patterns](#) Web page and [Meal Patterns for Residential Child Care Institutions](#) Web page contain lunch meal patterns for each grade group. Schools that regularly operate on three, four, or six days must follow the meal pattern requirements in [appendix C](#). The CSDE's [Meal Patterns for Four-day Week](#) Web page contains four-day lunch meal patterns for each grade group.

Menu planners must make adjustments to the lunch meal pattern for schools with different grade configurations that prevent the use of the three required grade groups, such as a K-8 school. For information on these requirements, see "Multiple Grade Groups" in [section 3](#).

Table 1-3. Five-day Lunch Meal Pattern ¹

FOOD COMPONENTS	GRADES K-5		GRADES 6-8		GRADES 9-12	
	Daily	Weekly ²	Daily	Weekly ²	Daily	Weekly ²
Fluid Milk (cups) ³ <i>Low-fat (1%) unflavored or fat-free unflavored or flavored</i>	1	5	1	5	1	5
Fruits (cups) ⁴ <i>Fruit juice cannot exceed half of the weekly fruits</i>	½	2 ½	½	2 ½	1	5
Vegetables (cups) ⁵ <i>Vegetable juice cannot exceed half of the weekly vegetables</i>	¾	3 ¾	¾	3 ¾	1	5
Dark Green ^{5,6}	0	½	0	½	0	½
Red/Orange ^{5,7}	0	¾	0	¾	0	1 ¼
Beans/Peas (Legumes) ^{5,8}	0	½	0	½	0	½
Starchy ^{5,9}	0	½	0	½	0	½
Other ^{5,10}	0	½	0	½	0	¾
Additional vegetables to reach total ^{5,11}	0	1	0	1	0	1 ½
Grains (ounce equivalents) ¹² <i>All grains must be whole grain-rich</i>	1	8-9	1	8-10	2	10-12
Meats and Meat Alternates (ounce equivalents) ¹³	1	8-10	1	9-10	2	10-12
DIETARY SPECIFICATIONS (NUTRITION STANDARDS): Daily Amount Based on the Average for a Five-day Week						
Calories ^{14, 15}	550-650		600-700		750-850	
Saturated Fat (percentage of total calories) ¹⁵	< 10		< 10		< 10	
Sodium (milligrams) ^{15, 16}	≤ 1,230		≤ 1,360		≤ 1,420	
Trans Fat (grams) ¹⁵	Nutrition label or manufacturer specifications must indicate zero grams of trans fat per serving.					
◀ See next page for important menu planning notes ▶						

Table 1-3. Five-day Lunch Meal Pattern, continued

- 1 The meal pattern shows the required amounts of each component that must be made available to each child to claim reimbursement for the meal. Meals may include larger amounts of any component if the weekly menu meets the dietary specifications for calories, saturated fat, trans fat, and sodium. Use the USDA's *Food Buying Guide* to determine the amount of purchased food that meets the requirements. For processed foods, review Child Nutrition (CN) labels (see [appendix G](#)) or product formulation statements (see [appendix H](#)).
- 2 A week equals five days. Schools that regularly operate for six or seven days must increase the weekly requirements by 20 percent. Schools that regularly operate for less than five days must decrease the weekly requirements by 20 percent for each day less than five days. For more information, see [appendix C](#).
- 3 Schools must offer at least two different varieties (fat content and/or flavor) of unflavored low-fat (1%) or fat-free unflavored or flavored milk. Whole, reduced-fat (2%), and flavored low-fat milk cannot be served.
- 4 Fruits include fresh, frozen, canned in light syrup, water or juice, and dried. All fruits credit based on volume except dried fruit credits as twice the volume served, e.g., ¼ cup of dried fruit credits as ½ cup of fruit. Fruit juice must be pasteurized 100 percent full-strength juice and cannot exceed half of the weekly fruits (see [appendix D](#)). Serving whole fruits instead of juice is recommended.
- 5 All vegetables credit based on volume except raw leafy greens credit as half the volume served (e.g., 1 cup credits as ½ cup of vegetables), and tomato paste and puree credit based on the volume as if reconstituted (see the *Food Buying Guide*). Vegetable juice must be pasteurized 100 percent full-strength juice and cannot exceed half of the weekly vegetables. For information on the vegetable subgroups, see [section 2](#).
- 6 The dark green subgroup includes vegetables such as bok choy, broccoli, collard greens, dark green leafy lettuce, kale, mesclun, mustard greens, romaine lettuce, spinach, turnip greens, and watercress.
- 7 The red/orange subgroup includes vegetables such as acorn squash, butternut squash, carrots, pumpkin, tomatoes, tomato juice, and sweet potatoes.
- 8 The beans and peas (legumes) subgroup includes vegetables such as black beans, black-eyed peas (mature, dry), garbanzo beans (chickpeas), kidney beans, lentils, navy beans, soy beans, split peas and white beans. It does not include green peas, green lima beans, and green (string) beans.
- 9 The starchy subgroup includes vegetables such as black-eyed peas (not dry), corn, cassava, green bananas, green peas, green lima beans, parsnips, plantains, taro, water chestnuts, and white potatoes.
- 10 "Other" vegetables include all other vegetables such as artichokes, asparagus, avocado, beets, Brussels sprouts, cabbage, cauliflower, celery, cucumbers, eggplant, green beans, green peppers, iceberg lettuce, mushrooms, okra, onions, turnips, wax beans, and zucchini. The "other" vegetables requirement may be met with any additional beans/peas (legumes) subgroups but not the starchy subgroup.
- 11 Any vegetable subgroup may be offered as additional vegetables to meet the total weekly vegetable requirements.
- 12 All grains must be whole grain-rich, i.e., the product contains at least 50 percent whole grains, any remaining grains are enriched, and any noncreditable grains are less than 2 percent (¼ ounce equivalent) of the product formula. For more information, see *Criteria for Whole Grain-rich Foods*. All grains must meet the serving sizes specified in *Whole Grain-rich Ounce Equivalents for School Nutrition Programs* ([appendix E](#)). Up to 2 ounce equivalents per week may be a grain-based dessert if weekly menus meet the dietary specifications for calories, saturated fat, trans fat, and sodium. Menus are not required to comply with the maximum for grains, but must meet the minimum and stay within the weekly calorie range. The weekly maximum provides a guide for planning age-appropriate meals that meet the dietary specifications for calories, saturated fat, and sodium.
- 13 The serving size refers to the edible portion of cooked lean meat, poultry, or fish as served, e.g., cooked lean meat without bone. A 1-ounce equivalent serving equals 1 ounce of lean meat, poultry, or fish, 1 ounce of cheese (low-fat recommended), 2 ounces of cottage or ricotta cheese (low-fat recommended), ¼ cup of cooked beans and peas (legumes), ½ large egg, 2 tablespoons of nut butters, 1 ounce of nuts or seeds, ¼ cup (2.2 ounces) of commercial tofu (containing at least 5 grams of protein), ½ cup of yogurt or soy yogurt, and 1 ounce of alternate protein products (APP). APP must meet the USDA requirements specified in appendix A to Part 210 of the NSLP regulations. Meat and meat alternates must be served in a main dish, or a main dish and only one other food item. Allowable nuts and seeds include almonds, Brazil nuts, cashews, filberts, macadamia nuts, peanuts, pecans, walnuts, pine nuts, pistachios, and soynuts. Nuts and seeds cannot credit for more than 50 percent of the meat/meat alternates requirement. They must be combined with another meat/meat alternate to meet the minimum daily serving. Menus are not required to comply with the maximum for meat/meat alternates, but must meet the minimum and stay within the weekly calorie range. The weekly maximum provides a guide for planning age-appropriate meals that meet the dietary specifications for calories, saturated fat, and sodium.
- 14 The average daily amount of calories for a five-day school week must be at least the minimum value but no more than the maximum value.
- 15 Discretionary sources of calories (solid fats and added sugars) may be added if meals meet the dietary specifications for calories, saturated fat, trans fat, and sodium.
- 16 These intermediate sodium limits (first target) apply through June 30, 2017. The second sodium target must be reached by July 1, 2017 (≤ 935 for grades K-5; $\leq 1,035$ for grades 6-8, and $\leq 1,080$ for grades 9-12). The final sodium target must be reached by July 1, 2022 (≤ 640 for grades K-5; ≤ 710 for grades 6-8, and ≤ 740 for grades 9-12).

