

The background of the page is a collage of various grains. At the top, there are several slices of whole-grain bread. Below the bread, there is a pile of uncooked white rice. In the foreground, there is a large pile of uncooked whole-wheat pasta, including long, thin tubes and shorter, thicker pieces. The entire scene is set against a plain white background.

4

Grains

Food Buying Guide for Child Nutrition Programs

4 | Grains

Grains Component for the Child Nutrition Programs (CNP)

All reimbursable meals offered in the National School Lunch Program (NSLP), Child and Adult Care Food Program (CACFP), and Summer Food Service Program (SFSP) must include a grain item. Schools may offer grains, meats/meat alternates, or a combination of both to meet the combined component requirement in the School Breakfast Program (SBP). CACFP and NSLP Preschool meal patterns allow meats/meat alternates to be offered in place of the entire grains requirement up to three times per week at breakfast. A reimbursable snack in the CACFP, SFSP, or NSLP afterschool snack service (NSLP afterschool snacks) may include a creditable grain as one of the two required meal components.



FNS meal pattern regulations establish the minimum serving size(s) of grains required for breakfasts, lunches, suppers, and snacks.

Meal pattern charts for each of the Child Nutrition Programs (CNP) are on pages I-7 through I-19. This section pertains to the grains requirements in the NSLP, NSLP afterschool snacks, SBP, and CACFP. Please refer to Appendix E for the grains requirements for the SFSP.

Definitions

| | |
|---|--|
| Bran | Bran is the seed husk or outer coating of cereal grains such as wheat, rye, and oats. The bran can be mechanically removed from the flour or meal by sifting or bolting. Bran can be used to meet the enriched grains requirements in CNP. |
| Creditable grains | Creditable grains represent all of the grain ingredients in a product that are creditable toward the grains component; they include whole-grain flour, whole-grain meal, corn masa, masa harina, hominy, enriched flour, enriched meal, bran, germ, or be included in an enriched product, such as enriched bread or in a fortified cereal. |
| Enriched | Enriched means that the product conforms to the U.S. Food and Drug Administration’s (FDA) Standard of Identity for enrichment (21 CFR Section 137). The terms “enriched,” “fortified,” or similar terms indicate the addition of one or more vitamins or minerals or protein to a food. |
| Flour | Flour is the product derived by finely grinding and bolting (sifting) wheat or other grains. Flour may be made from all grains (wheat, rye, corn, etc.). |
| Germ | Germ is the vitamin-rich embryo of the grain kernel. The germ can be separated before milling for use as a cereal or food supplement. Germ can be used to meet the enriched grains requirements in CNP. |
| Nixtamalization | Nixtamalization is a process in which dried corn is soaked and cooked in an alkaline (slaked lime) solution. This process increases the bioavailability of certain nutrients. Nixtamalized corn is used to make hominy, corn masa (dough from masa harina), masa harina (corn flour), and certain types of cornmeal. These ingredients are considered whole grain when evaluating products for CNP meal requirements. If the ingredient statement indicates the corn is treated with lime (for example, “ground corn with trace of lime” or “ground corn treated with lime”), then the corn is nixtamalized. |
| Ounce equivalents | Ounce equivalents designates the contribution a given serving size makes toward the grains component. |
| Primary grain ingredient | Primary grain ingredient is the first grain ingredient listed in the ingredient statement. |
| Whole grain | Whole grain contains all parts of the grain kernel which includes the bran, germ, and endosperm. |
| Whole grain-rich (WGR)¹ | Whole grain-rich (WGR) is the term designated by FNS to indicate that the grains content of a product is between 50 and 100 percent whole grain with any remaining grains being enriched. This term only refers to the FNS definition for meeting the grains requirements for the NSLP, SBP, and CACFP. The term should not be found on product labels and should not be confused with the FDA whole grain health claim. |

¹ Please refer to Appendix E for grains/breads requirements in the SFSP.

4 | Grains

Examples of Foods That Are Creditable Toward the Grains Component

The following types of ingredients are considered creditable grains in CNP:

whole grains (e.g., whole wheat, whole-wheat meal/flour, brown rice, rolled oats, whole corn)

enriched grains (e.g., enriched meal/flour, enriched rice, bread, and pasta)

bran or germ can be used to meet the enriched grains requirements in CNP

Note: nixtamalized corn, (i.e., corn treated with lime), such as hominy, corn masa, and masa harina are considered whole grain when evaluating products for meal requirements.

