Crediting Guide for the School Nutrition Programs

National School Lunch Program • School Breakfast Program

Afterschool Snack Program • Seamless Summer Option

School Year 2026-27 (July 1, 2026, through June 30, 2027)

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About This Guide

The Connecticut State Department of Education's (CSDE) *Crediting Guide for the School Nutrition Programs* provides comprehensive information and resources to assist school food authorities (SFAs) with crediting foods and beverages toward the U.S. Department of Agriculture's (USDA) meal patterns for grades K-12 and preschool in the National School Lunch Program (NSLP), School Breakfast Program (SBP), Afterschool Snack Program (ASP) of the NSLP, and Seamless Summer Option (SSO) of the NSLP. Meals and snacks offered in the SSO follow the NSLP, SBP, and ASP meal pattern requirements.

The requirements in this guide apply to all public schools, private schools, and residential child care institutions (RCCIs) that participate in the NSLP, SBP, ASP, and SSO.

This guide is part of the CSDE's menu planning guidance series for the school nutrition programs. Refer to "CSDE's Menu Planning Guidance Series" in this section for a summary of the guides that apply to the meal patterns for grades K-12 and the preschool meal patterns.

> This guide reflects the USDA regulations and policies in effect as of the publication date. Please note that this information may change. The CSDE will update this guide whenever the USDA issues new meal pattern guidance for the school nutrition programs. Please check the CSDE's Menu Planning Guidance for School Meals for Grades K-12 webpage or Meal Patterns for Preschoolers in School Nutrition Programs webpage for the most current version. This document is available at https://portal.ct.gov/-/media/sde/nutrition/mpg/guide_crediting_snp.pdf.

The mention of trade names, commercial products, or organizations does not imply approval or endorsement by the CSDE or the USDA. Product names are used solely for clarification.

Questions regarding this guide may be directed to Susan Fiore, MS, RD, Nutrition Education Coordinator, at 860-807-2075 or susan.fiore@ct.gov.

CSDE's Menu Planning Guidance Series

This guide is part of the CSDE's menu planning guidance series for the school nutrition programs. These guides are designed to assist SFAs with meeting the NSLP, SBP, and ASP meal patterns for grade K-12 and preschool, including the requirements for crediting foods and beverages, menu documentation, and meal service.

- Guide to the Meal Patterns for Grades K-12 in the National School Lunch Program and School Breakfast Program
- Guide to the Dietary Specifications for the National School Lunch Program and School Breakfast Program Meal Patterns for Grades K-12
- Crediting Guide for the School Nutrition Programs Crediting Guide for the School Nutrition Programs (applies to the NSLP, SBP, and ASP meal patterns for grades K-12 and preschool)
- Guide to Menu Documentation for the School Nutrition Programs Crediting Guide for the School Nutrition Programs (applies to the NSLP, SBP, and ASP meal patterns for grades K-12 and preschool)
- Guide to Meal Service Requirements for Grades K-12 in the National School Lunch Program and School Breakfast Program
- Guide to the Preschool Meal Patterns for the School Nutrition Programs
- Guide to Meal Service Requirements for Preschoolers in the School Nutrition Programs

The menu planning guidance series for grades K-12 is available on the CSDE's Menu Planning Guidance for School Meals for Grades K-12 webpage. The preschool menu planning guidance series is available on the CSDE's Meal Patterns for Preschoolers in School Nutrition Programs webpage.

CSDE Contact Information

For questions regarding the NSLP, SBP, and ASP, please contact the school nutrition programs staff in the CSDE's Bureau of Child Nutrition Programs. The CSDE's resource, *County Assignments for School Nutrition Programs*, indicates each Connecticut county's assigned CSDE school nutrition team member who provides technical assistance for the USDA school nutrition programs.

For a list of all CSDE Child Nutrition Programs staff, refer to the CSDE's resource, *Child Nutrition Staff and Responsibilities*.

Abbreviations and Acronyms

APP	alternate protein product
AR	Administrative Review
ASP	Afterschool Snack Program of the NSLP
CFR	Code of Federal Regulations
C.G.S.	Connecticut General Statutes
CN	Child Nutrition
CNP	Child Nutrition Program
CSDE	Connecticut State Department of Education
FBG	Food Buying Guide for Child Nutrition Programs (USDA)
FDP	Food Distribution Program
FDA	Food and Drug Administration
FNA	Food and Nutrition Administration, U.S. Department of Agriculture
ICN	Institute of Child Nutrition
LEA	local educational agency
MMA	meats/meat alternates

NSLP	National School Lunch Program
OVS	offer versus serve
oz eq	ounce equivalents
PFS	product formulation statement
RCCI	residential child care institution
SBP	School Breakfast Program
SFA	school food authority
SSO	Seamless Summer Option of the NSLP
USDA	U.S. Department of Agriculture
WGR	whole grain-rich

For additional guidance, refer to the CSDE's resource, *Common Acronyms and Abbreviations in the School Nutrition Programs*.

1 — Introduction

Schools and institutions that participate in the National School Lunch Program (NSLP), School Breakfast Program (SBP), and Afterschool Snack Program (ASP) of the NSLP must offer meals and snacks that comply with the U.S. Department of Agriculture's (USDA) meal patterns for the school nutrition programs. The Seamless Summer Option (SSO) of the NSLP follows the NSLP, SBP, and ASP meal patterns.

Foods and beverages must meet specific requirements to credit toward the required meal components for breakfast, lunch, and afterschool snack. These crediting requirements apply to commercial products, foods prepared from scratch by the SFA, and foods prepared by vendors. This guide assists school food authorities (SFAs) with meeting these crediting requirements.

Overview of Meal Patterns

The meal patterns for the school nutrition programs require minimum servings of five meal components. SFAs that meet these meal pattern requirements may claim reimbursement for meals and afterschool snacks served to children.

> A meal component is one of the five food groups that comprise reimbursable meals, including milk, fruits, vegetables, grains, and meats/meat alternates (MMA).

The meal patterns for grades K-12 and preschool have different requirements. A summary of the requirements for each grade group is below.

Meal patterns for grades K-12

The current USDA meal patterns for grades K-12 are defined by the final rule, Nutrition Standards for the National School Lunch and School Breakfast Programs (77 FR 4088) from January 26, 2012, and the final rule, *Child Nutrition Programs: Transitional Standards for Milk, Whole Grains, and Sodium*, from February 7, 2022. Effective July 1, 2024, the USDA final rule, *Child Nutrition Programs: Meal Patterns Consistent with the 2020-2025 Dietary Guidelines for Americans*, implements gradual updates to the Child Nutrition Programs in several areas, including the meal patterns for grades K-12.

In addition, effective January 14, 2026, the Whole Milk for Healthy Kids Act of 2025 amends the Richard B. Russell National School Lunch Act to revise the requirements for milk and fluid milk substitutes for grades K-12 in the NSLP. Effective June 8, 2026, the USDA final rule, *Expanding Fluid Milk Options in Child Nutrition Programs*, changes the fluid milk requirements for ages 2 and older in the SBP and ASP meal patterns for grades K-12.

- The breakfast meal pattern requirements for grades K-12 are defined in section 7 CFR 220.8 of the SBP regulations. The SBP meal patterns require minimum daily and weekly servings of three meal components: 1) milk; 2) fruits; and 3) a combined grains/MMA component. Vegetables may substitute for the fruits component (refer to "Vegetable substitutions for K-12 breakfast menus" in section 4).

- The lunch meal pattern requirements for grades K-12 are defined in section 7 CFR 210.10 of the NSLP regulations. The NSLP meal patterns require minimum daily and weekly servings of the five meal components. Lunch menus must also provide minimum weekly servings of the five vegetable subgroups (dark green vegetables, red and orange vegetables, beans, peas, and lentils, starchy vegetables, and other vegetables).

- The snack meal pattern requirements for grades K-12 are defined in section 7 CFR 210.10(o) of the NSLP regulations. The ASP meal pattern requires minimum servings of any two of the five meal components. Only one of the two meal components may be a creditable beverage such as milk, juice, or a smoothie.

For detailed guidance on the meal pattern requirements, refer to the CSDE's *Guide to the Meal Patterns for Grades K-12 in National School Lunch Program and School Breakfast Program* and visit the CSDE's Meal Patterns for Grades K-12 in School Nutrition Programs webpage. For more information, refer to the CSDE's *Summary of Final Rule Updates to the Meal Patterns for the School Nutrition Programs* and visit the "Meal Pattern Changes" section of the CSDE's Meal Patterns for Grades K-12 in School Nutrition Programs webpage.

Preschool meal patterns

The preschool meal patterns are the same as the Child and Adult Care Food Program (CACFP) meal patterns for children. The current USDA preschool meal patterns were effective October 1, 2017, as legislated by the USDA final rule, *CACFP Meal Pattern Revisions Related to the Healthy, Hunger-Free Kids Act of 2010*. Effective July 1, 2024, the USDA final rule, *Child Nutrition Programs: Meal Patterns Consistent with the 2020-2025 Dietary Guidelines for Americans*, implements gradual updates to the Child Nutrition Programs in several areas, including the preschool meal patterns. Effective June 8, 2026, the USDA final rule, *Expanding Fluid Milk Options in Child Nutrition Programs*, changes the fluid milk requirements for ages 2 and older in the preschool meal patterns.

- The preschool breakfast meal pattern requirements are defined in section 7 CFR 220.8(o) of the SBP regulations. The SBP preschool meal patterns require minimum servings of three meal components: 1) milk; 2) fruits and vegetables; and 3) grains. MMA may substitute for grains up to three times per week (refer to "MMA substitutions for preschool breakfast menus" in section 3).

- The preschool lunch meal pattern is defined in section 7 CFR 210.10(p) of the NSLP regulations. The NSLP preschool meal patterns require minimum servings of the five meal components. Vegetables may substitute for the fruits component at any lunch (refer to "Vegetable substitutions for preschool lunch menus" in section 5).

- The preschool snack meal pattern is defined in section 7 CFR 210.10(p) the NSLP regulations. The ASP preschool meal pattern requires minimum servings of any two of the five meal components. Only one of the two meal components may be a creditable beverage such as milk, juice, or a smoothie.

For detailed guidance on the preschool meal pattern requirements, refer to the CSDE's *Guide to the Preschool Meal Patterns for the School Nutrition Programs* and visit the CSDE's Meal

Patterns for Preschoolers in School Nutrition Programs webpage. For more information, refer to the CSDE's *Summary of Final Rule Updates to the Meal Patterns for the School Nutrition Programs* and visit the "Meal Pattern Changes" section of the CSDE's Meal Patterns for Grades K-12 in School Nutrition Programs webpage.

Dietary specifications for the SBP and NSLP meal patterns for grades K-12

In addition to the meal components, the SBP and NSLP meal patterns for grades K-12 require weekly dietary specifications. These dietary specifications are the USDA's nutrition standards for reimbursable meals. They include minimum and maximum levels for calories and limits for saturated fat and sodium.

> Effective with school year 2027-28 (beginning July 1, 2027), the USDA final rule, *Child Nutrition Programs: Meal Patterns Consistent with the 2020-2025 Dietary Guidelines for Americans*, establishes a new dietary specification for added sugars (less than 10 percent of calories).

For more information on the dietary specifications, refer to the CSDE's *Guide to the Dietary Specifications for the National School Lunch Program and School Breakfast Program Meal Patterns for Grades K-12* and visit the "Dietary Specifications" section of the CSDE's Meal Patterns for Grades K-12 in School Nutrition Programs webpage. Training on the dietary specifications is available in Module 6: Dietary Specifications of the CSDE's training program, *What's in a Meal: Meal Patterns for Grades K-12 in the School Nutrition Programs*.

Menu Items

Menu items contribute to the meal components. A menu item is any planned main dish, vegetable, fruit, bread, grain, or milk. Menu items may contribute to one or more meal components. For example, a hamburger (MMA component) on a whole-grain bun (grains component) is one menu item that contributes to two meal components.

Creditable Foods

Creditable foods are foods and beverages that count toward the meal pattern requirements for reimbursable meals and afterschool snacks in the USDA's Child Nutrition Programs. The USDA considers the following factors when determining if a food credits toward the meal components:

- nutrient content;
- function in a meal;
- regulations concerning the USDA's Child Nutrition Programs (quantity requirements and definition);
- the Food and Drug Administration's (FDA) standards of identity;
- the USDA's standards for meat and meat products; and
- administrative policy decisions on the crediting of specific foods.

The USDA crediting requirements are indicated in the USDA's *Food Buying Guide for Child Nutrition Programs* (refer to "Food Buying Guide for Child Nutrition Programs" in this section). Additional guidance is communicated through the USDA policy memos on the USDA's Food and Nutrition Administration (FNA) Documents & Resources webpage.

Minimum Creditable Amounts

Each meal component requires a minimum amount to credit toward the meal patterns. Menu items that contain less than the minimum amount do not credit. However, they do count toward the weekly dietary specifications at breakfast and lunch grades for K-12 (refer to "Dietary specifications for the SBP and NSLP meal patterns for grades K-12" in this section).

- **Milk component:** The minimum creditable amount is the full serving of fluid milk for each grade group at meals and snacks. For smoothies only, the minimum creditable amount is ¼ cup. If the amount of milk in a smoothie is not the full serving, the meal must include the additional amount of milk required to provide the full serving for each grade group. The NSLP and SBP meal patterns for grades K-12 require a variety of milk (at least two different choices including one unflavored choice). A milk variety is not required for the preschool NSLP and SBP meal patterns or the ASP meal patterns for grades K-12 and preschool. For more information, refer to "Crediting Milk in Smoothies" and "Milk Variety Required at Breakfast and Lunch for Grades K-12" in section 2.

- **MMA component:** The minimum creditable amount is ¼ ounce equivalent (oz eq). At lunch, the MMA component must be served in the main dish or in the main dish and one other food item.

- **Vegetables component:** The minimum creditable amount is ⅛ cup. Meals and snacks may include more than one vegetable (at least ⅛ cup each) to meet the full serving of the vegetables component for each grade group.

- **Fruits component:** The minimum creditable amount is ⅛ cup. Meals and snacks may include more than one fruit (at least ⅛ cup each) to meet the full serving of the fruits component for each grade group.

- **Grains component:** The minimum creditable amount is ¼ oz eq. Meals and snacks may include more than one grain (at least ¼ oz eq each) to meet the full serving of the grains component for each grade group.

If a food item provides less than the required meal pattern serving, the menu planner must offer additional foods from that meal component to provide the full serving for each grade group. For example, the lunch meal pattern for grades K-5 requires ¾ cup of the vegetables component. If a food item provides ½ cup of vegetables, the lunch menu must include another food item with at least ¼ cup of vegetables to meet the full vegetables component.

Rounding requirements for crediting foods

When crediting menu items toward the meal components, menu planners must round down to the nearest ¼ oz eq for MMA and grains and the nearest ¼ cup for fruits and vegetables. For example, a standardized recipe or commercial product that contains 1.9 ounces of cooked chicken per serving credits as 1.75 oz eq of the MMA component.

Requirement for Visible Components

The USDA requires that foods must be visible (recognizable) to credit toward the meal patterns. Foods that are not visible do not credit unless the menu item also contains the minimum creditable amount of a visible food from the same meal component. The minimum creditable amounts for visible creditable meal components are ⅛ cup for fruits and vegetables and ¼ oz eq for MMA and grains. The examples below illustrate this requirement.

- A smoothie recipe contains 2 tablespoons of peanut butter per serving. The peanut butter does not credit toward the MMA component because it is not visible.
- A muffin recipe contains ⅛ cup of applesauce per serving. The applesauce does not credit as the fruits component because it is not visible.
- A baked oatmeal recipe contains ½ oz eq of egg per serving. The egg does not credit as the MMA component because it is not visible. However, if this recipe also contains ½ oz eq of visible sunflower seeds, the menu planner may credit the egg and sunflower seeds together as 1 oz eq of the MMA component.
- A macaroni and cheese recipe contains ⅛ cup of pureed carrots (red/orange subgroup) per serving. The pureed carrots do not credit as the vegetables component because they are not visible. However, if this recipe also contains ⅛ cup of visible diced butternut squash (red/orange subgroup) per serving, the menu planner may credit the pureed carrots and butternut squash together as ¼ cup of the vegetables component (red/orange subgroup). For more information, refer to "Unrecognizable pureed vegetables" in section 4.
- A soup recipe contains ½ oz eq of pureed tofu per serving. The pureed tofu does not credit as the MMA component because it is not visible. However, if this recipe also contains ½ oz eq of visible diced chicken, the menu planner may credit the tofu and chicken together as 1 oz eq of the MMA component

The USDA's intent for this requirement is to ensure that children can easily identify the foods in school menus.

Exceptions for certain foods

The USDA allows exceptions to the requirement for visible components for the foods below.

- Yogurt or soy yogurt blended in fruit or vegetable smoothies may credit as the MMA component (refer to "Crediting yogurt in smoothies" in Section 3).
- Pureed fruits in smoothies may credit as the fruit component and pureed vegetables in smoothies may credit as the vegetables component (refer to "Crediting Fruit Juices and Pureed Fruits in Smoothies" and "Crediting Pureed Vegetables in Smoothies" in section 5).
- Pasta made with 100 percent legume flour may credit as the MMA component if the menu also includes an additional meat or meat alternate, such as tofu, cheese, or meat (refer to "Crediting Bean, Pea, and Lentil Flour Pasta Products as MMA" in section 3 and "Crediting Pasta Products Made of Vegetable Flour" in section 4).

Other foods must meet the USDA's requirement for visible components (refer to "Requirement for Visible Components" in this section).

Additional Foods

School menus may include additional (extra) foods or larger servings beyond the minimum meal pattern requirements. Additional foods include creditable and noncreditable foods served in addition to the required meal components.

- Creditable foods are additional servings of a meal component, such as larger servings of fruits and vegetables.
- Noncreditable foods are foods and beverages that do not credit toward the meal patterns (refer to "Noncreditable Foods" in this section).

When offering additional foods, the CSDE encourages menu planners to choose nutrient-dense foods that are appropriate to the nutritional needs of each grade group. Examples include vegetables, fruits, whole grains, low-fat and nonfat milk products, beans, peas, and lentils, and lean meats, fish, poultry.

Considerations for K-12 menus

For breakfast and lunch menus for grades K-12, additional creditable and noncreditable foods offered to students with reimbursable meals count toward the weekly dietary specifications for the NSLP and SBP (refer to "Dietary specifications for the SBP and NSLP meal patterns for

grades K-12" in this section). Menu planners must ensure that offering additional foods or larger servings does not cause the menu to exceed the weekly limits for calories, saturated fat, and sodium.

Considerations for preschool menus

Young children have small appetites. Menu planners should consider the appropriateness of additional foods based on the nutritional needs of each age group.

Noncreditable Foods

Noncreditable foods are foods and beverages that do not count toward the meal components. Noncreditable foods include:

- foods and beverages in amounts too small to credit (refer to "Minimum creditable amounts" in this section); and
- foods and beverages that do not meet the crediting requirements of the meal components.

Examples of noncreditable foods include water, potato chips, pudding, ice cream, gelatin, cream cheese, butter, bacon, and condiments like syrup, jam, ketchup, mustard, mayonnaise, and salad dressings. Examples of noncreditable foods for each meal component are listed at the end of sections 2 through 6. For more examples, refer to the CSDE's resource, *Noncreditable Foods in the Meal Patterns for the School Nutrition Programs*.

Allowable noncreditable foods

SFAs may serve certain noncreditable foods in addition to the meal components to add variety, help improve acceptability in the meal, and satisfy appetites. Some examples include maple syrup on pancakes, salad dressing on tossed greens, and condiments such as ketchup or mustard on sandwiches and other entrees.

> To ensure that meals and afterschool snacks meet children's nutritional needs, the CSDE encourages SFAs to use discretion when serving noncreditable foods. Noncreditable foods typically contain few nutrients and are higher in added sugars, saturated fat, and sodium. Menu planners should read labels, be aware of the ingredients in foods, and limit the frequency and amount of less nutritious choices.

The USDA's CACFP best practices recommend that preschool menus avoid noncreditable foods that are sources of added sugars. Examples include sweet toppings (e.g., honey, jam, and syrup), mix-in ingredients sold with yogurt (e.g., honey, candy, and cookie pieces), and sugar-sweetened beverages (e.g., fruit drinks and sodas).

Noncreditable foods offered as part of reimbursable meals for grades K-12 must fit within the weekly dietary specifications (refer to "Dietary specifications for the SBP and NSLP meal patterns for grades K-12" in this section).

Prohibited noncreditable foods

Federal and state requirements prohibit some noncreditable foods, such as candy, coffee, tea, soda, and sports drinks. For more information, refer to the CSDE's resource, *Overview of Connecticut Competitive Foods Regulations*, and visit the CSDE's Competitive Foods in Schools webpage and Beverage Requirements webpage.

Depending on the type of school or institution, snack foods sold a la carte (separately from reimbursable meals) must meet the Connecticut Nutrition Standards (CNS) or the USDA's Smart Snacks nutrition standards. The CNS applies to public school districts that participate in the healthy food option of Healthy Food Certification (HFC). The USDA's Smart Snacks nutrition standards apply to non-HFC public school districts, private schools, and RCCIs.

Required Crediting Documentation

SFAs must maintain appropriate documentation to indicate that meals and afterschool snacks meet the applicable meal pattern and crediting requirements for each grade group. This documentation is required for commercial processed products and foods prepared from scratch. The CSDE will review this information during the Administrative Review of the school nutrition programs.

Documentation for commercial processed products

The USDA requires that SFAs must be able to document how commercial processed foods credit toward the meal components in reimbursable meals and afterschool snacks. Commercial processed products are commercially prepared foods and beverages with added ingredients. Some examples include:

- combination foods that contain more than one meal component, e.g., pizza, chicken nuggets, cheese ravioli, hummus and other bean dips, fruit and yogurt smoothies, fruit-filled pastries, and trail mixes with dried fruits and nuts (refer to "Crediting MMA in Commercial Products," "Crediting Hummus and Bean Dips as MMA," and "Crediting Dried Meat, Poultry, and Seafood Products" in section 3);

- foods with added liquids, binders, and extenders, e.g., deli meats, hotdogs, and sausages (refer to "Crediting Deli Meats, Hot Dogs, and Sausages" in section 3):

- dried meat, poultry, and seafood products, e.g., jerky and summer sausages (refer to "Crediting Dried Meat, Poultry, and Seafood Products" in section 3);

- foods that are alternate protein products (APPs) or contain APPs (refer to "Crediting Alternate Protein Products (APPs)" in section 3);

- fruits and vegetables with added ingredients, e.g., breaded onion rings, french fries, hash brown patties, coleslaw, and dried soup mix (refer to "Crediting Fruits in Commercial Products" in section 5 and "Crediting Vegetables in Combination Foods" in section 4); and

- whole grain-rich (WGR) or enriched grain products that also contain noncreditable grains (e.g., oat fiber, corn fiber, wheat starch, corn starch, and modified food starch, including potato, legume, and other vegetable flours), such as muffins, crackers, breakfast cereals, and grain-based-deserts like cookies, graham crackers, granola bars, and pastries (refer to "Noncreditable Grains Limit for K-12 Menus" in section 6 and "When method 2 is required for commercial products" in section 7).

These types of foods require specific documentation to credit toward the meal components of the school meal patterns. SFA must obtain this documentation prior to purchasing, serving, and claiming the food product in reimbursable meals and afterschool snacks.

The acceptable types of documentation for processed foods include any of the documents below.

1. **Child Nutrition (CN) label:** A CN label is a USDA-approved statement that clearly identifies the contribution of a commercial product toward the meal pattern requirements. Allowable CN label documentation includes 1) the original CN label from the product carton; 2) a photocopy or photograph of the CN label shown attached to the original product carton; or 3) a CN label copied with a watermark displaying the product name and CN number provided by the vendor, attached to the bill of lading (invoice). For more information, refer to the CSDE's resource, *Using Child Nutrition (CN) Labels in the School Nutrition Programs*.

2. **Product formulation statement (PFS):** A PFS is a document developed by manufacturers that provides specific information about how a product credits toward the USDA meal patterns for the Child Nutrition Programs. The PFS must be signed by an official of the manufacturer and state the amount of each meal component contained in one serving of the product. For more information on PFS forms, refer to the CSDE's resource, *Using Product Formulation Statements in the School Nutrition Programs*. For guidance on how to review a PFS, visit the USDA's Child Nutrition Programs: Tips for Evaluating a Manufacturer's Product Formulation Statement webpage.

> A PFS is required for all commercial processed products without a CN label that are not listed in the USDA's *Food Buying Guide for Child Nutrition Programs* (FBG). The USDA requires that SFAs must obtain and verify the PFS for accuracy prior to purchasing, serving, and claiming the food product in reimbursable meals and afterschool snacks. Commercial processed products without a CN label or PFS do not credit.

The requirements for crediting documentation for processed foods are defined in USDA Memo SP 05-2025, CACFP 04-2025, SFSP 02-2025: *Guidance for Accepting Processed Product Documentation for Meal Pattern Requirements*. For additional guidance on accepting product documentation, refer to the CSDE's resource, Accepting Processed Product Documentation in the School Nutrition Programs, and visit the CSDE's Crediting Documentation for the Child Nutrition Programs webpage.

Training on the requirements for CN labels and PFS forms is available in Module 8: Meal Pattern Documentation for Crediting Commercial Processed Products of the CSDE's training program, *What's in a Meal: Meal Patterns for Grades K-12 in the School Nutrition Programs*.

Documentation for foods made from scratch

The USDA's regulations (7 CFR 210.10(b)(5)) require that SFAs develop and follow standardized recipes for all foods prepared from scratch. The USDA defines a standardized recipe as one that has been tried, adapted, and retried at least three times and has been found to produce the same good results and yield every time when the exact procedures are used with the same type of equipment and the same quantity and quality of ingredients. Standardized quantity recipes produce 25 or more servings.

> Standardized recipes are required for all foods prepared on site by the SFA and all vended foods made from scratch, such as foods provided through a contract with a food service vendor or food service management company (FSMC).

The meal pattern crediting information for standardized recipes must be based on the yields in the USDA's *Food Buying Guide for Child* Nutrition Programs (refer to "Food Buying Guide for Child Nutrition Programs" in this section). For guidance on recipe standardization, refer to the Culinary Institute of Child Nutrition's *USDA Recipe Standardization Guide for School Nutrition Programs*. This "how-to" guide describes recipe standardization techniques in detail and includes examples, practice exercises, and reference materials.

For more guidance and resources on standardized recipes, refer to section 4 of the CSDE's *Guide to Menu Documentation for the School Nutrition Programs* and visit the "Standardized Recipes" section of the CSDE's Crediting Documentation for the Child Nutrition Programs webpage.

Storing crediting documentation

SFAs must maintain all crediting documentation on file in accordance with the records retention requirements for the school nutrition programs (refer to the CSDE's resource, *Records Retention Requirements for the School Nutrition Programs*). This documentation must be current and will be reviewed by the CSDE during the Administrative Review of the school nutrition programs.

Food Buying Guide for Child Nutrition Programs

SFAs should ensure that menu planners use the *Food Buying Guide for Child Nutrition Programs* (FBG) to plan reimbursable meals and afterschool snacks for the school nutrition programs. The FBG is the definitive resource for determining yields and crediting information for foods and beverages. It provides yield information for common types and customary sizes of milk, MMA, vegetables, fruits, and grains, including commercially available foods and USDA Foods.

The FBG helps menu planners determine:

- a food's specific contribution toward the meal pattern requirements;
- 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 standardized recipe; and
- how much food to buy.

The FBG is available as an interactive web-based tool (which includes the Exhibit A Grains Tool, Recipe Analysis Workbook (RAW), and Product Formulation Statement (PFS) Workbook), a mobile app, and a downloadable PDF. These resources are available on the USDA's The Food Buying Guide Interactive Web-based Tool webpage. This webpage also includes training modules and recorded webinars to assist menu planners with using the FBG.

For additional resources, visit the "Food Buying Guide" section of the CSDE's Crediting Documentation for the Child Nutrition Programs webpage.

Resources for Crediting Foods

The websites and resources below provide guidance on the requirements for crediting foods in the NSLP, SBP, and ASP meal patterns. For a list of resources with guidance on meeting the meal pattern and crediting requirements, refer to the CSDE's resource list, *Meal Pattern and Crediting Resources for the School Nutrition Programs*.

- Child Nutrition Programs: Tips for Evaluating a Manufacturer's Product Formulation Statement (USDA webpage):
  https://www.fna.usda.gov/cn/labeling/tips-evaluating-pfs

- Crediting Documentation for the Child Nutrition Programs (CSDE webpage):
  https://portal.ct.gov/sde/nutrition/crediting-documentation-for-the-child-nutrition-programs

- Crediting Foods in School Nutrition Programs (CSDE webpage):
  https://portal.ct.gov/sde/nutrition/crediting-foods-in-school-nutrition-programs

- Crediting Tip Sheets in Child Nutrition Programs (USDA):
  https://www.fna.usda.gov/tn/cn/crediting-tipsheets

- Crediting Summary Charts for the Meal Patterns for the School Nutrition Programs (CSDE):
  https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/crediting_summary_ charts_snp.pdf

- Crediting Updates for Child Nutrition Programs: Be in the Know! Webinar Series (USDA):
  https://www.fna.usda.gov/tn/cn/crediting-updates-webinars

- Exhibit A Grains Tool of the Food Buying Guide (USDA):
  https://www.fna.usda.gov/tn/fbg/webtool

- Food Buying Guide for Child Nutrition Programs (USDA):
  https://www.fna.usda.gov/tn/fbg

- Meal Pattern and Crediting Resources for the School Nutrition Programs (CSDE):
  https://portal.ct.gov/-/media/sde/nutrition/nslp/meal_pattern/resources_school_ meal_ patterns_snp.pdf

- Operational Memoranda for School Nutrition Programs (CSDE webpage):
  https://portal.ct.gov/sde/nutrition/operational-memoranda-for-school-nutrition-programs

- Preschool Meal Pattern Training for the School Nutrition Programs ("Preschool Meal Pattern Training" section of CSDE's Meal Patterns for Preschoolers in School Nutrition Programs webpage):
  https://portal.ct.gov/sde/nutrition/meal-patterns-preschoolers-in-school-nutrition-programs/preschool-meal-pattern-training

- Recipe Analysis Workbook (RAW) for Standardized Recipes (USDA):
  https://www.fna.usda.gov/tn/fbg/webtool

- USDA Policy Memos (USDA's FNA Documents & Resources webpage):
  https://www.fna.usda.gov/resources

- What's in a Meal: Meal Patterns for Grades K-12 in the School Nutrition Programs (CSDE Training Program):
  https://portal.ct.gov/sde/nutrition/meal-pattern-training-materials

For additional guidance on crediting foods, visit the CSDE's Crediting Foods in School Nutrition Programs webpage and Crediting Documentation for the Child Nutrition Programs webpage. Training on the meal components and crediting foods is available in the CSDE's training programs, *What's in a Meal: Meal Patterns for Grades K-12 in the School Nutrition Programs*, and *Preschool Meal Pattern Training for the School Nutrition Programs*.

Guidance on Meeting the Meal Pattern Requirements

The resources below provide SFAs with information and guidance on meeting the meal pattern requirements for the school nutrition programs.

- Links to the USDA's regulations and final rules for the meal patterns for the school nutrition programs are available on the CSDE's Laws and Regulations for Child Nutrition Programs webpage.

- The USDA provides guidance for implementing the school nutrition programs through the policy memos on their FNA Documents & Resources webpage.

- The CSDE's Operational Memoranda for School Nutrition Programs webpage provides links to relevant USDA memos by year, and includes memos from the CSDE Bureau of Child Nutrition Programs on the requirements for the school nutrition programs.

- The CSDE's Program Guidance for School Nutrition Programs webpage provides an alphabetical listing of links to information and guidance on the federal and state requirements for the school nutrition programs, including the meal patterns and dietary specifications, crediting foods and beverages, menu documentation, and meal service.

- The CSDE's weekly e-newsletter for school nutrition programs, School Lunch Tray (SLT), provides important guidance and resources to help SFAs comply with the federal and state requirements, and identifies deadlines for completing required activities and submitting required reports.

- The CSDE hosts Table Talk webinars several times each month during the school year to review key topics and information contained in the SLT, as well as more in-depth training and information sessions on current topics. The schedule and registration information for the Table Talk webinars are available in the SLT.

- The CSDE's Training for Child Nutrition Programs webpage provides links to recorded trainings on a variety of topics, including the CSDE's training program on the K-12 meal patterns for the school nutrition programs, *What's in a Meal: Meal Patterns for Grades K-12 in the School Nutrition Programs*, and the CSDE's training program on the preschool meal patterns, *Preschool Meal Pattern Training for the School Nutrition Programs*.

- The CSDE's Manuals and Guides for Child Nutrition Programs webpage provides links to guides on a variety of topics, including food safety, menu planning and meal patterns, program administration, school wellness, and special diets.

SFAs may contact their assigned school nutrition team member for more information and program-specific questions.

Today's
Menu

2 — Milk Component

Milk must be pasteurized, meet all state and local requirements, and contain vitamins A and D at levels specified by the FDA. The USDA meal patterns require fluid milk as a beverage. Only fluid milk meets the USDA's definition for milk and the FDA's standard of identity for milk.

Required Milk Servings

The meal patterns for grades K-12 and preschool require different servings for the milk component. The required servings are measured in cups for all grade groups.

Milk servings for K-12 menus

The breakfast and lunch meal patterns for grades K-12 require minimum daily and weekly serving of the milk component. The minimum daily requirement is 1 cup for all grades. The weekly requirements are the sum of the daily requirements. For example, a five-day menu must offer 5 cups of milk over the week, and a seven-day menu must offer 7 cups of milk over the week. The minimum serving of milk offered at snack is 1 cup for all grade groups.

Milk servings for preschool menus

The preschool breakfast and lunch meal patterns require ½ cup of milk for ages 1-2 and ¾ cup of milk for ages 3-5. The minimum serving of milk offered at snack is ½ cup for both age groups.

Allowable Types of Milk

The allowable types of milk for ages 2 and older in the meal patterns for the school nutrition programs include whole milk, reduced-fat (2%) milk low-fat (1%) milk, and fat-free milk. Allowable milk options also include the following types of fluid milk: lactose-free milk, lactose-reduced milk, acidified milk (e.g., acidified kefir milk and acidified acidophilus milk), cultured milk (e.g., cultured buttermilk, cultured kefir milk, and cultured acidophilus milk), and Ultra High Temperature (UHT) milk.

> SFAs are not required to offer whole milk or reduced-fat milk. These types of milk are options in addition to low-fat and fat-free milk. For breakfast and lunch for grades K-12, SFAs may choose which types of milk to offer within the milk variety requirement. For the preschool meal patterns, SFAs may choose which type of milk to offer.

In addition to the USDA's requirements for fluid milk, all milk available for sale to students in public schools must comply with the state beverage requirements (refer to "Additional State Requirements for Milk and Nondairy Milk Substitutes in Public Schools" in this section).

Allowable types of milk in the SBP meal patterns for grades K-12

Effective June 8, 2026, the USDA final rule, *Expanding Fluid Milk Options in Child Nutrition Programs*, revises the SBP meal patterns to allow whole and reduced-fat milk, in addition to the previously allowed low-fat and fat-free milk. These types of milk may be unflavored or flavored. Flavored milk must meet the limit for added sugars (refer to "Added Sugars Limit for Flavored Milk for Grades K-12" in this section).

SFAs may choose which types of milk to offer but must serve a variety of milk (at least two different choices), including at least one unflavored choice (refer to "Milk Variety Required at Breakfast and Lunch for Grades K-12" in this section).

Allowable types of milk in the NSLP meal patterns for grades K-12

Effective January 14, 2026, the Whole Milk for Healthy Kids Act of 2025 amends the Richard B. Russell National School Lunch Act to revise the milk requirements for the NSLP and allow whole and reduced-fat (2%) milk, in addition to the previously allowed low-fat (1%) and fat-free milk. These types of milk may be unflavored or flavored. Flavored milk must meet the limit for added sugars (refer to "Added Sugars Limit for Flavored Milk for Grades K-12" in this section).

SFAs may choose which types of milk to offer but must serve a variety of milk (at least two different choices), including at least one unflavored choice (refer to "Milk Variety Required at Breakfast and Lunch for Grades K-12" in this section).

Allowable types of milk in the ASP meal pattern for grades K-12

Allowable types of milk in the ASP meal pattern for grades K-12 include unflavored and flavored whole milk, reduced-fat milk, low-fat milk, and fat-free milk. Flavored milk must meet the limit for added sugars (refer to "Added Sugars Limit for Flavored Milk for Grades K-12" in this section).

Snack menus are not required to offer a variety of milk. SFAs may serve one type of allowable milk to all children.

Allowable types of milk in the NSLP, SBP, and ASP preschool meal patterns

The preschool meal patterns require unflavored whole milk for age 1. The preschool meal patterns for ages 2-5 allow unflavored whole milk, reduced-fat milk, low-fat milk, and fat-free milk. Flavored milk is not allowed in the preschool meal patterns.

The preschool meal patterns do not require a variety of milk. SFAs may serve one type of allowable milk to all children.

Added Sugars Limit for Flavored Milk for Grades K-12

The NSLP, SBP, and ASP meal patterns for grades K-12 allow flavored milk that meets the limit for added sugars. Flavored milk served in reimbursable meals and afterschool snacks cannot exceed 10 grams of added sugars per 8 fluid ounces. Flavored milk sold as a competitive food in middle and high schools cannot exceed 15 grams of added sugars per 12 fluid ounces.

Milk Variety Required at Breakfast and Lunch for Grades K-12

SFAs must offer at least two different choices of milk at breakfast and lunch for grades K-12. The allowable choices depend on the type of meal.

- **Breakfast:** Allowable choices for the SBP meal pattern for grades K-12 include low-fat milk and fat-free milk, either unflavored or flavored (refer to "Allowable Types of Milk" in this section). SFAs may offer any two choices but at least one choice must be unflavored.

- **Lunch:** Allowable choices for the NSLP meal pattern for grades K-12 include whole milk, reduced-fat (2%) milk, low-fat (1%) milk, and fat-free milk, either unflavored or flavored (refer to "Allowable Types of Milk" in this section). SFAs may offer any two choices but at least one choice must be unflavored.

SFAs must document information on the offered types of milk in the daily production records. For more information, refer to the CSDE's resource, *Requirements for Production Records in the National School Lunch Program and School Breakfast Program*.

Milk variety exemption for RCCIs

RCCIs that are juvenile detention centers or correctional facilities may meet the milk variety requirement over the week instead of daily, if there are potential legitimate safety concerns about offering different types of milk to students. For example, RCCIs may offer all students flavored fat-free milk on some days of the week and unflavored low-fat milk on other days.

This provision also applies to other RCCIs that can demonstrate operational limitations to separating the grade groups and can show legitimate safety concerns if students are served different portions. To implement this provision, the RCCI must submit a waiver request to the CSDE. For more information, visit the "Meal Pattern Exemption for RCCIs" section of the CSDE's Meal Patterns for Grades K-12 in School Nutrition Programs webpage.

Additional Flexibilities for Milk in Preschool Menus

The milk component for the preschool meal patterns allows some additional flexibilities based on the nutritional needs of young children. Certain types of milk are allowed during a one-month transition period when switching young children from formula to whole milk or whole milk to low-fat or fat-free milk.

Iron-fortified formula for children ages 12 to 13 months

Iron-fortified formula may be served to children between the ages of 12 months and 13 months to help with the transition to whole milk. This provision applies only during the specified one-month transition period.

Breastmilk past age 1

Breastmilk is allowed as the milk component at any age in the preschool meal patterns. Breastmilk may be served in combination with other types of milk. For meals and afterschool snacks to be reimbursable, the combined amount of breastmilk and milk must provide the minimum serving.

- **Example:** The preschool breakfast meal pattern requires ½ cup of unflavored low-fat or fat-free milk for age 2. If a mother provides ¼ cup of expressed breastmilk, the SFA must serve ¼ cup of unflavored low-fat or fat-free milk to make up the difference and meet the minimum ½-cup milk requirement at breakfast.

The breastmilk and milk do not need to be mixed in the same cup; they may be served separately. The SFA must provide all other required meal components for the meal or afterschool snack to be reimbursable.

Documentation for milk in preschool menus

Preschool menus must document the type of milk served to each age group. For example, the menu for ages 2-5 should state “unflavored low-fat milk” instead of “low-fat milk” or “unflavored fat-free milk” instead of “fat-free milk.” This ensures that preschool menus reflect the appropriate type of milk for each age group.

Optional Fluid Milk Substitutions (Nondairy Beverages) for Non-disability Reasons

SFAs may choose, but are not required, to offer one or more fluid milk substitutes (nondairy beverages) to all children whose dietary needs do not constitute a disability. Fluid milk substitutes are plant-based beverages like fortified soy milk that are intended to replace cow's milk. Fluid milk substitutes must meet the USDA's nutrition standards for fluid milk substitutes in section 7 CFR 210.10(d)(2)(ii)) of the NSLP regulations.

Fluid milk substitutes offered in public schools must also meet the state beverage requirements for nondairy milk under Section 10-221q of the Connecticut General Statutes (C.G.S.). For more information, refer to "Additional State Requirements for Milk and Nondairy Milk Substitutes in Public Schools" in this section.

Fluid milk substitutes require a written request from the parent/guardian, a state licensed healthcare professional, or a registered dietitian that identifies the reason for the milk substitute. **Note:** With the implementation of the Whole Milk for Healthy Kids Act of 2025 on January 14, 2026, a written request is not required for fluid milk substitutes in the NSLP meal patterns for grades K-12.

For detailed guidance on the requirements and considerations for fluid milk substitutes, refer to the CSDE's resources, *Allowable Fluid Milk Substitutes for Non-Disability Reasons in the School Nutrition Programs* and *Guide to Meal Modifications in the School Nutrition Programs*. More resources are available in the "Milk Substitutes for Non-disability Reasons" section of the CSDE's Special Diets in the School Nutrition Programs webpage.

