

Grain Ounce Equivalents for the Preschool Meal Patterns of the School Nutrition Programs

School Year 2024-25 (July 1, 2024, through June 30, 2025)

This guidance applies to the U.S. Department of Agriculture’s (USDA) preschool meal patterns (ages 1-5) for 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 SSO follows the NSLP and SBP meal patterns. The requirements for the preschool meal patterns are the same as the Child and Adult Care Food Program (CACFP) meal patterns for children. For information on the preschool meal patterns and crediting foods, refer to the CSDE’s [Menu Planning Guide for the Preschool Meal Patterns of the School Nutrition Programs](#) and visit the “[Grains Component](#)” section of the CSDE’s [Meal Patterns for Preschoolers in School Nutrition Programs](#) webpage.



Contents

Overview of Preschool Ounce Equivalents (Oz Eq) Chart.....	2
Creditable Grain Foods.....	3
Preschool Whole Grain-rich (WGR) Requirement.....	3
Grain-based Desserts.....	4
Using the Preschool Grain Oz Eq Chart.....	4
When a Product Formulation Statement (PFS) is Required.....	5
Preschool Grain Oz Eq Chart.....	6
Resources.....	8

Grain Ounce Equivalents for the Preschool Meal Patterns of the School Nutrition Programs

Overview of Preschool Ounce Equivalents (Oz Eq) Chart

The U.S. Department of Agriculture's (USDA) [Exhibit A: Grain Requirements for Child Nutrition Programs](#), summarizes the required quantities for nine groups (A-I) of grain foods. These quantities are not the same for all Child Nutrition Programs because the meal patterns are different. The chart on pages 5-6 of this document lists the Exhibit A oz eq that apply to creditable grain foods in 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.

Groups A-E include baked goods, e.g., crackers, breads, rolls, taco shells, muffins, waffles, and pancakes. Group H includes cereal grains like pasta, cooked breakfast cereals, and other cereal grains, e.g., amaranth, barley, buckwheat, cornmeal, corn grits, farina, kasha, millet, oats, quinoa, wheat berries, and rolled wheat. Group I includes ready-to eat (RTE) cold breakfast cereals.

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 (group B) must weigh 28 grams or 1 ounce and a blueberry muffin (group D) must weigh 55 grams or 2 ounces. The minimum amount that credits toward the grains component is $\frac{1}{4}$ oz eq.



Grain Ounce Equivalents for the Preschool Meal Patterns of the School Nutrition Programs

Creditable Grain Foods

To credit as the grains component, commercial grain products and foods made from scratch must be made with creditable grains. 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.

- Creditable foods include commercial grain products and foods made from scratch that are whole-grain rich (WGR) or enriched. For guidance on the grain crediting requirements and how to identify WGR and enriched grains, refer to the Connecticut State Department of Education's (CSDE) resources, [How to Identify Creditable Grains for Preschoolers in the School Nutrition Programs](#), [Crediting Whole Grains in the School Nutrition Programs](#), and [Crediting Enriched Grains in the School Nutrition Programs](#),
- Creditable cooked and ready-to-eat (RTE) breakfast cereals include WGR, enriched, and fortified cereals. For additional guidance, refer to the CSDE's [Crediting Breakfast Cereals in the Preschool Meal Patterns for the School Nutrition Programs](#).

Effective with school year 2025-26 (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.

Additional resources on the grains component of the NSLP and SBP preschool meal patterns are available in the "[Grains Component](#)" section of the CSDE's [Meal Patterns for Preschoolers in School Nutrition Programs](#) webpage.

Preschool Whole Grain-rich (WGR) Requirement

At least one serving of grains per day must be WGR between all meals and ASP snacks served to preschoolers. The USDA recommends at least two servings of WGR grains per day. WGR foods for the preschool meal patterns include 100 percent whole grains and foods that contain a blend of whole (at least 50 percent) and enriched grains. For guidance on identifying WGR foods 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](#).

Grain Ounce Equivalents for the Preschool Meal Patterns of the School Nutrition Programs

Grain-based Desserts

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.

Sweet crackers (like graham crackers and animal crackers) are not grain-based desserts. However, as a best practice, the USDA encourages SFAs to limit sweet crackers due to their higher sugar content. The CSDE recommends limiting sweet crackers to no more than twice per week, between all meals and snacks served to preschoolers. For more information on grain-based desserts, refer to [USDA Memo CACFP 16-2017: Grain-Based Desserts in the Child and Adult Care Food Program](#) and visit the USDA's [Grain-based Desserts in the CACFP](#) webpage.

Using the Preschool Grain Oz Eq Chart

The oz eq chart in this document (refer to pages 4-5) indicates the required weight (groups A-E) or volume (groups H and I) for each group of grain products to credit as 1 oz eq of the grains component in the NSLP, SBP, and ASP preschool meal patterns. It also indicates the required quantities for $\frac{3}{4}$ oz eq, $\frac{1}{2}$ oz eq, and $\frac{1}{4}$ oz eq (the minimum creditable amount).

