

Guide to Meeting the Preschool Meal Patterns and Crediting Requirements for the School Nutrition Programs

National School Lunch Program • School Breakfast Program
Afterschool Snack Program • Seamless Summer Option

July 1, 2024, through September 30, 2025



Revised January 2025

Connecticut State Department of Education
Bureau of Child Nutrition Programs
450 Columbus Boulevard, Suite 504
Hartford, CT 06103-1841

Guide to Meeting the Preschool Meal Patterns and Crediting Requirements
for the School Nutrition Programs

https://portal.ct.gov/-/media/sde/nutrition/nslp/preschool/guide_preschool_meal_patterns.pdf

In accordance with federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, this institution is prohibited from discriminating on the basis of race, color, national origin, sex (including gender identity and sexual orientation), disability, age, or reprisal or retaliation for prior civil rights activity.

Program information may be made available in languages other than English. Persons with disabilities who require alternative means of communication to obtain program information (e.g., Braille, large print, audiotope, American Sign Language), should contact the responsible state or local agency that administers the program or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339.

To file a program discrimination complaint, a Complainant should complete a Form AD-3027, USDA Program Discrimination Complaint Form which can be obtained online at: <https://www.usda.gov/sites/default/files/documents/ad-3027.pdf>, from any USDA office, by calling (866) 632-9992, or by writing a letter addressed to USDA. The letter must contain the complainant's name, address, telephone number, and a written description of the alleged discriminatory action in sufficient detail to inform the Assistant Secretary for Civil Rights (ASCR) about the nature and date of an alleged civil rights violation. The completed AD-3027 form or letter must be submitted to USDA by:

1. mail: U.S. Department of Agriculture
Office of the Assistant Secretary for Civil Rights
1400 Independence Avenue, SW
Washington, D.C. 20250-9410; or
2. fax: (833) 256-1665 or (202) 690-7442; or
3. email: program.intake@usda.gov

This institution is an equal opportunity provider.

The Connecticut State Department of Education is committed to a policy of equal opportunity/affirmative action for all qualified persons. The Connecticut Department of Education does not discriminate in any employment practice, education program, or educational activity on the basis of race; color; religious creed; age; sex; pregnancy; sexual orientation; workplace hazards to reproductive systems, gender identity or expression; marital status; national origin; ancestry; retaliation for previously opposed discrimination or coercion, intellectual disability; genetic information; learning disability; physical disability (including, but not limited to, blindness); mental disability (past/present history thereof); military or veteran status; status as a victim of domestic violence; or criminal record in state employment, unless there is a bona fide occupational qualification excluding persons in any of the aforementioned protected classes. Inquiries regarding the Connecticut State Department of Education's nondiscrimination policies should be directed to: Attorney Louis Todisco, Connecticut State Department of Education, by mail 450 Columbus Boulevard, Hartford, CT 06103-1841; or by telephone 860-713-6594; or by email louis.todisco@ct.gov.

Contents

| | |
|--|-------------|
| About this Guide | viii |
| Contact Information | ix |
| Abbreviations and Acronyms | x |
| 1 — Preschool Meal Patterns | 1 |
| Meal Pattern Legislation | 1 |
| Changes to Preschool Meal Patterns | 2 |
| Meal pattern changes effective July 1, 2024 | 2 |
| Meal pattern changes for school year 2025-26 | 3 |
| Required Age Groups | 3 |
| Reimbursable Meals and Snacks | 3 |
| Meal Components | 4 |
| Table 1-1. Required meal components for the preschool meal patterns | 4 |
| Menu Items | 5 |
| Required Servings | 5 |
| Additional Foods | 5 |
| Nutrition Standards and Restrictions | 5 |
| Offer versus Serve (OVS) is Not Allowed | 6 |
| Preschool Meal Patterns | 6 |
| Table 1-2. Preschool breakfast meal pattern | 7 |
| Table 1-3. Preschool lunch meal pattern | 8 |
| Table 1-4. Preschool afterschool snack meal pattern | 9 |
| Overview of Preschool Meal Pattern Requirements | 10 |
| Breakfast requirements | 10 |
| Lunch requirements | 11 |
| Afterschool snack requirements | 12 |
| Meal pattern documentation | 13 |
| Meal Modifications for Children with Special Dietary Needs | 15 |
| Choking Prevention for Young Children | 15 |
| Serving the Same Foods to Preschool and Grades K-12 | 16 |
| Comparison of meal pattern differences for preschool and grades K-12 | 17 |
| Menu Planning Resources | 17 |

| | |
|---|-----------|
| 2 — Introduction to Crediting Foods | 21 |
| Creditable Foods..... | 22 |
| Minimum Creditable Amounts | 22 |
| Requirement for Visible Components | 23 |
| Exceptions for certain foods..... | 23 |
| Required Crediting Documentation | 24 |
| Documentation for commercial products..... | 24 |
| Documentation for foods made from scratch | 26 |
| Food Buying Guide for Child Nutrition Programs | 27 |
| Noncreditable Foods..... | 28 |
| Allowable noncreditable foods | 28 |
| Prohibited noncreditable foods..... | 29 |
| Resources for Crediting Foods | 30 |
| 3 — Milk Component | 33 |
| Required Servings for Milk..... | 33 |
| Allowable Types of Milk | 33 |
| Transitioning from Breastmilk or Infant Formula to Whole Milk | 35 |
| Breastmilk past age 1..... | 35 |
| Transitioning from Whole Milk to Low-fat or Fat-free Milk..... | 35 |
| Menu Documentation for Milk | 36 |
| Allowable Milk Substitutes for Non-disability Reasons | 36 |
| USDA’s Nutrition Standards for Fluid milk substitutes | 38 |
| Additional State Beverage Requirements for Public Schools | 40 |
| Crediting Milk in Smoothies | 40 |
| Milk in Prepared Foods | 40 |
| Keeping Milk Cold | 41 |
| Noncreditable Foods in the Milk Component..... | 41 |
| Resources for Crediting Milk | 41 |
| 4 — Meats/Meat Alternates Component | 43 |
| Required Servings for MMA..... | 43 |
| Minimum creditable amount for MMA | 44 |
| Amounts for 1 oz eq..... | 44 |
| MMA versus Protein..... | 46 |
| Choking Prevention for MMA | 46 |
| Crediting Documentation for Commercial Processed Products | 47 |
| Main Dish Requirement for Lunch | 47 |
| Requirement for recognizable main dish..... | 47 |
| MMA at Breakfast | 48 |

| | |
|--|----|
| Crediting Alternate Protein Products (APPs) | 49 |
| Criteria for APPs | 49 |
| Required documentation for APPs..... | 50 |
| Crediting Beans, Peas, and Lentils as MMA..... | 51 |
| Serving size for beans, peas, and lentils credited as MMA..... | 52 |
| Crediting beans, peas, and lentils as MMA in recipes | 53 |
| Crediting roasted or dried beans, peas, and lentils as MMA..... | 53 |
| Resources for beans, peas, and lentils | 53 |
| Crediting Bean, Pea, and Lentil Flour Pasta Products as MMA | 55 |
| Crediting Cheeses | 56 |
| Natural cheeses | 56 |
| Process Cheeses..... | 56 |
| Cheese substitutes..... | 56 |
| Menu items that contain cheese | 56 |
| Noncreditable cheeses..... | 57 |
| Crediting Deli Meats, Hot Dogs, and Sausages..... | 58 |
| Crediting meat products with added liquids, binders, and extenders..... | 58 |
| Crediting 100 percent meat products | 59 |
| Developing recipes for deli meats | 60 |
| Crediting Dried Meat, Poultry, and Seafood Products | 61 |
| Evaluating the PFS for commercial dried meat products | 61 |
| Crediting dried meat products with ground pork and beef ingredients..... | 62 |
| Crediting Eggs | 62 |
| Menu items that contain eggs | 62 |
| Crediting Hummus and Bean Dips as MMA | 63 |
| Crediting MMA in Combination Entrees..... | 64 |
| Crediting MMA in Commercial Products | 64 |
| Crediting Nuts and Seeds | 65 |
| Change to limit for nuts and seeds at lunch..... | 65 |
| Crediting Nut/Seed Butters | 66 |
| Serving size is based on volume not weight | 66 |
| Serving size considerations | 67 |
| Nuts, seeds, and nut/seed butters in commercial products | 67 |
| Noncreditable nuts and seeds..... | 67 |
| Crediting Surimi Seafood..... | 68 |
| Oz eq contribution per serving | 68 |
| Crediting recipes containing surimi | 69 |
| Crediting Tempeh | 69 |
| Oz eq contribution per serving | 69 |
| Crediting recipes containing tempeh..... | 70 |



| | |
|---|-----------|
| Crediting Tofu and Tofu Products | 70 |
| Crediting recipes containing tofu | 71 |
| Crediting Yogurt and Soy Yogurt | 72 |
| Serving size for yogurt | 72 |
| Sugars limit for yogurt | 73 |
| Crediting yogurt in smoothies | 73 |
| Nutrition guidance | 74 |
| Resources for crediting yogurt | 74 |
| Noncreditable Foods in the MMA Component | 75 |
| Resources for Crediting MMA | 76 |
| 5 — Vegetables Component | 79 |
| Required Servings for Vegetables | 79 |
| Meeting the required vegetable servings | 80 |
| Choking Prevention for Vegetables | 80 |
| Substituting Vegetables for Fruits at Lunch | 81 |
| Crediting Canned Vegetables | 81 |
| Crediting Dried Vegetables | 81 |
| Determining rehydrated volume | 81 |
| Crediting Hominy as Vegetables | 82 |
| Crediting Beans, Peas, and Lentils as Vegetables | 83 |
| Crediting roasted or dried beans, peas, and lentils as vegetables | 83 |
| Crediting hummus and bean dips as vegetables | 84 |
| Crediting beans, peas, and lentils in recipes as vegetables | 84 |
| Crediting documentation for commercial products | 85 |
| Crediting Mixed Vegetables at Lunch | 85 |
| Known quantities of vegetables | 85 |
| Unknown quantities of vegetables | 85 |
| Crediting Pasta Products Made of Vegetable Flours | 86 |
| Crediting vegetable flours as vegetables | 86 |
| Crediting vegetable flours with other non-vegetable ingredients | 87 |
| Signage and staff training for vegetable flour pastas | 87 |
| Crediting Pureed Vegetables | 88 |
| Unrecognizable pureed vegetables | 88 |
| Pureed vegetables in smoothies | 88 |
| Crediting Raw Leafy Greens | 89 |
| Crediting Vegetable and Fruit Mixtures | 89 |
| Crediting Soups | 90 |
| Serving size considerations for commercial soups | 91 |
| Noncreditable soups | 91 |

| | |
|--|-----------|
| Crediting Vegetable Juice | 92 |
| Crediting Vegetables in Combination Foods..... | 92 |
| Crediting Vegetables with Added Ingredients | 93 |
| Produce Safety..... | 93 |
| Noncreditable Foods in the Vegetables Component | 94 |
| Resources for Crediting Vegetables | 95 |
| 6 — Fruits Component | 97 |
| Required Servings for Fruits | 98 |
| Meeting the required fruit servings..... | 98 |
| Choking Prevention for Fruits | 99 |
| Crediting Canned Fruits | 99 |
| Crediting Coconut | 99 |
| Crediting Dried Fruits | 100 |
| Crediting Fresh Fruits | 101 |
| Crediting Frozen Fruits | 103 |
| Crediting Fruits in Commercial Products | 103 |
| Crediting Fruits in Yogurt | 104 |
| Crediting Fruits in Grain-Based Desserts | 104 |
| Crediting Fruits with Added Ingredients | 105 |
| Crediting Fruit Juice | 106 |
| Juice concentrates | 106 |
| Juice blends | 107 |
| Frozen juice products..... | 107 |
| Apple cider | 107 |
| Coconut water | 107 |
| Juice ingredients | 108 |
| Juice limit | 108 |
| Offering juice as an extra menu item | 109 |
| Crediting Pureed Fruits in Smoothies | 110 |
| Juice limit for smoothies..... | 110 |
| Crediting fruits in commercial smoothies | 110 |
| Combined fruits and vegetables in smoothies | 111 |
| Crediting other components in smoothies..... | 111 |
| Required documentation for smoothies | 111 |
| Noncreditable commercial smoothies | 111 |
| Crediting considerations for smoothies | 112 |
| Crediting examples for smoothies at afterschool snack..... | 112 |
| Pureed Fruits in Other Foods..... | 113 |
| Noncreditable Foods in the Fruits Component | 114 |

| | |
|--|------------|
| Resources for Crediting Fruits | 114 |
| 7 — Grains Component | 117 |
| Overview of Crediting Requirements | 117 |
| Choking Prevention for Grains | 118 |
| Grain-based Desserts Prohibited | 118 |
| Identifying grain-based desserts | 118 |
| Foods that are not grain-based desserts | 119 |
| Serving grain-based desserts as extra foods | 119 |
| Resources for grain-based desserts | 119 |
| Part A: Grain Crediting Requirements | 121 |
| Creditable Grains | 121 |
| Crediting Criteria for Commercial Grain Products | 121 |
| Crediting Criteria for Breakfast Cereals | 123 |
| Evaluate sugars per serving first | 123 |
| Crediting Criteria for Commercial Combination Foods | 124 |
| Crediting Corn Masa, Masa Harina, Corn Flour, and Cornmeal | 127 |
| Crediting Hominy as Grains | 128 |
| Crediting Popcorn | 129 |
| Noncreditable Foods in the Grains Component | 130 |
| Grain Crediting Worksheets | 131 |
| Resources for Crediting Grains | 131 |
| Part B: WGR Requirement | 134 |
| Different WGR Criteria for Preschool Meal Patterns | 134 |
| Menu Planning Considerations | 134 |
| Overview of Rule of Three | 136 |
| Rule of Three WGR Criteria for Commercial Grain Products | 137 |
| Rule of Three WGR Criteria for Cooked Breakfast Cereals | 139 |
| WGR Criteria for RTE Breakfast Cereals | 140 |
| Rule of Three WGR Criteria for Commercial Combination Foods | 141 |
| Rule of Three WGR Criteria for Grain Foods Made from Scratch | 143 |
| Rule of Three WGR Criteria for Combination Foods Made from Scratch | 143 |
| Resources for WGR Criteria | 145 |
| Part C: Required Servings | 147 |
| Meeting the Required Grain Servings | 147 |
| USDA’s Exhibit A Chart | 148 |
| Methods to Determine Oz Eq | 149 |
| Resources for Oz Eq | 155 |

8 — Resources 157
 Meal Components and Crediting 157
 Meal Patterns and Menu Planning 158
 Regulations and Policy 160
 Related Guidance 161
Glossary..... 163

About this Guide

The Connecticut State Department of Education's (CSDE) *Guide to Meeting the Preschool Meal Patterns for the School Nutrition Programs* provides detailed guidance and resources to assist school food authorities (SFAs) with planning menus to meet the preschool meal patterns and crediting requirements of the [National School Lunch Program \(NSLP\)](#), [School Breakfast Program \(SBP\)](#), [Seamless Summer Option \(SSO\)](#) of the NSLP, and [Afterschool Snack Program \(ASP\)](#) of the NSLP. The requirements in this guide apply to all public schools, private schools, and residential child care institutions (RCCIs) that serve preschoolers in the NSLP, SBP, ASP, and SSO.

This guide is part of the CSDE's menu planning guidance series for the preschool meal patterns of the school nutrition programs.

- Guide to Meeting the Preschool Meal Patterns and Crediting Requirements for the School Nutrition Programs
- Guide to Meal Service Requirements for Preschoolers in the School Nutrition Programs
- Guide to Menu Documentation for the School Nutrition Programs

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 guidance for the preschool meal patterns. Please check the "[CSDE's Menu Planning Guidance Series for the Preschool Meal Patterns](#)" section of CSDE's Meal Patterns for Preschoolers in School Nutrition Programs webpage for the most current version.

Links to the USDA's regulations and final rules for the NSLP and SBP meal patterns are available in the "[Meal Patterns for School Nutrition Programs](#)" section of 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 [FNS Documents & Resources](#) webpage.

The CSDE's [Program Guidance for School Nutrition Programs](#) webpage provides 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.

Contact Information

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


For questions regarding the NSLP, SBP, SSO, and ASP, please contact the school nutrition programs staff in the CSDE's Bureau of Child Nutrition Programs.

| County | School Nutrition Programs Staff |
|---|---|
| Middlesex County (includes Regions 4, 13, and 17) Tolland County (includes Regions 8 and 19) | Jennifer Bove 860-807-2044 jennifer.bove@ct.gov |
| Fairfield County (includes Region 9) Litchfield County (includes Regions 1, 7, 12, 14, and 20) School wellness policies | Fionnuala Brown 860-807-2129 fionnuala.brown@ct.gov |
| Hartford County (includes Region 10) | Teri Dandeneau 860-807-2079 teri.dandeneau@ct.gov |
| New Haven County (includes Regions 5, 15, and 16) | Greg King 860-713-6804 greg.king@ct.gov |
| New London County Windham County (includes Region 11) Claims processing | Susan Alston 860-807-2081 susan.alston@ct.gov |

For a list of all CSDE Child Nutrition Programs staff, refer to the CSDE's [Child Nutrition Staff and Responsibilities](#). For information on the school nutrition programs visit the CSDE's [School Nutrition Programs](#) webpage.

Abbreviations and Acronyms

| | |
|--------|--|
| APP | alternate protein product |
| AR | Administrative Review |
| ASP | Afterschool Snack Program of the NSLP |
| CACFP | Child and Adult Care Food Program |
| CFR | Code of Federal Regulations |
| C.G.S. | Connecticut General Statutes |
| CN | Child Nutrition |
| CSDE | Connecticut State Department of Education |
| FBG | Food Buying Guide for Child Nutrition Programs (USDA) |
| FDA | Food and Drug Administration |
| FDP | Food Distribution Program |
| FNS | Food and Nutrition Service, U.S. Department of Agriculture |
| FR | Federal Register |
| 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 |



| | |
|------|--|
| SOP | standard operating procedure |
| SSO | Seamless Summer Option of the NSLP |
| SFA | school food authority |
| TCS | Time/Temperature Control for Safety Food |
| USDA | U.S. Department of Agriculture |
| WGR | whole grain-rich |
| WIC | Special Supplemental Nutrition Program for Women, Infants and Children |

For additional guidance, refer to the CSDE's resource, [*Acronyms and Abbreviations for School Nutrition Programs*](#).



1 — Preschool Meal Patterns

The goal of the USDA's Child Nutrition Programs is to improve and maintain children's health and nutrition while promoting the development of good eating habits. The [preschool meal patterns](#) for ages 1-5 are designed to meet children's calorie needs, provide key nutrients, and align with the [Dietary Guidelines for Americans](#). These meal patterns help young children eat the types and amounts of foods that best support their growth and development. School food authorities (SFAs) are eligible for USDA reimbursement when meals and afterschool snacks served to preschoolers contain the minimum serving of each required meal component and meet all crediting requirements.

Meal Pattern Legislation

The preschool meal patterns in the National School Lunch Program (NSLP), School Breakfast Program (SBP), Afterschool Snack Program (ASP) of the NSLP, and Seamless Summer Option (SSO) are the same as the Child and Adult Care Food Program (CACFP) meal patterns for children.

- The preschool lunch meal pattern [[7 CFR 210.10\(p\)](#)] and snack meal pattern [[7 CFR 210.10\(p\)](#)] are defined in the NSLP regulations.
- The preschool breakfast meal pattern is defined in [7 CFR 220.8\(o\)](#) of the SBP regulations.
- The SSO follows the NSLP and SBP meal patterns.

The current preschool meal patterns were effective October 1, 2017, as legislated by the USDA Final Rule (81 FR 24347), [CACFP Meal Pattern Revisions Related to the Healthy, Hunger-Free Kids Act of 2010](#). This final rule updated the preschool meal patterns to align with the [Dietary Guidelines for Americans](#) by including more whole grains and a greater variety of vegetables and fruits, and reducing added sugars and solid fats in preschool menus.



Changes to Preschool Meal Patterns

On April 25, 2024, the USDA published the final rule, [Child Nutrition Programs: Meal Patterns Consistent with the 2020-2025 Dietary Guidelines for Americans](#) (89 FR 31962). This final rule implements gradual updates to the Child Nutrition Programs in several key areas, including the preschool meal patterns. These changes are summarized below and highlighted throughout this guide as applicable.

The final rule also requires other changes that are not related to the preschool meal patterns. For more information, refer to [USDA Memo SP 19-2024, CACFP 07-2024, and SFSP 12-2024](#). *Initial Implementation Memorandum: Child Nutrition Programs: Meal Patterns Consistent with the 2020-2025 Dietary Guidelines for Americans.*

Meal pattern changes effective July 1, 2024

Effective July 1, 2024, the final rule implements the terminology updates and menu planning flexibility below.

- Changes all previous references in the regulations for Child Nutrition Programs from “food component” to “meal component.”
- Allows nuts and seeds to credit for the full meats/meat alternates (MMA) component in all meals and afterschool snacks, removing the previous 50 percent crediting limit for nuts and seeds at lunch.
- Changes all previous references in the regulations for Child Nutrition Programs from “legumes (beans and peas)” to “beans, peas, and lentils.”
- Updates the previous MMA quantities in the preschool meal patterns from ounces to ounce equivalents (oz eq). The amount of MMA that credits as 1 ounce or 1 oz eq is the same.

These updates do not require SFAs to change preschool menus or operations. However, the change to the crediting requirement for nuts and seeds provides a flexibility for menu planners.

Meal pattern changes for school year 2025-26

Effective July 1, 2025, the final rule changes the preschool meal pattern's product-based limits for yogurt and breakfast cereals from total sugars to added sugars.

- Yogurt cannot exceed 12 grams of added sugars per 6 ounces (2 grams of added sugars per ounce).
- Breakfast cereals cannot exceed 6 grams of added sugars per dry ounce.

For more information on the final rule changes, refer to the CSDE's [Summary of Final Rule Updates to the Meal Patterns for the School Nutrition Programs](#) and visit the "Upcoming Meal Pattern Changes" section of the CSDE's [Meal Patterns for Grades K-12 in School Nutrition Programs](#) webpage.

Required Age Groups

The preschool meal patterns include two age groups: 1-2 and 3-5. When a 5-year-old is in preschool or a 4-year-old is in kindergarten, SFAs may serve the appropriate meal pattern for that grade.

- If a 5-year-old is in preschool, the preschool meal patterns apply.
- If a 4-year-old is in kindergarten, the appropriate meal pattern for that school's grade grouping applies. The breakfast meal pattern grade groups could be grades K-5, grades K-8, or grades K-12. The lunch meal pattern grade groups could be grades K-5 or grades K-8. The ASP meal pattern grade group is K-12.

For information on the meal patterns for grades K-12, visit the CSDE's [Meal Patterns for Grades K-12 in School Nutrition Programs](#) webpage and the "ASP Meal Pattern for Grades K-12" section of the CSDE's [Afterschool Snack Program \(ASP\)](#) webpage.

Reimbursable Meals and Snacks

The preschool meal patterns consist of minimum servings of specific meal components for each age group. Meals and afterschool snacks served to children are eligible for USDA reimbursement when they contain the minimum serving of each required meal component. Reimbursable meals may also contain additional foods beyond the minimum requirements (refer to "[Additional Foods](#)" in this section).

Meal Components

Effective July 1, 2024, the USDA final rule, *Child Nutrition Programs: Meal Patterns Consistent with the 2020-2025 Dietary Guidelines for Americans*, changes the previous terminology for “food component” to “meal component.” A meal component is one of the five food groups that comprise reimbursable meals and afterschool snacks, including milk, fruits, vegetables, grains, and meats/meat alternates (MMA). The table below indicates the required servings of each meal component for the NSLP and SBP meal patterns.

Table 1-1. Required meal components for the preschool meal patterns

| Breakfast | Lunch | Afterschool snack |
|--|--|---|
| <p>3 meal components</p> <ul style="list-style-type: none"> • Milk • Vegetables, fruits, or both • Grains ¹ | <p>5 meal components</p> <ul style="list-style-type: none"> • Milk • MMA • Vegetables ² • Fruits • Grains | <p>Choose 2 of 5 meal components</p> <ul style="list-style-type: none"> • Milk • MMA • Vegetables • Fruits • Grains |

¹ MMA may substitute for the entire grains component at breakfast up to three times per week (refer to “[MMA at breakfast](#)” in section 4).

² Vegetables may substitute for the entire fruits component at lunch. The two servings of vegetables must be different kinds (refer to “[Substituting vegetables for fruits at lunch](#)” in section 5).

Each meal component has specific crediting requirements. All foods and beverages must meet these requirements to credit as a meal component of reimbursable meals and afterschool snacks. This includes commercial products, foods made from scratch by the SFA, and foods prepared by vendors.

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.

Required Servings

The preschool meal patterns require minimum servings of each meal component. Meals and afterschool snacks that contain less than the minimum serving of any meal component do not meet the preschool meal patterns and are not reimbursable. For example, the breakfast meal pattern for ages 3-5 requires $\frac{1}{2}$ cup of fruits, vegetables, or both. If the breakfast menu contains less than $\frac{1}{2}$ cup, these meals are not reimbursable.

Additional Foods

Preschool menus may include additional foods or larger servings beyond the minimum meal pattern requirements. When offering additional foods, the CSDE encourages SFAs to choose nutrient-dense foods that are appropriate to the nutritional needs of each age group. Examples include vegetables, fruits, whole grains, low-fat and nonfat milk products, beans, peas, and lentils, and lean meats, fish, poultry.

Menu planners should consider the appropriateness of additional foods based on the nutritional needs of each age group. Preschoolers have small appetites and might not consume the nutritious meal components if the preschool menu includes additional foods.

Some additional foods do not credit in preschool menus and cannot be served or should be served only in moderation (refer to “[Noncreditable Foods](#)” in section 2).

Nutrition Standards and Restrictions

The preschool meal patterns require nutrition standards for some specific foods. These include limits for sugars in yogurt and breakfast cereals (refer to “[Crediting Yogurt and Soy Yogurt](#)” in section 4 and “[Crediting Criteria for Breakfast Cereals](#)” in section 7) and a minimum protein requirement for tofu (refer to “[Crediting Commercial Tofu and Tofu Products](#)” in section 4).

The preschool meal patterns also prohibit certain foods. Grain-based deserts like cookies, granola bars, and fruit turnovers do not credit in preschool menus. The preschool meal patterns also prohibit deep-fat frying foods on site, i.e., cooking by submerging food in hot oil or other fat.

Offer versus Serve (OVS) is Not Allowed

OVS is an optional approach to menu planning and meal service for breakfast and lunch that allows children in grades K-12 to decline some of the foods offered in a reimbursable meal. The USDA does not allow OVS for preschool meals in the NSLP and SBP unless the meal service is co-mingled.

“Co-mingling” is the practice of serving reimbursable meals or snacks to a variety of grades in the same service area at the same time, such as preschoolers and grades K-5 or preschoolers and grades K-8. For guidance on the meal pattern requirements for co-mingled meals, refer to section 4 of the CSDE’s [Guide to Meal Service Requirements for Preschoolers in the School Nutrition Programs](#).

Preschool Meal Patterns

The charts in this section show the preschool meal patterns for breakfast (table 1-2), lunch (table 1-3), and snack (table 1-4). Menu planning notes for each meal component are provided in the online versions of the preschool meal patterns, which are available on the CSDE’s [Meal Patterns for Preschoolers in School Nutrition Programs](#) webpage.

Training on the preschool meal patterns is available in Module 2: Introduction to Preschool Meal Patterns of the CSDE’s [Preschool Meal Pattern Training for the School Nutrition Programs](#).