Table 1-4. Seven-day Lunch Meal Pattern ¹

FOOD COMPONENTS	GRADES K-5		GRADES 6-8		GRADES 9-12	
	Daily	Weekly ²	Daily	Weekly ²	Daily	Weekly ²
Fluid Milk (cups) ³ <i>Low-fat (1%) unflavored or fat-free unflavored or flavored</i>	1	7	1	7	1	7
Fruits (cups) ⁴ <i>Fruit juice cannot exceed half of the weekly fruits</i>	½	3 ½	½	3 ½	1	7
Vegetables (cups) ⁵ <i>Vegetable juice cannot exceed half of the weekly vegetables</i>	¾	5 ¼	¾	5 ¼	1	7
Dark Green ^{5, 6}	0	½	0	½	0	½
Red/Orange ^{5, 7}	0	¾	0	¾	0	1 ¼
Beans/Peas (Legumes) ^{5, 8}	0	½	0	½	0	½
Starchy ^{5, 9}	0	½	0	½	0	½
Other ^{5, 10}	0	½	0	½	0	¾
Additional vegetables to reach total ^{5, 11}	0	2 ½	0	2 ½	0	3 ½
Grains (ounce equivalents) ¹² <i>All grains must be whole grain-rich</i>	1	11-12.5	1	11-14	2	14-17
Meats and Meat Alternates (ounce equivalents) ¹³	1	11-14	1	12.5-14	2	14-17
DIETARY SPECIFICATIONS (NUTRITION STANDARDS): Daily Amount Based on the Average for a Seven-day Week						
Calories ^{14, 15}	550-650		600-700		750-850	
Saturated Fat (percentage of total calories) ¹⁵	< 10		< 10		< 10	
Sodium (milligrams) ^{15, 16}	≤ 1,230		≤ 1,360		≤ 1,420	
Trans Fat (grams) ¹⁵	Nutrition label or manufacturer specifications must indicate zero grams of trans fat per serving.					
◀ See next page for important menu planning notes ▶						