School food authorities (SFAs) must know the grain item's serving weight (groups A-G) or volume (groups H and I) to use this chart. Oz eq are calculated by dividing the **grain item's serving weight/volume** by the **required weight/volume for 1 oz eq** of the applicable grain group.

- The serving weight/volume for commercial products is listed on the Nutrition Facts label or product formulation statement (PFS).
- The serving weight/volume for foods made from scratch is determined from the SFA's standardized recipe. If the standardized recipe does not provide this information, SFAs must either determine the average serving weight/volume by weighing or measuring several portions (refer to the CSDE's [Yield Study Data Form for Child Nutrition Programs](#)) or use the creditable grains method for determining oz eq (refer to the CSDE's resource, [Calculation Methods for Grain Ounce Equivalents for the Preschool Meal Patterns of the School Nutrition Programs](#)).

Grain Ounce Equivalents for the Preschool Meal Patterns of the School Nutrition Programs

The steps for using the oz eq chart are indicated in the CSDE's resource, [How to Use the Grain Ounce Equivalents Chart for the National School Lunch Program and School Breakfast Program](#). Training is available in module 13 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](#). For detailed guidance on both methods for determining the oz eq of commercial grain products and standardized recipes, refer to the CSDE's resource, [Calculation Methods for Grain Ounce Equivalents for the Preschool Meal Patterns of the School Nutrition Programs](#).

When a Product Formulation Statement (PFS) is Required

The preschool oz eq chart can only be used for creditable grain foods. A manufacturer's PFS is required when a commercial product's ingredients statement and packaging do not provide sufficient crediting information. For guidance on when a PFS is required and what it must include, refer to the CSDE's resources, [When Commercial Grain Products Require a Product Formulation Statement to Credit in the School Nutrition Programs](#) and [Using Product Formulation Statements in the School Nutrition Programs](#).

Grain Ounce Equivalents for the Preschool Meal Patterns of the School Nutrition Programs

Preschool Grain Oz Eq Chart

This chart lists the Exhibit A oz eq (groups A-E and H-I) that apply to creditable grain foods in the preschool meal patterns. Groups F and G (grain-based desserts) are not included because grain-based desserts do not credit in preschool meals and snacks.

Group A	Group A Servings
Bread-type coating Breadsticks, hard Chow Mein noodles Crackers, savory, e.g., saltines and snack crackers Croutons Pretzels, hard Stuffing, dry (weights apply to bread in stuffing)	1 oz eq = 22 grams or 0.8 ounce ¾ oz eq = 17 grams or 0.6 ounce ½ oz eq = 11 grams or 0.4 ounce ¼ oz eq = 6 grams or 0.2 ounce
Group B	Group B Servings
Bagels Batter-type coating Biscuits Breads, e.g., white, wheat, whole wheat, French, Italian Buns, hamburger and hot dog Crackers, sweet, e.g., graham crackers and animal crackers, all shapes ¹ Egg roll skins English muffins Pita bread Pizza crust Pretzels, soft Rolls Taco shells Tortilla chips Tortillas	1 oz eq = 28 grams or 1 ounce ¾ oz eq = 21 grams or 0.75 ounce ½ oz eq = 14 grams or 0.5 ounce ¼ oz eq = 7 grams or 0.25 ounce
Group C	Group C Servings
Cornbread Corn muffins Croissants Pancakes Piecrust (only in meat/meat alternate pies) Waffles	1 oz eq = 34 grams or 1.2 ounces ¾ oz eq = 26 grams or 0.9 ounce ½ oz eq = 17 grams or 0.6 ounce ¼ oz eq = 9 grams or 0.3 ounce

¹ As a best practice, the USDA encourages preschool menus to limit sweet crackers (graham crackers and animal crackers) because of their higher sugar content. The CSDE recommends limiting sweet crackers to no more than twice per week, between all meals and snacks served to preschoolers

Grain Ounce Equivalents for the Preschool Meal Patterns of the School Nutrition Programs

