

Calculating the Weekly Percentage of Whole Grain-rich Menu Items in the National School Lunch Program and School Breakfast Program

This guidance applies to the U.S. Department of Agriculture’s (USDA) meal patterns for grades K-12 in the National School Lunch Program (NSLP), School Breakfast Program (SBP), and Seamless Summer Option (SSO) of the NSLP. The SSO follows the NSLP and SBP meal patterns. For information on the meal patterns and crediting foods for grades K-12, visit the Connecticut State Department of Education’s (CSDE) webpages, [Meal Patterns for Grades K-12 in School Nutrition Programs](#) and [Crediting Foods in School Nutrition Programs](#).



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Calculating the Weekly Percentage of WGR Menu Items in the NSLP and SBP

Overview of Weekly Whole Grain-rich (WGR) Requirement

The NSLP and SBP meal patterns for grades K-12 require that at least 80 percent of the weekly grains offered at lunch and breakfast must be whole grain-rich (WGR). For guidance on meeting the WGR criteria for school meals refer to the CSDE's guide, [Meeting the Whole Grain-rich Requirement for the National School Lunch Program and School Breakfast Program Meal Patterns for Grades K-12](#).

Grains that are not WGR must be enriched. Bran (such as oat bran, wheat bran, corn bran, rice bran, and rye bran) and germ (such as wheat germ) credit the same as enriched grains. For guidance on the crediting requirements for enriched grains, refer to the CSDE's resource, [Crediting Enriched Grains in the National School Lunch Program and School Breakfast Program](#).



Documentation for Weekly WGR Requirement

School food authorities (SFAs) must document that at least 80 percent of the weekly grains offered at lunch and breakfast are WGR. The weekly percentage of WGR menu items must be calculated separately for lunch and breakfast. This documentation must be maintained on file for the Administrative Review of the school nutrition programs.

CSDE worksheet for calculating the weekly WGR percentage

SFAs may calculate the weekly menu's percentage of WGR grains using the CSDE's Excel worksheet, [Worksheet to Calculate the Weekly Percentage of Whole Grain-rich Menu Items in School Lunch and Breakfast Menus for Grades K-12](#). SFAs that do not use this worksheet must maintain alternate documentation using the "Steps for Calculating the Weekly Percentage of WGR Menu Items" in this document.

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Steps for Calculating the Weekly Percentage of WGR Menu Items

The determination of whether a weekly lunch or breakfast menu offers at least 80 percent WGR grains is based on the total ounce equivalents (oz eq) of all grain items offered with all menu choices during the week. The steps to calculate the weekly WGR percentage of school menus are indicated below.

SFAs must calculate the weekly percentage of WGR menu items separately for lunch and breakfast.

Step 1: Determine the total oz eq of all offered grain items (WGR and enriched)

Add the oz eq for each creditable grain menu item (WGR and enriched) for all daily meal choices during the week. For example, Monday's lunch menu offers three daily grain choices: 1½ oz eq of a whole-wheat roll (WGR), 2 oz eq of brown rice (WGR), and 1 oz eq of enriched crackers. This daily menu provides a total of 4½ oz eq of grains.

The USDA allows two methods for determining the oz eq of a creditable grain product or standardized recipe. SFAs may use either method but must document how the crediting information was obtained.

- Method 1 uses the USDA's [*Exhibit A: Grain Requirements for Child Nutrition Programs*](#) chart to determine the required weight (groups A-G) or volume (groups H-I) for the grain group where the product or recipe belongs. This method is used for commercial grain products and may also be used for standardized recipes if the menu planner knows the weight (grams or ounces) of the prepared (cooked) serving. The Exhibit A grain quantities are not the same for all Child Nutrition Programs because the meal patterns are different. The CSDE's [*Grain Ounce Equivalents for Grades K-12 in the National School Lunch Program and School Breakfast Program*](#) indicates the Exhibit A oz eq that apply to the NSLP and SBP meal patterns for grades K-12.
- Method 2 determines the oz eq from the weight (grams) of creditable grains per serving. This method is used for standardized recipes and may also be used for commercial grain products with a product formulation statement (PFS) stating the weight of creditable grains per serving. The grams of creditable grains are listed in the commercial product's PFS or calculated from the grain quantities in the SFA's recipe.

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- There are some situations when SFAs must use method 2 to determine if a commercial product meets the crediting or WGR criteria for school meals, and a PFS is required. For more information, refer to the CSDE's resources, [When Commercial Grain Products Require a Product Formulation Statement to Credit in the School Nutrition Programs](#) and [Calculation Methods for Grain Ounce Equivalents for Grades K-12 in the National School Lunch Program and School Breakfast Program](#).
- SFAs are not required to use either crediting method if the product has a Child Nutrition (CN) label. CN-labeled products credit based on the stated crediting information for grain oz eq.