Please refer to the “Definitions” section for more information on nixtamalization. These ingredients are processed in a way that increases the bioavailability of certain nutrients, so they have a nutritional profile similar to whole corn.



Foods that contribute to the grains requirement in all CNP include the following items when made from above specified ingredients but are not limited to:

Breads, biscuits, bagels, rolls, tortillas, crackers, cereal grains (cooked) such as rice, bulgur, oatmeal, corn grits, hominy grits, wheat berries, or couscous

Must be made from creditable grains, or included in an enriched product such as enriched bread, macaroni and noodle products, rice, or cornmeal or in a fortified cereal.

Ready-to-eat (RTE) breakfast cereals

If the product includes enriched ingredients, or the product itself is labeled as “Enriched,” it must meet the FDA Standards of Identity for enrichment (21 CFR Section 137).

In the NSLP/SBP, RTE cereals that list a whole grain as the first ingredient must be fortified. If the cereal is 100 percent whole grain, fortification is not required.

By July 1, 2025, breakfast cereals served in the NSLP, SBP and NSLP afterschool snacks must contain no more than 6 grams of added sugars per dry ounce.

By October 1, 2025, breakfast cereals served in the CACFP must contain no more than 6 grams of added sugars per dry ounce. Prior to October 1, 2025, breakfast cereals must contain no more than 6 grams of total sugars per dry ounce.

Cereals or bread products that are used as an ingredient in another menu item such as muffins, cornbread, pizza crust, casseroles, or breading on fish or poultry

Must be made from creditable grains.

See above requirements for RTE cereals in the NSLP, SBP, and CACFP.

Macaroni, pasta, noodle products (cooked)

Must be made from creditable grains.

The NSLP and SFSP regulations allow enriched macaroni products that have been fortified with protein to be counted toward either the grains or meats/meat alternates requirements,

but not toward both meal components simultaneously. When counted as meats/meat alternates, these products may be used to meet part, but not all of the component requirement.

- In the NSLP, enriched macaroni products fortified with protein may be counted toward meeting no more than one-half of the meats/meat alternates requirement for that meal.
- The CACFP regulations allow enriched macaroni products that have been fortified with protein to be counted toward the grains requirement only.
- Pasta products made with bean flours do not count toward the grains requirement. Please see Appendix C for more information on products made with bean flour and how they may contribute to CNP meal pattern requirements.

Grains high in added sugars such as toaster pastries, coffee cake, doughnuts, sweet rolls, pie crusts, cookies, cakes, etc.

Must be made from creditable grains.

No more than 2.0 ounce equivalent (oz eq) grains served per week in the NSLP may be in the form of grain-based desserts (Exhibit A items with scripts 3, 4, and 5).

Savory grain products such as hard pretzels, hard bread sticks, and tortilla chips

Must be made from creditable grains.

Substituting Vegetables for Grains in American Samoa, Guam, Hawaii, Puerto Rico, and the U.S. Virgin Islands and Tribal Communities

All schools, sponsors, institutions, and facilities in American Samoa, Puerto Rico, the Virgin Islands, and Tribal Communities can offer any vegetable such as breadfruit, prairie turnips, yams, plantains, or sweet potatoes to meet the grains or breads requirements in the NSLP, SBP, SFSP, and CACFP to address cultural food preferences, product availability, and cost concerns.

The vegetables served must meet the daily minimum grain quantity required and can be used to meet the whole grain-rich requirement. One-half cup vegetables substitutes for one ounce equivalent grains.

There is no limit on the amount of times vegetables may be substituted for the grains requirement.

The vegetables substituting for grains may not also credit as the required vegetable component in the applicable meal pattern.

See pages 4-6 through 4-7 for more information on grains requirements in each CN program.

At least 80 percent of the grains offered weekly in the NSLP (7 CFR 210.10(c)(2)(iii)) and the SBP (7 CFR 220.8(c)(2)(iii)) must be whole grain-rich, and the other grain items offered must be enriched. See pages 4-7 through 4-9 for more information on the criteria. (Please note: State agencies have the discretion to set stricter requirements than the minimum nutrition standards for school meals. For additional guidance, please contact your State agency.)

For the CACFP, at least one serving of grains per day must be whole grain-rich (7 CFR 226.20(a)(4)(i)(A)).

4 | Grains

Criteria for Determining Acceptable Grain Items

The following criteria are to be used as a basis for crediting items to meet the grains requirement in the CNP.

Creditable grain items are made from grains that are whole-grain flour, whole-grain meal, corn masa, masa harina, hominy, enriched flour, enriched meal, bran, germ, or be an enriched product, such as enriched bread, macaroni and noodle products, rice, or cornmeal, or a fortified cereal.