Table 1-4. Seven-day Lunch Meal Pattern, continued

- 1 The meal pattern shows the required amounts of each component that must be made available to each child to claim reimbursement for the meal. Meals may include larger amounts of any component if the weekly menu meets the dietary specifications for calories, saturated fat, trans fat, and sodium. Use the USDA's *Food Buying Guide* to determine the amount of purchased food that meets the requirements. For processed foods, review Child Nutrition (CN) labels (see [appendix G](#)) or product formulation statements (see [appendix H](#)).
- 2 A week equals seven days. Schools that regularly operate for less than seven days must decrease the weekly requirements by 20 percent for each day less than five days. For more information, see [appendix C](#).
- 3 Schools must offer at least two different varieties (fat content and/or flavor) of unflavored low-fat (1%) or fat-free unflavored or flavored milk. Whole, reduced-fat (2%), and flavored low-fat milk cannot be served.
- 4 Fruits include fresh, frozen, canned in light syrup, water or juice, and dried. All fruits credit based on volume except dried fruit credits as twice the volume served, e.g., ¼ cup of dried fruit credits as ½ cup of fruit. Fruit juice must be pasteurized 100 percent full-strength juice and cannot exceed half of the weekly fruits (see [appendix D](#)). Serving whole fruits instead of juice is recommended.
- 5 All vegetables credit based on volume except raw leafy greens credit as half the volume served (e.g., 1 cup credits as ½ cup of vegetables), and tomato paste and puree credit based on the volume as if reconstituted (see the *Food Buying Guide*). Vegetable juice must be pasteurized 100 percent full-strength juice and cannot exceed half of the weekly vegetables. For information on the vegetable subgroups, see [section 2](#).
- 6 The dark green subgroup includes vegetables such as bok choy, broccoli, collard greens, dark green leafy lettuce, kale, mesclun, mustard greens, romaine lettuce, spinach, turnip greens, and watercress.
- 7 The red/orange subgroup includes vegetables such as acorn squash, butternut squash, carrots, pumpkin, tomatoes, tomato juice, and sweet potatoes.
- 8 The beans and peas (legumes) subgroup includes vegetables such as black beans, black-eyed peas (mature, dry), garbanzo beans (chickpeas), kidney beans, lentils, navy beans, soy beans, split peas and white beans. It does not include green peas, green lima beans, and green (string) beans.
- 9 The starchy subgroup includes vegetables such as black-eyed peas (not dry), corn, cassava, green bananas, green peas, green lima beans, parsnips, plantains, taro, water chestnuts, and white potatoes.
- 10 "Other" vegetables include all other vegetables such as artichokes, asparagus, avocado, beets, Brussels sprouts, cabbage, cauliflower, celery, cucumbers, eggplant, green beans, green peppers, iceberg lettuce, mushrooms, okra, onions, turnips, wax beans, and zucchini. The "other" vegetables requirement may be met with any additional beans/peas (legumes) subgroups but not the starchy subgroup.
- 11 Any vegetable subgroup may be offered as additional vegetables to meet the total weekly vegetable requirements.
- 12 All grains must be whole grain-rich, i.e., the product contains at least 50 percent whole grains, any remaining grains are enriched, and any noncreditable grains are less than 2 percent (¼ ounce equivalent) of the product formula. For more information, see *Criteria for Whole Grain-rich Foods*. All grains must meet the serving sizes specified in *Whole Grain-rich Ounce Equivalents for School Nutrition Programs* ([appendix E](#)). Up to 2 ounce equivalents per week may be a grain-based dessert if weekly menus meet the dietary specifications for calories, saturated fat, trans fat, and sodium. Menus are not required to comply with the maximum for grains, but must meet the minimum and stay within the weekly calorie range. The weekly maximum provides a guide for planning age-appropriate meals that meet the dietary specifications for calories, saturated fat, and sodium.
- 13 The serving size refers to the edible portion of cooked lean meat, poultry, or fish as served, e.g., cooked lean meat without bone. A 1-ounce equivalent serving equals 1 ounce of lean meat, poultry, or fish, 1 ounce of cheese (low-fat recommended), 2 ounces of cottage or ricotta cheese (low-fat recommended), ¼ cup of cooked beans and peas (legumes), ½ large egg, 2 tablespoons of nut butters, 1 ounce of nuts or seeds, ¼ cup (2.2 ounces) of commercial tofu (containing at least 5 grams of protein), ½ cup of yogurt or soy yogurt, and 1 ounce of alternate protein products (APP). APP must meet the USDA requirements specified in appendix A to Part 210 of the *NSLP regulations*. Meat and meat alternates must be served in a main dish, or a main dish and only one other food item. Allowable nuts and seeds include almonds, Brazil nuts, cashews, filberts, macadamia nuts, peanuts, pecans, walnuts, pine nuts, pistachios, and soynuts. Nuts and seeds cannot credit for more than 50 percent of the meat/meat alternates requirement. They must be combined with another meat/meat alternate to meet the minimum daily serving. Menus are not required to comply with the maximum for meat/meat alternates, but must meet the minimum and stay within the weekly calorie range. The weekly maximum provides a guide for planning age-appropriate meals that meet the dietary specifications for calories, saturated fat, and sodium.
- 14 The average daily amount of calories for a seven-day school week must be at least the minimum value but no more than the maximum value.
- 15 Discretionary sources of calories (solid fats and added sugars) may be added if meals meet the dietary specifications for calories, saturated fat, trans fat, and sodium.
- 16 These intermediate sodium limits (first target) apply through June 30, 2017. The second sodium target must be reached by July 1, 2017 (≤ 935 for grades K-5; $\leq 1,035$ for grades 6-8, and $\leq 1,080$ for grades 9-12). The final sodium target must be reached by July 1, 2022 (≤ 640 for grades K-5; ≤ 710 for grades 6-8, and ≤ 740 for grades 9-12).



Breakfast

Table 1-5 summarizes the breakfast requirements for each food component.

Table 1-5. Overview of Breakfast Requirements

Milk

- The milk component consists of only low-fat (1%) unflavored or fat-free unflavored or flavored milk. Schools must offer a variety of milk choices daily, including at least two different choices of fat content or flavor.
- Schools must offer at least 1 cup of milk daily for all grade groups.

Fruits

- Schools must offer at least 1 cup of fruits daily for all grade groups. Vegetables from the dark green, red/orange, legumes, and “other” subgroups can be substituted for fruits at any time. Starchy vegetables such as hash-brown potatoes may be offered on any day if the weekly menu includes at least two cups of nonstarchy vegetables.
- Fruit and vegetable juice must be pasteurized 100 percent full-strength juice. Fruit juice together with vegetable juice cannot exceed half of the weekly fruit offerings. All sources of juice served in school meals count toward the weekly limit, including juice that is fresh, frozen, and made from concentrate; frozen juice pops made from 100 percent juice; pureed fruits and vegetables in fruit/vegetable smoothies; and juice from canned fruit served in 100 percent juice, unless the canned fruit is drained.
- With OVS, schools must offer a minimum of four food items from the three food components including two grains (or one grain and one meat/meat alternate substitution), one fruit, and one milk, or one grain, two fruits, and one milk. The fourth food item cannot be another serving of milk.
- For a reimbursable meal with OVS, students must select at least three items including ½ cup of fruit (or vegetable substitution, if offered) and the minimum required serving size of at least two other food items. For more information on OVS, see [section 4](#).

Grains

- Schools must offer at least 1 ounce equivalent of WGR products daily for all grades. For more information, see “WGR Requirements” in [section 2](#).
- The minimum weekly requirement varies by grade group.
- The maximum weekly limit does not apply, but menus must meet the minimum and stay within the weekly calorie range. The weekly maximum provides a guide for planning age-appropriate meals that meet the requirements for calories, saturated fats, and sodium. For more information, see “Weekly Grains and Meat/Meat Alternates” in [section 3](#).

Optional Meat/Meat Alternates

- Meat/meat alternates are not required but can be served. Schools have two options for crediting meat/meat alternates at breakfast.
 - Offer a meat/meat alternate in place of part of the grains component after offering the minimum daily 1 ounce equivalent of grains. A serving of 1 ounce equivalent of meat/meat alternates credits as 1 ounce equivalent of grains.
 - Offer a meat/meat alternate as an extra food that does not credit toward the meal pattern. For more information, see “Meat/Meat Alternates at Breakfast” in [section 2](#) and “OVS with Meat/Meat Alternate Substitutions” in [section 4](#).