SFAs must maintain documentation to demonstrate the oz eq contribution of each grain menu item and whether it is WGR. For commercial grain products, this includes the Nutrition Facts label and ingredients statement. This documentation may also require a CN label (if the grain is part of a meat/meat alternate product) or PFS. For more information, refer to the CSDE's resources, [Using Child Nutrition \(CN\) Labels in the School Nutrition Programs](#), [Using Product Formulation Statements in the School Nutrition Programs](#) and [Accepting Processed Product Documentation in the National School Lunch Program and School Breakfast Program](#).

For foods made from scratch, a standardized recipe is required. For more information, refer to the “[Crediting Foods Made from Scratch](#)” section of the CSDE's Crediting Foods in School Nutrition Programs webpage.

Step 2: Determine the total oz eq of all offered WGR items

Add the oz eq for each WGR grain menu item for all daily meal choices during the week. For example, Monday's lunch menu offers three daily grain choices: 1½ oz eq of a whole-wheat roll (WGR); 2 oz eq of brown rice (WGR); and 1 oz eq of enriched crackers. This daily menu provides a total of 3½ oz eq of WGR grains.

Step 3: Determine the percentage of WGR grains offered during the week

Divide the total oz eq of all WGR grain menu items (from step 2) by the total oz eq of all grain menu items (from step 1); then multiply by 100.



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Table 1 shows a sample calculation of the weekly percentage of WGR menu items. This weekly menu provides 37 oz eq of WGR menu items and 3 oz eq of enriched menu items, for a total of 40 oz eq from all grain menu items. Since 92.5 percent of all offered weekly grains are WGR, this menu meets the weekly WGR requirement.

| Table 1. Steps for calculating the weekly percentage of WGR menu items | | |
|--|---|-------------------------|
| 1. List the total oz eq of all WGR menu items offered during the week. | | |
| <ul style="list-style-type: none"> Add the oz eq for each WGR grain menu item for all daily meal choices | A | 37 WGR grains (oz eq) |
| 2. List the total oz eq of all creditable grain menu items (WGR and enriched) offered during the week. | | |
| <ul style="list-style-type: none"> Add the oz eq for each grain menu item (WGR and enriched) for all daily meal choices. | B | 40 Total grains (oz eq) |
| 3. Calculate the percentage of WGR grain items for the weekly menu. | | |
| <ul style="list-style-type: none"> Divide A (step 1) by B (step 2). | C | 0.925 |
| <ul style="list-style-type: none"> Multiply C by 100. | D | 92.5 percent WGR |
| 4. Is D at least 80 percent? | | |
| <input checked="" type="checkbox"/> Yes: meets the weekly WGR requirement <input type="checkbox"/> No: add more WGR items to the menu | | |

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Percentage of Weekly WGR Menu Items versus Weekly Grains Requirement

It is important to note that calculating the percentage of weekly WGR menu items is different from calculating the minimum weekly meal pattern requirements for the grains component for each grade group.

- **Weekly meal pattern requirement:** The NSLP and SBP meal patterns require minimum weekly amounts of the grains component for each grade group. If the lunch or breakfast menu offers multiple daily grain choices, the menu planner must use the daily grain choice with the **smallest** oz eq to determine if the menu meets the weekly meal pattern requirement.
- **Weekly WGR percentage:** The NSLP and SBP meal patterns require that at least 80 percent of the offered weekly grains must be WGR. To determine the percentage of weekly WGR menu items, the menu planner must add the oz eq for **all** daily grain choices.

Table 2 shows how these requirements apply to a lunch menu for grades 6-8.

| Table 2. How to calculate total weekly grains versus percentage of WGR menu items | |
|---|--|
| The lunch meal pattern for grades 6-8 requires at least 1 oz eq of the grains component per day and at least 8 oz eq per week. The school lunch menu offers a daily choice of two different grain menu items: <ul style="list-style-type: none">• 1½ oz eq enriched grain• 2 oz eq WGR grain | |
| Weekly meal pattern requirement | Weekly WGR requirement |
| The menu planner must count the smaller menu item (1½ oz eq) toward the weekly meal pattern requirement for the grains component. | The menu planner must add both menu items together to get the total oz eq of all grain items (WGR and enriched) offered for the day (3½ oz eq). |



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Table 3 shows an example of how to calculate the total weekly oz eq of grains and the weekly percentage of WGR menu items for a lunch menu for grades 6-8.

Table 3. Sample calculation of total weekly grain ounce equivalents and weekly WGR percentage for grades 6-8

The lunch meal pattern for grades 6-8 requires at least 1 oz eq of the grains component per day and at least 8 oz eq per week. This menu meets the meal pattern requirements because each daily grain choice provides at least 1 oz eq and the menu provides 9 oz eq over the week, based on the smallest grain choice offered each day (2 oz eq on days 1, 2, 4, and 5, and 1 oz eq on day 3).