Lactose-Free/Reduced Milk

Lactose-free/reduced milk is fluid milk and credits the same as regular milk. These types of milk are processed by adding lactase enzymes to reduce or eliminate the lactose (naturally occurring milk sugar) found in regular milk. Children who cannot digest the lactose found in regular milk may be able to drink lactose-free/reduced milk. The USDA recommends these types of milk as the first choice for children with lactose intolerance.

Lactose-free/reduced milk must meet the specific fat content and flavor restrictions for each grade group (refer to "Allowable Types of Milk" in this section). Public schools must also meet the additional state beverage requirements for milk (refer to "Additional State Requirements for Milk and Nondairy Milk Substitutes in Public Schools" in this section).

For more information, refer to the CSDE's resource, *Offering Lactose-Free and Lactose-Reduced Milk in the School Nutrition Programs*.

Additional State Requirements for Milk and Nondairy Milk Substitutes in Public Schools

Connecticut public schools must meet additional state requirements for the milk component, as required by the state beverage (C.G.S. Section 10-221q). The state beverage statute does not apply to private schools or RCCIs.

Milk and nondairy milk substitutes available for sale to students anywhere on school premises in public schools must comply with the state beverage requirements. These requirements apply to all types of fluid milk and fluid milk substitutes available for sale to students in public schools, including reimbursable meals, afterschool snacks, a la carte sales (beverages available for sale separately from reimbursable meals and afterschool snacks), and the SMP.

- Milk cannot exceed 4 grams of sugars per ounce.
- Nondairy beverages cannot exceed 4 grams of sugar per fluid ounce, 35 percent of calories from fat, and 10 percent of calories from saturated fat.

Commercial products that meet the federal and state requirements for milk and nondairy milk substitutes are included in the approved product lists on the CSDE's List of Acceptable Foods and Beverages webpage (refer to List 16: Milk and List 17: Dairy Alternative Beverages). This webpage includes brand-specific lists of foods that meet the Connecticut Nutrition Standards and beverages that meet the requirements of the state beverage statute.

For more information on the state beverage statute, refer to the CSDE's resource, *Allowable Beverages for Connecticut Public Schools*, and visit the CSDE's Beverage Requirements webpage.

Crediting Milk in Smoothies

Milk that meets the applicable requirements for each grade group credits as the milk component when served in smoothies. For smoothies only, the minimum creditable amount of milk is ¼ cup. If a smoothie contains less than the required meal pattern serving of milk, the breakfast or lunch menu must include the additional amount of milk required to provide the full milk component for each grade group.

When the K-12 breakfast or lunch menu includes smoothies made with milk, SFAs must also offer a variety of fluid milk on the serving line to meet the USDA's requirement to offer a variety of milk options (refer to "Milk Variety Required at Breakfast and Lunch for Grades K-12" in this section). For more information on crediting smoothies, refer to "Crediting Fruit Juices and Pureed Fruits in Smoothies" in section 5, "Pureed vegetables in smoothies" in section 4, and "Crediting yogurt in smoothies" in section 3.

Milk in Prepared Foods Does Not Credit

Only fluid milk meets the USDA's definition for milk and the FDA's standard of identity for milk. The NSLP, SBP, and ASP meal patterns require fluid milk as a beverage.

Milk does not credit when cooked in cereals, puddings, cream sauces, or other foods. For example, milk does not credit when used to make quiche or macaroni and cheese. Foods made from milk (such as cheese, yogurt, and ice cream) do not credit as the milk component. For information on crediting cheese and yogurt as MMA, refer to section 3.

Reconstituted Dry Milk Does Not Credit

Sections 7 CFR 210.10(d)(1)(ii) and 7 CFR 220.8(d)) of the USDA regulations for the NSLP, SBP, and ASP meal patterns require fluid milk as a beverage. Reconstituted milk does not meet the USDA's definition for milk or the FDA's standard of identity for milk and is not allowed in reimbursable meals and snacks. This includes reconstituted milk made by a SFA from dry milk powder and commercial products made using reconstituted milk powder. An example of an ingredients statement for a commercial product made using reconstituted milk powder is "low fat milk (water, nonfat milk powder, whole milk powder)."

Reconstituted dry milk credits only under emergency conditions with state agency approval. Under 7 CFR 210.10(d)(3)(ii) of the NSLP regulations (which also applies to the SBP and ASP), the USDA allows an alternate form of fluid milk only when: 1) emergency conditions temporarily prevent fluid milk from being available to a SFA; and 2) the state agency approves the temporary use of the alternate form of fluid milk. Section 7 CFR 210.10(d)(3)(ii) specifies that if a SFA is unable to obtain a supply of any type of fluid milk on a continuing basis, the state agency may approve the service of meals without fluid milk if the SFA uses an equivalent amount of canned milk or dry milk in the preparation of the meals.

In addition, milk made from reconstituted milk powder does not meet the state beverage requirements for fluid milk under C.G.S. Section 10-221q (refer to "Additional State Requirements for Milk and Milk Substitutes in Public Schools" in this section). Products made using reconstituted milk powder cannot be sold a la carte in Connecticut public schools.

Serving Milk from Coolers

Milk coolers accessible to students on the serving line cannot contain any beverages other than milk. For example, schools cannot sell water and juice from the milk cooler. SFAs cannot promote or offer water, juice, or any other beverage as an alternative selection to fluid milk throughout the food service area.

Keeping Milk Cold

Implementing procedures to keep milk cold is important for food safety and helps make milk more appealing to children. Milk must be kept at 40°F or below but tastes best at 35°F. SFAs should develop procedures to maintain milk at 35°F during all points of the meal service (receiving, storing, and serving).

New England Dairy's Keep Milk Cold webpage contains resources to help staff serve cold milk. SFAs may use the U.S. Dairy's Milk Quality Checklist to evaluate current practices and implement procedures for keeping milk cold.

Comparison of Milk Requirements for Grades K-12 and Preschool

A summary chart of the requirements for the milk component is available in the CSDE's resource, *Comparison of the Milk Component Requirements in the Meal Patterns for School Nutrition Programs*. This document compares the requirements for the milk component in the meal patterns for grades K-12 and preschool, including the updates required by the USDA final rules, *Child Nutrition Programs: Meal Patterns Consistent with the 2020-2025 Dietary Guidelines for Americans* and *Expanding Fluid Milk Options in Child Nutrition Programs*, and the Whole Milk for Healthy Kids Act of 2025.

Noncreditable Foods in the Milk Component

Some examples of foods that do not credit as the milk component include:

- **for age 1 in the preschool meal patterns**, reduced-fat milk, low-fat milk, and fat-free milk, either unflavored or flavored (refer to "Allowable Types of Milk" in this section);
- **for ages 2-5 in the preschool meal patterns**, flavored milk (refer to "Allowable Types of Milk" in this section);
- **for grades K-12 in the SBP, NSLP, ASP, and SMP**, flavored that exceeds 10 grams of added sugars per 8 fluid ounces (refer to "Allowable Types of Milk" in this section);
- **for a la carte sales in middle and high schools**, flavored milk that exceeds 15 grams of added sugars per 12 fluid ounces (refer to "Allowable Types of Milk" in this section);
- **for public schools only**, milk and nondairy milk substitutes that do not meet the state beverage requirements of Connecticut General Statute Section 10-221q (refer to "Additional State Requirements for Milk and Nondairy Milk Substitutes in this section);
- **for children without disabilities**, nondairy milk substitutes that do not meet the USDA's nutrition standards for fluid milk substitutes, e.g., almond milk, cashew milk, rice milk, some brands of soy milk, and most brands of oat milk (refer to "Allowable Milk Substitutions for Non-disability Reasons" in this section);
- milk reconstituted from dry milk powder (refer to "Reconstituted Dry Milk Does Not Credit" in this section);
- milk that is cooked or baked in prepared foods, e.g., cereals, puddings, cream sauces, and macaroni and cheese (refer to "Milk in Prepared Foods Does Not Credit" in this section);
- foods made from milk, e.g., cheese, yogurt, and ice cream;
- nutrition supplement beverages; and
- powdered milk beverages.

This list is not all-inclusive. For more information, refer to "Noncreditable Foods" in section 1 and the CSDE's resource, *Noncreditable Foods in the Meal Patterns for the School Nutrition Programs*.

Avoiding Common Compliance Issues for the Milk Component

The common compliance issues indicated below are based on findings from the CSDE's Administrative Review of the school nutrition programs. SFAs must plan menus to avoid these compliance issues.

- **No milk variety for grades K-12:** Breakfast and lunch menus must always offer at least two different types of milk with all meals. At least one milk choice must be unflavored. A lack of milk variety occurs most often when serving breakfast in the classroom. For more information, refer to "Milk Variety Required at Breakfast and Lunch for Grades K-12" in this section.

- **Incorrect milk substitutes for non-disability reasons:** The USDA allows only two fluid milk substitutions for non-disability reasons: 1) low-fat and fat-free lactose-reduced/free milk; and 2) nondairy milk products that meet the USDA's nutrition standards for milk substitutes. SFAs cannot offer any other beverages as milk substitutes for non-disability reasons, such as juice and water. For more information, refer to "Allowable Milk Substitutions for Non-disability Reasons" in this section.

- **Offering other beverages such as water and juice in the milk cooler:** Milk coolers must only contain milk. SFAs cannot promote or offer water, juice, or any other beverages as an alternative selection to fluid milk throughout the food service area. For more information, refer to "Serving Milk from Coolers" in this section.

SFAs must plan the milk component of school menus to avoid these compliance issues.

Resources for Crediting Milk

The resources below assist menu planners with crediting the milk component in the breakfast, lunch, and afterschool snack meal patterns.

- Allowable Fluid Milk Substitutes for Non-disability Reasons in the School Nutrition Programs (CSDE): https://portal.ct.gov/-/media/sde/nutrition/nslp/specdiet/milk_substitutes_snp.pdf

- Choosing Flavored Milk That Is Lower in Added Sugars for School Meals (USDA webinar): https://www.youtube.com/watch?v=ICvARHgtC-g

- Comparison of Meal Pattern Requirements for the Milk Component in School Nutrition Programs (CSDE): https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/comparison_milk_requirements_snp.pdf

- Crediting Documentation for the Child Nutrition Programs (CSDE webpage): https://portal.ct.gov/sde/nutrition/crediting-documentation-for-the-child-nutrition-programs

- Crediting Summary Charts for the Meal Patterns for the School Nutrition Programs (CSDE): https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/crediting_summary_charts_snp.pdf

- Identifying Products that Meet the USDA's Nutrition Standards for Fluid Milk Substitutes in the School Nutrition Programs (CSDE): https://portal.ct.gov/-/media/sde/nutrition/nslp/specdiet/identify_allowable_nondairy_milk_substitutes_snp.pdf

- Food Buying Guide for Child Nutrition Programs (USDA): https://www.fna.usda.gov/tn/fbg

- Milk Component (CSDE's Crediting Foods in School Nutrition Programs webpage): https://portal.ct.gov/sde/nutrition/crediting-foods-in-school-nutrition-programs/milk

- Milk Substitutes (CSDE's Special Diets in School Nutrition Programs webpage): https://portal.ct.gov/sde/nutrition/special-diets-in-school-nutrition-programs/milk-substitutes

- Offering Lactose-Free and Lactose-Reduced Milk in the School Nutrition Programs (CSE): https://portal.ct.gov/-/media/sde/nutrition/nslp/specdiet/lactose_free_reduced_milk_snp.pdf

- Preschool Meal Pattern Training for the School Nutrition Programs Module 4: Milk Component ("Preschool Meal Pattern Training" section of CSDE's Meal Patterns for Preschoolers in School Nutrition Programs webpage): https://portal.ct.gov/sde/nutrition/meal-patterns-preschoolers-in-school-nutrition-programs/preschool-meal-pattern-training#module4

- Serving Milk in the CACFP (USDA): https://www.fna.usda.gov/tn/cacfp/meal-pattern-training-worksheets/milk
  Applies only to the preschool meal patterns

- USDA Final Rule: Expanding Fluid Milk Options in Child Nutrition Programs (91 FR 25073):
  https://www.fna.usda.gov/cn/fr-050826

- USDA Memo SP 01-2025: Fluid Milk Requirements for School Meals:
  https://www.fna.usda.gov/cn/fluid-milk-requirements-schools

- USDA Memo SP 01-2026: Whole Milk for Healthy Kids Act of 2025 – Implementation Requirements for the National School Lunch Program:
  https://www.fna.usda.gov/nslp/wmfhka-implementation

- USDA Memo SP 08-2026 and CACFP 04-2026: Expanding Fluid Milk Options in Child Nutrition Programs:
  https://www.fna.usda.gov/schoolmeals/fluid-milk-options

- USDA Memo SP 39-2019: Clarification on the Milk and Water Requirements in the School Meal Program:
  https://www.fna.usda.gov/cn/clarification-milk-and-water-requirements-school-meal-program

- USDA Memo SP 40-2019, CACFP 17-2019, and SFSP 17-2019: Smoothies Offered in Child Nutrition Programs:
  https://www.fna.usda.gov/cn/smoothies-offered

- What's in a Meal Module 9: Milk Component (CSDE's Training Program, What's in a Meal: Meal Patterns for Grades K-12 in the School Nutrition Programs):
  https://portal.ct.gov/sde/nutrition/meal-pattern-training-materials#module9

- Whole Milk for Healthy Kids Act of 2025:
  https://www.congress.gov/bill/119th-congress/senate-bill/222/text

For additional crediting resources, visit the "Milk" section of the CSDE's Crediting Foods in School Nutrition Programs webpage. Training on the milk component is available in Module 9: Milk Component of the CSDE's training program, *What's in a Meal: Meal Patterns for Grades K-12 in the School Nutrition Programs*, and Module 4: Milk Component of the CSDE's Preschool Meal Pattern Training for the School Nutrition Programs.

3 — Meats/Meat Alternates Component

The meats/meat alternates (MMA) component consists of meats (like cooked lean meat, poultry, and fish) and meat alternates, which provide a similar protein content to meat. Examples of meat alternates include alternate protein products (APPs), cheese, eggs, beans, peas, and lentils, nuts and seeds and their butters, yogurt, soy yogurt, tofu, and tempeh.

The meal patterns for grades K-12 and preschool require different servings for the MMA component. The required servings are measured in oz eq for all grade groups. These servings refer to the edible portion of cooked lean meat, poultry, or fish, e.g., cooked lean meat without bone, breading, binders, extenders, or other ingredients.

Most MMA (such as cooked lean meat, poultry, and fish, cheese, APPs, tempeh, and surimi) credit based on weight. Nut and seed butters and beans, peas, and lentils credit based on volume (cups). Yogurt and tofu credit based on either weight or volume. Menu planners should consult the USDA's FBG to determine the number of servings provided by a specific quantity of meat or meat alternate as purchased (refer to "Food Buying Guide for Child Nutrition Programs" in section 1).

Minimum Creditable Amount for MMA

The minimum creditable amount of MMA is ¼ oz eq. MMA offered in amounts less than ¼ oz eq do not count toward the required meal pattern servings. However, they do count toward the weekly dietary specifications for the breakfast and lunch meal patterns for grades K-12 (refer to "Dietary specifications for the SBP and NSLP meal patterns for grades K-12" in section 1).

When crediting MMA toward the meal pattern requirements, menu planners must round down to the nearest ¼ oz eq. For example, a standardized recipe or commercial product that contains 1.9 ounces of cooked chicken per serving credits as 1.75 oz eq of the MMA component.

Required MMA Servings for K-12 Menus

The breakfast and lunch meal patterns for grades K-12 require minimum daily and weekly servings of the MMA component for each grade group. The MMA component may be offered as one of the two required meal components at snack.

MMA servings for K-12 breakfast menus

The breakfast meal pattern for grades K-12 requires minimum daily and weekly servings of the combined grains and MMA component. For all grades, breakfast menus must offer at least 1 oz eq daily of grains, MMA, or a combination of both.

The required weekly oz eq are ranges. The weekly requirements for five-day breakfast menus are 7-10 oz eq for grades K-5, 8-10 oz eq for grades 6-8, and 9-10 oz eq for grades 9-12. The weekly requirements for seven-day breakfast menus are 10-14 oz eq for grades K-5, 11-14 oz eq for grades 6-8, and 12½-14 oz eq for grades 9-12.

SFAs cannot offer less than the minimum weekly oz eq. The maximum weekly oz eq are not required but provide a guide for planning age-appropriate meals that meet the weekly dietary specifications (refer to "Dietary specifications for the SBP and NSLP meal patterns for grades K-12" in section 1).

For more information on meeting the weekly oz eq for breakfast, refer to section 5 of the CSDE's *Guide to the Meal Patterns for Grades K-12 in the National School Lunch Program and School Breakfast Program*.

MMA servings for K-12 lunch menus

The lunch meal patterns for grades K-12 require minimum daily and weekly servings. Lunch menus must offer at least 1 oz eq of MMA daily for grades K-5 and 6-8, and at least 2 oz eq daily for grades 9-12.

The required weekly oz eq are ranges. The weekly requirements for five-day lunch menus are 8-10 oz eq for grades K-5, 9-10 oz eq for grades 6-8, and 10-12 oz eq for grades 9-12. The weekly requirements for seven-day lunch menus are 11-14 oz eq for grades K-5, 12½-14 oz eq for grades 6-8, and 4-17 oz eq for grades 9-12.

SFAs cannot offer less than the minimum weekly oz eq. The maximum weekly oz eq are not required but provide a guide for planning age-appropriate meals that meet the weekly dietary specifications (refer to "Dietary specifications for the SBP and NSLP meal patterns for grades K-12" in section 1).

For more information on meeting the weekly oz eq for lunch, refer to section 3 of the CSDE's *Guide to the Meal Patterns for Grades K-12 in the National School Lunch Program and School Breakfast Program*.

MMA servings for K-12 snack menus

The snack meal pattern requires the minimum serving of any two of the five meal components. The minimum serving of MMA offered at snack is 1 oz eq for all grade groups.

Required MMA Servings for Preschool Menus

The MMA component is not required at breakfast. The preschool lunch meal pattern requires a serving of MMA. A serving of MMA may be offered as one of the two required meal components at snack.

MMA substitutions for preschool breakfast menus

The preschool breakfast meal pattern does not require the MMA component, but menu planners may substitute MMA for the entire grains component up to three times per week. A ½-oz eq serving of the MMA component substitutes for ½ oz eq of the grains component (the minimum serving of the grains component for both age groups).

For example, the menu planner could substitute 1 tablespoon of peanut butter, ½ ounce of cheese, half of a large egg, or ¼ cup of yogurt for ½ oz eq of the grains component. This provision applies regardless of the number of days in the week. For example, the menu planner could choose to substitute the MMA component for the entire grains component three times during a three-day week or three times during a five-day week. For more information, refer to the USDA's resource, *Serving Meat and Meat Alternates at Breakfast*.

MMA servings for preschool lunch menus

The MMA component is required at lunch. The minimum serving is 1 oz eq for ages 1-2 and 1½ oz eq for ages 3-5.

MMA servings for preschool snack menus

The snack meal pattern requires the minimum serving of any two of the five meal components. The minimum serving of MMA offered at snack is ½ oz eq for both age groups.

Choking Prevention for MMA in Preschool Menus

Some MMA may be a choking hazard for young children. Examples include nuts and seeds, e.g., peanuts, almonds and sunflower or pumpkin seeds; chunks or spoonfuls of peanut butter or other nut/seed butters; tough meat or large chunks of meat; fish with bones; and large chunks of cheese, especially string cheese. Consider children's ages and developmental readiness when deciding what MMA to offer in preschool menus.

Preparation techniques to reduce the risk of choking include cutting tube-shaped foods like hot dogs or string cheese into short strips instead of round pieces; removing all bones from fish, chicken, and meat before cooking or serving; grinding up tough meats and poultry; chopping peanuts, nuts, and seeds finely, or grinding before adding to prepared foods; and spreading nut/seed butters thinly on other foods (such as toast and crackers).

Amounts for 1 Oz Eq

The amounts in the MMA component refer to the edible portion of cooked lean meat, poultry, or fish, e.g., cooked lean meat without bone, breading, binders, extenders, or other ingredients. The serving must contain the appropriate edible portion of MMA, excluding any other ingredients. For example, to credit as 1 oz eq of the MMA component, tuna salad must contain 1 ounce of tuna fish before added ingredients such as mayonnaise, celery, and seasonings.

A 1-oz eq serving of the MMA component equals:

- 1 ounce of lean meat, poultry, or fish;
- 3 ounces of surimi;
- 1 ounce of natural cheese, e.g., Colby, Monterey Jack, and Swiss or process cheese, e.g., American;
- ¼ cup of cottage cheese;
- 2 ounces of cheese food/spread or cheese substitute;
- ¼ cup of cooked beans, peas, and lentils, e.g., kidney beans, chickpeas (garbanzo beans), lentils, and split peas;
- ½ large egg;
- 2 tablespoons of nut or seed butters, e.g., peanut butter, almond butter, cashew butter, and sunflower seed butter;
- 1 ounce of nuts or seeds, e.g., almonds, Brazil nuts, cashews, filberts, macadamia nuts, peanuts, pecans, pine nuts, pistachios, soy nuts, and walnuts;
- ½ cup of yogurt or soy yogurt (unflavored or flavored);
- 1 ounce of tempeh that contains specific ingredients;

- 2.2 ounces (weight) or ¼ cup (volume) of tofu and other soy products containing at least 5 grams of protein; and
- 1 ounce of alternate protein product (APP) that meets the USDA's APP requirements.

Menu planners should review the USDA's FBG to determine the specific yield and crediting information for foods in the MMA component (refer to "Food Buying Guide for Child Nutrition Programs" in section 1).

MMA versus Protein

The USDA meal patterns require a specific amount of the MMA component, not a specific amount of protein. The terms "protein" and "meats/meat alternates" are often used interchangeably, but they are not the same. "Meats/meat alternates" refers to the meal component of the USDA meal patterns for the Child Nutrition Programs. "Protein" refers to one of the key nutrients found in meats and meat alternates.

Except for commercial tofu and tofu products, protein content is not an indicator that a commercial product credits as the MMA component because the grams of protein listed on the product's Nutrition Facts label do not correspond to the oz eq of the MMA component contained in the product. A serving of meat or meat alternate contains other components in addition to protein, such as water, fat, vitamins, and minerals. Protein is also found in varying amounts in other ingredients (such as cereals, grains, and many vegetables) that may be part of a commercial meat or meat alternate product.

> Menu planners cannot use the Nutrition Facts label or ingredients statement to determine the oz eq of MMA in a commercial product. The only exception is commercial tofu and tofu products, which must contain at least 5 grams of protein in a 2.2-ounce serving by weight (refer to "Crediting Commercial Tofu and Tofu Products" in this section).

All commercial processed products require a CN label or PFS to document the oz eq of MMA per serving. For more information, refer to "Crediting MMA in Commercial Products" in this section.

Crediting Documentation for Commercial Processed Products

SFAs must obtain crediting documentation for all commercial processed MMA products such as pizza, chicken nuggets, and cheese ravioli. This documentation must state the amount of the MMA component per serving. For example, to credit a commercially prepared cheese pizza as 2 oz eq of the MMA component, the product's CN label or PFS must indicate that the serving contains 2 ounces of cheese. For more information, refer to "Documentation for commercial processed products" in section 1 and the CSDE's resource, *Accepting Processed Product Documentation in the School Nutrition Programs*.

Signage to Identify MMA Servings for K-12 Menus

SFAs must use meal identification signage to instruct K-12 students on how much food to select from each meal component daily for a reimbursable meal, based on the planned servings for each grade group. The example below shows how a school could meet this requirement.

- **Example:** A high school lunch menu allows students to select two ½-cup containers of yogurt to meet the required 2 oz eq of the MMA component for grades 9-12. The cafeteria signage must clearly communicate that students are allowed to select two containers of yogurt with each meal. This signage must be at or near the beginning of the serving line and located where the yogurt is available.

For more information on signage, refer to the CSDE's resource, *Signage Requirements for the National School Lunch Program and School Breakfast Program*, and section 4 of the CSDE's *Guide to Meal Service Requirements for the National School Lunch Program and School Breakfast Program Meal Patterns for Grades K-12*.

Main Dish Requirement for Lunch

The daily MMA component at lunch must be served in the main dish, or in the main dish and one other food item. The main dish is generally considered the main food item in the menu, which is complemented by the other food items. For example, a lunch menu for grades 9-12 could provide the required 2 oz eq of the MMA component from:

- a sandwich containing 2 ounces of tuna (2 oz eq of MMA); or
- a sandwich containing 1 ounce of tuna (1 oz eq of MMA) served with a 1-ounce string cheese stick (1 oz eq of MMA).

SFAs cannot serve the daily MMA component for lunch in more than two food items.

Requirement for recognizable main dish

MMA foods that are not a recognizable main dish do not credit in school menus unless the food also contains at least ¼ oz eq of another recognizable (visible) MMA. For example, SFAs cannot credit peanut butter in a muffin or smoothie, pureed beans in spice cake, or blended soft tofu in soup because the MMA is not recognizable. The USDA's intent for this requirement is to ensure that school menus offer MMA in a form that is recognizable to children.

The USDA allows two exceptions to the requirement for a recognizable main dish.

- Yogurt blended in fruit or vegetable smoothies credits as the MMA component (refer to "Crediting yogurt in smoothies" in this section).

- Pasta made with 100 percent bean, pea, or lentil flours may credit as the MMA component if the menu also includes an additional MMA, such as tofu, cheese, or meat (refer to "Crediting Bean, Pea, and Lentil Flour Pasta Products as MMA" in this section).

For more information, refer to "Requirement for visible components" in section 1.

Crediting Alternate Protein Products (APPs)

APPs are food ingredients that may be used alone or in combination with meat, poultry, or seafood. They are processed from soy or other vegetable protein sources and may be dehydrated granules, particles, or flakes. Some examples include soy flours, soy concentrates, soy isolates, whey protein concentrate, whey protein isolates, and casein. APPs may be used in the dry (nonhydrated), partially hydrated, or fully hydrated form.

APPs are generally used as part of a formed meat patty or in a vegetarian patty resembling a meat product. Examples of foods that might contain added APPs include beef patties, beef crumbles, pizza topping, meat loaf, meat sauce, taco filling, burritos, and tuna salad.

APPs credit as meat alternates. A 1-ounce serving of a creditable APP credits as 1 oz eq of the MMA component. The total MMA contribution cannot exceed the product's weight.

Criteria for APPs

APPs must meet the USDA's requirements specified in appendix A of the NSLP regulations (7 CFR 210) and appendix A of the SBP regulations (7 CFR 220). These regulations specify that APPs may credit for part or all of the MMA requirement if they meet the three criteria below.

1. The APP must be processed so that some portion of the non-protein constituents of the food is removed. This refers to the manufacturing process for APP. APPs must be safe and suitable edible products produced from plant or animal sources.

2. The biological quality of the protein in the APP must be at least 80 percent of casein (milk protein), determined by performing a Protein Digestibility Corrected Amino Acid Score (PDCAAS). The PDCAAS is a method of evaluating protein quality.

3. The APP contains at least 18 percent protein by weight when fully hydrated or formulated. "When hydrated or formulated" refers to a dry APP and the amount of water, fat, oil, colors, flavors, or any other substances that have been added.

Menu planners cannot determine if commercial APP products meet these criteria by reading the product's label. The labeling laws of the USDA's Food Safety Inspection Service (FSIS) and Food and Drug Administration (FDA) require manufacturers to list product ingredients, but percentage labeling is voluntary. For example, a product may list whey protein concentrate and hydrolyzed soy protein in the ingredients but will not indicate the percentage of these protein ingredients by weight.

Required documentation for APPs

The FBG does not contain yield information for APPs. SFAs must obtain documentation from the manufacturer that the product meets the USDA APP criteria. APPs do not credit without appropriate documentation.

CN-labeled APP products will indicate the appropriate crediting information. Products that are CN labeled require a PFS from the manufacturer with supporting documentation on company letterhead to indicate that the APP ingredient meets the USDA's requirements. The USDA provides APP sample documentation.

The manufacturer's documentation should include information on the percent protein contained in the dry alternate protein product and in the prepared product. For an APP product mix, manufacturers should provide information on the amount by weight of dry APP in the package, hydration instructions, and instructions on how to combine the mix with meat or other meat alternates.

> If the PFS for a commercial lists APP ingredients that are being credited as the MMA component, the manufacturer must provide supporting documentation to indicate that these APP ingredients meet the USDA's APP requirements. APP ingredients without this supporting documentation do not credit.

The USDA's Alternate Protein Products webpage provides additional guidance on documenting the APP requirements. For information on CN labels and PFS forms, refer to "Documentation for commercial processed products" in section 1. For more information on crediting APPs, refer to the CSDE's resource, *Requirements for Alternate Protein Products in the School Nutrition Programs*.

Crediting Beans, Peas, and Lentils as MMA

Beans, peas, and lentils are pulses, which are a type of legumes, i.e., plants that include pods. Pulses are the dried edible seeds of legumes. Examples include black beans, black-eyed peas (mature, dry), edamame (soybeans), garbanzo beans (chickpeas), kidney beans, lentils, navy beans, soybeans, split peas, and white beans. Beans, peas, and lentils are one of the five vegetable subgroups (refer to "Vegetable Subgroups at Lunch" in section 4).

Menu planners must follow the crediting guidance below.

- Beans, peas, and lentils may credit as either the MMA component or the vegetables component, but one serving cannot credit as both meal components in the same meal or afterschool snack. A ¼-cup serving credits as 1 oz eq of the MMA component or ¼ cup of the vegetables component (beans, peas, and lentils a subgroup).

- Beans, peas, and lentils may credit as the MMA component or the vegetables component in different meals and afterschool snacks. For example, refried beans may credit as the MMA component at one lunch and as the vegetables component at another lunch.

- If a meal or afterschool snack includes two servings of beans, peas, or lentils, the menu planner may choose to credit one serving as the MMA component and one serving as the vegetables component. For example, ¼ cup of garbanzo beans in a salad may credit as ¼ cup of the vegetables component (beans, peas, and lentils a subgroup) and ½ cup of kidney beans in chili may credit as 2 oz eq of the MMA component.

- For K-12 lunch menus only, beans, peas, and lentils offered as either vegetables or MMA at lunch may count toward the weekly vegetable subgroup requirement for ½ cup of beans, peas, and lentils. The vegetable subgroups are not required in the breakfast or snack meal patterns for grades K-12 or for the preschool meal patterns. For more information on the vegetable subgroups, refer to "Vegetable Subgroups at Lunch" in section 4.

Menu planners must determine in advance how to credit beans, peas, and lentils in meals and afterschool snacks.

Serving size for beans, peas, and lentils credited as MMA

Beans, peas, and lentils credit based on volume. A ¼-cup serving (4 tablespoons) of beans, peas, or lentils credits as 1 oz eq of the MMA component. The minimum creditable amount is 1 tablespoon (¼ oz eq).

The meal pattern serving size refers to the amount of cooked beans, peas, or lentils excluding other ingredients, such as sauce and pork fat in baked beans. For example, to credit baked beans as 1 oz eq of the MMA component, the serving must contain ¼ cup of beans, not including the sauce and pork fat.

The table below shows the oz eq contribution for different amounts of cooked beans, peas, and lentils.

Table 3-1. MMA contribution of cooked beans, peas, and lentils

Serving size	MMA contribution
1 tablespoon	¼ oz eq (minimum creditable amount)
2 tablespoons (⅛ cup)	½ oz eq
3 tablespoons	¾ oz eq
4 tablespoons (¼ cup)	1 oz eq
5 tablespoons	1¼ oz eq
6 tablespoons (⅜ cup)	1½ oz eq
7 tablespoons	1¾ oz eq
8 tablespoons (½ cup)	2 oz eq

For information on crediting beans, peas, and lentils as vegetables, refer to "Crediting Beans, Peas, and Lentils as Vegetables" in section 4.

Crediting beans, peas, and lentils as MMA in recipes

SFAs must maintain appropriate crediting documentation for menu items that contain beans, peas, and lentils as an ingredient, such as lentil soup, bean burritos, hummus, and chili. These foods credit based on the cups of cooked beans, peas, and lentils in the standardized recipe's serving. The serving must provide at least 1 tablespoon (¼ oz eq) of beans, peas, or lentils to credit toward the MMA component.

The menu planner must determine the oz eq of MMA in the standardized recipe by dividing the cups of cooked beans, peas, and lentils in one serving of the standardized recipe by 0.25, then rounding down to the nearest ¼ oz eq. For guidance on how to calculate the contribution of beans, peas, and lentils in a standardized recipe, refer to the CSDE's resource, *Crediting Beans, Peas, and Lentils in the School Nutrition Programs*.

Crediting roasted or dried beans, peas, and lentils as MMA

Roasted or dried beans, peas, and lentils (such as roasted soybeans or roasted chickpeas) credit based on weight (ounces). A 1-ounce serving of roasted or dried beans, beans, or lentils credits as 1 oz eq of the MMA component.

For information on crediting roasted or dried beans, peas, and lentils as the vegetables component, refer to "Crediting Roasted or Dried Beans, Peas, and Lentils as Vegetables" in section 4.

> Roasted or dried beans, peas, and lentils may be a choking hazard for young children. Consider children's ages and developmental readiness when deciding whether to offer roasted or dried beans, peas, and lentils in preschool menus. For additional guidance, refer to "Choking Prevention for MMA in Preschool Menus" in this section.

Resources for beans, peas, and lentils

The recipes and resources below assist SFAs with incorporating beans, peas, and lentils into school menus.

- Beans, Peas, and Lentils in School Meals (Institute of Child Nutrition): https://theicn.org/wpfd_file/beans-peas-and-lentils-in-school-meals/
- Child Nutrition Recipe Box (Institute of Child Nutrition): https://theicn.org/cnrb/
- Crediting Beans, Peas, and Lentils in the School Nutrition Programs (CSDE): https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/credit_beans_peas_lentils_snp.pdf
- Manager's Corner: Legumes in School Meals (Institute of Child Nutrition): https://theicn.org/wpfd_file/managers-corner-legumes/
- Recipes for Healthy Kids Cookbook for Schools (USDA): https://www.fna.usda.gov/tn/recipes-healthy-kids-cookbook-schools
- School Lunch Menu Flexibilities: Beans, Peas, and Lentils (USDA webinar): https://www.youtube.com/watch?v=IJGC9zvx9Zk

For additional resources, refer to "Beans, Peas, and Lentils" in the "Meats and Meat Alternates" section of the CSDE's Crediting Foods in School Nutrition Programs webpage.

Crediting Bean, Pea, and Lentil Flour Pasta Products as MMA

Pasta products made of 100 percent bean, pea, and lentil flours (such as chickpea flour or lentil flour) credit as MMA if they are offered with an additional MMA, such as tofu, cheese, or meat. The USDA's intent for this requirement is to ensure that school menus offer MMA in a form that is recognizable to children (refer to "Requirement for visible components" in section 1).

The table below shows the oz eq contribution for different amounts of bean, pea, and lentil flour pasta products. A ¼-cup cooked serving credits as 1 oz eq of the MMA component.

Table 3-2. MMA contribution of cooked 100 percent bean, pea, and lentil flour pasta products

Serving size	MMA contribution
1 tablespoon	¼ oz eq (minimum creditable amount)
⅛ cup	½ oz eq
¼ cup	1 oz eq
⅜ cup	1½ oz eq
½ cup	2 oz eq

Manufacturers and SFAs may credit bean, pea, and lentil flour pasta using the bean flour yield information in the FBG's Appendix C, or with appropriate documentation on the manufacturer's PFS. For more information, refer to "Documentation for commercial processed products" in section 1

Pasta made of 100 percent beans, peas, or lentils may also credit as the vegetables component but cannot credit as both the vegetables component and MMA component in the same meal or afterschool snack (refer to "Crediting Pasta Products Made of Vegetable Flours" in section 4).

The requirements for crediting vegetable flour pasta products are summarized in USDA Memo SP 26-2019, CACFP 13-2019, and SFSP 12-2019: *Crediting Pasta Products Made of Vegetable Flour in the Child Nutrition Programs*.

Crediting Cheeses

Cheeses credit as meat alternates. The USDA recommends choosing natural cheeses.

Natural cheeses

Natural cheeses are produced directly from milk, such as cheddar, Colby, Monterey Jack, mozzarella, Muenster, provolone, Swiss, feta, and brie. Natural cheeses also include pasteurized blended cheeses made by blending one or more different kinds of natural cheeses.

Natural cheeses credit based on weight. A 1-ounce serving credits as 1 oz eq of the MMA component.

Processed cheeses

Processed cheeses are made by blending natural cheeses with other ingredients such as emulsifiers, preservatives, colorings, and flavorings. Examples include American cheese, pasteurized process cheese food, pasteurized process cheese spread, and pasteurized process cheese products.

Processed cheeses credit based on weight. A 1-ounce serving credits as 1 oz eq of the MMA component.

Cheese substitutes

Cheese substitutes include reduced fat, low fat, nonfat, and lite versions of cheese substitute, cheese food substitute, and cheese spread substitute. These foods must meet the FDA's standard of identity for substitute foods and must be labeled as "cheese substitute," "cheese food substitute," or "cheese spread substitute." The FDA's standard of identity requires that a cheese substitute is not nutritionally inferior to the standardized cheese for which it is substituting.

Cheese substitutes require 2 ounces to credit as 1 oz eq of the MMA component.

Menu items that contain cheese

SFAs must maintain appropriate crediting documentation for menu items that contain cheese as an ingredient, such as pizza, lasagna, and macaroni and cheese. SFAs must document the oz eq of cheese per serving with a PFS or CN label for commercial products and a standardized recipe for foods made from scratch. This documentation must be based on the food yields in the FBG. For more information, refer to "Required Crediting Documentation" and "Food Buying Guide for Child Nutrition Programs" in section 1.

Summary of required amounts of cheese for 1 oz eq

The table below summarizes the required quantity for different types of cheeses to credit as 1 oz eq of the MMA component.

Table 3-3. MMA contribution of cheeses

Type of cheese	1 oz eq of MMA =
Natural cheese, e.g., cheddar and Swiss	1 ounce
Grated cheese, e.g., Parmesan or Romano	1 ounce (⅜ cup)
Processed cheese, e.g., American	1 ounce
Cottage or ricotta cheese	2 ounces (¼ cup)
Process cheese food	2 ounces
Process cheese spread	2 ounces
Process cheese substitute, cheese food substitute, or process cheese spread substitute	2 ounces

Noncreditable cheeses

Imitation cheese and cheese products do not credit.

Crediting Deli Meats, Hot Dogs, and Sausages

Deli meats (such as turkey, chicken, ham, roast beef, salami, and bologna), hot dogs, and sausages are commercial processed products. Many brands contain added liquids (such as water or broth), binders, and extenders. This means that a 1-ounce serving of these products does not credit as 1 oz eq of the MMA component.

The serving that provides 1 oz eq depends on the product's ingredients and can vary greatly between different brands and types of products. SFAs must review the crediting documentation for all commercial processed products to ensure that the crediting information is correct (refer to "Required Crediting Documentation" in section 1).

Examples of binders and extenders

Binders and extenders are defined by the USDA's regulations for the Food Safety and Inspection Service (FSIS) (9 CFR 318.7). APPs are indicated with "(APP)" after the ingredient name. Products may contain APPs if they meet the USDA's APP requirements (refer to "Crediting Alternate Protein Products (APPs)" in this section).

- Agar-agar
- Algin (a mixture of sodium alginate, calcium carbonate and calcium gluconate/lactic acid)
- Bread
- Calcium-reduced dried skim milk
- Carboxymethyl cellulose (cellulose gum)
- Carrageenan
- Cereal
- Dried milk
- Dry or dried whey
- Enzyme (rennet) treated calcium-reduced dried skim milk and calcium lactate
- Gums, vegetable
- Isolated soy protein (APP)
- Locust bean gum
- Methyl cellulose
- Modified food starch
- Reduced lactose whey
- Reduced minerals
- Sodium caseinate
- Soy flour (APP)
- Soy protein concentrate (APP)
- Starchy vegetable flour
- Tapioca dextrin
- Vegetable starch
- Wheat gluten
- Whey
- Whey protein concentrate (APP)
- Xanthan gum

Crediting meat products with added liquids, binders, and extenders

Meat products with added liquids, binders, and extenders do not credit based on serving weight. SFAs must credit these foods based on the percentage of meat in the product formula, as indicated by a CN label or PFS. Crediting depends on the amount of meat per serving, excluding added ingredients. For example, one brand of deli meat might require 1.6 ounces to credit as 1 oz eq of the MMA component, while another brand might require 2.3 ounces.

The examples below show some commercial turkey breast products that contain added liquid, binders, and extenders.

- **Example 1**
  Ingredients: Turkey breast, **water**, **modified cornstarch,** contains less than 2% of sodium lactate, salt, sugar, sodium phosphates, **carrageenan**, natural flavor, sodium diacetate, potassium chloride, sodium ascorbate, sodium nitrite, caramel color.

- **Example 2**
  Ingredients: Turkey breast meat, **turkey broth**, contains 2% or less salt, sugar, **carrageenan**, sodium phosphate, sodium acetate, sodium diacetate, flavoring.

These products require a PFS or CN label to document how they credit toward the MMA component.

SFAs must obtain a CN label or PFS to document the oz eq of MMA per serving for all commercial meat products with added liquids, binders, and extenders. For more information, refer to "Documentation for commercial processed products" in section 1 and the CSDE's resources, *Crediting Deli Meats in the School Nutrition Programs* and *Crediting Commercial Meat/Meat Alternate Products in the School Nutrition Programs*.

Crediting 100 percent meat products

Products that are 100 percent meat without added liquids, binders, or extenders credit on an ounce-per-ounce basis, i.e., the actual serving weight. For example, 1 ounce of sliced turkey that is 100 percent meat credits as 1 oz eq of the MMA component.

Developing recipes for deli meats

Different brands and types of deli meats credit differently. To ensure proper crediting, SFAs must develop standardized recipes for menu items that contain deli meats, such as sandwiches and other entrees. These standardized recipes should indicate the deli meat's contribution to the MMA component based on a specific weight of a specific brand.

To simplify portioning for food service staff and ensure that the serving provides the proper crediting amount, round up the weight of the deli meat in the standardized recipe to the nearest ¼ ounce. For example, the standardized recipe should list 1.2 ounces of deli meat as 1.25 ounces and 1.6 ounces of deli meat as 1.75 ounces.

