

How to Use the Grain Ounce Equivalents Chart for the Child and Adult Care Food Program

This guidance applies to reimbursable meals and snacks served in child care centers, family day care homes, emergency shelters, at-risk afterschool care centers, and adult day care centers that participate in the U.S. Department of Agriculture’s (USDA) Child and Adult Care Food Program (CACFP).

For information on the CACFP meal patterns for children and the CACFP adult meal patterns, visit the Connecticut State Department of Education’s (CSDE) [Meal Patterns for the Child and Adult Care Food Program](#) webpage. For information on the crediting requirements, visit the CSDE’s [Crediting Foods in the Child and Adult Care Food Program](#) webpage and [Crediting Documentation for the Child Nutrition Programs](#) webpage.



Contents

Exhibit A: Grain Requirements for Child Nutrition Programs	2
Grain-based desserts	2
Exhibit A Oz Eq Calculation Method	3
Commercial products	3
Foods made from scratch in groups A-G.....	3
Rounding rules	4
Crediting Examples	4
Example 1: Multiple small pieces per serving.....	5
Steps for determining oz eq of grain item with multiple small pieces per serving.....	5
Example 2: Multiple large pieces per serving.....	6
Steps for determining oz eq of grain item with multiple large pieces per serving	6
Example 3: One piece per serving.....	7
Steps for determining oz eq of grain item with multiple large pieces per serving	7
Grain Crediting Tools	8
Resources	8



How to Use the Grain Ounce Equivalents Chart for the Child and Adult Care Food Program

Exhibit A: Grain Requirements for Child Nutrition Programs

The required quantities for the grains component are in ounce equivalents (oz eq). The USDA's chart, [Exhibit A: Grain Requirements for Child Nutrition Programs](#), summarizes the required quantities for nine groups (A-I) of grain foods.

- Groups A-F include baked goods, such as crackers, breads, rolls, taco shells, muffins, waffles, pancakes, and grain-based desserts, e.g., cookies, cake, granola bars, and pastries.
- Group H includes cereal grains, such as pasta, rice, cooked breakfast cereals, barley, cornmeal, and quinoa.
- Group I includes ready-to-eat cold breakfast cereals.

The CSDE's resource, [Grain Ounce Equivalents Chart for the Child and Adult Care Food Program](#), indicates the applicable Exhibit A quantities and requirements for the CACFP meal patterns.

The Exhibit A quantities are one of the two methods for determining the oz eq of a grain menu item; the other method is the creditable grains per serving. For guidance on both methods for determining oz eq, refer to the CSDE's resource, [Calculation Methods for Grain Ounce Equivalents in the Child and Adult Care Food Program](#).

Grain-based desserts

The steps in this document do not apply to grain-based desserts because these foods do not credit in the CACFP 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 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.

Sweet crackers (like graham crackers and animal crackers) are not included in the restrictions for grain-based desserts. They may be served in reimbursable meals and snacks.

How to Use the Grain Ounce Equivalents Chart for the Child and Adult Care Food Program

As a best practice, the USDA encourages CACFP facilities 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 in the CACFP.

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.

Exhibit A Oz Eq Calculation Method

CACFP facilities must know the applicable weight or volume of the grain menu item to use the Exhibit A oz eq calculation method. The oz eq contribution is calculated by dividing the grain menu item's serving weight or volume by the required weight or volume for 1 oz eq for the applicable Exhibit A grain group.

Commercial products

The serving weight or volume of commercial products is determined from the serving information listed on the Nutrition Facts label or product formulation statement (PFS). The oz eq chart cannot be used if the product's ingredients statement and packaging do not provide sufficient information to determine if it meets the meal pattern crediting criteria. These products require a PFS.

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 Child and Adult Care Food Program](#) and [Using Product Formulation Statements in the Child and Adult Care Food Program](#). Additional guidance on PFS forms is available in the "Product Formulation Statements" section of the CSDE's Crediting Documentation for the Child Nutrition Programs webpage.

Foods made from scratch in groups A-G

To use the oz eq chart for foods made from scratch in groups A-G, CACFP facilities must have a standardized recipe on file that indicates the weight of the prepared (cooked) serving. If the standardized recipe does not provide this information, CACFP facilities must use one of the two methods below.