Table 1-6 shows the five-day breakfast meal pattern. The CSDE’s [Meal Patterns for Five-day Week](#) Web page contains breakfast meal patterns for each grade group. Programs such as RCCIs that regularly operate on a seven-day week must follow the seven-day meal pattern (see [table 1-7](#)). The CSDE’s [Meal Patterns for Residential Child Care Institutions](#) Web page contains separate lunch meal patterns for each grade group. Schools that regularly operate on three, four, or six days must follow the requirements in [appendix C](#). The CSDE’s [Meal Patterns for Four-day Week](#) Web page contains four-day breakfast patterns for each grade group.

Menu planners must make adjustments to the breakfast meal pattern for schools with different grade configurations that prevent the use of the three required grade groups, such as a K-8 school. For information on these requirements, see “Multiple Grade Groups” in [section 3](#).

Table 1-6. Five-day Breakfast Meal Pattern ¹

FOOD COMPONENTS	GRADES K-5		GRADES 6-8		GRADES 9-12	
	Daily	Weekly ²	Daily	Weekly ²	Daily	Weekly ²
Fluid Milk (cups) ³ <i>Low-fat (1%) unflavored or fat-free unflavored or flavored</i>	1	5	1	5	1	5
Fruits (cups) ^{4, 5, 6} <i>Juice (fruit and vegetable) cannot exceed half of the weekly fruits</i>	1	5	1	5	1	5
Grains (ounce equivalents) ^{7, 8} <i>All grains must be whole grain-rich</i>	1	7-10	1	8-10	1	9-10
DIETARY SPECIFICATIONS (NUTRITION STANDARDS): Daily Amount Based on the Average for a Five-day Week						
Calories ^{9, 10}	350-500		400-550		450-600	
Saturated Fat (percentage of total calories) ¹⁰	< 10		< 10		< 10	
Sodium (milligrams) ¹¹	≤ 540		≤ 600		≤ 640	
Trans Fat (grams) ¹⁰	Nutrition label or manufacturer specifications must indicate zero grams of trans fat per serving.					
◀ See next page for important menu planning notes ▶						



Table 1-6. Five-day Breakfast Meal Pattern, continued

- ¹ The meal pattern shows the required amounts of each component that must be made available to each child to claim reimbursement for the meal. Meals may include larger amounts of any component if the weekly menu meets the dietary specifications for calories, saturated fat, trans fat, and sodium. Use the USDA's *Food Buying Guide* to determine the amount of purchased food that meets the requirements. For processed foods, review Child Nutrition (CN) labels (see [appendix G](#)) or product formulation statements (see [appendix H](#)).
- ² A week equals five days. Schools that regularly operate for six or seven days must increase the weekly requirements by 20 percent for each additional day. Schools that regularly operate for less than five days must decrease the weekly requirements by 20 percent for each day less than five days. For more information, see [appendix C](#).
- ³ Schools must offer at least two different varieties (fat content and/or flavor) of unflavored low-fat (1%) or fat-free unflavored or flavored milk. Whole, reduced-fat (2%), and flavored low-fat milk cannot be served.
- ⁴ Fruits include fresh, frozen, canned in light syrup, water or juice, and dried. Fruits credit based on volume except dried fruit credits as twice the volume served, e.g., ¼ cup of dried fruit credits as ½ cup of fruit.
- ⁵ Vegetables may be substituted for fruits but the first two cups per week must be from the dark green, red/orange, beans and peas (legumes), or “other” vegetable subgroups. Starchy vegetables may be offered on any day if the weekly menu includes at least two cups of nonstarchy vegetables. All vegetables credit based on volume except raw leafy greens credit as half the volume served (e.g., 1 cup credits as ½ cup of vegetables), and tomato paste and puree credit based on the volume as if reconstituted (see the *Food Buying Guide*).
- ⁶ Fruit and vegetable juice must be pasteurized 100 percent full-strength juice. Fruit juice together with vegetable juice cannot exceed half of the weekly fruit offerings (see [appendix D](#)). Serving whole fruits and vegetables instead of juice is recommended.
- ⁷ All grains must be whole grain-rich, i.e., the product contains at least 50 percent whole grains, any remaining grains are enriched, and any noncreditable grains are less than 2 percent (¼ ounce equivalent) of the product formula. For more information, see *Criteria for Whole Grain-rich Foods*. All grains must meet the serving sizes specified in *Whole Grain-rich Ounce Equivalents for School Nutrition Programs* ([appendix E](#)). Menus are not required to comply with the maximum for grains, but must meet the minimum and stay within the weekly calorie range. The weekly maximum provides a guide for planning age-appropriate meals that meet the calorie, saturated fat, and sodium requirements.
- ⁸ The SBP does not require the meat/meat alternates component. Schools may substitute 1 ounce equivalent of meat/meat alternate for 1 ounce equivalent of grains after offering the minimum daily grains serving (1 ounce equivalent). The serving size refers to the edible portion of cooked lean meat, poultry, or fish as served, e.g., cooked lean meat without bone. A 1-ounce equivalent equals 1 ounce of lean meat, poultry or fish, 1 ounce of cheese (low-fat recommended), 2 ounces of cottage or ricotta cheese (low-fat recommended), ¼ cup of cooked beans and peas (legumes), ½ large egg, 2 tablespoons of nut butters, 1 ounce of nuts or seeds, ¼ cup (2.2 ounces) of commercial tofu containing at least 5 grams of protein, ½ cup of yogurt or soy yogurt, and 1 ounce of alternate protein products (APP). APP must meet the USDA requirements specified in [appendix A](#) to Part 220 of the [SBP regulations](#). Allowable nuts and seeds include almonds, Brazil nuts, cashews, filberts, macadamia nuts, peanuts, pecans, walnuts, pine nuts, pistachios, and soynuts.
- ⁹ The average daily amount of calories for a five-day school week must be at least the minimum value but no more than the maximum value.
- ¹⁰ Discretionary sources of calories (solid fats and added sugars) may be added if meals meet the dietary specifications for calories, saturated fat, trans fat, and sodium.
- ¹¹ These intermediate sodium limits (first target) apply through June 30, 2017. The second intermediate target must be reached by July 1, 2017 (≤485 for grades K-5, ≤535 for grades 6-8, and ≤570 for grades 9-12). The final sodium target must be reached by July 1, 2022 (≤430 for grades K-5, ≤470 for grades 6-8, and ≤500 for grades 9-12).