Some enriched grain products that are being blended with whole-grain ingredients must meet the FDA Standards of Identity (21 CFR Part 136, Part 137, Part 139) for enriched bread, macaroni and noodle products, rice, or cornmeal.

School Meal Programs

Ounce equivalents (oz eq) are used to determine the amount of creditable grains.

One-quarter ounce equivalent (0.25 oz eq) is the smallest amount allowable to be credited toward the grains requirement as specified in program regulations.

At least 80 percent of the weekly grains offered must meet the whole grain-rich criteria, meaning they are:

- 100 percent whole grain; or the grain content of a product is between 50 and 100 percent whole grain with any remaining grains being enriched.
- Bran and germ can be used to meet the enriched grains requirements.

Note: Nixtamalized corn (i.e., corn treated with lime), such as hominy, corn masa, and masa harina are considered whole grain when evaluating products for meal requirements. See page 4-3 for more information on nixtamalization.

Please note: State agencies have the discretion to set stricter requirements than the minimum nutrition standards for school meals. For additional guidance, please contact your State agency.

Up to 20 percent of the grain items offered weekly can be made from grains that are enriched meal and/or flour.

- Bran and germ can be used to meet the enriched grains requirements.

Up to 2.0 ounce equivalent grains per week may be credited in the form of a grain-based dessert in NSLP.

- By July 1, 2025, grain items from Exhibit A with superscripts 3 & 4 are not creditable in NSLP afterschool snacks.
- Grain items from Exhibit A with superscript 3 are not permitted in SBP.

By July 1, 2025, breakfast cereals must contain no more than 6 grams of added sugars per dry ounce.

CACFP and Preschool

Ounce equivalents (oz eq) are used to determine the amount of creditable grains.

One-quarter ounce equivalent (0.25 oz eq) is the smallest amount allowable to be credited toward the grains requirement as specified in program regulations, except for the infant meal pattern.

Grain items must be made from creditable grains, or be an enriched product such as enriched bread or a fortified cereal.

At least one serving of grains per day must be whole grain-rich.

Grain-based desserts do not credit toward the grains component.

By October 1, 2025, breakfast cereals must contain no more than 6 grams of added sugars per dry ounce. Prior to October 1, 2025, breakfast cereals must contain no more than 6 grams of added sugars per dry ounce or 6 grams of total sugars per dry ounce.

SFSP

Grain items are credited in servings. See program guidance and Appendix E for more information.

One-quarter serving is the smallest amount allowable to be credited toward the grains requirement as specified in program regulations.

Grain items must be made from grains that are whole-grain flour, whole-grain meal, corn masa, masa harina, hominy, enriched flour, enriched meal, bran, germ, or be an enriched product, such as enriched bread, or a fortified cereal.

Please refer to Appendix E for grains requirements in the SFSP.

Please note that the SFSP is not required to serve grain items that meet the whole grain-rich criteria; however, regularly offering items that meet this standard will help children develop healthy eating habits.

Also, the SFSP is not required to credit grains using ounce equivalents. However, ounce equivalents contain a slightly higher amount of creditable grains than grains servings. Therefore, ounce equivalents may be used to calculate grains servings in the SFSP if the program operator wishes to do so. See Appendix E for more information.

What Foods Meet the Whole Grain-Rich Criteria?

The NSLP, SBP, NSLP afterschool snacks (effective July 1, 2025), and CACFP meal patterns require specific amounts of grains that meet the whole grain-rich criteria to be served.

Any one of the following methods can be used to evaluate if a grain product meets the whole grain-rich criteria:

A. Use Exhibit A: Grain Requirements for Child Nutrition Programs:

- For grain items in Groups A–G of Exhibit A, the whole-grain content per 1 ounce equivalent (oz eq) must be at least 8 grams out of the standard 16 grams. The remaining grains must be enriched.

For grain items in Group H of Exhibit A, the volumes or weights listed in the chart can be used to meet grains requirements. For example, a ½ cup of cooked brown rice or enriched rice is equal to 1.0 oz eq of whole grain or enriched grain, respectively.

As another example, if dry pasta includes a blend of whole-grain flour and enriched flour, the whole-grain content must be at least 14 grams of whole-grain flour out of the standard 28 grams of creditable grains per oz eq. The remaining 14 grams of flour must be enriched.

This may be determined from information provided on the product packaging or by the manufacturer, if available. If any non-whole grains (refined grains) are included, they must be enriched.