Group D	Group D Servings
Muffins, all except corn	1 oz eq = 55 grams or 2 ounces $\frac{3}{4}$ oz eq = 42 grams or 1.5 ounces $\frac{1}{2}$ oz eq = 28 grams or 1.0 ounce $\frac{1}{4}$ oz eq = 14 grams or 0.5 ounce
Group E	Group E Servings
French toast	1 oz eq = 69 grams or 2.4 ounces $\frac{3}{4}$ oz eq = 52 grams or 1.8 ounces $\frac{1}{2}$ oz eq = 35 grams or 1.2 ounces $\frac{1}{4}$ oz eq = 18 grams or 0.6 ounce
Group H	Group H Servings
Barley Breakfast cereals, cooked ² Bulgur or cracked wheat Cereal grains, e.g., amaranth, buckwheat, cornmeal, corn grits, farina, kasha, millet, oats, quinoa, wheat berries, and rolled wheat Macaroni, all shapes Noodles, all varieties Pasta, all shapes Ravioli, noodle only Rice, brown or enriched white	1 oz eq = $\frac{1}{2}$ cup cooked or 1 ounce (28 grams) dry $\frac{1}{2}$ oz eq = $\frac{1}{4}$ cup cooked or $\frac{1}{2}$ ounce (14 grams) dry
Group I	Group I Servings
Ready-to-eat (RTE) breakfast cereals (cold dry) ²	1 oz eq = 1 cup or 1 ounce for flakes and rounds $\frac{1}{4}$ cups or 1 ounce for puffed cereal $\frac{1}{4}$ cup or 1 ounce for granola $\frac{1}{2}$ oz eq = $\frac{1}{2}$ cup or $\frac{1}{2}$ ounce for flakes and rounds $\frac{3}{4}$ cup or $\frac{1}{2}$ ounce for puffed cereal $\frac{1}{8}$ cup or $\frac{1}{2}$ ounce for granola

² RTE and cooked breakfast cereals must be WGR, enriched, or fortified, and cannot exceed 6 grams of sugars per dry ounce. Effective 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 breakfast cereals from total sugars to added sugars (no more than 6 grams of added sugars per dry ounce). For more information, refer to the CSDE's resource, [Crediting Breakfast Cereals in the Preschool Meal Patterns for the School Nutrition Programs](#), and visit the USDA's webpage, [Choose Breakfast Cereals that are Lower in Sugar](#).

Grain Ounce Equivalents for the Preschool Meal Patterns of the School Nutrition Programs

Resources

Calculation Methods for Grain Ounce Equivalents for the Preschool Meal Patterns of the School Nutrition Programs (CSDE):

https://portal.ct.gov/-/media/sde/nutrition/cacfp/crediting/wgr_requirement_cacfp.pdf

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 Enriched Grains in the School Nutrition Programs (CSDE):

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

Crediting Whole Grains in the School Nutrition Programs (CSDE):

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

Exhibit A: Grain Requirements for Child Nutrition Programs (USDA):

<https://foodbuyingguide.fns.usda.gov/Content/TablesFBG/ExhibitA.pdf>

Exhibit A Grains Tool to the Rescue (USDA Webinar):

<https://www.fns.usda.gov/tn/exhibit-grains-tool-rescue>

Food Buying Guide Exhibit A Grains Tool (USDA):

<https://www.fns.usda.gov/tn/food-buying-guide-interactive-web-based-tool>

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

Grain-based Desserts in the CACFP (USDA handouts and webinars in English and Spanish):

<https://www.fns.usda.gov/tn/grain-based-desserts-cacfp>

Grains Component for Preschoolers (“Related Resources” section of the 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>

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 Identify Creditable Grains for Preschoolers in the School Nutrition Programs (CSDE):

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

Grain Ounce Equivalents for the Preschool Meal Patterns of the School Nutrition Programs

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

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

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

Menu Planning Guide for the Preschool Meal Patterns of the School Nutrition Programs (CSDE):

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

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

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

Tips for Evaluating a Manufacturer's Product Formulation Statement (USDA):

<https://fns-prod.azureedge.us/sites/default/files/resource-files/manufacturerPFStipsheet.pdf>

Upcoming Meal Pattern Changes (CSDE's Meal Patterns for Grades K-12 in School Nutrition Programs webpage):

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

USDA Final Rule: Child Nutrition Programs: Meal Patterns Consistent with the 2020-2025 Dietary Guidelines for Americans (89 FR 31962):

<https://www.federalregister.gov/documents/2024/04/25/2024-08098/child-nutrition-programs-meal-patterns-consistent-with-the-2020-2025-dietary-guidelines-for>

Using Ounce Equivalents for Grains in the Child and Adult Care Food Program (USDA handouts in English and Spanish):

<https://www.fns.usda.gov/tn/using-ounce-equivalents-grains-cacfp>

Grain Ounce Equivalents for the Preschool Meal Patterns of the School Nutrition Programs

For more information, visit the “[Grains Component](#)” section of the CSDE’s [Meal Patterns for Preschoolers in School Nutrition Programs](#) webpage or contact the [school nutrition programs staff](#) at the Connecticut State Department of Education, Bureau of Child Nutrition Programs, 450 Columbus Boulevard, Suite 504, Hartford, CT 06103-1841. This document is available at https://portal.ct.gov/-/media/sde/nutrition/nslp/crediting/grain_calculation_snp_preschool.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, audiotape, 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