If the SFA makes the same food item using different brands of deli meats that credit differently, the standardized recipe should include the specific weight of each brand.

- **Example:** A school makes a turkey sandwich using ABC brand turkey breast or XYZ brand turkey breast, depending on availability and cost. The school's standardized recipe should include the required weight of ABC brand for 1 oz eq of MMA and the required weight of XYZ brand for 1 oz eq of MMA. Alternatively, the menu planner could also choose to develop a separate standardized turkey sandwich recipe for each brand of deli meat.

For information on standardized recipes, refer to "Documentation for foods made from scratch" in section 1.

Crediting Dried Meat, Poultry, and Seafood Products

Some examples of shelf-stable, dried, and semi-dried meat, poultry, and seafood products include jerky and summer sausage. The USDA indicates that these products are most useful in meals served off-site like field trips, but they may also credit in meals and snacks served on school premises.

The FBG does not include crediting information for dried meat, poultry, or seafood products because industry production standards for these products vary widely. Dried meat, poultry, and seafood products require a CN label or PFS to document the oz eq of the MMA component per serving.

Evaluating the PFS for dried meat products

Menu planners must evaluate the dried meat product's PFS to ensure that it complies with the USDA's crediting principles below.

1. The creditable meat, poultry, or seafood ingredient listed on the product's PFS must match or have a similar description as the ingredient listed in the product's ingredients statement.

    - **Example**
      Ingredients: Ground beef (not more than 30% fat), water, salt, less than 2% brown sugar, spices, monosodium glutamate, sugar, flavorings, sodium nitrate.

      The first ingredient is "Ground beef (not more than 30% fat)." The product's PFS must match this information by listing the crediting information for "Ground beef (not more than 30% fat)."

2. The creditable meat, poultry, or seafood ingredient listed on the product's PFS must have a similar description to a food item in the FBG. For the example above, "Ground beef (not more than 30% fat" matches the description for "Beef, Ground, fresh or frozen, Market Style, no more than 30% fat (Like IMPS #136), cooked lean meat" of the FBG.

Section 1 - Meats/Meat Alternates

1. Food As Purchased (AP)	2. Purchase Unit	3. Servings per Purchase Unit, Edible Portion (EP)	4. Serving Size per Meal Contribution	5. Purchase Units for 100 Servings	6. Additional Information
BEEF, GROUND, fresh or frozen					
Beef, Ground, fresh or frozen Market Style[8,9], no more than 30% fat, (Like IMPS #136)	Pound	11.20	1 oz cooked lean meat	9.00	1 lb AP = 0.70 lb cooked, drained, lean meat
	Pound	7.46	1-1/2 oz cooked lean meat	13.50	1 lb AP = 0.70 lb cooked, drained, lean meat
Beef, Ground, fresh or frozen[8,10] no more than 26% fat, (Like IMPS #136)	Pound	11.50	1 oz cooked lean meat	8.70	1 lb AP = 0.72 lb cooked, drained, lean meat
	Pound	7.68	1-1/2 oz cooked lean meat	13.10	1 lb AP = 0.72 lb cooked, drained, lean meat

3. The creditable amount cannot exceed the finished weight of the product, i.e., the cooked weight ready for serving. For example, a 1-ounce serving of beef jerky cannot credit for more than 1 oz eq of the MMA component.

SFAs must ensure that all dried meat products comply with these crediting requirements.

Crediting dried meat products with ground pork and beef ingredients

Ground pork and beef ingredients must include the percent fat because the fat content has a direct correlation to the cooking yield. To credit in reimbursable meals and afterschool snacks, the fat content of ground beef or ground pork in dried meat products cannot exceed 30 percent. Products that do not indicate the fat percentage do not credit.

- **Example**
  Ingredients: Pork, cane sugar, garlic (garlic, citric acid, ascorbic acid), contains 2% or less of: Spanish smoked paprika (paprika, rosemary extract), sea salt, natural flavors, sherry wine vinegar, red pepper chili flakes, celery powder, in collagen casing.

  This dried pork stick product does not credit as the MMA component because the creditable ingredient (pork) does not list the fat percentage and does not match a description in the FBG.

The requirements for crediting dried meat are summarized in USDA Memo SP 21-2019, CACFP 08-2019, and SFSP 07-2019: *Crediting Shelf-Stable, Dried and Semi-Dried Meat, Poultry, and Seafood Products in the Child Nutrition Programs*. For additional guidance on crediting dried meat products, refer to the USDA's webinar, *Moving Forward: Update on Food Crediting in Child Nutrition Programs with Guidance for Dried Meat Products*.

Crediting Eggs

Only whole eggs are creditable. Liquid egg substitutes are not whole eggs and do not credit. Egg whites do not credit when they are served without the yolks.

One large egg credits as 2 oz eq of the MMA component. Half of a large egg credits as 1 oz eq of the MMA component.

Menu items that contain eggs

SFAs must maintain appropriate crediting documentation for menu items that contain eggs as an ingredient, such as quiche, frittatas, breakfast sandwiches, pre-cooked egg patties, and breakfast burritos made with scrambled eggs. Commercial products require a CN label or a PFS and menu items made from scratch require a standardized recipe. This documentation must be based on the food yields in the FBG. For more information, refer to "Required Crediting Documentation" and "Food Buying Guide for Child Nutrition Programs" in section 1.

Crediting Enriched Macaroni Products with Fortified Protein

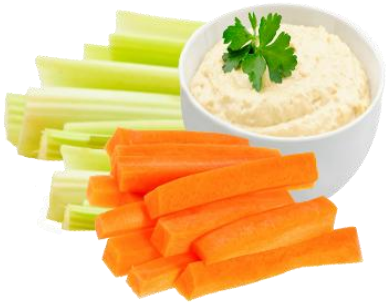
Enriched macaroni products with fortified protein may credit as part of the MMA component or part of the grains component but cannot credit as both meal components in the same meal or afterschool snack. A 1-ounce serving (28.35 grams) of dry product may meet up to half of the MMA requirement when served with 1 ounce of cooked meat, poultry, fish, or cheese. The serving sizes of the cooked combination may be adjusted for various grade groups.

To be allowable, the product label must state: "One ounce (28.35 grams) dry weight of this product meets one-half of the meat or meat alternate requirements of lunch or supper of the USDA child nutrition programs when served in combination with 1 or more ounces (28.35 grams) of cooked meat, poultry, fish, or cheese."

Crediting Hummus and Bean Dips as MMA

Hummus and bean dips may credit as either the MMA component or the vegetables component (beans, peas, and lentils subgroup), but one serving cannot credit as both meal components in the same meal or afterschool snack. To credit as the MMA component, the serving must contain at least ¼ oz eq of MMA from the combined amount of chickpeas (or other beans, peas, and lentils) and tahini (sesame paste) or other nut/seed butters.

- **Beans, peas, and lentils:** A ¼-cup serving of beans, peas, or lentils credits as 1 oz eq of the MMA component. The minimum creditable amount is 1 tablespoon (¼ oz eq).
- **Tahini or other ground nut/seed butters:** Two tablespoons of tahini or other ground nut/seed butters credit as 1 oz eq of the MMA component. The minimum creditable amount is ½ tablespoon (¼ oz eq).



SFAs must maintain crediting documentation for hummus and bean dips that indicates the amount per serving of beans, peas, and lentils, and tahini or other ground nut/seed butters, based on the yields in the FBG. Commercial products require a CN label or a PFS and menu items made from scratch must have a standardized recipe (refer to "Required Crediting Documentation" in section 1).

For information on crediting hummus as the vegetables component, refer to "Crediting Beans, Peas, and Lentils as Vegetables" in section 4.

> The USDA defines bean dip is a spread made from ground pulses (beans, peas, and/or lentils) with one or more of the following optional ingredients: ground nut/seed butter (such as tahini [ground sesame] or peanut butter; vegetable oil (such as olive oil, canola oil, soybean oil); seasoning (such as salt, citric acid); vegetables and juice for flavor (such as olives, roasted peppers, garlic, lemon juice); and for manufactured bean dip, ingredients necessary as preservatives and/or to maintain freshness.

Crediting MMA in Combination Entrees

Combination entrees contain the MMA component and at least one other meal component. For example, macaroni and cheese contains pasta (grains component) and cheese (MMA component).

SFAs must maintain crediting documentation for these foods. Commercial combination entrees require a CN label or a PFS stating the amount of the MMA component per serving (refer to "Documentation for commercial processed products" in section 2). Combination entrees made from scratch must have a standardized recipe that documents the amount of the MMA component per serving based on the yields in the FBG (refer to "Documentation for foods made from scratch" and "Food Buying Guide for Child Nutrition Programs" in section 1).

Crediting MMA in Commercial Products

Commercial processed MMA products (such as pizza, chicken nuggets, and cheese ravioli) require documentation stating the amount of the MMA component per serving. For example, to credit a commercial breaded chicken patty as 2 oz eq of the MMA component, the product's CN label or PFS must state that one serving of the product contains 2 ounces of cooked chicken.

> SFAs must have a CN label or manufacturer's PFS to document the meal pattern contribution of all commercial MMA products used in reimbursable meals and afterschool snacks (refer to "Documentation for commercial processed products" in section 1). Commercial processed products without this documentation do not credit.

The CSDE's resource, *Crediting Commercial Meat/Meat Alternate Products in the School Nutrition Programs*, summarizes the requirements for crediting commercial MMA in school menus.

Crediting Nuts and Seeds

Nuts and seeds may credit for the full MMA component at any meal or afterschool snack. A 1-ounce serving of nuts or seeds credits as 1 oz eq of the MMA component.

Creditable nuts and seeds include almonds, Brazil nuts, cashews, filberts, macadamia nuts, peanuts, pecans, walnuts, pine nuts, pistachios, pumpkin seeds, soy nuts, and sunflower seeds.

Roasted or dried soybeans also credit as MMA. However, fresh soybeans (edamame) are legumes and credit only as the vegetables component (refer to "Vegetable Subgroups at Lunch" in section 4).

For more information, refer to the crediting guidance below and the CSDE's resource, *Crediting Nuts and Seeds in the School Nutrition Programs*.

Crediting Nut/Seed Butters

Examples of creditable nut/seed butters include almond butter, cashew nut butter, peanut butter, sesame seed butter, soy nut butter, and sunflower seed butter. Reduced-fat peanut butter credits if it meets the FDA's standard of identity for peanut butter (21 CFR 164.150), which requires that products contain at least 90 percent peanuts.

Serving size based on volume not weight

The serving size for nut/seed butters is based on volume (tablespoons), not weight (ounces). Two tablespoons (⅛ cup) of nut/seed butter credits as 1 oz eq of the MMA component. This crediting is the same for all types of nut/seed butters, such as smooth, crunchy, and natural.

The required volume measure (tablespoons) for nut/seed butters is not the same as weight (ounces). One ounce does not provide 1 oz eq of the MMA component. The FBG indicates that 1.1 ounces (two tablespoons) of nut/seed butter credits as 1 oz eq of the MMA component.

The table below shows the oz eq contribution for different amounts of nut/seed butters. The scoop (disher) size equivalents are from the Institute of Child Nutrition's *Basics at a Glance Portion Control Poster*. The weight equivalents are from the FBG.

Table 3-4. MMA contribution of nut/seed butters

Serving size	Scoop (disher) size	Meal pattern contribution	Weight equivalent
½ tablespoon (1½ teaspoons)	Closest is No. 100 (2 teaspoons)	¼ oz eq (minimum creditable amount)	0.275 ounces
1 tablespoon (3 teaspoons)	Closest is No. 60 (3¼ teaspoons)	½ oz eq	0.55 ounces
1½ tablespoons	Closest is No. 40 (1⅔ tablespoons)	¾ oz eq	0.825 ounces
2 tablespoons (⅛ cup)	No. 30 (2 tablespoons)	1 oz eq	1.1 ounces
3 tablespoons	Closest is No. 20 (3⅓ tablespoons)	1½ oz eq	1.65 ounces
4 tablespoons (¼ cup)	No. 16 (¼ cup)	2 oz eq	1.2 ounces

Serving size considerations for nut/seed butters

Menu planners should consider the appropriateness of the required serving for each grade group. It may be unreasonable to provide the full serving of nut/seed butter in one menu item, such as a peanut butter sandwich. For example, the lunch meal pattern for grades 9-12 requires 2 oz eq of the MMA component, which equals 4 tablespoons (¼ cup) of peanut butter. This is a large amount for two slices of bread.

The CSDE recommends providing a smaller portion of peanut butter and supplementing it with another MMA to provide the full serving. For example, a lunch menu for grades 9-12 could provide 2 oz eq of MMA from a sandwich containing 2 tablespoons of peanut butter (1 oz eq) served with ½ cup of yogurt (1 oz eq). Another option is providing the required 4 tablespoons of peanut butter in three half-sandwiches that each contain 4 teaspoons of peanut butter.

Nuts, seeds, and nut/seed butters in commercial products

SFAs must obtain a CN label or PFS for commercial processed products that contain nuts, seeds, and nut/seed butters. Some examples include pre-made peanut butter and jelly sandwiches and trail mixes with nuts and dried fruits.

This documentation must state the amount of the MMA component per serving (refer to "Documentation for commercial processed products" in section 2). For example, to credit a commercial pre-made peanut butter sandwich as 1 oz eq of the MMA component, the product's CN label or PFS must state that one serving contains 2 tablespoons of peanut butter.

Nuts, seeds, and nut/seed butters that are ingredients in commercial products must be visible and easily recognizable as meat substitutes to credit in reimbursable meals (refer to "Requirement for visible components" in section 1). Commercial products that are not easily recognizable as meat substitutes do not credit. Some examples include peanut butter blended into other foods such as muffins and smoothies, peanut butter in granola bars, and chopped nuts in muffins.

Nuts, seeds, and nut/seed butters in foods made from scratch

SFAs must maintain standardized recipes that document the MMA contribution of foods prepared from scratch that contain nuts, seeds, or nut/seed butters (refer to "Documentation for foods made from scratch" in section 1). This documentation must be based on the food yields in the FBG (refer to "Food Buying Guide for Child Nutrition Programs" in section 1).

Noncreditable nuts and seeds

Acorns, chestnuts, and coconuts do not credit. For guidance on crediting coconut as the fruits component, refer to "Crediting Coconut" in section 5.

Choking prevention for preschool menus

Nuts, seeds, chunky peanut butter, and chunks or spoonfuls of nut or seed butters may be a choking hazard for young children. Consider children's ages and developmental readiness when deciding whether to offer these foods in preschool menus and modify foods and menus as appropriate. Preparation techniques to reduce the risk of choking include grinding or finely chopping peanuts, nuts, and seeds before adding to prepared foods, and using only creamy nut or seed butters and spreading them thinly on other foods such as toast and crackers.

Crediting Surimi Seafood

Surimi seafood is a pasteurized, ready-to-eat, restructured seafood product usually made from pollock (fish). Surimi seafood is available in many forms and shapes, including chunks, shredded, and flaked. Surimi seafood can be incorporated into a variety of menu items, such as seafood salads, sushi-style rolls, sandwiches, tacos, and ramen.

The amount of fish in surimi varies depending on the manufacturer and product. Surimi seafood may contain as little as one-third seafood ingredient and may include other creditable food ingredients. A 3-ounce serving of surimi credits as 1 oz eq of the MMA component.

The requirements for crediting surimi are summarized in USDA Memo SP 24-2019, CACFP 11-2019, and SFSP 10-2019: *Crediting Surimi Seafood in the Child Nutrition Programs*. The USDA's webinar, *Additional Meat/Meat Alternate Options for CNPs: Crediting Tempeh and Surimi*, provides additional guidance on crediting surimi.

Oz eq contribution per serving

The table below shows the oz eq contribution for different amounts of surimi seafood. The crediting ratio for surimi seafood differs based on portion size due to the USDA rounding rules that require rounding down to the nearest 0.25 oz eq (refer to "Rounding requirements for crediting foods" in section 1).

Table 3-5. MMA contribution of surimi seafood

Serving size	MMA contribution
1 ounce	¼ oz eq
2 ounces	½ oz eq
3 ounces	1 oz eq
4.4 ounces	1½ oz eq
6 ounces	2 oz eq

To credit surimi differently from the amounts above, SFAs must obtain a CN label or manufacturer's PFS that documents how the crediting is determined. For example, a manufacturer's PFS might document that 1 ounce of a surimi product credits as ½ oz eq of the MMA component.

Crediting recipes containing surimi

For all menu items made from scratch, SFAs must maintain standardized recipes that document the MMA contribution of surimi per serving based on the crediting ratio of 3 ounces of surimi per oz eq (refer to "Documentation for foods made from scratch" in section 1).

Crediting Tempeh

Tempeh is a highly nutritious fermented soybean cake traditionally made from whole soybeans. Tempeh may be used as a meat alternate in a variety of recipes, including stir-fries, sandwiches, and salads. The SFA's standardized recipe must document the ounces of tempeh per serving.

The requirements for crediting tempeh are summarized in USDA Memo SP 25-2019, CACFP 12-2019, and SFSP 11-2019: *Crediting Tempeh in the Child Nutrition Programs*. For additional guidance on crediting tempeh, refer to the USDA's webinar, *Additional Meat/Meat Alternate Options for CNPs: Crediting Tempeh and Surimi*.

Oz eq contribution per serving

A 1-ounce serving of tempeh credits as 1 oz eq of the MMA component. This method of crediting applies only to tempeh products whose ingredients are limited to soybeans (or other legumes), water, tempeh culture, and for some varieties, vinegar, seasonings, and herbs. If a tempeh product contains other ingredients, SFAs must obtain a CN label or PFS to document crediting (refer to "Documentation for commercial processed products" in section 2).

Varieties of tempeh that include other creditable foods as ingredients (such as brown rice, sunflower seeds, sesame seeds, flax seed, and vegetables) may also credit toward any other applicable meal components, such as MMA, grains, and vegetables. These types of tempeh product must provide the minimum creditable quantities (refer to "Minimum Creditable Amounts" in section 1). SFAs must obtain a CN label or manufacturer's PFS to document how much tempeh and other creditable foods these products contain.

Crediting standardized recipes containing tempeh

SFAs must maintain standardized recipes that document the MMA contribution of tempeh per serving (refer to "Documentation for foods made from scratch" in section 1). This documentation must be based on the food yields in the FBG (refer to "Food Buying Guide for Child Nutrition Programs" in section 1).

Crediting Tofu and Tofu Products

Tofu does not have an FDA standard of identity. Tofu must meet the three requirements below to credit as a meat alternate.

1. **Must be commercially prepared products that meet USDA's definition:** Tofu must be commercially prepared and meet the following definition in 7 CFR 210.2 and 7 CFR 226.2: "a soybean-derived food, made by a process in which soybeans are soaked, ground, mixed with water, heated, filtered, coagulated, and formed into cakes. Basic ingredients are whole soybeans, one or more food-grade coagulants (typically a salt or an acid), and water."

2. **Must be easily recognizable:** The tofu or tofu product must be easily recognizable as a meat substitute (refer to "Requirement for visible components" in section 1). Tofu is widely recognized as a meat substitute and comes in a variety of textures such as silken, soft, firm, and extra firm. Some examples of recognizable tofu and tofu products include firm or extra firm tofu in stir-fries, omelets, miso soup, and minced in lasagna as a substitute for ricotta cheese; and commercial meat substitute products like tofu burgers and tofu sausage.

   Tofu products that are not easily recognizable as meat substitutes do not credit. Some examples include tofu blended into other foods (like smoothies, soup, and sauces), tofu baked in desserts, and tofu that does not represent a meat substitute, such as tofu noodles.

3. **Must meet protein requirement:** The tofu ingredient must contain at least 5 grams of protein in a 2.2-ounce serving by weight (¼ cup volume equivalent) to credit as 1 oz eq of the MMA component. Menu planners must use the Nutrition Facts panel or PFS to determine if commercial tofu meets this protein requirement. Table 3-6 shows the oz eq contribution for different amounts of tofu and the minimum grams of protein required to credit in reimbursable meals and afterschool snacks

SFAs must maintain documentation on file to indicate that commercial tofu products comply with these requirements. For guidance on calculating the grams of protein per serving, refer to the CSDE's resource, *Crediting Tofu and Tofu Products in the School Nutrition Programs*.

Table 3-6. MMA contribution of tofu

Serving size	MMA contribution	Minimum protein (grams) per serving
0.55 ounce (1 tablespoon)	¼ oz eq (minimum creditable amount)	1.25 grams
1.1 ounces (⅛ cup)	½ oz eq	2.5 grams
2.2 ounces (¼ cup)	1 oz eq	5 grams
3.3 ounces (⅜ cup)	1½ oz eq	7.5 grams
4.4 ounces (½ cup)	2 oz eq	10 grams

Crediting standardized recipes containing tofu

The SFA's standardized recipes must document the oz eq of tofu per serving based on the yields in the FBG (refer to "Documentation for foods made from scratch" in section 1). This documentation must be based on the food yields in the FBG (refer to "Food Buying Guide for Child Nutrition Programs" in section 1).

Crediting Yogurt

Commercial yogurt and soy yogurt must meet the added sugars limit to credit as a meat alternate in school menus. Yogurt may contain added fruit, either blended or on the bottom, and may be unflavored or flavored, sweetened or unsweetened, and any fat content, e.g., whole fat, low fat, or nonfat. Yogurt must meet the Food and Drug Administration's (FDA) standard of identity for yogurt (21 CFR 131.200).

Limit for added sugars in yogurt

Effective July 1, 2025, the USDA final rule, *Child Nutrition Programs: Meal Patterns Consistent with the 2020-2025 Dietary Guidelines for Americans*, requires that yogurt cannot exceed 12 grams of added sugars per 6 ounces (no more than 2 grams of added sugars per ounce). Products that exceed this limit do not credit.

SFAs must have documentation on file to indicate that all yogurt and soy yogurt products served in school menus comply with this limit. For guidance on how to determine if a product complies, refer to the CSDE's resource, *Crediting Yogurt in the School Nutrition Programs*, and "Resources for crediting yogurt" in this section.

> The CSDE encourages SFAs to choose yogurt without nonnutritive sweeteners (such as aspartame, acesulfame potassium, sucralose, and stevia) or sugar alcohols. These products are often labeled as "light" or "lite."

Serving size for yogurt

The required serving for yogurt is based on volume (cups) or weight (ounces) and is the same for all types, flavors, and fat contents. A ½-cup serving (volume) or 4 ounces (weight) credits as 1 oz eq of the MMA component. The minimum creditable amount is ⅛ cup or 1 ounce. The table below shows the oz eq contribution for different amounts of yogurt.

Table 3-7. MMA contribution of yogurt

Serving size	MMA contribution
⅛ cup or 1 ounce	¼ oz eq (minimum creditable amount)
¼ cup or 2 ounces	½ oz eq
⅜ cup or 3 ounces	¾ oz eq
½ cup (4 ounces)	1 oz eq
¾ cup (6 ounces)	1½ oz eq
1 cup (8 ounces)	2 oz eq

Crediting yogurt in smoothies

Yogurt and soy yogurt that meet the limit for added sugars may credit as the MMA component when used as an ingredient in smoothies. A ½-cup serving of yogurt credits as 1 oz eq of MMA.

SFAs must document the cups of yogurt per serving with a standardized recipe for smoothies made from scratch, and a CN label or PFS for commercial products (refer to "Required Crediting Documentation" in section 1). For example, to credit a smoothie as 1 oz eq of MMA, the SFA's standardized recipe or the commercial product's CN label or PFS must indicate that each serving contains ½ cup of yogurt.

> The addition of yogurt to a smoothie does not replace the milk variety requirement at breakfast and lunch for grades K-12. For K-12 menus, SFAs must still offer a variety of fluid milk at breakfast and lunch to meet the milk component requirement of the NSLP and SBP meal patterns for grades K-12 (refer to "Milk Variety Required at Breakfast and Lunch for Grades K-12" in section 2). A milk variety is not required for preschool menus.

For more information on crediting smoothies, refer to "Crediting Fruit in Smoothies" in section 5, "Crediting Vegetables in Smoothies" in section 4, and "Crediting Milk in Smoothies" in section 2.

Noncreditable yogurt products

Drinkable or squeezable yogurt and frozen yogurt do not credit. The FDA's definition and standard of identity requires that yogurt must be "coagulated," not liquid. Frozen yogurt does not have an FDA standard of identity and does not credit. Yogurt-flavored products (such as yogurt bars and yogurt-covered fruit or nuts) do not meet the FDA's definition and standard of identity for yogurt. Homemade yogurt does not credit for food safety reasons.

Resources for crediting yogurt

The resources below assist menu planners with crediting yogurt in reimbursable meals and afterschool snacks.

- Choose Yogurt That Is Lower in Added Sugars in the Child and Adult Care Food Program (USDA): https://www.fna.usda.gov/tn/cacfp/meal-pattern-training-worksheets/yogurts-lower-sugar
- Choosing Yogurt That Is Lower in Added Sugars for School Meals (USDA webinar): https://www.youtube.com/watch?v=EjV7XBRReFU
- Calculating the Added Sugars Limit for Yogurt in the Child and Adult Care Food Program (USDA): https://www.fna.usda.gov/tn/cacfp/calculating-sugar-limits-yogurt
- Crediting Yogurt in the School Nutrition Programs (CSDE): https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/credit_yogurt_snp.pdf
- Crediting Smoothies in the School Nutrition Programs (CSDE): https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/credit_smoothies_snp.pdf
- Nutrition Standards for Added Sugars: Yogurt Fact Sheet (Institute of Child Nutrition): https://theicn.org/resources/2582/sugar-reduction-for-schools-fact-sheets/127720/nutrition-standards-for-added-sugars-overview-fact-sheet.pdf
- USDA Memo SP 02-2024, CACFP 02-2024, and SFSP 02-2024: Revised: Crediting Tofu and Soy Yogurt Products in the School Meals Programs, Child and Adult Care Food Program, and Summer Food Service Program: https://www.fna.usda.gov/cn/crediting-tofu-soy-yogurt-products-school-meals-cacfp

- USDA Memo SP 40-2019, CACFP 17-2019, and SFSP 17-2019: Smoothies Offered in Child Nutrition Programs:
  https://www.fna.usda.gov/cn/smoothies-offered

Links to these resource are also available under "Yogurt" in the "Meats and Meat Alternates" section of the CSDE's Crediting Foods in School Nutrition Programs webpage.

Noncreditable Foods in the MMA Component

Some examples of foods that do not credit as the MMA component include:

- acorns, chestnuts, and coconuts;
- APPs that do not meet the USDA's regulatory requirements (refer to "Crediting Alternate Protein Products (APPs)" in this section);
- bacon (pork);
- commercial canned soups, e.g., beef barley, beef noodle, turkey or chicken noodle, and turkey or chicken rice;
- cream cheese;
- drinkable yogurt;
- egg whites without the yolks;
- frozen yogurt;
- imitation cheese and cheese products;
- liquid egg substitutes;
- pork fat;
- products made with tofu that are not easily recognized as meat substitutes (refer to "Crediting Tofu and Tofu Products" in this section);
- sour cream;
- tofu that contains less than 5 grams of protein in 2.2-ounce serving by weight (refer to "Crediting Tofu and Tofu Products" in this section);
- tofu that is not easily recognized as a meat substitute (refer to "Crediting Tofu and Tofu Products" in this section); and
- Yogurt and soy yogurt that exceed 2 grams of added sugars per ounce (refer to "Crediting Yogurt and Soy Yogurt" in this section).

This list is not all-inclusive. For more information, refer to "Noncreditable Foods" in section 1 and the CSDE's resource, *Noncreditable Foods in the Meal Patterns for the School Nutrition Programs*.

> Menu planners should use the FBG to identify foods that credit as the MMA component (refer to "Food Buying Guide for Child Nutrition Programs" in section 1).

Avoiding Common Compliance Issues for the MMA Component

The common compliance issues indicated below are based on findings from the CSDE's Administrative Review of the school nutrition programs.

- **Insufficient serving at lunch:** The daily lunch menu cannot provide less than the minimum serving of MMA for each grade group. For each lunch choice in K-12 menus, SFAs must offer at least 1 oz eq of MMA for grades K-5 and 6-8 and at least 2 oz eq of MMA for grades 9-12. For preschool menus, lunches must include at least 1 oz eq for ages 1-2 and at least 1½ oz eq for ages 3-5. For more information, refer to "Required Servings for MMA" in this section.

- **Incorrect crediting of commercial processed foods:** SFAs must have a CN label or PFS to determine the crediting information for commercial processed MMA foods that are not listed in the FBG, such as chicken nuggets and pizza. Commercial processed products without appropriate crediting documentation do not credit (refer to "Crediting MMA in Commercial Products" in this section).

- **Incorrect crediting of deli meats:** Commercial processed meat products like deli meats, hotdogs, and sausages do not credit on an ounce-per-ounce basis. Menu planner must credit these products using the weight specified in their CN label or PFS. For more information, refer to "Crediting Deli Meats, Hot Dogs, and Sausages" and "Crediting MMA in Commercial Products" in this section.

- **Incorrect crediting of peanut butter:** The required serving for nut/seed butters is based on volume not weight. A 1-ounce serving of nut/seed butter does not provide 1 oz eq of the MMA component. SFAs must serve 2 tablespoons of nut/seed butter (1.1 ounces) to credit as 1 oz eq of MMA. For more information, refer to "Crediting Nut/Seed Butters" in this section.

- **Crediting noncreditable foods, e.g., bacon and cream cheese:** Bacon (pork) and cream cheese are high in fat and low in protein and do not credit. Some types of turkey bacon might credit depending on the product's CN label or PFS. For more information, refer to "Noncreditable MMA," "Crediting Deli Meats, Hot Dogs, and Sausages" and "Crediting MMA in Commercial Products" in this section.

- **Using the wrong standardized recipe:** The standardized recipe used by the menu planner to determine crediting information must be the same standardized recipe that kitchen staff use to prepare the food. Crediting errors can occur when kitchen staff use a different standardized recipe. SFAs must maintain accurate standardized recipes on file that reflect the foods being prepared in the kitchen. For more information, refer to "Documentation for foods made from scratch" in section 1.

SFAs must plan the MMA component of school menus to avoid these compliance issues.

Resources for Crediting MMA

The resources below assist menu planners with crediting foods as the MMA component. For additional crediting resources specific to different types of MMA, refer to the crediting topics throughout this section.

- Accepting Processed Product Documentation in the School Nutrition Programs (CSDE): https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/accepting_processed_product_ documentation_snp.pdf
- Alternate Protein Products (USDA webpage): https://www.fna.usda.gov/tn/cnp/food-industry-toolkit/app
- Crediting Beans, Peas, and Lentils in the School Nutrition Programs (CSDE): https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/credit_beans_peas_lentils_snp.pdf
- Crediting Commercial Meat/Meat Alternate Products in the School Nutrition Programs (CSDE): https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/credit_commercial_mma_snp.pdf.
- Crediting Deli Meats in the School Nutrition Programs (CSDE): https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/credit_deli_snp.pdf
- Crediting Documentation for the Child Nutrition Programs (CSDE webpage): https://portal.ct.gov/sde/nutrition/crediting-documentation-for-the-child-nutrition-programs
- Crediting Nuts and Seeds in the School Nutrition Programs (CSDE): https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/credit_nuts_seeds_snp.pdf
- Crediting Summary Charts for the Meal Patterns for the School Nutrition Programs (CSDE): https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/crediting_summary_charts_snp.pdf
- Crediting Tofu and Tofu Products in the School Nutrition Programs (CSDE): https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/credit_tofu_snp.pdf
- Food Buying Guide for Child Nutrition Programs (USDA): https://www.fna.usda.gov/tn/fbg

- Meats and Meat Alternates Component (CSDE's Crediting Foods in School Nutrition Programs webpage): https://portal.ct.gov/sde/nutrition/crediting-foods-in-school-nutrition-programs/meats-and-meat-alternates

- Moving Forward: Update on Food Crediting in Child Nutrition Programs with Guidance for Dried Meat Products (USDA webinar): https://www.fna.usda.gov/tn/moving-forward-update-food-crediting-dried-meat-products

- Offering Meats and Meat Alternates at School Breakfast (USDA): https://www.fna.usda.gov/tn/offering-meats-and-meat-alternates-school-breakfast

- Preschool Meal Pattern Training for the School Nutrition Programs Module 5: Meats/Meat Alternates Component ("Preschool Meal Pattern Training" section of CSDE's Meal Patterns for Preschoolers in School Nutrition Programs webpage): https://portal.ct.gov/sde/nutrition/meal-patterns-preschoolers-in-school-nutrition-programs/preschool-meal-pattern-training

- Product Formulation Statement for Documenting Meats/Meat Alternates (M/MA) in Child Nutrition Programs (USDA): https://www.fna.usda.gov/sites/default/files/resource-files/tn-pfs-mma-template.pdf

- Product Formulation Statement for Documenting Meats/Meat Alternates (M/MA) in Child Nutrition Programs: Completed Sample (USDA): https://fna-bwbufwdzbabpezgc.z01.azurefd.us/sites/default/files/resource-files/tn-pfs-mma-sample.pdf

- Questions and Answers on Alternate Protein Products (APP) (USDA): https://www.fna.usda.gov/tn/cnp/food-industry-toolkit/app

- Requirements for Alternate Protein Products in the School Nutrition Programs (CSDE): https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/app_requirements_snp.pdf

- School Lunch Menu Flexibilities: Beans, Peas, and Lentils (USDA webinar): https://www.youtube.com/watch?v=IJGC9zvx9Zk

- Serving Meat and Meat Alternates at Breakfast in the Child and Adult Care Food Program (USDA): https://www.fna.usda.gov/tn/cacfp/meal-pattern-training-worksheets/serving-mma-breakfast
  Applies only to the preschool meal patterns

- Serving Meats and Meat Alternates at Lunch and Supper in the USDA Child and Adult Care Food Program (USDA):
  https://www.fna.usda.gov/tn/cacfp/serving-meats-meat-alternates-lunch-supper
  Applies only to the preschool meal patterns

- USDA Memo SP 02-2024, CACFP 02-2024, SFSP 02-2024: Revised: Crediting Tofu and Soy Yogurt Products in the School Meal Programs and the CACFP:
  https://www.fna.usda.gov/cn/crediting-tofu-soy-yogurt-products-school-meals-cacfp

- USDA Memo SP 21-2019, CACFP 08-2019, and SFSP 07-2019: Crediting Shelf-Stable, Dried and Semi-Dried Meat, Poultry, and Seafood Products in the Child Nutrition Programs:
  https://www.fna.usda.gov/cn/crediting-shelf-stable-dried-and-semi-dried-meat-poultry-and-seafood-products-child-nutrition

- USDA Memo SP 24-2019, CACFP 11-2019, and SFSP 10-2019: Crediting Surimi Seafood in the Child Nutrition Programs:
  https://www.fna.usda.gov/cn/crediting-surimi-seafood-child-nutrition-programs

- USDA Memo SP 25-2019, CACFP 12-2019, and SFSP 11-2019: Crediting Tempeh in the Child Nutrition Programs:
  https://www.fna.usda.gov/cn/crediting-tempeh-child-nutrition-programs

- USDA Memo SP 26-2019, CACFP 13-2019, and SFSP 12-2019: Crediting Pasta Products Made of Vegetable Flour in the Child Nutrition Programs:
  https://www.fna.usda.gov/cn/crediting-pasta-products-made-vegetable-flour-child-nutrition-programs

- What's in a Meal Module 10: Meats/Meat Alternates Component (CSDE's Training Program,
  What's in a Meal: Meal Patterns for Grades K-12 in the School Nutrition Programs):
  https://portal.ct.gov/sde/nutrition/meal-pattern-training-materials#module10

For additional crediting resources, visit the "Meats and Meat Alternates" section of the CSDE's Crediting Foods in School Nutrition Programs webpage. Training on the MMA component is available in Module 10: Meats/Meat Alternates Component of the CSDE's training program, *What's in a Meal: Meal Patterns for Grades K-12 in the School Nutrition Programs*, and Module 5: Meats/Meat Alternates Component of the CSDE's Preschool Meal Pattern Training for the School Nutrition Programs.

4 — Vegetables Component

The vegetables component includes fresh, frozen, canned, and rehydrated dried vegetables; and pasteurized full-strength vegetable juice.

The meal patterns for grades K-12 and preschool require different servings for the vegetables component. The required meal pattern servings are measured in cups for all grade groups. These servings refer to the edible portion of vegetables after any applicable preparation techniques, such as peeling, trimming, and cooking. All vegetables credit based on volume (cups) with the exceptions below.

- Raw leafy greens credit as half the volume served (refer to "Crediting Raw Leafy Greens" in this section).
- Dried or dehydrated vegetables (such as potato flakes and dried soup mix) credit based on the cups of vegetables per serving in the rehydrated volume (refer to "Crediting Dried Vegetables" in this section).
- Tomato paste and puree credit based on the volume of tomatoes prior to pureeing (refer to "Crediting tomato paste and puree" in this section).

Menu planners should consult the USDA's FBG to determine the number of servings provided by a specific quantity of vegetable as purchased (refer to "Food Buying Guide for Child Nutrition Programs" in section 1). For guidance and examples of how to use the FBG to determine purchasing and crediting information for vegetables, refer to chapter 2 of the USDA's *Menu Planner for School Meals*.

Minimum Creditable Amount for Vegetables

The minimum creditable amount is ⅛ cup. Vegetables offered in amounts less than ⅛ cup do not count toward the required meal pattern servings. However, they do count toward the weekly dietary specifications for the breakfast and lunch meal patterns for grades K-12 (refer to "Dietary specifications for the SBP and NSLP meal patterns for grades K-12" in section 1).

When crediting vegetables toward the meal pattern requirements, menu planners must round down to the nearest ⅛ cup. For example, a standardized recipe or commercial product that contains 2½ tablespoons of vegetables per serving credits as ⅛ cup of the vegetables component.

Offering A Combination of Vegetables

SFAs may choose to serve a combination of several vegetables to meet the daily requirement for each age group if each serving contains at least ⅛ cup of vegetables, i.e., the minimum creditable amount (refer to "Minimum creditable amounts" in section 1). For example:

- a lunch menu for grades K-5 could meet the required ¾-cup serving of vegetables with ½ cup of broccoli and ¼ cup of carrots; and
- a lunch menu for ages 2-5 could meet the required ¼ cup of the vegetables component with ⅛ cup of broccoli and ⅛ cup of carrots.

The SFA determines these menu planning decisions.

Required Vegetable Servings for K-12 Menus

The breakfast and lunch meal patterns for grades K-12 require minimum daily and weekly servings of the vegetables component for each grade group. The vegetables component may be offered as one of the two required meal components at snack.

Vegetable substitutions for K-12 breakfast menus

Vegetables are optional at breakfast. SFAs may substitute vegetables for the fruits component at any breakfast. The minimum daily requirement of the fruit component (including optional vegetable substitutions) is 1 cup for all grades. The minimum weekly requirements are the sum of the requirements. For example, a five-day breakfast menu must offer 5 cups of fruits (including optional vegetable substitutions) over the week, and a seven-day breakfast menu must offer 7 cups of fruits (including optional vegetable substitutions) over the week.

Note: For school year 2026-27, the Continuing Appropriations, Agriculture, Legislative Branch, Military Construction and Veterans Affairs, and Extensions Act, 2026 (Public Law 119-37, the 2026 Appropriations Act), enacted on November 12, 2025, supersedes the requirements for vegetables at breakfast in the USDA final rule, *Child Nutrition Programs: Meal Patterns Consistent with the 2020-2025 Dietary Guidelines for Americans*. The 2026 Appropriations Act allows SFAs participating in the SBP to credit any vegetable offered in place of fruit without including vegetables from other subgroups in the weekly menus. For additional guidance, refer to USDA Memo SP 05-2026, CACFP 03-2026, SFSP 03-2026: 2026 Appropriations Act: Effect on Child Nutrition Programs.

Vegetable servings for K-12 lunch menus

The minimum daily serving is ¾ cup for grades K-5 and grades 6-8, and 1 cup for grades 9-12. The minimum weekly requirements are the sum of the daily requirements. For example, a five-day lunch menu for grades K-5 or grades 6-8 must offer at least 3¾ cup of vegetables weekly and a five-day lunch menu for grades 9-12 must offer 5 cups of vegetables weekly. These weekly requirements include five vegetable subgroups: dark green; red/orange; beans, peas, and lentils; starchy; and other (refer to "Vegetable Subgroups at Lunch" in this section).

Vegetable servings for K-12 snack menus

The snack meal pattern requires the minimum serving of any two of the five meal components. The minimum serving of vegetables offered at snack is ¾ cup for all grade groups. Only one meal component may be a creditable beverage such as juice, a fruit smoothie, or milk. Juice cannot be served when milk is the only other meal component at snack.

Vegetable servings for K-12 breakfast and lunch menus with offer versus serve

When implementing offer versus serve (OVS) at breakfast and lunch for grades K-12, menu planners should consider how the planned servings affect students' selection of reimbursable meals. The CSDE encourages SFAs to offer all vegetables in ½-cup servings and allow students to choose two servings. This makes it easier for students to select the required ½ cup of fruits or vegetables for a reimbursable meal with OVS. For more information on OVS, refer to the CSDE's *Offer versus Serve Guide for School Meals* and visit the CSDE's Offer versus Serve for School Nutrition Programs webpage.

SFAs must use meal identification signage to instruct students on how much food to select from each meal component daily for a reimbursable meal with OVS, based on the planned servings for each grade group.

- **Example:** A high school allows students to select two ½-cup servings of vegetables to meet the minimum daily 1-cup serving for grades 9-12 at lunch. The school menu and cafeteria signage must clearly communicate that students may select up to two servings of vegetables with each meal. This signage must be on the serving line where the vegetable selections are located.

For more information on signage, refer to the CSDE's *Signage Requirements for the National School Lunch Program and School Breakfast Program* and section 4 of the CSDE's *Guide to Meal Service Requirements for the National School Lunch Program and School Breakfast Program Meal Patterns for Grades K-12*.

Required Vegetable Servings for Preschool Menus

The preschool lunch meal patterns require minimum daily servings of the vegetables component for each age group. Vegetables may be offered at breakfast and snack.

Vegetable servings for preschool breakfast menus

Vegetables and fruits are one meal component at breakfast. SFAs may serve vegetables, fruits, or both. The minimum servings are ¼ cup for ages 1-2 and ½ cup for ages 3-5.