Table 1-7. Seven-day Breakfast Meal Pattern ¹

FOOD COMPONENTS	GRADES K-5		GRADES 6-8		GRADES 9-12	
	Daily	Weekly ²	Daily	Weekly ²	Daily	Weekly ²
Fluid Milk (cups) ³ <i>Low-fat (1%) unflavored or fat-free unflavored or flavored</i>	1	7	1	7	1	7
Fruits (cups) ^{4, 5, 6} <i>Juice (fruit and vegetable) cannot exceed half of the weekly fruits</i>	1	7	1	7	1	7
Grains (ounce equivalents) ^{7, 8} <i>All grains must be whole grain-rich</i>	1	10-14	1	11-14	1	12.5-14
DIETARY SPECIFICATIONS (NUTRITION STANDARDS): Daily Amount Based on the Average for a Seven-day Week						
Calories ^{9, 10}	350-500		400-550		450-600	
Saturated Fat (percentage of total calories) ¹⁰	< 10		< 10		< 10	
Sodium (milligrams) ¹¹	≤ 540		≤ 600		≤ 640	
Trans Fat (grams) ¹⁰	Nutrition label or manufacturer specifications must indicate zero grams of trans fat per serving.					
◀ See next page for important menu planning notes ▶						



Table 1-7. Seven-day Breakfast Meal Pattern, continued

- ¹ The meal pattern shows the required amounts of each component that must be made available to each child to claim reimbursement for the meal. Meals may include larger amounts of any component if the weekly menu meets the dietary specifications for calories, saturated fat, trans fat, and sodium. Use the USDA's *Food Buying Guide* to determine the amount of purchased food that meets the requirements. For processed foods, review Child Nutrition (CN) labels (see [appendix G](#)) or product formulation statements (see [appendix H](#)).
- ² A week equals seven days. This meal pattern is for programs that regularly operate on a seven-day week, e.g., residential child care institutions (RCCIs).
- ³ Schools must offer at least two different varieties (fat content and/or flavor) of unflavored low-fat (1%) or fat-free unflavored or flavored milk. Whole, reduced-fat (2%), and flavored low-fat milk cannot be served.
- ⁴ Fruits include fresh, frozen, canned in light syrup, water or juice, and dried. Fruits credit based on volume except dried fruit credits as twice the volume served, e.g., ¼ cup of dried fruit credits as ½ cup of fruit.
- ⁵ Vegetables may be substituted for fruits but the first two cups per week must be from the dark green, red/orange, beans and peas (legumes), or “other” vegetable subgroups. Starchy vegetables may be offered on any day if the weekly menu includes at least two cups of nonstarchy vegetables. All vegetables credit based on volume except raw leafy greens credit as half the volume served (e.g., 1 cup credits as ½ cup of vegetables), and tomato paste and puree credit based on the volume as if reconstituted (see the *Food Buying Guide*).
- ⁶ Fruit and vegetable juice must be pasteurized 100 percent full-strength juice. Fruit juice together with vegetable juice cannot exceed half of the weekly fruit offerings (see [appendix D](#)). Serving whole fruits and vegetables instead of juice is recommended.
- ⁷ All grains must be whole grain-rich, i.e., the product contains at least 50 percent whole grains, any remaining grains are enriched, and any noncreditable grains are less than 2 percent (¼ ounce equivalent) of the product formula. For more information, see *Criteria for Whole Grain-rich Foods*.
- All grains must meet the serving sizes specified in *Whole Grain-rich Ounce Equivalents for School Nutrition Programs* ([appendix E](#)). Menus are not required to comply with the maximum for grains, but must meet the minimum and stay within the weekly calorie range. The weekly maximum provides a guide for planning age-appropriate meals that meet the calorie, saturated fat, and sodium requirements.
- ⁸ The SBP does not require the meat/meat alternates component. Schools may substitute 1 ounce equivalent of meat/meat alternate for 1 ounce equivalent of grains after offering the minimum daily grains serving (1 ounce equivalent). The serving size refers to the edible portion of cooked lean meat, poultry, or fish as served, e.g., cooked lean meat without bone. A 1-ounce equivalent equals 1 ounce of lean meat, poultry or fish, 1 ounce of cheese (low-fat recommended), 2 ounces of cottage or ricotta cheese (low-fat recommended), ¼ cup of cooked beans and peas (legumes), ½ large egg, 2 tablespoons of nut butters, 1 ounce of nuts or seeds, ¼ cup (2.2 ounces) of commercial tofu containing at least 5 grams of protein, ½ cup of yogurt or soy yogurt, and 1 ounce of alternate protein products (APP). APP must meet the USDA requirements specified in appendix A to Part 220 of the SBP regulations. Allowable nuts and seeds include almonds, Brazil nuts, cashews, filberts, macadamia nuts, peanuts, pecans, walnuts, pine nuts, pistachios, and soynuts.
- ⁹ The average daily amount of calories for a seven-day school week must be at least the minimum value but no more than the maximum value.
- ¹⁰ Discretionary sources of calories (solid fats and added sugars) may be added if meals meet the dietary specifications for calories, saturated fat, trans fat, and sodium.
- ¹¹ These intermediate sodium limits (first target) apply through June 30, 2017. The second intermediate target must be reached by July 1, 2017 (≤485 for grades K-5, ≤535 for grades 6-8, and ≤570 for grades 9-12). The final sodium target must be reached by July 1, 2022 (≤430 for grades K-5, ≤470 for grades 6-8, and ≤500 for grades 9-12).

Preschool

The USDA final rule, *Nutrition Standards for the National School Lunch and School Breakfast Programs*, does not change the meal pattern requirements for preschoolers in the NSLP and SBP. However, when feasible, the USDA encourages schools to adopt those aspects of the school meal patterns that promote optimal nutrition for preschoolers such as providing WGR foods and more fruits and vegetables.

On April 25, 2016, the USDA issued the final rule, *Child and Adult Care Food Program: Meal Pattern Revisions Related to the Healthy, Hunger-Free Kids Act of 2010* (81 FR 24348). This rule updates the meal pattern requirements for the CACFP, including the meal patterns for preschoolers in the NSLP and SBP. The changes take effect on October 1, 2017, and better align the meal patterns for preschoolers with the *Dietary Guidelines for Americans*, as required by the HHFKA.

The new CACFP meal patterns require more whole grains and a greater variety of vegetables and fruits, and reduce the amount of added sugars and solid fats in meals. They also encourage breastfeeding in child care facilities, and better align the CACFP with the Special Supplemental Nutrition Program for Women, Infants and Children (WIC), and other Child Nutrition Programs. For more information, see the USDA's [Nutrition Standards for CACFP Meals and Snacks](#) Web page.