- Ready-to-eat (RTE) breakfast cereals in Group I of Exhibit A must list a whole grain as

4 | Grains

the primary ingredient and the cereal must be fortified. RTE breakfast cereals that are 100 percent whole grain are not required to be fortified. However, any noncreditable grains must be restricted to insignificant levels.

Please find Exhibit A online at:

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

B. Use the Ingredient Statement (Ingredient Declaration or Ingredient List)

On the food label, ingredients are listed in descending order of predominance by weight. A grain product that lists a whole grain as the primary ingredient by weight (or as the second ingredient after water) and in which the remaining grains are enriched, meets the whole grain-rich criteria.

- I. A product is whole grain-rich if a whole-grain ingredient is listed first and it is the only ingredient OR only one grain follows that is an enriched grain, bran, or germ, OR there are two or more whole grains that follow.
- II. If a whole grain is listed first and there are two or more enriched grains, bran, or germ that follow, a Product Formulation Statement (PFS) is needed from the manufacturer to determine if the whole grains weigh equal to or more than the enriched grains in the product.
- III. Even if a whole grain is not listed as the first ingredient, if there are multiple whole-grain ingredients, the combined weight of those whole grains may be more than the weight of the other ingredients. These products could meet the whole grain-rich criteria with proper manufacturer documentation or a standardized recipe. For example, a bread item may be made with three grain ingredients: enriched wheat flour (40 percent of grain), whole-wheat flour (30 percent of grain), and whole oats (30 percent of grain). The program operator, with the assistance of the manufacturer through the use of a PFS, could determine that the whole grains are the primary grain ingredient by weight because the combined whole-grain ingredients (whole-wheat flour and whole oats), at 60 percent, are greater than the enriched wheat flour at 40 percent.
- IV. Ingredient statements for mixed dishes (e.g., pizza, corn dogs, or burritos) may be organized by component (e.g., frozen pizza listing ingredients for cheese, crust and toppings separately). In this case, only the grains portion of the ingredient statement needs to be considered (e.g., crust, breading, tortilla).

C. Use the FDA-Approved Whole Grain Health Claim

The product includes one of the following FDA-approved whole grain health claims on its packaging and any refined grains in the product are enriched:

“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 some cancers.” OR “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.”

D. Use the State Agency’s Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) List

Whole-grain bread and other whole-grain options (except for some cereals) found on any State agency's WIC-approved food list meets whole grain-rich criteria for all CNP. This may include but is not limited to tortillas, pastas, rice, and breads on a State WIC list. Not all cereals on a WIC list are whole grain-rich. When using the WIC list to choose a whole grain-rich cereal, be sure to choose one that is marked as whole grain on the WIC list. For a list of

WIC State agency contacts, please see: <http://www.fns.usda.gov/wic/wic-contacts>.

Individual CNP may offer additional methods for crediting whole grain-rich items. Please refer to specific program guidance for complete whole grain-rich criteria for SBP/NSLP, NSLP afterschool snacks, and CACFP.

Flour Blends

Some products include flour blends listed in the ingredient declaration, for example, ingredients: flour blend (whole-wheat flour, enriched flour), sugar, cinnamon, etc. When trying to determine if whole grains are the primary ingredient by weight for these products in Exhibit A, Groups A–G, program operators will need to know either that the whole-grain content is at least 8.0 grams per 1.00 oz eq (50% of the 16-gram standard) or that the weight of the whole-grain ingredient(s) in the flour blend must be the predominant ingredient(s) by weight of the entire product. This information would need to be gathered from the manufacturer in the form of a PFS or a standardized recipe if prepared in-house as documentation that the whole-grain ingredients are equal to or greater than the enriched, bran, and/or germ ingredients.

In school meals, any noncreditable grains in products or recipes used to meet the enriched grain requirements are limited to less than 2 percent of the product formula by weight or less than 0.25 oz eq. An amount less than 0.25 oz eq for products from Exhibit A, Groups A–G, means that there must be fewer than 4 grams of noncreditable grain per oz eq. For products from Group H, this means that there must be fewer than 7 grams of noncreditable grain per oz eq.

Manufacturers producing qualifying products (entrees with meats/meat alternates and grains) may apply for a Child Nutrition (CN) label to indicate the number of oz eq grains that meet the whole grain-rich criteria. The term “oz. equivalent grains” on the CN label indicates that the product meets the whole grain-rich criteria, while the term “oz. equivalent grains (enriched)” indicates the product meets the enriched grains requirements.