1. Determine the average serving weight by weighing several portions (refer to the CSDE's [Yield Study Data Form for the Child Nutrition Programs](#)), then use the oz eq chart.
2. Use the creditable grains method for determining oz eq (refer to the CSDE's resource, [Calculation Methods for Grain Ounce Equivalents in the Child and Adult Care Food Program](#)).

How to Use the Grain Ounce Equivalents Chart for the Child and Adult Care Food Program

The oz eq chart cannot be used if the grain menu item's serving weight is not known.

Rounding rules

CACFP facilities must follow the rounding rules below when calculating the oz eq of a commercial grain product or standardized recipe.

- **Oz eq contribution:** When determining the oz eq of a grain food, always round down to the nearest $\frac{1}{4}$ oz eq. For example, if the calculation indicates that a bagel contains 1.49 oz eq, round down to 1.25 oz eq.
- **Number of pieces per serving:** When determining the number of pieces needed to credit as 1 oz eq., always round up to the next whole number. For example, if the calculation indicates that 6.7 pretzels credit as 1 oz eq, round up to 7 pretzels.

Menu planners must use the appropriate rounding rule to correctly calculate the grain item's oz eq contribution.

Crediting Examples

The examples below show the steps for using the Exhibit A quantities in the CSDE's oz eq chart to determine the oz eq for grain menu items in groups A-G. These steps are used for commercial grain products and may also be used for standardized recipes if the menu planner knows the weight of the prepared (cooked) serving (refer to "[Foods made from scratch in groups A-G](#)" in this document).

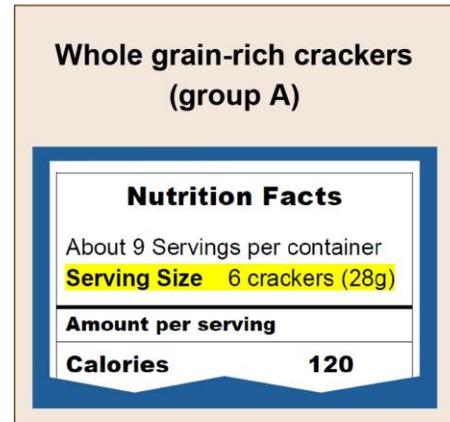
The examples include three different categories of commercial products and standardized recipes: 1) grain items that contain multiple small pieces per serving, such as crackers, hard pretzels, and animal crackers ([example 1](#)); 2) grain items that contain multiple large pieces per serving, such as pancakes, slices of bread, and waffles ([example 2](#)); and 3) grain items that contain one piece per serving, such as muffins, bagels, and rolls ([example 3](#)). The calculation steps are different for each category.

Before determining a menu item's oz eq, check that the commercial grain product or standardized recipe is creditable, i.e., whole grain-rich (WGR) or enriched. For information on identifying creditable grain foods, refer to the CSDE's resources, [How to Identify Creditable Grains for the Child and Adult Care Food Program](#), [Guide to Meeting the Whole Grain-rich Requirement the Child and Adult Care Food Program](#) and [Crediting Enriched Grains in the Child and Adult Care Food Program](#).

How to Use the Grain Ounce Equivalents Chart for the Child and Adult Care Food Program

Example 1: Multiple small pieces per serving

For grain items that contain multiple small pieces per serving (such as crackers, hard pretzels, and animal crackers), calculate the number of pieces per oz eq by dividing the required weight (grams) for 1 oz eq of the applicable grain group listed in Exhibit A by the grams per piece. The steps below show this calculation for an example of whole grain-rich crackers in group A.