The current NSLP and SBP preschool meal pattern requirements under [7 CFR 226](#) remain in effect through September 30, 2017. The CSDE will be developing additional guidance for the new CACFP meal pattern requirements that take effect on October 1, 2017. In the meantime, the current CACFP meal pattern for children still applies.

In the NSLP and SBP meal patterns, fruits and vegetables are two separate components and the “grains” component replaces the “grains/breads” component. Since the requirements for preschoolers do not change until October 1, 2017, the preschool lunch and breakfast meal patterns still contain the “vegetables/fruits” and “grains/breads” components. Tables 1-8 and 1-9 show the preschool meal patterns for lunch and breakfast. These meal patterns are available as handouts on the CSDE's [Meal Patterns for Five-day Week](#) and [Meal Patterns for Residential Child Care Institutions](#) Web pages.



Table 1-8. Preschool Meal Pattern for Lunch

FOOD COMPONENTS	Minimum Quantities ¹	
	AGES 1-2	AGES 3-4
Fluid Milk ²	6 fluid ounces ($\frac{3}{4}$ cup)	6 fluid ounces ($\frac{3}{4}$ cup)
Vegetables/Fruits Two or more servings of different vegetables or fruits or both ³	$\frac{1}{2}$ cup	$\frac{1}{2}$ cup
Grains/Breads ⁴ Must be whole grain or enriched A serving is a slice of bread (25 grams or 0.9 ounce) or an equivalent serving of biscuits, rolls and other breads or $\frac{1}{2}$ cup of cooked rice, macaroni, noodles, other pasta products or cereal grains.	5 servings per week ^{4, 5} Minimum of $\frac{1}{2}$ serving per day	8 servings per week ^{4, 5} Minimum of 1 serving per day
Meat/Meat Alternates Lean meat, poultry, or fish ⁶ Alternate Protein Products ⁷ Cheese Egg (large) Peanut butter or other nut or seed butters Cooked dry beans and peas Peanuts, tree nuts, soy nuts and seeds ⁸ Yogurt, plain or flavored, unsweetened or sweetened	1 ounce 1 ounce 1 ounce $\frac{1}{2}$ 2 tablespoons $\frac{1}{4}$ cup $\frac{1}{2}$ ounce (50 percent) 4 ounces or $\frac{1}{2}$ cup	1 $\frac{1}{2}$ ounces 1 $\frac{1}{2}$ ounces 1 $\frac{1}{2}$ ounces $\frac{3}{4}$ 3 tablespoons $\frac{3}{8}$ cup $\frac{3}{4}$ ounce (50 percent) 6 ounces or $\frac{3}{4}$ cup
◀ See next page for important menu planning notes ▶		



Table 1-8. Preschool Meal Pattern for Lunch, continued

- ¹ The meal pattern shows the minimum amounts of each component that must be made available to each child to claim reimbursement for the meal. Children may be served larger portions but not less than the minimum quantities specified. Use the USDA's *Food Buying Guide* to determine the amount of purchased food that meets the minimum requirements. For processed foods, review Child Nutrition (CN) labels (see [appendix G](#)) or product formulation statements (see [appendix H](#)).
- ² Serve whole milk to age 1 and low-fat or fat-free milk to age 2. For children ages 3 years and older, schools must offer at least two different varieties (fat content and/or flavor) of unflavored low-fat (1%) or fat-free unflavored or flavored milk.
- ³ The specified portions must be met with at least two servings of different vegetables and/or fruits, i.e., two servings of different vegetables, two servings of different fruits, or one serving of vegetable and one serving of fruit. A minimum of 1/8 cup must be served to count toward the total requirement. All fruit and vegetable juice must be pasteurized 100 percent full-strength juice and cannot exceed half of the total requirement.
- ⁴ Breads and grains must be whole grain or enriched. Breakfast cereals must be whole grain, enriched, or fortified. All grains/breads must meet the minimum serving sizes specified in *Serving Sizes for Grains/Breads for Preschool Meals in the National School Lunch Program (NSLP) and School Breakfast Program (SBP)*. Alternatively, schools can choose to use the minimum ounce equivalents specified in *Whole Grain-rich Ounce Equivalents for School Nutrition Programs* (see [appendix E](#)).
- ⁵ For the purposes of this chart, a week equals five days. For seven-day weeks, serve 7 servings of grains/breads for ages 1-2 and 11 1/4 servings of grains/breads for ages 3-4. For four-day weeks, serve 4 servings of grains/breads for ages 1-2 and 6 1/2 servings of grains/breads for ages 3-4. For three-day weeks, serve 3 servings of grains/breads for ages 1-2 and 5 servings of grains/breads for ages 3-4.
- ⁶ The serving size refers to the edible portion of cooked lean meat, poultry, or fish as served, e.g., cooked lean meat without bone.
- ⁷ Alternate protein products must meet the requirements specified by the USDA in appendix A to Part 210 of the [NSLP regulations](#).
- ⁸ Nuts and seeds can provide only half of the total meat/meat alternates serving at lunch, and must be combined with another meat/meat alternate to meet the total requirement. Tree nuts and seeds that credit as meat alternates include almonds, Brazil nuts, cashews, filberts, macadamia nuts, peanuts, pecans, walnuts, pine nuts, pistachios, and soynuts. Children younger than 4 are at the highest risk of choking. The USDA recommends that any nuts or seeds served to young children are in a prepared food, and are ground or finely chopped.