Table 1-2. Preschool breakfast meal pattern

| Breakfast meal components | Minimum for ages 1-2 | Minimum for ages 3-5 |
|--|---------------------------|---------------------------|
| Milk, fluid Age 1: Whole milk, unflavored Ages 2-5: Low-fat (1%) or fat-free milk, unflavored | 4 fluid ounces (½ cup) | 6 fluid ounces (¾ cup) |
| Vegetables, fruits, or portions of both | ¼ cup | ½ cup |
| Grains, ounce equivalents (oz eq) | ½ oz eq = | ½ oz eq = |
| Whole grain-rich (WGR) or enriched bread or bread product, e.g., biscuit, roll, or muffin | ½ oz eq | ½ oz eq |
| WGR, enriched, or fortified cooked breakfast cereal, cereal grain, or pasta | ¼ cup | ¼ cup |
| WGR, enriched, or fortified ready-to-eat (RTE) breakfast cereal (dry, cold): Flakes or rounds | ½ cup | ½ cup |
| Puffed | ¾ cup | ¾ cup |
| Granola | ⅛ cup | ⅛ cup |



Table 1-3. Preschool lunch meal pattern

| Lunch meal components | Minimum for ages 1-2 | Minimum for ages 3-5 |
|--|---------------------------|---------------------------|
| Milk, fluid Age 1: Whole milk, unflavored Ages 2-5: Low-fat (1%) or fat-free milk, unflavored | 4 fluid ounces (½ cup) | 6 fluid ounces (¾ cup) |
| Meats/meat alternates (MMA), ounce equivalents (oz eq) | 1 oz eq = | 1½ oz eq = |
| Lean meat, poultry, or fish; cheese; alternate protein products (APPs); or tempeh | 1 ounce | 1½ ounces |
| Surimi | 3 ounces | 4.4 ounces |
| Tofu | 2.2 ounces (¼ cup) | 3.3 ounces (⅜ cup) |
| Cottage cheese | 2 ounces (¼ cup) | 3 ounces (⅜ cup) |
| Egg, large | ½ | ¾ |
| Beans, peas, and lentils | ¼ cup | ⅜ cup |
| Peanut butter, soy nut butter, or other nut/seed butters | 2 tablespoons | 3 tablespoons |
| Peanuts, soy nuts, tree nuts, or seeds | 1 ounce | 1½ ounces |
| Yogurt or soy yogurt, plain or flavored, unsweetened or sweetened | 4 ounces (½ cup) | 6 ounces (¾ cup) |
| Vegetables, cups | ⅛ cup | ¼ cup |
| Fruits, cups | ⅛ cup | ¼ cup |
| Grains, oz eq | ½ oz eq = | ½ oz eq = |
| Whole grain-rich (WGR) or enriched bread or bread product, e.g., biscuit, roll, or muffin | ½ oz eq | ½ oz eq |
| WGR, enriched, or fortified cooked breakfast cereal, cereal grain, or pasta | ¼ cup | ¼ cup |
| WGR, enriched, or fortified ready-to-eat (RTE) breakfast cereal (dry, cold): Flakes or rounds | ½ cup | ½ cup |
| Puffed | ¾ cup | ¾ cup |
| Granola | ⅛ cup | ⅛ cup |

Table 1-4. Preschool afterschool snack meal pattern

| Snack meal components <i>Serve any two of the five meal components</i> | Minimum for ages 1-2 | Minimum for ages 3-5 |
|---|---------------------------|---------------------------|
| Milk, fluid Age 1: Whole milk, unflavored Ages 2-5: Low-fat (1%) or fat-free milk, unflavored | 4 fluid ounces (½ cup) | 4 fluid ounces (½ cup) |
| Meats/meat alternates (MMA), ounce equivalents (oz eq) ⁴ | ½ oz eq = | ½ oz eq = |
| Lean meat, poultry, or fish; cheese; alternate protein products (APPs); or tempeh | ½ ounce | ½ ounce |
| Surimi | 2 ounces | 2 ounces |
| Tofu | 1.1 ounces (⅛ cup) | 1.1 ounces (⅛ cup) |
| Cottage cheese | 1 ounce (⅛ cup) | 1 ounce (⅛ cup) |
| Egg, large | ½ | ½ |
| Beans, peas, and lentils | ⅛ cup | ⅛ cup |
| Peanut butter, soy nut butter, or other nut/seed butters | 1 tablespoon | 1 tablespoon |
| Peanuts, soy nuts, tree nuts, or seeds | ½ ounce | ½ ounce |
| Yogurt or soy yogurt, plain or flavored, unsweetened or sweetened | 2 ounces (¼ cup) | 2 ounces (¼ cup) |
| Vegetables, cups | ½ cup | ½ cup |
| Fruits, cups | ½ cup | ½ cup |
| Grains, oz eq | ½ oz eq = | ½ oz eq = |
| Whole grain-rich (WGR) or enriched bread or bread product, e.g., biscuit, roll, or muffin | ½ oz eq | ½ oz eq |
| WGR, enriched, or fortified cooked breakfast cereal, cereal grain, or pasta | ¼ cup | ¼ cup |
| WGR, enriched, or fortified ready-to-eat (RTE) breakfast cereal (dry, cold): Flakes or rounds | ½ cup | ½ cup |
| Puffed | ¾ cup | ¾ cup |
| Granola | ⅛ cup | ⅛ cup |

Overview of Preschool Meal Pattern Requirements

This section summarizes the requirements for the preschool meal patterns. For detailed guidance on the crediting requirements for each meal component, refer to sections 3 through 7. For information on the required records for documenting meal pattern compliance, refer to the CSDE's [Guide to Menu Documentation for the School Nutrition Programs](#).

Breakfast requirements

Breakfast menus must meet the requirements below.

- **Required meal components:** Breakfasts must include three meal components (milk component, vegetables, fruits, or both, and grains component). The serving offered for each meal component must be at least the minimum quantity for each age group in the preschool breakfast meal pattern (refer to [table 1-2](#) in this section).
- **Breakfast cereals:** SFAs must document whether cooked and RTE breakfast cereals are WGR, enriched, or fortified. This information may be listed on the preschool menu, daily production record, or other menu documentation such as a list of all cereals served in preschool menus. For more information, refer to [“Required Documentation for Grains”](#) in section 7.
- **Cereal with milk:** The menu must list the specific type of cereal as one component (e.g., “whole-grain granola”) and the specific type of fluid milk as another (e.g., “unflavored low-fat milk”). “Cereal with milk” does not indicate that the breakfast menu provides the required amount of cereal or the required amount and appropriate type of milk for each age group.
- **Juice and fruit:** SFAs must document the specific types of juices and fruits served. For example, indicate “orange juice” instead of “juice,” and “banana or diced peaches” instead of “fresh fruit choice.” This information may be listed on the preschool menu, daily production record, or other menu documentation such as a list of all types of juices and fruits served in preschool menus.
- **Juice limit:** If the breakfast menu credits juice as the vegetables and fruits component, juice cannot credit as the fruits component or vegetables component at lunch or snack that same day (refer to [“Juice limit”](#) in section 6).
- **Substituting MMA for grains:** The MMA component may substitute for the entire grains component at breakfast up to three times per week. A 1-oz eq serving of the MMA component substitutes for 1 oz eq of the grains component (refer to [“MMA at Breakfast”](#) in section 4).

- **Water availability:** SFAs must make water available during the meal service but cannot offer water in place of the required meal components. For guidance on the requirements for water, refer to section 7 of the CSDE’s [Guide to Meal Service Requirements for Preschoolers in the School Nutrition Programs](#) and visit the CSDE’s [Water Availability for School Nutrition Programs](#) webpage.

For additional guidance and breakfast menu ideas, refer to the USDA’s [It’s Breakfast Time! Child and Adult Care Food Program Breakfast Menu Planner for Children 3 Through 18 Years of Age](#) and refer to “Breakfast” in the “Menu Planning” section of the CSDE’s Meal Patterns for Preschoolers in School Nutrition Programs webpage.

Lunch requirements

Lunch menus must meet the requirements below.

- **Required meal components:** Lunches must include five meal components (milk, MMA, vegetables, fruits (or vegetable substitutions), and grains). The serving offered for each meal component must be at least the minimum quantity in the preschool lunch meal pattern (refer to [table 1-3](#) in this section).
- **Substituting vegetables for fruits:** The vegetables component may substitute for the fruits component at any lunch (refer to “[Substituting Vegetables for Fruits at Lunch](#)” in section 5). Lunch menus must include one serving of the vegetables component and one serving of the fruits component, or two different servings of the vegetables component. Lunches cannot contain two servings of only the fruits component.
- **Vegetables and fruits:** SFAs must document the specific types of vegetables and fruits served. For example, indicate “garden salad with lettuce, cucumbers, carrots, and tomatoes” instead of “salad,” and “fresh fruit salad (apples, oranges, bananas, and strawberries)” instead of “fruit salad.” This information may be listed on the preschool menu, daily production record, or other menu documentation such as a list of all types of vegetables and fruits served in preschool menus.
- **Water availability:** SFAs must make water available during the meal service but cannot offer water in place of the required meal components. For guidance on the requirements for water, refer to section 7 of the CSDE’s [Guide to Meal Service Requirements for Preschoolers in the School Nutrition Programs](#).

For additional guidance and lunch menu ideas, refer to “Lunch” in the “Menu Planning” section of the CSDE’s Meal Patterns for Preschoolers in School Nutrition Programs webpage.

Afterschool snack requirements

Afterschool snack menus must meet the requirements below.

- **Required meal components:** Afterschool snacks must include any two of the five meal components (milk, MMA, vegetables, fruits, and grains). A snack that contains two foods from the same meal component is not reimbursable. For example, orange juice and applesauce are both from the fruits component. However, a snack that contains orange juice (fruits component) and carrot sticks (vegetables component) is reimbursable because it contains two different meal components. The serving offered for each meal component must be at least the minimum quantity in the preschool afterschool snack meal pattern (refer to [table 1-4](#) in this section).
- **Best practice for vegetables and fruits:** Afterschool snack menus should include a vegetable or fruit as often as possible. The USDA's [CACFP best practices](#) recommend making at least one of the two required snack meal components a vegetable or fruit.
- **Beverage limit:** If the snack menu includes a creditable beverage (milk or juice), the other meal component cannot be a beverage. The snack menu cannot include juice when milk is the only other meal component.
- **Offering milk with yogurt:** If the snack menu includes milk, the other meal component should not be yogurt. The CSDE recommends this practice to increase nutrient variety.
- **Offering more than two food items:** If the snack menu includes more than two different food items, at least two food items must meet the required meal components and servings. An example is a snack that contains yogurt (MMA component), strawberries (fruits component), and granola (grains component). The snack menu or other documentation must clearly indicate the serving size of each menu item and which items contribute to the ASP preschool meal pattern.
- **Water availability:** SFAs must make water available during the snack service but cannot offer water in place of the required meal components. Water should be offered as a beverage when the snack menu does not include milk or juice. For guidance on the requirements for water, refer to section 7 of the CSDE's [Guide to Meal Service Requirements for Preschoolers in the School Nutrition Programs](#).

For additional guidance and snack menu ideas, refer to the USDA's [Let's Make a Snack! Child and Adult Care Food Program Breakfast Menu Planner for Children 3 Through 18 Years of Age](#) and visit the USDA's [Serving Snacks in the CACFP](#) webpage. For more snack menu ideas, refer to "Snacks" in the "Menu Planning" section of the CSDE's Meal Patterns for Preschoolers in School Nutrition Programs webpage.

Meal pattern documentation

SFAs must maintain appropriate documentation to indicate that preschool meals and afterschool snacks meet the meal pattern and crediting requirements. An overview of these requirements is below. For detailed guidance on the menu documentation requirements, refer to the CSDE's [Guide to Menu Documentation for the School Nutrition Programs](#) and visit the CSDE's [Crediting Documentation for the Child Nutrition Programs](#) webpage.

- **Menu:** All sites must have a written menu to document that preschool meals and afterschool snacks provide the required meal components and quantities for each age group. For information on preschool menus, refer to section 2 of the CSDE's [Guide to Menu Documentation for the School Nutrition Programs](#).
- **Production records:** SFAs must have daily production records on file for all preschool meals and afterschool snacks. For more information, refer to the CSDE's resource, [Requirements for Production Records in the National School Lunch Program and School Breakfast Program](#), and section 3 of the CSDE's [Guide to Menu Documentation for the School Nutrition Programs](#), and visit the CSDE's [Production Records for School Nutrition Programs](#) webpage.
- **Commercial foods:** SFAs must maintain Child Nutrition (CN) labels or production formulation statement (PFS) forms on file to document the meal pattern contribution of all commercial foods served in preschool menus. Examples include entrees like pizza and chicken nuggets and vegetables and fruits with added ingredients (e.g., coleslaw, potato salad, and carrot-raisin salad). CN labels are available only for main dish entrees that contribute to the MMA component, but they usually indicate the contribution of other meal components that are part of these products, such as grains, vegetables, and fruits. For more information on CN labels and PFS forms, refer to sections 6 and 7 CSDE's [Guide to Menu Documentation for the School Nutrition Programs](#).
- **Foods made from scratch:** SFAs must maintain standardized recipes on file to document the meal pattern contribution of all foods prepared from scratch. Vendors that prepare foods for SFAs must also be able to document the preschool meal pattern contribution of their recipes. Examples of foods prepared from scratch include entrees (such as pizza, macaroni and cheese, and sandwiches), grains (such as pancakes, muffins, and breads), and vegetables and fruits with added ingredients (e.g., coleslaw, potato salad, and carrot-raisin salad). For information on standardized recipes, refer to section 4 of the CSDE's [Guide to Menu Documentation for the School Nutrition Programs](#).

- **Alternate protein products (APPs):** SFAs must maintain documentation on file to indicate that APPs meet the requirements in [appendix A](#) of the NSLP regulations (7 CFR 210) and [appendix A](#) of the SBP regulations (7 CFR 220). For more information, refer to “[Crediting Alternate Protein Products \(APPs\)](#)” in section 4 and the CSDE’s resource, [Requirements for Alternate Protein Products in the School Nutrition Programs](#).
- **Breakfast cereals:** SFAs must maintain documentation on file to indicate that all breakfast cereals meet the sugars limit and that the menu planner used one of the USDA’s three allowable methods to determine compliance. For more information, refer to “[Crediting Criteria for Breakfast Cereals](#)” in section 7 and the CSDE’s resource, [Crediting Breakfast Cereals in the Preschool Meal Patterns for the School Nutrition Programs](#).
- **Tofu and tofu products:** SFAs must maintain documentation on file to indicate that tofu and tofu products contain at least 5 grams of protein in 2.2 ounces (weight) or ¼ cup (volume). For more information, refer to “[Crediting Commercial Tofu and Tofu Products](#)” in section 4 and the CSDE’s resource, [Crediting Tofu and Tofu Products in the School Nutrition Programs](#).
- **WGR foods:** SFAs must maintain documentation on file to indicate that the menu planner identified WGR foods using one of the USDA’s six allowable methods for determining if foods meet the preschool WGR criteria. For more information, refer to the CSDE’s [Guide to Meeting the Whole Grain-rich Requirement for the Child and Adult Care Food Program](#).

The NSLP, SBP, and ASP preschool meal patterns have different WGR criteria from the NSLP and SBP meal patterns for grades K-12. Grain foods that meet the WGR criteria for grades K-12 will meet the preschool WGR criteria, excluding grain-based desserts (which do not credit in the preschool meal patterns). For more information, refer to “[Grain-based Desserts Prohibited](#)” and “[WGR requirement](#)” in section 7.

- **Yogurt:** SFAs must maintain documentation on file to indicate that all yogurt and soy yogurt products meet the sugars limit. For more information, refer to “[Crediting Yogurt and Soy Yogurt](#)” in section 4 and the CSDE’s resource, [Crediting Yogurt in the Preschool Meal Patterns for the School Nutrition Programs](#).

SFAs must maintain all meal pattern documentation on file. The CSDE will review this information during the Administrative Review of the school nutrition programs.

Meal Modifications for Children with Special Dietary Needs

SFAs must comply with the federal nondiscrimination laws and requirements for meal modifications for children with special dietary needs. These requirements are summarized in the CSDE’s resource, [Overview of the Requirements for Meal Modifications in the School Nutrition Programs](#). For detailed guidance, refer to the CSDE’s [Guide to Meal Modifications in the School Nutrition Programs](#) and visit the CSDE’s [Special Diets in School Nutrition Programs](#) webpage.

Choking Prevention for Young Children

Children younger than age 4 are at the highest risk of choking while eating. SFAs should consider children’s ages and developmental readiness when deciding what foods to offer in preschool menus and modify menus as appropriate.

Avoid foods that are choking hazards (such as small marble-sized, sticky, or hard foods that are difficult to chew and easy to swallow whole). Prepare foods so they are easy for young children to chew and swallow (such as changing the shape, size, and texture of foods). For additional guidance, refer to the USDA’s resource, [Reducing the Risk of Choking in Young Children at Mealtimes](#), and visit the “[Choking Prevention](#)” section of the CSDE’s [Food Safety for Child Nutrition Programs](#) webpage.



Serving the Same Foods to Preschool and Grades K-12

The preschool meal patterns and the meal patterns for grades K-12 have different crediting requirements. SFAs must consider these differences when planning and purchasing menu items that will be served to both groups. Foods served to both groups must meet the stricter meal pattern requirements. The examples below demonstrate these meal pattern differences.

- **Whole grain-rich (WGR) criteria:** The WGR criteria for the NSLP and SBP meal patterns for grades K-12 are stricter than the WGR criteria for the preschool meal patterns. Grain foods served to both groups must comply with the WGR criteria for grades K-12.

Grain-based desserts do not credit in the preschool meal patterns, even if they are WGR (refer to [“Grain-based Desserts Prohibited”](#) in section 7).

- **Limit for sugars:** The preschool meal patterns require product-based limits for sugars in yogurt and breakfast cereals, but the meal patterns for grades K-12 do not. Yogurt and breakfast cereals served to both groups must comply with the preschool limit for sugars.

Effective with school year 2025-26 (beginning July 1, 2025), the limit for added sugars in yogurt and breakfast cereals will be consistent for preschool and grades K-12. The USDA final rule, [Child Nutrition Programs: Meal Patterns Consistent with the 2020-2025 Dietary Guidelines for Americans](#), establishes new limits for added sugars in yogurt and breakfast cereals in the NSLP, SBP, and ASP meal patterns for grade K-12; and changes the preschool limit from total sugars to added sugars. Yogurt cannot exceed 12 grams of added sugars per 6 ounces (2 grams of added sugars per ounce). Breakfast cereals cannot exceed 6 grams of added sugars per dry ounce.

Co-mingling is the practice of serving meals or afterschool snacks to a variety of grades in the same service area at the same time, such as preschoolers and grades K-5. When meals or afterschool snacks are co-mingled, SFAs may serve the foods for the meal pattern of the older grades to both grade groups. For guidance on the meal pattern requirements for co-mingled meals, refer to section 4 of the CSDE’s [Guide to Meal Service Requirements for Preschoolers in the School Nutrition Programs](#).

Comparison of meal pattern differences for preschool and grades K-12

A comparison of the meal pattern differences is available in the CSDE's resources, [Comparison of Meal Pattern Requirements for Preschoolers and Grades K-12 in the National School Lunch Program and School Breakfast Program](#) and [Comparison of Afterschool Snack Program \(ASP\) Meal Pattern Requirements for Preschool and Grades K-12](#). Training is available in "Module 3: Meal Pattern Comparison of Preschool and Grades K-12" of the CSDE's [Preschool Meal Pattern Training for the School Nutrition Programs](#).

Menu Planning Resources

The resources and websites below provide information and guidance on planning meals and afterschool snacks to meet the preschool meal patterns. For detailed information on crediting foods in the preschool meal patterns, visit the CSDE's [Crediting Foods in School Nutrition Programs](#) webpage. For a comprehensive list of resources with guidance on meeting the preschool meal pattern and crediting requirements, refer to the CSDE's [Resources for the Preschool Meal Patterns](#).

- Afterschool Snack Program Handbook (CSDE):
https://portal.ct.gov/-/media/sde/nutrition/asp/asp_handbook.pdf
- CACFP Halftime: Thirty on Thursdays Training Webinar Series (USDA):
<https://www.fns.usda.gov/cacfp-halftime-thirty-thursdays-training-webinar-series>
- CACFP Meal Pattern Training Slides (USDA):
<https://www.fns.usda.gov/tn/meal-pattern-training-slides-cacfp>
- CACFP Meal Pattern Training Worksheets (USDA):
<https://www.fns.usda.gov/tn/cacfp-meal-pattern-training-worksheets>
- CACFP Nutrition Standards for CACFP Meals and Snacks (USDA):
<https://www.fns.usda.gov/cacfp/meals-and-snacks>
- CACFP Training Tools (USDA):
<https://www.fns.usda.gov/tn/training-tools-cacfp>
- Choking Prevention (CSDE's Food Safety for Child Nutrition Programs webpage):
<https://portal.ct.gov/sde/nutrition/food-safety-for-child-nutrition-programs/choking-prevention>

- Comparison of Lunch and Breakfast Meal Pattern Requirements for Preschool and Grades K-12 in the School Nutrition Programs (CSDE):
https://portal.ct.gov/-/media/sde/nutrition/nslp/preschool/comparison_preschool_grades_k-12_snp.pdf
- Comparison of Afterschool Snack Program (ASP) Meal Pattern Requirements for Preschool and Grades K-12 (CSDE):
https://portal.ct.gov/-/media/sde/nutrition/asp/comparison_preschool_grades_k-12_asp.pdf
- Comparison of Meal Pattern Requirements for the Grains Component in the School Nutrition Programs (CSDE):
https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/comparison_grain_crediting_snp.pdf
- Crediting Documentation for the Child Nutrition Program (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 Preschool Meal Patterns of the School Nutrition Programs (CSDE):
https://portal.ct.gov/-/media/sde/nutrition/cacfp/crediting/crediting_summary_charts_snp_preschool.pdf
- Cycle Menus for Child Care: Preschoolers (Institute of Child Nutrition):
<https://theicn.org/resources/1575/cycle-menus-for-child-care-preschoolers/118740/cycle-menus-for-child-care-preschoolers.pdf>
- Food Buying Guide for Child Nutrition Programs (USDA):
<https://www.fns.usda.gov/tn/food-buying-guide-for-child-nutrition-programs>
- Meal Patterns for Preschoolers in School Nutrition Programs (CSDE webpage):
<https://portal.ct.gov/sde/nutrition/meal-patterns-preschoolers-in-school-nutrition-programs/documents>
- Meal Service (CSDE's Meal Patterns for Preschoolers in School Nutrition Programs):
<https://portal.ct.gov/sde/nutrition/meal-patterns-preschoolers-in-school-nutrition-programs/meal-service>

- Menu Forms and Production Records (CSDE's Meal Patterns for Preschoolers in School Nutrition Programs):
<https://portal.ct.gov/sde/nutrition/meal-patterns-preschoolers-in-school-nutrition-programs/menu-forms-and-production-records>
- Menu Planning Basics: A Guide for CACFP Operators in Child Care (Institute of Child Nutrition):
<https://theicn.org/icn-resources-a-z/menu-planning-basics-cacfp/>
- Menu Planning for Child Nutrition Programs (CSDE webpage):
<https://portal.ct.gov/sde/nutrition/menu-planning>
- Menu Planning (CSDE's Meal Patterns for Preschoolers in School Nutrition Programs webpage):
<https://portal.ct.gov/sde/nutrition/meal-patterns-preschoolers-in-school-nutrition-programs/menu-planning>
- Preschool Meal Pattern Training for the School Nutrition Programs (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>
- Reducing the Risk of Choking in Young Children at Mealtimes (USDA):
<https://www.fns.usda.gov/tn/reducing-risk-choking-young-children-mealtimes>
- Resource List for Menu Planning and Food Production in Child Nutrition Programs (CSDE):
https://portal.ct.gov/-/media/sde/nutrition/resources/resources_menu_planning.pdf
- Resources for the Preschool Meal Patterns (CSDE):
https://portal.ct.gov/-/media/sde/nutrition/nslp/preschool/resources_preschool_meal_patterns.pdf
- Serving School Meals to Preschoolers (USDA):
<https://www.fns.usda.gov/tn/serving-school-meals-preschoolers>
- Snacks (CSDE's Meal Patterns for Preschoolers in School Nutrition Programs webpage):
<https://portal.ct.gov/sde/nutrition/meal-patterns-preschoolers-in-school-nutrition-programs/menu-planning#Snacks>
- Special Diets in School Nutrition Programs (CSDE):
<https://portal.ct.gov/sde/nutrition/special-diets-in-school-nutrition-programs>

1 | Preschool Meal Patterns

- USDA Memo CACFP 08-2017: Questions and Answers on the Updated Meal Pattern Requirements for the Child and Adult Care Food Program:
<https://www.fns.usda.gov/cacfp/questions-and-answers-updated-meal-pattern-requirements>
- USDA Memo CACFP 15-2016: Optional Best Practices to Further Improve Nutrition in the CACFP:
<https://www.fns.usda.gov/cacfp/optional-best-practices-further-improve-nutrition-cacfp>
- USDA Memo SP 37-2017: Flexibility for Co-Mingled Preschool Meals: Questions and Answers:
<https://www.fns.usda.gov/school-meals/flexibility-co-mingled-preschool-meals-questions-and-answers>

For detailed information on crediting foods in the preschool meal patterns, visit the CSDE's [Crediting Foods in School Nutrition Programs](#) webpage and [Crediting Documentation for the Child Nutrition Programs](#) webpage. For a comprehensive list of resources with guidance on meeting the preschool meal pattern and crediting requirements, refer to the CSDE's [Resources for the Preschool Meal Patterns](#). For additional resources, refer to section 8.



2 — Introduction to Crediting Foods

Each meal component of the USDA’s preschool meal patterns has specific criteria for determining how foods and beverages credit toward reimbursable meals and afterschool snacks. All foods and beverages must meet these requirements to credit as a meal component. This includes commercial products, foods made from scratch, and foods prepared by vendors.

Effective July 1, 2024, the USDA final rule, *Child Nutrition Programs: Meal Patterns Consistent with the 2020-2025 Dietary Guidelines for Americans*, changes the previous references in the regulations for Child Nutrition Programs from “food component” to “meal component,” and defines meal component as one of the food groups that comprise reimbursable meals. The meal components are fruits, vegetables, grains, meats/meat alternates, and fluid milk.

The menu planning guidance in this document assists SFAs with meeting the crediting requirements for the five meal components of the preschool meal patterns. 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.



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 whether a food credits toward the meal components:

- nutrient content;
- function in a meal;
- regulations concerning the USDA 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 [Food Buying Guide for Child Nutrition Programs](#) (FBG) and communicated through the policy memos on the USDA's [FNS Documents & Resources](#) webpage.

Minimum Creditable Amounts

Each meal component requires a minimum amount to credit in preschool menus. Food items that contain less than the minimum creditable amount do not credit in preschool menus.

- **Milk component:** The minimum creditable amount is the full serving of fluid milk. For smoothies only, the minimum creditable amount is $\frac{1}{4}$ cup. If the amount of milk in a smoothie is less than the full serving, the preschool meal or afterschool snack must include the additional amount of milk required to provide the full serving for each age group (refer to "[Crediting Fruits in Smoothies](#)" in section 6).
- **MMA component:** The minimum creditable amount is $\frac{1}{4}$ oz eq. At lunch, the MMA component must be served in a main dish, or in a main dish and one other food item. For more information, refer to "[Main Dish Requirement for Lunch](#)" in section 4.
- **Vegetables component:** The minimum creditable amount is $\frac{1}{8}$ cup. Smaller amounts of vegetables used for flavorings or garnishes do not credit in preschool menus. SFAs may offer more than one food item to meet the full serving of the vegetables component for each age group if each food item contains at least $\frac{1}{8}$ cup of vegetable.

- **Fruits component:** The minimum creditable amount is $\frac{1}{8}$ cup. Smaller amounts of fruits used for flavorings or garnishes do not credit in preschool menus. SFAs may offer more than one food item to meet the full serving of the fruits component for each age group if each food item contains at least $\frac{1}{8}$ cup of fruit.
- **Grains component:** The minimum creditable amount is $\frac{1}{4}$ oz eq. SFAs may offer more than one food item to meet the full serving of the grains component for each age group if each food item contains at least $\frac{1}{4}$ oz eq.

If a food item provides less than the full serving, the preschool menu must include additional foods from that same meal component to provide the full serving for each age group. For example, the preschool lunch meal pattern for ages 3-5 requires $\frac{1}{4}$ cup of the vegetables component. If a food item provides $\frac{1}{8}$ cup of vegetables, the lunch menu must include another food item with at least $\frac{1}{8}$ cup of vegetables to provide the full vegetables component for ages 3-5.

Requirement for Visible Components

The USDA requires that foods must be visible (recognizable) to credit in preschool menus. For example, menu planners cannot credit peanut butter in smoothies, pureed tofu in soups, or applesauce in muffins. 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 blended in fruit or vegetable smoothies credits as the MMA component. For more information, refer to “[Yogurt in smoothies](#)” in section 4 and “[Crediting Fruit and Vegetable Smoothies](#)” in section 6.
- 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. For more information, refer to “[Crediting Bean, Pea, and Lentil Flour Pasta Products as MMA](#)” in section 4.
- Pureed fruits in smoothies credit as the fruit component and pureed vegetables in smoothies credit as the vegetables component (refer to “[Crediting Fruit and Vegetable Smoothies](#)” and “[Crediting Pureed Fruits](#)” in section 6).