CN labeled products that credit toward both the grains (using oz eq grains) and the meats/meat alternates components may be used by all CNP. Therefore, the ounce equivalent meets the minimum quantity for the grains component in all CNP. For more information on the CN Labeling Program, see Appendix C.

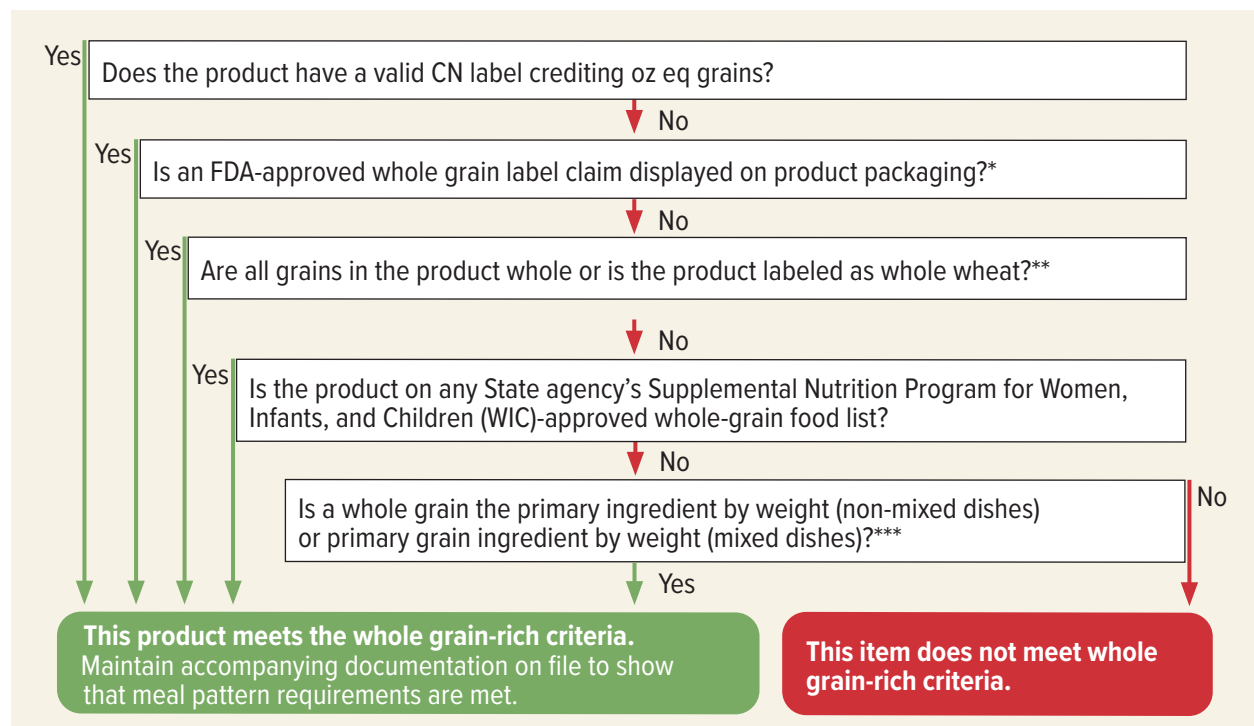
4 | Grains

Does My Product Meet the Whole Grain-Rich Criteria?

By using the following flow chart, you can evaluate a product to determine if it meets the whole grain-rich criteria.

Once you determine that a grain product is creditable, it is important to read through “Criteria for Determining Ounce Equivalents” (see pages 4-11 through 4-13). This section explains when to use Exhibit A (see pages 4-16 through 4-19) or calculate grams of creditable grains (see pages 4-14 through 4-15) to determine the grains contribution.

The following criteria are to be used as a basis for crediting items to meet the whole grain-rich requirement in the school meal programs. Please note, products must include at least 0.25 oz eq grains.



* For the NSLP and SBP, any refined grains included in the product must be enriched, in addition to having an FDA whole grain health claim.

** Nixtamalized corn, (i.e., corn treated with lime), such as hominy, corn masa, and masa harina, are considered whole grain when evaluating products for meal requirements. In school meal programs, noncreditable ingredients should be limited to no more than 0.24 oz eq (3.99 grams for Groups A–G or 6.99 grams for Groups H or I of the Exhibit A). All other refined grains must be enriched. The CACFP operators may refer to appropriate regulatory guidance for additional information.