Vegetable servings for preschool lunch menus

The vegetables component is required at lunch. The minimum servings are ⅛ cup for ages 1-2 and ¼ cup for ages 3-5.

SFAs may also choose to substitute vegetables for the fruits component at any preschool lunch (refer to "Vegetable substitutions for preschool lunch menus" in section 5).

Vegetable servings for preschool snack menus

The snack meal pattern requires the minimum serving of any two of the five meal components. The minimum serving of vegetables offered at snack is ½ cup for both age groups. Only one meal component may be a creditable beverage such as juice, a fruit smoothie, or milk. Juice cannot be served when milk is the only other meal component at snack.

Required Vegetable Subgroups for K-12 Lunch Menus

The lunch meal pattern requires weekly servings of the five vegetable subgroups recommended by the *2020-2025 Dietary Guidelines for Americans*. The five subgroups with examples of vegetables are summarized below.

1. **Dark green:** Examples include bok choy, broccoli, collard greens, dark green leafy lettuce, kale, mesclun, mustard greens, romaine lettuce, spinach, turnip greens, and watercress.

2. **Red/orange:** Examples include acorn squash, butternut squash, carrots, pumpkin, tomatoes, tomato juice, and sweet potatoes;

3. **Beans, peas, and lentils:** Examples include black beans, black-eyed peas (mature, dry), garbanzo beans (chickpeas), kidney beans, lentils, navy beans, soybeans, split peas, and white beans.

4. **Starchy:** Examples include black-eyed peas (not dry), corn, cassava, green bananas, green peas, green lima beans, whole hominy (canned, drained), jicama, parsnips, plantains, taro, water chestnuts, and white potatoes.

5. **Other:** This subgroup is a distinct grouping of food items classified by the *2020-2025 Dietary Guidelines for Americans*, that includes all other vegetables that are not in the other four subgroups. Examples include artichokes, asparagus, avocado, cooked bean sprouts (raw sprouts cannot be served for food safety reasons), beets, Brussels sprouts, cabbage, cauliflower, celery, cucumbers, eggplant, green beans, green peppers, iceberg lettuce, mushrooms, okra, onions, turnips, wax beans, and zucchini.

For information on the vegetable subgroups, refer to the CSDE's resource, *Vegetable Subgroups in the National School Lunch Program*.

How to offer the vegetable subgroups

The vegetable subgroup requirements do not apply to each individual day. SFAs may offer the vegetable subgroups in any order and amount throughout the week. SFAs may choose to break up the subgroup requirements throughout the week and offer the same vegetable subgroup several different times during the week if the following apply: 1) the weekly menu meets the full vegetable subgroup requirements; and 2) each day's lunch includes the minimum serving of the vegetables component.

- **Example:** SFAs can meet the weekly ½-cup requirement for beans, peas, and lentils for a five-day lunch menu by offering a black bean salsa on Monday that provides ¼ cup of beans and a bean burrito on Thursday that provides ¼ cup of

beans. This menu must also include additional vegetable servings each day to meet the minimum daily vegetables for each grade group (¾ cup for grades K-5 and 6-8, and 1 cup for grades 9-12).

All students must have access to the appropriate quantities of all vegetable subgroups each week. If a school has multiple serving lines, each serving line must offer all vegetable subgroups on a weekly basis in at least the minimum required amounts. For more information, refer to "Avoiding Vegetable Subgroup Conflicts" and "Must offer vegetable subgroups on each serving line" in this section.

Additional Vegetables for K-12 Lunch Menus

The required weekly quantities for the five vegetable subgroups do not add up to the total weekly vegetables requirement in the NSLP meal patterns for grades K-12. The additional vegetables category makes up the difference.

For example, the vegetable subgroups in the five-day meal pattern for grades K-5 and 6-8 add up to 2¾ cups per week. Since both grade groups require 3¾ cups of vegetables per week, SFAs must provide 1 cup of additional vegetables to meet the minimum weekly total. These additional vegetables may come from any of the five subgroups.

The tables below indicate the required weekly quantities of the vegetable subgroups and additional vegetables at lunch for five-day and seven-day weeks.

Table 4-1. Vegetable subgroups and additional vegetables for five-day weeks

Vegetables (cups)	Grades K-5, 6-8, and K-8 option	Grades 9-12
Dark green	½	½
Red/orange	¾	1¼
Beans, peas, and lentils	½	½
Starchy	½	½
Other	½	¾
Subtotal	**2¾**	**3½**
Additional vegetables required for weekly total (any subgroup)	1	1½
Total weekly vegetables	**3¾**	**5**

Table 4-2. Vegetable subgroups and additional vegetables for seven-day weeks

Vegetables (cups)	Grades K-5, 6-8, and K-8 option	Grades 9-12
Dark green	½	½
Red/orange	¾	1¼
Beans, peas, and lentils	½	½
Starchy	½	½
Other	½	¾
Subtotal	**2¾**	**3½**
Additional vegetables required for weekly total (any subgroup)	2½	3½
Total weekly vegetables	**5¼**	**7**

Ensuring K-12 Menu Compliance with the Vegetable Subgroups

SFAs must ensure that K-12 lunch menus offer students access to the required amounts of all five vegetable subgroups each week. The guidance below helps SFAs meet this requirement.

Must offer vegetable subgroups on each serving line

When SFAs have multiple serving lines or offer a variety of meal choices, the minimum required portion of all meal components must be available to all students for every meal on each serving line. Each lunch choice and each serving line must offer all students access to the same daily vegetable subgroups, subgroups, unless that subgroup is offered again later in the week or the school offers a daily vegetable subgroup rainbow tray (refer to "Offering rainbow trays at lunch" in this section).

When planning menus to meet the weekly vegetable subgroups, menu planners should think of each serving line as its own entity. The daily and weekly requirements must be met for each serving line. The examples below illustrate this requirement.

- **Example 1:** A school offers a hot lunch choice and cold lunch choice on the same lunch line. Tuesday's menu offers corn (starchy subgroup) as the daily vegetables component for the hot lunch menu and baby carrots (red/orange subgroup) as the daily vegetables component for the cold lunch menu. If the cold

lunch menu does not offer corn (or another starchy vegetable) later in the week, Tuesday's cold lunch menu must offer corn (or another starchy vegetable). Otherwise, students who select the cold lunch on Tuesday do not have access to the starchy vegetables subgroup that week.

- **Example 2:** A school has three different lunch lines, including a hot lunch line, a deli line, and a grill line. Monday's hot lunch menu features baked beans (beans, peas, and lentils subgroup) as the daily vegetable. To meet the weekly vegetable subgroups requirement, baked beans (or another vegetable from the beans, peas, and lentils subgroup) must also be available on the other two serving lines. For example, Monday's menu for the deli line and grill line must include baked beans or another vegetable from the bean, peas, and lentils subgroup, such as garbanzo beans or lentils. SFAs cannot post signs on the deli line and grill line directing students to select the vegetable subgroup choice from a different serving line. Each serving line must offer the full reimbursable meal, including the required weekly servings of the vegetable subgroups.

For information on the vegetable subgroups, refer to the CSDE's resource, *Vegetable Subgroups in the National School Lunch Program*.

Offering rainbow trays at lunch

Offering a daily vegetable subgroup "rainbow" tray on each serving line is the best practice for meeting the NSLP meal pattern requirements for the weekly vegetable subgroups. A rainbow tray includes pre-portioned selections from each of the five vegetable subgroups. An example is offering a choice of baby carrots (red/orange subgroup), broccoli florets (dark green subgroup), marinated chickpeas (beans, peas, and lentils subgroup), corn (starchy subgroup), and sliced cucumbers (other subgroup). This provides students with access to each vegetable subgroup every day.

Avoiding vegetable subgroup conflicts

School lunch menus must meet the vegetable subgroup requirements on a weekly basis. Menu planners may choose what combinations of vegetable subgroups to offer each day. Each subgroup must be available to all students in at least the minimum quantities during the week.

The lunch menu cannot require students to choose one subgroup over another on a single day if these subgroups are not offered again during the week. A daily lunch menu that requires students to choose between two different subgroups has a vegetable subgroup conflict. To resolve this conflict, the SFA must make these subgroups available on another day that week. The table below shows an example of a vegetable subgroup conflict.

Table 4-3. Example of vegetable subgroup conflict

Entree item (student chooses one)	Portion size	Subgroup contribution
Chili con carne with beans	1 cup (contains ½ cup of kidney beans)	½ cup of beans, peas, and lentils
Chicken Caesar salad	2 cups of romaine lettuce 2 oz eq of grilled chicken	1 cup of dark green vegetables (raw leafy greens credit as half the volume served)

This lunch menu offers a choice of two entrees with different vegetable subgroups on the same day. The dark green vegetable subgroup (romaine lettuce) is offered in one entree item (chicken Caesar salad) and the beans, peas, and lentils subgroup (kidney beans) is offered in another entree item (chili con carne). Since students may choose only one entree, this lunch menu has a vegetable subgroup conflict.

To resolve this conflict, the lunch menu must provide another opportunity later in the week for students to select either the dark green vegetables subgroup or the beans, peas, and lentils subgroup. The lunch menu will meet the vegetable subgroup requirement if the SFA implements one of the two options below.

- **Option 1:** Serve the beans, peas, and lentils subgroup and a dark green vegetable on another day (not as part of the entree).
- **Option 2:** Credit the kidney beans as the MMA component and serve the beans, peas, or lentils subgroup as the vegetables component on another day.

SFAs should review all lunch menus to ensure that each serving line offers the minimum weekly amount of each vegetable subgroup.

Vegetable subgroup substitutions

SFAs must train school food service staff on making appropriate substitutions within each vegetable subgroup. Substitutions must be from the same vegetable subgroup, unless the SFA offers all five subgroups each day.

For example, if the kitchen runs out of broccoli, school food service staff must substitute another vegetable from the dark green vegetables subgroup. A vegetable substitution from a different subgroup might cause the menu to be noncompliant with the weekly vegetable subgroups requirement, unless the SFA offers that same vegetable subgroup later that week or offers all vegetable subgroups each day.

Menu Planning Tips for Vegetable Subgroups

The simplest strategy to ensure that menus meet the weekly vegetable subgroups requirement is to develop a vegetable subgroup cycle menu. SFAs may offer the weekly vegetable subgroup choices in a variety of ways, such as:

- one choice from a different vegetable subgroup each day;
- more than one choice from a different vegetable subgroup each day;
- one choice from each of the five subgroups every day;
- more than one choice from each of the five subgroups every day.

SFAs may also choose to offer the same foods from a particular subgroup each week. For example, the red/orange subgroup could be carrots and sweet potatoes every week. However, the USDA encourages schools to include a variety of choices to provide more nutritious meals.

Sample vegetable subgroup cycle menus

The CSDE encourages SFAs to develop a vegetable subgroups cycle menu that meets the weekly vegetable subgroups. Table 4-4 shows a sample 20-day cycle menu that includes two daily choices from a different vegetable subgroup each day. SFAs could also decide to offer only one daily choice or more than one daily choice.

Another option is to allow the kitchen manager to select the daily vegetable choice or choices for that day's specified subgroups. This allows for more flexibility based on the planned menu items, and the cost, seasonality, and availability of the vegetables within the daily subgroups.

The disadvantages of serving vegetables from only one subgroup each day include less variety and less colorful meals. Since colorful meals are more attractive and eye appealing to students, SFAs may want to offer choices from at least two different vegetable subgroups each day.

Table 4-4. Sample 20-day vegetable subgroups cycle menu

Day 1 **Dark green**	**Day 2** **Red/orange**	**Day 3** **Beans, peas, and lentils**	**Day 4** **Starchy**	**Day 5** **Other**
Broccoli Red leaf lettuce	Carrots Sweet potato	Chickpeas Edamame	Corn Peas	Cucumbers Green beans

Day 6 **Red/orange**	**Day 7** **Beans, peas, and lentils**	**Day 8** **Starchy**	**Day 9** **Other**	**Day 10** **Dark green**
Orange peppers Butternut squash	Lentils Kidney beans	Water chestnuts Red potatoes	Cauliflower Cabbage	Spinach Romaine lettuce

Day 11 **Beans, peas, and lentils**	**Day 12** **Starchy**	**Day 13** **Other**	**Day 14** **Dark green**	**Day 15** **Red/orange**
Split peas Black beans	Corn Potatoes	Celery Green peppers	Boston lettuce Kale	Acorn squash Tomatoes

Day 16 **Starchy**	**Day 17** **Other**	**Day 18** **Dark green**	**Day 19** **Red/orange**	**Day 20** **Beans, peas, and lentils**
Peas Lima beans	Beets Zucchini	Broccoli Mesclun	Carrots Tomatoes	Split peas Navy beans

Table 4-5 shows a sample one-week cycle menu that includes choices from all five subgroups every day. SFAs could choose to implement this cycle menu in a variety of ways that include some or all of the following:

- allow students to self-serve the vegetables subgroups from a vegetable bar, if a salad bar unit is available;
- allow students to self-serve the vegetables subgroups from a vegetable rainbow tray on each serving line that contains pre-portioned vegetables from each subgroup (refer to "Offering rainbow trays at lunch" in this section); and
- serve hot vegetable choices to students from the lunch lines.

SFAs may include all required subgroups every day or throughout the week if all students have access to each vegetable subgroup on a weekly basis. These options provide extensive variety and more colorful and attractive meals. As with the previous example, SFAs could also decide to offer only one daily choice or more than one daily choice and allow the kitchen manager to select the daily vegetable choice or choices.

Table 4-5. Sample one-week vegetable subgroups cycle menu

Vegetable subgroup	Day 1	Day 2	Day 3	Day 4	Day 5
Dark green	Broccoli Red leaf lettuce	Spinach Romaine lettuce	Boston lettuce Kale	Broccoli Mesclun	Bok choy Green leaf lettuce
Red/ orange	Carrots Sweet potato	Orange peppers Butternut squash	Acorn squash Tomatoes	Carrots Tomatoes	Red peppers Sweet potato
Beans, peas, and lentils	Chickpeas Edamame	Lentils Kidney beans	Split peas Navy beans	Pinto beans Black beans	Garbanzo beans Kidney beans
Starchy	Corn Peas	Water chestnuts Red potatoes	Jicama Potatoes	Peas Lima beans	Plantains Cassava

Other	Cucumbers Green beans	Cauliflower Cabbage	Celery Green peppers	Beets Zucchini	Snow peas Summer squash

Salad Bars

The USDA encourages salad bars in the school nutrition programs. SFAs may use a daily salad bar line to meet the weekly vegetable subgroups requirement for K-12 lunch menus if it is available to all students each day and offers all required subgroups every day or over the week.

Point-of-service positioning

Students must select all required meal components for a reimbursable meal (including the vegetable subgroups) before the point of service. The point of service is the moment in the meal or snack service where staff can accurately determine that a reimbursable free, reduced-price, or paid meal has been served to an eligible child. To ensure that each student's selections from the salad bar meet the required portions for a reimbursable meal, the salad bar should be located before the point of service.

If a school cannot position the salad bar in a location prior to the point of service, the SFA may request approval from the CSDE for an alternative system. The alternative system must ensure that all students who use the salad bar select the required meal components for a reimbursable meal.

The SFA must submit a written request to the CSDE and receive approval before using any salad bars positioned after the point of service. Students must receive all required meal components of the reimbursable meal. For schools that implement OVS, this request must describe the specific procedures the school will use to ensure that all reimbursable meals include at least ½ cup of fruits or vegetables and the full serving of at least two other meal components.

> Without CSDE approval, foods served on an unmonitored salad bar after the point of service are considered "extras" that are not part of the reimbursable meal. However, these foods do count toward the weekly dietary specifications for the lunch meal patterns for grades K-12 (refer to "Additional Foods" and "Dietary specifications for the SBP and NSLP meal patterns for grades K-12" in section 1).

OVS with salad bars for grades K-12

If a school implements OVS for grades K-12, salad bars must follow the OVS requirements. Schools may pre-portion foods to ensure that students take the minimum required portion sizes from a salad bar and to allow staff to quickly identify if the student has a reimbursable meal under OVS. Without pre-portioning, SFAs must train cashiers to accurately judge the quantities of self-serve items on student trays to determine if food items credit toward a reimbursable meal. For more information on OVS, refer to the CSDE's *Offer versus Serve Guide for School Meals* and visit the CSDE's Offer versus Serve for School Nutrition Programs webpage.

Vegetable subgroups and salad bars

Vegetable subgroups offered on a daily salad bar must be itemized on the school's production records. The NSLP regulations (210.10(a)(3)) require that production records and menu records must show how the offered meals contribute to the required meal components and food quantities. Guidance on production records is available to the CSDE's *Requirements for Production Records in the National School Lunch Program and School Breakfast Program* and *Guide to Menu Documentation for the School Nutrition Programs*.

Resources for salad bars

Guidance and resources on implementing salad bars for the school nutrition programs are available in the "Salad Bars" section of the CSDE's Menu Planning for Child Nutrition Programs webpage. For more information on salad bars in schools, refer to USDA Memo SP 31-2013: *Salad Bars in the National School Lunch Program*.

Crediting Canned Vegetables

Canned vegetables must be drained. A serving of canned vegetables cannot include the packing liquid, such as water or sauce.

For example, to credit as ½ cup of the vegetables component, ½ cup of canned peas cannot include the packing water and ½ cup serving of baked beans cannot include the sauce in which it is packed. The serving must contain ½ cup of vegetables before any added liquid.

> Many canned vegetables are high in sodium. To help K-12 menus comply with the weekly sodium limits, menu planners should read product labels and purchase varieties of canned vegetables that are lower in sodium (refer to "Dietary specifications for the SBP and NSLP meal patterns for grades K-12" in section 1).

Crediting Dried Vegetables

Dried or dehydrated vegetables like potato flakes and dried soup mix credit as the vegetables component based on their rehydrated volume. Dried vegetables used for seasonings (such as dried onion and dried parsley) do not credit.

The FBG lists yields for some dehydrated vegetables, such as pinto beans, refried beans, onions, bell peppers, potatoes, seaweed, and sweet potatoes. Dried vegetables not listed in the FBG require a PFS to determine crediting information.

The PFS must provide specific documentation on the cups of vegetables per serving in the rehydrated volume (refer to "Documentation for commercial processed products" in section 1). Menu planners should check the accuracy of the PFS prior to including foods with dehydrated vegetables in CACFP menus.

Determining rehydrated volume for dried vegetables

The rehydration volume of dried vegetables often varies among different brands and products. Menu planners must use the procedures below to determine and document the rehydrated volume of dehydrated vegetable products.

1. Rehydrate (add water or liquid to) a purchase unit of the dehydrated vegetable according to the manufacturer's directions. If the container does not include directions, request rehydration directions from the manufacturer.

2. Measure the rehydrated volume.

3. Measure the number of ¼-cup servings of rehydrated product that one purchase unit provides.

4. Keep records on file as verification. Records should include information on the size of the purchase unit, the number of ¼-cup servings of rehydrated product per purchase unit, the name of the manufacturer, and the manufacturer's directions for rehydrating the product.

Since product rehydration volumes often vary from brand to brand, SFAs should use this procedure for each brand of dehydrated product. For more information, refer to the CSDE's *Yield Study Data Form for the Child Nutrition Programs*.

Crediting Hominy as Vegetables

Hominy is a traditional food in Mexican and Native American cultures that is commonly served as a vegetable or milled grain product, e.g., hominy grits. Hominy is made from whole kernels of maize (dried field corn) that have been soaked in an alkaline solution (nixtamalized). This process removes the hull and germ, causes the corn to puff up to about double its normal size, and increases the bioavailability of certain nutrients, such as calcium and niacin.

Hominy is available dried and in a fully cooked canned form. Drained canned hominy or cooked whole hominy (from dried hominy) credits toward the vegetables component as the starchy vegetables subgroup based on the cups served. For example, ¼ cup of canned drained hominy credits as ¼ cup of starchy vegetables.

For information on crediting hominy as the grains component, refer to "Crediting Hominy as Grains" in section 6.

Crediting Beans, Peas, and Lentils as Vegetables

Menu planners may credit beans, peas, and lentils as either the vegetables component or the MMA component, but one serving cannot credit as both meal components in the same meal or afterschool snack. SFAs must determine in advance how to credit beans, peas, and lentils in meals and afterschool snacks. For information on crediting beans, peas, and lentils as the MMA component, refer to "Crediting Beans, Peas, and Lentils as MMA" in section 3.

Beans, peas, and lentils credit as the vegetables component based on the cups served. For example, ½ cup of kidney beans credits as ½ cup of the vegetables component.

> The serving refers to the amount of cooked beans, peas, or lentils, excluding other ingredients such as sauce and pork fat. For example, ½ cup of baked beans that contains ⅛ cup of sauce and pork fat credits as ⅜ cup of the vegetables component. For more information, refer to "Vegetables with Added Ingredients" in this section.

A menu item must provide at least ⅛ cup of beans, peas, or lentils to credit toward part of the vegetables component. For more information, refer to "Minimum creditable amounts" in section 1 and "Required Servings for Vegetables" in this section. For information on crediting beans, peas, and lentils as the MMA component, refer to "Crediting Hummus and Bean Dips as MMA" in section 3.

Crediting roasted or dried beans, peas, and lentils as vegetables

Roasted or dried beans, peas, and lentils, such as chickpeas and soybeans, credit as the vegetables component based on the cups served. For example, ¼ cup of roasted chickpeas credits as ¼ cup of the vegetables component.

The USDA recommends that menu planners use discretion when offering snack-type products (such as individually wrapped soy nuts) in reimbursable meals, due to their perception as snack foods. While these types of products credit in the school nutrition programs, they may be better suited for meals served off site, such as bagged lunches for field trips. When offering these foods as either the MMA component or vegetables component, make sure that school menus clearly identify how they contribute to reimbursable meals or afterschool snacks.

For information on crediting roasted or dried beans, peas, and lentils as the MMA component, refer to "Crediting roasted or dried beans, peas, and lentils as MMA" in section 3.

Crediting hummus and bean dips as vegetables

Beans, peas, and lentils in hummus and bean dips may credit as either the MMA component or the vegetables component, but one serving cannot credit as both meal components in the same meal or afterschool snack. Crediting as the vegetables component is based on the cups of beans, peas, and lentils per serving. For example, hummus that contains ¼ cup of chickpeas per serving credits as ¼ cup of the vegetables component. The minimum creditable amount of chickpeas is ⅛ cup.

To credit hummus and bean dips as the vegetable component, SFAs must maintain crediting documentation that indicates the cups of beans, peas, and lentils per serving, based on the yields in the FBG. Commercial products require a CN label or PFS (refer to "Documentation for commercial processed products" in section 2). Hummus and bean dips made from scratch require a standardized recipe (refer to "Crediting beans, peas, and lentils in recipes as vegetables" in this section).

For information on crediting hummus as the MMA component, refer to "Crediting Hummus and Bean Dips as MMA" in section 3.

Crediting beans, peas, and lentils in recipes as vegetables

SFAs must maintain appropriate crediting documentation for menu items that contain beans, peas, or lentils as an ingredient, such as lentil soup, bean burritos, and chili. The SFA's standardized recipe must provide at least ⅛ cup of beans, peas, or lentils per serving to credit toward the vegetables component.

The menu planner must determine the crediting information for the vegetables component by dividing the total cups of beans, peas, and lentils in the standardized recipe by the number of servings, then rounding down to the nearest ⅛ cup. For guidance on how to calculate the contribution of beans, peas, and lentils in a standardized recipe, refer to the CSDE's resource, *Crediting Beans, Peas, and Lentils in the School Nutrition Programs*.

Crediting documentation for commercial bean, pea, and lentil products

SFAs must maintain crediting documentation for all commercial processed products that contain beans, peas, and lentils, such as black bean burritos and vegetarian chili. This documentation must state the amount of the MMA component per serving. For more information, refer to "Documentation for commercial processed products" in section 1.

Crediting Mixed Vegetables in K-12 Lunch Menus

Some mixed vegetables contain different vegetable subgroups. Examples of vegetable mixtures include carrots, peas, and corn; three-bean salad; and a California mix of broccoli, cauliflower, and carrots.

The crediting of mixed vegetables depends on whether the menu planner knows the amount of each type of vegetable in the mixture.

- **Same subgroup:** Vegetable combinations from the same subgroup credit toward that vegetable subgroups. For example, a mixture of carrots and sweet potatoes credits as red/orange vegetables because both are from the red/orange subgroup. A mixture of corn and green peas credits as starchy vegetables because both are from the starchy subgroup.

- **Different subgroup:** Vegetable combinations that contain at least ⅛ cup of each vegetable subgroup credit each vegetable toward the appropriate subgroups. For example, a mixture of ¼ cup of carrots (red/orange subgroup) and ¼ cup of corn and peas (starchy subgroup) credits as ¼ cup of red/orange vegetables and ¼ cup of starchy vegetables.

- **Unknown quantities:** If the menu planner does not know the quantities of the different vegetables (such as a frozen vegetable blend of peas, carrots, and corn), the mixture credits as “additional” vegetables.

SFAs may use manufacturer data (such as a PFS) to determine the amount of each type of vegetable in the mixture. This information must clearly document the ratio of the ingredients in the vegetable mixture.

- **Example:** The PFS for a vegetable blend indicates that the product contains 25 percent broccoli, 25 percent carrots, and 50 percent cauliflower. A 1-cup serving credits as ¼ cup of broccoli (dark green subgroup), ¼ cup of carrots (red/orange subgroup), and ½ cup of cauliflower (other subgroup).

SFAs are not required to monitor that each portion contains the documented ratios.

Crediting Mixed Vegetables in K-12 Breakfast Menus

The vegetable subgroups are not required at breakfast. Mixed vegetables substituted for the fruits component credit based on the cups served. For example, ½ cup of mixed vegetables credits as ½ cup of the fruits component (vegetable substitution) at breakfast.

Crediting Pasta Products Made of Vegetable Flours

Pasta products made of 100 percent beans, peas, or lentils may credit as either the vegetables component or the MMA component but cannot credit as both meal components in the same meal or afterschool snack. For more information, refer to "Crediting Bean, Pea, and Lentil Flour Pasta Products as MMA" in section 3.

Pasta products made of vegetable flours credit as the vegetables component if they meet the specific requirements in USDA Memo SP 26-2019, CACFP 13-2019, and SFSP 12-2019: *Crediting Pasta Products Made of Vegetable Flour in the Child Nutrition Programs*. These requirements are summarized below.

Crediting vegetable flours as vegetables

Pasta made of one or more 100 percent vegetable flours credits toward the vegetables component. These products credit the same as vegetables. For example, ½ cup of pasta made of 100 percent vegetable flour credits as ½ cup of the vegetables component.

The ingredients statements below show some examples of pasta products that contain 100 percent vegetable flour.

- Ingredients: Red lentil flour.
- Ingredients: Green lentils, cauliflower, parsnips.

Menu planners could choose to credit these products toward the vegetables component based on the cooked volume of the serving.

Crediting vegetable flours from one vegetable subgroup

Pasta products made of one or more vegetable flours from one vegetable subgroup may credit toward that vegetable subgroups. For example, ½ cup of pasta made of 100 percent red lentil flour credits as ½ cup of the beans, peas, and lentils subgroup.

Pasta made of 100 percent beans, peas, and lentils may also credit as the MMA component but cannot credit as the beans, peas, and lentils subgroup and the MMA component in the same

meal or afterschool snack. For more information, refer to "Crediting Bean, Pea, and Lentil Flour Pasta Products as MMA" in section 3.

Crediting vegetable flours with other non-vegetable ingredients

Pasta products made of vegetable flours with other non-vegetable ingredients may credit as the vegetables component (or the MMA component for 100 percent bean, pea, and lentil flour pasta products) with a PFS that details the actual volume of vegetable flour per serving. This crediting does not apply to grain-based pasta products that contain small amounts of vegetable powder for color, such as spinach pasta or sun-dried tomato pasta. The examples below show some ingredients statements for vegetable flour pasta products.

- **Example 1**
  Ingredients: Semolina (wheat), durum flour (wheat), **dried spinach**, niacin, ferrous sulfate (iron), thiamin mononitrate, riboflavin, folic acid.

  This product does not credit toward the vegetables component. The spinach is used for coloring and the amount is too small to credit.

- **Example 2**
  Ingredients: Semolina (wheat), durum flour (wheat), **dried carrots, dried tomato, dried spinach**, niacin, ferrous sulfate (iron), thiamin mononitrate, riboflavin, folic acid.

  This product might credit toward the vegetables component depending on the amount of dried carrots, dried tomato, and dried spinach per serving. The SFA must obtain a PFS from the manufacturer to determine the crediting information for this product.

Signage and staff training for vegetable flour pastas in K-12 menus

Nutrition education, including signs in cafeterias and other meal service areas, helps students understand what foods are in their meals. For K-12 menus, SFAs must use signs or other nutrition education to indicate that pasta made of vegetable flour is a "vegetable," and not the grain component of the meal. For example, if a lunch includes 100 percent chickpea pasta as the vegetables component, the menu could list chickpea pasta with a symbol showing it to be part of the vegetables component of the meal, not the grains component.

Menu planners should inform food service staff when meals include pasta made with vegetable flours. Food service staff must understand how the pasta contributes to the reimbursable meal and be able to identify reimbursable meals with OVS.

Crediting Pureed Vegetables

Except for smoothies, pureed vegetables must be visible to credit toward the NSLP, SBP, and ASP meal patterns (refer to "Requirement for visible components" in section 1). Examples include pureed foods made from one vegetable such as tomato sauce, split pea soup, mashed potatoes, mashed sweet potatoes, and pureed butternut squash.

Pureed vegetables credit based on the volume (cups) after pureeing. For example, to determine the volume of pea puree obtained from 1 cup of green peas, food service staff would puree the whole peas and measure the resulting amount of puree. Pureed vegetables typically have a smaller volume than the whole vegetable pieces. SFAs may use the CSDE's *Yield Study Data Form for the Child Nutrition Programs* to document the yield of pureed vegetables.

Pureed vegetables in smoothies credit only as juice toward the vegetables component. For guidance on crediting pureed vegetables in smoothies, refer to "Crediting Pureed Vegetables in Smoothies" below.

Unrecognizable pureed vegetables

Foods made with pureed vegetables that are not visible (such as pureed carrots in macaroni and cheese) cannot credit as the vegetables component unless they also provide at least ⅛ cup of a visible creditable vegetable. For example, a serving of macaroni and cheese that contains ⅛ cup of diced butternut squash (visible red/orange subgroup) and ⅛ cup of pureed carrots (red/orange subgroup that is not visible) credits as ¼ cup of the red/orange subgroups.

Pureed vegetables that are not recognizable can be a different subgroup from the visible vegetables. For example, a serving of school-made vegetable soup that contains ⅛ cup of pureed tomatoes (red/orange subgroup) and ⅛ cup of diced onion ("other" subgroup) credits toward the red/orange and "other" subgroups. Whenever possible, the USDA encourages SFAs to make pureed vegetables in a blended dish from the same subgroup as the recognizable vegetables to serve as an educational tool for students.

Pureed vegetables do not credit when they are used to improve the nutrient profile of a food. For example, pureed black beans in brownies do not credit toward the vegetables component or the MMA component. Pureed sweet potatoes in a spice cake do not credit toward the vegetables component. The USDA emphasizes the importance of the nutrition education aspect of the school nutrition programs, which includes the goal of helping participants easily recognize the key food groups that contribute to a healthy meal.

For more information, refer to "Requirement for Visible Components" in section 1.

Crediting tomato paste and puree

Tomato paste and puree credit using the whole food equivalency (volume of tomatoes prior to pureeing) instead of the actual volume served. This crediting is indicated in the FBG. Two tablespoons of tomato paste credits as ¼ cup of the vegetables component. One tablespoon of tomato paste credits as ¼ cup of the vegetables component.

Crediting Pureed Vegetables in Smoothies

Pureed vegetables in smoothies credit as juice toward the vegetables component and count toward the applicable juice limit for K-12 and preschool breakfast, lunch, and snack menus. For more information, refer to "Weekly limit for vegetable juices for K-12 menus" and "Vegetable juice limit for preschool menus" in this section.

For K-12 lunch menus, the crediting of smoothies containing two or more different vegetables or vegetable juices depends on whether they are from the same or different subgroups.

- **Same subgroup:** Smoothies that contain vegetables or vegetable juices from the same subgroup credit toward that vegetable subgroup. For example, a smoothie containing carrots and tomatoes credits toward the red/orange vegetable subgroup because both vegetables are from the red/orange vegetable subgroups. A smoothie containing a 100 percent carrot/tomato juice blend also credits toward the red/orange vegetable subgroup.

- **Different subgroup:** Smoothies that contain vegetables or vegetable juices from more than one subgroup credit only toward "additional" vegetables. For example, a smoothie containing carrots (red/orange), spinach (dark green), tomato (red/orange) and watercress (dark green) credits toward "additional" vegetables. A smoothie containing a 100 percent vegetable juice blend of carrots, spinach, tomato, and watercress also credits toward "additional" vegetables.

SFAs must include smoothies with all other juices when determining if the weekly breakfast, lunch, or snack menu meets the weekly juice limit.

Combined vegetables and fruits in smoothies

Smoothies that contain any combination of pureed fruits, pureed vegetables, and 100 percent fruit and vegetable juice blends credit based on the greatest vegetable or fruit ingredient. Commercial smoothies credit as the vegetables component if the first juice ingredient is vegetable juice or vegetable puree, and credit as the fruits component if the first juice ingredient is fruit juice or fruit puree.

Smoothies made from scratch credit as the vegetables component if vegetable juice or vegetable puree is the greatest juice ingredient in the standardized recipe. They credit as the fruits component if fruit juice or fruit puree is the greatest juice ingredient in the standardized recipe. For information on crediting smoothies as the fruits component, refer to "Crediting Fruits in Smoothies" in section 5.

Vegetable juices and purees in smoothies credit as juice toward the "additional" vegetables requirement (refer to "Additional Vegetables" in this section). SFAs must document the total cups of vegetable juices/pureed vegetables per serving with a standardized recipe for smoothies made from scratch or a PFS for commercial products (refer to "Required Crediting Documentation" in section 1).

Crediting Raw Leafy Greens

Raw leafy greens credit as half the volume served. For example, ½ cup of raw leafy greens credits as ¼ cup of the vegetables component. Examples of raw leafy greens include kale, greens (e.g., beet, collard, mustard, and turnip), spinach, arugula, and lettuce such as iceberg, romaine, Boston, Bibb, red leaf, and spring mix.

> As a reminder, cooked leafy greens (such as spinach and kale) and roasted or dried leafy greens (such as roasted kale) credit based on the volume served. For example, ½ cup of cooked spinach or roasted kale credits as ½ cup of the vegetables component.

Crediting Vegetable and Fruit Mixtures

Mixtures of vegetables and fruits may credit toward both the vegetables component and the fruits component if the serving contains at least ⅛ cup of visible vegetables and at least ⅛ cup of visible fruits. For example, a carrot-raisin salad that contains ½ cup of carrots and ⅛ cup of raisins credits as ½ cup of the vegetables component and ¼ cup of the fruits component. Dried fruits credit as twice the volume served (refer to "Crediting Dried Fruits" in section 5).

Crediting Soups

Vegetable soups made from scratch credit based on the cups of each vegetable subgroup in one serving of the standardized recipe. SFAs must determine this crediting information based on the vegetable yields listed in the FBG (refer to "Documentation for foods made from scratch" and "Food Buying Guide for Child Nutrition Programs" in section 1).

Commercial vegetable soups credit based on the yields in the FBG. Only certain types of commercial vegetable soups are creditable.

Creditable commercial vegetable soups

The FBG indicates that 1 cup of a commercial vegetable soup credits as ¼ cup of additional vegetables (refer to "Additional Vegetables for K-12 Lunch Menus" in this section). Allowable vegetable soups include:

- minestrone soup;
- tomato soup;
- tomato soup with other basic components such as rice;
- vegetable soup (contains only vegetables); and
- vegetable soup with other basic components such as meat or poultry.

The FBG indicates that 1 cup of a commercial bean, pea, or lentil soup credits as ½ cup of vegetables (beans, peas, and lentils subgroup). Allowable soups include:

- bean soup, e.g., black bean, navy bean, and mixed bean;
- pea soup, e.g., split pea; and
- lentil soup.

These servings refer to the amount of cooked soup, e.g., heated canned or frozen ready-to-serve soup, reconstituted dried soup, and reconstituted condensed soup.

Commercial vegetable soups not listed in the FBG require crediting documentation that states the specific contribution of each vegetable subgroup per serving. SFAs must obtain a PFS that indicates the specific contribution of vegetables (refer to "Documentation for commercial processed products" in section 1). A CN label might be available for some commercial vegetable soups that contain at least ½ oz eq of MMA.

For additional guidance, refer to the CSDE's resource, *Crediting Soups in the School Nutrition Programs*.

Serving size considerations for commercial vegetable soups

The served portion of a commercial vegetable soup must be sufficient to provide the vegetables being credited in school menus. Menu planners should consider the appropriateness of the serving size for different grade groups, and the size of the container used to serve the soup.

- **Meal pattern contribution:** The large serving required for a commercial soup to provide the full serving of vegetables might be unreasonable, especially for younger children. For example, the lunch meal pattern for grades K-5 and 6-8 requires ¾ cup of the vegetables component. This equals 3 cups of a commercial vegetable soup or 1½ cups of a commercial bean, pea, or lentil soup.

- **Container size:** A 1-cup container (8 fluid ounces) does not provide 1 cup of soup unless it is filled to the top, which is impractical. To prevent spills and ensure the served portion meets the meal pattern requirements, the container should be larger than the planned serving of soup. For example, SFAs could use a 10-fluid ounce bowl to hold 8 fluid ounces (1 cup) of soup and a 6-fluid ounce bowl to hold 4 fluid ounces (½ cup) of soup.

SFAs must communicate with school food service staff regarding the appropriate serving size for each grade group.

Noncreditable soups

Commercial beef barley soup, chicken or turkey noodle soup, chicken or turkey rice soup, and cream vegetable soups (such as cream of broccoli and cream of mushroom) do not credit.

Crediting Vegetable Juices

Any types of pasteurized full-strength (100 percent) vegetable juices may credit in reimbursable meals and snacks. Vegetable juices may be fresh, frozen, or made from concentrate. The name of the full-strength fruit juice on the label must include one of the terms below.

- Full-strength juice
- Single-strength juice
- 100 percent juice
- Reconstituted juice
- Juice from concentrate

The statements “natural” and “organic” do not indicate that a juice is full strength.

Crediting vegetable juices toward the vegetable subgroups in K-12 lunch menus

Vegetable juices credit toward the required vegetable subgroups for K-12 menus based on the types of vegetables they contain. For example, tomato juice credits toward the red/orange subgroup.

The crediting of juice blends containing two or more different vegetable juices depends on whether the vegetables are from the same or different subgroups.

- **Same subgroup:** Full-strength vegetable juice blends that contain vegetables from the same subgroup credit toward that vegetable subgroups. For example, a full-strength carrot/tomato vegetable juice blend credits toward the red/orange subgroup because both vegetables are from the red/orange vegetable subgroups.

- **Different subgroup:** Vegetable juice blends containing vegetables from more than one subgroup credit toward the other vegetable subgroups. For example, a full-strength vegetable juice blend containing carrots (red/orange), spinach (dark green), tomato (red/orange), and watercress (dark green) credits toward the other subgroups.

Vegetable and fruit juice blends must be a combination of full-strength vegetable juices or full-strength vegetable and fruit juices. For information on crediting vegetable and fruit juice blends, refer to “Juice Blends” in section 5.

Weekly limit for vegetable juices for K-12 menus

Breakfast, lunch, and snack menus for grades K-12 must meet the applicable weekly juice limit.

- **Breakfast:** The total cups of vegetable juices together with fruit juices (including fruit/vegetable juice blends) cannot exceed half of the total cups of fruits and vegetable substitutions offered during the week. For example, if the five-day breakfast menu offers 5 cups of fruits and vegetables, fruit and vegetable juices cannot exceed 2½ cups.

- **Lunch:** The total cups of vegetable juices offered during the week cannot exceed half of the total cups of vegetables offered during the week. For example, if a five-day lunch menu for grades 9-12 offers 5 cups of vegetables, vegetable juices cannot exceed 2½ cups.

- **Snack:** The total cups of vegetable juices together with fruit juices (including fruit/vegetable juice blends) cannot exceed half of the total cups of fruits and vegetable substitutions offered during the week. For example, if the weekly snack menu offers 1½ cups of fruits and vegetables, fruit and vegetable juices cannot exceed ¾ cup.

If SFAs serve larger amounts of fruits and vegetables, the weekly juice limit also increases. For more information on the weekly juice limits, refer to sections 4 and 6 of the CSDE's *Guide to the Meal Patterns for Grades K-12 in the National School Lunch Program and School Breakfast Program*.

Vegetable juice limit for preschool menus

The preschool juice limit applies to all fruit and vegetable juices. Juice credits as either the vegetables component or the fruits component at only one preschool meal or afterschool snack per day.

Crediting Vegetables in Combination Foods

Combination foods that contain vegetables credit based on the cups of the visible portion of vegetables per serving (refer to "Requirement for visible components" in section 2). Some examples include tomato sauce in pizza and lasagna, kidney beans and tomatoes in chili, vegetables in egg rolls, chickpeas in hummus, and vegetables in chicken-vegetable stir-fry.

SFAs must maintain documentation on the cups of vegetables per serving. Commercial products require a CN label (if the vegetables are part of a main dish entree that contains at least ½ oz eq of the MMA component) or PFS. Foods made from scratch require a standardized recipe that documents the cups of vegetables per serving based on the yields in the FBG. For more information, refer to "Required Crediting Documentation" in section 1.

Crediting Vegetables with Added Ingredients

When vegetables contain added ingredients (such as mayonnaise, yogurt, sugar, molasses, salad dressing, or breading), only the vegetable portion credits in school menus. Some examples of vegetables with added ingredients include tossed salad with dressing and croutons, potato salad made with mayonnaise, chopped celery, and spices, mashed potatoes made with butter and milk, baked beans with sauce, carrot-raisin salad, breaded vegetables like eggplant and onion rings, and vegetables with cheese.