In addition, menu planners may credit foods like entrees that are made with pureed vegetables if they also contain at least $\frac{1}{8}$ cup of visible creditable vegetables. For example, a serving of

macaroni and cheese that contains $\frac{1}{8}$ cup of diced butternut squash (visible) and $\frac{1}{8}$ cup of pureed carrots (not visible) credits as $\frac{1}{4}$ cup of vegetables (refer to “[Unrecognizable pureed vegetables](#)” in section 5)

Required Crediting Documentation

SFAs must be able to document that all foods and beverages offered in reimbursable meals and afterschool snacks meet the preschool meal pattern crediting requirements. Appropriate crediting documentation must be maintained on file for commercial products and foods prepared from scratch. The CSDE will review this information during the Administrative Review of the school nutrition programs.

Documentation for commercial products

The USDA requires that SFAs must be able to document the meal pattern contribution of all commercial processed products offered in preschool menus. Processed foods 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;
- foods with added liquids, binders, and extenders, e.g., deli meats, hotdogs, and sausages (refer to the CSDE’s resources, [Crediting Deli Meats in the School Nutrition Programs](#) and [Crediting Commercial Meat/Meat Alternate Products in the School Nutrition Programs](#));
- dried meat, poultry, and seafood products, e.g., jerky and summer sausages;
- foods that are alternate protein products (APPs) or contain APPs (refer to the CSDE’s resource, [Requirements for Alternate Protein Products in the School Nutrition Programs](#));
- fruits and vegetables with added ingredients, e.g., breaded onion rings, french fries, hash brown patties, coleslaw, and dried soup mix; and
- 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.

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

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 pattern 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, refer to the USDA's [Tips for Evaluating a Manufacturer's Product Formulation Statement](#) and [Reviewer's Checklist for Evaluating Manufacturer Product Formulation Statements \(Product Analysis\) for Meat/Meat Alternate \(M/MA\) Products](#).

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). This documentation must be obtained and verified for accuracy prior to purchasing, serving, and claiming the food product in reimbursable meals. Commercial processed products without a CN label or PFS cannot credit in the school nutrition programs.

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 6: Meal Pattern Documentation of the CSDE's training program, [What's in a Meal: National School Lunch Program and School Breakfast Program Meal Patterns for Grades K-12](#).

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 CSDE's [Crediting Documentation for the Child Nutrition Programs](#) webpage.

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 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 [Food Buying Guide for Child Nutrition Programs](#) 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.



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 belong to the meal components.

Examples of noncreditable foods include whole milk for ages 2 and older, water, potato chips, pudding, ice cream, gelatin, cream cheese, butter, bacon, and condiments like syrup, jam, ketchup, mustard, mayonnaise, and salad dressings. 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 Preschool Meal Patterns for the School Nutrition Programs](#).

Allowable noncreditable foods

SFAs may serve noncreditable foods in addition to the meal components to add variety, help improve acceptability in the meal, and satisfy appetites. 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 preschool 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 fats, 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).

Prohibited noncreditable foods

Federal and state laws prohibit certain noncreditable foods, such as candy, soda, coffee, tea, and sports drinks. For more information, visit the CSDE's [Competitive Foods](#) webpage and [Beverage Requirements](#) webpage.

Depending on the type of school, 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 residential child care institutions (RCCIs).



Resources for Crediting Foods

The resources and websites below address the requirements for crediting foods in the preschool meal patterns. For a list of resources with guidance on meeting the preschool meal pattern and crediting requirements, refer to the CSDE's *Resources for the Preschool Meal Patterns*.

- Afterschool Snack Program Handbook (CSDE):
https://portal.ct.gov/-/media/sde/nutrition/asp/asp_handbook.pdf
- 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 Handbook for the Child and Adult Care Food Program (USDA):
<https://www.fns.usda.gov/tn/crediting-handbook-child-and-adult-care-food-program>
- Crediting Summary Charts for the Preschool Meal Patterns of the School Nutrition Programs (CSDE):
https://portal.ct.gov/-/media/sde/nutrition/cacfp/crediting/crediting_summary_charts_snp_preschool.pdf
- Crediting Updates for Child Nutrition Programs: Be in the Know! Webinar Series (USDA):
<https://www.fns.usda.gov/tn/crediting-updates-child-nutrition-programs-be-know-webinar-series>
- CSDE Operational Memos for the CACFP (CSDE webpage):
<https://portal.ct.gov/sde/lists/operational-memoranda-for-the-cacfp>
- Food Buying Guide for Child Nutrition Programs (USDA):
<https://www.fns.usda.gov/tn/food-buying-guide-for-child-nutrition-programs>
- Meal Patterns for Preschoolers in School Nutrition Programs (CSDE webpage):
<https://portal.ct.gov/sde/nutrition/meal-patterns-preschoolers-in-school-nutrition-programs>
- Preschool Meal Pattern Training for the School Nutrition Programs (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>

- Resource List for Menu Planning and Food Production in Child Nutrition Programs (CSDE):
https://portal.ct.gov/-/media/sde/nutrition/resources/resources_menu_planning.pdf
- Resources for the Preschool Meal Patterns (CSDE):
https://portal.ct.gov/-/media/sde/nutrition/nslp/preschool/resources_preschool_meal_patterns.pdf
- USDA FNS Instructions for Child Nutrition Programs:
<https://portal.ct.gov/sde/nutrition/fns-instructions-for-child-nutrition-programs>
- USDA Policy Memos (USDA’s FNS Documents & Resources webpage):
<https://www.fns.usda.gov/resources>

For additional guidance on crediting foods, visit the “[Crediting Foods in Preschool Menus](#)” section of the CSDE’s Meal Patterns for Preschoolers in School Nutrition Programs webpage.



3 — 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 preschool 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 Servings for Milk

The preschool meal patterns require a serving of fluid milk at breakfast and lunch.

- A serving of milk may be one of the two required meal components at afterschool snack. Only one meal component at afterschool snack can be a creditable beverage. Milk cannot be served when juice is the only other meal component at afterschool snack.
- Meals and snacks with breakfast cereals may include fluid milk as a beverage, on cereal, or both.

The table below summarizes the required servings of the milk component for each age group and meal.

Table 3-1. Required cups of fluid milk

| Meal | Ages 1-2 | Ages 3-5 |
|-------------------|----------|----------|
| Breakfast | ½ | ¾ |
| Lunch | ½ | ¾ |
| Afterschool snack | ½ | ½ |

Allowable Types of Milk

The preschool meal patterns require unflavored whole milk for age 1, and unflavored low-fat (1%) or fat-free milk for ages 2-5. Allowable types of milk include any pasteurized milk that meets and state and local standards and the fat content and flavor restrictions for each age group, including:

- lactose-free and lactose-reduced milk;
- cultured milk, such as cultured buttermilk, cultured kefir milk, and cultured acidophilus milk;
- acidified milk, such as acidified kefir milk and acidified acidophilus milk; and

- Ultra High Temperature (UHT) milk.

SFAs cannot serve milk that does not comply with the required fat content for each age group. For example, low-fat milk, fat-free milk, and reduced-fat milk cannot be served to 1-year-olds. Whole milk and reduced-fat milk cannot be served to ages 2-5.

If a child requires milk with a different fat content for disability reasons, the SFA must make the substitution prescribed in the medical statement signed by a state licensed healthcare professional or registered dietitian (refer to [“Meal Modifications for Children with Special Dietary Needs”](#) in section 1).

The table below summarizes the allowable types of milk for each age group. For additional guidance, visit the USDA’s [Serving Milk in the CACFP](#) webpage.

Table 3-2. Allowable types of milk in the preschool meal patterns

| Type of milk | Age 1 | Age 2 | Ages 3-5 |
|------------------------------|-------|----------------|----------|
| Whole, unflavored | X | X ¹ | |
| Whole, flavored | | | |
| Reduced-fat (2%), unflavored | | X ¹ | |
| Reduced-fat (2%), flavored | | | |
| Low-fat (1%), unflavored | | X | X |
| Low-fat (1%), flavored | | | |
| Fat-free, unflavored | | X | X |
| Fat-free, flavored | | | |

¹ Unflavored whole milk and unflavored reduced-fat milk can be served only during a one-month transition period when switching a 24-month-old child from whole milk to low-fat or fat-free milk (refer to [“Transitioning from Whole Milk to Low-fat or Fat-free Milk”](#) in this section).

Transitioning from Breastmilk or Infant Formula to Whole Milk

Iron-fortified infant formula does not meet the fluid milk requirement of the preschool meal patterns. However, meals that contain an allowable iron-fortified infant formula are reimbursable for a one-month transition period when children ages 12 to 13 months are weaning (transitioning) from infant formula to whole cow's milk.

When a child is weaned from formula (or breastmilk) to cow's milk, it is common practice to provide the infant with both foods at the same meal. A small amount of whole milk is added to the iron-fortified infant formula, and gradually increased over time. This eases the transition by helping the infant to accept some of the new food.

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 $\frac{1}{2}$ cup of unflavored low-fat or fat-free milk for age 2. If a mother provides $\frac{1}{4}$ cup of expressed breastmilk, the SFA must serve $\frac{1}{4}$ cup of unflavored low-fat or fat-free milk to make up the difference and meet the minimum $\frac{1}{2}$ -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.

Transitioning from Whole Milk to Low-fat or Fat-free Milk

The USDA allows SFAs to serve unflavored reduced-fat milk and unflavored whole milk during a one-month transition period when a 24-month-old child is switching from whole milk to low-fat or fat-free milk. The steps below can help ease a child's transition to low-fat or fat-free milk.

1. Add a small amount of reduced-fat milk to whole milk.
2. Gradually change to low-fat or fat-free milk mixed with whole milk.
3. Decrease the amount of whole milk over time so the entire serving is low-fat or fat-free milk by the end of the one-month transition period.

The preschool meal patterns do not allow whole milk or reduced-fat milk for ages 2 and older.

Menu Documentation for Milk

Preschool menus must document the type of milk served to each age group. The examples below show how to indicate the type of milk on preschool menus.

- The menu for age 1 should state “unflavored whole milk” instead of “whole milk.”
- The menu for ages 2-5 should state “unflavored low-fat milk” instead of “low-fat milk” and “unflavored fat-free milk” instead of “fat-free milk.”

This ensures that preschool menus reflect the appropriate type of milk being served to each age group.

Allowable Milk Substitutes for Non-disability Reasons

The USDA allows two types of substitutions for children who do not consume regular cow’s milk due to non-disability reasons.

1. Lactose-free/reduced milk

Lactose-free/reduced milk are fluid milk and credit the same as regular milk in the milk component for the preschool meal patterns. 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 following meal pattern requirements for each age group: unflavored whole milk for age 1; and unflavored low-fat or fat-free milk for ages 2-5. Lactose-free/reduced milk served in public schools must also meet the additional state beverage requirements for milk under Connecticut General Statutes (C.G.S.) [Section 10-221q](#) (refer to “[Additional State Beverage Requirements for Public Schools](#)” in this section).

2. Fluid milk substitutes that meet the USDA’s nutrition standards for fluid milk substitutes

Fluid milk substitutes are plant-based beverages designed to replace cow’s milk, such as soy milk, almond milk, rice milk, and oat milk. Fluid milk substitutes for non-disability reasons must meet the USDA’s nutrition standards for fluid milk substitutes (refer to [table 3-4](#)). Only certain brands of fluid milk substitutes meet these standards. Fluid milk substitutes served in public schools must also meet the additional state beverage requirements for nondairy milk substitutes under [C.G.S. Section 10-221q](#) (refer to “[Additional State Beverage Requirements for Public Schools](#)” in this section).

The table below summarizes these requirements.

Table 3-3. Summary of federal and state requirements

| Requirements | Lactose-free/reduced milk | Fluid milk substitutes |
|---|--|--|
| Federal nutrition standards (USDA) | <p>Must meet the appropriate preschool meal pattern requirements for each age group.</p> <ul style="list-style-type: none"> • Age 1: whole milk, unflavored • Ages 2-5: low-fat or fat-free milk, unflavored | Must meet the USDA's nutrition standards for fluid milk substitutes. |
| State nutrition standards (C.G.S. Section 10-221q: beverages) | <p>Applies to public schools only: No artificial sweeteners and cannot exceed 4 grams of sugar per ounce (refer to "Additional State Milk Requirements for Public Schools" in this section).</p> | <p>Applies to public schools only: No artificial sweeteners and cannot exceed 4 grams of sugar per ounce, 35 percent of calories from fat, and 10 percent of calories from saturated fat.</p> |
| Documentation | None: Lactose-free/reduced milk are fluid milk and credit as the milk component in the preschool meal patterns. | Written request from the parent/guardian, a state licensed healthcare professional, or a registered dietitian that identifies the reason for the milk substitute. Maintain on file with child's medical records. |

USDA's Nutrition Standards for Fluid milk substitutes

SFAs that choose to offer one or more fluid milk substitutes for non-disability reasons must use commercial products that meet the USDA's nutrition standards for fluid milk substitutes (refer to the table below). These nutrition standards ensure that children who require a fluid milk substitute receive the important nutrients found in milk.

Fluid milk substitutes must meet each nutrient standard (nutrients per cup) or the percent daily value (% DV). The manufacturer's nutrition information might list the nutrient values, the unrounded or rounded percent Daily Value (% DV), or both. If any nutrient values are missing, SFAs must obtain this information from the manufacturer.

Table 3-4. USDA's nutrition standards for fluid milk substitutes

| Nutrients per cup (8 fluid ounces) | Unrounded % DV ¹ | Rounded % DV ² |
|---|-----------------------------|---------------------------|
| Calcium: 276 milligrams (mg) | 21.23% | 20% |
| Protein: 8 grams (g) | 16% | 16% |
| Vitamin A: 150 micrograms (mcg) retinol activity equivalent (RAE) | 16.67% | 20% |
| Vitamin D: 2.5 micrograms (mcg) | 12.5% | 15% |
| Magnesium: 24 mg | 5.71% | 6% |
| Phosphorus: 222 mg | 17.76% | 20% |
| Potassium: 349 mg | 7.43% | 10% |
| Riboflavin: 0.44 mg | 33.85% | 35% |
| Vitamin B12: 1.1 mcg | 45.83% | 45% |

¹ The unrounded % DV is the minimum nutrients per cup (column 1) divided by the current daily value for each nutrient (refer to the FDA's [Reference Guide: Daily Values for Nutrients](#)).

² The rounded % DV is based on the FDA labeling laws and is listed on the Nutrition Facts label (refer to Appendix H of the FDA's [A Food Labeling Guide: Guidance for Industry](#)).

Effective July 1, 2024, the USDA final rule, *Child Nutrition Programs: Meal Patterns Consistent with the 2020-2025 Dietary Guidelines for Americans*, updates the units for vitamin A and vitamin D requirements for fluid milk substitutes to align with the FDA labeling requirements (FDA final rule 81 FR 33742, *Food Labeling: Revision of the Nutrition and Supplement Facts Labels*). For vitamin A, instead of 500 IUs, the unit requirement is now 150 mcg RAE per 8 fluid ounces. For vitamin D, instead of 100 IUs, the unit requirement is now 2.5 mcg per 8 fluid ounces. The amount of vitamin A and vitamin D required in fluid milk substitutes does not change; only the unit of measurement has changed to conform to the FDA's labeling requirements.

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*.



Additional State Beverage Requirements for Public Schools

In addition to meeting the USDA's requirements, preschool programs operating in public schools must comply with the state beverage requirements of [C.G.S. Section 10-221q](#). These requirements include specific nutrition standards for fluid milk (including lactose-free/reduced milk) and fluid milk substitutes available for sale to students in public schools, as part of and separately from reimbursable meals and afterschool snacks.

- Lactose-free/reduced milk cannot contain artificial sweeteners and cannot exceed 4 grams of sugar per ounce.
- Fluid milk substitutes cannot contain artificial sweeteners and cannot exceed 4 grams of sugar per ounce, 35 percent of calories from fat, and 10 percent of calories from saturated fat.

The state beverage statute does not apply to private schools or RCCIs. For more information on the state beverage statute, visit the CSDE's [Beverage Requirements](#) webpage.

Crediting Milk in Smoothies

Milk credits as the milk component when served in smoothies if it meets the required fat content for each age group (refer to "[Allowable Types of Milk](#)" in this section). For smoothies only, the minimum creditable amount of milk is $\frac{1}{4}$ cup. If a smoothie contains less than the full serving of milk, the preschool menu must include the additional amount of milk to provide the full milk component.

For more information on crediting smoothies, refer to "[Crediting Fruit in Smoothies](#)" in section 6, "[Crediting Vegetables in Smoothies](#)" in section 3, and "[Crediting yogurt in smoothies](#)" in section 4.

Milk in Prepared Foods

Only fluid milk meets the USDA's definition for milk and the FDA's standard of identity for milk. The preschool 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) cannot credit as the milk component. For information on crediting cheese and yogurt as MMA, refer to "[Crediting Cheeses](#)" and "[Crediting Yogurt and Soy Yogurt](#)" in section 4.

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). The U.S. Dairy's [Milk Quality Checklist](#) helps SFAs to evaluate to current practices and implement procedures for keeping milk cold.

Noncreditable Foods in the Milk Component

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

- for age 1, reduced fat (2%) milk (unflavored or flavored); low-fat (1%) milk (unflavored or flavored), and fat-free milk (unflavored or flavored);
- for ages 2-5, whole milk (unflavored or flavored), reduced fat (2%) milk (unflavored or flavored), flavored fat-free milk, and flavored low-fat (1%) milk;
- 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 "[USDA's nutrition standards for fluid milk substitutes](#)" in this section);
- milk that is cooked or baked in prepared foods, such as cereals, puddings, cream sauces, and macaroni and cheese;
- foods made from milk, such as cheese, yogurt, and ice cream;
- nutrition supplement beverages, such as Abbott's Pediasure;
- powdered milk beverages, such as Nestle's NIDO; and
- for preschool programs operating in public schools, milk and nondairy milk substitutes that do not meet the state beverage requirements (refer to "[Additional State Beverage Requirements for Public Schools](#)" in this section).

This list is not all-inclusive. For more information, refer to "[Noncreditable Foods](#)" in section 2 and the CSDE's resource, [Noncreditable Foods in the Preschool Meal Patterns for the School Nutrition Programs](#).

Resources for Crediting Milk

The resources below assist menu planners with crediting the milk component in the preschool 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

- Crediting Fluid Milk in the Child Nutrition Programs Tip Sheet (USDA):
<https://www.fns.usda.gov/tn/crediting-milk-child-nutrition-programs-tip-sheet>
- Food Buying Guide Section 5: Overview of Crediting Requirements for the Milk Component (USDA):
https://foodbuyingguide.fns.usda.gov/Content/TablesFBG/USDA_FBG_Section5_Milk.pdf
- Food Buying Guide Section 5: Yield Table for Milk (USDA):
https://foodbuyingguide.fns.usda.gov/files/Reports/USDA_FBG_Section5_MilkYieldTable.pdf
- Identifying Products that Meet the USDA's Nutrition Standards for Fluid Milk Substitutes in the Child and Adult Care Food Program (CSDE):
https://portal.ct.gov/-/media/sde/nutrition/cacfp/specdiet/identify_allowable_nondairy_milk_substitutes_cacfp.pdf
- Lactose Intolerance and Milk Allergies (Institute of Child Nutrition Mealtime Memo):
https://theicn.org/wpfd_file/september-2024-mealtime-memo-lactose-intolerance-and-milk-allergies/
- Milk (CSDE's Crediting Foods in School Nutrition Programs webpage):
<https://portal.ct.gov/sde/nutrition/crediting-foods-in-school-nutrition-programs/milk>
- Preschool Meal Pattern Training for the School Nutrition Programs, Module 4: Milk Component (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>
- Serving Milk in the CACFP (USDA handouts, training slides, and webinars in English and Spanish):
<https://www.fns.usda.gov/tn/serving-milk-cacfp>
- USDA Memo SP 01-2025: Fluid Milk Requirements for School Meals:
<https://fns-prod.azureedge.us/sites/default/files/resource-files/SP01-2025os.pdf>
- USDA Memo SP 40-2019, CACFP 17-2019, and SFSP 17-2019: Smoothies Offered in the Child Nutrition Programs:
<https://www.fns.usda.gov/cn/smoothies-offered-child-nutrition-programs>

For additional crediting resources, visit the “Milk” section of the CSDE’s [Crediting Foods in School Nutrition Programs](#) webpage.

4 — Meats/Meat Alternates Component

The meats/meat alternates (MMA) component consists of meats like cooked lean meat, poultry, and fish; and meat alternates (foods that 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. Beans, peas, and lentils credit 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.

The USDA's [CACFP best practices](#) recommend serving only lean meats, nuts, and beans, peas, and lentils; limiting processed meats to one serving per week; and serving only low-fat or reduced-fat natural cheese.

Required Servings for MMA

Effective July 1, 2024, the USDA final rule, [Child Nutrition Programs: Meal Patterns Consistent with the 2020-2025 Dietary Guidelines for Americans](#), updates the MMA quantities in the preschool meal patterns from ounces to ounce equivalents (oz eq). The amount of MMA that credits as 1 ounce or 1 oz eq is the same.

The preschool meal patterns require a serving of the MMA component at lunch. The MMA component is not required at breakfast but may substitute for the entire grains component up to three times per week (refer to “[MMA at Breakfast](#)” in this section). A serving of MMA may be one of the two required meal components at afterschool snack. The table below summarizes the required servings of the MMA component for each age group and meal.

Table 4-1. Required oz eq of the MMA component

| Meal | Ages 1-2 | Ages 3-5 |
|-------------------|----------|----------|
| Breakfast | None | None |
| Lunch | 1 | 1½ |
| Afterschool snack | ½ | ½ |

Minimum creditable amount for MMA

The minimum creditable amount for the MMA component is $\frac{1}{4}$ oz eq. Meats and meat alternates offered in amounts less than $\frac{1}{4}$ oz eq do not credit in preschool menus (refer to “[Minimum creditable amounts](#)” in section 2).

When crediting menu items toward the MMA component, menu planners must round down to the nearest $\frac{1}{4}$ oz eq. For example, a standardized recipe or commercial product that contains 0.9 oz eq of cooked chicken per serving credits as 0.75 oz eq of the MMA component.

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 (reduced-fat or low-fat recommended for ages 2 and older);
- $\frac{1}{4}$ cup of cottage cheese (reduced-fat or low-fat recommended for ages 2 and older);
- 2 ounces of cheese food/spread or cheese substitute;
- $\frac{1}{4}$ cup of cooked beans, peas, and lentils, e.g., kidney beans, chickpeas (garbanzo beans), lentils, and split peas;
- $\frac{1}{2}$ 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) containing no more than 23 grams of sugars per 6 ounces (3.83 grams per ounce);
- 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 APP that meets the USDA’s APP requirements.

This section contains specific crediting guidance for each type of MMA. Menu planners should consult the USDA’s FBG to determine the crediting information for foods in the MMA component (refer to “[Food Buying Guide for Child Nutrition Programs](#)” in section 2).



MMA versus Protein

The preschool 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 the MMA component 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).

To credit as the MMA component, commercial products that are processed or contain added ingredients (such as pizza, chicken nuggets, veggie burgers, and cheese ravioli) require a CN label or PFS to document the oz eq of the MMA component per serving. For more information, refer to “[Crediting MMA in Commercial Products](#)” in this section.

Choking Prevention for MMA

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). For additional guidance, refer to “[Choking Prevention](#)” in section 1.

Crediting Documentation for Commercial Processed Products

SFAs must obtain crediting documentation for commercial products that are processed or contain added ingredients, 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 slice of commercially prepared cheese pizza as 1½ oz eq of the MMA component, the product’s CN label or PFS must indicate that the serving contains 1½ ounces of cheese. For more information, refer to “[Documentation for commercial products](#)” in section 2 and the CSDE’s resource, [Accepting Processed Product Documentation in the School Nutrition Programs](#).

Main Dish Requirement for Lunch

The MMA component at lunch must be served in a main dish, or in a 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 ages 3-5 could provide the required 1½ oz eq of the MMA component from:

- a sandwich containing 1½ ounces of tuna (1½ oz eq); or
- a sandwich containing 1 ounce of tuna (1 oz eq) served with vegetable soup that contains ⅛ cup of kidney beans (½ oz eq).

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

Requirement for recognizable main dish

Foods that are not a recognizable main dish do not credit toward the MMA component. For example, menu planners cannot credit peanut butter in a muffin or smoothie, pureed beans in a muffin, or blended soft tofu in soup. The USDA’s intent for this requirement is to ensure that preschool menus offer MMA in a form that is recognizable to children.

The USDA allows two exceptions to the requirement for a recognizable main dish: 1) yogurt blended in fruit or vegetable smoothies; and 2) pasta made with 100 percent legume flour, if the menu also includes an additional meat or meat alternate, such as tofu, cheese, or meat. For more information, refer to “[Requirement for visible components](#)” in section 2.

MMA at Breakfast

The MMA component is not required at breakfast. However, menu planners may choose to substitute the MMA component for the entire grains component up to three times per week. 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.

A 1-oz eq serving of the MMA component substitutes for 1 oz eq of the grains component. For example, the menu planner could substitute 2 tablespoons of peanut butter, 1 ounce of cheese, half of a large egg, or ½ cup of yogurt for 1 oz eq of the grains component.

The USDA's [Serving Meat and Meat Alternates at Breakfast](#) webpage contains handouts, training slides, and webinars in English and Spanish with additional guidance on serving the MMA component in preschool breakfast menus.



Crediting Alternate Protein Products (APPs)

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

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.

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 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 an APP product meets 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. Therefore, manufacturers must provide the appropriate crediting documentation.

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. Without appropriate documentation, APPs do not credit in preschool menus.

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. Sample APP documentation is on page 6 of the USDA's [Questions and Answers on Alternate Protein Products](#).

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 product lists APP ingredients that are being credited as the MMA component, the manufacturer must provide supporting documentation to indicate that the APP ingredients meet the USDA's APP requirements. APP ingredients without this supporting documentation cannot credit in in preschool menus.

The USDA's [Questions and Answers on Alternate Protein Products \(APP\)](#) provides additional guidance on documenting the APP requirements. For information on CN labels and PFS forms, refer to "[Documentation for commercial products](#)" in section 2. 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 of foods in the beans, peas, and lentils subgroup 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 may credit as either the MMA component or the vegetables component, but one serving cannot credit as both components in the same meal or afterschool snack. A $\frac{1}{4}$ -cup serving credits as 1 oz eq of the MMA component or $\frac{1}{4}$ cup of the vegetables component.
- Beans, peas, and lentils may credit as the MMA component or the vegetables component in different meals. 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, the menu planner may choose to credit one serving as the MMA component and one serving as the vegetables component. For example, $\frac{1}{4}$ cup of garbanzo beans in a salad may credit as $\frac{1}{4}$ cup of the vegetables component and $\frac{1}{4}$ cup of kidney beans in chili may credit as 1 oz eq of the MMA component.

Menu planners must determine in advance how to credit beans, peas, and lentils in a meal.

Effective July 1, 2024, the USDA final rule, [Child Nutrition Programs: Meal Patterns Consistent with the 2020-2025 Dietary Guidelines for Americans](#), changes the previous references in the regulations for Child Nutrition Programs from “legumes (beans and peas)” to “beans, peas, and lentils.”



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

Beans, peas, and lentils credit as meat alternates 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.

The serving size refers to the amount of cooked beans, peas, and lentils without other ingredients, such as the 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 MMA contribution for different amounts of cooked beans, peas, and lentils.

Table 4-2. MMA contribution of cooked beans, peas, and lentils

| Serving size | MMA contribution |
|------------------------------|-------------------------------------|
| 1 tablespoon | ¼ oz eq (minimum creditable amount) |
| 2 tablespoons (⅓ cup) | ½ oz eq |
| 3 tablespoons | ¾ oz eq |
| 4 tablespoons (¼ cup) | 1 oz eq |
| 5 tablespoons | 1¼ oz eq |
| 6 tablespoons (⅔ 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 5.

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 beans, peas, and lentils in the standardized recipe's serving. A standardized recipe must provide at least 1 tablespoon ($\frac{1}{4}$ oz eq) of beans, peas, or lentils per serving 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 beans, peas, and lentils in one serving of the standardized recipe by 0.25, then rounding down to the nearest $\frac{1}{4}$ 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 as meat alternates based on weight (ounces). A 1-ounce serving of roasted or dried beans, peas, or lentils credits as 1 oz eq of the MMA component.