Table 1-9. Preschool Meal Pattern for Breakfast

FOOD COMPONENTS	Minimum Quantities ¹	
	AGES 1-2	AGES 3-4
Fluid Milk ²	4 fluid ounces (½ cup)	6 fluid ounces (¾ cup)
Vegetables/Fruits ³ Fruit and/or vegetable or full-strength fruit juice or vegetable juice	¼ cup	½ cup
Select one serving from the grains/breads and meat/meat alternates components, two from one component, or an equivalent combination ⁴		
Grains/Breads ⁵ Whole-grain or enriched bread Whole-grain or enriched biscuit, roll, muffin or other breads Whole-grain, enriched or fortified cereal ⁶	½ serving ⁵ ½ serving ⁵ ¼ cup ³ or 1/3 ounce	½ serving ⁵ ½ serving ⁵ 1/3 cup ³ or ½ ounce
Meat/Meat Alternates Lean meat, poultry, or fish ⁷ Alternate Protein Products ⁸ Cheese Egg (large) Peanut butter or other nut or seed butters Cooked dry beans and peas Nuts and Seeds ⁹ Yogurt, plain or flavored, unsweetened or sweetened	½ ounce ½ ounce ½ ounce ½ 1 tablespoon 2 tablespoons ½ ounce 2 ounces or ¼ cup	½ ounce ½ ounce ½ ounce ½ 1 tablespoon 2 tablespoons ½ ounce 2 ounces or ¼ cup
◀ See next page for important menu planning notes ▶		



Table 1-9. Preschool Meal Pattern for Breakfast, continued

- ¹ The meal pattern shows the minimum amounts of each component that must be made available to each child to claim reimbursement for the meal. Children may be served larger portions but not less than the minimum quantities specified. Use the USDA's *Food Buying Guide* to determine the amount of purchased food that meets the minimum requirements. For processed foods, review Child Nutrition (CN) labels (see [appendix G](#)) or product formulation statements (see [appendix H](#)).
- ² Serve whole milk to age 1 and low-fat or fat-free milk to age 2. For children ages 3 years and older, schools must offer at least two different varieties (fat content and/or flavor) of unflavored low-fat (1%) or fat-free unflavored or flavored milk.
- ³ Serve a fruit or vegetable, combination of fruit and vegetable, or pasteurized 100 percent full-strength fruit juice or vegetable juice. A minimum of $\frac{1}{8}$ cup of fruit or vegetable must be served to count toward the total requirement. Full-strength vegetable or fruit juice cannot exceed half of the total requirement.
- ⁴ Serve one of the following four options: 1) one serving of grains/breads and one serving of meat/meat alternates; 2) two servings of grains/breads; 3) two servings of meat/meat alternates; or 4) an equivalent combination that totals two servings, such as $1\frac{1}{2}$ servings of grains/breads and $\frac{1}{2}$ serving of meat/meat alternates.
- ⁵ Breads and grains must be whole grain or enriched. All grains/breads must meet the minimum serving sizes specified in *Serving Sizes for Grains/Breads for Preschool Meals in the National School Lunch Program (NSLP) and School Breakfast Program (SBP)*. Alternatively, schools can choose to use the minimum ounce equivalents specified in *Whole Grain-rich Ounce Equivalents for School Nutrition Programs* (see [appendix E](#)).
- ⁶ Breakfast cereals must be whole grain, enriched or fortified. One serving must meet the requirements for either measure (cups) or weight (ounces), whichever is less.
- ⁷ The serving size refers to the edible portion of cooked lean meat, poultry, or fish as served, e.g., cooked lean meat without bone.
- ⁸ Alternate protein products must meet the requirements specified by the USDA in appendix A to Part 220 of the [SBP regulations](#). For more information, see the [Crediting Foods](#) Web page.
- ⁹ Tree nuts and seeds that credit as meat alternates include almonds, Brazil nuts, cashews, filberts, macadamia nuts, peanuts, pecans, walnuts, pine nuts, pistachios, and soynuts. No more than one ounce of nuts or seeds may be served in any one breakfast. Children younger than 4 are at the highest risk of choking. The USDA recommends that any nuts or seeds served to young children are in a prepared food, and are ground or finely chopped.

USING THE NSLP AND SBP MEAL PATTERNS FOR PRESCHOOLERS

If an elementary school includes preschoolers in the same meal periods with children in grades K-5, the menu planner can use the NSLP and SBP meal patterns for both groups at lunch and breakfast.

- **Lunch:** The lunch meal pattern for grades K-5 meets the requirements for preschoolers if the menu planner increases the minimum daily meat/meat alternates from 1 ounce equivalent to 1 ½ ounce equivalents. The other NSLP meal components exceed the minimum daily preschool requirements, and therefore meet the preschool meal pattern requirements. For more information, see “Lunch for Schools with Preschool and Grade K-5” in [section 3](#)
- **Breakfast:** The breakfast meal pattern for grades K-5 exceeds the minimum daily preschool requirements. Therefore, a breakfast menu for grades K-5 will also meet the meal pattern requirements for preschoolers. For more information, see “Breakfast for Schools with Preschool and Grade K-5” in [section 3](#).

The preschool meal pattern still uses the previous serving sizes for the “grains/breads” component. For more information, see *Serving Sizes for Grains/Breads for Preschool Meals in the National School Lunch Program (NSLP) and School Breakfast Program (SBP)*.

Alternatively, schools that serve preschoolers in the NSLP and SBP may choose to use the minimum ounce equivalents specified in *Whole Grain-rich Ounce Equivalents for School Nutrition Programs* (see [appendix E](#)) instead of the serving sizes for grains/breads. The WGR ounce equivalents provide consistency with school meals and more nutrient-dense choices for preschoolers. The final rule for nutrition standards for CACFP meals ([81 FR 24348](#)) requires that the serving sizes of grains in the preschool meal patterns meet the WGR ounce equivalents effective October 1, 2019.



PRESCHOOL NUTRIENT STANDARDS

In addition to the meal pattern requirements, all preschool meals must meet the USDA nutrient standards specified in sections 210.10(p) and 220.8(o) of the USDA [final rule](#) for school meals (77 FR 4088). The current nutrient standards for NSLP meals for preschoolers remain in effect until October 1, 2017. Table 1-10 summarizes these standards.

**Table 1-10. Minimum Nutrient and Calorie Levels for Preschool Meals ¹
Traditional Food-Based Menu Planning (School Week Averages ²)**

Nutrient and Energy Allowances	BREAKFAST		LUNCH	
	Age 2 ³	Ages 3-4	Age 2	Ages 3-4
Calories	325	388	Not Applicable ⁴	517
Total fat (percentage of calories) ⁵	—	—	Not Applicable ⁴	—
Total saturated fat (percentage of calories) ⁵	—	—	Not Applicable ⁴	—
Protein (grams)	4	5	Not Applicable ⁴	7
Calcium (milligrams)	200	200	Not Applicable ⁴	267
Iron (milligrams)	2.5	2.5	Not Applicable ⁴	3.3
Vitamin A (Retinol Equivalents)	100	113	Not Applicable ⁴	150
Vitamin C (milligrams)	10	11	Not Applicable ⁴	14

¹ This chart shows the minimum school week averages for nutrients except fat and saturated fat, which are maximum levels.