- **Example:** To credit coleslaw as ½ cup of the vegetables component, the serving must contain ½ cup of shredded vegetables like cabbage and carrots, before added ingredients such as mayonnaise, vinegar, sugar, and spices.

SFAs must maintain documentation on the cups of vegetables per serving. Commercial products must have a CN label (if the vegetables are part of a main dish entree that contributes to the MMA component) or PFS. Foods made from scratch require a standardized recipe that documents the cups of vegetables per serving based on the yields in the FBG. For more information, refer to "Required Crediting Documentation" in section 1.

> SFAs are not required to maintain standardized recipes and PFS forms for vegetables without added ingredients, such as whole or cut-up fresh vegetables, canned vegetables, and frozen vegetables.

Produce Safety

SFAs must ensure that all food service personnel understand how to prepare produce safely. The Institute of Child Nutrition's (ICN) Produce Safety Resources webpage includes resources that describe best practices for receiving, storing, handling, and purchasing fresh and fresh-cut produce. The USDA's Best Practices for Handling Fresh Produce in Schools webpage provides guidance on the steps food service personnel can take to ensure that produce is prepared safely. For additional resources, visit the CSDE's Food Safety for Child Nutrition Programs webpage and Resources for Child Nutrition Programs webpage.

SFAs must ensure that salad bars comply with Hazard Analysis and Critical Control Point (HACCP). The SFA's standard operating procedure (SOP) for salad bars must include appropriate food safety procedures to ensure that foods stay at proper temperatures and are safe from contamination. For examples of SOPs, refer to the ICN's sample SOPs, *Preventing Contamination at Food Bars,* and visit the ICN's Standard Operating Procedures webpage.

Choking Prevention for Vegetables in Preschool Menus

Some vegetables may be a choking hazard for young children. Examples include cooked or raw whole-kernel corn, and small pieces of raw vegetables, e.g., raw green peas, whole beans, raw carrot rounds, baby carrots, string beans, celery, and other raw or partially cooked hard vegetables.

Consider children's ages and developmental readiness when deciding what vegetables to offer in preschool menus. Preparation techniques to reduce the risk of choking include cooking until soft, and cutting, dicing, or shredding into small pieces.

Noncreditable Foods in the Vegetables Component

Some examples of foods that do not credit as the vegetables component include:

- chili sauce;
- dehydrated vegetables used for seasoning;
- cream vegetable soups, e.g., cream of broccoli and cream of mushroom;
- home-canned products (for food safety reasons);
- ketchup;
- pickle relish;
- snack-type foods made from vegetables, such as potato chips and corn chips; and
- unpasteurized vegetable juices.

This list is not all-inclusive. For more information, refer to "Noncreditable Foods" in section 1 and the CSDE's resource, *Noncreditable Foods in the Meal Patterns for the School Nutrition Programs*.

> Menu planners should use the FBG to identify foods that credit as the vegetables component (refer to "Food Buying Guide for Child Nutrition Programs" in section 1).

Avoiding Common Compliance Issues for the Vegetables Component

The common compliance issues indicated below are based on findings from the CSDE's Administrative Review of the school nutrition programs.

- **Insufficient serving for K-12 lunch menus:** The daily lunch menu must provide the minimum serving of vegetables required for each grade group (refer to "Vegetable servings for K-12 lunch menus" in this section). For each lunch choice, SFAs must offer at least ¾ cup of vegetables for grades K-5 and 6-8, and at least 1 cup of vegetables for grades 9-12.

- **Not meeting the weekly vegetable subgroups for K-12 lunch menus:** Each weekly lunch menu must offer all students the minimum amount of each vegetable subgroup. For more information, refer to "Required Vegetable Subgroups for K-12 Lunch Menus" and "Ensuring K-12 Menu Compliance with the Vegetable Subgroups" in this section.

- **Not offering all vegetable subgroups on each serving line for K-12 lunch menus:** When SFAs have multiple serving lines or offer a variety of meal choices, the minimum required amounts of each vegetable subgroup must be available to all students on each serving line. SFAs cannot require students to select the vegetable subgroup choice from a different serving line. For more information, refer to "Ensuring K-12 Menu Compliance with the Vegetable Subgroups" in this section.

- **Incorrect vegetable subgroup substitutions for K-12 lunch menus:** Substituting a vegetable from a different subgroup (such as corn instead of broccoli) could cause the lunch menu to be noncompliant with the weekly vegetable subgroups requirement. Vegetable substitutions must be from the same vegetable subgroup unless the lunch menu offers that same subgroup later in the week or offers all vegetable subgroups each day. For more information, refer to "Vegetable subgroup substitutions" in this section.

- **Incorrect crediting of raw leafy greens:** Raw leafy greens credit as half the volume served, e.g., 1 cup equals ½ cup of the vegetables component. For more information, refer to "Crediting Raw Leafy Greens" in this section.

- **Missing or inadequate serving line signage for vegetable choices in K-12 lunch menus:** SFAs must provide information on school menus and appropriate signage on the serving line where the vegetable selections are located. This signage must clearly explain the number of vegetable servings that students may select for a reimbursable meal. For more information, refer to "Identifying vegetable servings for students" in this section and the CSDE's resource, *Signage Requirements for the National School Lunch Program and School Breakfast Program*.

SFAs must plan the vegetables component of school menus to avoid these compliance issues.

Resources for Crediting Vegetables

The resources below assist menu planners with crediting foods as the vegetables component in the NSLP, SBP, and ASP meal patterns.

- Crediting Beans, Peas, and Lentils in the School Nutrition Programs (CSDE): https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/credit_beans_peas_lentils_snp.pdf

- Crediting Documentation for the Child Nutrition Programs (CSDE webpage): https://portal.ct.gov/sde/nutrition/crediting-documentation-for-the-child-nutrition-programs

- Crediting Juices in the School Nutrition Programs (CSDE): https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/credit_juices_snp.pdf

- Crediting Smoothies in the School Nutrition Programs (CSDE): https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/credit_smoothies_snp.pdf

- Crediting Soups in the School Nutrition Programs (CSDE): https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/credit_soups_snp.pdf

- Crediting Summary Charts for the Meal Patterns for the School Nutrition Programs (CSDE): https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/crediting_summary_charts_snp.pdf

- Crediting Vegetable Noodles and Coconut in the Child Nutrition Programs (USDA webinar): https://www.fna.usda.gov/tn/crediting-vegetable-noodles-and-coconut-child-nutrition-programs

- Food Buying Guide for Child Nutrition Programs (USDA): https://www.fna.usda.gov/tn/fbg

- Preschool Meal Pattern Training for the School Nutrition Programs Module 6: Vegetables Component ("Preschool Meal Pattern Training" section of CSDE's Meal Patterns for Preschoolers in School Nutrition Programs webpage): https://portal.ct.gov/sde/nutrition/meal-patterns-preschoolers-in-school-nutrition-programs/preschool-meal-pattern-training#module6

- Product Formulation Statement for Documenting Vegetables and Fruits in School Meal Programs (USDA):
  https://www.fna.usda.gov/sites/default/files/resource-files/tn-pfs-vegfruit-template-schoolmeals.pdf

- Product Formulation Statement for Documenting Vegetables and Fruits in School Meal Programs: Completed Sample for Vegetables (USDA):
  https://www.fna.usda.gov/sites/default/files/resource-files/tn-veg-fruit-pfs-sample-schoolmeals-veg-subgroup.pdf

- Product Formulation Statement for Documenting Vegetables and Fruits in the Child and Adult Care Food Program, Summer Food Service Program, and NSLP Afterschool Snacks (USDA):
  https://www.fna.usda.gov/sites/default/files/resource-files/tn-pfs-vegfruit-template-cacfp.pdf

- School Lunch Menu Flexibilities: Beans, Peas, and Lentils (USDA webinar):
  https://www.youtube.com/watch?v=IJGC9zvx9Zk

- Serving Vegetables in the Child and Adult Care Food Program (USDA):
  https://www.fna.usda.gov/tn/cacfp/meal-pattern-training-worksheets/serving-vegetables

- Start with Half a Cup: Fresh Vegetable Portioning Guide for Schools (CSDE):
  https://portal.ct.gov/sde/nutrition/menu-planning/portion-control#StartHalfCup

- USDA Memo CACFP 09-2017: Vegetable and Fruit Requirements in the Child and Adult Care Food Program; Questions and Answers:
  https://www.fna.usda.gov/cacfp/vegetable-fruit-requirements-qas

- USDA Memo SP 02-2025: Substitution of Vegetables for Fruit Flexibility in the School Breakfast Program: Q&As for Program Operators:
  https://www.fna.usda.gov/sbp/vegetables-fruit-flexibility-qas
  Applies only to the meal patterns for grades K-12

- USDA Memo SP 05-2026, CACFP 03-2026, SFSP 03-2026: 2026 Appropriations Act: Effect on Child Nutrition Programs:
  https://www.fna.usda.gov/schoolmeals/appropriations-act-effect-cnp2026

- USDA Memo SP 26-2019, CACFP 13-2019, and SFSP 12-2019: Crediting Pasta Products Made of Vegetable Flour in the Child Nutrition Programs:
  https://www.fna.usda.gov/cn/crediting-pasta-products-made-vegetable-flour-child-nutrition-programs

- USDA Memo SP 40-2019, CACFP 17-2019, and SFSP 17-2019: Smoothies Offered in Child Nutrition Programs:
  https://www.fna.usda.gov/cn/smoothies-offered

- Vegetable Subgroups in the Child and Adult Care Food Program (CSDE):
  https://portal.ct.gov/-/media/sde/nutrition/cacfp/crediting/vegetable_subgroups_cacfp.pdf

- Vegetable Subgroups in the National School Lunch Program (CSDE):
  https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/vegetable_subgroups_nslp.pdf

- Vegetables Component (CSDE's Crediting Foods in School Nutrition Programs webpage):
  https://portal.ct.gov/sde/nutrition/crediting-foods-in-school-nutrition-programs/vegetables

- What's in a Meal Module 12: Vegetables Component (CSDE's Training Program, What's in a Meal: Meal Patterns for Grades K-12 in the School Nutrition Programs):
  https://portal.ct.gov/sde/nutrition/meal-pattern-training-materials#module12

For additional crediting resources, visit the "Vegetables" section of the CSDE's Crediting Foods in School Nutrition Programs webpage. Training on the vegetables component is available in Module 12: Vegetables Component of the CSDE's training program, *What's in a Meal: Meal Patterns for Grades K-12 in the School Nutrition Programs* and Module 6: Vegetables Component of the CSDE's *Preschool Meal Pattern Training for the School Nutrition Programs*.

5 — Fruits Component

The fruits component includes fresh, frozen, canned, and dried fruits, and pasteurized full-strength fruit juice. The meal patterns for grades K-12 and preschool require different servings for the fruits component. The required meal pattern servings are measured in cups for all grade groups. These servings refer to the edible portion of fruits after any applicable preparation techniques, such as peeling, removing seeds and pits, and cooking.

All fruits credit based on volume (cups) except for dried fruits, which credit as twice the volume served (refer to "Crediting Dried Fruits" in this section). Menu planners should consult the USDA's FBG to determine the number of servings provided by a specific quantity of fruit as purchased (refer to "Food Buying Guide for Child Nutrition Programs" in section 1).

Minimum Creditable Amount for Fruits

The minimum creditable amount is ⅛ cup. Fruits offered in amounts less than ⅛ cup do not count toward the required meal pattern servings. However, they do count toward the weekly dietary specifications for the breakfast and lunch meal patterns for grades K-12 (refer to "Dietary specifications for the SBP and NSLP meal patterns for grades K-12" in section 1).

When crediting fruits toward the meal pattern requirements, menu planners must round down to the nearest ⅛ cup. For example, a standardized recipe or commercial product that contains 2½ tablespoons of fruit per serving credits as ⅛ cup of the fruits component.

Offering A Combination of Fruits

SFAs may choose to serve a combination of several fruits to meet the daily requirement for each grade group if each serving contains at least ⅛ cup of fruit, i.e., the minimum creditable amount (refer to "Minimum creditable amounts" in section 1). For example:

- a lunch menu for grades 9-12 could meet the required 1 cup of the fruits component with ½ cup of peaches and ½ cup of applesauce; and
- a lunch menu for ages 2-5 could meet the required ¼ cup of the fruits component with ⅛ cup of peaches and ⅛ cup of applesauce.

The SFA determines these menu planning decisions.

Required Fruit Servings for K-12 Menus

The breakfast and lunch meal patterns for grades K-12 require minimum daily and weekly servings of the fruits component for each grade group. The fruits component may be offered as one of the two required meal components at snack.

Fruit servings for K-12 breakfast menus

The minimum daily requirement is 1 cup for all grades. The minimum weekly requirements are the sum of the daily requirements. A five-day breakfast menu must offer 5 cups of fruits over the week. A seven-day breakfast menu must offer 7 cups of fruits over the week.

> Vegetables may substitute for the fruits component at any breakfast (refer to "Vegetable substitutions for K-12 breakfast menus" in section 4).

Fruit servings for K-12 lunch menus

The minimum daily serving is ½ cup for grades K-5 and grades 6-8, and 1 cup for grades 9-12. The minimum weekly requirements are the sum of the daily requirements. A five-day lunch menu for grades K-5 or grades 6-8 must offer at least ½ cup daily and at least 2½ cups weekly. A five-day lunch menu for grades 9-12 must offer 5 cups of fruits over the week.

Fruit servings for K-12 snack menus

The snack meal pattern requires the minimum serving of any two of the five meal components. The minimum serving of fruits offered at snack is ¾ cup for all grade groups. Only one meal component may be a creditable beverage such as juice, a fruit smoothie, or milk. Juice cannot be served when milk is the only other meal component at snack.

Fruit servings for K-12 breakfast and lunch menus with OVS

When implementing OVS at breakfast and lunch for grades K-12, menu planners should consider how the planned servings affect students' selection of reimbursable meals. The CSDE encourages SFAs to offer all fruits in ½-cup servings and allow students to choose two servings. This makes it easier for students to select the required ½ cup of fruits or vegetables for a reimbursable meal. For more information on OVS, refer to the CSDE's *Offer versus Serve Guide for School Meals* and visit the CSDE's Offer versus Serve for School Nutrition Programs webpage.

SFAs must use meal identification signage to instruct students on how much food to select from each meal component daily for a reimbursable meal with OVS, based on the planned servings for each grade group.

- **Example:** A high school allows students to select two ½-cup servings of fruit to meet the minimum daily 1-cup serving for grades 9-12 at lunch. The lunch menu and cafeteria signage must clearly communicate that students may select up to two servings of fruit with each meal. This signage must be on the serving line where the fruit selections are located.

For more information on signage, refer to the CSDE's *Signage Requirements for the National School Lunch Program and School Breakfast Program* and section 4 of the CSDE's *Guide to Meal Service Requirements for the National School Lunch Program and School Breakfast Program Meal Patterns for Grades K-12*.

Required Fruit Servings for Preschool Menus

The guidance below summarizes the required servings of the fruit component for the preschool meal patterns.

Fruit servings for preschool breakfast menus

Vegetables and fruits are one meal component at breakfast. SFAs may serve vegetables, fruits, or both. The minimum servings are ¼ cup for ages 1-2 and ½ cup for ages 3-5.

Fruit servings for preschool lunch menus

The preschool lunch meal pattern requires the fruits component but also allows vegetable substitutions. The minimum servings are ⅛ cup for ages 1-2 and ¼ cup for ages 3-5.

Vegetable substitutions for preschool lunch menus

Vegetables may substitute for the fruits component at any lunch. For example, menu planners may choose to substitute vegetables for the fruits component on Monday and Friday, or every day of the week. Lunch menus that include vegetable substitutions must meet one of the requirements below.

1. Offer one serving of the vegetables component and one serving of the fruits component.
2. Offer two different servings of the vegetables component.

A lunch cannot contain two servings of only the fruits component, without offering vegetables.

Fruit servings for preschool snack menus

The snack meal pattern requires the minimum serving of any two of the five meal components. The minimum serving of fruits offered at snack is ½ cup for both age groups. Only one meal component may be a creditable beverage such as juice, a fruit smoothie, or milk. Juice cannot be served when milk is the only other meal component at snack.

Crediting Canned Fruits

Allowable canned fruits include canned fruits in juice, water, and light syrup. Juice in canned fruit or fruit cups may count toward the fruits component and does not count toward the weekly juice limit. For example, ½ cup of canned peaches in juice credits as ½ cup of the fruits component.

Crediting Coconut

Fresh and frozen coconut credit as the fruits component based on the volume served. For example, ⅛ cup of fresh or frozen coconut credits as ⅛ cup of the fruits component. Dried coconut credits the same as other dried fruits, i.e., twice the volume served (refer to "Crediting Dried Fruits" in this section). For example, ⅛ cup of dried coconut credits as ¼ cup of the fruits component

Coconut is high in calories and saturated fat and should be limited in school menus. Coconut flour, coconut oil, and coconut milk do not credit.

The requirements for crediting coconut are summarized in USDA Memo SP 34-2019, CACFP 15-2019, and SFSP 15-2019: *Crediting Coconut, Hominy, Corn Masa, and Masa Harina in the Child Nutrition Programs*.

Crediting Dried Fruits

Dried fruits (such as raisins, apricots, dried cherries, dried cranberries, dried blueberries, mixed dried fruit, and dried coconut) credit as twice the volume served. For example, ¼ cup of raisins credits as ½ cup of the fruits component.

This crediting does not apply to dried fruits in amounts less than ⅛ cup (the minimum creditable amount). For example, $^{1}/_{16}$ cup (1 tablespoon) of raisins does not credit as ⅛ cup fruit.

Manufacturers sometimes process dried fruits with added sugars to keep the fruit pieces separated. The CSDE encourages menu planners to read labels and choose dried fruit without added sweeteners, including sugars and nonnutritive sweeteners (such as aspartame, acesulfame potassium, sucralose, and stevia). Menu planners should limit dried fruits with

added sweeteners to help K-12 breakfast and lunch menus meet the weekly dietary specifications (refer to "Dietary specifications for the SBP and NSLP meal patterns for grades K-12" in section 1).

Crediting Fresh Fruits

The crediting contribution of one piece of fresh fruit (whole or cut up) depends on the type and size (count pack), and ranges from ¼ cup to 1¼ cups. The count pack is the number of whole fruits that that fit into a case. The smaller the count, the larger the size of the fruit.

For example, the FBG indicates that:

- one 60-count plum, one 88-count peach, and one clementine each credit as ⅜ cup of fruit;
- one 100-120-count banana, one 150-count pear, one 80-count peach, one 138-count orange, and one 45-count plum each credit as ½ cup of fruit;
- one 113-count and 125-count orange each credit as ⅝ cup of fruit;
- one size 56-64 nectarine, one size 56 peach, and one 120-count pear each credit as ¾ cup of fruit; and
- one 125-138-count apple credits as 1 cup of fruit.

Menu planners must ensure that an individual piece of fresh fruit (whole or cut up) provides the correct serving for each meal and grade group. If the amount is less than the required meal pattern serving, the meal must include additional fruit to meet the full serving. The examples below illustrate this requirement for the fruits component.

- **Breakfast for grades K-12:** The required serving of the fruits component is 1 cup for all grades. One regular banana (100-120 count) credits as ½ cup of fruit and does not provide the full serving. To meet the meal pattern requirements, the breakfast menu must include an additional ½ cup of fruits or vegetables. Vegetables may substitute for the fruits component at any breakfast (refer to "Vegetable substitutions for K-12 breakfast menus" in section 4).

- **Lunch for grades K-12:** The required serving of the fruits component is ½ cup for grades K-5 and 6-8 and 1 cup for grades 9-12. One clementine credits as ⅜ cup of fruit and does not provide the full serving for any grade group. To meet the meal pattern requirements, the lunch menu must include an additional ⅛ cup of fruit for grades K-5 and 6- 8 and an additional ⅝ cup of fruit for grades 8-12.

- **Snack for grades K-12:** When fruit is offered as one of the two required meal components, the required serving is ¾ cup for all grades. One kiwi credits as ¼ cup of fruit, which does not provide the full serving. To meet the meal pattern requirements, the afterschool snack menu must include an additional ½ cup of fruit.

- **Breakfast for preschool:** The preschool breakfast meal pattern for ages 3-5 requires ½ cup of fruits, vegetables, or both. One 120-count tangerine credits as ⅜ cup of fruit, which does not provide the full serving. To meet the meal pattern requirements, the breakfast menu must include an additional ⅛ cup of fruits or vegetables. Vegetables and fruits are one meal component at breakfast.

- **Snack for preschool:** The required serving of the fruits component offered at snack is ½ cup. One kiwi credits as ¼ cup of fruit, which does not provide the full serving. To meet the meal pattern requirements, the afterschool snack menu must include an additional ¼ cup of the fruits component.

The table below lists the FBG's meal pattern contribution of some fresh fruits, and the additional amount needed to provide ½ cup or 1 cup. For K-12 menus, the additional amount at lunch may be from the same fruit or a different fruit. The additional amount at breakfast may be from fruits or vegetables (refer to "Vegetable substitutions for K-12 breakfast menus" in section 4).

For preschool menus, the additional amount at lunch may be from the same fruit, a different fruit, or a vegetable (refer to "Vegetable substitutions for preschool lunch menus" in this section). The additional amount at breakfast may be from fruits or vegetables (refer to "Fruit servings for preschool breakfast menus" in this section).

Table 5-1. Meal pattern contribution of whole fresh fruits

Fruit (one piece)	Meal pattern contribution from FBG	Additional amount for ½ cup	Additional amount for 1 cup
Apple, 125 to 138 count	1 cup	0	0
Apricot, medium (1 ⅜-inch diameter)	¼ cup	¼ cup	¾ cup
Banana, 150 count, petite	⅜ cup	⅛ cup	⅝ cup
Banana, 100-120 count, regular	½ cup	0	½ cup
Clementine, 1 whole	⅜ cup	⅛ cup	⅝ cup
Grapefruit, 27-32 count, large	1 cup	0	0

Fruit (one piece)	Meal pattern contribution from FBG	Additional amount for ½ cup	Additional amount for 1 cup
Kiwi, 33-39 count	¼ cup	¼ cup	¾ cup
Nectarine, size 88-96 (2¼-inch diameter)	½ cup	0	½ cup
Nectarine, size 56-64 (2¾-inch diameter)	¾ cup	0	¼ cup
Orange, Arizona or California, 113 count	⅝ cup	0	⅜ cup
Orange, Florida or Texas, 125 count	⅝ cup	0	⅜ cup
Orange, Arizona or California, 138 count	½ cup	0	½ cup
Peach, size 88 and 84 (2⅛-inch diameter)	⅜ cup	⅛ cup	⅝ cup
Peach, size 64 and 60 (2½-inch diameter)	⅔ cup	0	⅓ cup
Peach, size 80	½ cup	0	½ cup
Peach, size 56	¾ cup	0	¼ cup
Pear, 150 count	½ cup	0	½ cup
Pear, 120 count	¾ cup	0	¼ cup
Pear, D'Anjou, Bosc, or Bartlett, 100 count	1¼ cups	0	0
Plum, purple, red, or black, size 45 and 50 (2-inch diameter)	½ cup	0	½ cup
Plum, Japanese or hybrid, size 60 and 65	⅜ cup	⅛ cup	⅝ cup
Tangerine, 120 count	⅜ cup	⅛ cup	⅝ cup

Crediting Frozen Fruits

Frozen fruits credit based on the volume served. For some frozen fruits (like frozen sliced strawberries and frozen apricots), the serving includes the juice or liquid that accumulates during thawing. For other frozen fruits (like frozen berry blends, frozen sweet cherries, and frozen mangoes), the serving is for the thawed, drained fruit. Check the FBG for the specific serving and crediting requirements for different types of frozen fruits.

Some frozen fruits contain added sugars. Menu planners should limit frozen fruits with added sugars to help school menus meet the weekly calorie limits (refer to "Dietary specifications for the SBP and NSLP meal patterns for grades K-12" in section 1).

Crediting Fruits in Commercial Products

Commercial products that contain at least ⅛ cup of one or more visible fruits (such as an apple turnover) credit based on the cups of fruit per serving (refer to "Requirement for visible components" in section 1). Commercial products must have a PFS that documents the cups of fruits per serving (refer to "Documentation for commercial processed products" in section 1).

Crediting Fruits in Yogurt

Fruits in commercially prepared yogurt (either blended or on the bottom or top) do not credit. Menu planners may credit fresh, frozen, or dried fruits added to yogurt as a separate meal component, based on the cups served. Some examples include yogurt topped with fresh blueberries or a yogurt-fruit parfait made with frozen sliced strawberries.

Crediting Fruits in Desserts

Some examples of desserts that contain added fruit include fruited gelatin, fruit pies, fruit cobblers, and fruit crisps. The visible fruit portion of desserts may credit toward the fruits component based on the cups of fruit per serving (refer to "Requirement for visible components" in section 1).

- **Example:** A fruit turnover that contains ½ cup of apples per serving credits as ½ cup of the fruits component.

The minimum creditable amount is ⅛ cup. SFAs must document the cups of fruit per serving with a PFS for commercial products and a standardized recipe for desserts made from scratch (refer to "Required Crediting Documentation" in section 1).

For K-12 breakfast and lunch menus, the grain portion of allowable grain-based fruit desserts (such as the crust of a fruit turnover) may credit toward the grains component based on the oz eq per serving (refer to "Grain-based Desserts" in section 6). The grain portion counts toward the weekly 2 oz eq limit for grain-based desserts at lunch (refer to "Limit for grain-based desserts in K-12 lunch menus" in section 6). Grain-based desserts do not credit in the preschool meal patterns or the ASP meal pattern for grades K-12.

Menu planners should limit sweetened fruit desserts or grain-based fruit desserts to help school menus meet the weekly limits for calories, saturated fat, and sodium (refer to "Dietary specifications for the SBP and NSLP meal patterns for grades K-12" in section 1).

Crediting Fruits in Yogurt

Fruits in commercially prepared yogurt (either blended or on the bottom or top) do not credit. Menu planners may credit fruits offered as a separate meal component, such as yogurt topped with fresh blueberries a yogurt-fruit parfait made with sliced strawberries.

Crediting Fruits with Added Ingredients

When fruits contain added ingredients (such as yogurt, mayonnaise, sugar, butter, sauce, or toppings), only the fruit portion credits toward the meal patterns. Some examples of fruits with added ingredients include yogurt-fruit parfaits, carrot-raisin salad, and Waldorf salad.

- **Example:** To credit Waldorf salad as ½ cup of the fruits component, the serving must contain ½ cup of fruit (e.g., diced apples, sliced grapes, and raisins), before added ingredients such as mayonnaise, sugar, spices, and walnuts.

SFAs must document the cups of fruit per serving with a PFS for commercial products and a standardized recipe for foods made from scratch (refer to "Required Crediting Documentation" in section 1). This documentation must be based on the food yields in the FBG (refer to "Food Buying Guide for Child Nutrition Programs" in section 1).

SFAs are not required to maintain standardized recipes and PFS forms for fruits without added ingredients, such as whole or cut-up fresh fruits; canned fruits in juice, water, or light syrup; frozen fruits; and dried fruits.

Crediting Fruit Juices

Any types of pasteurized full-strength (100 percent) fruit juices may credit in reimbursable meals and afterschool snacks. Fruit juices may be fresh, frozen, or made from concentrate. The name of the full-strength fruit juice on the label must include one of the terms below.

- Full-strength juice
- Single-strength juice
- 100 percent juice
- Reconstituted juice
- Juice from concentrate

The statements "natural" and "organic" do not indicate that a juice is full strength.

Juices may be fresh, frozen, or made from concentrate, and may be served liquid or frozen, such as full-strength frozen juice pops. For more information, refer to "Frozen 100 percent juice products" in this section and the CSDE's resources, *Crediting Juices in the School Nutrition Programs* and *Crediting Smoothies in the School Nutrition Programs*.

Juices do not credit when used as an ingredient in another food or beverage product, except for smoothies (refer to "Crediting Fruit Juices and Pureed Fruits in Smoothies" in this section).

> The USDA recommends serving whole fruits (fresh, frozen, canned, and dried) more often than juices. Juices do not provide the same nutritional benefits as whole fruits and vegetables, which contain fiber, fewer calories, and more nutrients. K-12 breakfast and lunch menus that serve juices frequently might exceed the weekly calorie limits (refer to "Dietary specifications for the SBP and NSLP meal patterns for grades K-12" in section 1).

Juice concentrates

Juice made from concentrate is reconstituted with a volume of water that is several times the amount of juice concentrate. A typical reconstitution ratio might be three parts water to one part concentrate, but this ratio may vary for different juice products.

Commercial juice products made from concentrate will list "water" as the first ingredient, followed by the type of juice concentrate, for example, "water, orange juice concentrate" and "filtered water, grape juice concentrate." Juices made from concentrate that are labeled "100 percent juice" credit as the fruit component when the SFA follows the manufacturer's specific instructions for reconstituting.

Juice blends

Juice blends must be a combination of full-strength (100 percent) fruit juices, vegetable juices, or fruit and vegetable juices. The crediting of vegetable juice blends depends on the information provided in the manufacturer's PFS. If the PFS indicates the amount of each type of juice in the blend, SFAs may credit each type accordingly.

For example, a PFS indicates that a commercial juice blend contains ⅛ cup of apple juice and ⅛ cup of sweet potato juice. This product credits as ⅛ cup of the fruits component and ⅛ cup of the vegetables component (red/orange subgroup).

If a commercial product does not have a PFS (or the PFS does not provide the specific crediting information for each type of juice), juice blends credit based on the first juice ingredient. If the first juice ingredient is fruit juice, the product credits as the fruits component. If the first juice ingredient is vegetable juice, the product credits as the additional vegetables requirement and cannot contribute to the vegetable subgroups (refer to "Additional Vegetables" in section 4).

- **Example**
  Ingredients: Reconstituted vegetable juice blend (water and concentrated juices of sweet potatoes, purple carrots, carrots), reconstituted fruit juices (water and concentrated juices of apples, white grapes, cranberries, blackberries), contains less than 2% of: natural flavoring, citric acid, lemon juice.

  For K-12 menus, this product credits as either the other vegetables subgroup or the additional vegetable requirement because the first ingredient is a reconstituted vegetable juice blend (refer to "Vegetable Subgroups at Lunch" and "Additional Vegetables" in section 4). For preschool menus, this product credits as the vegetables component.

SFAs must maintain crediting documentation for juice blends credited toward the vegetable subgroups.

Frozen 100 percent juice products

Frozen 100 percent fruit juice products like full-strength frozen juice pops credit based on the fluid volume prior to freezing. SFAs must obtain a PFS from the manufacturer to document this information (refer to "Documentation for commercial processed products" section 1). Frozen fruit juice counts toward the juice limit for breakfast, lunch and snack (refer to "Juice Limits for K-12 and Preschool Menus" in this section).

Apple cider

Apple cider must be pasteurized 100 percent full-strength juice. Pasteurized juice has been heat-treated to kill harmful bacteria. Menu planners must check labels, as some brands of apple cider are not pasteurized. SFAs cannot serve unpasteurized apple cider or any other type of unpasteurized juices. Apple cider counts toward the juice limit for breakfast, lunch and snack (refer to "Juice Limits for K-12 and Preschool Menus" in this section).

Coconut water

Coconut water labeled as 100 percent juice credits toward the fruits component based on the volume served. Coconut water counts toward the juice limit for breakfast, lunch and snack (refer to "Juice Limits for K-12 and Preschool Menus" in this section).

Juice ingredients

All pasteurized 100 percent juices meet the USDA's requirements for the fruits component, but their ingredients may vary among manufacturers. The FDA's labeling regulations allow 100 percent juice to contain added ingredients and still be labeled "100% juice." Therefore, some 100 percent juices contain added ingredients such as artificial flavors, artificial colors (e.g., red 40, blue 1, yellow 5 and 6, and titanium dioxide), preservatives (e.g., sodium benzoate and potassium sorbate), flavor enhancers (e.g., ethyl maltol), and emulsifiers or thickeners (e.g., glycerol esters of wood rosin and xanthan gum). The CSDE encourages menu planners to read ingredients statements and choose 100 percent juices without these added ingredients.

Juice Limits for K-12 and Preschool Menus

The juice limits for each school nutrition program are summarized below. These juice limits apply to all sources of 100 percent juice, including juices that are fresh, frozen, and made from concentrate; frozen juice pops made from 100 percent juice; and pureed fruits and vegetables in fruit/vegetable smoothies.

- **SBP meal patterns for grades K-12:** The total cups of all juices (fruit, vegetable, and combination) offered during the week cannot exceed half of the total cups of all fruits (including vegetable substitutions) offered during the week. For example, if the five-day breakfast menu offers 5 cups of fruits and vegetables, fruit and vegetable juices cannot exceed 2½ cups.

- **NSLP meal patterns for grades K-12:** The NSLP meal patterns require separate weekly juice limits for the fruits component and the vegetables component. Fruit juices cannot exceed half of the weekly fruits offered at lunch. Vegetable juices cannot exceed half of the weekly vegetables offered at lunch. For example, if the five-day lunch menu for grades K-5 offers 2½ cups of fruits, fruit juices cannot exceed 1¼ cups.

- **ASP meal pattern for grades K-12:** The total cups of all juices (fruit, vegetable, and combination) offered during the week cannot exceed half of the total cups of fruits and vegetables offered during the week. For example, if the weekly snack menu offers 1 cup of fruits and vegetables, juice cannot exceed ½ cup. In addition, juice cannot be served when milk is the only other meal component at snack.

- **NSLP, SBP, and ASP preschool meal patterns:** Juice credits as either the vegetables component or the fruits component at only one preschool meal or afterschool snack per day.

Menu planners must check their breakfast, lunch, and snack menus to ensure that the total cups of offered juices do not exceed the required limits for each school nutrition program and grade group.

For K-12 menus, the weekly juice limit increases if SFAs serve larger amounts of fruits and vegetables. For more information on the weekly juice limits, refer to sections 4 and 6 of the CSDE's *Guide to the Meal Patterns for Grades K-12 in the National School Lunch Program and School Breakfast Program*.

Crediting Fruit Juices and Pureed Fruits in Smoothies

Fruit juices and pureed fruits in smoothies credit only as juices toward the fruits component. Crediting is based on the total cups of juices and pureed fruits per serving. For example, a smoothie that contains ½ cup of pureed strawberries credits as ½ cup of fruit juice.

Juice limit for smoothies

Juices and pureed fruits in smoothies count with all other fruit juices toward the weekly juice limit for the fruits component (refer to "Juice Limits for K-12 and Preschool Menus" in this section).

Crediting pureed fruits in commercial smoothies

Commercial smoothies made with pureed fruits credit based on the volume of fruits after pureeing and before freezing. The minimum creditable amount is ⅛ cup.

The product label must include a statement regarding the "percent juice content," which is required by the FDA for beverages made with fruit/vegetable juices or purees. For example, an 8-fluid ounce smoothie made from fruit puree labeled with "contains 50% juice" credits as 4 fluid ounces (½ cup) of juice. SFAs may need to obtain a PFS from the manufacturer to document the amount of pureed fruits in the product (refer to "Documentation for commercial processed products" in section 1).

Crediting concentrated fruit purees and juices in smoothies

Concentrated fruit purees and concentrated juices are added sugars. They do not credit in smoothies unless they are reconstituted to full-strength fruit puree or full-strength juice. The amount before reconstituting is used to determine the creditable amount.

Combined fruits and vegetables in smoothies

Smoothies that contain any combination of pureed fruits, pureed vegetables, and 100 percent fruit and vegetable juice blends credit based on the greatest fruit or vegetable ingredient.

- Commercial smoothies credit as the fruits component if the first juice ingredient is fruit juice or fruit puree. Commercial smoothies credit as the vegetables component if the first juice ingredient is vegetable juice or vegetable puree.
- Smoothies made from scratch credit as the fruits component if fruit juice or fruit puree is the greatest juice ingredient in the SFA's standardized recipe. Smoothies made from scratch credit as the vegetables component if vegetable juice or vegetable puree is the

greatest juice ingredient in the SFA's standardized recipe.

For information on crediting smoothies as the vegetables component, refer to "Crediting Vegetables in Smoothies" in section 4.

Crediting other meal components in smoothies

Other creditable ingredients in smoothies include vegetable juices and pureed vegetables (refer to "Crediting Vegetables in Smoothies" in section 4), milk (refer to "Crediting Milk in Smoothies" in section 2), and yogurt (refer to "Crediting yogurt in smoothies" in section 3).

Required documentation for smoothies

SFAs must have documentation on file that indicates the quantity of all creditable ingredients in the smoothie serving, such as pureed fruits and vegetables, juices, yogurt, and milk. The total creditable amount in a smoothie cannot exceed the volume served. For example, ½ cup of a commercial smoothie cannot credit as 1 cup of juice.

Commercial smoothie products that contain at least ½ oz eq of yogurt might have a CN label. Products that are not CN labeled require a PFS. Foods made from scratch require a standardized recipe that documents the cups of fruits per serving based on the yields in the FBG. For more information, refer to "Required Crediting Documentation" in section 1.

Noncreditable commercial smoothies

Commercial smoothies that contain dietary supplements (such as whey protein powder) or herbal supplements (such as gingko biloba, ginseng, and echinacea) do not credit. Noncreditable commercial smoothies also include probiotic dairy drinks, drinkable yogurt, and yogurt drinks.

Required signage for smoothies in K-12 menus

The USDA requires school nutrition programs to identify the meal components offered to K-12 students. SFAs must inform students about the meal components in a smoothie by listing the type of smoothie on the menu and serving line signage. For example, the menu could indicate "peach and milk smoothie" or "strawberry smoothie (made with fresh strawberries, low-fat milk, and yogurt)."

For more information, refer to the CSDE's resource, *Signage Requirements for the National School Lunch Program and School Breakfast Program*, and section 4 of the CSDE's *Guide to Meal Service Requirements for the National School Lunch Program and School Breakfast*

Program Meal Patterns for Grades K-12. For sample signage templates, visit New England Dairy's Smoothies webpage.

Resources for crediting smoothies

The resources below assist menu planners with crediting smoothies in reimbursable meals and afterschool snacks.

- Crediting Smoothies in the School Nutrition Programs (CSDE): https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/credit_smoothies_snp.pdf
- Offering Smoothies as Part of Reimbursable School Meals (USDA): https://www.fna.usda.gov/tn/offering-smoothies-part-reimbursable-school-meals
- USDA Memo SP 40-2019, CACFP 17-2019, and SFSP 17-2019: Smoothies Offered in Child Nutrition Programs: https://www.fna.usda.gov/cn/smoothies-offered

These resources are available under "Smoothies" in the "Fruits" section of the CSDE's Crediting Foods in School Nutrition Programs webpage.

Pureed Fruits in Other Foods

Pureed fruits in foods other than smoothies do not credit as the fruits component (refer to "Requirement for visible components" in section 1). Some examples include pureed prunes or applesauce in muffins and pureed bananas in banana bread.

Choking Prevention for Fruits in Preschool Menus

Some fruits may be a choking hazard for young children. Examples include whole grapes, berries, melon balls, apples and other hard pieces of raw fruit, and dried fruits.

Consider children's ages and developmental readiness when deciding what fruits to offer in preschool menus. Preparation techniques to reduce the risk of choking include cooking until soft, and cutting, dicing, or shredding into small pieces.

Noncreditable Fruits

Some examples of foods that do not credit as the fruits component include:

- banana chips;
- commercial fruit smoothies that contain dietary or herbal supplements;
- fruit snacks (e.g., fruit roll-ups, fruit leathers, fruit wrinkles, fruit twists, yogurt-covered fruit snacks);
- home-canned products (for food safety reasons);
- jams, jellies, and preserves;
- juice drinks that are not 100 percent juice such as grape juice drink, orange juice drink, pineapple-grapefruit drink, cranberry juice cocktail, and lemonade; and
- unpasteurized fruit juices.

This list is not all-inclusive. For more information, refer to "Noncreditable Foods" in section 1 and the CSDE's resource, *Noncreditable Foods in the Meal Patterns for the School Nutrition Programs*.

> Menu planners should use the FBG to identify foods that credit as the fruits component (refer to "Food Buying Guide for Child Nutrition Programs" in section 1).

Avoiding Common Compliance Issues for the Fruits Component

The common compliance issues indicated below are based on findings from the CSDE's Administrative Review of the school nutrition programs.

- **Insufficient servings for K-12 breakfast and lunch menus:** The daily menu must provide the minimum serving of fruit required for each grade group (refer to "Required Servings of Fruits for K-12 Menus" in this section). For each lunch choice, SFAs must offer at least ½ cup of fruit for grades K-5 and 6-8, and at least 1 cup for grades 9-12. For each breakfast choice, SFAs must offer at least 1 cup of fruit for all grades.

- **Incorrect crediting of dried fruits:** Dried fruits (such as raisins and dried apricots) credit as twice the volume served, e.g., 1 cup of dried fruit equals ½ cup of the fruits component. For more information, refer to "Crediting Dried Fruits" in this section.

- **Incorrect crediting of fresh fruits:** One piece of fresh fruit does not always credit as ½ cup of the fruits component. Some types of fresh fruits provide less than ½ cup in one piece. SFAs must credit fresh fruits based on the yields indicated in the FBG (refer to "Crediting Fresh Fruits" in this section).

- **Missing or inadequate serving line signage for fruit choices for K-12 menus:** SFAs must provide information on the menu and appropriate signage on the serving line where the fruit selections are located. This signage must clearly explain the number of fruit servings that students may select for a reimbursable meal. For more information, refer to "Fruit servings with OVS at breakfast and lunch" in this section and the CSDE's *Signage Requirements for the National School Lunch Program and School Breakfast Program*.

SFAs must plan the fruits component of school menus to avoid these compliance issues.

Resources for Crediting Fruits

The resources below assist menu planners with crediting foods as the fruits component in the NSLP, SBP, and ASP meal patterns.