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](#)" in section 1.

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](#)" section 5.

Resources for beans, peas, and lentils

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

- Beans and Peas are Unique Foods (USDA):
<https://www.choosemyplate.gov/eathealthy/vegetables/vegetables-beans-and-peas>
- 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/resources/1513/nutrition/122257/legumes-in-school-meals.pdf>
- Pulses in Schools (USDA Pulses):
<https://www.usapulses.org/schools/school-nutrition>
- Recipes for Healthy Kids Cookbook for Schools (USDA):
<https://www.fns.usda.gov/tn/recipes-healthy-kids-cookbook-schools>

For additional resources, refer to “Beans, Peas, and Lentils” in the CSDE’s [Resource List for Menu Planning and Food Production in Child Nutrition Programs](#).



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 meat alternates. However, the menu planner must offer the pasta with an additional MMA, such as tofu, cheese, or meat. The USDA’s intent for this requirement is to ensure that preschool menus offer MMA in a form that is recognizable to children (refer to [“Requirement for visible components”](#) in section 2).

The table below shows the MMA contribution for different amounts of pasta products made of 100 percent bean, pea, and lentil flours. A ¼-cup cooked serving credits as 1 oz eq of the MMA component.

Table 4-3. MMA contribution of cooked 100 percent bean/pea/lentil flour pasta products

| Serving size | MMA contribution |
|--------------|-------------------------------------|
| 1 tablespoon | ¼ oz eq (minimum creditable amount) |
| ⅛ cup | ½ oz eq |
| ⅜ cup | ¾ oz eq |
| ¼ cup | 1 oz eq |
| ½ cup | 2 oz eq |

Alternatively, 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 products”](#) in section 2 and the USDA’s resources, [Product Formulation Statement \(Product Analysis\) for Meat/Meat Alternate \(MMA\) Products in Child Nutrition Programs](#) and [Tips for Evaluating a Manufacturer’s Product Formulation Statement](#).

Pasta made of 100 percent bean, pea, and lentil flours 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. For more information, refer to [“100 percent vegetable flours crediting as a vegetable”](#) in section 5.

The requirements for crediting pasta products made of vegetable flours 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 serving low-fat or reduced-fat cheeses for ages 2 and older and choosing natural cheeses.

Large chunks of cheese (such as cheese cubes or string cheese) may be a choking hazard for young children. Grate or thinly slice cheese to reduce the risk of choking. For additional guidance, refer to [“Choking Prevention”](#) in section 1.

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.

Process Cheeses

Process 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. Process 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. Menu planners 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 (refer to “[Required Crediting Documentation](#)” in section 1).

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

Table 4-4. Required quantity of cheese for 1 oz eq of MMA

| 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 ($\frac{3}{8}$ cup) |
| Process cheese, e.g., American | 1 ounce |
| Cottage or ricotta cheese | $\frac{1}{4}$ 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 in preschool menus.



Crediting Deli Meats, Hot Dogs, and Sausages

Deli meats (such as turkey, chicken, ham, roast beef, salami, and bologna), hot dogs, and sausages credit as the MMA component in the preschool meal patterns. The serving that provides 1 oz eq depends on the product's ingredients and varies greatly between different brands and types. SFAs must ensure that the serving of a commercial meat product provides the oz eq being credited toward the MMA component.

Hotdogs and other tube-shaped meats may be a choking hazard for young children. Cut hot dogs into short strips instead of round pieces. Consider children's ages and developmental readiness when deciding whether to offer hot dogs in preschool menus. For additional guidance, refer to "[Choking Prevention](#)" in section 1.

Crediting meat products with added liquids, binders, and extenders

Commercial meat products like deli meats, hot dogs, sausages, and other processed meats often contain added liquids, binders, and extenders (refer to table 4-5). Binders and extenders are defined by the USDA's regulations for the Food Safety and Inspection Service (FSIS) ([9 CFR 318.7](#)).

Products with added liquids (such as water or broth), binders, and extenders credit based on the percentage of meat in the product formula, not the serving weight. 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.

A 1-ounce serving of products that contain added liquids, binders, and extenders does not credit as 1 oz eq of the MMA component.

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.

Table 4-5. Examples of binders and extenders

| | |
|---|---|
| Agar-agar | Isolated soy protein (APP) ¹ |
| Algin (a mixture of sodium alginate, calcium carbonate and calcium gluconate/lactic acid) | Locust bean gum |
| Bread | Methyl cellulose |
| Calcium-reduced dried skim milk | Modified food starch |
| Carrageenan | Reduced lactose whey |
| Carboxymethyl cellulose (cellulose gum) | Reduced minerals |
| Cereal | Sodium caseinate |
| Dried milk | Soy flour (APP) ¹ |
| Dry or dried whey | Soy protein concentrate (APP) ¹ |
| Enzyme (rennet) treated calcium-reduced dried skim milk and calcium lactate | Starchy vegetable flour |
| Gums, vegetable | Tapioca dextrin |
| | Vegetable starch |
| | Wheat gluten |
| | Whey |
| | Whey protein concentrate (APP) ¹ |
| | Xanthan gum |

¹ Products may contain these ingredients if they meet the USDA's APP requirements (refer to "[Crediting Alternate Protein Products \(APPs\)](#)" in this section).

SFAs must obtain a CN label or PFS for all commercial meat products with added liquids, binders, and extenders. This documentation must indicate the oz eq of MMA contained in one serving of the product. For more information, refer to "[Documentation for commercial products](#)" in section 2 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 deli meat 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 should 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 make portioning simple 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 $\frac{1}{4}$ 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 either ABC brand turkey breast or XYZ brand turkey breast. 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 turkey sandwich recipe for each brand of deli meat.

For information on standardized recipes, refer to "[Documentation for foods made from scratch](#)" in section 2.



Crediting Dried Meat, Poultry, and Seafood Products

Shelf-stable, dried, and semi-dried meat, poultry, and seafood products credit as the MMA component. Some examples include jerky and summer sausage. The USDA indicates that these products are most useful in meals served off-site like field trips. However, SFAs may also credit these products in meals and afterschool snacks served on school premises.

Dried meat, poultry, and seafood products require a CN label or PFS to document the oz eq of the MMA component per serving. 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 products (such as jerky) may be a choking hazard for young children. Consider children’s ages and developmental readiness when deciding whether to offer dried meat products in preschool menus. For additional guidance, refer to [“Choking Prevention”](#) in section 1.

Evaluating the PFS for commercial 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 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.

Since this dried beef stick product lists “Ground beef (not more than 30% fat)” as the first ingredient, the product’s PFS must also list the crediting information for “Ground beef (not more than 30% fat).”

2. The creditable meat 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” in the FBG.

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.

Commercial products that do not meet these requirements do not credit in preschool menus.

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 Child Nutrition Programs, 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 in preschool menus.

- **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 ingredients (pork) do 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

Whole eggs credit as meat alternates. 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. Liquid egg substitutes are not whole eggs and do not credit in preschool menus. Egg whites do not credit if served without the yolks.

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 scrambled egg breakfast burritos. Menu planners must document the eggs per serving 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).

Crediting Hummus and Bean Dips as MMA

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. To credit as the MMA component, the serving must contain at least $\frac{1}{4}$ oz eq of MMA from the combined amount of chickpeas (or other beans, peas, and lentils) and tahini (sesame paste).

- **Beans, peas, and lentils:** A $\frac{1}{4}$ -cup serving of beans, peas, or lentils credits as 1 oz eq of the MMA component. The minimum creditable amount is 1 tablespoon ($\frac{1}{4}$ 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 $\frac{1}{2}$ tablespoon ($\frac{1}{4}$ 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 5.

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

Commercial combination entrees (such as tacos, lasagna, and chicken stir-fry) require a CN label or a PFS stating the amount of the MMA component per serving (refer to “[Documentation for commercial products](#)” in section 2). Menu items 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 2).

Crediting MMA in Commercial Products

To credit as the MMA component, commercial products that are processed or contain added ingredients (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 1½ oz eq of the MMA component, the product’s CN label or PFS must state that one serving of the product contains 1½ ounces of cooked chicken. Commercial products cannot credit as the MMA component without this documentation.

SFAs must have a CN label or PFS to document the meal pattern contribution of all commercial MMA products used in preschool menus. Commercial products without this documentation cannot credit in preschool menus (refer to “[Documentation for commercial products](#)” in section 2). SFAs are responsible for checking the manufacturer’s PFS for accuracy before including any commercial products in preschool menus

The CSDE’s resource, [Crediting Commercial Meat/Meat Alternate Products in the School Nutrition Programs](#), summarizes the requirements for crediting commercial MMA in preschool menus.



Crediting Nuts and Seeds

Nuts and seeds credit as meat alternates. Creditable nuts and seeds include almonds, Brazil nuts, cashews, filberts, macadamia nuts, peanuts, pecans, walnuts, pine nuts, pistachios, pumpkin seeds, soy nuts, sunflower seeds, and roasted or dried soybeans.

Roasted or dried soybeans also credit as meat alternates. However, fresh soybeans (edamame) are legumes and credit only as the vegetables component

Nuts and seeds 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. The USDA recommends that any nuts or seeds served to young children are in a prepared food and are ground or finely chopped. For additional guidance, refer to "[Choking Prevention](#)" in section 1.

A 1-ounce serving of nuts or seeds credits as 1 oz eq of the MMA component. Refer to the crediting guidance below and in the CSDE's resource, [Crediting Nuts and Seeds in the School Nutrition Programs](#).

Change to limit for nuts and seeds at lunch

Effective July 1, 2024, the USDA final rule, [Child Nutrition Programs: Meal Patterns Consistent with the 2020-2025 Dietary Guidelines for Americans](#), removes the previous 50 percent crediting limit for nuts and seeds at lunch. Nuts and seeds may credit for the full MMA component at any meal or afterschool snack.



Crediting Nut/Seed Butters

Nut/seed butters credit as meat alternates. 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 is based on volume not weight

The serving size for nut/seed butters is based on volume (tablespoons), not weight (ounces). Two tablespoons ($\frac{1}{8}$ cup) of nut/seed butter credit 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). A 1-ounce serving (weight) of nut/seed butter does not provide 1 oz eq of the MMA component. Nut/seed butters that are portioned by weight instead of volume must use the appropriate weight conversion in the USDA’s FBG. For more information, refer to “[Volume versus weight](#)” in section 2.

The FBG indicates that 2 tablespoons (1.1 ounces) of nut or seed butter credits as 1 oz eq of the MMA component.

The table below shows the MMA contribution for different amounts of nut/seed butters.

Table 4-6. MMA contribution of nut/seed butters

| Serving size | MMA contribution |
|---|---|
| $\frac{1}{2}$ tablespoon | $\frac{1}{4}$ oz eq (minimum creditable amount) |
| 1 tablespoon | $\frac{1}{2}$ oz eq |
| $1\frac{1}{2}$ tablespoons | $\frac{3}{4}$ oz eq |
| 2 tablespoons ($\frac{1}{8}$ cup) | 1 oz eq |
| 3 tablespoons | $1\frac{1}{2}$ oz eq |
| 4 tablespoons ($\frac{1}{4}$ cup) | 2 oz eq |

Serving size considerations

Menu planners should consider the appropriateness of the required serving for each age group. It may be unreasonable to provide the full serving of nut/seed butter in one menu item, such as a peanut butter sandwich.

The CSDE recommends providing a smaller portion of nut/seed butter and supplementing it with another MMA to provide the full serving. For example, the preschool lunch meal pattern for ages 3-5 requires 1½ oz eq of the MMA component, which equals 3 tablespoons of peanut butter. A lunch menu could provide 1½ oz eq of MMA from a sandwich containing 1½ tablespoons of peanut butter ($\frac{3}{4}$ oz eq of MMA) served with $\frac{3}{8}$ cup of yogurt ($\frac{3}{4}$ oz eq of MMA).

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 mix with nuts and dried fruits.

This documentation must state the amount of the MMA component per serving (refer to “[Documentation for commercial 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 indicate 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 preschool menus (refer to “[Requirement for visible components](#)” in section 2). Commercial products that are not easily recognizable as meat substitutes do not credit in preschool menus. Some examples include peanut butter blended into other foods (such as muffins or smoothies) and chopped nuts in muffins.

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 nut or seed butters in preschool menus. Use only creamy peanut butter (not chunky) and spread thinly to reduce the risk of choking. For additional guidance, refer to “[Choking Prevention](#)” in section 1.

Noncreditable nuts and seeds

Acorns, chestnuts, and coconuts do not credit as the MMA component.

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 MMA 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.

Table 4-7. MMA contribution of surimi seafood

| Serving size | MMA contribution |
|-----------------|-------------------------------------|
| 1 ounce | ¼ oz eq (minimum creditable amount) |
| 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 (refer to “[Documentation for commercial products](#)” in section 2). 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 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 2).

Crediting Tempeh

Tempeh credits as a meat alternate. 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 oz eq 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 beans, peas, and lentils), 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 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 as the MMA component, grains component, and vegetables component. To credit in preschool menus, this type of tempeh product must provide the minimum creditable quantities, such as ¼ oz eq of MMA, ¼ oz eq of grains, and ¼ cup of vegetables. SFAs must obtain a CN label or manufacturer’s PFS to document how much tempeh and other creditable foods these products contain.

Crediting recipes containing tempeh

SFAs must maintain standardized recipes that document the MMA contribution per serving based on the amount of tofu per serving (refer to [“Documentation for foods made from scratch”](#) in section 2).

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 and 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 to credit as the MMA component (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 in preschool menus. 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 ($\frac{1}{4}$ 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 4-8 shows the MMA contribution for different amounts of tofu and the minimum grams of protein required to credit in preschool menus.

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](#).

Crediting recipes containing tofu

For foods made from scratch that contain tofu as an ingredient, the SFA's standardized recipes must document the amount of MMA 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 2).

Table 4-8. 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 Yogurt and Soy Yogurt

Commercial yogurt and soy yogurt that meet the USDA's sugars limit credit as meat alternates (refer to "[Sugars limit for yogurt](#)" in this section). 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](#)).

Serving size for yogurt

The required serving size 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 MMA contribution for different amounts of yogurt.

Table 4-9. 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 |

Sugars limit for yogurt

Yogurt and soy yogurt must meet the sugars limit of no more than 23 grams of total sugars per 6 ounces (no more than 3.83 grams of sugars per ounce). Yogurt and soy yogurt used as an ingredient in smoothies must also meet this requirement.

Effective with program year 2025-26 (beginning October 1, 2025), the USDA final rule, [Child Nutrition Programs: Meal Patterns Consistent with the 2020-2025 Dietary Guidelines for Americans](#), changes the product-based limit for yogurt from total sugars to added sugars. Yogurt cannot exceed 12 grams of added sugars per 6 ounces (2 grams of added sugars per ounce). With state agency approval, SFAs may choose to implement the added sugars limit prior to October 1, 2025.

SFAs must have documentation on file to indicate that yogurt and soy yogurt served in preschool menus comply with the sugars limit. For guidance on how to determine if a product complies with the sugars limit, refer to the CSDE’s [Crediting Yogurt in the Preschool Meal Patterns for the School Nutrition Programs](#) and “Resources for crediting yogurt” in this section.

Crediting yogurt in smoothies

Yogurt or soy yogurt that meets the sugars limit 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 the MMA component.

SFAs must document the amount 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 the MMA component, 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 is not a substitution for fluid milk. Fluid milk must be offered at breakfast and lunch to meet the milk component requirement of the preschool meal patterns.

For more information on crediting smoothies, refer to “[Crediting Fruit in Smoothies](#)” in section 6, “[Crediting Vegetables in Smoothies](#)” in section 5, and “[Crediting Milk in Smoothies](#)” in section 3.

Nutrition guidance

The CSDE encourages SFAs to read labels and consider fat content when purchasing yogurt for meals and afterschool snacks. The [Dietary Guidelines for Americans](#) recommends low-fat or fat-free yogurt for ages 2 and older. These types of yogurts provide the same nutrients as whole-milk yogurt but contain less saturated fat and fewer calories.

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

Noncreditable yogurt products

Drinkable or squeezable yogurt and frozen yogurt do not credit in preschool menus. The FDA’s definition and standard of identity requires that yogurt must be “coagulated,” not liquid. The FDA does not have a standard of identity for frozen yogurt. Homemade yogurt does not credit for food safety reasons. 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, and do not credit in preschool menus.

Resources for crediting yogurt

The resources below assist menu planners with crediting yogurt as the MMA component in the preschool meal patterns.

- Calculating the Added Sugars Limit for Yogurt in the Child and Adult Care Food Program (USDA webpage):
<https://www.fns.usda.gov/tn/cacfp/calculating-sugar-limits-yogurt>
- Choose Yogurt That Is Lower in Added Sugars in the Child and Adult Care Food Program (USDA webpage):
<https://www.fns.usda.gov/tn/cacfp/choose-yogurts-lower-sugar>
- Crediting Smoothies in the Preschool Meal Patterns for the School Nutrition Programs (CSDE):
https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/credit_smoothies_snp_preschool.pdf
- Crediting Yogurt in the Preschool Meal Patterns for the School Nutrition Programs (CSDE):
https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/credit_yogurt_snp_preschool.pdf

- USDA Memo SP 02-2024, CACFP 02-2024, and SFSP 02-2024: Revised: Crediting Tofu and Soy Yogurt Products in the School Meal Programs, CACFP, and SFSP: <https://www.fns.usda.gov/cn/crediting-tofu-and-soy-yogurt-products-school-meal-programs-and-cacfp>
- USDA Memo SP 40-2019, CACFP 17-2019, and SFSP 17-2019: Smoothies Offered in the Child Nutrition Programs: <https://www.fns.usda.gov/cn/smoothies-offered-child-nutrition-programs>

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

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;
- 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;
- sour cream;
- tofu that contains less than 5 grams of protein in 2.2-ounce serving by weight;
- tofu that is not easily recognized as a meat substitute; and
- yogurt or soy yogurt that contains more than 3.83 grams of sugars per ounce.

This list is not all-inclusive. For more information, refer to “[Noncreditable Foods](#)” in section 2 and the CSDE’s resource, [Noncreditable Foods in the Preschool Meal Patterns for the School Nutrition Programs](#).

Menu planners should use the FBG to identify foods that credit as the MMA component. For more information, refer to “[Food Buying Guide for Child Nutrition Programs](#)” in this section.

Resources for Crediting MMA

The resources below assist menu planners with crediting foods as the MMA component in the preschool meal patterns.

- 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
- 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 Meats/Meat Alternates in the Child Nutrition Programs Tip Sheet (USDA):
<https://www.fns.usda.gov/tn/crediting-meats-meat-alternates-child-nutrition-tip-sheet>
- Crediting Nuts and Seeds in the School Nutrition Programs (CSDE):
https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/credit_nuts_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 Section 1: Overview of Crediting Requirements for the Meats/Meat Alternates Component (USDA):
https://foodbuyingguide.fns.usda.gov/Content/TablesFBG/USDA_FBG_Section1_MeatsAndMeatAlternates.pdf
- Food Buying Guide Section 1: Yield Table for Meats/Meat Alternates (USDA):
https://foodbuyingguide.fns.usda.gov/files/Reports/USDA_FBG_Section1_MeatsAndMeatAlternatesYieldTable.pdf
- Meats and Meat Alternates (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>
- Preschool Meal Pattern Training for the School Nutrition Programs, 5: Meats/Meat Alternates Component (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>
- Questions and Answers on Alternate Protein Products (USDA):
<https://www.fns.usda.gov/questions-and-answers-alternate-protein-products-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
- 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.fns.usda.gov/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.fns.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.fns.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.fns.usda.gov/crediting-pasta-products-made-vegetable-flour-child-nutrition-programs>
- USDA Memo SP 53-2016 and CACFP 21-2016: Crediting Tofu and Soy Yogurt Products in the School Meal Programs and the CACFP:
<https://www.fns.usda.gov/crediting-tofu-and-soy-yogurt-products-school-meal-programs-and-cacfp>
- USDA Webinar: Moving Forward: Update on Food Crediting in Child Nutrition Programs with Guidance for Dried Meat Products:
<https://www.fns.usda.gov/tn/moving-forward-update-food-crediting-dried-meat-products>

For additional crediting resources, visit the “[Meats and Meat Alternates](#)” section of the CSDE’s [Crediting Foods in School Nutrition Programs](#) webpage. T



5 — Vegetables Component

The vegetables component includes fresh, frozen, canned, and rehydrated dried vegetables; and pasteurized full-strength vegetable juice. The USDA's [CACFP best practices](#) recommend that preschool menus include at least one serving per week of the vegetable subgroups recommended by the [Dietary Guidelines for Americans](#). These include dark green vegetables, red and orange vegetables, beans, peas, and lentils, starchy vegetables, and other vegetables. For more information, refer to the CSDE's resource, [Vegetable Subgroups in the Child and Adult Care Food Program](#).

The USDA's [CACFP best practices](#) also recommend incorporating seasonal and locally produced foods into meals and snacks. For information on farm to school, refer to the USDA's resources, [Farm to Preschool: Local Food and Learning in Early Child Care and Education Settings](#) and [Integrating Local Foods into Child Nutrition Programs](#), and visit the USDA's [Farm to CACFP](#) webpage and [Procuring Local Foods](#) webpage. Additional resources are available on the CSDE's [Farm to School](#) webpage and the University of Connecticut's [Put Local on Your Tray](#) webpage.

Required Servings for Vegetables

The preschool meal patterns require a serving of the vegetables component at lunch. Vegetables and fruits are one meal component at breakfast and may include a serving of vegetables, fruits, or both. A serving of vegetables may be one of the two required meal components at afterschool snack. The table below summarizes the required servings of the vegetables component for each age group and meal.

Table 5-1. Required cups of the vegetables component

| Meal | Ages 1-2 | Ages 3-5 |
|-------------------|----------|----------|
| Breakfast | ¼ | ½ |
| Lunch | ⅛ | ¼ |
| Afterschool snack | ½ | ½ |

The amounts for the vegetables component refer to the edible portion 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:** Raw leafy greens such as lettuce and spinach credit as half the volume served (refer to "[Crediting Raw Leafy Greens](#)" in this section).

- **Dried or dehydrated vegetables:** 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).

Menu planners should consult the USDA’s FBG to determine the number of servings provided by a specific quantity of vegetables (refer to “[Food Buying Guide for Child Nutrition Programs](#)” in section 2).

Meeting the required vegetable servings

SFAs may choose to serve a combination of several vegetables to meet the minimum requirement. Each serving must contain at least $\frac{1}{8}$ cup of vegetables (refer to “[Minimum creditable amounts](#)” in section 2). For example, a lunch menu for ages 3-5 could meet the required $\frac{1}{4}$ -cup serving of the vegetables component with $\frac{1}{4}$ cup of broccoli, or $\frac{1}{8}$ cup of broccoli and $\frac{1}{8}$ cup of carrots. Servings that contain less than $\frac{1}{8}$ cup of vegetables do not credit in preschool menus.

If a menu item contains less than the full serving of the vegetables component, the menu planner must include additional vegetables to meet the full serving for each age group. For example, the preschool lunch meal pattern requires $\frac{1}{4}$ cup of the vegetables component for ages 3-5. If a menu item contains $\frac{1}{8}$ cup of vegetables, the menu planner must include another menu item with at least $\frac{1}{8}$ cup of vegetables to provide the full serving for ages 3-5.

When crediting menu items toward the vegetables component, menu planners must round down to the nearest $\frac{1}{8}$ cup. For example, a standardized recipe or commercial product that contains $2\frac{1}{2}$ tablespoons of corn per serving credits as 2 tablespoons ($\frac{1}{8}$ cup) of the vegetables component.

Choking Prevention for Vegetables

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. For additional guidance, refer to “[Choking Prevention](#)” in section 1.

Substituting Vegetables for Fruits at Lunch

Vegetables may replace 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.

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 $\frac{1}{2}$ cup of the vegetables component, a $\frac{1}{2}$ -cup serving of canned peas cannot include the water in which it is packed, and a $\frac{1}{2}$ -cup serving of baked beans cannot include the sauce in which it is packed. The serving must contain $\frac{1}{2}$ cup of vegetables before any added liquid.

Crediting Dried Vegetables

Dried or dehydrated vegetables (such as 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 in preschool menus.

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 (refer to “[Documentation for commercial products](#)” in section 2). The PFS must provide specific documentation on the cups of vegetables per serving in the rehydrated volume. Menu planners should check the accuracy of the PFS prior to including foods with dehydrated vegetables in preschool menus.

Determining rehydrated volume

The rehydration volume of dried vegetables often varies from brand to brand. 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 $\frac{1}{4}$ -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 $\frac{1}{4}$ -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 [“Determining in-house product yields”](#) in section 2.

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. For example, $\frac{1}{4}$ cup of canned drained hominy credits as $\frac{1}{4}$ cup of the starchy vegetables subgroup.

For information on crediting hominy as the grains component, refer to [“Crediting Hominy as Grains”](#) in section 7.



Crediting Beans, Peas, and Lentils as Vegetables

Beans, peas, and lentils credit 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. The menu planner must determine in advance how to credit beans, peas, and lentils in preschool menus.

Beans, peas, and lentils credit as the vegetables component based on the volume (cups) served. For example, $\frac{1}{2}$ cup of kidney beans credits as $\frac{1}{2}$ cup of the vegetables component.

A serving of cooked beans, peas, or lentils must contain the minimum required amount of beans, peas, or lentils without other ingredients such as sauce and pork fat. For example, $\frac{1}{2}$ cup of baked beans that contains $\frac{1}{8}$ cup of sauce and pork fat credits as $\frac{3}{8}$ cup of the vegetables component. For more information, refer to [“Vegetables with Added Ingredients”](#) in this section.

A menu item must provide at least $\frac{1}{8}$ cup of beans, peas, or lentils to credit toward part of the vegetables component. If the amount is less than the full serving, the meal or afterschool snack must include additional vegetables to meet the full serving for each age group. For more information, refer to [“Minimum creditable amounts”](#) in section 2 and [“Required Servings for Vegetables”](#) in this section.

For information on crediting beans, peas, and lentils as the MMA component, refer to [“Crediting Beans, peas, and lentils as MMA”](#) in section 4.

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 volume (cups) served. For example, $\frac{1}{4}$ cup of roasted chickpeas credits as $\frac{1}{4}$ cup of the vegetables component.

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 these foods in preschool menus. For additional guidance, refer to [“Choking Prevention”](#) in section 1.

The USDA recommends that menu planners use discretion when offering snack-type beans, peas, and lentils (such as individually wrapped soy nuts) as part of reimbursable meals, due to

their perception as snack foods. While these types of products credit in the preschool meal patterns, they may be better suited for meals served off site, such as bagged lunches for field trips.

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 4.

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 $\frac{1}{4}$ cup of chickpeas per serving credits as $\frac{1}{4}$ cup of the vegetables component. The minimum creditable amount is $\frac{1}{8}$ 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 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 4.

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 $\frac{1}{8}$ cup of beans, peas, or lentils per serving to credit toward the vegetables component.

The menu planner must determine the amount of the vegetables component per recipe serving by dividing the total cups of beans, peas, or lentils in the standardized recipe by the number of servings, then rounding down to the nearest $\frac{1}{8}$ 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 products

Commercial processed products that contain beans, peas, and lentils (such as black bean burritos and vegetarian chili) require documentation stating the amount of the MMA component per serving (refer to “[Documentation for commercial products](#)” in section 2).

Crediting Mixed Vegetables at Lunch

The crediting of mixed vegetables depends on whether the menu planner knows the amount of each type of vegetable in the mixture. Some examples of vegetable mixtures include carrots, peas, and corn; three-bean salad; and a California mix of broccoli, cauliflower, and carrots.

Known quantities of vegetables

A vegetable mixture may credit as two servings of vegetables (and may credit toward both the vegetables component and the fruits component at lunch) if the menu planner knows the quantities of the different vegetables and each vegetable is at least $\frac{1}{8}$ cup.

- **Example:** A lunch menu for ages 3-5 includes a vegetable mixture of $\frac{1}{4}$ cup of broccoli and $\frac{1}{4}$ cup of cauliflower. Since vegetables may substitute for the fruits component at lunch, the menu planner may choose to credit the broccoli as the full vegetables component ($\frac{1}{4}$ cup) and use the cauliflower to replace the full fruits component ($\frac{1}{4}$ cup). The cauliflower provides the minimum $\frac{1}{4}$ -cup serving for the fruits component.

For more information, refer to “[Substituting Vegetables for Fruits at Lunch](#)” in this section.