This menu also meets the weekly WGR requirement. The menu offers 20 oz eq of grain items during the week and 17.5 oz eq (87.5 percent) are WGR.

| Grain items (all menu choices) | Serving size | Grain group ¹ | Oz eq | | |
|--|----------------------------|-----------------------------|--------------|--------------|-------------|
| | | | WGR | Enriched | |
| Day 1: Whole-wheat bread | 2 slices | B | 2 | 0 | |
| Day 1: WGR pasta | 1 cup | H | 2 | 0 | |
| Day 2: Whole-wheat dinner roll | 2 ounces | B | 2 | 0 | |
| Day 2: Brown rice | 1 cup | H | 2 | 0 | |
| Day 3: WGR breading on chicken nuggets | 0.8 ounce | A | 1 | 0 | |
| Day 3: WGR crackers | 4 crackers (1.2 ounces) | A | 1.5 | 0 | |
| Day 4: Enriched cornbread, school recipe | 3 ounces | C | 0 | 2.5 | |
| Day 4: Enriched croutons | 1.6 ounces | A | 2 | 0 | |
| Day 5: WGR pizza crust | 3 ounces | B | 3 | 0 | |
| Day 5: WGR hamburger bun | 2 ounces | B | 2 | 0 | |
| Total oz eq per week | | | 17.5 | 2.5 | 20 |
| Percentage | | | 87.5% | 12.5% | 100% |

¹ Refer to the CSDE's resource, [Grain Ounce Equivalents for Grades K-12 in the National School Lunch Program and School Breakfast Program](#).

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Resources

Accepting Processed Product Documentation in the National School Lunch Program and School Breakfast Program (CSDE):

https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/Accepting_Processed_Product_Documentation_SNP.pdf

Calculation Methods for Grain Ounce Equivalents for Grades K-12 in the National School Lunch Program and School Breakfast Program (CSDE):

https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/Grain_Calculation_SNP_grades_K-12.pdf

Crediting Breakfast Cereals for Grades K-12 in the National School Lunch Program and School Breakfast Program (CSDE):

https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/Credit_Cereals_SNP_grades_K-12.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

Grain Ounce Equivalents for Grades K-12 in the National School Lunch Program and School Breakfast Program (CSDE):

https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/Grain_Oz_Eq_SNP_grades_K-12.pdf

Grains Component for Grades K-12 (CSDE webpage):

<https://portal.ct.gov/SDE/Nutrition/Crediting-Foods-in-School-Nutrition-Programs/Documents#Grains>

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

Meeting the Whole Grain-rich Requirement for the National School Lunch Program and School Breakfast Program Meal Patterns for Grades K-12 (CSDE):

https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/WGR_Requirement_SNP_grades_K-12.pdf

Menu Planning Guide for School Meals for Grades K-12 (CSDE):

<https://portal.ct.gov/SDE/Nutrition/Menu-Planning-Guide-for-School-Meals>

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

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Standardized Recipes (“Documents/Forms” section of the CSDE’s Crediting Foods in CACFP Child Care Programs webpage):

<https://portal.ct.gov/SDE/Nutrition/Crediting-Foods-in-School-Nutrition-Programs#StandardizedRecipes>

USDA Memo SP 05-2022: Meal Requirements Under the National School Lunch Program and School Breakfast Program: Questions and Answers for Program Operators Updated to Support the Transitional Standards for Milk, Whole Grains, and Sodium Effective July 1, 2022:

<https://www.fns.usda.gov/cn/sp052022-questions-answers-program-operators>

Using Child Nutrition (CN) Labels in the School Nutrition Programs (CSDE):

https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/CN_Labels_SNP.pdf

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

https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/Product_Formulation_Statements.pdf

What’s in a Meal Module 11: Grains Component (CSDE’s Training Program,

What’s in a Meal: National School Lunch Program and School Breakfast Program Meal Patterns for Grades K-12):

<https://portal.ct.gov/SDE/Nutrition/Meal-Pattern-Training-Materials>

What’s in a Meal Module 12: Whole Grain-rich Requirement (CSDE’s Training Program,

What’s in a Meal: National School Lunch Program and School Breakfast Program Meal Patterns for Grades K-12):

<https://portal.ct.gov/SDE/Nutrition/Meal-Pattern-Training-Materials>

What’s in a Meal Module 6: Meal Pattern Documentation (CSDE’s Training Program,

What’s in a Meal: National School Lunch Program and School Breakfast Program Meal Patterns for Grades K-12):

<https://portal.ct.gov/SDE/Nutrition/Meal-Pattern-Training-Materials>

What’s in a Meal Module 13: Grains Ounce Equivalents (CSDE’s Training Program,

What’s in a Meal: National School Lunch Program and School Breakfast Program Meal Patterns for Grades K-12):

<https://portal.ct.gov/SDE/Nutrition/Meal-Pattern-Training-Materials>

Whole Grain Resource for the National School Lunch and Breakfast Programs (USDA):

<https://www.fns.usda.gov/tn/whole-grain-resource-national-school-lunch-and-breakfast-programs>

Worksheet to Calculate the Weekly Percentage of Whole Grain-rich Menu Items in School Lunch and Breakfast Menus for Grades K-12 (CSDE):

https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/Worksheet_Calculating_WGR_Percentage_SNP_grades_K-12.xlsx

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For more information, visit the “[Grains Component](#)” section of the CSDE’s [Crediting Foods 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/Calculate_WGR_Percentage_SNP.pdf.

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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

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