- Crediting Juices in the School Nutrition Programs (CSDE): https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/credit_juices_snp.pdf
- Crediting Smoothies in the School Nutrition Programs (CSDE): https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/credit_smoothies_snp.pdf
- Crediting Summary Charts for the Meal Patterns for the School Nutrition Programs (CSDE): https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/crediting_summary_charts_snp.pdf
- Crediting Vegetable Noodles and Coconut in the Child Nutrition Programs (USDA webinar): https://www.fna.usda.gov/tn/crediting-vegetable-noodles-and-coconut-child-nutrition-programs
- Food Buying Guide for Child Nutrition Programs (USDA): https://www.fna.usda.gov/tn/fbg
- Fruits Component (CSDE's Crediting Foods in School Nutrition Programs webpage): https://portal.ct.gov/sde/nutrition/crediting-foods-in-school-nutrition-programs/fruits
- Preschool Meal Pattern Training for the School Nutrition Programs, Module 7: Fruits Component ("Preschool Meal Pattern Training" section of CSDE's Meal Patterns for Preschoolers in School Nutrition Programs webpage): https://portal.ct.gov/sde/nutrition/meal-patterns-preschoolers-in-school-nutrition-programs/preschool-meal-pattern-training#module7
- Product Formulation Statement for Documenting Vegetables and Fruits in School Meal Programs (USDA): https://www.fna.usda.gov/sites/default/files/resource-files/tn-pfs-vegfruit-template-schoolmeals.pdf
- Product Formulation Statement for Documenting Vegetables and Fruits in School Meal Programs: Completed Sample for Fruits (USDA): https://www.fna.usda.gov/sites/default/files/resource-files/tn-veg-fruit-pfs-sample-schoolmeals-veg-subgroup.pdf

- Product Formulation Statement for Documenting Vegetables and Fruits in the Child and Adult Care Food Program, Summer Food Service Program, and NSLP Afterschool Snacks (USDA): https://www.fna.usda.gov/sites/default/files/resource-files/tn-pfs-vegfruit-template-cacfp.pdf

- Start with Half a Cup: Fresh Fruit Portioning Guide for Schools (CSDE): https://portal.ct.gov/sde/nutrition/menu-planning/portion-control#StartHalfCup

- USDA memo SP 34-2019, CACFP 15-2019 and SFSP 15-2019: Crediting Coconut, Hominy, Corn Masa, and Corn Flour in the Child Nutrition Programs: https://www.fna.usda.gov/cn/crediting-coconut-hominy-corn-masa-and-masa-harina-child-nutrition-programs

- USDA Memo SP 40-2019, CACFP 17-2019, and SFSP 17-2019: Smoothies Offered in Child Nutrition Programs: https://www.fna.usda.gov/cn/smoothies-offered

- What's in a Meal Module 11: Fruits Component (CSDE's Training Program, What's in a Meal: Meal Patterns for Grades K-12 in the School Nutrition Programs): https://portal.ct.gov/sde/nutrition/meal-pattern-training-materials#module11

For additional crediting resources, visit the "Fruits" section of the CSDE's Crediting Foods in School Nutrition Programs webpage. Training on the fruits component is available in Module 11: Fruits Component of the CSDE's training program, *What's in a Meal: Meal Patterns for Grades K-12 in the School Nutrition Programs*, and Module 7: Fruits Component of the CSDE's *Preschool Meal Pattern Training for the School Nutrition Programs*.

6 — Grains Component Crediting and Whole Grain-rich Requirements

The USDA encourages menu planners to offer a variety of different grains in school menus. The grains component includes breads and bread products such as:

- breads, biscuits, bagels, rolls, tortillas, and muffins;
- snack products like crackers (including sweet cracker like animal crackers and graham crackers), hard pretzels, hard bread sticks, tortilla chips, and popcorn;
- certain grain-based desserts like cookies, granola bars, cereal bars, cake, and pastries (subject to crediting restrictions in the NSLP and SBP meal patterns for grades K-12 and not allowed in the NSLP, SBP, and ASP preschool meal patterns or the ASP meal pattern for grades K-12);
- cereal grains like buckwheat, brown rice, bulgur, and quinoa;
- ready-to-eat (RTE) breakfast cereals like puffed cereals, whole-grain round or flaked cereal, and granola;
- cooked breakfast cereals (instant and regular) like oatmeal, farina, and cream of wheat;
- bread products used as an ingredient in another menu item, such as combination foods, e.g., breading on fish or poultry and pizza crust in pizza; and
- pasta products like macaroni, spaghetti, noodles, orzo, and couscous.

Grain menu items must be whole grain-rich (WGR) or enriched. Breakfast cereals must be WGR, enriched, or fortified and cannot exceed 6 grams of added sugars per dry ounce. Bran and germ credit the same as enriched grains.

Crediting Requirements for K-12 and Preschool Menus

The NSLP, SBP, and ASP meal patterns for grades K-12 and preschool have different crediting and WGR criteria and different WGR requirements. The crediting and WGR criteria for K-12 menus are stricter than the crediting and WGR criteria for preschool menus because the meal patterns for grades K-12 require a limit for noncreditable grains (refer to "Noncreditable Grains Limit for K-12 Menus" in this section). The preschool crediting and WGR criteria follow the requirements for the Child and Adult Care Food Program (CACFP) meal patterns for children and do not require a limit for noncreditable grains.

SFAs must determine if grain menu items meet the applicable crediting and serving size (oz eq) requirements for each meal pattern and grade group.

1. **Crediting criteria:** Grain menu items must be WGR or enriched. In addition, grain menu items for K-12 menus cannot exceed the limit for noncreditable grains (refer to "Noncreditable Grains Limit for K-12 Menus" in this section).

2. **Oz eq contribution:** Menu planners must determine the oz eq contribution of the planned serving of creditable grain menu items. Guidance on how to determine a grain menu item's oz eq contribution is provided section 7.

These requirements apply to all grain menu items, including commercial grain products and foods prepared from scratch by the SFA or vendors.

Comparison of grain requirements for grades K-12 and preschool

A summary chart of the requirements for the grains component is available in the CSDE's resource, *Comparison of the Grains Component Requirements in the Meal Patterns for School Nutrition Programs*. This chart compares the requirements for the grains component in the meal patterns for grades K-12 and preschool, including the updates required by the USDA final rule, *Child Nutrition Programs: Meal Patterns Consistent with the 2020-2025 Dietary Guidelines for Americans*.

WGR Requirement for K-12 and Preschool Menus

The NSLP, SBP, and ASP meal patterns for grades K-12 and preschool require minimum servings of WGR grains. These requirements are summarized below.

WGR requirement for K-12 Menus

At least 80 percent of all grains offered at breakfast, lunch, and snack must be WGR. The determination of whether the weekly lunch menu the WGR requirement is based on the total oz eq of all grain items offered with all menu choices during the week. Menu planners must calculate the WGR percentage separately for each weekly menu (breakfast, lunch, and snack).

SFAs may calculate the weekly WGR percentages using the CSDE's Excel worksheet, *Worksheet to Calculate the Weekly Percentage of Whole Grain-rich Menu Items in the Breakfast, Lunch, and Snack Meal Patterns for Grades K-12* and the *Instructions for the Worksheet to Calculate the Weekly Percentage of Whole Grain-rich Menu Items in the School Nutrition Programs for Grades K-12*. For additional guidance, refer to the CSDE's resource, *Calculating the Weekly Percentage of Whole Grain-rich Menu Items in the Meal Patterns for Grades K-12*.

WGR requirement for preschool menus

Preschool menus must include at least one WGR serving per day, between all meals and snacks served to preschoolers. The USDA's CACFP best practices recommend at least two WGR servings per day.

SFAs have the option of deciding when to serve WGR foods in preschool meals and snacks, but certain requirements apply. Menu planners must consider the menu planning requirements below when determining which preschool meals or snacks will include WGR foods.

- **SFA serves only one preschool meal per day:** If the SFA serves only one meal per day, the grains component served at that meal must be WGR.
- **SFA serves only preschool breakfast:** The preschool breakfast meal pattern allows MMA to substitute for the entire grains component up to three times per week (refer to "MMA substitutions for preschool breakfast menus" in section 3). A WGR food is not required if the SFA serves only preschool breakfast and chooses to substitute MMA for the grains component.

- **SFA serves only preschool snack:** The grains component is not required at snack but may be served as one of the two required meal components. If the SFA serves only preschool snack and offers a grain as one of the two meal components (such as crackers with apples), the grain menu item must be WGR.

- **Different groups of children at each meal:** The WGR requirement applies to the school nutrition programs, not to each child. If the SFA serves more than one preschool meal, and two different groups of children are at each meal (such as one group of children at breakfast and another group of children at lunch), only one preschool meal is required to contain a WGR food. For example, a school that serves one group of preschoolers at breakfast and a different group of preschoolers at lunch must offer a WGR food at either breakfast or lunch.

The USDA strongly encourages SFA to vary the meals and afterschool snacks that include WGR foods. For example, the preschool menu could include whole-grain toast at breakfast on Monday and brown rice at lunch on Tuesday. This helps to ensure that all children are served a variety of whole grains, and benefit from the important nutrients these foods provide.

Noncreditable Grains Limit for K-12 Menus

All grain foods (WGR and enriched) in K-12 menus must meet the applicable limit for noncreditable grains. Noncreditable grains in commercial grain products and standardized recipes must be less than 2 percent of the product formula (¼ oz eq). To meet this limit, noncreditable grains cannot exceed 3.99 grams per portion for foods in groups A-G or 6.99 grams per portion for foods in groups H-I. For information on groups A-I, refer to "USDA's Exhibit A Chart" in section 7.

Some examples of noncreditable grains include oat fiber, corn fiber, wheat starch, corn starch, and modified food starch (including potato, legume, and other vegetable flours). For detailed guidance on noncreditable grains, refer to the CSDE's resources, *Guide to Meeting the Whole Grain-rich Requirement for the Meal Patterns for Grades K-12 in the School Nutrition Programs* and *Noncreditable Grains for the School Nutrition Programs and the Connecticut Nutrition Standards*.

WGR Criteria

A food is WGR if its grain content is between 50 and 100 percent whole grain and any remaining grains are enriched. In addition, WGR menu items for K-12 breakfast, lunch, and snack menus cannot exceed the limit for noncreditable grains (refer to "Noncreditable Grains Limit for K-12 Menus" in this section). For comprehensive guidance on the WGR criteria for K-12 menus, refer to the CSDE's *Guide to Meeting the Whole Grain-rich Requirement for the Meal Patterns for Grades K-12 in the School Nutrition Programs*.

The WGR criteria for K-12 menus are stricter than the WGR criteria for preschool menus because they require a limit for noncreditable grains. The WGR criteria for the preschool meal patterns follow the requirements for the CACFP meal patterns for children and do not require a limit for noncreditable grains. For comprehensive guidance on the WGR criteria for preschool menus, refer to the CSDE's *Guide to Meeting the Whole Grain-rich Requirement for the Child and Adult Care Food Program*.

> Except for grain-based desserts (which do not credit in the preschool meal patterns), grain foods that meet the K-12 WGR criteria will also meet the preschool WGR criteria. However, grain foods that meet the preschool WGR criteria may or may not meet the K-12 WGR criteria. To simplify menu planning, the CSDE encourages SFAs to use the K-12 WGR criteria to identify acceptable WGR grain foods for the preschool meal patterns.

The guidance below summarizes the different WGR criteria for commercial products and foods made from scratch in the meal patterns for grades K-12 and preschool.

WGR criteria for K-12 menus

WGR foods for K-12 menus must contain at least 50 percent whole grains; the remaining grain ingredients must be enriched, bran, or germ; and noncreditable grains cannot exceed the applicable limit for each grain group (A-I). The WGR criteria are different for different types of grain foods, depending on their location in the USDA's Exhibit A chart (refer to "USDA's Exhibit A Chart" in section 7).

To credit as a WGR food in the meal patterns for grades K-12, grain foods must meet the requirements below.

- **Commercial grain products (groups A-H):** Grain products in groups A-G (such as breads, muffins, pancakes, and crackers) and group H (such as rice, pasta, and quinoa)

must meet two WGR criteria: 1) the product is 100 percent whole grain or contains a blend of whole and enriched grains that is at least 50 percent whole grain; and 2) noncreditable grains do not exceed 3.99 grams per portion for groups A-G or 6.99 grams per portion for group H.

- **Commercial combination foods that contain a grain portion from groups A-I:** For combination foods (such as pizza crust in pizza, noodles in lasagna, and breading on chicken nuggets) the WGR requirements apply only to the grain portion. The grain portion must meet two WGR criteria: 1) the grain portion is 100 percent whole grain or contains a blend of whole and enriched grains that is at least 50 percent whole grain; and 2) noncreditable grains in the grain portion do not exceed 3.99 grams per portion for groups A-G or 6.99 grams per portion for groups H-I.

- **RTE breakfast cereals (group I):** RTE breakfast cereals (such as puffed cereals, round or flaked cereals, and granola) must meet three WGR criteria: 1) the first ingredient is a whole grain and the cereal is fortified or the cereal is 100 percent whole grain; 2) noncreditable grains do not exceed 6.99 grams per portion (1 ounce or 28 grams); and 3) added sugars do not exceed 6 grams per dry ounce. Fortification is not required for 100 whole grain cereals. For more information, refer to the CSDE's resource, *Crediting Breakfast Cereals in the School Nutrition Programs*.

- **Cooked breakfast cereals (group H):** Cooked breakfast cereals like oatmeal must meet three WGR criteria: 1) the first ingredient is a whole grain and the cereal is fortified or the cereal is 100 percent whole grain; 2) noncreditable grains do not exceed 6.99 grams per portion (½ cup cooked or 28 grams dry); and 3) added sugars do not exceed 6 grams per dry ounce. For more information, refer to the CSDE's resource, *Crediting Breakfast Cereals in the School Nutrition Programs*.

- **Foods made from scratch:** Grain foods prepared from scratch must have a standardized recipe that documents the grams of creditable grains per serving (refer to "Documentation for foods made from scratch" in section 1). Food made from scratch must meet two WGR criteria: 1) the combined amount of all whole grains is equal to or more than the combined amount of all other creditable grains (enriched grains, bran, and germ); and 2) noncreditable grains do not exceed 3.99 grams per portion for groups A-G or 6.99 grams per portion for groups H and I. For example, a pizza dough recipe that contains 6 pounds of whole-wheat flour, 5 pounds of enriched flour, and no noncreditable grains is WGR. For combination foods made from scratch that contain a grain portion (such as pizza crust in pizza and breading on chicken), the WGR criteria apply only to the grain portion of the standardized recipe.

Menu planners must determine if commercial grain products meet the applicable K-12 WGR criteria by reviewing the product's ingredients statement and packaging. Some commercial

products require a PFS to determine WGR compliance. For more information, refer to the CSDE's resource, *When Commercial Grain Products Require a Product Formulation Statement to Credit in the School Nutrition Programs*.

For more information on the WGR criteria and how to determine if commercial products and standardized recipes are WGR, refer to the CSDE's *Guide to Meeting the Whole Grain-rich Requirement for the Meal Patterns for Grades K-12 in the School Nutrition Programs*. Additional guidance is available in the "Whole Grain-rich Requirement" section of the CSDE's Crediting Foods in School Nutrition Programs webpage. Training on the K-12 WGR requirement and criteria is available in Module 14: Whole Grain-rich (WGR) Requirement of the CSDE's training program, *What's in a Meal: Meal Patterns for Grades K-12 in the School Nutrition Programs*.

WGR criteria for preschool menus

WGR foods for the preschool meal patterns must contain at least 50 percent whole grains and the remaining grain ingredients must be enriched, bran, or germ. The WGR criteria are different for different types of grain foods, depending on their location in the USDA's Exhibit A chart (refer to "USDA's Exhibit A Chart" in section 7).

The preschool meal patterns follow the CACFP Rule of Three for commercial grain products. Commercial grain products are WGR if a whole grain is the first grain ingredient, and the next two grain ingredients (if any) are creditable. The Rule of Three applies to commercial grain products, commercial combination foods, and cooked breakfast cereals, but does not apply to RTE breakfast cereals in group I. SFAs cannot use the Rule of Three to evaluate WGR foods for K-12 menus.

To credit as a WGR food in the preschool meal patterns, grain foods must meet the requirements below.

> These WGR criteria apply only to the preschool meal patterns. Grain foods that meet the WGR preschool criteria may or may not meet the K-12 WGR criteria. To simply menu planning, the CSDE encourages SFAs to use the K-12 WGR criteria to identify acceptable WGR grain foods for the preschool meal patterns.

- **Commercial grain products (groups A-E and H):** Grain products in groups A-E (such as breads, muffins, pancakes, and crackers) and group H (such as rice, pasta, and quinoa) must meet two WGR criteria: 1) a whole grain is the first ingredient; and 2) the next two grain ingredients (if any) are creditable. Noncreditable grains cannot be any of the first three grain ingredients. **Note:** Groups F and G are grain-based desserts and do not credit in the preschool meal patterns.

- **Commercial combination foods that contain a grain portion from groups A-E:** For combination foods (such as pizza crust in pizza, noodles in lasagna, and breading on chicken nuggets) the WGR requirements apply only to the grain portion. The grain portion must meet two WGR criteria: 1) a whole grain is the first grain ingredient; and 2) the next two grain ingredients (if any) are creditable. Noncreditable grains cannot be any of the first three grain ingredients in the grain portion.

- **RTE breakfast cereals (group I):** RTE breakfast cereals (such as puffed cereals, round or flaked cereals, and granola) must meet two WGR criteria: 1) the first ingredient is a whole grain and the cereal is fortified or the cereal is 100 percent whole grain; and 2) added sugars cannot exceed 6 grams per dry ounce. Fortification is not required for 100 whole grain cereals. For more information, refer to the CSDE's resource, *Crediting Breakfast Cereals in the School Nutrition Programs*.

- **Cooked breakfast cereals (group H):** Cooked breakfast cereals like oatmeal must meet two WGR criteria: 1) the first ingredient is a whole grain; 2) the next two grain ingredients (if any) are creditable; and 3) added sugars cannot exceed 6 grams per dry ounce. Noncreditable grains cannot be any of the first three grain ingredients in the grain portion. For crediting guidance, refer to the CSDE's resource, *Crediting Breakfast Cereals in the Child and Adult Care Food Program*.

- **Standardized recipes:** Grain foods prepared from scratch must have a standardized recipe that documents the grams of creditable grains per serving (refer to "Documentation for foods made from scratch" in section 1). Standardized recipes are WGR if the combined amount of all whole grains in the standardized recipe is equal to or more than the combined amount of all other creditable grains (enriched grains, bran, and germ). For example, a pizza dough recipe that contains 6 pounds of whole-wheat flour and 5 pounds of enriched flour is WGR. For combination foods made from scratch that contain a grain portion (such as pizza crust in pizza and breading on chicken), the WGR criteria apply only to the grain portion of the standardized recipe.

For more information on the preschool WGR criteria and how to determine if commercial products and standardized recipes are WGR, refer to the CSDE's *Guide to Meeting the Whole Grain-rich Requirement for the Child and Adult Care Food Program* and USDA Memo CACFP 05-2025: *Grain Requirements in the CACFP: Questions and Answers*. Additional guidance is available in the "Whole Grain-rich Requirement" section of the CSDE's Crediting Foods in School Nutrition Programs webpage.

Crediting Enriched Grains

Enriched grains are refined grains (such as wheat, rice, and corn) and grain products (such as cereal, pasta, and bread) that have certain vitamins and minerals added to replace some of the nutrients lost during processing. The five enrichment nutrients are defined by the Food and Drug Administration (FDA) and include:

- thiamin (vitamin B_1, thiamin mononitrate, or thiamin hydrochloride):
- riboflavin (vitamin B_2):
- niacin (vitamin B_3 or niacinamide):
- folic acid (folate):
- and iron (reduced iron, ferrous sulfate, or ferric orthophosphate).

If a commercial grain product includes enriched ingredients or the product itself is enriched, the ingredients or product must meet the applicable FDA standard of identity for enrichment. Examples of enriched ingredients include enriched flour (21 CFR 137.165) and enriched cornmeal (21 CFR 137.260). Examples of enriched products include enriched bread, rolls, and buns (21 CFR 136.115); enriched macaroni products (21 CFR 139.115); enriched noodle products (21 CFR 139.155); enriched rice (21 CFR 137.350); and enriched farina (21 CFR 137.305).

A commercial grain product is enriched if it meets at least one of the criteria below.

1. The food is labeled as "enriched," e.g., enriched long grain rice.

2. An enriched grain is the first ingredient in the food's ingredients statement (or water is the first ingredient, and an enriched grain is the next ingredient). The label will usually state "enriched flour" or "enriched wheat flour," or the grain ingredient includes a sub-listing of the five enrichment nutrients in parenthesis, e.g., "enriched flour (wheat flour, niacin, ferrous sulfate, thiamin mononitrate, riboflavin, folic acid)."

In addition to the criteria above, enriched grains for K-12 menus cannot exceed the limit for noncreditable grains (refer to "Noncreditable Grains Limit for K-12 Menus" in this document) and must meet the weekly limit for enriched grains.

Weekly limit for enriched grains in K-12 menus

Foods that are not WGR must be enriched. Enriched grains in K-12 breakfast, lunch, and snack menus cannot exceed 20 percent of the grain menu items offered during the week. The WGR percentage must be determined separately for each weekly breakfast, lunch, and snack menu. Menu planners must count all enriched grains offered in school menus toward this limit. This weekly limit for enriched grains does not apply to preschool menus.

Crediting Breakfast Cereals

The FDA regulations (21 CFR 170.3(n)(4)) define breakfast cereals as RTE cereals (such as puffed cereals, round or flaked cereals, and granola) and instant and regular hot cereals (such as oatmeal, cream of wheat, and farina). RTE breakfast cereals can be eaten as sold and are typically fortified with vitamins and minerals. Breakfast cereals must be WGR, enriched, or fortified and cannot exceed 6 grams of added sugars per dry ounce.

SFAs may serve creditable breakfast cereals as the grains component at any meal or afterschool snack. The crediting requirements for breakfast cereals in K-12 menus are different from the crediting requirements for breakfast cereals in preschool menus. In addition, the crediting requirement for RTE and cooked breakfast cereals are different.

Crediting requirements for breakfast cereals in K-12 menus

RTE and cooked breakfast cereals must meet the three criteria below to credit as the grains component in the breakfast, lunch, and snack meal patterns for grades K-12.

1. The cereal must be whole grain-rich (WGR), enriched, or fortified. For more information, refer to "WGR criteria for K-12 menus" "Enriched breakfast cereals," and Fortified breakfast cereals" in this section.
2. Noncreditable grains cannot exceed 6.99 grams per portion.
3. Added sugars cannot exceed 6 grams per dry ounce.

Menu planners must determine the oz eq contribution of creditable breakfast cereals. A 1-ounce serving credit as 1 oz eq. This equals 1 cup of flaked or round cereal, 1¼ cups of puffed cereal, and ¼ cup of granola.

Crediting requirements for breakfast cereals in preschool menus

RTE and cooked breakfast cereals must meet the two criteria below to credit as the grains component in the breakfast, lunch, and snack preschool meal patterns.

1. The cereal must be whole grain-rich (WGR), enriched, or fortified. For more information, refer to "WGR criteria for preschool menus," "Enriched breakfast cereals," and Fortified breakfast cereals" in this section.
2. Added sugars cannot exceed 6 grams per dry ounce.

Menu planners must determine the oz eq contribution of creditable breakfast cereals. A ½-ounce serving credit as ½ oz eq (the minimum preschool serving). This equals ½ cup of flaked or rounds cereals, ¾ cup of puffed cereals, and ⅛ cup of granola.

Enriched breakfast cereals

Enriched breakfast cereals contain five vitamins and minerals added in amounts required by the FDA to replace some of the nutrients lost during processing. The enrichment nutrients include thiamin (vitamin B_1, thiamin mononitrate, or thiamin hydrochloride); riboflavin (vitamin B_2); niacin (vitamin B_3 or niacinamide); folic acid (folate); and iron (reduced iron, ferrous sulfate, or ferric orthophosphate).

A breakfast cereal is enriched if the food is labeled as "enriched" or an enriched grain is the first ingredient. For K-12 menus, enriched breakfast cereals must also meet the limit for noncreditable grains (refer to "Noncreditable Grains Limit for K-12 Menus" in this section).

- **Example**
  Ingredients: Puffed rice, ferrous sulfate (a source of iron), niacinamide, citric acid, thiamin mononitrate, riboflavin, folic acid.

  This puffed rice breakfast cereal is enriched because the ingredients statement lists the five enrichment nutrients (iron, thiamin, niacin, riboflavin, and folic acid. It does not contain any noncreditable grains. This breakfast cereal credits as an enriched grain in the meal patterns for grades K-12 and the preschool meal patterns.

For K-12 menus, menu planners must count enriched breakfast cereals toward the weekly limit for enriched grains at breakfast, lunch, and snack (refer to "Weekly limit for enriched grains in K-12 menus" in this section).

Fortified breakfast cereals

Fortified breakfast cereals contain nutrients added by the manufacturer that were not originally present, or that are at higher levels than originally present. Manufacturers may choose which additional nutrients to use for fortification. Fortified breakfast cereals typically contain the five enrichment nutrients plus other vitamins and minerals that do not exist naturally in grains.

Different cereal brands may list different fortification nutrients. The USDA does not specify a minimum number of nutrients or a minimum percentage for the level of fortification for breakfast cereals in the Child Nutrition Programs. Fortified breakfast cereals are not required to be enriched.

A breakfast cereal is fortified if the food is labeled as "fortified" or the ingredients statement lists the vitamins and minerals added to the product. These nutrients are typically listed after "Vitamins and Minerals." For K-12 menus, fortified breakfast cereals must also meet the limit for noncreditable grains (refer to "Noncreditable Grains Limit for K-12 Menus" in this section).

- **Example**
  Ingredients: Milled corn, sugar, malt flavor, contains 2% or less of salt. Vitamins and Minerals: Iron, vitamin C (sodium ascorbate, ascorbic acid), niacinamide, vitamin B6 (pyridoxine hydrochloride), vitamin B2 (riboflavin), vitamin B1 (thiamin hydrochloride), vitamin A palmitate, folic acid, vitamin D, vitamin B12.

  This breakfast cereal is fortified because it contains added nutrients listed after the statement, "Vitamins and Minerals." It is not WGR because milled corn is not a whole grain. It does not contain any noncreditable grains. This breakfast cereal credits as an enriched grain in the meal patterns for grades K-12 and the preschool meal patterns.

Fortified breakfast cereals that are not WGR count toward the weekly limit for enriched grains in K-12 menus (refer to "Weekly limit for enriched grains in K-12 menus for K-12 Menus" in this section).

Resources for crediting breakfast cereals

The resources below assist menu planners with meeting the crediting requirements for breakfast cereals in the NSLP, SBP, and ASP meal patterns.

- Calculating the Added Sugars Limit for Breakfast Cereals in the Child and Adult Care Food Program (USDA):
  https://www.fna.usda.gov/tn/cacfp/calculating-sugar-limits-breakfast-cereals

- Choose Breakfast Cereals That Are Lower in Added Sugars in the Child and Adult Care Food Program (USDA):
  https://www.fna.usda.gov/tn/cacfp/meal-pattern-training-worksheets/breakfast-cereals-lower-sugar

- Choosing Breakfast Cereals That Are Lower in Added Sugars for School Meals (USDA webinar):
  https://www.youtube.com/watch?v=KkmIwmJiVYY

- Crediting Breakfast Cereals in the School Nutrition Programs (CSDE):
  https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/credit_cereals_snp.pdf

- Nutrition Standards for Added Sugars: Breakfast Cereals Fact Sheet (Institute of Child Nutrition):
  https://theicn.org/resources/2582/sugar-reduction-for-schools-fact-sheets/127722/nutrition-standards-for-added-sugars-breakfast-cereals-fact-sheet.pdf

Crediting Grain-based Desserts in K-12 Breakfast and Lunch Menus

The breakfast and lunch meal patterns for grades K-12 allow certain grain-based desserts to credit as the grains component. Grain-based desserts must be WGR or enriched and cannot exceed the limit for noncreditable grains (refer to "Noncreditable Grains Limit for K-12 Menus" in this section). Enriched grain-based desserts count with all other grain-based desserts toward the weekly limit for enriched grains at lunch (refer to "Weekly limit for enriched grains in K-12 menus for K-12 Menus" in this section).

Some examples of allowable grain-based desserts include unfrosted brownies, cookies, cakes, cupcakes, coffee cakes, cinnamon streusel quick breads, piecrusts in sweet pies (e.g., apple, coconut, blueberry, and pecan), cinnamon rolls, doughnuts, cereal bars, granola bars, breakfast bars, sweet rolls, pastries, toaster pastries, sweet scones (e.g., blueberry, orange cranberry, and chocolate chip), sweet croissants (e.g., chocolate or almond filled), sweet rice puddings (e.g., cinnamon and vanilla), sweet bread puddings (e.g., made with cinnamon, fruits, chocolate, or icing), and sweet pita chips (e.g., cinnamon sugar).

Grain-based desserts do not include quick breads like banana bread and zucchini bread (except cinnamon streusel), cornbread, pancakes, waffles, French toast, savory scones like cheese and herb, and piecrusts in entrees like quiche, meat pies, and chicken potpie.

> Grain-based desserts often contain more fat and added sugars than traditional grains. Menu planners should limit grain-based desserts to help K-12 breakfast and lunch menus meet the weekly dietary specifications (refer to "Dietary specifications for the SBP and NSLP meal patterns for grades K-12" in section 1). The CSDE recommends offering nutrient-dense whole grains instead of grain-based desserts.

Not all grain-based desserts credit at breakfast and lunch. The NSLP and SBP meal patterns allow different types of grain-based desserts and require different crediting restrictions. Grain-based desserts at lunch cannot exceed 2 oz eq per week.

The table below summarizes which types of grain-based desserts credit at each meal. These foods do not credit in the preschool meal patterns or the ASP meal pattern for grades K-12 (refer to "Grain-based Desserts Not Allowed for Preschool Menus or K-12 Snack Menus" in this section).

For additional guidance on grain-based desserts, refer to the CSDE's resource, *Crediting Grain-based Desserts in the National School Lunch Program and School Breakfast Program Meal Patterns for Grades K-12*.

Table 6-1. Allowable grain-based desserts for grades K-12

Food item (must be WGR or enriched)	Credits at lunch (≤ 2 oz eq per week)	Credits at breakfast
Animal crackers	Yes	Yes
Breakfast bars, plain or with nuts, dried fruit, chocolate pieces, fruit purees, filling, and frosting	Yes	Yes
Brownies, frosted	No	No
Brownies, plain	Yes	No
Cakes and cupcakes, plain or frosted	Yes	No
Cereal bars, plain or with nuts, dried fruit, chocolate pieces, fruit purees, filling, and frosting	Yes	Yes
Coffee cakes, cinnamon streusel quick breads	Yes	Yes
Cookies, plain or with nuts, dried fruit, chocolate pieces, fruit purees, filling, and frosting	Yes	No
Doughnuts, cake and yeast raised, frosted or unfrosted, glazed or unglazed	Yes	Yes
Fruit cobblers (cobbler topping)	Yes	No
Fruit crisps (crisp topping)	Yes	No
Fruit dessert pies (piecrust)	Yes	No
Fruit turnovers	Yes	Yes
Graham crackers	Yes	Yes
Grain-fruit bars, e.g., cereal bars	Yes	Yes
Granola bars, plain or with nuts, dried fruit, chocolate pieces, fruit purees, filling, and frosting	Yes	Yes
Pastries, plain or frosted	Yes	Yes
Sweet rolls, plain or frosted	Yes	Yes
Toaster pastries, plain or frosted	Yes	Yes

Limit for grain-based desserts in K-12 lunch menus

The lunch meal pattern requires a weekly limit for grain-based desserts. The total amount of grain-based desserts offered at lunch cannot exceed 2 oz eq per week. For example, the lunch menu may include a 2-oz eq grain-based dessert once per week or a 1-oz eq grain-based dessert twice per week. This limit applies to all WGR and enriched grain-based desserts including sweet crackers like graham crackers and animal crackers (refer to "Crediting graham crackers in menus for grades K-12 and preschool" in this section).

Restrictions for grain-based desserts in K-12 breakfast menus

The breakfast meal pattern does not require a weekly limit for grain-based desserts but restricts the types that are allowed (refer to table 6-1). For example, cookies, brownies, cupcakes, and fruit cobblers do not credit at breakfast.

Some examples of allowable grain-based desserts at breakfast include animal crackers and graham crackers, cereal bars, granola bars, doughnuts, fruit turnovers, pastries, and sweet rolls. The CSDE recommends limiting grain-based desserts at breakfast. Menus that frequently include grain-based desserts might not meet the weekly dietary specifications for breakfast (refer to "Dietary specifications for the SBP and NSLP meal patterns for grades K-12" in section 1).

Identifying grain-based desserts

SFAs should not rely on product names to identify grain-based desserts because cookies and similar grain-based desserts do not have an FDA standard of identity. This means that manufacturers may use terms in their product names or labels that might be misleading. For example, oatmeal raisin cookies might be called "breakfast rounds" and cereal bars might be called "breakfast bars."

Regardless of the name on the label, these types of foods are still grain-based desserts. They must comply with the weekly limit for grain-based desserts at lunch (no more than 2 oz eq) and the crediting restrictions for grain-based desserts at breakfast (only certain types are allowed).

The CSDE's resource, *Grain Ounce Equivalents Chart for the School Nutrition Programs,* identifies creditable grain-based desserts in blue and red. Grain-based desserts in blue are allowed at breakfast and lunch. Grain-based desserts in red are allowed only at lunch and cannot exceed 2 oz eq per week.

Crediting graham crackers in menus for grades K-12 and preschool

Graham crackers credit as the grains component in all school nutrition programs for grades K-12 and preschool. Different brands of graham crackers may be WGR or enriched. Graham flour is a whole grain. To credit as a WGR food, graham flour must be the first ingredient. For K-12 menus, the product must also meet the limit for noncreditable grains (refer to "Noncreditable Grains Limit for K-12 Menus" in this section).

Some brands of graham crackers do not meet the WGR criteria because they contain enriched flour as the first ingredient. Menu planners must check the ingredients statement to determine if different brands of graham crackers are WGR or enriched.

- **Example 1: WGR graham crackers**
  Ingredients: Graham flour (whole-grain wheat flour), unbleached enriched flour [wheat flour, niacin, reduced iron, thiamine mononitrate (vitamin B1), riboflavin (vitamin B2), folic acid)], sugar, canola oil, honey, baking soda, salt, artificial flavor.

  Graham flour is the first ingredient, and this product does not contain any noncreditable grains. This brand of graham crackers credits as a WGR grain in the meal patterns for grades K-12 and the preschool meal patterns.

- **Example 2: Enriched graham crackers**
  Ingredients: Unbleached enriched flour (wheat flour, niacin, reduced iron, thiamine mononitrate vitamin B1, riboflavin vitamin B2, folic acid), graham flour (whole grain wheat flour), sugar, soybean and/or canola oil, honey, baking soda, salt, soy lecithin, artificial flavor.

  Enriched flour is the first ingredient, and this product does not contain any noncreditable grains. This brand of graham crackers credits as an enriched grain in the meal patterns for grades K-12 and the preschool meal patterns. For K-12 menus, these graham crackers must be included in the weekly limits for enriched grains (refer to "Weekly limit for enriched grains in K-12 menus for K-12 Menus" in this section).

In addition to determining if graham crackers are WGR or enriched, menu planners must review the product's package weight and PFS to determine its' oz eq contribution (refer to "Determining Oz Eq for Graham Cracker Packages" in section 7).

Daily alternate lunch choices for K-12 menus

SFAs cannot offer grain-based desserts (like graham crackers or animal crackers) as the grains component of a daily alternate lunch choice for grades K-12. Offering grain-based desserts daily will exceed the weekly 2-oz eq limit for lunch.

- **Example:** A high school offers an alternate lunch choice for grades 9-12 that includes 1 cup of yogurt, 1 cup of fresh fruit, 1 cup of fresh vegetables, 2 oz eq of graham crackers, and a choice of 1 cup of low-fat or fat-free milk. This menu meets the lunch meal pattern but cannot be offered as a daily lunch choice because it exceeds the weekly 2-oz eq limit. Offering 2 oz eq of graham crackers each day provides 10 oz eq of grain-based desserts per week.

Grain-based desserts served as extra foods in K-12 menus

Grain-based desserts served as extra menu items at breakfast and lunch count toward the minimum daily and weekly oz eq for the grains component and the weekly dietary specifications for K-12 breakfast and lunch menus (refer to "Dietary specifications for the SBP and NSLP meal patterns for grades K-12" in section 1). At lunch, grain-based desserts also count toward the weekly limit of no more than 2 oz eq.

Grain-based Desserts Not Allowed for Preschool Menus or K-12 Snack Menus

Grain-based desserts do not credit as the grains component in the NSLP, SBP, and ASP preschool meal patterns or the ASP meal pattern for grades K-12. However, sweet crackers like graham crackers and animal crackers are allowed (refer to "Crediting graham crackers in menus for grades K-12 and preschool" in this section).

As a best practice, the USDA encourages SFAs to limit sweet crackers due to their higher sugar content. The CSDE recommends limiting sweet crackers to:

- no more than twice per week between all meals and afterschool snacks served to preschoolers; and
- no more than twice per week in afterschool snacks for grades K-12.

Menu planners should consider replacing sweet crackers with nutrient-dense whole-grain foods.

Crediting Corn Masa, Masa Harina, Corn Flour, and Cornmeal

Corn ingredients credit as the grains component if they are whole grain, enriched, or nixtamalized. Nixtamalization is the process of soaking and cooking dried corn in an alkaline (slaked lime) solution. This process results in a product with a similar nutrition content to whole-grain corn.

Nixtamalized corn is used to make hominy, masa harina (corn flour), corn masa (dough from masa harina), and certain types of cornmeal. Masa harina is used for making corn products such as tortillas, tortilla chips, and tamales.

Methods for identifying nixtamalized corn

SFAs may use either of the two methods below to identify commercial products made with nixtamalized corn.

1. **Corn is treated with lime:** If the ingredients statement indicates that the corn is treated with lime (such as "ground corn with trace of lime" and "ground corn treated with lime"), the corn ingredient is nixtamalized. The examples below show some commercial corn products that are nixtamalized and therefore credit as 100 percent whole grains.

    - Ingredients: Corn masa flour, water, contains 2% or less of: cellulose gum, guar gum, amylase, propionic acid, benzoic acid, and phosphoric acid (to maintain freshness).
    - Ingredients: Whole-white corn, vegetable oil (contains soybean, corn, cottonseed, and/or sunflower oil), salt, lime/calcium hydroxide (processing aid).
    - Ingredients: Limed whole-grain white corn, palm oil, salt, TBHQ (preservative).
    - Ingredients: Whole-grain yellow corn, high oleic canola oil, water, corn flour, salt, hydrated lime.

If the ingredients statement does not provide sufficient information, SFAs must obtain a PFS from the manufacturer stating that the ingredients are whole grain, enriched, or nixtamalized (refer to "Documentation for commercial processed products" in section1). For example, a PFS is required for a product that contains cornmeal or yellow corn flour.

2. **Product includes FDA-approved whole grain health claim:** If a commercial product made with corn includes one of two FDA-approved whole grain health claims on its packaging, the corn in the product is nixtamalized and the product provides at least 50 percent whole grain. These health claims are not common.

    - **Low-fat claim:** "Diets rich in whole grain foods and other plant foods and low in total fat, saturated fat, and cholesterol, may reduce the risk of heart disease and certain cancers."

    - **Moderate-fat claim:** "Diets rich in whole grain foods and other plant foods, and low in saturated fat and cholesterol, may help reduce the risk of heart disease."

Crediting information for corn masa, masa harina, corn flour, and cornmeal is summarized in USDA Memo SP 34-2019, CACFP 15-2019, and SFSP 15-2019: *Crediting Coconut, Hominy, Corn Masa, and Masa Harina in the Child Nutrition Programs*.

Crediting Hominy as Grains

Hominy is a traditional food in Mexican and Native American cultures that is commonly served as a vegetable or milled grain product, e.g., hominy grits. Hominy is made from whole kernels of maize (dried field corn) that have been soaked in an alkaline solution (nixtamalized). This process removes the hull and germ, causes the corn to puff up to about double its normal size, and increases the bioavailability of certain nutrients, such as calcium and niacin. Hominy credits as a whole grain.

Hominy is available dried and in a fully cooked canned form. Dried hominy (such as grits) credits as a whole grain. A ½-cup serving of cooked hominy grits or 1 ounce (28 grams) of dry hominy grits credits as 1 oz eq of the grains component.

For information on crediting hominy as the vegetables component, refer to "Crediting Hominy as Vegetables" in section 4.

Crediting Popcorn

Popcorn is a whole-grain food. Three cups (1 ounce) of plain popped popcorn credit as 1 oz eq of the grains component. The minimum creditable amount is ¾ cup (¼ ounce), which equals ¼ oz eq. The table below summarizes the grains contribution of popped popcorn.

Table 6-2. Grains contribution of popped popcorn

Cups (popped)	Weight (popped)	Grains contribution
¾ cup	0.25 ounces or 7 grams	¼ oz eq (minimum creditable amount)
1½ cups	0.5 ounces or 14 grams	½ oz eq
2¼ cups	0.75 ounces or 21 grams	¾ oz eq
3 cups	1 ounce or 28 grams	1 oz eq

Crediting considerations for popcorn

Menu planners should consider the crediting requirements below when including popcorn in reimbursable meals and afterschool snacks.

- Consider the appropriateness of the serving size for each grade group. It may be unreasonable to provide the full serving of the grains component from popcorn, due to the large volume required for crediting. The CSDE recommends providing a smaller serving of popcorn and supplementing it with another food from the grains component. For example, a snack mix that contains ¾ cup of popcorn (¼ oz eq) mixed with ¼ oz eq of WGR pretzels and ½ oz eq of WGR RTE breakfast cereal credits as 1 oz eq of the grains component.

- Foods that contain popcorn as an ingredient (such as a popcorn snack mix or popcorn balls) require documentation to determine the crediting information. SFAs must have a PFS for commercial foods and a standardized recipe for foods prepared from scratch (refer to "Required Crediting Documentation" in section 1).