² A school week is defined as a normal school week of five consecutive days. To accommodate shortened weeks resulting from holidays and other scheduling needs, the period shall be a minimum of three consecutive days and a maximum of seven consecutive days.

³ Nutrients and calories start at age 2 because the *Dietary Guidelines for Americans* applies to ages 2 and older.

⁴ The current USDA regulations for lunches specify minimum nutrient and calorie levels only for ages 3 to 4.

⁵ The USDA preschool nutrient standards were developed when the 1995 *Dietary Guidelines for Americans* were in effect. The 1995 *Dietary Guidelines for Americans* recommended that after age 2 children should gradually adopt a diet that, by about age 5, contains no more than 30 percent of calories from fat. The 2015-2010 *Dietary Guidelines for Americans* recommends that children ages 1-3 should consume 30 to 40 percent of their calories from fat and children ages 4-18 should consume 25 to 35 percent of their calories from fat.

Meal Pattern Compliance

Menu planners must ensure that school meals offer the minimum serving size and appropriate type of foods for each meal component. The USDA's *Food Buying Guide for School Meal Programs* helps menu planners buy the right amount and appropriate type of foods, and determine the specific contribution each food makes toward the meal pattern requirements. Accurate product yields are critical to providing appropriate serving sizes. This section provides information on the *Food Buying Guide* and product yields, and includes additional menu planning resources to help schools meals comply with the meal pattern requirements.

FOOD BUYING GUIDE

The *Food Buying Guide* provides yield information for common types and customary sizes of meat/meat alternates, vegetables, fruits, and grains, including commercially available foods and USDA Foods. It allows menu planners to determine:

- how many servings a specific quantity of food will provide;
- what quantity of raw product will provide the amount of ready-to-cook food in a recipe; and
- how much food to buy.

Schools should use the *Food Buying Guide* to determine how much food to purchase to meet the minimum portion sizes in the USDA meal patterns and to calculate how school recipes contribute to the meal patterns. For example, menu planners can use the *Food Buying Guide* to determine how much raw broccoli provides 50 ½-cup servings of cooked vegetable or how much uncooked brown rice provides 100 1-cup servings of cooked rice. This process is critical for documenting compliance with the meal pattern requirements.

DETERMINING IN-HOUSE PRODUCT YIELDS

The yield information provided in the *Food Buying Guide* represents average yields based on research conducted by the USDA. Many factors affect yield, including:

- the quality and condition of the food purchased;
- storage conditions and handling;
- the equipment used in preparation;
- cooking method and time;
- the form in which the food is served, e.g., whether the potatoes are mashed, fried, or baked; and
- the serving utensils and portion control methods used.



If a food service operation consistently obtains a higher or lower yield for a product than the yield specified by the *Food Buying Guide*, the SFA should conduct an in-house yield study to determine the actual number of portions of a specified size that the product provides. In-house yields are also required for products that are not listed in the *Food Buying Guide*.

SFAs must follow specific and verifiable procedures to document product yields. The CSDE allows schools to use in-house yields if they are properly documented and follow the CSDE procedures for conducting product yield studies.

Yield Study Procedures

Connecticut schools and institutions must use the following procedures to determine in-house product yields.

1. Select a day when the product is served on the school menu. Use at least four separate samples of the product to determine yields. A “sample” is the product pack unit, such as number 10 cans or 5-pound bags. If the school uses more samples, the yield data will be more accurate.
2. For the best yield estimate, at least two people should independently portion and count the samples. Each person completes half of the samples, e.g., with a sample of four cans, each person works alone to measure and count the servings from two cans.
3. Select the appropriate measuring utensil for the portion size being served, such as a number 16 scoop/disher or ½-cup measuring spoon.
4. Fill the measuring utensil level to the top of the measure.
5. Carefully count and document the number of portions in each sample.
6. Add the total number of servings from each of the samples.
7. Divide the total number of servings by the number of samples to get the average number of servings per sample.
8. Complete the CSDE’s [Yield Study Data Form](#) and maintain on file for review by the CSDE school nutrition programs staff during the administrative review of the SFA’s school nutrition programs.

The CSDE’s [Yield Study Data Form](#) includes a sample completed *Yield Study Data Form* that provides an example of how to complete the form. For additional technical assistance with yield studies, contact the CSDE’s [school nutrition programs](#) staff.

MENU PLANNING RESOURCES

The list below includes some key resources to help schools comply with the USDA meal patterns for school nutrition programs.

- Beans (USDA):
<http://healthymeals.nal.usda.gov/menu-planning/beans>
- Best Practices Sharing Center (Healthy Meals Resource System):
<http://healthymeals.nal.usda.gov/best-practices>
- Crediting Foods (CSDE):
www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=333796
- Fruits and Vegetables (USDA):
<http://healthymeals.nal.usda.gov/menu-planning/fruits-and-vegetables>
- Healthy Meals Resource System Recipes (USDA):
<http://healthymeals.nal.usda.gov/recipes>
- Menu Planning (CSDE):
www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=333780
- Menu Planning (USDA):
<http://healthymeals.nal.usda.gov/menu-planning-0>
- *On the Road to Professional Food Preparation* (Institute of Child Nutrition):
www.nfsmi.org/ResourceOverview.aspx?ID=99
- Professional Standards for School Nutrition Professionals Training Resources (USDA): <http://professionalstandards.nal.usda.gov/>
- Purchasing and Procurement (USDA):
<http://healthymeals.nal.usda.gov/menu-planning/purchasing-and-procurement>
- USDA Foods Connecticut Food Distribution Program (CSDE):
www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=333790
- USDA Foods (USDA):
<http://healthymeals.nal.usda.gov/menu-planning/usda-food-commodity-resources>
- What's Cooking? USDA Mixing Bowl (USDA):
www.whatscooking.fns.usda.gov/
- What's Shaking: Creative Ways to Boost Flavor With Less Sodium (USDA):
<http://healthymeals.nal.usda.gov/whatsshaking>
- Whole Grains (USDA):
<http://healthymeals.nal.usda.gov/menu-planning/whole-grains>

For detailed information on meeting the requirements for the milk, fruits, vegetables, grains, and meat/meat alternates components, see [Section 2](#). For information on meeting the dietary specifications, see [section 5](#). For more resources, see [section 6](#).