Unknown quantities of vegetables

If the menu planner does not know the quantities of the different vegetables, the vegetable mixture credits as one serving of vegetables and cannot credit as the fruit component. In this case, the lunch menu would require either a serving of the fruits component, or another serving of vegetables substituted for the fruits component.

Crediting Pasta Products Made of Vegetable Flours

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.

Pasta made of 100 percent bean, pea, or lentil flours credits as the MMA component or the vegetables component but cannot credit as both meal components in the same meal or afterschool snack. For more information, refer to “[Crediting Legume Flour Pasta Products as MMA](#)” in section 4.

Crediting vegetable flours as vegetables

Pasta made of one or more 100 percent vegetable flours credits toward the vegetables component, even when it is not served with another recognizable vegetable. These products credit the same as vegetables. For example, $\frac{1}{2}$ cup of pasta made of 100 percent vegetable flour credits as $\frac{1}{2}$ cup of the vegetables component. The ingredients statements below show 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 with other non-vegetable ingredients

Pasta products made of vegetable flour with other non-vegetable ingredients may credit toward the vegetables component (or for 100 percent bean, pea, or lentil flour pasta, the MMA component) 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 the ingredients statements for some 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 cups 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

The USDA encourages SFAs to provide information, as age appropriate, that helps children understand what foods are in their meals and afterschool snacks. 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 also inform serving staff when meals include pasta made with vegetable flour, so they are aware of how these foods contribute to the preschool meal patterns.

Crediting Pureed Vegetables

Pureed vegetables must be visible to credit in preschool menus (refer to “[Requirement for visible components](#)” in section 2). 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. Menu planners may use the CSDE’s [Yield Study Data Form for the Child Nutrition Programs](#) to document the yield of pureed vegetables.

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 $\frac{1}{8}$ cup of a visible creditable vegetable. For example, a serving of macaroni and cheese that contains $\frac{1}{8}$ cup of diced butternut squash (visible) and $\frac{1}{8}$ cup of pureed carrots (not visible) credits as $\frac{1}{4}$ cup of the vegetables component.

Pureed vegetables do not credit when used to improve the nutrient profile of a food. For example, pureed sweet potatoes in muffins cannot 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 children easily recognize the key food groups that contribute to a healthy meal.

Pureed vegetables in smoothies

Pureed vegetables in smoothies credit only as juice toward the vegetables component and count toward the juice limit (refer to “[Juice limit](#)” in section 6). Crediting is based on the volume (cups) of pureed vegetables per serving. For example, a smoothie that contains $\frac{1}{2}$ cup of pureed carrots credits as $\frac{1}{2}$ cup of vegetable juice.

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. For more information, refer to “[Mixed fruits and vegetables in smoothies](#)” in section 6.

For more information on crediting smoothies, refer to “[Crediting Fruit in Smoothies](#)” in section 6, “[Crediting Milk in Smoothies](#)” in section 3, and “[Crediting yogurt in smoothies](#)” in section 4.

Crediting Raw Leafy Greens

Raw leafy greens credit as half the volume served. For example, $\frac{1}{2}$ cup of raw leafy greens credits as $\frac{1}{4}$ 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, $\frac{1}{2}$ cup of cooked spinach or roasted kale credits as $\frac{1}{2}$ cup of the vegetables component.

Crediting Vegetable and Fruit Mixtures

Mixtures of vegetables and fruits may credit toward both the vegetables component and fruits component if the serving contains at least $\frac{1}{8}$ cup of visible vegetables and at least $\frac{1}{8}$ cup of visible fruits. For example, a carrot-raisin salad that contains $\frac{1}{2}$ cup of carrots and $\frac{1}{8}$ cup of raisins credits as $\frac{1}{2}$ cup of the vegetables component and $\frac{1}{4}$ cup of the fruits component. As a reminder, dried fruits credit as twice the volume served (refer to “[Crediting Dried Fruits](#)” in section 6).



Crediting Soups

Vegetable soups made from scratch credit based on the volume (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 (refer to the table below). The FBG indicates that 1 cup of a commercial bean, pea, or lentil soup credits as $\frac{1}{2}$ cup of vegetables, and 1 cup of commercial vegetable soup credits as $\frac{1}{4}$ cup of vegetables. The serving refers 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 products](#)” in section 1). A CN label might be available for some commercial vegetable soups that contain at least $\frac{1}{2}$ oz eq of the MMA.

Table 5-2. Creditable commercial vegetable soups

| Vegetable soups | Bean, pea, and lentil soups |
|--|--|
| 1 cup = $\frac{1}{4}$ cup of additional vegetables | 1 cup = $\frac{1}{2}$ cup of beans, peas, and lentils subgroup |
| Minestrone soup | Bean soup, e.g., black bean, navy bean, and mixed bean |
| Tomato soup | Pea soup, e.g., split pea |
| Tomato soup with other basic components such as rice | Lentil soup |
| Vegetable soup (contains only vegetables) | |
| Vegetable soup with other basic components such as meat or poultry | |

For additional guidance, refer to the CSDE’s resource, [Crediting Soups in the School Nutrition Programs](#).

Serving size considerations for commercial soups

The served portion of a commercial vegetable soup must be sufficient to provide the vegetable subgroups 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 $\frac{3}{4}$ cup of the vegetables component. This equals 3 cups of a commercial vegetable soup or $1\frac{1}{2}$ 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 ($\frac{1}{2}$ cup) of soup.

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 in preschool menus.



Crediting Vegetable Juice

Any type of pasteurized full-strength (100 percent) vegetable juice credits in the preschool meal patterns. Vegetable juice 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.

Pasteurized full-strength juice credits as the vegetables component or fruits component at only one preschool meal or afterschool snack per day. Menu planners must check each day’s breakfast, lunch, and afterschool snack menus to ensure that juice does not exceed the limit.

Pureed vegetables in smoothies credit only as juice (refer to “[Pureed vegetables in smoothies](#)” in this section). For more information, refer to “[Juice limit](#)” in section 6 and the CSDE’s resource, [Crediting Juice in the Preschool Meal Patterns for the School Nutrition Programs](#).

Crediting Vegetables in Combination Foods

Combination foods that contain vegetables credit based on the amount 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, vegetable egg rolls, chickpeas in hummus, and vegetables in chicken-vegetable stir-fry.

SFAs must maintain documentation on the amount 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 2.

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 preschool menus. Some examples of vegetables with added ingredients include tossed salad with dressing and croutons, potato salad, mashed potatoes made with butter and milk, baked beans with sauce, carrot-raisin salad, breaded vegetables like eggplant and onion ring, and vegetables with cheese.

- **Example:** To credit coleslaw as $\frac{1}{2}$ cup of the vegetables component, the serving must contain $\frac{1}{2}$ 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 require 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 2.

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 staff members understand how to prepare produce safely. The ICN’s [Produce Safety Resources](#) webpage includes resources that describe best practices for receiving, storing, handling, and purchasing fresh and fresh-cut produce. For additional resources, refer to the CSDE’s [Resource List for Food Safety for Child Nutrition Programs](#) and visit the CSDE’s [Food Safety for Child Nutrition Programs](#) webpage.

Noncreditable Foods in the Vegetables Component

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; and
- snack-type foods made from vegetables, such as potato chips and corn chips.

This list is not all-inclusive. For more information, refer to “[Noncreditable Foods](#)” in section 2 and the CSDE’s resource, [Noncreditable Foods in the Preschool Meal Patterns for the School Nutrition Programs](#).

Menu planners should use the FBG to identify foods that credit as the vegetables component. For more information, refer to “[Food Buying Guide for Child Nutrition Programs](#)” in this section.



Resources for Crediting Vegetables

The resources below assist menu planners with crediting foods as the vegetables component in the preschool 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 Juice in the Preschool Meal Patterns for the School Nutrition Programs (CSDE):
https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/credit_juice_snp_preschool.pdf
- Crediting Vegetable Noodles and Coconut in the Child Nutrition Programs (USDA Webinar):
<https://www.fns.usda.gov/tn/crediting-vegetable-noodles-and-coconut-child-nutrition-programs>
- Crediting Smoothies in the Preschool Meal Patterns for the School Nutrition Programs (CSDE):
https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/credit_smoothies_snp_preschool.pdf
- Crediting Soups in the School Nutrition Programs (CSDE):
https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/credit_soups_snp.pdf
- Crediting Vegetables in Child Nutrition Programs Tip Sheet (USDA):
<https://www.fns.usda.gov/tn/crediting-vegetables-child-nutrition-programs-tip-sheet>
- Food Buying Guide Section 2: Overview of Crediting Requirements for the Vegetables Component (USDA):
https://foodbuyingguide.fns.usda.gov/Content/TablesFBG/USDA_FBG_Section2_Vegetables.pdf
- Food Buying Guide Section 2: Yield Table for Vegetables (USDA):
https://foodbuyingguide.fns.usda.gov/files/Reports/USDA_FBG_Section2_VegetablesYieldTable.pdf

- **Preschool Meal Pattern Training for the School Nutrition Programs, Module 6: Fruits Component and Vegetables Component (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>
- **Serving Vegetables in the CACFP (USDA handouts in English and Spanish):**
<https://www.fns.usda.gov/tn/serving-vegetables-cacfp>
- **Start with Half a Cup: Fresh Vegetable Portioning Guide for Schools:**
<https://portal.ct.gov/-/media/sde/nutrition/swhac/portionguideveg85x14.pdf>
- **USDA Memo CACFP 09-2017: Vegetable and Fruit Requirements in the Child and Adult Care Food Program; Questions and Answers:**
<https://www.fns.usda.gov/cacfp/vegetable-and-fruit-requirements-cacfp-qas>
- **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.fns.usda.gov/crediting-pasta-products-made-vegetable-flour-child-nutrition-programs>
- **USDA Memo SP 40-2019, CACFP 17-2019, and SFSP 17-2019: Smoothies Offered in the Child Nutrition Programs:**
<https://www.fns.usda.gov/cn/smoothies-offered-child-nutrition-programs>
- **Vegetable Subgroups in the Child and Adult Care Food Program (CSDE):**
https://portal.ct.gov/-/media/sde/nutrition/cacfp/crediting/vegetable_subgroups_cacfp.pdf
- **Vegetables (CSDE’s Crediting Foods in School Nutrition Programs webpage):**
<https://portal.ct.gov/sde/nutrition/crediting-foods-in-school-nutrition-programs/vegetables>

For additional crediting resources, visit the “[Vegetables Component](#)” section of the CSDE’s [Meal Patterns for Preschoolers in School Nutrition Programs](#) webpage.



6 — Fruits Component

The fruits component includes fresh, frozen, canned, and dried fruits; and pasteurized full-strength fruit juice. The USDA's [CACFP best practices](#) recommend that SFAs:

- serve a variety of fruits and choose whole fruits (fresh, canned, dried, or frozen) more often than juice;
- make at least one of the two required meal components at afterschool snack a vegetable or fruit, and
- incorporate seasonal and locally produced foods into meals.

For information on farm to school, refer to the USDA's resources, [Farm to Preschool: Local Food and Learning in Early Child Care and Education Settings](#) and [Integrating Local Foods into Child Nutrition Programs](#), and visit the USDA's [Farm to CACFP](#) webpage and [Procuring Local Foods](#) webpage. Additional resources are available on the CSDE's [Farm to School](#) webpage and the University of Connecticut's [Put Local on Your Tray](#) webpage.



Required Servings for Fruits

The preschool meal patterns require a serving of the fruits component at lunch. Vegetables may substitute for the fruits component at any lunch (refer to “[Substituting Vegetables for Fruits at Lunch](#)” in section 5).

Vegetables and fruits are one meal component at breakfast and may include a serving of vegetables, fruits, or both.

A serving of fruit may be one of the two required meal components at afterschool snack. Juice cannot be served when milk is the only other meal component at afterschool snack. Only one meal component at afterschool snack can be a creditable beverage such as juice, a fruit smoothie, or milk. The table below summarizes the required servings of the fruits component for each age group and meal.

Table 6-1. Required cups of the fruits component

| Meal | Ages 1-2 | Ages 3-5 |
|-------------------|---------------|---------------|
| Breakfast | $\frac{1}{4}$ | $\frac{1}{2}$ |
| Lunch | $\frac{1}{8}$ | $\frac{1}{4}$ |
| Afterschool snack | $\frac{1}{2}$ | $\frac{1}{2}$ |

The amounts for the fruits component refer to the edible portion 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 (refer to “[Food Buying Guide for Child Nutrition Programs](#)” in section 2).

Meeting the required fruit servings

SFAs may choose to serve a combination of several fruits to meet the preschool meal pattern requirement. Each serving must contain at least $\frac{1}{8}$ cup of fruit (refer to “[Minimum creditable amounts](#)” in section 2). For example, a lunch menu for ages 3-5 could meet the required $\frac{1}{4}$ -cup serving of the fruits component with $\frac{1}{8}$ cup of peaches and $\frac{1}{8}$ cup of applesauce. Servings that contain less than $\frac{1}{8}$ cup of fruit do not credit in preschool menus.

If a menu item contains less than the full serving of the fruits component, the meal or afterschool snack must include additional fruit to meet the full serving for each age group. For example, the preschool lunch meal pattern requires $\frac{1}{4}$ cup of the fruits component for ages 3-5. If a menu item contains $\frac{1}{8}$ cup of fruit, the menu planner must include another menu item with at least $\frac{1}{8}$ cup of fruit to provide the full serving for ages 3-5.

When crediting menu items toward the fruits component, menu planners must round down to the nearest $\frac{1}{8}$ cup. For example, a standardized recipe or commercial product that contains $2\frac{1}{2}$ tablespoons of diced strawberries per serving credits as 2 tablespoons ($\frac{1}{8}$ cup) of the fruits component.

Choking Prevention for Fruits

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. For additional guidance, refer to "[Choking Prevention](#)" in section 1.

Crediting Canned Fruits

Allowable canned fruits include canned fruits in juice, water, and light syrup. Juice and light syrup in canned fruit or fruit cups may count toward the fruits component and are not subject to the juice limit. For example, $\frac{1}{2}$ cup of canned peaches in juice or light syrup credits as $\frac{1}{2}$ cup of the fruits component.

Crediting Coconut

Fresh and frozen coconut credit as the fruits component based on the volume served. For example, $\frac{1}{8}$ cup of fresh or frozen coconut credits as $\frac{1}{8}$ cup of the fruits component. Dried coconut credits the same as other dried fruits (refer to "[Crediting Dried Fruits](#)" in this section). For example, $\frac{1}{8}$ cup of dried coconut credits as $\frac{1}{4}$ cup of the fruits component.

Coconut is high in calories and saturated fat and should be limited in preschool 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, $\frac{1}{4}$ cup of raisins credits as $\frac{1}{2}$ cup of the fruits component.

This crediting requirement does not apply to dried fruits in amounts less than $\frac{1}{8}$ cup (the minimum creditable amount). For example, $\frac{1}{16}$ cup (1 tablespoon) of raisins does not credit as $\frac{1}{8}$ cup fruit.

Dried fruits may be a choking hazard for young children. Consider children's ages and developmental readiness when deciding whether to offer dried fruits in preschool menus. For additional guidance, refer to "[Choking Prevention](#)" in section 1.

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).



Crediting Fresh Fruits

The crediting contribution of one piece of fresh fruit (whole or cut up) varies depending on the type and size, and ranges from $\frac{1}{4}$ cup to $1\frac{1}{4}$ cups. For example, the FBG indicates that:

- one 60-count plum, one 88-count peach, and one clementine each credit as $\frac{3}{8}$ 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 $\frac{1}{2}$ cup of fruit;
- one 113-count and 125-count orange each credit as $\frac{5}{8}$ cup of fruit;
- one size 56-64 nectarine, one size 56 peach, and one 120-count pear each credit as $\frac{3}{4}$ 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 preschool meal and afterschool snack. If the amount is less than the full serving, the meal or afterschool snack must include additional fruit to meet the full serving. The examples below illustrate this requirement.

- **Example for breakfast:** The preschool breakfast meal pattern for ages 3-5 requires $\frac{1}{2}$ cup of fruits, vegetables, or both. One 120-count tangerine credits as $\frac{3}{8}$ cup of fruit, which does not provide the full serving. To credit as the full fruits component, the breakfast menu must include an additional $\frac{1}{8}$ cup of fruits or vegetables.
- **Example for afterschool snack:** The ASP preschool meal pattern requires $\frac{1}{2}$ cup of the fruits component. One kiwi credits as $\frac{1}{4}$ cup of fruit, which does not provide the full serving. To credit as the full fruits component, the afterschool snack menu must include an additional $\frac{1}{4}$ cup of the fruits component.

Table 6-2 lists the FBG's meal pattern contribution of some fresh fruits, and the additional amount needed to provide a $\frac{1}{2}$ -cup serving. A $\frac{1}{2}$ -cup serving is the amount of fruit required for ages 3-5 at breakfast.

The count pack is the number of whole fruits that fit into a case. The smaller the count, the larger the size of the fruit.

Table 6-2. Meal pattern contribution of fresh fruits

| Fruit (one piece, whole or cut up) | Meal pattern contribution from FBG | Additional amount needed for ½ cup |
|---|------------------------------------|------------------------------------|
| Apple, 125-138 count | 1 cup | 0 |
| Apricot, medium (1 ⅜-inch diameter) | ¼ cup | ¼ cup |
| Banana, 150 count (7 to 7 ⁷ / ₈ inch) | ½ cup | 0 |
| Banana, 100-120 count, regular | ½ cup | 0 |
| Clementine, whole, peeled | ⅜ cup | ⅛ cup |
| Grapefruit, 27-32 count, large | 1 cup | 0 |
| Kiwi, 33-39 count | ¼ cup | ¼ cup |
| Nectarine, size 88-96 (2 ¼-inch diameter) | ½ cup | 0 |
| Nectarine, size 56-64 (2 ¾-inch diameter) | ¾ cup | 0 |
| Orange, Arizona or California, 113 count | ⅝ cup | 0 |
| Orange, Florida or Texas, 125 count | ⅝ cup | 0 |
| Orange, Arizona or California, 138 count | ½ cup | 0 |
| Peach, size 88 and 84 (2 ⅙-inch diameter) | ⅜ cup | ⅛ cup |
| Peach, size 64 and 60 (2 ½-inch diameter) | ⅔ cup | 0 |
| Peach, size 80 | ½ cup | 0 |
| Peach, size 56 | ¾ cup | 0 |
| Peach, size 56 | ¾ cup | 0 |
| Pear, 150 count | ½ cup | 0 |
| Pear, 120 count | ¾ cup | 0 |
| Pear, D’Anjou, Bosc, or Bartlett, 100 count | 1¼ cups | 0 |

| Fruit (one piece, whole or cut up) | Meal pattern contribution from FBG | Additional amount needed for ½ cup |
|---|------------------------------------|------------------------------------|
| Plum, purple, red, or black, size 45 and 50 (2-inch diameter) | ½ cup | 0 |
| Plum, purple, red, or black, 2 ½-inch diameter | ⅝ cup | 0 |
| Plum, Japanese or hybrid, size 60 and 65 | ¾ cup | ⅛ cup |
| Tangerine, 120 count | ¾ cup | ⅛ cup |

Crediting Frozen Fruits

Frozen fruits credit based on the volume served. For some frozen fruits (such as frozen sliced strawberries and frozen apricots), the serving includes the thawed liquid. For other frozen fruits (such as 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.

Choose frozen fruits without added sugars. The USDA recommends limiting sweetened fruits to help reduce children’s consumption of added sugars and help children develop a taste preference for unsweetened fruit.

Crediting Fruits in Commercial Products

Commercial products that contain at least ⅛ cup of one or more visible fruits (such as mixed berries in a yogurt-fruit parfait) credit based on the cups of fruit per serving (refer to [“Requirement for visible components”](#) in this section). Commercial products must have a CN label or PFS that documents the cups of fruits per serving (refer to [“Documentation for commercial products”](#) in section 2).

Crediting Fruits in Yogurt

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

Crediting Fruits in Grain-Based Desserts

Grain-based desserts do not credit in preschool menus. However, the visible fruit portion of grain-based desserts (such as fruit crisp, fruit pies, and fruit turnovers) may credit based on the cups of fruit in the serving (refer to “[Requirement for visible components](#)” in section 2).

- **Example:** A fruit turnover that contains $\frac{1}{2}$ cup of apples credits as $\frac{1}{2}$ cup of the fruits component.

Keep in mind that the large amount of a grain-based dessert needed to provide the required serving of fruit might be unreasonable, especially for younger children.



The grain portion of grain-based desserts (such as piecrust and cobbler or crisp topping) does not credit as the grains component in the preschool meal patterns (refer to “[Grain-based Desserts Prohibited](#)” in section 7). The USDA recommends limiting sweetened fruit to help reduce children’s consumption of added sugars and help children develop a taste preference for unsweetened fruit.

SFAs must maintain documentation on the cups of fruits per serving. Commercial products require a PFS (refer to “[Documentation for commercial products](#)” in section 2). Foods made from scratch require a standardized recipe that documents the cups of fruits 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 2).

Crediting Fruits with Added Ingredients

When fruits contain added ingredients (such as yogurt, mayonnaise, sugar, butter, sauce, or toppings), only the fruit portion credits in preschool menus. Some examples of fruits with added ingredients include yogurt-fruit parfaits, carrot-raisin salad, Waldorf salad, cottage cheese mixed with crushed pineapple, and baked apples.

- **Example:** To credit Waldorf salad as $\frac{1}{2}$ cup of the fruits component, the serving must contain $\frac{1}{2}$ cup of fruit (e.g., diced apples, sliced grapes, and raisins), before added ingredients such as mayonnaise, sugar, and spices.

SFAs maintain documentation on the cups of fruits per serving. Commercial products require a PFS (refer to “[Documentation for commercial products](#)” in section 2). Foods made from scratch require a standardized recipe that documents the cups of fruits 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 2).

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 Juice

Any type of pasteurized full-strength (100 percent) fruit juice credits in the preschool meal patterns. Fruit juice 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.

Juice may be fresh, frozen, or made from concentrate, and may be served liquid or frozen, e.g., full-strength frozen juice pops. For more information, refer to “[Frozen 100 percent juice products](#)” in this section and the CSDE’s resources, *Crediting Juice in the Preschool Meal Patterns for the School Nutrition Programs* and *Crediting Smoothies in the Preschool Meal Patterns for the School Nutrition Programs*.



The USDA recommends serving whole fruits (fresh, frozen, canned, and dried) more often than juice, based on the *Dietary Guidelines for Americans*. Juice does not provide the same nutritional benefits as whole fruits and vegetables, which contain fiber, fewer calories, and more nutrients.

Juice concentrates

Juice concentrates credit only when they are reconstituted with water to 100 percent full-strength juice and served in the form of juice. Foods made with juice concentrate, such as gelatin or sherbet, do not credit as juice because they are no longer in the form of juice.

Juice made from concentrate is reconstituted with a volume of water that is several times the amount of the 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.” Juice made from concentrate that is labeled “100 percent juice” credits 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, full-strength vegetable juices, or full-strength fruit and vegetable juices. At lunch, fruit and vegetable 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 vegetables component.

- **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.

This product credits as the vegetables component because the first ingredient is a reconstituted vegetable juice blend.

Frozen juice products

Frozen 100 percent fruit juice products (such as full-strength frozen juice pops) credit based on the fluid volume prior to freezing. SFAs must request a PFS from the manufacturer to document this information (refer to “[Documentation for commercial products](#)” in section 2). Frozen fruit juice must meet the same requirements as juice and counts toward the juice limit (refer to “[Juice limit](#)” in this section).

Apple cider

Apple cider credits toward the fruits component if it is 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 (refer to “[Juice limit](#)” in this section).

Coconut water

Coconut water labeled as 100 percent juice credits toward the fruits component based on the volume served. Coconut water must meet the same requirements as juice and counts toward the juice limit (refer to “[Juice limit](#)” 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 with added ingredients to be labeled "100% juice." This means that 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 product ingredients statements and choose 100 percent juice without these added ingredients.

Juice limit

Pasteurized full-strength juice credits as the vegetables component or fruits component at only one preschool meal or afterschool snack per day. The daily juice limit applies 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.

If a preschool meal or afterschool snack includes any type of juice as the fruits component or vegetables component, juice cannot credit as the fruits component or vegetables component at any other preschool meal or afterschool snack that same day.



The examples below show how the juice limit applies.

- **Example 1:** The preschool lunch meal pattern requires a serving of the fruits component and a serving of the vegetables component. Lunch menus cannot offer a smoothie and juice as the only two servings of fruits and vegetables because both credit as juice. For example, the lunch menu cannot offer a strawberry smoothie as the fruits component and tomato juice as the vegetables component. At least one of the required servings of the vegetables component or fruits component at lunch must be a whole fruit or vegetable (fresh, frozen, canned, or dried).
- **Example 2:** If the preschool lunch menu includes juice as the fruits component, juice cannot credit as the fruits component or vegetables component at breakfast or afterschool snack that same day.
- **Example 3:** If the preschool breakfast menu includes juice as the fruits component, juice cannot credit as either the vegetables component or fruits component at lunch or afterschool snack that same day.
- **Example 4:** If the preschool afterschool snack menu includes a smoothie made with pureed peaches as the fruits component, juice cannot credit as the fruits component or vegetables component at breakfast or lunch that same day. Pureed fruits and vegetables in smoothies credit only as juice (refer to “[Crediting Smoothies](#)” in this section).

Menu planners must check each day’s breakfast, lunch, and afterschool snack menus to ensure that juice does not exceed the limit.

Offering juice as an extra menu item

Menu planners may choose to offer juice as an extra menu item that does not credit in preschool menus. However, the USDA encourages SFAs to limit juice in preschool menus to ensure that meals and afterschool snacks meet children’s nutritional needs.

The USDA’s [CACFP best practices](#) recommend serving a variety of fruits and choosing whole fruits (fresh, frozen, canned, and dried) more often than juice.

Crediting Pureed Fruits in Smoothies

Fruit juice and pureed fruits in smoothies credit only as juice toward the fruits component. Crediting is based on the volume (cups) of juice and pureed fruits per serving. For example, a smoothie that contains $\frac{1}{2}$ cup of pureed strawberries credits as $\frac{1}{2}$ cup of fruit juice.

Juice limit for smoothies

Juice and pureed fruits in smoothies count with all other juices toward the juice limit. For example, if the menu planner credits pureed strawberries in a smoothie as the fruits component at breakfast, juice cannot credit as the fruits component or the vegetables component at lunch or afterschool snack that same day. For more information, refer to “[Juice limit](#)” in this section and the CSDE’s resources, [Crediting Juice in the Preschool Meal Patterns for the School Nutrition Programs](#) and [Crediting Smoothies in the Preschool Meal Patterns for the School Nutrition Programs](#).

Crediting 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 $\frac{1}{8}$ cup.

Concentrated fruit puree and concentrated juice are added sugars. They do not credit in smoothies unless they are reconstituted to full-strength fruit puree or full-strength juice.

The product label must include a statement regarding the “percent juice content,” which is required by the FDA for beverages made with fruit/vegetable juice or puree. For example, an 8-fluid ounce commercial smoothie made from fruit puree labeled with “contains 50% juice” credits as 4 fluid ounces ($\frac{1}{2}$ cup) of juice. SFAs may need to obtain a PFS from the manufacturer to document the amount of pureed fruits in the product.

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 5.

Crediting other components in smoothies

Other creditable ingredients in smoothies include vegetable juice and pureed vegetables (refer to "[Crediting Vegetables in Smoothies](#)" in section 5), milk (refer to "[Crediting Milk in Smoothies](#)" in section 3), and yogurt (refer to "[Crediting yogurt in smoothies](#)" in section 4).

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, juice, 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 2.

Noncreditable commercial smoothies

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

Crediting considerations for smoothies

Menu planners should consider the crediting requirements below when including smoothies in preschool menus.

- Breakfast:** Pureed fruits and vegetables in smoothies may credit as juice toward the entire vegetables and fruits component at breakfast, if the serving provides the minimum meal pattern amount. For example, a smoothie that contains $\frac{1}{2}$ cup of pureed mangoes and peaches credits as the full fruits component for ages 3-5 at breakfast. If the smoothie contains less than the required amount, the breakfast menu must include additional vegetables and fruits to meet the full requirement.
- Lunch:** The preschool lunch meal pattern requires a serving of vegetables and a serving of fruits. Menu planners cannot offer a smoothie and juice as the only two servings of vegetables and fruits at lunch. Since both foods credit as juice, this would exceed the juice limit. At least one of the required servings of the vegetables component or fruits component at lunch must be a whole fruit or vegetable (fresh, frozen, canned, or dried).
- Afterschool snack:** The ASP preschool meal pattern requires any two of the five meal components. Pureed fruits and vegetables in smoothies may credit as either the entire fruits component or the entire vegetables component but cannot credit as both meal components in the same afterschool snack. Smoothies containing juice and milk may credit as either the fruits component or the milk component but cannot credit as both meal components in the same afterschool snack. If the amount of milk or juice in the smoothie is less than the full serving, the SFA's afterschool snack menu must include additional foods to provide the full component. The SFA's afterschool snack menu cannot include juice (including pureed fruits and vegetables in smoothies) when milk is the only other meal component.