- Popcorn sometimes includes ingredients and toppings like salt, caramel, cheese, and butter. SFAs must ensure that these ingredients (and any oil or fat used to pop the popcorn) are included in the standardized recipe's nutrition information per serving. Menu planners should limit these foods to help school menus meet the weekly dietary specifications (refer to "Dietary specifications for the SBP and NSLP meal patterns for

grades K-12" in section 1). The USDA strongly encourages healthier alternatives, such as seasoning popcorn with herb blends or serving fresh, plain popcorn.

- For K-12 menus, grain-based desserts that contain popcorn count toward the weekly limit of no more than 2 oz eq at lunch (refer to "Limit for grain-based desserts in K-12 lunch menus" in this section).

- Popcorn may be a choking hazard for young children. Consider children's ages and developmental readiness when deciding whether to offer popcorn in preschool menus.

Crediting information for popcorn is summarized in USDA Memo SP 23-2019, CACFP 10-2019, and SFSP 09-2019: *Crediting Popcorn in the Child Nutrition Program*.

Noncreditable Foods in the Grains Component

Some examples of foods that do not credit as the grains component include:

- commercial grain products that are not WGR or enriched;
- for K-12 menus, WGR and enriched grain foods that exceed the limit for noncreditable grains (refer to "Noncreditable Grains Limit for K-12 Menus" in this section).
- breakfast cereals that are not WGR, enriched, or fortified;
- breakfast cereals that contain more than 6 grams of added sugars per dry ounce;
- foods made from scratch that are not WGR or enriched; and
- foods made from scratch for K-12 menus that exceed the limit for noncreditable grains (refer to "Noncreditable Grains Limit for K-12 Menus" in this section).
- grain-based desserts for preschool menus and ASP menus for grades K-12;
- certain grain-based desserts at breakfast for grades K-12, such as cookies, brownies, cupcakes, and fruit cobblers (refer to "Grain-based Desserts" in this section); and
- grain-based desserts at lunch for grades K-12 that exceed 2 oz eq per week (refer to "Grain-based Desserts" in this section).

This list is not all-inclusive. For more information, refer to "Noncreditable Foods" in section 1 and the CSDE's resource, *Noncreditable Foods in the Meal Patterns for the School Nutrition Programs*.

> Menu planners should use the FBG to identify foods that credit as the grains component (refer to "Food Buying Guide for Child Nutrition Programs" in section 1).

Avoiding Common Compliance Issues for the Grains Component

The common compliance issues indicated below are based on findings from the CSDE's Administrative Review of the school nutrition programs.

- **Incorrect crediting of commercial grain products:** SFAs must determine the oz eq of all menu items using either the USDA's Exhibit A chart or the grams of creditable grains per serving from the product's PFS. Except for bread products in group B, 1 ounce of a commercial grain product does not credit as 1 oz eq. For example, blueberry muffins (group D of the USDA's Exhibit A chart) require 2 ounces to credit as 1 oz eq. For more information, refer to "USDA's Exhibit A Chart" in section 7.

- **Not verifying crediting compliance of grain products:** SFAs must verify that all commercial grain products and standardized recipes meet the crediting criteria for either WGR or enriched grains. For more information, refer to "WGR Criteria" and "Crediting Enriched Grains" in this section.

- **Not meeting the minimum weekly WGR requirement:** SFAs must verify that at least 80 percent of all grains offered in weekly breakfast, Lunch and snack menus are WGR. For more information, refer to "WGR Requirement for K-12 and Preschool Menus" in this section.

- **Not obtaining a PFS to credit certain commercial grain products:** A PFS is required in some situations when SFAs cannot use the USDA's Exhibit A chart to determine the oz eq contribution of commercial grain products (refer to "When method 2 is required for commercial products" in section 7.

SFAs must plan the grains component of school menus to avoid these compliance issues.

Resources for Crediting Grains

The resources below assist menu planners with identifying foods that credit as the grains component in the NSLP, SBP, and ASP meal patterns.

- Crediting Breakfast Cereals in the School Nutrition Programs (CSDE): https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/credit_cereals_snp.pdf
- Crediting Enriched Grains in the School Nutrition Programs (CSDE): https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/credit_enriched_grains_snp.pdf
- Crediting Summary Charts for the Meal Patterns for the School Nutrition Programs (CSDE): https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/crediting_summary_charts_snp.pdf
- Crediting Whole Grains in the School Nutrition Programs (CSDE): https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/credit_whole_grains_snp.pdf
- Food Buying Guide for Child Nutrition Programs (USDA): https://www.fna.usda.gov/tn/fbg
- Grains Component (CSDE's Crediting Foods in School Nutrition Programs webpage): https://portal.ct.gov/sde/nutrition/crediting-foods-in-school-nutrition-programs/grains
- Preschool Meal Pattern Training for the School Nutrition Programs Module 7: Grains Component ("Preschool Meal Pattern Training" section of CSDE's Meal Patterns for Preschoolers in School Nutrition Programs webpage): https://portal.ct.gov/sde/nutrition/meal-patterns-preschoolers-in-school-nutrition-programs/preschool-meal-pattern-training
- Product Formulation Statement for Documenting Grains Ounce Equivalents in Child Nutrition Programs (USDA): https://www.fna.usda.gov/sites/default/files/resource-files/tn-pfs-grains-oz-eq-template.pdf
- Product Formulation Statement for Documenting Grains Ounce Equivalents in Child Nutrition Programs: Completed Sample (USDA): https://www.fna.usda.gov/sites/default/files/resource-files/tn-pfs-grains-oz-eq-sample.pdf

- USDA Memo CACFP 05-2025: Grain Requirements in the Child and Adult Care Food Program; Questions and Answers:
  https://www.fna.usda.gov/cacfp/grain-requirements-qas

- USDA Memo CACFP 16-2017: Grain-Based Desserts in the Child and Adult Care Food Program:
  https://www.fna.usda.gov/cacfp/grain-based-desserts-child-and-adult-care-food-program

- USDA Memo SP 23-2019, CACFP 10-2019, and SFSP 09-2019: Crediting Popcorn in the Child Nutrition Programs:
  https://www.fna.usda.gov/cn/crediting-popcorn-child-nutrition-programs

- USDA Memo SP 30-2012: Grain Requirements for the National School Lunch Program and School Breakfast Program:
  https://www.fna.usda.gov/cn/grain-requirements-national-school-lunch-program-and-school-breakfast-program

- USDA Memo SP 34-2019, CACFP 15-2019, and SFSP 15-2019: Crediting Coconut, Hominy, Corn Masa, and Masa Harina in the Child Nutrition Programs:
  https://www.fna.usda.gov/cn/crediting-coconut-hominy-corn-masa-and-masa-harina-child-nutrition-programs

- What's in a Meal Module 13: Grains Component (CSDE's Training Program, What's in a Meal: Meal Patterns for Grades K-12 in the School Nutrition Programs):
  https://portal.ct.gov/sde/nutrition/meal-pattern-training-materials#module13

For additional crediting resources, visit the "Grains" section of the CSDE's Crediting Foods in School Nutrition Programs webpage. Training on the grains component is available in Module 13: Grains Component of the CSDE's training program, *What's in a Meal: Meal Patterns for Grades K-12 in the School Nutrition Programs*, and Module 8: Grains Component of the CSDE's *Preschool Meal Pattern Training for the School Nutrition Programs*.

7 — Grains Component Servings

The required meal pattern servings for the grains component are in oz eq. The amount of a creditable grain food that provides 1 oz eq varies because different types of foods contain different amounts of creditable grains. Menu planners should consult the USDA's FBG to determine the number of servings provided by a specific quantity of grain as purchased (refer to "Food Buying Guide for Child Nutrition Programs" in section 1).

The meal patterns for grades K-12 and preschool require different servings for the grains component. The required servings are measured in oz eq for all grade groups.

Minimum Creditable Amount for Grains

The minimum creditable amount is ¼ oz eq. Grains offered in amounts less than ¼ oz eq do not count toward the required meal pattern servings. However, they do count toward the weekly dietary specifications for the breakfast and lunch meal patterns for grades K-12 (refer to "Dietary specifications for the SBP and NSLP meal patterns for grades K-12" in section 1.

When crediting grains toward the meal pattern requirements, menu planners must round down to the nearest ¼ oz eq. For example, a standardized recipe or commercial product that contains 1.49 oz eq of creditable grains per serving credits as 1.25 oz eq of the grains component.

Offering A Combination of Grains

SFAs may choose to serve a combination of several grain menu items to meet the minimum daily requirement for each grade group if each serving contains at least ¼ oz eq of grains, i.e., the minimum creditable amount (refer to "Minimum creditable amounts" in section 1). For example:

- a lunch menu for grades 9-12 could provide the required 2 oz eq of grains from ½ cup of brown rice (1 oz eq) and a 1-ounce whole-grain roll (1 oz eq); and
- a preschool lunch menu for ages 2-5 could provide the required ½ oz eq of grains from ⅛ cup of brown rice (¼ oz eq) and ¼ ounce of a whole-grain roll (¼ oz eq).

The SFA determines these menu planning decisions.

For K-12 breakfast and lunch menus, these menu-planning decisions affect students' selection of reimbursable meals when implementing OVS. For information on OVS, refer to the CSDE's *Offer versus Serve Guide for School Meals* and visit the CSDE's Offer versus Serve for Grades K-12 in School Nutrition Programs webpage.

Required Grain Servings for K-12 Menus

The breakfast and lunch meal patterns for grades K-12 require minimum daily and weekly servings of the grains component for each grade group. The grains component may be offered as one of the two required meal components at snack.

Grain servings for K-12 breakfast menus

The breakfast meal patterns for grades K-12 require minimum daily and weekly servings of the combined grains and MMA component. For all grades, breakfast menus must offer at least 1 oz eq daily of grains, MMA, or a combination of both. SFAs must offer more than 1 oz eq of the grains/MMA component on some days of the week to meet the minimum weekly requirement.

The required weekly oz eq are ranges. The weekly requirements for five-day breakfast menus are 7-10 oz eq for grades K-5, 8-10 oz eq for grades 6-8, and 9-10 oz eq for grades 9-12. The weekly requirements for seven-day breakfast menus are 10-14 oz eq for grades K-5, 11-14 oz eq for grades 6-8, and 12½-14 oz eq for grades 9-12.

SFAs cannot offer less than the minimum weekly oz eq. The maximum weekly oz eq are not required but provide a guide for planning age-appropriate meals that meet the weekly dietary specifications (refer to "Dietary specifications for the SBP and NSLP meal patterns for grades K-12" in section 1).

SFAs must offer more than the minimum daily 1 oz eq of grains on some days to meet the minimum weekly requirement for each grade group. For example, the minimum weekly grains/MMA for grades 9-12 is 9 oz eq for five-day weeks. SFAs must offer more than 1 oz eq of grains on some days because the minimum serving provides only 5 oz eq per week.

For more information on meeting the weekly oz eq for breakfast, refer to section 5 of the CSDE's *Guide to the Meal Patterns for Grades K-12 in the National School Lunch Program and School Breakfast Program*.

Grain servings for K-12 lunch menus

The lunch meal patterns for grades K-12 require minimum daily and weekly servings of the grains component. Lunch menus must offer at least 1 oz eq of grains daily for grades K-5 and 6-8, and at least 2 oz eq daily for grades 9-12.

The required weekly oz eq are ranges. The weekly requirements for five-day lunch menus are 8-9 oz eq for grades K-5, 8-10 oz eq for grades 6-8, and 10-12 oz eq for grades 9-12. The weekly requirements for seven-day lunch menus are11-12½ oz eq for grades K-5, 11-14 oz eq for grades 6-8, and 14-17 oz eq for grades 9-12.

SFAs cannot offer less than the minimum weekly oz eq. The maximum weekly oz eq are not required but provide a guide for planning age-appropriate meals that meet the weekly dietary specifications (refer to "Dietary specifications for the SBP and NSLP meal patterns for grades K-12" in section 1).

For grades K-5 and 6-8, SFAs must offer more than the minimum daily 1 oz eq of grains on some days to meet the minimum weekly requirement. For example, the minimum weekly grains requirement is 8 oz eq for five-day weeks. SFAs must offer more than 1 oz eq of grains on some days because the minimum serving provides only 5 oz eq per week.

For more information on meeting the weekly oz eq for lunch, refer to section 3 of the CSDE's *Guide to the Meal Patterns for Grades K-12 in the National School Lunch Program and School Breakfast Program*.

Grain servings for K-12 snack menus

The K-12 snack meal pattern requires the minimum serving of any two of the five meal components. The minimum serving of grains offered at snack is 1 oz eq for all grade groups.

Determining if weekly breakfast or lunch menus comply with minimum oz eq

The weekly oz eq are the sum of the daily oz eq. Menu planners must add the oz eq offered for each day of the weekly breakfast or lunch menu to determine the weekly oz eq.

When breakfast or lunch menus offer multiple grain choices on an individual day, the smallest oz eq grain item counts toward the weekly requirements. For example, the daily lunch menu offers a 1½-oz eq grain item and a 2-oz eq grain item. The menu planner must count the 1½-oz eq grain item toward the weekly requirements.

> When the lunch menu offers two or more daily choices with different oz eq, each choice must provide at least the minimum daily oz eq. For example, if a lunch for grades K-5 offers three different grain choices, each choice must be at least 1 oz eq. The determination of whether the menu meets the minimum weekly requirement is based on the daily grain item with the smallest oz eq.

For more information on meeting the weekly oz eq for breakfast and lunch, refer to the CSDE's *Guide to the Meal Patterns for Grades K-12 in the National School Lunch Program and School Breakfast Program*.

Required Grain Servings for Preschool Menus

The breakfast and lunch preschool meal patterns require minimum daily servings of the grains component for each age group. The grains component may be offered as one of the two required meal components at snack.

Grain servings for preschool breakfast menus

The grains component is required at breakfast. The minimum serving of the grains component is ½ oz eq for both age groups.

Menu planners may substitute MMA for the entire grains component at breakfast up to three times per week. For more information, refer to "MMA substitutions for preschool breakfast menus" in section 3.

Grain servings for preschool lunch menus

The grains component is required at lunch. The minimum serving is 1 oz eq for ages 1-2 and 1½ oz eq for ages 3-5.

Grain servings for preschool snack menus

The preschool snack meal pattern requires the minimum serving of any two of the five meal components. The minimum serving of grains offered at snack is ½ oz eq for both age groups.

USDA's Exhibit A Chart

The USDA's *Exhibit A: Grain Requirements for Child Nutrition Programs* (known as Exhibit A) summarizes the grain oz eq for nine groups (A-I) of creditable grain foods. Each group contains products with similar grain content. The serving of a creditable grain food that provides 1 oz eq varies because different types of foods contain different amounts of creditable grains.

- Groups A-G include baked goods such as crackers, breads, rolls, taco shells, muffins, waffles, pancakes, and grain-based desserts, e.g., cookies, cake, granola bars, and pastries. The serving that provides 1 oz eq varies from 22 grams (0.8 ounces) for foods in group A to 125 grams (4.4 ounce) for foods in group G. **Note:** Grain-based desserts require certain crediting restrictions for K-12 breakfast and lunch menus (refer to "Crediting Grain-based Desserts in K-12 Breakfast and Lunch Menus" in section 6) and do not credit in the preschool meal patterns or the ASP meal pattern for grades K-12 (refer to "Grain-based Desserts Not Allowed for Preschool Menus or K-12 Snack Menus" in section 6).

- Group H includes cereal grains like pasta, cooked breakfast cereals, and other cereal grains, e.g., amaranth, barley, buckwheat, cornmeal, corn grits, farina, kasha, millet, oats, quinoa, wheat berries, and rolled wheat. These foods require ½ cup cooked or 28 grams (1 ounce) dry to credit as 1 oz eq of the grains component. Cereal grains typically credit based on the cooked serving, but menu planners may choose to credit cereal grains using the dry uncooked weight. Dry cereal grains used as an ingredient in a standardized recipe (like rolled oats in bread) require 16 grams of creditable grains to credit as 1 oz eq of the grains component.

- Group I includes ready-to eat (RTE) cold breakfast cereals like puffed cereals, round or flaked cereals, and granola These foods require 1 ounce (28 grams) to credit as 1 oz eq of the grains component. A 1-ounce serving equals 1 cup of flaked or round cereal, 1¼ cups of puffed cereal, and ¼ cup of granola.

The CSDE's resource, *Grain Ounce Equivalents Chart for the School Nutrition Programs*, indicates the applicable Exhibit A quantities and requirements for the NSLP, SBP, and ASP meal patterns for grades K-12 and preschool.

Methods to Determine Grain Oz Eq

The USDA allows two methods for determining the oz eq of creditable grain products and standardized recipes. SFAs may use either method but must document how the crediting information was obtained. These methods are summarized below.

For detailed guidance on both methods, refer to the CSDE's resource, *Calculation Methods for Grain Ounce Equivalents for the Meal Patterns for School Nutrition Programs*, and "Serving Requirements" in the "Grains" section of the Crediting Foods in School Nutrition Programs webpage. Training on oz eq is available in Module 15: Grain Ounce Equivalents of the CSDE's training program, *What's in a Meal: Meal Patterns for Grades K-12 in the School Nutrition Programs.*

Method 1: USDA's Exhibit A chart

Method 1 uses the Exhibit A chart to determine the required weight (groups A-G) or volume (groups H-I) for the grain group where the food belongs. This method is used for commercial grain products and may also be used for standardized recipes if the menu planner knows the weight (grams or ounces) of the prepared (cooked) serving. The CSDE's resource, *Grain Ounce Equivalents Chart for the School Nutrition Programs*, indicates the applicable Exhibit A quantities and requirements for the NSLP, SBP, and ASP meal patterns for grades K-12 and preschool.

Menu planners can use the USDA's online Exhibit A Grains Tool to determine the oz eq of grains products and the required amount needed for a specific meal pattern contribution. For more information, refer to the USDA's webinar, *How to Maximize the Exhibit A Grains Tool*.

The CSDE's resource, *How to Use the Grain Ounce Equivalents Chart for the School Nutrition Programs*, reviews the steps for using the Exhibit A quantities to determine the meal pattern contribution of commercial products and standardized recipes. Training on this information is provided in Module 15: Grain Ounce Equivalents of the CSDE's training program, *What's in a Meal: Meal Patterns for Grades K-12 in the School Nutrition Programs.*

Method 2: Creditable grains

Method 2 determines the oz eq contribution from the weight (grams) of creditable grains per serving. This method is used for standardized recipes and may also be used for commercial grain products that have a PFS stating the weight of creditable grains per serving. The required grams of creditable grains per oz eq are different for enriched grains and WGR foods.

- **Enriched grains:** To credit as 1 oz eq of the grains component, foods in groups A-G must contain 16 grams of creditable grains and foods in groups H-I must contain 28 grams of creditable grains. For K-12 menus, enriched grains must also meet the limit for noncreditable grains (refer to "Noncreditable Grains Limit for K-12 Menus" in section 6).

- **WGR foods:** To credit as 1 oz eq of a WGR food, foods in groups A-G must contain 16 grams of creditable grains (including at least 8 grams of whole grains) and foods in groups H-I must contain 28 grams of creditable grains (including at least 14 grams of whole grains). For K-12 menus, WGR grains must also meet the limit for noncreditable grains (refer to "Noncreditable Grains Limit for K-12 Menus" in section 6).

For guidance on evaluating a grain product's PFS, refer to the CSDE's resource, *When Commercial Grain Products Require a Product Formulation Statement to Credit in the School Nutrition Programs*. Training on the PFS requirements and how to evaluate a PFS is available in Module 8: Meal Pattern Documentation for Crediting Commercial Processed Products of the CSDE's training program, *What's in a Meal: Meal Patterns for Grades K-12 in the School Nutrition Programs*.

When method 2 is required for commercial products

SFAs may need to obtain additional information to determine the crediting information for some commercial grain products. A PFS is required for commercial products when any of the situations below apply.

> These commercial grain products cannot credit in reimbursable meals or afterschool snacks if the manufacturer will not supply a PFS, or the PFS does not provide the appropriate documentation.

1. The first ingredient is not a creditable grain, but the product contains more than one creditable grain. The PFS must indicate that the combined weight of all creditable grains is the greatest ingredient by weight.

2. **Applies only to WGR foods:** The first ingredient is not a whole grain, but the product contains more than one whole grain. The PFS must indicate that the combined weight of all whole grains is the greatest ingredient by weight.

3. **Applies only to WGR foods:** The first ingredient is a whole grain, and the product contains two or more enriched grains. The PFS must indicate that the weight of the whole grain is equal to more than the combined weight of the enriched grains.

4. **Applies only to WGR foods:** The first ingredient is a flour blend of whole and enriched flour. The PFS must indicate one of the following: 1) the whole grain content is at least 8 grams per oz eq (groups A-G); or 2) the weight of the whole grain in the flour blend is more than the first ingredient (excluding water) listed *after* the flour blend.

5. The product contains noncreditable grains that are not listed in any of the following ways: after the statement, "contains 2% or less;" in a non-grain ingredient; or in the non-grain portion of a combination food. The PFS must indicate that the total weight of noncreditable grains does not exceed 3.99 grams per portion for groups A-G or 6.99 grams per portion for groups H-I.

6. A combination food that contains a grain portion does not have a CN label. The PFS must indicate the following: 1) the weight (grams) of each creditable grain per serving; 2) how the product provides that amount according to the USDA's FBG or USDA's regulations, guidance, or policies; and 3) if applicable, the total weight of any noncreditable grains.

7. The manufacturer claims that the product's serving size is less than the required weight or volume in the USDA's Exhibit A chart. The PFS must indicate the following: 1) the weight (grams) of each creditable grain per serving; 2) how the product provides that amount according to the FBG or USDA's regulations, guidance, or policies; and 3) if applicable, the total weight of noncreditable grains.

8. The product is not listed in the USDA's Exhibit A chart. The PFS must indicate the following: 1) the weight (grams) of each creditable grain per serving; 2) how the product provides that amount according to the FBG or USDA's regulations, guidance, or policies; and 3) if applicable, the total weight of noncreditable grains.

For specific guidance on these requirements and examples of commercial products that require a PFS, refer to the CSDE's resource, *When Commercial Grain Products Require a Product Formulation Statement to Credit in the School Nutrition Programs*.

Determining Oz Eq for Bread Slices

Bread is in group B of the USDA's Exhibit A chart. One slice must weigh 1 ounce (28 grams) to credit as 1 oz eq of the grains component.

The weight of one slice of bread varies among manufacturers and different types of bread products. For some types of bread, one slice weighs more or less than 1 ounce. Menu planners must check the serving size on the Nutrition Facts label to determine the bread product's oz eq contribution per slice.

The weight of one slice is determined by dividing the serving weight by the number of slices per serving, then rounding down to the nearest ¼ oz eq (refer to "Rounding requirements for crediting foods" in section 1). The examples below show how to complete this calculation.

Sample calculation for weight per slice

The Nutrition Facts label for a multigrain bread indicates that the serving is 2 slices (44 grams). Bread is in group B and requires 1 ounce (28 grams) to credit as 1 oz eq of the grains component.

1. Determine the weight per slice: Divide the serving weight by the number of slices per serving.
    - 44 grams divided by 2 slices = 22 grams per slice. Since 22 grams is less than 28 grams, one slice of this multigrain bread does not credit as 1 oz eq of the grains component.
2. Determine the grain oz eq per slice: Divide the grams per slice by 28 and round down to the nearest ¼ oz eq.
    - 22 grams divided by 28 grams = 0.78 oz eq, which rounds down to 0.75 oz eq.

One slice of this multigrain bread credits as 0.75 oz eq of the grains component.

Sample calculation for two slices of bread

Menu planners should determine the oz eq contribution of menu items made with 2 slices of bread (such as sandwiches) by adding the weight of both slices together before rounding down to the nearest ¼ oz eq.

- **Example:** A sandwich contains two slices of WGR bread. The Nutrition Facts label indicates that each slice weighs 26 grams. Bread is in group B and requires 1 ounce (28 grams) to credit as 1 oz eq of the grains component.

    1. Determine the total weight of the bread in the sandwich: Multiply the weight per slice by the number of slices.

        - 26 grams per slice multiplied by 2 slices = 52 grams.

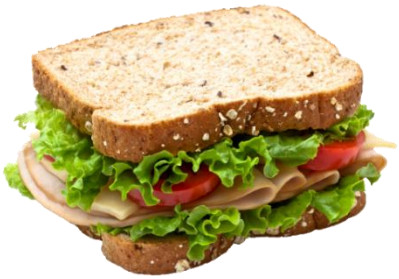
    2. Bread (group B) requires 1 ounce (28 grams) to credit as 1 oz eq of the grains component. Divide the total weight of the two slices by 28, then round down to the nearest ¼ oz eq.

        - 52 grams divided by 28 grams per oz eq = 1.86 oz eq, which rounds down to 1.75 oz eq.

    This sandwich credits as 1.75 oz eq of the grains component.

If the menu planner rounds down the weight of each slice first, the crediting is less than the 1.75 oz eq provided in the manufacturer's serving.

- **Example:** 26 grams divided by 28 grams per oz eq equals 0.93 oz eq. This rounds down to 0.75 oz eq per slice, which equals 1.5 oz eq of the grains component.



Determining Oz Eq for Cereal Bars and Granola Bars

SFAs must consider the appropriateness of the required serving for cereal bars and granola bars. Plain cereal bars and granola bars (group D) require 2 ounces (55 grams) to credit as 1 oz eq of the grains component. Cereal bars and granola bars with additional ingredients like nuts, dried fruit, and chocolate pieces (group E) require 2.4 ounces (69 grams) to credit as 1 oz eq of the grains component.

Some types of commercial cereal bars and granola bars require more than one bar to credit as 1 oz eq. For example, a fruit-filled cereal bar that weighs 37 grams credits as ½ oz eq of the grains component. SFAs must serve two fruit-filled cereal bars to provide 1 oz eq of the grains component at breakfast. The menu planner must determine if this serving size is practical and cost-effective.

> For K-12 menus, cereal bars and granola bars count toward the limit for grain-based desserts at lunch. Grain-based desserts cannot exceed 2 oz eq per week (refer to "Limit for grain-based desserts in K-12 lunch menus" in this section).

Cereal bars and granola bars are grain-based desserts and cannot credit in the preschool meal patterns for the ASP meal pattern for grades K-12.

Determining Oz Eq for Graham Cracker Packages

SFAs that offer graham crackers as a 1-oz eq grain menu item must make sure that the serving weighs 1 ounce or 28 grams. Menu planners must follow the rounding rules for oz eq, i.e., round the serving down to the nearest ¼ oz eq (refer to "Rounding requirements for crediting foods" in section 1). Many brands credit as less than 1 oz eq because the individual package does not weigh 1 ounce.

- **Example 1:** A two-count package of graham crackers that weighs 0.49 ounce credits as ¼ oz eq of the grains component due to the rounding rules for oz eq. The menu planner would need to offer four packages to provide 1 oz eq of the grains component.

- **Example 2:** A three-count package of graham crackers that weighs 0.75 or ¾ ounce credits as ¾ oz eq of the grains component due to the rounding rules for oz eq. The menu planner would need to offer two packages to provide at least 1 oz eq of the grains component.

SFAs must review the product's PFS to determine the specific crediting for each brand of graham crackers and if they are WGR or enriched (refer to "Crediting graham crackers in menus for grades K-12 and preschool section 6). Graham crackers count toward the limit for grain-based desserts for K-12 lunch menus (refer to "Limit for grain-based desserts in K-12 lunch menus" in this section).

Required Signage to Identify Grain Servings for K-12 Menus

SFAs must use meal identification signage to instruct K-12 students on how much food to select from each meal component daily for a reimbursable meal, based on the planned servings for each grade group. For example, if a high school allows students to select two 1-ounce whole-grain rolls to meet the minimum daily 2 oz eq of the grains component at lunch, the school menu and cafeteria signage must clearly communicate that students are allowed to select two rolls with each meal. This signage must be on the serving line where the rolls are located.

For more information on signage, refer to the CSDE's *Signage Requirements for the National School Lunch Program and School Breakfast Program* and section 4 of the CSDE's *Guide to Meal Service Requirements for the National School Lunch Program and School Breakfast Program Meal Patterns for Grades K-12*.

Training on the required signage for OVS is available in Module 17: Offer versus Serve in the National School Lunch Program and Module 18: Offer versus Serve in the School Breakfast Program of the CSDE's training program, *What's in a Meal: Meal Patterns for Grades K-12 in the School Nutrition Programs*.

Avoiding Common Compliance Issues for Grain Servings

The common compliance issues indicated below are based on findings from the CSDE's Administrative Review of the school nutrition programs.

- **Insufficient serving for K-12 breakfast and lunch menus:** The daily lunch menu cannot provide less than the minimum serving of the grains component for each grade group (refer to "Required Grain Servings for K-12 Menus" in this section). Lunch menus must include at least 1 oz eq of grains for grades K-5 and 6-8, and at least 2 oz eq of grains for grades 9-12. Breakfast menus must include at least 1 oz eq of the grains/MMA component for all grades.

- **Not offering the minimum weekly grains/MMA for all grades at breakfast:** SFAs must offer more than 1 oz eq of the grains/MMA component on some days of the week to meet the minimum weekly requirement for each grade group. If the menu offers multiple grains/MMA choices on an individual day, SFAs must count the smallest oz eq

choice toward the weekly grains/MMA requirement. For more information, refer to "Grain servings for K-12 breakfast menus" in this section.

- **Not offering the minimum weekly grains for grades K-5 and 6-8 at lunch:** SFAs must offer more than 1 oz eq of grains on some days to meet the minimum weekly requirement for grades K-5 and 6-8 at lunch. If the menu offers a choice of more than one grain item on an individual day, SFAs must count the smallest oz eq choice toward the weekly grains requirement. For more information, refer to "Grain servings for K-12 lunch menus" in this section.

SFAs must plan the grains servings for school menus to avoid these compliance issues.

Resources for Grain Servings

The resources below assist menu planners with determining the oz eq contribution of grain menu items for the NSLP, SBP, and ASP meal patterns.

- Calculation Methods for Grain Ounce Equivalents in the School Nutrition Programs (CSDE): https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/grain_calculation_snp.pdf
- Exhibit A Grains Tool of the Food Buying Guide (USDA): https://www.fna.usda.gov/tn/fbg/webtool
- Exhibit A: Grain Requirements for Child Nutrition Programs (USDA): https://foodbuyingguide.fns.usda.gov/Content/TablesFBG/Exhibit_A_Grain_Requirements_For_Child_Nutrition_Programs.pdf
- Grain Ounce Equivalents Chart for the School Nutrition Programs (CSDE): https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/grain_oz_eq_snp.pdf
- How to Use the Grain Ounce Equivalents Chart for the School Nutrition Programs (CSDE): https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/how_to_use_ounce_equivalents_chart_snp.pdf
- Product Formulation Statement for Documenting Grains Ounce Equivalents in Child Nutrition Programs (USDA): https://www.fna.usda.gov/sites/default/files/resource-files/tn-pfs-grains-oz-eq-template.pdf

- Product Formulation Statement for Documenting Grains Ounce Equivalents in Child Nutrition Programs: Completed Sample (USDA): https://www.fna.usda.gov/sites/default/files/resource-files/tn-pfs-grains-oz-eq-sample.pdf

- Serving Requirements ("Grains" section of CSDE's Crediting Foods in School Nutrition Programs webpage): https://portal.ct.gov/sde/nutrition/crediting-foods-in-school-nutrition-programs/grains#ServingRequirements

- What's in a Meal Module 15: Grains Ounce Equivalents (CSDE's Training Program, What's in a Meal: Meal Patterns for Grades K-12 in the School Nutrition Programs): https://portal.ct.gov/sde/nutrition/meal-pattern-training-materials#module15

- When Commercial Grain Products Require a Product Formulation Statement to Credit in the School Nutrition Programs (CSDE): https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/when_commercial_grain_products_require_pfs_snp.pdf

For additional crediting resources, visit the "Grains" section of the CSDE's Crediting Foods in School Nutrition Programs webpage. Training on grain oz eq is available in Module 15: Grains Ounce Equivalents of the CSDE's training program, *What's in a Meal: Meal Patterns for Grades K-12 in the School Nutrition Programs*.

8 — Resources

This section includes additional resources and websites to assist SFAs with meeting the crediting requirements for the school nutrition programs. More links to information on the federal and state requirements and guidance for reimbursable meals and afterschool snacks are available on the CSDE's Program Guidance for School Nutrition Programs webpage. For a list of resources on the meal patterns and crediting requirements, refer to the CSDE's *Meal Pattern and Crediting Resources for the School Nutrition Programs*.

Meal Components and Crediting

Crediting Documentation for the Child Nutrition Programs (CSDE webpage):
https://portal.ct.gov/sde/nutrition/crediting-documentation-for-the-child-nutrition-programs

Crediting Foods in School Nutrition Programs (CSDE webpage):
https://portal.ct.gov/sde/nutrition/crediting-foods-in-school-nutrition-programs

Crediting Summary Charts for the Meal Patterns for the School Nutrition Programs (CSDE):
https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/crediting_summary_ charts_ snp.pdf

Guide to Meeting the Whole Grain-rich Requirement for the Meal Patterns for Grades K-12 in the School Nutrition Programs (CSDE):
https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/guide_wgr_requirement_snp_ grades_k-12.pdf

Meal Pattern and Crediting Resources for the School Nutrition Programs (CSDE):
https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/resources_school_ meal_patterns_snp.pdf

Menu Planning Guidance for School Meals for Grades K-12 (CSDE webpage):
https://portal.ct.gov/sde/nutrition/menu-planning-guidance-for-school-meals

Noncreditable Foods in the Meal Patterns for the School Nutrition Programs (CSDE):
https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/noncreditable_foods_snp.pdf

Noncreditable Grains for the School Nutrition Programs and the Connecticut Nutrition Standards (CSDE):
https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/noncreditable_grains_snp.pdf

What's in a Meal: Meal Patterns for Grades K-12 in the School Nutrition Programs (CSDE's Meal Pattern Training for School Nutrition Programs webpage): https://portal.ct.gov/sde/nutrition/meal-pattern-training-materials

Meal Patterns and Menu Planning

Afterschool Snack Program Handbook (CSDE): https://portal.ct.gov/-/media/sde/nutrition/asp/asp_handbook.pdf

Dietary Specifications (CSDE's Meal Patterns for Grades K-12 in School Nutrition Program webpage): https://portal.ct.gov/sde/nutrition/meal-patterns-school-nutrition-programs/dietary-specifications

Guide to Meal Modifications in the School Nutrition Programs (CSDE): https://portal.ct.gov/-/media/sde/nutrition/nslp/specdiet/guide_meal_modifications_snp.pdf

Guide to Meal Service Requirements for the National School Lunch Program and School Breakfast Program Meal Patterns for Grades K-12 (CSDE): https://portal.ct.gov/-/media/sde/nutrition/mpg/guide_meal_service_nslp_sbp_k12.pdf

Guide to Meeting the Whole Grain-rich Requirement for the Meal Patterns for Grades K-12 in the School Nutrition Programs (CSDE): https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/guide_wgr_requirement_snp_grades_k-12.pdf

Guide to the Dietary Specifications for the National School Lunch Program and School Breakfast Program Meal Patterns for Grades K-12 (CSDE): https://portal.ct.gov/-/media/sde/nutrition/mpg/guide_dietary_specifications_nslp_sbp_k12.pdf

Meal Pattern and Crediting Resources for the School Nutrition Programs (CSDE): https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/resources_school_meal_patterns_snp.pdf

Meal Pattern Changes (CSDE's Meal Patterns for Grades K-12 in School Nutrition Program webpage): https://portal.ct.gov/sde/nutrition/meal-patterns-school-nutrition-programs#Meal_Pattern_Changes

Meal Patterns for Grades K-12 in School Nutrition Programs (CSDE webpage): https://portal.ct.gov/sde/nutrition/meal-patterns-school-nutrition-programs

Menu Planner for School Meals (USDA):
https://www.fna.usda.gov/tn/menu-planner-school-meals

Menu Planning Checklists for Lunch for Grades K-12 (CSDE's Forms for School Nutrition Programs webpage):
https://portal.ct.gov/sde/nutrition/forms-for-school-nutrition-programs#m

Menu Planning for Child Nutrition Programs (CSDE webpage):
https://portal.ct.gov/sde/nutrition/menu-planning

Nutrition Standards for School Meals (USDA webpage):
https://www.fna.usda.gov/schoolmeals/nutrition-standards

Offer versus Serve for School Nutrition Programs (CSDE webpage):
https://portal.ct.gov/sde/nutrition/offer-versus-serve-for-school-nutrition-programs

Offer versus Serve Guide for School Meals (CSDE):
https://portal.ct.gov/sde/nutrition//-/media/sde/nutrition/nslp/ovs/ovs_guide_snp.pdf

Overview of Menu Planning for Grades K-12 in the National School Lunch Program (CSDE):
https://portal.ct.gov/-/media/sde/nutrition/nslp/mealpattern/overview_menu_planning_nslp_grades_k-12.pdf

Overview of Menu Planning for Grades K-12 in the School Breakfast Program (CSDE):
https://portal.ct.gov/-/media/sde/nutrition/sbp/overview_menu_planning_sbp_grades_k-12.pdf

Preschool Meal Pattern Training for the School Nutrition Programs ("Preschool Meal Pattern Training" section of CSDE's Meal Patterns for Preschoolers in School Nutrition Programs webpage):
https://portal.ct.gov/sde/nutrition/meal-patterns-preschoolers-in-school-nutrition-programs/preschool-meal-pattern-training

Sodium Limits for the National School Lunch Program and School Breakfast Program Meal Patterns for School Meals for Grades K-12 (CSDE):
https://portal.ct.gov/-/media/sde/nutrition/nslp/mealpattern/sodium_limits_nslp_sbp.pdf

What's in a Meal: Meal Patterns for Grades K-12 in the School Nutrition Programs (CSDE's Meal Pattern Training for School Nutrition Programs webpage):
https://portal.ct.gov/sde/nutrition/meal-pattern-training-materials

Policy and Guidance

C.G.S. Section 10-221q. Sale of beverages:
https://www.cga.ct.gov/current/pub/chap_170.htm#sec_10-221q

Child Nutrition Programs Legislation and Regulations (USDA):
https://www.fna.usda.gov/cn/legislation-regulations

Code of Federal Regulations (CFR) for the National School Lunch Program (7 CFR 210) (USDA):
https://www.ecfr.gov/current/title-7/subtitle-B/chapter-II/subchapter-A/part-210

Code of Federal Regulations (CFR) for the School Breakfast Program (7 CFR 220) (USDA):
https://www.ecfr.gov/current/title-7/subtitle-B/chapter-II/subchapter-A/part-220

Food and Nutrition Administration (FNA) Documents & Resources (USDA):
https://www.fna.usda.gov/resources

Laws and Regulations for Child Nutrition Programs (CSDE webpage):
https://portal.ct.gov/sde/nutrition/laws-and-regulations-for-child-nutrition-programs

Manuals and Guides for Child Nutrition Programs (CSDE webpage):
https://portal.ct.gov/sde/nutrition/manuals-and-guides-for-child-nutrition-program

Operational Memoranda for School Nutrition Programs (CSDE webpage):
https://portal.ct.gov/sde/nutrition/operational-memoranda-for-school-nutrition-programs

Program Guidance for School Nutrition Programs (CSDE webpage):
https://portal.ct.gov/sde/nutrition/program-guidance-school-nutrition-programs

Questions and Answers on Connecticut Statutes for School Foods and Beverages CSDE):
https://portal.ct.gov/-/media/sde/nutrition/hfc/questions_answers_connecticut_statutes_school_foods_beverages.pdf

School Lunch Tray and Table Talk (CSDE webpage):
https://portal.ct.gov/sde/nutrition/school-lunch-tray-and-table-talk

Training for Child Nutrition Programs (CSDE webpage):
https://portal.ct.gov/sde/nutrition/training-for-child-nutrition-programs

USDA Final Rule: Nutrition Standards in the National School Lunch and School Breakfast Programs (77 FR 4087):
https://www.fna.usda.gov/cn/fr-012612

USDA Final Rule: Child Nutrition Programs: Meal Patterns Consistent with the 2020-2025 Dietary Guidelines for Americans (89 FR 31962):
https://www.fna.usda.gov/cn/fr-042524

USDA Final Rule: Expanding Fluid Milk Options in Child Nutrition Programs (91 FR 25073):
https://www.fna.usda.gov/cn/fr-050826

USDA FNS Instruction 786-8: Reimbursement for Off-Site Meal Consumption:
https://www.fna.usda.gov/schoolmeals/reimbursement-offsite-meal-consumption

USDA Memo SP 05-2022: Meal Requirements Under the NSLP & SBP: Q&A for Program Operators Updated to Support the Transitional Standards Effective July 1, 2022:
https://www.fna.usda.gov/cn/sp052022-questions-answers-program-operators

USDA Memo SP 17-2012: Procurement Questions and Answers to Assist in the Implementation of the final rule titled Nutrition Standards in the National School Lunch and School Breakfast Program.
https://www.fna.usda.gov/cn/procurement-qas-assist-implementation-final-rule

8 | Resources

Glossary

a la carte sales: Foods and beverages that are sold separately from reimbursable meals and afterschool snacks in the USDA's school nutrition programs. For more information, refer to "competitive foods" in this section.

added sugars: Sugars and syrups added to foods in processing or preparation, as opposed to the naturally occurring sugars found in nutrient-dense foods like fruits, vegetables, grains, and dairy products. Names for added sugars include brown sugar, corn sweetener, corn syrup, dextrose, fructose, fruit juice concentrates, glucose, high-fructose corn syrup, honey, invert sugar, lactose, malt syrup, maltose, molasses, raw sugar, sucrose, sugar, and syrup.

Administrative Review (AR): The state agency's comprehensive offsite and onsite evaluation of all SFAs participating in the NSLP and SBP. The review cycle is every three years for each SFA and includes a review of critical and general areas. For more information, visit the CSDE's Administrative Review for School Nutrition Programs webpage.