Group A

Bread sticks, hard
Bread-type coating
Chow Mein noodles
Crackers, savory, e.g., saltines and snack crackers
Croutons
Pretzels, hard
Stuffing, dry **Note:** weights apply to bread in stuffing

Oz Eq for Group A

1 oz eq = 22 grams or 0.8 ounce
 $\frac{3}{4}$ oz eq = 17 grams or 0.6 ounce
 $\frac{1}{2}$ oz eq = 11 grams or 0.4 ounce
 $\frac{1}{4}$ oz eq = 6 grams or 0.2 ounce

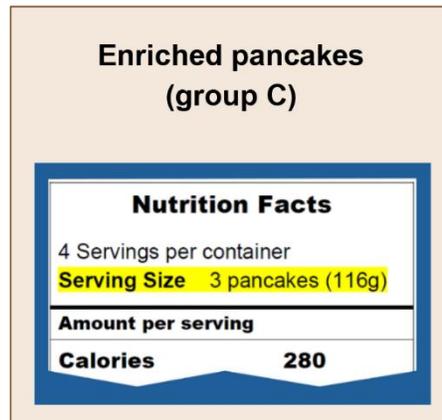
Steps for determining oz eq of grain item with multiple small pieces per serving

- 1. Grams per manufacturer's serving:** List the manufacturer's serving size in grams (g) from the Nutrition Facts label or PFS: 28 grams
- 2. Pieces per manufacturer's serving:** List the number of pieces per manufacturer's serving from the Nutrition Facts label or PFS: 6 pieces
- 3. Calculate grams per piece:** Divide grams per serving (step 1) by pieces per serving (step 2): 28 grams divided by 6 pieces = 4.67 grams per piece
- 4. Required weight for 1 oz eq:** List the required weight for 1 oz eq for the product's group (A-G) in Exhibit A. 22 grams
- 5. Calculate number of pieces per oz eq:** Divide the required weight for 1 oz eq (step 4) by the grams per piece (step 3): 22 grams divided by 4.67 grams per piece = 4.7 pieces per oz eq
- 6. Round up to next whole number:** 5 pieces (crackers) = 1 oz eq

How to Use the Grain Ounce Equivalents Chart for the National School Lunch Program and School Breakfast Program

Example 2: Multiple large pieces per serving

For grain items that contain multiple large pieces per serving (such as pancakes, slices of bread, and waffles), calculate the oz eq contribution per piece by dividing the required weight (grams) for 1 oz eq of the applicable grain group listed in Exhibit A by the grams per piece. The steps below show this calculation for an example of enriched pancakes in group C.



Group C	Oz Eq for Group C
Corn muffins	1 oz eq = 34 grams or 1.2 ounces
Croissants	$\frac{3}{4}$ oz eq = 26 grams or 0.9 ounce
Pancakes	$\frac{1}{2}$ oz eq = 17 grams or 0.6 ounce
Piecrust (only in meat or meat alternate pies)	$\frac{1}{4}$ oz eq = 9 grams or 0.3 ounce
Waffles	

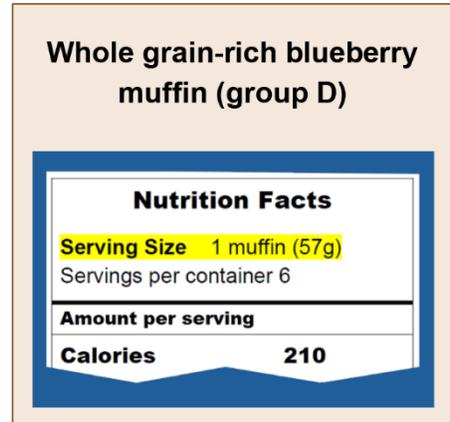
Steps for determining oz eq of grain item with multiple large pieces per serving

1. **Grams per manufacturer's serving:** List the manufacturer's serving size in grams (g) from the Nutrition Facts label or PFS: 116 grams
2. **Pieces per manufacturer's serving:** List the number of pieces per manufacturer's serving from the Nutrition Facts label or PFS: 3 pieces
3. **Calculate grams per piece:** Divide grams per manufacturer's serving (step 1) by pieces per manufacturer's serving (step 2): 116 grams divided by 3 pieces = 38.67 grams per piece
4. **Required weight for 1 oz eq:** List the required weight for 1 oz eq for the product's group (A-G) in Exhibit A. 34 grams
5. **Calculate oz eq per piece:** Divide grams per piece (step 3) by required weight for 1 oz eq (step 4): 38.67 grams divided by 34 grams = 1.14 oz eq per piece
6. **Round down to nearest $\frac{1}{4}$ oz eq:** 1 oz eq per piece (1 pancake)

How to Use the Grain Ounce Equivalents Chart for the National School Lunch Program and School Breakfast Program

Example 3: One piece per serving

For grain items that contain one piece per serving (such as muffins, bagels, and rolls), calculate the oz eq contribution per serving by dividing the grams per serving by the required weight (grams) for 1 oz eq of the applicable grain group listed in Exhibit A. The steps below show this calculation for an example of a whole grain-rich blueberry muffin in group D.