The USDA recommends not offering smoothies at more than one meal or afterschool snack per day.

Crediting examples for smoothies at afterschool snack

The examples below show how smoothies could credit at afterschool snack. The ASP preschool meal pattern for ages 3-5 requires any two of the following five meal components: $\frac{1}{2}$ cup of unflavored low-fat or fat-free milk; $\frac{1}{2}$ oz eq of MMA; $\frac{1}{2}$ cup of vegetables; $\frac{1}{2}$ cup of fruits; and $\frac{1}{2}$ oz eq of grains.

- Example 1:** A smoothie recipe contains $\frac{1}{2}$ cup of pureed fruit (credits as fruit juice) and $\frac{1}{2}$ cup of unflavored low-fat milk per serving. The menu planner may choose to credit this smoothie as either the full fruits component or the full milk component, but not both meal components in the same afterschool snack. To be reimbursable, the

afterschool snack must include the full serving of a second meal component that is not juice, fruit, or milk (i.e., MMA, grains, or vegetables). For example, the afterschool snack menu could include a 1-ounce whole-grain corn muffin (grains component) as the second meal component.

- **Example 2:** A smoothie recipe contains $\frac{1}{2}$ cup of pureed fruit (credits as fruit juice) and $\frac{1}{4}$ cup of unflavored low-fat milk per serving. The pureed fruit credits as the full fruits component. However, the milk does not credit as the full milk component because it is less than $\frac{1}{2}$ cup. To be reimbursable, the afterschool snack must include the full serving of a second meal component that is not juice, fruit, or milk (i.e., MMA, grains, or vegetables). For example, the afterschool snack menu could include $\frac{1}{2}$ cup of diced cucumbers (vegetables component) as the second meal component.

The smoothies in these examples cannot credit as the milk component for age 1 because the preschool meal patterns require whole milk for age 1.

The CSDE's resource, [Crediting Smoothies in the Child and Adult Care Food Program](#), summarizes the requirements for crediting smoothies in preschool menus. For additional guidance, refer to [USDA Memo SP 40-2019](#), [CACFP 17-2019](#), and [SFSP 17-2019: Smoothies Offered in the Child Nutrition Programs](#).

Pureed Fruits in Other Foods

Except for smoothies, foods made with pureed fruits cannot credit as the fruits component (refer to "[Requirement for visible components](#)" in section 2). Some examples include pureed prunes or applesauce in muffins, and pureed bananas in banana bread.

Noncreditable Foods in the Fruits Component

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

- banana chips;
- 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
- commercial fruit smoothies that contain dietary or herbal supplements.

This list is not all-inclusive. For more information, refer to “[Noncreditable Foods](#)” in section 2 and the CSDE’s resource, [Noncreditable Foods in the Preschool Meal Patterns for the School Nutrition Programs](#).

Menu planners should use the FBG to identify foods that credit as the fruits component. For more information, refer to “[Food Buying Guide for Child Nutrition Programs](#)” in this section.

Resources for Crediting Fruits

The resources below assist menu planners with crediting foods as the fruits component in the preschool meal patterns.

- Accepting Processed Product Documentation in the School Nutrition Programs (CSDE):
https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/accept_documentation_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 Fruits in the Child Nutrition Programs Tip Sheet (USDA):
<https://www.fns.usda.gov/tn/crediting-fruits-child-nutrition-programs-tip-sheet>

- Crediting Juice in the Preschool Meal Patterns for the School Nutrition Programs (CSDE):
https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/credit_juice_snp_preschool.pdf
- Crediting Smoothies in the Preschool Meal Patterns for the School Nutrition Programs (CSDE):
https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/credit_smoothies_snp_preschool.pdf
- Food Buying Guide Section 3: Overview of Crediting Requirements for the Fruits Component (USDA):
https://foodbuyingguide.fns.usda.gov/Content/TablesFBG/USDA_FBG_Section3_Fruits.pdf
- Food Buying Guide Section 3: Yield Table for Fruits (USDA):
https://foodbuyingguide.fns.usda.gov/files/Reports/USDA_FBG_Section3_FruitsYieldTable.pdf
- Fruits (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 6: Fruits Component and Vegetables Component (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>
- Start with Half a Cup: Fresh Fruit Portioning Guide for Schools:
<https://portal.ct.gov/-/media/sde/nutrition/swhac/portionguidefruit85x14.pdf>
- Start with Half a Cup: Fresh Fruit Portioning Guide for Schools:
<https://portal.ct.gov/-/media/sde/nutrition/swhac/portionguidefruit85x14.pdf>
- USDA Memo CACFP 09-2017: Vegetable and Fruit Requirements in the Child and Adult Care Food Program; Questions and Answers:
<https://www.fns.usda.gov/cacfp/vegetable-and-fruit-requirements-cacfp-qas>
- USDA Memo SP 10-2014, CACFP 05-2014, and SFSP 10-2014 (v3): Smoothies Offered in Child Nutrition Programs:
<https://www.fns.usda.gov/smoothies-offered-child-nutrition-programs>

- 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.fns.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 the Child Nutrition Programs:
<https://www.fns.usda.gov/cn/smoothies-offered-child-nutrition-programs>
- Webinar: Crediting Vegetable Noodles and Coconut in the Child Nutrition Programs (USDA):
<https://www.fns.usda.gov/tn/crediting-vegetable-noodles-and-coconut-child-nutrition-programs>

For additional crediting resources, visit the “Fruits” section of the CSDE’s [Crediting Foods in School Nutrition Programs](#) webpage.



7 — Grains Component

Grain menu items must be WGR or enriched to credit in preschool menus. Breakfast cereals must be WGR, enriched, or fortified. Bran and germ credit the same as enriched grains.

The grains component includes a variety of WGR and enriched foods, such as:

- breads, biscuits, bagels, rolls, tortillas, and muffins;
- snack products, such as crackers (including sweet crackers, such as animal crackers and graham crackers), hard pretzels, hard breadsticks, tortilla chips; and popcorn;
- cereal grains, such as buckwheat, brown rice, bulgur, and quinoa;
- RTE breakfast cereals, such as puffed cereals, whole-grain round or flaked cereal, and granola;
- cooked breakfast cereals (instant and regular), such as 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, such as macaroni, spaghetti, noodles, orzo, and couscous.

Preschool menus must include at least one serving of WGR grains per day, between all meals and afterschool snacks served to children. Products that are 100 percent whole grain, such as whole-wheat bread and brown rice, provide the best nutrition and should be served most often.

Overview of Crediting Requirements

Menu planners must complete two steps to determine if grain menu items credit in preschool menus.

1. **Crediting criteria:** Determine if the grain menu item meets the preschool crediting criteria. To credit as the grains component, the grain menu item must be WGR or enriched. For guidance on the crediting and WGR criteria, refer to [“Part A: Crediting Requirements”](#) and [“Part B: WGR Criteria.”](#)
2. **Oz eq contribution:** Determine the oz eq contribution of the planned serving. For guidance on determining a grain menu item’s oz eq contribution, refer to [“Part C: Serving Size.”](#)

These steps apply to all grain menu items, including commercial grain products and foods prepared from scratch.

Choking Prevention for Grains

Some grains may be a choking hazard for young children. Examples include plain wheat germ; whole-grain kernels such as rice or wheat berries; crackers or breads with seeds, nut pieces, or whole-grain kernels such as wheat berries; breakfast cereals that contain nuts, whole-grain kernels, and hard chunks (such as granola); and popcorn. Consider children’s ages and developmental readiness when deciding what grains to offer in preschool menus. For additional guidance, refer to “[Choking Prevention](#)” in section 1.

Grain-based Desserts Prohibited

Grain-based desserts do not credit as the grains component in the preschool meal patterns. Examples of grain-based desserts include breakfast bars, brownies, cakes (including cupcakes and coffee cakes), cereal bars, cinnamon rolls, cinnamon streusel quick breads, cookies (all kinds, including vanilla wafers), doughnuts, gingerbread, granola bars, ice cream cones, marshmallow cereal treats, pastries (such as cinnamon buns, Danish, sweet buns, sweet rolls, and eclairs) piecrusts in sweet pies (e.g., apple, coconut, blueberry, and pecan), sweet biscotti (such as those made with fruits, chocolate, or icing) sweet bread pudding, sweet croissants (e.g. chocolate filled), sweet scones (e.g., blueberry, raisin, and orange cranberry), rice pudding, and toaster pastries.

Identifying grain-based desserts

The USDA’s [Exhibit A: Grain Requirements for Child Nutrition Programs](#) identifies creditable grain-based desserts in red. If a product is not listed on the Exhibit A chart, the menu planner may decide if a food is a grain-based dessert by considering the common perceptions of the food and how it’s typically served. The questions below help menu planners determine if the product is a grain-based dessert.

- Is the food thought of or served as a dessert?
- Is it frosted, iced, or dessert-flavored, like chocolate, caramel, or butterscotch?
- Does it contain custard filling or candy?
- Is it in the shape of a cookie or packaged like a dessert?

Menu planners should not rely on a product’s name to determine if it is grain-based dessert because cookies and similar grain-based desserts do not have an FDA standard of identity. This means that manufacturers might use terms in their product names or labels that might be misleading. Some examples include:

- “breakfast rounds” for oatmeal raisin cookies;
- “breakfast bars” for cereal bars; and
- “super stars” for doughnut holes.

Regardless of the name on the label, these types of foods are still grain-based desserts.

Foods that are not grain-based desserts

Grain-based desserts do not include sweet crackers (such as graham crackers and animal crackers), muffins, quick breads, e.g., banana bread and zucchini bread (except for cinnamon streusel), cornbread, pancakes, waffles, French toast, savory scones (such as cheese and herb), and piecrusts in entrees such as quiche, meat pies, and chicken potpie.

As a best practice, the USDA encourages preschool menus to limit sweet crackers (such as graham crackers and animal crackers) because of their higher sugars content. The CSDE recommends not serving sweet crackers more than twice per week between all preschool meals and afterschool snacks served to children.

Serving grain-based desserts as extra foods

SFAs may choose to serve grain-based desserts as an additional food item that does not credit in preschool menus. Examples include serving cake or cookies at special celebrations. However, to ensure that children's nutritional needs are met, the USDA and CSDE encourage SFAs to use discretion when serving noncreditable foods and beverages (refer to “[Noncreditable foods](#)” in section 2).

Resources for grain-based desserts

The resources below provide guidance on the requirements for grain-based desserts.

- Grain-based Desserts in the CACFP (USDA handouts and webinars in English and Spanish)
<https://www.fns.usda.gov/tn/grain-based-desserts-cacfp>
- Preschool Meal Pattern Training for the School Nutrition Programs, Module 7: Grains Component (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>
- USDA Memo CACFP 16-2017: Grain-Based Desserts in the Child and Adult Care Food Program:
<https://www.fns.usda.gov/cacfp/grain-based-desserts-child-and-adult-care-food-program>

- USDA Memo CACFP 09-2018: Grain Requirements in the Child and Adult Care Food Program; Questions and Answers:
<https://www.fns.usda.gov/cacfp/grain-requirements-cacfp-questions-and-answers>

Links to these resources are also available under “[Grain-based Desserts](#)” in the “Grains Component” section of the CSDE’s Meal Patterns for Preschoolers in School Nutrition Programs webpage.



Part A: Crediting Requirements

Part A: Grain Crediting Requirements

This section addresses the crediting requirements for the grains component of the preschool meal patterns. All grain items served in preschool menus must comply with these requirements, including commercial grain products and grain foods made from scratch.

Creditable Grains

Grain products and recipes must be made with creditable grains to credit as the grains component in the preschool meal patterns. Breakfast cereals must be WGR, enriched, or fortified; and cannot exceed the sugars limit (refer to “[Crediting Criteria for Breakfast Cereals](#)” in this section).

Creditable grains include whole grains, enriched grains, bran (such as oat bran, wheat bran, corn bran, rice bran, and rye bran), and germ (such as wheat germ). Bran and germ credit the same as enriched grains.

For information on identifying whole and enriched grains, refer to the CSDE’s resources, [Crediting Whole Grains in the School Nutrition Programs](#) and [Crediting Enriched Grains in the School Nutrition Programs](#). For guidance on the steps for identifying creditable grains, refer to the CSDE’s resource, [How to Identify Creditable Grains for Preschoolers in the National School Lunch Program and School Breakfast Program](#).

The preschool meal patterns have different crediting requirements for commercial grain products, commercial combination foods, cooked breakfast cereals, RTE breakfast cereals, and grain foods made from scratch. This section summarizes these crediting requirements.

Crediting Criteria for Commercial Grain Products

Commercial grain products in groups A-E (baked goods, such as breads, rolls, muffins, crackers, and waffles) and group H (pasta and cereal grains, such as quinoa, rice, and millet) credit as the grains component if a creditable grain is the first ingredient, or water is the first ingredient and a creditable grain is the second ingredient.

Groups A-E and H-I refer to the grain groups in the USDA’s Exhibit A chart. For more information, refer to “[Part C: Required Servings for Grains](#)” in this section.
Note: Groups F and G (grain-based desserts) do not credit in the preschool meal patterns (refer to “[Grain-based Desserts Prohibited](#)” in this section).

Part A: Crediting Requirements

The ingredients for commercial products are listed in descending order of predominance by weight. The ingredient that weighs the most is listed first and the ingredient that weighs the least is listed last. When reviewing the first ingredient on the product's label, water is ignored.

The ingredients statements below show some examples of creditable commercial grain products. Whole grains are indicated in bold and enriched grains are indicated in italics.

- **Example 1:**

Ingredients: *Enriched wheat flour (flour, niacin, reduced iron, thiamine mononitrate, riboflavin, folic acid)*, canola and/or sunflower oil, salt, contains 2% or less of: yeast, nonfat milk, sugar, baking soda, monocalcium phosphate, paprika, spices, celery, onion powder.

This grain product credits as an enriched grain. Enriched wheat flour is the first ingredient and the only grain ingredient.

- **Example 2:**

Ingredients: Water, **whole-wheat flour**, yeast, wheat gluten, contains less than 2% of each of the following: soybean oil, sugar, salt, calcium propionate (preservative), fumaric acid, baking soda, monocalcium phosphate, calcium sulfate, ammonium sulfate.

This grain product credits as a whole grain. Whole-wheat flour is the first ingredient after water and is the only grain ingredient. This product is 100 percent whole grain and credits as a WGR food.

- **Example 3:**

Ingredients: Water, *enriched flour (wheat flour, niacin, reduced iron, vitamin B1 [thiamin mononitrate], vitamin B2 [riboflavin], folic acid)*, **whole-wheat flour**, vegetable oil (soybean, palm, and/or canola oil), egg whites, *wheat bran*, sugar, contains 2% or less of leavening (baking soda, sodium aluminum phosphate, monocalcium phosphate), salt, malt flavoring, whey, soy lecithin.

This grain product as an enriched grain. Enriched wheat flour is the first ingredient after water. This product is not WGR because the whole wheat flour is listed after the enriched flour.

Since the preschool and CACFP meal pattern requirements are the same, SFAs may use CACFP resources to assist with crediting grains in the preschool meal patterns. The CSDE's [Guide to Meeting the Whole Grain-rich Requirement for the Child and Adult Care Food Program](#) provides more examples of how to determine if commercial grain products are creditable. Menu

Part A: Crediting Requirements

planners may use the CSDE’s Excel worksheet, [Child Care Worksheet 1: Crediting Commercial Grains in the Child and Adult Care Food Program](#), to determine if commercial grain products comply with the preschool crediting and WGR criteria. For more information, refer to “[Grain Crediting Worksheets](#)” in this section.

Multiple creditable grains in commercial grain products

If a creditable grain is not the first ingredient, but the commercial grain product contains more than one creditable grain, the SFA must obtain a PFS from the manufacturer to determine crediting information (refer to “[Documentation for commercial products](#)” in section 2).

To credit in preschool menus, the product’s PFS must document that the combined weight of all creditable grains in the product is the greatest ingredient by weight. 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](#).

Crediting Criteria for Breakfast Cereals

Breakfast cereals include RTE breakfast cereals in group I (such as puffed cereals, round or flaked cereals, and granola) and cooked breakfast cereals in group H (including instant and regular, such as oatmeal, farina, and cream of wheat). Breakfast cereals credit as the grains component if they meet the two criteria below.

1. The first ingredient is a creditable grain, or the cereal is fortified.
2. The cereal meets the sugars limit (no more than 6 grams of sugars per dry ounce).

Effective with school year 2025-26 (beginning July 1, 2025), the USDA final rule, [Child Nutrition Programs: Meal Patterns Consistent with the 2020-2025 Dietary Guidelines for Americans](#), changes the product-based limit for breakfast cereals from total sugars to added sugars. Breakfast cereals cannot exceed 6 grams of added sugars per dry ounce.

Evaluate sugars per serving first

The CSDE recommends that menu planners review the sugars content of breakfast cereals first, before reviewing the ingredients statement for creditable grains. If a breakfast cereal exceeds the sugars limit, it cannot credit in preschool menus, even if it contains creditable grains or is WGR.

Part A: Crediting Requirements

Crediting guidance for breakfast cereals

The CSDE's resource, [Crediting Breakfast Cereals in the Preschool Meal Patterns for the School Nutrition Programs](#), provides examples of how to determine if breakfast cereals are creditable. Since the preschool and CACFP meal pattern requirements are the same, menu planners may use the CSDE's Excel worksheets below to determine if breakfast cereals comply with the preschool crediting and WGR criteria.

- Child Care Worksheet 2: Crediting Ready-to-eat (RTE) Breakfast Cereals in the Child and Adult Care Food Program
- Child Care Worksheet 3: Crediting Cooked Breakfast Cereals in the Child and Adult Care Food Program

For more information, refer to "[Grain Crediting Worksheets](#)" in this section.

Breakfast cereals that contain nuts, whole-grain kernels such as wheat berries, and hard chunks (such as granola) may be a choking hazard for young children. Consider children's ages and developmental readiness when deciding what types of breakfast cereals to offer in preschool menus. For additional guidance, refer to "[Choking Prevention](#)" in section 1.

Crediting Criteria for Commercial Combination Foods

Commercial combination foods that contain a grain portion from groups A-E (such as pizza crust in pizza and baked fish coated with breadcrumbs) or groups H-I (such as noodles in lasagna and baked chicken coated with crushed cereal flakes) credit as the grains component if the first **grain** ingredient is a creditable grain.

- **Example for breaded chicken nuggets:**
Ingredients: Boneless, skinless chicken breast with rib meat, water, **whole-wheat flour**, contains 2% or less of the following: dried garlic, dried onion, salt, sea salt, soybean oil, spice, sugar, torula yeast, turmeric, yeast, yeast extract. Breeding set in vegetable oil.

This combination food credits as a WGR food toward the grains component because the first grain ingredient (whole-wheat flour) is a creditable grain. A PFS is required to determine the oz eq per serving (refer to "[Documentation for commercial products](#)" in section 2).

Part A: Crediting Requirements

Separate grain portion in commercial combination foods

A commercial combination food that lists the ingredients for the grain portion separately credits as the grains component if a creditable grain is the first ingredient in the grain portion, or water is the first ingredient in the grain portion and a whole grain is the second ingredient in the grain portion.

- **Example for cheese ravioli:**

Ingredients: **Filling:** Fat-free ricotta cheese (whey, skim milk [made from nonfat dry milk powder], vinegar, xanthan gum, carrageenan), water, egg, low moisture part skim mozzarella cheese (cultured part skim milk, salt, enzymes), whey protein isolate, sodium caseinate, Romano cheese made from cow's milk (cultured milk, salt, enzymes), bleached wheat flour, garlic salt (salt, dehydrated garlic), salt, corn starch, sugar, dehydrated garlic. **Pasta: Whole-wheat flour**, enriched durum wheat flour (wheat flour, niacin, ferrous sulfate, thiamin mononitrate, riboflavin, folic acid), water, egg.

This combination food credits as a WGR food toward the grains component because the first ingredient (whole-wheat flour) in the pasta (grain portion) is a creditable grain. A PFS is required to determine the oz eq per serving (refer to [“Documentation for commercial products”](#) in section 2).

Multiple creditable grains in commercial combination foods

If a creditable grain is not the first ingredient, but the grain portion of a combination food contains more than one creditable grain, the SFA must obtain a PFS from the manufacturer to determine crediting information (refer to [“Documentation for commercial products”](#) in section 2). To credit in preschool menus, the product's PFS must document that the combined weight of all creditable grains in the grain portion of the product is the greatest ingredient by weight in the grain portion. 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](#).

Part A: Crediting Requirements**Crediting Criteria for Grain Foods Made from Scratch**

Grain foods made from scratch and combination foods made from scratch that contain a grain portion have different crediting requirements.

- **Grain foods:** Grain foods made from scratch (such as breads, rolls, muffins, waffles, and pancakes) credit toward the grains component based on the amount of creditable grains in one serving of the SFA's standardized recipe.
- **Combination foods:** Combination foods made from scratch that contain a grain portion (such as pizza, lasagna, and breaded chicken) credit toward the grains component based on the amount of creditable grains in the grain portion of one serving of the SFA's standardized recipe.

Since the preschool and CACFP meal pattern requirements are the same, SFAs may use CACFP resources to assist with crediting grains in the preschool meal patterns. The CSDE's [Guide to Meeting the Whole Grain-rich Requirement for the Child and Adult Care Food Program](#) provides examples of how to determine if grain foods made from scratch are creditable. The CSDE's Excel worksheets below help menu planners determine if grain foods made from scratch comply with the preschool crediting and WGR criteria.

- Child Care Worksheet 4: Crediting Family-size Recipes for Grains in the Child and Adult Care Food Program
- Child Care Worksheet 5: Crediting Quantity Recipes for Grains in the Child and Adult Care Food Program

For more information, refer to "[Grain Crediting Worksheets](#)" in this section.

SFAs must have standardized recipes on file to document the crediting information for grain foods prepared from scratch (refer to "[Documentation for foods made from scratch](#)" in section 2).

Part A: Crediting Requirements

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 cooked dried corn in an alkaline (slaked lime) solution. This process results in a product with nutrition content similar 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

Menu planners may use 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 (such as “cornmeal” and “yellow corn flour”), SFAs must obtain a PFS from the manufacturer stating that the ingredients are whole grain, enriched, or nixtamalized (refer to [“Documentation for commercial products”](#) in section 2).

Part A: Crediting Requirements

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 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 canned hominy as the vegetables component, refer to “[Crediting Hominy as Vegetables](#)” in section 5.

Part A: Crediting Requirements

Crediting Popcorn

Popcorn is a whole-grain food. Three cups (a 1-ounce serving) of plain popped popcorn credit as 1 oz eq of the grains component. The minimum creditable amount is $\frac{3}{4}$ cup ($\frac{1}{4}$ ounce), which equals $\frac{1}{4}$ oz eq. The table below summarizes the grains contribution of popped popcorn.

Table 7-1. Grains contribution of popped popcorn

| Cups (popped) | Weight (popped) | Grains contribution |
|---------------------|-------------------------|---|
| $\frac{3}{4}$ cup | 0.25 ounces or 7 grams | $\frac{1}{4}$ oz eq (minimum creditable amount) |
| $1\frac{1}{2}$ cups | 0.5 ounces or 14 grams | $\frac{1}{2}$ oz eq |
| $2\frac{1}{4}$ cups | 0.75 ounces or 21 grams | $\frac{3}{4}$ oz eq |
| 3 cups | 1 ounce or 28 grams | 1 oz eq |

Crediting considerations for popcorn

For developmentally ready children, menu planners should consider the crediting requirements below when including popcorn in preschool menus.

- Consider the appropriateness of the serving size for each age 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 $\frac{3}{4}$ cup of popcorn ($\frac{1}{4}$ oz eq of grains) and $\frac{1}{4}$ cup of enriched or WGR round cereal ($\frac{1}{4}$ oz eq of grains) credits as $\frac{1}{2}$ oz eq of the grains component.

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. For additional guidance, refer to "[Choking Prevention](#)" in section 1.

Part A: Crediting Requirements

- 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 obtain a PFS for commercial products (refer to [“Documentation for commercial products”](#) in section 2) and a standardized recipe for foods prepared from scratch (refer to [“Documentation for foods made from scratch”](#) in section 2).
- Popcorn sometimes includes ingredients and toppings such as salt, caramel, cheese, and butter. The USDA strongly encourages healthier alternatives, such as seasoning the popcorn with herb blends or serving fresh, plain popcorn.
- Popcorn that is an ingredient in grain-based desserts does not credit toward the grains component. Grain-based desserts do not credit in preschool menus (refer to [“Grain-based Desserts Prohibited”](#) in this section).

The requirements for crediting popcorn are summarized in [USDA Memo SP 23-2019, CACFP 10-2019, and SFSP 09-2019: Crediting Popcorn in the Child Nutrition Programs](#).

Noncreditable Foods in the Grains Component

Examples of foods that do not credit as the grains component include:

- commercial grain products that are not WGR or enriched;
- breakfast cereals that are not WGR, enriched, or fortified;
- breakfast cereals that contain more than 6 grams of sugars per ounce;
- foods made from scratch that are not WGR or enriched; and
- grain-based desserts such as brownies, cookies, cake, coffee cake, doughnuts, cereal bars, granola bars, breakfast bars, sweet rolls, pastries, toaster pastries, sweet scones (e.g., blueberry, raisin, and orange cranberry), piecrusts in sweet pies (e.g., apple and pecan), rice pudding, and sweet bread pudding (refer to [“Grain-based Desserts Prohibited”](#) in this section).

This list is not all-inclusive. For more information, refer to [“Noncreditable Foods”](#) in section 2 and the CSDE’s resource, [Noncreditable Foods in the Preschool Meal Patterns for the School Nutrition Programs](#).

Menu planners should use the FBG to identify foods that credit as the grains component. For more information, refer to [“Food Buying Guide for Child Nutrition Programs”](#) in this section.

Part A: Crediting Requirements

Grain Crediting Worksheets

Menu planners may use the CSDE’s CACFP crediting worksheets to evaluate grain-based foods for compliance with the preschool crediting, WGR, and serving requirements.

- Child Care Worksheet 1: Crediting Commercial Grains in the Child and Adult Care Food Program
- Child Care Worksheet 2: Crediting Ready-to-eat (RTE) Breakfast Cereals in the Child and Adult Care Food Program
- Child Care Worksheet 3: Crediting Cooked Breakfast Cereals in the Child and Adult Care Food Program
- Child Care Worksheet 4: Crediting Family-size Recipes for Grains in the Child and Adult Care Food Program
- Child Care Worksheet 5: Crediting Quantity Recipes for Grains in the Child and Adult Care Food Program

These crediting worksheets are available under “Grain Crediting Worksheets” in the “[Related Resources](#)” section of the CSDE’s [Meal Patterns for Preschoolers in School Nutrition Programs](#) webpage.

Resources for Crediting Grains

The resources below assist menu planners with identifying foods that credit as the grains component in the preschool meal patterns.