Afterschool Snack Program (ASP): The USDA's federally assisted snack program implemented through the NSLP. The ASP provides cash reimbursement to help schools serve snacks to children in afterschool activities aimed at promoting the health and well-being of children and youth. Schools must provide children with regularly scheduled activities in an organized, structured, and supervised environment that includes educational or enrichment activities, e.g., mentoring/tutoring programs. Programs must meet state or local licensing requirements and health and safety standards. For more information, visit the CSDE's Afterschool Snack Program webpage.

afterschool snacks: Reimbursable snacks offered in the Afterschool Snack Program (ASP). For more information, refer to "Afterschool Snack Program (ASP)" in this section.

age/grade groups: The three age/grade groupings (K-5, 6-8, and 9-12) of the USDA's meal breakfast and lunch patterns for grades K-12. The classification of age/grade groups is based on children's nutritional needs and the ages that typically correspond with these grade levels (ages 5-10 for grades K-5, ages 11-13 for grades 6-8, and ages 14-18 for grades 9-12).

alternate protein products (APPs): Food ingredients processed from soy or other vegetable protein sources (e.g., dehydrated granules, particles, or flakes) that may be used alone or in combination with meat, poultry, or seafood. Some examples include soy flours, soy concentrates, soy isolates, whey protein concentrate, whey protein isolates, and casein. The USDA has specific requirements for the crediting of APPs in Child Nutrition Programs. For more information, refer to the CSDE's resource, *Requirements for Alternate Protein Products in the School Nutrition Programs*.

artificial sweeteners: A category of nonnutritive sweeteners used as sugar substitutes to sweeten foods and beverages. The six artificial sweeteners approved by the Food and Drug Administration (FDA) include acesulfame potassium (Ace-K) (e.g., Sweet One®, Sunett ®, and Sweet & Safe®); advantame; aspartame (e.g., Nutrasweet®, Equal®, and Sugar Twin®; neotame (e.g., Newtame®); saccharin (e.g., Sweet and Low®, Sweet Twin®, and Necta Sweet); and sucralose (Splenda®). These nonnutritive sweeteners are calorie-free except for aspartame, which is very low in calories. For more information, refer to "nonnutritive sweeteners" in this section.

bean dip: A spread made from ground pulses (beans, peas, and/or lentils) with one or more of the following optional ingredients: ground nut/seed butter (such as tahini [ground sesame] or peanut butter; vegetable oil (such as olive oil, canola oil, soybean oil); seasoning (such as salt, citric acid); vegetables and juice for flavor (such as olives, roasted peppers, garlic, lemon juice); and for manufactured bean dip, ingredients necessary as preservatives and/or to maintain freshness.

beans, peas, and lentils (pulses): The dried edible seeds of legumes (such as beans, lentils, chickpeas, and split peas). Pulses include all beans, peas, and lentils cooked from dry, canned, or frozen, such as kidney beans, pinto beans, black beans, pink beans, black-eyed peas, garbanzo beans (chickpeas), split peas, pigeon peas, mung beans, and lentils. The meal patterns for Child Nutrition Programs allow beans, peas, and lentils to credit as either the MMA component or the vegetables component. Minimum weekly servings are required in the NSLP meal patterns for grades K-12. For more information, refer to "Crediting Beans, Peas, and Lentils as MMA" in section 3 and "Crediting Beans, Peas, and Lentils as Vegetables" in section 4.

bran: The seed husk or outer coating of cereal grains such as wheat, rye, and oats. Examples include oat bran, wheat bran, corn bran, rice bran, and rye bran. Bran credits the same as enriched grains.

breakfast cereals: Ready-to-eat (RTE) cereals (such as puffed cereals, round or flaked cereals, and granola) and instant and regular hot cereals (such as oatmeal, cream of wheat, and farina). RTE breakfast cereals can be eaten as sold and are typically fortified with vitamins and minerals.

calories: The measurement of energy provided by foods and beverages.

carbohydrates: A category of nutrients that includes sugars (simple carbohydrates) and starch and fiber (complex carbohydrates). Carbohydrates are easily converted by the body to energy (calories). Foods that provide carbohydrates (fruits, vegetables, breads, cereals, grains, milk, and dairy products) are important sources of many nutrients. However, foods containing large amounts of added sugars provide calories but few, if any, nutrients. For more information, refer to "added sugars" and "simple carbohydrates" in this section.

cereal grains: The seeds that come from grasses. Cereal grains can be whole grain (such as amaranth, barley, buckwheat, corn, millet, oats, quinoa, rice, rolled wheat, rye, sorghum, triticale, wheat, and wheat berries) or enriched (such as enriched cornmeal, corn grits, and farina).

Child Nutrition (CN) label: A statement approved by the USDA that clearly identifies the contribution of a food product toward the meal pattern requirements, based on the USDA's evaluation of the product's formulation. Products eligible for CN labels include main dish entrees that provide at least ½ oz eq of the MMA component, e.g., beef patties, cheese or meat pizzas, meat or cheese and bean burritos, egg rolls, and breaded fish portions. CN labels usually indicate the contribution of other meal components (such as vegetables, grains, and fruits) that are part of these products. For more information, refer to the CSDE's resource, *Using Child Nutrition (CN) Labels in the School Nutrition Programs*, and visit the "Child Nutrition Labels" section of the CSDE's Crediting Documentation for the Child Nutrition Programs webpage.

Child Nutrition Programs: The USDA's federally funded programs that provide nutritious meals and snacks to children, including the National School Lunch Program (NSLP), School Breakfast Program (SBP), Afterschool Snack Program (ASP), Special Milk Program (SMP), Summer Food Service Program (SFSP), Seamless Summer Option (SSO) of the NSLP, Fresh Fruit and Vegetable Program (FFVP), and Child and Adult Care Food Program (CACFP). The CACFP also provides nutritious meals and snacks to the frail elderly in adult day care centers. For more information, visit the CSDE's Child Nutrition Programs webpage.

combination foods: Foods that contain more than one meal component, such as pizza, burritos, and smoothies made with milk and fruit. For example, macaroni and cheese contains pasta (grains) and cheese (meats/meat alternates). Combination foods generally cannot be separated (such as pizza and burritos) or are not intended to be separated (such as a hamburger on a bun or turkey sandwich).

competitive foods: Any foods and beverages sold to students anytime on school premises other than meals served through the USDA's school meal programs. Competitive food sales include, but are not limited to, cafeteria a la carte sales, vending machines, school stores, and fundraisers. For more information, refer to "a la carte sales" in this section and visit the CSDE's Competitive Foods in Schools webpage.

corn masa: Dough made from masa harina that is used for making corn products such as tortillas, tortilla chips, and tamales. Corn masa is nixtamalized and credits as a whole grain. For more information, refer to "nixtamalization" in this section.

cornmeal: Meal made from ground, dried corn.

creditable food: A food or beverage that counts toward meeting the meal pattern requirements for reimbursable meals and afterschool snacks in the USDA's Child Nutrition Programs. For more information, visit the CSDE's Crediting Foods in School Nutrition Programs webpage.

creditable grains: The ingredients in a commercial grain product or standardized recipe that credit toward the grains component. Creditable grains include whole grains, enriched grains, bran, and germ. For more information, refer the CSDE's resources, *Crediting Whole Grains in the School Nutrition Programs* and *Crediting Enriched Grains in the School Nutrition Programs*.

cycle menu: A series of menus planned for a specific period, with a different menu for each day. Cycle menus can help schools comply with the meal pattern requirements, control food cost, control inventory, improve staff efficiency, and save time and labor costs. For more information, refer to the CSDE's *Guide to Menu Documentation for the School Nutrition Programs* and visit the "Cycle Menus" section of the CSDE's Menu Planning for Child Nutrition Programs webpage.

Dietary Guidelines for Americans: A federal document that provides science-based advice for Americans ages 2 and older to promote health and reduce risk for chronic diseases through diet and physical activity. The U.S. Department of Health and Human Services and the USDA jointly publish the *Dietary Guidelines for Americans* every five years. This document forms the basis of federal food, nutrition education, and information programs. For more information, visit the Dietary Guidelines for Americans webpage.

dietary specifications: The USDA's nutrition standards for the NSLP and SBP meal patterns for grades K-12, that include weekly calorie ranges and weekly limits for saturated fat and sodium. For information on the specific dietary specifications for each grade group, visit the CSDE's Meal Patterns for Grades K-12 in School Nutrition Programs webpage. For guidance on meeting the dietary specifications, refer to the CSDE's *Guide to the Dietary Specifications for the National School Lunch Program and School Breakfast Program Meal Patterns for Grades K-12*.

Effective with school year 2026-27 (beginning July 1, 2027), the USDA final rule, *Child Nutrition Programs: Meal Patterns Consistent with the 2020-2025 Dietary Guidelines for Americans*, requires a new weekly dietary specification for added sugars (less than 10 percent of calories). For more information, visit the "Meal Pattern Changes" section of the CSDE's Meal Patterns for Grades K-12 in School Nutrition Programs webpage.

disability: A condition in which a person has a physical or mental impairment that substantially limits one or more major life activities, has a record of such an impairment, or is regarded as having such an impairment. For more information, refer to the CSDE's *Guide to Meal Modifications in School Nutrition Programs*.

edible portion: The portion of a food that can be eaten after the nonedible parts are removed. Examples include cooked, lean meat without bone, and fruits without seeds or pits.

endosperm: The soft, white inside portion of the whole-grain kernel. The endosperm contains starch, protein, and small amounts of B vitamins.

enriched grains: Refined grains (such as wheat, rice, and corn) and grain products (such as cereal, pasta, and bread) that have some vitamins and minerals added to replace the nutrients lost during processing. The five enrichment nutrients are added within limits specified by the FDA, and include thiamin (B_1), riboflavin (B_2), niacin (B_3), folic acid, and iron. For more information, refer the CSDE's resource, *Crediting Enriched Grains in the School Nutrition Programs*.

enrichment: Adding back nutrients (usually vitamins or minerals) originally present in a food that were lost during processing. Enrichment nutrients are added back in approximately the same levels as were originally present in the food. For more information, refer to "enriched grains" in this section.

entree: Refer to "main dish" in this section.

Exhibit A chart: The USDA's *Exhibit A: Grain Requirements for Child Nutrition Programs* chart indicates the required weight (groups A-G) or volume (groups H-I) for different types of grain foods to provide 1 oz eq of the grains component. For guidance on applicable Exhibit A quantities and requirements for each school nutrition program, refer to the CSDE's resource, *Grain Ounce Equivalents Chart for the School Nutrition Programs*.

flour: Finely ground and sifted wheat or other grains such as rye, corn, rice, or buckwheat.

fluid milk substitutes: Plant-based beverages like fortified soy milk that are intended to replace cow's milk. Fluid milk substitutes must meet the USDA's nutrition standards for fluid milk substitutes. Only certain brands of fluid milk substitutes meet these standards. CACFP facilities may choose to offer allowable fluid milk substitutes to children who do not consume milk due to non-disability reasons. For more information, refer to "nutrition standards for milk substitutes" in this section and the CSDE's resources, *Allowable Fluid Milk Substitutes for Non-Disability Reasons in the School Nutrition Programs* and *Determining if Nondairy Milk Substitutes Meet the USDA's Nutrition Standards for Fluid Milk Substitutes in School Nutrition Programs*.

food-based menu planning: A type of menu planning for the USDA's Child Nutrition Programs that uses a meal pattern with specific meal components in certain amounts based on specific age/grade groups. For more information, refer to "meal components" in this section.

food item: A specific food offered within the required meal components for reimbursable meals and afterschool snacks in the USDA's school nutrition programs. A food item may contain one or more meal components or more than one serving of a single component. For example, an entree could provide 1 oz eq of the grains component and 1 oz eq of the MMA component.

fortification: Adding nutrients (usually vitamins or minerals) that were not originally present in a food or beverage, or adding nutrients at levels that are higher than originally present. Fortification is used for naturally nutrient-rich products based on scientifically documented health needs (such as fortifying milk with vitamin D to increase the body's absorption of calcium), or to enhance the perceived nutritional value of products with little or no natural nutritional value, e.g., fortifying "energy" bars made from processed flour with multiple vitamins and minerals. Fortification nutrients are added to products in varying amounts, from small percentages up to amounts greater than recommended intakes.

fruits component: The meal component of the USDA meal patterns for the school nutrition programs that includes fruits (fresh, frozen, canned, and dried) and pasteurized full-strength juices. For more information, refer to section 5 and visit the "Fruits" section of the CSDE's Crediting Foods in School Nutrition Programs webpage.

full meal component: The daily quantity designated by the menu planner (no less than the established minimum) to meet the required weekly ranges.

full serving: Refer to "full meal component" in this section.

full-strength fruit or vegetable juice: An undiluted product obtained by extraction from sound fruit. Full-strength juice may be fresh, canned, frozen or reconstituted from concentrate and may be served in either liquid or frozen state or as an ingredient in a standardized recipe. The name of the full-strength fruit juice on the label must include one of the following terms: "full-strength juice," "single-strength juice," "100 percent juice," "reconstituted juice," or "juice from concentrate." For more information, refer to the CSDE's resource, *Crediting Juices in the School Nutrition Programs*.

germ: The vitamin-rich sprouting section of the whole-grain kernel. Germ credits the same as enriched grains.

age/grade groups: Refer to "age/grade groups" in this section.

grain-based desserts: Desserts made of grains, such as brownies, cookies, sweet crackers (e.g., graham crackers and animal crackers), cakes, cupcakes, coffee cakes, cinnamon streusel quick breads, piecrusts in sweet pies (e.g., apple, coconut, blueberry, and pecan), cinnamon rolls, doughnuts, cereal bars, granola bars, breakfast bars, sweet rolls, pastries, toaster pastries, sweet scones (e.g., blueberry, orange cranberry, and chocolate chip), sweet croissants (e.g., chocolate or almond filled), sweet rice puddings (e.g., cinnamon and vanilla), sweet bread puddings (e.g., made with cinnamon, fruits, chocolate, or icing), and sweet pita chips (e.g., cinnamon sugar). For more information, refer to the CSDE's resource, *Crediting Grain-based Desserts in the National School Lunch Program and School Breakfast Program Meal Patterns for Grades K-12*. **Note:** Except for sweet crackers like graham crackers and animal crackers, grain-based desserts do not credit in the preschool meal patterns or the ASP meal pattern for grades K-12.

grains component: The meal component of the USDA meal patterns for the school nutrition programs that includes cereal grains and products made from their flours. Creditable grain foods include products and recipes that are WGR or enriched. Creditable cooked and ready-to-eat (RTE) breakfast cereals include products that are WGR, enriched, or fortified. For more information, refer to section 6 and visit the "Grains" section of the CSDE's Crediting Foods in School Nutrition Programs webpage.

grains: Plants in the grass family that produce a dry, edible fruit commonly called a kernel, grain, or berry.

Hazard Analysis Critical Control Points (HACCP): A preventative food safety program to control food safety hazards during all aspects of food service operations. HACCP reduces the risk of foodborne hazards by focusing on each step of the food preparation process from receiving to service.

hominy: A traditional food in Mexican and Native American cultures that is commonly served as a vegetable or milled grain product, e.g., hominy grits. Hominy is made from whole kernels of maize (dried field corn) that have been soaked in an alkaline solution (nixtamalized). This process removes the hull and germ, causes the corn to puff up to about double its normal size, and increases the bioavailability of certain nutrients, such as calcium and niacin. For crediting information, refer to "Crediting Hominy as Vegetables" in section 4 and "Crediting Hominy as Grains" in section 5.

juice drink: A product resembling juice that contains full-strength juice along with added water and possibly other ingredients, such as sweeteners, spices, or flavorings. Juice drinks do not credit toward the meal pattern requirements.

lactose: The naturally occurring sugar found in milk. Lactose contains glucose and galactose. For more information, refer to "simple carbohydrates (sugars) in this section.

lactose-free milk: A type of fluid milk that is processed to remove the lactose (naturally occurring sugar) found in regular milk. Lactose-free milk typically has the same nutritional benefits as regular milk, including calcium, protein, and vitamins. Like other types of fluid milk, lactose-free milk comes in a variety of flavors and fat contents. For more information, refer to the CSDE's resource, *Offering Lactose-Free and Lactose-Reduced Milk in the School Nutrition Programs*.

lactose-reduced milk: A type of fluid milk that is processed to remove some of the lactose (naturally occurring sugar). Lactose-reduced milk typically has the same nutritional benefits as regular milk, including calcium, protein, and vitamins. Like other types of fluid milk, lactose-reduced milk comes in a variety of flavors and fat contents. For more information, refer to the CSDE's resource, *Offering Lactose-Free and Lactose-Reduced Milk in the School Nutrition Programs*.

lean meat and poultry: Defined by the USDA as meat and poultry that contains less than 10 grams of fat, no more than 4.5 grams of saturated fat, and less than 95 milligrams of cholesterol per 100 grams and per labeled serving size, based on the USDA's definitions for food label use. Examples include 95 percent lean cooked ground beef, beef top round steak or roast, beef tenderloin, pork top loin chop or roast, pork tenderloin, ham or turkey deli slices, skinless chicken breast, and skinless turkey breast.

legumes: A type of plant that includes pods, e.g., soybeans, peanuts, fresh peas, fresh beans, and pulses (beans, peas, and lentils). For more information, refer to "beans, peas, and lentils (pulses)" and "pulses" in this section.

local educational agency (LEA): A public board of education or other public or private nonprofit authority legally constituted within a state for either administrative control or direction of, or to perform a service function for, public or private nonprofit elementary schools or secondary schools in a city, county, township, school district, or other political subdivision of a state, or for a combination of school districts or counties that is recognized in a state as an administrative agency for its public or private nonprofit elementary schools or secondary schools. The term also includes any other public or private nonprofit institution or agency having administrative control and direction of a public or private nonprofit elementary school or secondary school, including residential child care institutions, Bureau of Indian Affairs schools, and educational service agencies and consortia of those agencies, as well as the state educational agency in a state or territory in which the state educational agency is the sole educational agency for all public or private nonprofit schools.

main dish: The main food item in the menu, which is complemented by the other food items. Examples of main dish items include pizza, chicken stir-fry, and chef's salad with ham, hard-boiled egg, and cheese.

masa harina: Corn flour used for making corn products such as tortillas, tortilla chips, and tamales. Masa harina is nixtamalized and credits as a whole grain. For more information, refer to "nixtamalization" in this section and "Crediting Corn Masa, Masa Harina, Corn Flour, and Cornmeal" in section 6.

meal components: The five food groups (milk, fruits, vegetables, grains, and MMA) that comprise reimbursable meals in the NSLP and SBP and reimbursable snacks in the ASP.

meal pattern: The required meal components and minimum servings that schools and institutions participating in the USDA's Child Nutrition Programs must provide to receive federal reimbursement for meals and afterschool snacks served to children. For more information, visit the CSDE's Meal Patterns for Grades K-12 in School Nutrition Programs webpage and Meal Patterns for Preschoolers in School Nutrition Programs webpage, and the "Meal Patterns and Crediting" section of the CSDE's Afterschool Snack Program webpage.

meal: A grain made by coarsely grinding corn, oats, wheat, or other grains. Whole grain, enriched, or fortified meal credits toward the grains component of the USDA's meal patterns.

meals: Refer to "reimbursable meals" in this section.

meat alternates: Foods that provide a similar protein content to meat. Meat alternates include alternate protein products, cheese, eggs, cooked dry beans and peas, nuts and seeds and their butters (except for acorn, chestnut, and coconut), yogurt, soy yogurt, commercial tofu containing at least 5 grams of protein in a ¼-cup (2.2 ounces) serving, and tempeh. For more information, visit the "Meats and Meat Alternates" section of the CSDE's Crediting Foods in School Nutrition Programs webpage.

meats/meat alternates (MMA) component: The meal component of the USDA meal patterns for the school nutrition programs that includes meats (e.g., beef, poultry, and fish) and meat alternates, such as eggs, cheese, yogurt, beans, peas, and lentils, nuts, and seeds. For more information, visit the "Meats and Meat Alternates" section of the CSDE's Crediting Foods in School Nutrition Programs webpage.

medical statement: A document signed by a state-licensed healthcare professional or registered dietitian that identifies the specific medical conditions and appropriate dietary accommodations for children with special dietary needs. For more information, refer to the CSDE's *Guide to Meal Modifications in the School Nutrition Programs* and visit the "Medical Statements" section of the CSDE's Special Diets in School Nutrition Programs webpage.

menu item: Any planned main dish, vegetable, fruit, bread, grain, or milk that is part of reimbursable meals or afterschool snacks. Menu items consist of food items. For more information, refer to "food item" in this section.

milk component: The meal component of the USDA meal patterns for the school nutrition programs that includes pasteurized fluid milk that meets federal and state regulations. The milk component also includes fluid milk substitutes that meet the USDA's nutrition standards for fluid milk substitutes. For more information, refer to "fluid milk substitutes" and "nutrition standards for fluid milk substitutes" in this section, and visit the "Milk" section of the CSDE's Crediting Foods in School Nutrition Programs webpage.

National School Lunch Program (NSLP): The USDA's federally assisted meal program operating in public and nonprofit private schools and residential child care institutions. The NSLP provides nutritionally balanced, low-cost, or free lunches to children each school day. The NSLP was established under the National School Lunch Act, signed by President Harry Truman in 1946. For more information, visit the CSDE's National School Lunch Program webpage.

natural cheese: Cheese that is produced directly from milk. Examples include cheddar, Colby, Monterey Jack, mozzarella, Muenster, provolone, Swiss, feta, and brie. Natural cheese also includes pasteurized blended cheese that is made by blending one or more different kinds of natural cheese. Natural cheeses do not include pasteurized process cheese (e.g., American), pasteurized process cheese food, pasteurized process cheese spread, or pasteurized process cheese products. For more information, refer to "Crediting Cheeses" in section 3.

nixtamalization: A process in which dried corn is soaked and cooked in an alkaline (slaked lime) solution. This process increases the bioavailability of certain nutrients and results in a product with a similar nutrition content to whole-grain corn. Nixtamalized corn is used to make hominy, masa harina (corn flour), corn masa (dough from masa harina), and certain types of cornmeal. Nixtamalized corn credits as a whole grain. For more information, refer to "Crediting Corn Masa, Masa Harina, Corn Flour, and Cornmeal" in section 6.

noncreditable foods: Foods and beverages that do not contribute toward the meal patterns for the USDA's Child Nutrition Programs. Noncreditable foods and beverages are either in amounts too small to credit (i.e., foods and beverages that do not provide the minimum creditable amount of a meal component) or they do not meet the crediting requirements of the meal components. For more information, refer to the CSDE's resource, *Noncreditable Foods in the Meal Patterns for the School Nutrition Programs*.

noncreditable grains: Grain ingredients that do not meet the USDA's definition of creditable grains and therefore do not contribute to the grains component. Some examples include oat fiber, corn fiber, wheat starch, corn starch, and modified food starch (including potato, legume, and other vegetable flours). The NSLP and SBP meal patterns for grades K-12 require that all creditable grain foods (WGR and enriched) cannot exceed 3.99 grams per portion for foods in groups A-G or 6.99 grams per portion for foods in groups H-I. (Groups A-I refer to the grain groups in the USDA's chart, *Exhibit A: Grain Requirements for Child Nutrition Programs*.) For

more information, refer to the CSDE's resource, *Noncreditable Grains for the School Nutrition Programs and the Connecticut Nutrition Standards*.

nonprofit school food service account (NSFSA): The restricted account in which all the revenue from all food service operations conducted by the SFA, principally for the benefit of school children, is retained and used only for the operation or improvement of the nonprofit school food service. For more information, visit the "Nonprofit School Food Service Account (NSFSA)" section of the CSDE's Financial Management for School Nutrition Programs webpage.

nonnutritive sweeteners: Ingredients without calories that are hundreds of times sweeter than sugars and that are used as sugar substitutes to sweeten foods and beverages. Nonnutritive sweeteners include the six FDA-approved artificial sweeteners (acesulfame potassium (Ace-K), advantame, aspartame, neotame, saccharin, and sucralose) and three plant-based sweeteners (stevia, monk fruit, and thaumatin) that are Generally Recognized as Safe (GRAS) by the FDA. For guidance on the FDA approved nonnutritive sweeteners, refer to the FDA's Aspartame and Other Sweeteners in Food webpage.

nutrient-dense foods: Foods and beverages that provide vitamins, minerals, and other substances that contribute to adequate nutrient intakes or may have positive health effects, and contain little or no solid fats, added sugars, refined starches, or sodium. Ideally, these foods and beverages are also in forms that retain naturally occurring components, such as dietary fiber. Examples include all vegetables, fruits, whole grains, seafood, eggs, beans and peas, unsalted nuts and seeds, fat-free and low-fat dairy products, and lean meats and poultry (when prepared with little or no added solid fats, sugars, refined starches, and sodium). The term "nutrient dense" indicates the nutrients and other beneficial substances in a food have not been "diluted" by the addition of calories from added solid fats, sugars, or refined starches, or by the solid fats naturally present in the food.

nutrient-rich foods: Refer to "nutrient-dense foods" in this section.

nutrition standards for fluid milk substitutes: The USDA's nutrition requirements for plant-based beverages like soy milk that are used as fluid milk substitutes in the USDA Child Nutrition Programs. The USDA requires that any fluid milk substitutes are nutritionally equivalent to cow's milk and meet the following nutrients per cup (8 fluid ounces): 276 milligrams (mg) of calcium; 8 grams (g) of protein; 150 micrograms (mcg) retinol activity equivalents (RAE) of vitamin A; 2.5 mcg of vitamin D; 24 mg of magnesium; 222 mg of phosphorus; 349 mg of potassium; 0.44 mg of riboflavin; and 1.1 micrograms (mcg) of vitamin B-12. For more information, refer to the CSDE's resource, *Allowable Fluid Milk Substitutes for Non-Disability Reasons in the School Nutrition Programs*.

nutritive sweeteners: Sugars and sweeteners that contain calories and are used to sweeten foods and beverages. Examples include brown rice syrup, brown sugar, corn sweetener, corn syrup, corn syrup solids, dextrin, dextrose, fructose, fruit juice concentrate, glucose, high-fructose corn syrup, honey, invert sugar, lactose, malt syrup, maltose, molasses, maple syrup, nectars (e.g., peach nectar, pear nectar), raw sugar, sorghum syrup, sucrose, and syrup. For more information, refer to "added sugars" and "simple carbohydrates (sugars)" in this section.

offer versus serve (OVS): A provision that applies to menu planning and the determination of reimbursable meals for grades K-12 in the NSLP and SBP. OVS allows students to decline a certain number of meal components or food items in the meal. SFAs must offer the required meal components to each student. For the NSLP, students must select at least ½ cup of fruits or vegetables and the full serving of at least two other meal components. For the SBP, students must select at least three food items including at least ½ cup of fruit (or vegetable substitutions, if offered). OVS must be implemented in senior high schools for lunch but is optional for breakfast. OVS is optional for breakfast and lunch in junior high, middle, and elementary schools. OVS does not apply to the SMP or ASP, or to preschool meals in the NSLP and SBP. For more information, refer to the CSDE's *Offer versus Serve Guide for School Meals* and visit the CSDE's OVS webpage.

ounce equivalent (oz eq): A weight-based unit of measure for the grains component and MMA component in the meal patterns for the school nutrition programs. Oz eq account for dry versus cooked grains and variations in MMA. One oz eq of the MMA component is sometimes more than a measured ounce, depending on the food's density and nutritional content. One oz eq of the grains component is less than a measured ounce for some grain foods (e.g., pretzels, breadsticks, and crackers), equal to a measured ounce for some grain foods (e.g., bagels, biscuits, bread, rolls, cereal grains, and RTE breakfast cereals), and more than a measured ounce for some grain foods (e.g., muffins and pancakes). For more information, refer to "Exhibit A chart" in this section and the CSDE's resources, *Crediting Commercial Meat/Meat Alternate Products in the School Nutrition Programs* and *Grain Ounce Equivalents Chart for the School Nutrition Programs*.

point-of-service meal count: The moment in the meal service where staff can accurately determine that the child has been served all required meal components for a reimbursable meal or afterschool snack.

potable water: Water that is safe for human consumption.

pre-fried foods: Commercially prepared foods such as meats, poultry, fish, and vegetables that are fried by the manufacturer during preparation. These foods are usually cooked by the food service operation in the oven or microwave. Pre-fried foods include refrigerated or frozen items that are breaded or battered, most frozen potato products, and most frozen products described as "crispy" or "crunchy." Examples include chicken nuggets, chicken patties, fish sticks, french fries, tater tots, hash browns, and onion rings.

primary grain ingredient: The greatest grain ingredient by weight. For commercial grain foods, this is the first ingredient (excluding water) listed in the product's ingredients statement. For commercial combination foods that contain a grain portion, this is the first grain ingredient (excluding water) listed in the product's ingredients statement. For commercial combination foods that contain a grain portion listed separately, this is the first ingredient (excluding water) listed in the grain portion of the product's ingredients statement.

product formulation statement (PFS): An information statement developed by manufacturers that provides specific information about how a product credits toward the USDA's meal patterns, and documents how this information is obtained citing Child Nutrition Program resources or regulations. A PFS does not provide any warranty against audit claims. The USDA requires a PFS for commercial processed products without a CN label that are not listed in the *Food Buying Guide for Child Nutrition Programs* (FBG). All creditable ingredients in this statement must match a description in the FBG. The PFS must be prepared on company letterhead with the signature of a company official and the date of issue. The USDA requires that SFAs must verify the PFS for accuracy prior to purchasing, serving, and claiming the product in reimbursable meals and afterschool snacks. For more information, refer to the CSDE's resources, *Using Product Formulation Statements in the School Nutrition Programs* and *Accepting Processed Product Documentation in the School Nutrition Programs*, and visit the "Product Formulation Statements" section of the CSDE's Crediting Documentation for the Child Nutrition Programs webpage.

production record: A working tool that outlines the type and quantity of foods used to prepare school meals and afterschool snacks. Production records must demonstrate how meals contribute to the required meal components, food items or menu items for each day of operation. They must also provide sufficient documentation to determine how school meals contribute to meeting the weekly dietary specifications. The USDA's regulations require that all schools in the NSLP, SBP, and ASP must complete daily menu production records for all meals. For more information, refer to the CSDE's *Guide to Menu Documentation for the School Nutrition Programs* and visit the CSDE's Production Records for School Nutrition Programs webpage.

pulses: The edible dry seeds from legumes, such as beans, peas, and lentils. For more information, refer to "beans, peas, and lentils (pulses)" and "legumes" in this section.

recognizable food item: A food that is visible in the offered breakfast or lunch and allows students to identify the food groups and amounts recommended for consumption at mealtime. Foods must be recognizable to credit in the NSLP, SBP, and ASP meal patterns. The USDA allows some exceptions, such as yogurt blended in fruit or vegetable smoothies (refer to "Crediting yogurt in smoothies" in Section 3), pureed fruits and vegetables in smoothies (refer to "Crediting Pureed Vegetables in Smoothies" in section 4 and "Crediting Fruit Juices and Pureed Fruits in Smoothies" in section 5), and pasta made with 100 percent vegetable flour (refer to "Crediting Pasta Products Made of Vegetable Flour" in section 4).

refined grains: Grains that have been processed to remove the bran and germ, making the product less nutritious than whole grains. Refined grains may or may not be enriched. For more information, refer to "enriched grains" in this section.

registered dietitian (RD) or registered dietitian nutritionist (RDN): An individual who meets the following requirements: 1) completed a minimum of a graduate degree at a U.S. regionally accredited university or college and course work accredited by the Accreditation Council for Education in Nutrition and Dietetics of the Academy of Nutrition and Dietetics (ACEND); 2) completed an ACEND®-accredited supervised practice program at a health-care facility, community agency, or a foodservice corporation or combined with undergraduate or graduate studies; 3) passed a national examination administered by the Commission on Dietetic Registration (CDR); and 4) completed continuing professional educational requirements to maintain registration. For more information, visit the Academy of Nutrition and Dietetics' (AND) Registered Dietitian Nutritionist Fact Sheet website.

reimbursable meals: Meals that offer the required meal components and minimum servings for each grade group of the NSLP and SBP meal patterns and are eligible for USDA reimbursement.

reimbursable snacks: Meals that offer the required meal components and minimum servings for each grade group of the ASP meal patterns and are eligible for USDA reimbursement.

residential child care institution (RCCI): RCCIs include but are not limited to homes for the mentally, emotionally or physically impaired, and unmarried mothers and their infants; group homes; halfway houses; orphanages; temporary shelters for abused children and for runaway children; long-term care facilities for chronically ill children; and juvenile detention centers. A long-term care facility is a hospital, skilled nursing facility, intermediate care facility, or distinct part thereof, which is intended for the care of children confined for 30 days or more.

saturated fat: A type of fat that raises blood cholesterol, which is a risk factor for cardiovascular disease. Major sources of saturated fat include coconut, palm, and palm kernel oils, butter, and beef fats. Saturated fat is also found in other animal fats, such as pork and chicken fats, and in other plant fats, such as nuts. For more information, refer to "solid fats" in this section.

School Breakfast Program (SBP): The USDA's federally assisted meal program operating in public and nonprofit private schools and residential child care institutions. The SBP provides nutritionally balanced, low-cost, or free breakfasts to children each school day. The SBP was established under the Child Nutrition Act of 1966 to ensure that all children have access to a healthy breakfast at school to promote learning readiness and healthy eating behaviors. For more information, visit the CSDE's School Breakfast Program webpage.

school food authority (SFA): The governing body that is responsible for the administration of one or more schools and has the legal authority to operate the USDA's school nutrition programs.

school nutrition programs: The USDA's school nutrition programs include the National School Lunch Program (NSLP), School Breakfast Program (SBP), Afterschool Snack Program (ASP) of the NSLP, Seamless Summer Option (SSO) of the NSLP, Special Milk Program (SMP), Fresh Fruit and Vegetable Program (FFVP), and Child and Adult Care Food Program (CACFP) At-risk Supper Program implemented in schools. For more information, visit the CSDE's School Nutrition Programs webpage.

Seamless Summer Option (SSO) of the NSLP: The USDA's federally assisted summer feeding program that combines features of the NSLP, SBP, and SFSP, and serves meals free of charge to children ages 18 and younger from low-income areas. School districts participating in the NSLP or SBP are eligible to apply to the CSDE to participate in the SSO. The SSO follows the NSLP, SBP, and ASP meal patterns. For more information, visit the CSDE's Seamless Summer Option (SSO) of the NSLP webpage.

serving size or portion: The weight, measure, number of pieces, or slices of a food or beverage. SFAs must provide the minimum serving sizes specified in the USDA meal patterns for meals and afterschool snacks to be reimbursable.

simple carbohydrates (sugars): Carbohydrates consisting of one sugar (e.g., fructose and galactose) or two sugars (e.g., lactose, maltose, and sucrose). Sugars can be naturally present in foods (such as fructose in fruit or lactose in milk) or added to foods (such as sucrose or table sugar). Foods that naturally contain simple carbohydrates (such as fruits, milk, and milk products, and some vegetables) also contain vitamins and minerals. Foods that contain large amounts of added sugars (such as cookies, candy, pastries, sweetened baked goods, regular soft drinks, and other sweetened drinks) provide calories with few, if any, nutrients. For more information, refer to "added sugars" in this section.

sodium: A mineral that helps maintain the body's fluid balance and blood pressure. Diets that are high in sodium can increase the risk of high blood pressure in individuals who are sodium sensitive.

solid fats: Fats that are usually not liquid at room temperature. Solid fats are found in most animal foods but also can be made from vegetable oils through hydrogenation. Some common solid fats include butter, beef fat (tallow, suet), chicken fat, pork fat (lard), stick margarine, coconut oil, palm oil, and shortening. Foods high in solid fats include full-fat (regular) cheese, cream, whole milk, ice cream, well-marbled cuts of meats, regular ground beef, bacon, sausages, poultry skin, and many baked goods (such as cookies, crackers, donuts, pastries, and croissants). Solid fats contain more saturated fats. For more information, refer to "saturated fats" in this section.

Special Milk Program (SMP): The USDA's federally assisted program that provides milk to children in schools and child care institutions that do not participate in other federal meal service programs. The SMP reimburses schools for the milk they serve. Schools in the NSLP or SBP may also participate in the SMP to provide milk to children in half-day pre-kindergarten and kindergarten programs where children do not have access to the school meal programs. For more information, visit the CSDE's Special Milk Program webpage.

standard of identity: A legal or regulatory definition that specifies the required ingredients, composition, and sometimes processing methods for a particular food product. These standards ensure that products labeled with a certain name meet specific criteria for quality and content, helping to protect consumers and maintain consistency in the marketplace. The USDA develops standards for meat and poultry products. The FDA develops standards for other food products. For more information, visit the FDA's Standards of Identity for Food webpage.

standardized recipe: A recipe that a food service operation has tried, adapted, and retried at least three times and has been found to produce the same good results and yield every time when the exact procedures are used with the same type of equipment and the same quantity and quality of ingredients. Standardized recipes include specific information such as ingredients, weights and measures, preparation directions, serving directions, yield, and portion size. For more information, refer to the Culinary Institute of Child Nutrition's *USDA Recipe Standardization Guide for School Nutrition Programs,* and visit the "Standardized Recipes" section of the CSDE's Crediting Documentation for the Child Nutrition Programs webpage.

state licensed healthcare professional: An individual who is authorized to write medical prescriptions under state law and is recognized by the State Department of Public Health (DPH). In Connecticut, this includes physicians (MD), physician assistants (PA) and certified physician assistants (PAC), doctors of osteopathy (DO), and advanced practice registered nurses (APRN), i.e., nurse practitioners, clinical nurse specialists, and certified nurse anesthetists who are licensed as APRNs. For more information, refer to the CSDE's *Guide to Meal Modifications in School Nutrition Programs*.

sucrose: Another name for table sugar. Sucrose contains glucose and fructose. For more information, refer to “simple carbohydrates (sugars) in this section.

sugar alcohols (polyols): A type of carbohydrate used as sugar substitutes to sweeten foods and beverages. Sugar alcohols are incompletely absorbed and metabolized by the body and contribute fewer calories than most sugars. They also perform other functions such as adding bulk and texture to foods. Common sugar alcohols include sorbitol, mannitol, xylitol, maltitol, maltitol syrup, lactitol, erythritol, isomalt, and hydrogenated starch hydrolysates (HSH). Products with sugar alcohols are often labeled “sugar free.” Large amounts of sugar alcohols may cause bloating, gas, or diarrhea. For more information, refer to “nonnutritive sweeteners” in this section.

sugars: Refer to “added sugars” and “simple carbohydrates” in this section.

surimi: Pasteurized, ready-to-eat, restructured seafood usually made from pollock (fish). A 3-ounce serving of surimi credits as 1 oz eq of the MMA component.

tempeh: A highly nutritious fermented soybean cake traditionally made from whole soybeans. A 1-ounce serving of tempeh credits as 1 oz eq of the MMA component. This method of crediting applies only to tempeh products whose ingredients are limited to soybeans (or other beans, peas, and lentils), water, tempeh culture, and for some varieties, vinegar, seasonings, and herbs. SFA must obtain a PFS for tempeh products that contain different ingredients.

USDA Foods: Foods available to the USDA Child Nutrition Programs through the CSDE’s Food Distribution Program. USDA Foods are available to schools in several ways, including Direct Delivery USDA Foods, Further Processed USDA Foods, the USDA Department of Defense (DoD) Fresh Fruit and Vegetable Program, the Fresh Fruit and Vegetable Program Pilot, and the SFSP USDA DoD Pilot. For more information, visit the USDA’s USDA Foods Programs webpage and the CSDE’s Food Distribution Program webpage.

vegetable subgroups: The five categories of vegetables within the vegetables component that are required over the week in the NSLP meal patterns for grades K-12. The subgroups include dark green, red/orange, beans, peas, and lentils, starchy, and other vegetables. For more information, refer to the CSDE’s resource, *Vegetable Subgroups in the National School Lunch Program*, and visit the “Vegetables” section of the CSDE’s Crediting Foods in School Nutrition Programs webpage.

vegetables component: The meal component of the USDA meal patterns for the school nutrition programs that includes vegetables (fresh, frozen, canned, and dried) and pasteurized full-strength juice; and includes five subgroups. Vegetable juice cannot exceed half of the weekly vegetable offerings at lunch or breakfast. For more information, visit the “Vegetables” section of the CSDE’s Crediting Foods in School Nutrition Programs webpage.

wheat bread: Bread that often has wheat flour or enriched wheat flour (not whole-wheat flour) as an ingredient. Wheat bread is not whole grain unless it is labeled "whole-wheat bread."

whole foods: Foods that are unprocessed or minimally processed and do not contain added ingredients such as fat, sugars, or sodium.

whole fruits and vegetables: Fresh, frozen, canned, and dried fruits and vegetables that are unprocessed or minimally processed, and do not contain added ingredients such as fat, sugars, and sodium.

whole grain-rich (applies to meal patterns for grades K-12): Foods that meet the following three criteria: 1) contain between 50 and 100 percent whole grain; 2) any remaining grains are enriched; and 3) do not exceed the limit for noncreditable grains. For guidance on the specific WGR criteria for different types of grains in K-12 menus, refer to "WGR criteria for K-12 menus" in section 6.

whole grain-rich (applies to preschool meal patterns): Foods that meet the following two criteria: 1) contain between 50 and 100 percent whole grain; and 2) any remaining grains are enriched. For guidance on the specific WGR criteria for different types of grains in preschool menus, refer to "WGR criteria for preschool menus" in section 6.

whole grains: Grains that consist of the entire kernel, including the starchy endosperm, the fiber-rich bran, and the nutrient-rich germ. All grains start out as whole grains, but many are processed to remove the bran and germ, which also removes many of the nutrients. Whole grains are nutrient rich, containing vitamins, minerals, fiber, antioxidants, and health-enhancing phytonutrients such as lignans and flavonoids. Examples of whole grains include whole wheat, whole oats, oatmeal, whole-grain cornmeal, brown rice, whole rye, whole barley, wild rice, buckwheat, and bulgur (cracked wheat). For more information, refer to the CSDE's resource, *Crediting Whole Grains in the School Nutrition Programs*.

whole-grain flour: Flour made by grinding the entire whole-grain kernel, including the fiber-rich bran, nutrient-rich germ, and starchy endosperm. Flour or meal that does not contain all parts of the grain is not whole grain, e.g., degermed corn, milled rice, and wheat flour.

whole-wheat bread: Bread that contains the whole grain, including the starchy endosperm, the fiber-rich bran, and the nutrient-rich germ. Whole-wheat flour will be listed as the first grain ingredient.

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