

# Grain Ounce Equivalents for the National School Lunch Program and School Breakfast Program Preschool Meal Patterns

This guidance applies to the U.S. Department of Agriculture’s (USDA) meal patterns for preschoolers (ages 1-4) in 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 preschool meal patterns. The requirements for the preschool meal patterns are the same as the Child and Adult Care Food Program (CACFP). For information on the preschool meal patterns and crediting foods, refer to the CSDE’s [Menu Planning Guide for Preschoolers in the National School Lunch Program and School Breakfast Program](#) and visit the “Grains Component for Preschoolers” section of the CSDE’s [Meal Patterns for Preschoolers in School Nutrition Programs](#) webpage.



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# Grain Ounce Equivalents for the NSLP and SBP Preschool Meal Patterns

## 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 in 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.

## 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 National School Lunch Program and School Breakfast Program*, *Crediting Whole Grains in the National School Lunch Program and School Breakfast Program*, and *Crediting Enriched Grains in the National School Lunch Program and School Breakfast Program*.
- 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 for Preschoolers in the National School Lunch Program and School Breakfast Program*.

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

# Grain Ounce Equivalents for the NSLP and SBP Preschool Meal Patterns

## 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](#).

## 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 Preschoolers in the National School Lunch Program and School Breakfast Program](#)).

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 Preschoolers in the National School Lunch Program and School Breakfast Program](#).

## When a 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 information to determine if it meets the crediting criteria. 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 NSLP and SBP Preschool Meal Patterns

### Preschool Grain Oz Eq Chart

This chart reflects the required quantities for nine groups (A-I) of grain foods in the USDA's *Exhibit A: Grain Requirements for Child Nutrition Programs*. Groups F and G (grain-based desserts) are not included because grain-based desserts do not credit in the preschool meal patterns. The required preschool meal pattern serving is ½ oz eq for ages 1-4.

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

<sup>1</sup> 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 not serving sweet crackers more than twice per week, between all meals and snacks served.

## Grain Ounce Equivalents for the NSLP and SBP Preschool Meal Patterns

Group D		Group E		Group F	
Foods	Oz eq	Foods	Oz eq	Foods	Oz eq
Muffins, all except corn	<b>1 oz eq</b> = 55 grams or 2 ounces  <b>¾ oz eq</b> = 42 grams or 1.5 ounces  <b>½ oz eq</b> = 28 grams or 1.0 ounce  <b>¼ oz eq</b> = 14 grams or 0.5 ounce	French toast	<b>1 oz eq</b> = 69 grams or 2.4 ounces  <b>¾ oz eq</b> = 52 grams or 1.8 ounces  <b>½ oz eq</b> = 35 grams or 1.2 ounces  <b>¼ oz eq</b> = 18 grams or 0.6 ounce	None <sup>2</sup>	
Group G		Group H		Group I	
Foods	Oz eq	Foods	Oz eq	Foods	Oz eq
None <sup>2</sup>		Barley Breakfast cereals, cooked <sup>3</sup> 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	<b>1 oz eq</b> = ½ cup cooked or 1 ounce (28 grams) dry  <b>½ oz eq</b> = ¼ cup cooked or ½ ounce (14 grams) dry	Ready-to-eat (RTE) breakfast cereals (cold dry) <sup>3</sup>  <b>1 oz eq</b> = 1 cup or 1 ounce for flakes and rounds ¼ cups or 1 ounce for puffed cereal ¼ cup or 1 ounce for granola  <b>½ oz eq</b> = ½ cup or ½ ounce for flakes and rounds ¾ cup or ½ ounce for puffed cereal ⅛ cup or ½ ounce for granola

<sup>2</sup> Grain-based desserts (excluding sweet crackers such as graham crackers and animal crackers) are not listed in this chart because they do not credit in the preschool meal patterns. Examples 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 (e.g., cinnamon buns, Danish, eclairs, sweet buns, sweet rolls, and toaster pastries) 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), and rice pudding. For more information, visit the USDA's webpage, [Grain-based Desserts in the CACFP](#).

<sup>3</sup> RTE and cooked breakfast cereals must be whole grain, enriched, or fortified and cannot contain more than 6 grams of sugars per dry ounce (no more than 21.2 grams of sucrose and other sugars per 100 grams of dry cereal). For more information, refer to the CSDE's resource, [Crediting Breakfast Cereals for Preschoolers in the National School Lunch Program and School Breakfast Program](#), and visit the USDA's webpage, [Choose Breakfast Cereals that are Lower in Sugar](#).

# Grain Ounce Equivalents for the NSLP and SBP Preschool Meal Patterns

## Resources

Calculation Methods for Grain Ounce Equivalents for Preschoolers in the National School Lunch Program and School Breakfast Program (CSDE):

[https://portal.ct.gov/-/media/SDE/Nutrition/CACFP/Crediting/WGR\\_Requirement\\_CACFP.pdf](https://portal.ct.gov/-/media/SDE/Nutrition/CACFP/Crediting/WGR_Requirement_CACFP.pdf)

Crediting Breakfast Cereals for Preschoolers in the National School Lunch Program and School Breakfast Program (CSDE):

[https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/Credit\\_Cereals\\_SNP\\_preschool.pdf](https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/Credit_Cereals_SNP_preschool.pdf)

Crediting Enriched Grains in the National School Lunch Program and School Breakfast Program (CSDE):

[https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/Credit\\_Enriched\\_Grains\\_SNP.pdf](https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/Credit_Enriched_Grains_SNP.pdf)

Crediting Whole Grains in the National School Lunch Program and School Breakfast Program (CSDE):

[https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/Credit\\_Whole\\_Grains\\_SNP.pdf](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](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](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 (CSDE 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](https://portal.ct.gov/-/media/SDE/Nutrition/CACFP/Crediting/WGR_Requirement_CACFP.pdf)

How to Identify Creditable Grains for Preschoolers in the National School Lunch Program and School Breakfast Program (CSDE):

[https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/Identify\\_Creditable\\_Grains\\_SNP\\_preschool.pdf](https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/Identify_Creditable_Grains_SNP_preschool.pdf)

## Grain Ounce Equivalents for the NSLP and SBP Preschool Meal Patterns

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](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 Preschoolers in the National School Lunch Program and School Breakfast Program (CSDE):

[https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Preschool/Menu\\_Planning\\_Guide\\_Preschool.pdf](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](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](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>

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-child-and-adult-care-food-program-questions-and-answers-0>

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 SP 34-2019, CACFP 15-2019, and SFSP 15-2019: Crediting Coconut, Hominy, Corn Masa, and Masa Harina in the Child Nutrition Programs:

[https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Memos/OM2019/SP34\\_CACFP15\\_SFSP15-2019s.pdf](https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Memos/OM2019/SP34_CACFP15_SFSP15-2019s.pdf)

Using Ounce Equivalents for Grains in the CACFP (USDA handouts in English and Spanish):

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

Using Product Formulation Statements in the School Nutrition Programs (CSDE):

[https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/Product\\_Formulation\\_Statements.pdf](https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/Product_Formulation_Statements.pdf)

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](https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/When_Commercial_Grain_Products_Require_PFS_SNP.pdf)



## Grain Ounce Equivalents for the NSLP and SBP Preschool Meal Patterns



For more information, refer to the CSDE's *Menu Planning Guide for Preschoolers in the National School Lunch Program and School Breakfast Program* and 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\\_Oz\\_Eq\\_SNP\\_preschool.pdf](https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/Grain_Oz_Eq_SNP_preschool.pdf).

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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](mailto:program.intake@usda.gov)

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