- Crediting Breakfast Cereals in the Preschool Meal Patterns for the School Nutrition Programs (CSDE):
https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/credit_cereals_snp_preschool.pdf
- Crediting Documentation for the Child Nutrition Programs (CSDE webpage):
<https://portal.ct.gov/sde/nutrition/crediting-documentation-for-the-child-nutrition-programs>
- Crediting Enriched Grains in the School Nutrition Programs (CSDE):
https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/credit_enriched_grains_snp.pdf
- Crediting Grains in the Child Nutrition Programs Tip Sheet Part 1: Creditable Grains in Child Nutrition Programs (USDA):
https://fns-prod.azureedge.us/sites/default/files/resource-files/grains_tipsheet_part1.pdf

Part A: Crediting Requirements

- Crediting Grains in the Child Nutrition Programs Tip Sheet Part 2: Identifying Grain Products That Are Whole Grain-Rich (USDA):
https://fns-prod.azureedge.us/sites/default/files/resource-files/grains_tipsheet_part2.pdf
- Crediting Grains in the Child Nutrition Programs Tip Sheet Part 3: Program Requirements (USDA):
https://fns-prod.azureedge.us/sites/default/files/resource-files/grains_tipsheet_part3.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 Section 4: Overview of Crediting Requirements for the Grains Component (USDA):
https://foodbuyingguide.fns.usda.gov/Content/TablesFBG/USDA_FBG_Section4_Grains.pdf
- Food Buying Guide Section 4: Yield Table for Grains (USDA):
https://foodbuyingguide.fns.usda.gov/files/Reports/USDA_FBG_Section4_GrainsYieldTable.pdf
- Grains Component (“Related Resources” 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/related-resources#Grains>
- How to Identify Creditable Grains for the Preschool Meal Patterns of the School Nutrition Programs (CSDE):
https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/identify_creditable_grains_snp_preschool.pdf
- Preschool Meal Pattern Training for the School Nutrition Programs, Module 7: Grains Component (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 in Child Nutrition Programs (USDA):
https://www.fns.usda.gov/sites/default/files/resource-files/PFS_Grains_Oz_Eq_Fillable_508.pdf

Part A: Crediting Requirements

- Product Formulation Statement for Documenting Grains in Child Nutrition Programs – Completed Sample (USDA):
https://www.fns.usda.gov/sites/default/files/resource-files/PFS_Example_Grains_Oz_Eq.pdf
- USDA Memo CACFP 09-2018: Grain Requirements in the Child and Adult Care Food Program; Questions and Answers:
<https://www.fns.usda.gov/cacfp/grain-requirements-cacfp-questions-and-answers>
- USDA Memo SP 23-2019, CACFP 10-2019, and SFSP 09-2019: Crediting Popcorn in the Child Nutrition Programs:
<https://www.fns.usda.gov/cn/crediting-popcorn-child-nutrition-programs>
- 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.fns.usda.gov/cn/crediting-coconut-hominy-corn-masa-and-masa-harina-child-nutrition-programs>
- Using the WIC Food Lists to Identify Grains for the CACFP (USDA handouts in English and Spanish):
<https://www.fns.usda.gov/tn/using-wic-food-lists-identify-grains-cacfp>
- 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.

Part B: WGR Requirement

Part B: WGR Requirement

“Whole grain-rich” for the preschool meal patterns means a food that contains at least 50 percent whole grains and the remaining grain ingredients are enriched, bran, or germ. All WGR foods credit in the preschool meal patterns but not all creditable grains are WGR. The WGR criteria are different for commercial products and foods made from scratch. This section summarizes these requirements.

Different WGR Criteria for Preschool Meal Patterns

It is important to note that the WGR criteria for the NSLP, SBP, and ASP preschool meal patterns are different from the WGR criteria for the NSLP and SBP meal patterns for grades K-12. The WGR criteria for grades K-12 are stricter.

Except for grain-based desserts, grain foods that meet the WGR criteria for grades K-12 also meet the preschool WGR criteria. However, grain foods that meet the preschool WGR criteria may or may not meet the WGR criteria for grades K-12. For information on the differences between the grains component for the preschool meal patterns and the meal patterns for grades K-12, refer to the CSDE’s resource, [Comparison of the Grains Component Requirements in the Meal Patterns for School Nutrition Programs](#).

Menu Planning Considerations

Preschool menus must include at least one serving of WGR grains per day, between all meals and afterschool snacks served to children. The USDA’s [CACFP best practices](#) recommend at least two servings of WGR grains per day.

SFAs may serve a WGR food at any preschool meal or afterschool snack, but menu planners must consider the menu planning requirements below.

- **SFA serves only one meal per day:** If the SFA serves only one CACFP meal per day (breakfast or lunch), the grain served at that meal must be WGR.
- **SFA serves only breakfast:** If the SFA serves only breakfast and chooses to substitute MMA for the grains component (allowed up to three times per week at breakfast), a WGR food is not required. For more information on MMA substitutes, refer to “[MMA at Breakfast](#)” in section 4.

Part B: WGR Requirement

- **SFA serves only afterschool snack:** The grains component is not required at afterschool snack but may be served as one of the two required meal components. If the SFA serves only afterschool snack and offers a grain as one of the two meal components, the grain 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 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 meal is required to contain a WGR food.

The USDA strongly encourages SFAs to vary the meals and afterschool snacks that include a WGR item. 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.

Serving the same WGR foods to preschoolers and grades K-12

The requirements below apply when SFAs serve the same WGR foods to preschoolers and grades K-12.

- The same grain foods served to preschoolers and grades K-12 must meet the WGR criteria for grades K-12.
- The same cooked and RTE breakfast cereals served to preschoolers and grades K-12 must meet the WGR criteria for grades K-12 and the preschool sugars limit (refer to [“Crediting Criteria for Breakfast Cereals”](#) in “Part A: Grain Crediting Requirements”).
- SFAs cannot serve the same grain-based desserts to preschoolers and grades K-12 because grain-based desserts do not credit in the preschool meal patterns (refer to [“Grain-based Desserts”](#) in “Part A: Grain Crediting Requirements”).

When meals are co-mingled, SFAs may use the meal pattern of the older grades and serve the grain foods that meet the meal pattern of the older grades to both grade groups. An example of co-mingling is preschoolers and grades K-5 eating meals or afterschool snacks in the same service area at the same time. For guidance on the meal pattern requirements for co-mingled meals, refer to section 4 of the CSDE’s [Guide to Meal Service Requirements for Preschoolers in the School Nutrition Programs](#).

Part B: WGR Requirement**Overview of Rule of Three**

The USDA allows six methods for determining if grain foods meet the preschool WGR criteria. The Rule of Three reviews the product's ingredients statement and looks at the first three grain ingredients. It is the most used method for commercial products. The CSDE's [Guide to Meeting the Whole Grain-rich Requirement for the Child and Adult Care Food Program](#) provides guidance on these methods and includes examples of evaluating grain products for compliance with the Rule of Three WGR criteria.

As a reminder, the ingredients for commercial products are listed in descending order of predominance by weight. The ingredient that weighs the most is listed first and the ingredient that weighs the least is listed last. When reviewing the first ingredient on the product's label, water is ignored.

The Rule of Three applies only to commercial grain products, commercial combination foods, and cooked breakfast cereals. The Rule of Three does not apply to RTE breakfast cereals in group I (puffed cereals, flaked or round cereals, and granola).

Rule of Three Requirements

The Rule of Three requires that the first ingredient (excluding water) is a whole grain, and the next two grain ingredients (if any) are creditable grains. When reviewing a commercial product's ingredients statement for compliance with the Rule of Three criteria, the following requirements apply:

- a whole grain must be the first ingredient, and may be the second or third grain ingredients;
- an enriched grain may be the second or third grain ingredients;
- bran and germ may be the second or third grain ingredients; and
- noncreditable grains cannot be any of the first three grain ingredients. Examples of noncreditable grains for the preschool meal patterns include vegetable and legume flours (such as chickpea flour, fava bean flour, pea flour, and potato flour), corn flour, corn grits, farina, malted barley flour, milled corn, nut or seed flours, oat fiber, potato flour, potato starch, rice, soy fiber, soy flakes, wheat flour, and yellow corn flour. For additional examples and more information, refer to the CSDE's [Guide to Meeting the Whole Grain-rich Requirement for the Child and Adult Care Food Program](#).

Part B: WGR Requirement

If a food meets the Rule of Three, the menu planner does not need to check any other grain ingredients further down on the ingredients statement.

The Rule of Three WGR criteria are different for commercial grain products, commercial combination foods, cooked breakfast cereals, RTE breakfast cereals, and foods made from scratch. These requirements are summarized below.

Rule of Three WGR Criteria for Commercial Grain Products

Under the Rule of Three, commercial grain products in groups A-E (baked goods, such as breads, rolls, muffins, crackers, waffles, and pancakes) and group H (pasta and cereal grains, such as quinoa, rice, and millet) are WGR if they meet the three criteria below.

1. A whole grain is the first ingredient (or water is the first ingredient and a whole grain is the second ingredient).
2. The second grain ingredient (if any) is whole, enriched, bran, or germ.
3. The third grain ingredient (if any) is whole, enriched, bran, or germ.

The examples below show some commercial grain products that meet the Rule of Three WGR criteria. Whole grains are indicated in bold and enriched grains are indicated in italics.

- **Example 1:**

Ingredients: **Whole-wheat flour**, sugar, wheat gluten. Contains 2% or less of each of the following: honey, salt, yeast, molasses, diacetyl tartaric acid esters of mono-diglycerides (datem), ascorbic acid, mono-and diglycerides, l-cysteine, enzymes.

Whole-wheat flour is the first ingredient and the only grain ingredient. This product is 100 percent whole grain and credits as a WGR food.

- **Example 2:**

Ingredients: Water, **whole-wheat flour**, yeast, wheat gluten, contains less than 2% of each of the following: soybean oil, sugar, salt, calcium propionate (preservative), fumaric acid, baking soda, monocalcium phosphate, calcium sulfate, ammonium sulfate.

Whole-wheat flour is the first ingredient after water and the only grain ingredient. This product is 100 percent whole grain and credits as a WGR food.

- **Example 3:**

Ingredients: **Whole-wheat flour**, *enriched flour (wheat flour, niacinamide, reduced iron, thiamin mononitrate [vitamin B1], riboflavin [vitamin B2], folic acid)*, soybean oil with TBHQ for freshness, salt, contains 2% or less of corn syrup, baking soda, yeast, soy lecithin.

Part B: WGR Requirement

Whole-wheat flour is the first ingredient. Enriched flour is the second and only other grain ingredient. This product credits as a WGR food.

Multiple whole grains in commercial grain products

If a whole grain is not the first ingredient, but the grain product contains more than one whole grain, the SFA must obtain a PFS from the manufacturer stating the combined weight of all whole grains (refer to “[Documentation for commercial products](#)” in section 2). The example below shows a grain product that contains more than one whole grain. Whole grains are indicated in bold and enriched grains are indicated in italics.

- **Example:**

Ingredients: *Unbleached enriched wheat flour* [flour, malted barley flour, reduced iron, niacin, thiamin mononitrate (vitamin B1), riboflavin (vitamin B2), folic acid], water, **whole-wheat flour**, **whole oats**, sugar, yeast, soybean oil, salt.

To meet the WGR criteria, the product’s PFS must document that the combined weight of the two whole grains (whole-wheat flour and whole oats) is more than the weight of the first ingredient (unbleached enriched wheat flour).



Part B: WGR Requirement

Rule of Three WGR Criteria for Cooked Breakfast Cereals

Under the Rule of Three, cooked breakfast cereals (instant and regular, such as oatmeal, cream of wheat, and farina) are WGR if they meet the two criteria below.

1. The first ingredient is a whole grain.
2. The next two grain ingredients (if any) are whole, enriched, bran, or germ; and 3) the cereal meets the sugars limit (refer to “[Crediting Criteria for Breakfast Cereals](#)” in “Part A: Grain Crediting Requirements”).

The example below shows a whole-grain breakfast cereal.

- **Example:**

Ingredients: **Whole-grain rolled oats**, sugar, natural flavors, salt.

This cooked breakfast cereal is 100 percent whole grain because the first and only grain ingredient (whole grain rolled oats) is a whole grain. To credit as the grains component, this breakfast cereal must also comply with the sugars limit (refer to “[Sugars limit for breakfast cereals](#)” in “Part A: Grain Crediting Requirements”).

For examples of how to determine if cooked breakfast cereals are WGR, refer to the CSDE’s resource, [Crediting Breakfast Cereals in the Preschool Meal Patterns for the School Nutrition Programs](#).

Menu planners may use the CSDE’s Excel worksheet, [Child Care Worksheet 3: Crediting Cooked Breakfast Cereals in the Child and Adult Care Food Program](#), to determine if cooked breakfast cereals comply with the preschool crediting and WGR criteria. For more information, refer to “[Grain Crediting Worksheets](#)” in this section.

Part B: WGR Requirement

WGR Criteria for RTE Breakfast Cereals

The Rule of Three does not apply to RTE breakfast cereals. RTE breakfast cereals are WGR if they meet the two criteria below.

1. The first ingredient is a whole grain and the cereal is fortified, or the cereal is 100 percent whole grain.
2. Total sugars do not exceed 6 grams per dry ounce (refer to “[Crediting Criteria for Breakfast Cereals](#)” in “Part A: Grain Crediting Requirements”).

The example below shows a whole-grain fortified RTE breakfast cereal that meets the WGR criteria. Whole grains are indicated in bold and the enrichment nutrients are highlighted in yellow.

- **Example:**

Ingredients: **Whole-grain oat flour**, sugar, corn flour, whole-wheat flour, rice flour, salt, calcium carbonate, disodium phosphate, reduced iron, niacinamide, zinc oxide, BHT (a preservative), thiamin mononitrate, pyridoxine hydrochloride, riboflavin, folic acid.

This RTE breakfast cereal is fortified because it contains added nutrients (calcium carbonate, reduced iron, niacinamide, zinc oxide, thiamin mononitrate, pyridoxine hydrochloride, riboflavin, folic acid). It is WGR because whole-grain oat flour is the first ingredient, and the cereal is fortified. This RTE breakfast cereal credits as a WGR food if meets the sugars limit (refer to “[Crediting Criteria for Breakfast Cereals](#)” in “Part A: Grain Crediting Requirements”).

For examples of how to determine if RTE breakfast cereals are WGR, refer to the CSDE’s resource, [Crediting Breakfast Cereals in the Preschool Meal Patterns for the School Nutrition Programs](#).

Since the preschool and CACFP meal pattern requirements are the same, menu planners may use the CSDE’s Excel worksheet, [Child Care Worksheet 2: Crediting Ready-to-eat \(RTE\) Breakfast Cereals in the Child and Adult Care Food Program](#), to determine if RTE breakfast cereals comply with the preschool crediting and WGR criteria (refer to “[Grain Crediting Worksheets](#)” in this section).

Part B: WGR Requirement

Rule of Three WGR Criteria for Commercial Combination Foods

Under the Rule of Three, commercial combination foods that contain a grain portion from groups A-E (such as pizza crust in pizza and baked fish coated with breadcrumbs) or groups H-I (such as noodles in lasagna and baked chicken coated with crushed cereal flakes) are WGR if they meet the three criteria below.

1. A whole grain is the first ingredient (or water is the first ingredient and a whole grain is the second ingredient).
2. The second grain ingredient (if any) is whole, enriched, bran, or germ.
3. The third grain ingredient (if any) is whole, enriched, bran, or germ.

The ingredients statement below shows an example for breaded chicken nuggets.

- **Example for breaded chicken nuggets:**

Ingredients: Boneless, skinless chicken breast with rib meat, water, **whole-wheat flour**, contains 2% or less of the following: dried garlic, dried onion, salt, sea salt, soybean oil, spice, sugar, torula yeast, turmeric, yeast, yeast extract. Breeding set in vegetable oil.

This product meets the Rule of Three WGR criteria because whole-wheat flour is the first and only grain ingredient. A PFS is required to determine the oz eq per serving (refer to “[Documentation for commercial products](#)” in section 2).

Separate grain portion in commercial combination foods

A commercial combination food that lists the ingredients for the grain portion separately is WGR if it meets the three criteria below.

1. A whole grain is the first ingredient in the grain portion (or water is the first ingredient and a whole grain is the second ingredient).
2. The second grain ingredient in the grain portion (if any) is whole, enriched, bran, or germ.
3. The third grain ingredient in the grain portion (if any) is whole, enriched, bran, or germ.

The ingredients statement below shows an example for a breaded chicken patty that lists the grain portion separately.

- **Example for breaded chicken patty:**

Ingredients: Chicken, water, salt, and natural flavor. **Breaded with: white whole-wheat flour**, water, salt, *enriched yellow corn flour*, dried onion, dried garlic, dried yeast, brown

Part B: WGR Requirement

sugar, extractives of paprika, and spices. Breading set in vegetable oil.

This product meets the Rule of Three WGR criteria because the first grain ingredient (white whole-wheat flour), in the breading (grain portion) is a whole grain and the second and only other grain ingredient is an enriched grain (enriched yellow corn flour). A PFS is required to determine the oz eq per serving (refer to “[Documentation for commercial products](#)” in section 2).

Multiple whole grains in commercial combination foods

If a whole grain is not the first ingredient, but the grain portion of the combination food contains more than one whole grain, the SFA must obtain a PFS from the manufacturer to determine crediting information (refer to “[Documentation for commercial products](#)” in section 2). The ingredients statement below shows an example for a breaded chicken patty.

- **Example for breaded chicken patty:**

Ingredients: Chicken, water, salt, and natural flavor. **Breaded with:** *unbleached enriched wheat flour [flour, malted barley flour, reduced iron, niacin, thiamin mononitrate (vitamin B1), riboflavin (vitamin B2), folic acid], water, whole-wheat flour, whole oats*, dried onion, dried garlic, dried yeast, brown sugar, extractives of paprika, and spices. Breading set in vegetable oil.

The grain portion (breading) contains enriched flour as the first ingredient and also contains two whole grains (whole-wheat flour and whole oats). To meet the WGR criteria, the product’s PFS must document that the combined weight of the two whole grains is the greatest ingredient by weight in the grain portion (refer to “[Documentation for commercial products](#)” in section 2).

Part B: WGR Requirement

Rule of Three WGR Criteria for Grain Foods Made from Scratch

Grain foods made from scratch (such as breads, rolls, muffins, waffles, and pancakes) are WGR if the combined amount of all whole grains is equal to or more than the combined weight of all other creditable grains in the standardized recipe. The examples below show how SFAs can determine if standardized recipes meet the preschool WGR criteria.

- **Example 1:** A standardized muffin recipe contains 2 pounds of whole-wheat flour and 2 pounds of enriched flour. This recipe is WGR because the weight of the whole grain and enriched flour are equal.
- **Example 2:** A standardized bread recipe contains $\frac{3}{4}$ pound of whole-grain flour, $\frac{1}{2}$ pound of rolled oats, and 1 pound of enriched flour. This recipe is WGR because the combined weight of the two whole grains (whole-grain flour and rolled oats) is $1\frac{1}{4}$ pounds, which exceeds the weight of the enriched flour.

For examples of how to determine if grain foods made from scratch are WGR, refer to the CSDE's [Guide to Meeting the Whole Grain-rich Requirement for the Child and Adult Care Food Program](#).

Rule of Three WGR Criteria for Combination Foods Made from Scratch

The Rule of Three WGR criteria apply only to the grain portion of combination foods made from scratch. Examples of combination foods that contain a grain portion from groups A-E include pizza crust in pizza, breaded chicken, and baked fish coated with breadcrumbs. Examples of combination foods that contain a grain portion from groups H-I include noodles in lasagna and baked chicken coated with crushed cereal flakes.

The grain portion of a standardized recipe for a combination food is WGR if the combined amount of whole grains in the grain portion is equal to or more than the combined amount of all other creditable grains in the grain portion.

Menu planners must review the SFA's standardized recipes to determine if the grain portion credits as WGR or enriched grains.

Part B: WGR Requirement

Required Documentation for Grains

SFAs must maintain documentation on file to indicate that commercial grain products and food made from scratch comply with the preschool crediting and WGR requirements. Acceptable documentation for commercial products includes CN labels (if the grain portion is part of a CN-labeled MMA product) and PFS forms. Standardized recipes are required for foods made from scratch. The CSDE will review this documentation as part of the Administrative Review of the school nutrition programs. For more information, refer to [“Required Crediting Documentation”](#) in section 2.

The CSDE recommends that preschool menus include information about the type of grain items served for each meal and afterschool snack. This helps to document meal pattern compliance and provide information for families. For example, the menu planner could list:

- “whole-wheat bread,” “whole grain-rich bread,” or “enriched white bread” instead of “bread;
- “brown rice” or “enriched rice” instead of “rice;”
- “enriched spaghetti” instead of “spaghetti;”
- “whole-corn tortilla” instead of “tortilla;” and
- “fortified whole-grain breakfast cereal” instead of “breakfast cereal.”

Other acceptable methods for indicating which grains on preschool menus are WGR include

- using abbreviations, such “WW bread” for whole-wheat bread or “WGR blueberry muffin” for a WGR blueberry muffin;
- using symbols to indicate WGR foods; or
- using a check box to signify that a food is WGR.

Menus that include abbreviations or symbols should also indicate what they mean. For example, the menu could feature a statement such as: “WGR means a food that is whole grain-rich.”

SFAs should indicate the crediting and WGR information for the grains component on the daily production record or provide other menu documentation, such as:

- a binder of nutrition information for commercial products that includes Nutrition Facts labels and ingredients statements;
- a list of all grain products served that indicates which foods are WGR or enriched, or a fortified breakfast cereal;
- standardized recipes for foods made from scratch; and
- CN labels and PFS forms for commercial foods.

Part B: WGR Requirement

SFAs must also maintain documentation on file to indicate that all breakfast cereals meet the sugars limit (refer to “[Crediting Criteria for Breakfast Cereals](#)” in “Part A: Grain Crediting Requirements”). Documentation should include the product’s Nutrition Facts label and the SFA’s calculation showing that the cereal contains no more than 6 grams of sugars per dry ounce.

Resources for WGR Criteria

The resources below assist menu planners with identifying foods that meet the preschool WGR criteria.

- Guide to Meeting the Whole Grain-rich Requirement for the Child and Adult Care Food Program (CSDE):
https://portal.ct.gov/-/media/sde/nutrition/cacfp/crediting/wgr_requirement_cacfp.pdf
- How to Spot Whole Grain-Rich Foods for the CACFP (USDA handouts in English and Spanish):
<https://www.fns.usda.gov/tn/how-spot-whole-grain-rich-foods-cacfp>
- Identifying Whole Grain-rich Foods for the CACFP (USDA handouts and webinars in English and Spanish)
<https://www.fns.usda.gov/tn/identifying-whole-grain-rich-foods-cacfp>
- Is My Recipe Whole Grain-Rich in the CACFP? (USDA handouts in English and Spanish):
<https://www.fns.usda.gov/tn/my-recipe-whole-grain-rich-cacfp>
- Grains (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 C Component (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>
- 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

Part B: WGR Requirement

For additional crediting resources, visit the “[Grains](#)” section of the CSDE’s [Crediting Foods in School Nutrition Programs](#) webpage.



Part C: Required Servings

Part C: Required Servings

The required quantities for the grains component are in oz eq. The preschool meal patterns require a serving of the grains component at breakfast and lunch. A serving of the grains component may be one of the two required meal components at afterschool snack. The table below summarizes the required oz eq of the grains component for each age group and meal.

Table 7-2. Required oz eq of the grains component

| Meal | Ages 1-2 | Ages 3-5 |
|-------------------|----------|----------|
| Breakfast | ½ | ½ |
| Lunch | ½ | ½ |
| Afterschool snack | ½ | ½ |

Meeting the Required Grain Servings

Menu planners may choose to serve one grain menu item or a combination of several grain menu items to meet the minimum requirement. Each serving must contain at least ¼ oz eq of grains (refer to “[Minimum creditable amounts](#)” in section 2). For example, a lunch menu for ages 3-5 could provide the required ½ oz eq of the grains component from:

- ¼ cup of brown rice (½ oz eq); or
- ⅛ cup of brown rice (¼ oz eq) and a ¼-ounce serving of a whole-grain roll (¼ oz eq).

Servings that contain less than ⅛ oz eq of grains do not credit in preschool menus.

When crediting menu items toward the grains component, menu planners must round down to the nearest ¼ oz eq. For example, a standardized recipe or commercial product that contains 0.49 oz eq of grains per serving credits as 0.25 oz eq of the grains component.

If a menu item contains less than the full serving of the grains component, the meal or afterschool snack must include additional grains to meet the full serving for each age group. For example, the breakfast meal pattern requires ½ oz eq of the grains component. If a menu item

Part C: Required Servings

contains $\frac{1}{4}$ oz eq of grains, the menu planner must include another menu item with at least $\frac{1}{4}$ oz eq of grains to provide the full serving.

USDA's Exhibit A Chart

The USDA's [Exhibit A: Grain Requirements for Child Nutrition Programs](#) summarizes the grain oz eq for nine groups (A-I) of creditable grain foods. Each group contains products with similar grain content.

The amount of a creditable grain food that provides 1 oz eq varies because different types of foods contain different amounts of creditable grains. For example, to credit as 1 oz eq of the grains component, a roll must weigh 28 grams (1 ounce), a corn muffin must weigh 34 grams (1.2 ounces), and a blueberry muffin must weigh 55 grams (2 ounces).

The required quantities for the grains component in Exhibit A are not the same for all Child Nutrition Programs because the meal patterns are different. The CSDE's resource, [Grain Ounce Equivalents for the Preschool Meal Patterns of the School Nutrition Programs](#), lists the Exhibit A grain oz eq that apply to the preschool meal patterns. Groups F and G (grain-based desserts) are not included because grain-based desserts do not credit in the preschool meal patterns (refer to "[Grain-based Desserts Prohibited](#)" in "Part A: Grain Crediting Requirements").



Part C: Required Servings

Methods to Determine 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 Preschool Meal Patterns of the School Nutrition Programs](#), and refer to “[Serving Requirements](#)” in the “Grains” section of the Crediting Foods in School Nutrition Programs webpage.

The USDA allows two methods for determining the oz eq contribution of creditable grain products and recipes. SFAs may use either method but must document how they determine the crediting information for commercial products and foods made from scratch. These methods are summarized below.

Method 1: Weight or volume (USDA’s Exhibit A chart)

Method 1 uses the USDA’s 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.

- **Groups A-G (baked goods)** include foods like crackers, breads, rolls, taco shells, muffins, waffles, pancakes, and grain-based desserts, e.g., cookies, cake, granola bars, and pastries. The amount of a food that provides 1 oz eq varies from 22 grams or 0.8 ounces for foods in group A to 125 grams or 4.4 ounces for foods in group G.
- **Group H (cereal grains)** includes foods like pasta, cooked breakfast cereals (e.g., oatmeal), 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 recipe (like rolled oats in bread) require 16 grams of creditable grains to credit as 1 oz eq of the grains component. For guidance on crediting cooked breakfast cereals, refer to the CSDE’s resource, [Crediting Breakfast Cereals in the Preschool Meal Patterns for the School Nutrition Programs](#).
- **Group I (RTE breakfast cereals)** includes 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

Part C: Required Servings

cereal, 1¼ cups of puffed cereal, and ¼ cup of granola. For guidance on crediting RTE breakfast cereals, refer to the CSDE's resource, [Crediting Breakfast Cereals in the Preschool Meal Patterns for the School Nutrition Programs](#).

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 webinars, [Exhibit A Grains Tool to the Rescue](#) and [How to Maximize the Exhibit A Grains Tool](#).

The CSDE's resource, [How to Use the Grain Ounce Equivalents Chart for the National School Lunch Program and School Breakfast Program](#), 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 13: Grain Ounce Equivalents of the CSDE's training program, [What's in a Meal: National School Lunch Program and School Breakfast Program Meal Patterns for Grades K-12](#).

Method 2: Creditable grains

Method 2 determines the oz eq for creditable commercial grain products and standardized recipes by calculating the total weight (grams) of creditable grains per serving. The grams of creditable grains are obtained from the commercial product's PFS or calculated from the grain quantities in the SFA's standardized recipe. The required grams of creditable grains per oz eq are different for creditable foods and WGR foods.

- **Creditable foods:** 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.
- **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 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 6: Meal Pattern Documentation of the CSDE's training program, [What's in a Meal: National School Lunch Program and School Breakfast Program Meal Patterns for Grades K-12](#)

Part C: Required Servings

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 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-E); 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. 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; and 2) how the product provides that amount according to the USDA's [Food Buying Guide for Child Nutrition Programs](#) (FBG) or USDA's regulations, guidance, or policies.
6. 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; and 2) how the product provides that amount according to the FBG or USDA's regulations, guidance, or policies.
7. 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; and 2) how the

Part C: Required Servings

product provides that amount according to the FBG or USDA’s regulations, guidance, or policies.

For specific guidance and examples, refer to the CSDE’s resource, [When Commercial Grain Products Require a Product Formulation Statement to Credit in the School Nutrition Programs](#).

Grain crediting tools

The tools below help menu planners determine the oz eq contribution of creditable grain products and standardized recipes.

- **USDA’s Exhibit A Grains Tool for commercial grain products:** This [online tool](#) of the USDA’s FBG determines the oz eq of commercial grain products. More information is available in USDA’s webinars, [Exhibit A Grains Tool to the Rescue](#) and [How to Maximize the Exhibit A Grains Tool](#).
- **CSDE’s CACFP crediting worksheets:** These Excel worksheets determine if grain products and recipes meet the CACFP crediting requirements and WGR criteria and calculate the oz eq contribution of the serving.
 - Worksheet 1: Crediting Commercial Grains in the Child and Adult Care Food Program
 - Worksheet 4: Crediting Family-size Recipes for Grains in the Child and Adult Care Food Program
 - Worksheet 5: Crediting Quantity Recipes for Grains in the Child and Adult Care Food Program

The CACFP grain crediting worksheets are available in the “[Documents/Forms](#)” section of the CSDE’s Crediting Foods in CACFP Child Care Programs webpage.