Group D	Oz Eq for Group D
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

Steps for determining oz eq of grain item with multiple large pieces per serving

1. **Grams per manufacturer’s serving:** List the serving size in grams (g) from the Nutrition Facts label or PFS: 57 grams
2. **Required weight for 1 oz eq:** List the required weight for 1 oz eq for the product’s group (A-G) in Exhibit A: 55 grams
3. **Calculate oz eq per serving:** Divide the grams per manufacturer’s serving (step 1) by the required weight for 1 oz eq (step 2): 57 grams divided by 55 grams= 1.04 oz eq per muffin
4. **Round down to the nearest $\frac{1}{4}$ oz eq:** 1 oz eq per muffin

How to Use the Grain Ounce Equivalents Chart for the National School Lunch Program and School Breakfast Program

Grain Crediting Tools

The USDA's online [Food Buying Guide Interactive Web-based Tool](#) (FBG) provides several resources to help menu planners determine crediting information.

- The Exhibit A Grains Tool determines the oz eq of commercial grain products.
- The Recipe Analysis Workbook (RAW) allows menu planners to search for ingredients, develop a standardized recipe, and determine the meal pattern contribution per serving. To access this tool, users must create a free account on the USDA's FBG website.

For more information on oz eq, refer to "[Serving Requirements](#)" in the "Grains" section of the CSDE's Crediting Foods in CACFP Child Care Programs webpage.

Resources

Calculation Methods for Grain Ounce Equivalents in the Child and Adult Care Food Program (CSDE):

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

Crediting Documentation for the Child Nutrition Program (CSDE webpage):

<https://portal.ct.gov/sde/nutrition/crediting-documentation-for-the-child-nutrition-programs>

Crediting Enriched Grains in the Child and Adult Care Food Program (CSDE):

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

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

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

Crediting Worksheets (CSDE's Crediting Foods in the Child and Adult Care Food Program webpage):

<https://portal.ct.gov/sde/nutrition/crediting-foods-in-the-child-and-adult-care-food-program#CreditingWorksheets>

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

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

Grain Ounce Equivalents Chart for the Child and Adult Care Food Program (CSDE):

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

How to Use the Grain Ounce Equivalents Chart for the National School Lunch Program and School Breakfast Program

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/guide_wgr_requirement_cacfp.pdf

How to Identify Creditable Grains for the Child and Adult Care Food Program (CSDE):

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

Ounce Equivalents (“Serving Requirements” section of the CSDE’s Crediting Foods in CACFP Child Care Programs webpage):

<https://portal.ct.gov/sde/nutrition/crediting-foods-in-the-child-and-adult-care-food-program/grains#ServingRequirements>

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

<https://www.fns.usda.gov/sites/default/files/resource-files/manufacturerPFStipsheet.pdf>

Using Product Formulation Statements in the Child and Adult Care Food Program (CSDE):

http://portal.ct.gov/-/media/sde/nutrition/cacfp/crediting/using_product_formulation_statements_cacfp.pdf

What’s in a Meal Module 8: Meal Pattern Documentation for Crediting Commercial Processed Products (CSDE’s Training Program, What’s in a Meal: Meal Patterns for Grades K-12 in the School Nutrition Programs):

<https://portal.ct.gov/sde/nutrition/meal-pattern-training-materials>

When Commercial Grain Products Require a Product Formulation Statement to Credit in the Child and Adult Care Food Program (CSDE):

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

How to Use the Grain Ounce Equivalents Chart for the National School Lunch Program and School Breakfast Program

For more information, visit the CSDE's [Crediting Foods in the Child and Adult Care Food Program](#) webpage or contact the [CACFP 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/cacfp/crediting/how_to_use_ounce_equivalents_chart_cacfp.pdf.

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Washington, D.C. 20250-9410; or
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3. email: program.intake@usda.gov

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