- **How to Use the Grain Ounce Equivalents Chart for the NSLP and SBP:** The CSDE’s resource, [How to Use the Grain Ounce Equivalents Chart for the National School Lunch Program and School Breakfast Program](#), reviews the steps for using the Exhibit A quantities to determine the meal pattern contribution of three types of commercial products and recipes. These include grain menu items in groups A-E that contain multiple small pieces per serving (e.g., crackers, hard pretzels, and animal crackers), multiple large pieces per serving (e.g., pancakes, slices of bread, and waffles), and one piece per serving (e.g., muffins, bagels, and rolls).
- **USDA’s Recipe Analysis Workbook:** The FBG’s online [Recipe Analysis Workbook](#) allows menu planners to search for ingredients, develop a standardized recipe, and

Part C: Required Servings

determine the standardized recipe's meal pattern contribution per serving. To access this tool, users must create a free account on the USDA's FBG website.

For additional guidance, refer to "[Serving Requirements](#)" in the "Grains" section of the Crediting Foods in School Nutrition Programs webpage.

Crediting Considerations for Bread

Menu planners should consider the crediting requirements below when determining the appropriate serving size for bread products and standardized recipes.

Crediting one slice of bread

Bread is in group B of the USDA's Exhibit A chart and requires 1 ounce (28 grams) to credit as 1 oz eq of the grains component. The weight of one slice of bread varies greatly among manufacturers and different types of bread products. For many types of breads, one slice weighs more or less than 1 ounce. This means that one slice of bread does not always provide 1 oz eq of the grains component. Menu planners must check the serving size on the product's Nutrition Facts label to determine the 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 $\frac{1}{4}$ oz eq (refer to "[Meeting the Required Grain Servings](#)" in this section). The example below shows this calculation.

- **Example of weight per slice calculation:**

The Nutrition Facts label for a multigrain bread indicates that the serving sizes 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.



Part C: Required Servings

2. Determine the grain oz eq per slice: Divide the grams per slice by 28 and round down to the nearest $\frac{1}{4}$ oz eq.
 - 22 grams divided by 28 grams equals 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.

Crediting sandwiches with two slices of bread

The oz eq contribution of a sandwich is determined by adding the weight of both slices together before rounding down to the nearest $\frac{1}{4}$ oz eq. The example below shows this calculation.

- **Example of oz eq calculation:**

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 $\frac{1}{4}$ oz eq.
 - 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.

Note: 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.

- 26 grams divided by 28 grams per oz eq equals 0.93 oz eq, which rounds down to 0.75 oz eq per slice, which equals 1.5 oz eq of the grains component for the two slices of bread in the sandwich.

Part C: Required Servings

Resources for Oz Eq

The resources below assist menu planners with determining the oz eq contribution of a grain product or recipe.

- CACFP Grains Ounce Equivalents Resources USDA):
<https://www.fns.usda.gov/tn/grains-ounce-equivalents-resources-cacfp>
- Calculation Methods for Grain Ounce Equivalents for the Preschool Meal Patterns of the School Nutrition Programs (CSDE):
https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/grain_calculation_snp_preschool.pdf
- Exhibit A Grains Tool to the Rescue (USDA webinar):
<https://www.fns.usda.gov/tn/exhibit-grains-tool-rescue>
- Exhibit A: Grain Requirements for Child Nutrition Programs (USDA):
<https://foodbuyingguide.fns.usda.gov/Content/TablesFBG/ExhibitA.pdf>
- Food Buying Guide Exhibit A Grains Tool (USDA):
<https://foodbuyingguide.fns.usda.gov/ExhibitATool/Index>
- Grain Ounce Equivalents for the Preschool Meal Patterns of the School Nutrition Programs (CSDE):
https://portal.ct.gov/-/media/sde/nutrition/nslp/preschool/grain_oz_eq_snp_preschool.pdf
- How to Maximize the Exhibit A Grains Tool (USDA webinar):
<https://www.fns.usda.gov/tn/how-maximize-exhibit-grains-tool>
- How to Use the Grain Ounce Equivalents Chart for the National School Lunch Program and School Breakfast Program (CSDE):
https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/how_to_use_ounce_equivalents_chart.pdf
- Preschool Meal Pattern Training for the School Nutrition Programs, Module 7: Grains Component (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>

Part C: Required Servings

- 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>
- Using Ounce Equivalents for Grains in the CACFP (USDA webpage):
<https://www.fns.usda.gov/tn/using-ounce-equivalents-grains-cacfp>
- 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..



8 — Resources

This section includes additional resources and websites to assist SFAs with meeting the preschool meal patterns and crediting, documentation, and meal service requirements. More links to information on the federal and state requirements and guidance for school meals are available on the CSDE's [Program Guidance for School Nutrition Programs](#) webpages. For a list of resources on the preschool meal patterns and crediting requirements, refer to the CSDE's [Resources for the Preschool Meal Patterns](#).

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 Preschool Meal Patterns of the School Nutrition Programs (CSDE):

https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/crediting_summary_charts_snp_preschool.pdf

Fruits (CSDE's Crediting Foods in School Nutrition Programs webpage):

<https://portal.ct.gov/sde/nutrition/crediting-foods-in-school-nutrition-programs/fruits>

Grains Component (CSDE's Crediting Foods in School Nutrition Programs webpage):

<https://portal.ct.gov/sde/nutrition/crediting-foods-in-school-nutrition-programs/grains>

Guide to Meeting the Preschool Meal Patterns and Crediting Requirements for the School Nutrition Programs (CSDE):

https://portal.ct.gov/-/media/sde/nutrition/nslp/preschool/guide_preschool_meal_patterns_snp.pdf

Guide to Menu Documentation for the School Nutrition Programs (CSDE):

https://portal.ct.gov/-/media/sde/nutrition/mpg/guide_menu_documentation_snp.pdf

Meats and Meat Alternates (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>

Milk (CSDE's Crediting Foods in School Nutrition Programs webpage):

<https://portal.ct.gov/sde/nutrition/crediting-foods-in-school-nutrition-programs/milk>

Noncreditable Foods in the Preschool Meal Patterns for the School Nutrition Programs (CSDE):

https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/noncreditable_foods_snp_preschool.pdf

Preschool Meal Pattern Training for the School Nutrition Programs (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>

Resources for the Preschool Meal Patterns (CSDE):

https://portal.ct.gov/-/media/sde/nutrition/nslp/preschool/resources_preschool_meal_patterns.pdf

Vegetables (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: National School Lunch Program and School Breakfast Program Meal Patterns for Grades K-12 (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

Choking Prevention (CSDE's Food Safety for Child Nutrition Programs webpage):

<https://portal.ct.gov/sde/nutrition/food-safety-for-child-nutrition-programs/choking-prevention>

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 Meeting the Preschool Meal Patterns and Crediting Requirements for the School Nutrition Programs (CSDE):

https://portal.ct.gov/-/media/sde/nutrition/nslp/preschool/guide_preschool_meal_patterns_snp.pdf

Guide to Menu Documentation for the School Nutrition Programs (CSDE):

https://portal.ct.gov/-/media/sde/nutrition/mpg/guide_menu_documentation_snp.pdf

Meal Patterns (CSDE's Meal Patterns for Preschoolers in School Nutrition Programs webpage):

<https://portal.ct.gov/sde/nutrition/meal-patterns-preschoolers-in-school-nutrition-programs#MealPatterns>

Menu Forms and Production Records (CSDE's Meal Patterns for Preschoolers in School Nutrition Programs webpage):

<https://portal.ct.gov/sde/nutrition/meal-patterns-preschoolers-in-school-nutrition-programs/menu-forms-and-production-records>

Menu Planning (CSDE's Meal Patterns for Preschoolers in School Nutrition Programs webpage):

<https://portal.ct.gov/sde/nutrition/meal-patterns-preschoolers-in-school-nutrition-programs/menu-planning>

Menu Planning for Child Nutrition Programs (CSDE):

<https://portal.ct.gov/sde/nutrition/menu-planning>

Noncreditable Foods in the Preschool Meal Patterns for the School Nutrition Programs (CSDE):

https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/noncreditable_foods_snp_preschool.pdf

Preschool Meal Pattern Training for the School Nutrition Programs (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>

Resources for the Preschool Meal Patterns (CSDE):

https://portal.ct.gov/-/media/sde/nutrition/nslp/preschool/resources_preschool_meal_patterns.pdf

Special Diets in School Nutrition Programs (CSDE webpage):

<https://portal.ct.gov/sde/nutrition/special-diets-in-school-nutrition-programs>

USDA Memo SP 37-2017: Flexibility for Co-Mingled Preschool Meals: Questions and Answers:

<https://www.fns.usda.gov/school-meals/flexibility-co-mingled-preschool-meals-questions-and-answers>

Using the Nutrition Facts Label in the CACFP (USDA handouts in English and Spanish):

<https://www.fns.usda.gov/tn/using-nutrition-facts-label-cacfp>

What's in a Meal: National School Lunch Program and School Breakfast Program Meal Patterns for Grades K-12 (CSDE's Meal Pattern Training for School Nutrition Programs webpage):
<https://portal.ct.gov/sde/nutrition/meal-pattern-training-materials>

Regulations and Policy

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.fns.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>

Laws and Regulations for Child Nutrition Programs (CSDE webpage):

<https://portal.ct.gov/sde/nutrition/laws-and-regulations-for-child-nutrition-programs>

Nutrition Standards for CACFP Meals and Snacks (USDA):

<https://www.fns.usda.gov/cacfp/meals-and-snacks>

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

USDA Final Rule (89 FR 31962): Child Nutrition Programs: Meal Patterns Consistent with the 2020-2025 Dietary Guidelines for Americans (“Laws/Regulations” section of CSDE’s Meal Patterns for Grades K-12 in School Nutrition Programs):

https://portal.ct.gov/sde/nutrition/meal-patterns-school-nutrition-programs/regulations#Final_Rule_Meal_Patterns_DGA

Requirements for the Child and Adult Care Food Program:

<https://www.fns.usda.gov/cacfp/questions-and-answers-updated-meal-pattern-requirements-child-and-adult-care-food-program>

USDA Memo CACFP 15-2016: Optional Best Practices to Further Improve Nutrition in the Child and Adult Care Food Program Meal Pattern:

<https://www.fns.usda.gov/cacfp/optional-best-practices-further-improve-nutrition-cacfp>

USDA Memo SP 01-2019 and CACFP 01-2019: Guidance for FY19: Updated CACFP Meal Patterns and Updated NSLP and SBP Infant and Preschool Meal Patterns:

<https://www.fns.usda.gov/guidance-fy19-updated-cacfp-meal-patterns-and-updated-nslp-and-sbp-infant-and-preschool-meal>

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.fns.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.fns.usda.gov/cn/procurement-qas-assist-implementation-final-rule>

Related Guidance

Beverage Requirements (CSDE):

<https://portal.ct.gov/sde/nutrition/beverage-requirements>

Child Nutrition Programs (CSDE):

<https://portal.ct.gov/sde/nutrition/child-nutrition-programs>

Farm to School (CSDE):

<https://portal.ct.gov/sde/nutrition/farm-to-school>

Food and Nutrition Service (FNS) Documents & Resources (USDA webpage):

<https://www.fns.usda.gov/resources>

Food and Nutrition Service (FNS) Instructions (CSDE):

<https://portal.ct.gov/sde/nutrition/fns-instructions-for-child-nutrition-programs>

Food Labeling & Nutrition (FDA):

<https://www.fda.gov/food/food-labeling-nutrition>

Laws and Regulations for Child Nutrition Programs (CSDE):

<https://portal.ct.gov/sde/nutrition/laws-and-regulations-for-child-nutrition-programs>

Manuals and Guides for Child Nutrition Programs (CSDE):

<https://portal.ct.gov/sde/nutrition/manuals-and-guides-for-child-nutrition-programs>

National School Lunch Program (CSDE):

<https://portal.ct.gov/sde/nutrition/national-school-lunch-program>

Nutrition Education (CSDE):

<https://portal.ct.gov/sde/nutrition/nutrition-education>

Offer versus Serve for Grades K-12 in School Nutrition Programs (CSDE):

<https://portal.ct.gov/sde/nutrition/offer-versus-serve-for-school-nutrition-programs>

Operational Memoranda for School Nutrition Programs (CSDE):

<https://portal.ct.gov/sde/lists/operational-memoranda-for-school-nutrition-programs>

Procurement for School Nutrition Programs (CSDE):

<https://portal.ct.gov/sde/nutrition/procurement-for-school-nutrition-programs>

Production Records for School Nutrition Programs (CSDE):

<https://portal.ct.gov/sde/nutrition/production-records-for-school-nutrition-programs>

Program Guidance for School Nutrition Programs (CSDE):

<https://portal.ct.gov/sde/nutrition/program-guidance-school-nutrition-programs>

Resources for Child Nutrition Programs (CSDE):

<https://portal.ct.gov/sde/nutrition/resources-for-child-nutrition-programs>

School Breakfast Program (CSDE):

<https://portal.ct.gov/sde/nutrition/school-breakfast-program>

School Lunch Tray and Table Talk (CSDE):

<https://portal.ct.gov/sde/nutrition/school-lunch-tray-and-table-talk>

Seamless Summer Option of the NSLP (CSDE):

<https://portal.ct.gov/sde/nutrition/seamless-summer-option-sso-of-the-nslp>

Special Diets in School Nutrition Programs (CSDE):

<https://portal.ct.gov/sde/nutrition/special-diets-in-school-nutrition-programs>

Training for Child Nutrition Programs (CSDE):

<https://portal.ct.gov/sde/nutrition/training-for-child-nutrition-programs>

Glossary

a la carte sales: Foods and beverages that are sold separately from reimbursable meals in the USDA school nutrition programs.

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 National School Lunch Program (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.

alternate protein products (APPs): APPs are generally single ingredient powders that are added to foods. Examples include soy flours, soy concentrates, soy isolates, whey protein concentrate, whey protein isolates, and casein. APPs include vegetable protein products. The USDA has specific requirements for crediting APPs in Child Nutrition Programs. For more information, refer to “[Crediting Alternate Protein Products \(APPs\)](#)” in section 3 and 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 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) that are one of the five vegetable subgroups recommended by the [Dietary Guidelines for Americans](#). 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.

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.

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 and Adult Care Food Program (CACFP): The USDA's federally assisted meal program providing nutritious meals and afterschool snacks to children in child care centers, family day care homes, and emergency shelters, and snacks and suppers to children participating in eligible at-risk afterschool care programs. The CACFP also provides meals and afterschool snacks to adults who receive care in nonresidential adult day care centers. For more information, visit the USDA's [CACFP](#) webpage and the CSDE's [CACFP](#) webpage.

Child Nutrition (CN) label: A statement 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 afterschool 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 afterschool 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, tacos, lasagna, chicken stir-fry, and smoothies made with milk and fruit. For example, macaroni and cheese contains pasta (grains component) and cheese (MMA component). 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).

co-mingling: The practice of serving meals or afterschool snacks to a variety of grades in the same service area at the same time, such as preschoolers and grades K-5. This practice typically occurs due to operational constraints within a school, such as limited time and space. For guidance on the meal pattern requirements for co-mingled meals, refer to section 4 of the CSDE's [Guide to Meal Service Requirements for Preschoolers in the School Nutrition Programs](#) and "[Co-mingled Meals and Afterschool Snacks](#)" in the "Meal Service" section of the CSDE's Meal Patterns for Preschoolers in School Nutrition Programs 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 the meal pattern requirements for a reimbursable meal or afterschool snack in the USDA Child Nutrition Programs. For more information, refer to "[Creditable Foods](#)" in section 2 and 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.

deep-fat frying: Cooking by submerging food in hot oil or other fat. The CACFP prohibits deep-fat frying foods on site.

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 U.S. Department of Agriculture jointly publish the *Dietary Guidelines* 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.

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 the School Nutrition Programs](#).

edible portion: The portion of a food that can be eaten after the nonedible parts are removed, for example, cooked lean meat without bone, and fruit without seeds or pits.

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 (B₁), riboflavin (B₂), niacin (B₃), folic acid, and iron. For more information, refer to 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.

Exhibit A chart: A USDA chart that indicates the required weight (groups A-G) or volume (groups H-I) for a grain food to provide 1 ounce equivalent (oz eq) or 1 serving of the grains component in the Child Nutrition Programs. The required quantities for the grains component in Exhibit A are not the same for all Child Nutrition Programs because each program has a different meal pattern. The CSDE's resource, [Grain Ounce Equivalents for the Preschool Meal Patterns of the School Nutrition Programs](#), lists the Exhibit A grain oz eq that apply to the preschool meal patterns. This chart may be used to determine the grain oz eq for commercial grain products and for recipes that indicate the weight of the prepared (cooked) serving. For more information, refer to the USDA's [Exhibit A: Grain Requirements for Child Nutrition Programs](#).

flour: Finely ground and sifted wheat or other grains such as rye, corn, rice, or buckwheat.

fluid milk substitutes: Plant-based beverages designed to replace cow's milk, such as soy milk, almond milk, rice milk, and oat milk. Fluid milk substitutes may replace regular cow's milk in reimbursable meals and afterschool snacks for children who do not consume regular milk due to non-disability reasons, if they meet the USDA's nutrition standards for fluid milk substitutes. Only certain brands of fluid milk substitutes meet these standards. 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 item: A specific food offered within the meal components that comprise reimbursable meals in the CACFP. A food item may contain one or more meal components or more than one serving of a single component. For example, macaroni and cheese is one food item that provides two meal components (grains and MMA). A 2-ounce whole grain bagel is one food item that provides 2 oz eq of grains.

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.

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 (e.g., 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., an "energy" bar made from processed flour that is fortified 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 that is comprised of fruits (fresh, frozen, canned, and dried) and pasteurized full-strength juice. For more information, refer to section 6 and visit the "Fruits" section of the CSDE's [Crediting Foods in School Nutrition Programs](#) webpage.

full component: The minimum quantity required in the preschool meal patterns for each meal and age group.

full serving: Refer to "full 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. The name of the full-strength fruit juice on the label must include one of the following terms: “juice,” “full-strength juice,” “100 percent juice,” “reconstituted juice,” or “juice from concentrate.” **Note:** The preschool meal patterns allow pasteurized full-strength juice to credit as either the vegetables component or fruits component at only one meal or snack per day. For more information, refer to “[Juice limit](#)” in section 6 and the CSDE’s resource, [Crediting Juice in the Preschool Meal Patterns for the School Nutrition Programs](#).

germ: The vitamin-rich sprouting section of the whole-grain kernel. Germ credits the same as enriched grains.

grain-based desserts: Desserts that are made primarily of grains and that do not credit in preschool menus. Examples include 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). Sweet crackers (graham crackers and animal crackers) are not grain-based desserts.

grains component: The meal component of the USDA meal patterns that is comprised of cereal grains and products made from their flours. Creditable grain foods include products and recipes that are WGR or enriched. Creditable cooked and RTE breakfast cereals include products that are WGR, enriched, or fortified. For more information, refer to section 7 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.

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 5 and “[Crediting Hominy as Grains](#)” in section 7.

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.

lean meat and poultry: Defined by the [Dietary Guidelines for Americans](#) 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% 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.

main dish: The main dish is generally considered 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 7.

meal components: The five food groups that comprise reimbursable meals in the USDA Child Nutrition Programs, including milk, fruits, vegetables, grains, and meats/meat alternates. For information on the individual meal components, refer to sections 3 through 7.

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, refer to section 1.

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 similar protein content to meat. Meat alternates include alternate protein products, cheese, eggs, cooked dry beans or peas, nuts and seeds and their butters (except for acorn, chestnut, and coconut), tofu and other soy products containing at least 5 grams of protein in 2.2 ounces (weight) or ¼ cup (volume), tempeh, and yogurt (unflavored or flavored) containing no more than 23 grams of sugars per 6 ounces. For more information, refer to section 4 and visit the “[Meats and Meat Alternates](#)” section of the CSDE’s [Crediting Foods in School Nutrition Programs](#) webpage.

meats/meat alternates component: The meal component of the USDA meal patterns that includes meats (e.g., beef, poultry, and fish) and meat alternates, such as eggs, cheese, yogurt, beans, peas, and lentils, and nuts, and seeds. For more information, refer to section 4 and visit the “[Meats and Meat Alternates](#)” section of the CSDE’s [Crediting Foods in School Nutrition Programs](#) webpage.

medical statement: A document 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 School Nutrition Programs](#) and visit 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 the reimbursable meal. Menu items consist of food items.

milk component: The meal component of the USDA meal patterns that includes pasteurized fluid milk that meets the fat content and flavor restrictions of the USDA 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 section 3 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. It 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, such as cheddar, Colby, Monterey Jack, mozzarella, muenster, provolone, Swiss, feta, and brie. Natural cheese also includes pasteurized blended cheese 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 4.

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 nutrition content similar 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 7.

noncreditable foods: Foods and beverages that do not count toward the meal patterns for the USDA’s Child Nutrition Programs. Noncreditable foods include foods and beverages in amounts that are too small to credit and foods and beverages that do not belong to the meal components. For more information, refer to [“Noncreditable Foods”](#) in section 2 and the CSDE’s resource, [Noncreditable Foods in the Preschool Meal Patterns for the School Nutrition Programs](#).

noncreditable grains: Grain ingredients and products that do not contribute toward the grains component of the preschool meal patterns. Examples include fiber and modified food starch (including potato, legume, and other vegetable flours). For a list of noncreditable grains for the preschool meal patterns, refer to the CSDE’s [Guide to Meeting the Whole Grain-rich Requirement for the Child and Adult Care Food Program](#).

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 more information on nonnutritive sweeteners, refer to [“Additional Information about High-Intensity Sweeteners Permitted for Use in Food in the United States”](#) on the FDA’s 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 nutrition requirements for nondairy beverages (such as soy milk) 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 based on a 1-cup serving (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 "[USDA's Nutrition Standards for Fluid Milk Substitutes](#)" in section 2 and 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.

ounce equivalent (oz eq): A weight-based unit of measure for the grains component and MMA component of the preschool meal patterns. One oz eq of the MMA component is sometimes more than a measured ounce, depending on the food's density and nutrition content. The amount of a grain food that provides 1 oz eq varies because different types of foods contain different amounts of creditable grains. One oz eq of the grains component is less than a measured ounce for some grain foods (such as pretzels, breadsticks, and crackers), equal to a measured ounce for some grain foods (such as bagels, biscuits, bread, rolls, cereal grains, and RTE breakfast cereals), and more than a measured ounce for some grain foods (such as muffins and pancakes). For more information, refer to the CSDE's resources, [Crediting Commercial Meat/Meat Alternate Products in the School Nutrition Programs](#) and [Grain Ounce Equivalents for the Preschool Meal Patterns of the School Nutrition Programs](#).

point-of-service meal/snack count: The moment in the food service operation where staff can accurately determine that a reimbursable free, reduced-price, or paid meal has been served to an eligible child or that a reimbursable snack has been served to an eligible child.

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. All creditable ingredients in this statement must match a description in the USDA’s [Food Buying Guide for Child Nutrition Programs](#). The PFS must be prepared on company letterhead with the signature of a company official and the date of issue. A PFS does not provide any warranty against audit claims. SFAs must check the manufacturer’s crediting information for accuracy prior to including the product in reimbursable meals. 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 preschool meals and afterschool snacks. Production records demonstrate how meals contribute to the required food components, food items or menu items for each day of operation. Production records are strongly encouraged for all child care programs, but are required for CACFP child care centers that follow the NSLP meal pattern. For more information, refer to section 3 of the CSDE’s [Guide to Menu Documentation for the School Nutrition Programs](#) and [Requirements for Production Records in the National School Lunch Program and School Breakfast Program](#), and visit the “Menu Forms and Production Records” section of the CSDE’s [Meal Patterns for Preschoolers in School Nutrition Programs](#) webpage.

pulses: The edible dry seeds from legumes, such as beans, lentils, chickpeas, and split peas. For more information, refer to “legumes” in this section.

recognizable food item: A food that is visible in the offered meal or afterschool snack and allows children to identify the food groups and amounts recommended for consumption at mealtime. Foods must be recognizable to credit in the preschool meal patterns. The USDA allows some exceptions, such as yogurt blended in fruit or vegetable smoothies, pureed fruits and vegetables in smoothies, and pasta made with 100 percent vegetable flour. For more information, refer to “[Yogurt in smoothies](#)” and “[Crediting Legume Flour Pasta Products as Meats/Meat Alternates](#)” in section 4; “[Crediting Pureed Vegetables](#)” and “[Crediting Pasta Products Made of Vegetable Flour](#)” in section 5; and “[Crediting Fruit and Vegetable Smoothies](#)” and “[Crediting Pureed Fruits](#)” in section 6.

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): The Commission on Dietetic Registration defines a RD and RDN as someone who has completed a minimum of a bachelor’s degree at a U.S. regionally accredited university or college and course work accredited or approved by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics (AND); 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; passed a national examination administered by the Commission on Dietetic Registration (CDR); and completed continuing professional educational requirements to maintain registration. For more information, visit the AND’s [What is a Registered Dietitian Nutritionist](#) website and the CDR’s [Registered Dietitian \(RD\) or Registered Dietitian Nutritionist \(RDN\) Certification](#) website.

reimbursable meals: Meals that offer the required meal components and minimum servings for each age group of the preschool meal patterns and are eligible for USDA reimbursement.

reimbursable snacks: Afterschool snacks that offer the required meal components and minimum servings for each age group of the preschool meal patterns and are eligible for USDA reimbursement.

saturated fats: Types of fat that raise blood cholesterol, which is a risk factor for cardiovascular disease. Major sources of saturated fats include coconut, palm, and palm kernel oils, butter, and beef fats. Saturated fats are 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.

serving size or portion: The weight, measure, or number of pieces or slices of a food or beverage. For and snacks to be reimbursable, SFAs must provide the minimum servings specified in the preschool meal patterns.

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.

standard of identity: The mandatory government requirements that determine what a food product (like whole-wheat bread) must contain or may contain to be marketed under a certain name in interstate commerce. These standards protect consumers by ensuring that a label accurately reflects what is inside. For example, mayonnaise is not an imitation spread, and ice cream is not a similar, but different, frozen dessert. The USDA develops standards for meat and poultry products. The FDA develops standards for other food products.

standardized recipe: A recipe that 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 recipes include specific information such as ingredients, weights and measures, preparation directions, serving directions, yield, and portion size. For more information, refer to section 4 of this guide and 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, recognized medical authorities include 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 the 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 product usually made from pollock (fish). A 3-ounce serving of surimi credits as 1 oz eq of the MMA component. For more information, refer to “[Crediting Surimi Seafood](#)” in section 4.

tempeh: A highly nutritious fermented soybean cake traditionally made from whole soybeans. 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. For more information, refer to “[Crediting Tempeh](#)” in section 4.

vegetable subgroups: The five categories of vegetables within the vegetables food group that are recommended by the [Dietary Guidelines for Americans](#). The subgroups include dark green, red/ orange, beans, peas, and lentils, starchy, and other vegetables. The preschool meal patterns do not require the vegetable subgroups. However, the USDA’s [CACFP best practices](#) recommend providing at least one serving of each vegetable subgroup per week. For more information, refer to the CSDE’s resource, [Vegetable Subgroups in the Child and Adult Care Food 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 that is comprised of vegetables (fresh, frozen, canned, and dried) and pasteurized full-strength juice. Vegetable juice cannot exceed half of the weekly vegetable offerings. For more information, refer to section 5 and 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.” Wheat bread is low in fiber unless the manufacturer has added fiber.

whole foods: Foods that are unprocessed or minimally processed, and do not contain added ingredients such as fat, sugars, and 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 (WGR): Foods that are 100 percent whole grain or contain at least 50 percent whole grains and any other grain ingredients are enriched. For more information, refer to “[Part B: WGR Requirement](#)” in section 7 and the CSDE’s [Guide to Meeting the Whole Grain-rich Requirement for the Child and Adult Care Food Program](#) and “[Whole Grain-rich Requirement](#)” in the “Grains” section of the Crediting Foods in School Nutrition Programs webpage.

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 fiber-rich bran, nutrient-rich germ, and starchy endosperm. Whole-wheat flour will be listed as the first grain ingredient.



CONNECTICUT
Education