*** At least half of the grains in the product must be whole grains, with any remaining grains being enriched. Nixtamalized corn, (i.e., corn treated with lime), such as hominy, corn masa, and masa harina, are considered whole grain when evaluating products for meal requirements. When determining this in grams, at least 8 grams per ounce should be whole grain for items located in Groups A–G or at least 14 grams for items located in Groups H and I of Exhibit A.

The following criteria are used as a basis for crediting items to meet the whole grain-rich requirements in CACFP. Please note, products must include at least 0.25 ounce equivalent grains. If the answer is yes, this product meets the whole grain-rich criteria. Maintain accompanying documentation on file to show that meal pattern requirements are met. If no, this item does not meet whole grain-rich criteria.

1. Is the product on any State agency's Supplemental Nutrition Program for Women, Infants, and Children (WIC)-approved whole grain food list?
2. Is the product labeled as "whole wheat" and has a Standard of Identity issued by the FDA?*
3. Does the product include an FDA-approved whole grain health claim on its packaging?*
4. Does the food meet whole grain-rich criteria under the NSLP?
5. Does the food meet FNS's Rule of Three?
6. Does documentation from a manufacturer or standardized recipe demonstrate that whole grains are the primary grain ingredient by weight?

* An FDA Standard of Identity is a set of rules for what a certain product (like whole wheat bread) must contain or may contain to legally be labeled with that product name. FDA provides Standards of Identity for certain whole wheat bread products (21 CFR 136.180) and certain whole wheat pasta products (21 CFR 139.138)

** To demonstrate compliance with the whole grain-rich criteria in the CACFP, the FDA whole grain health claim is sufficient documentation.

Criteria for Determining Ounce Equivalents

All grain products served in the NSLP, SBP, NSLP afterschool snacks (effective July 1, 2025), CACFP and Preschool meals must be credited based on ounce equivalent (oz eq) standards. This applies to various products as follows:

Baked goods (breads, biscuits, bagels, etc.): 16 grams of creditable grains provide 1.0 oz eq credit.

Cereal grains (oatmeal, pasta, brown rice, etc.): 28 grams (approximately 1.0 ounce by weight) of dry product OR ½ cup cooked cereal, pasta, rice, etc. provides 1.0 oz eq credit.

Ready-to-eat (RTE) breakfast cereal: 28 grams or 1.0 ounce of product provides 1.0 oz eq credit. Ounce equivalent volumes are 1 cup flakes or rounds, 1.25 cups puffed cereal, and ¼ cup granola.

There are two different ways to determine the amount required to provide 1.0 oz eq grains: by using the weights listed in Exhibit A: Grain Requirements for Child Nutrition Programs or by calculating the grams of creditable grains.

A. Determining Contribution Based on Exhibit A

The weight needed to provide 1.0 oz eq grains for commonly available food products can be determined using Exhibit A (see pages 4-16 through 4-18). The wide variety of prepared grain products listed in Exhibit A are grouped based on their average grains content. Food types having similar concentrations of creditable grains are grouped together. Each group in Exhibit

4 | Grains

A provides the minimum weight required to supply 1.0 oz eq grains.

Exhibit A, Groups A–G

- For the types of food products listed in Groups A–G, 1.0 oz eq grains provide at least 16.0 grams of creditable grains. The weights given in Exhibit A, Groups A–G, may be used for grain products that are either commercially purchased or prepared on-site.
- Grain products listed in Groups A–G should provide the minimum of 16.0 grams of creditable grains for 1.0 oz eq. Obtain manufacturer’s documentation if it is unclear that the item is creditable toward program requirements. Once documentation is obtained, calculate the serving size based on the grams of creditable grains as shown below in section B.
- Exhibit A, Groups A–G also provides the weight needed for $\frac{1}{4}$, $\frac{1}{2}$, and $\frac{3}{4}$ of an oz eq grains in addition to the weight needed for 1.0 oz eq grains.

Exhibit A, Groups H & I

- When items in Groups H and I are served as cooked or cold breakfast cereals, such as cooked oatmeal, cooked millet, cooked rice, or cold breakfast cereal (ready-to-eat cereal) or cooked pasta, the weights OR volumes listed in Exhibit A, Groups H or I must be used. For example, the serving size required for 1.0 oz eq of cooked oatmeal made from dry oats is $\frac{1}{2}$ cup cooked or 28 grams dry oats.
- Some of the food products in Group H, such as dry oatmeal or cornmeal, may be used as a grain ingredient in a recipe as well as a cooked cereal. When the cereal grain items listed in Group H are used as an ingredient in a recipe such as oatmeal bread or in cornbread (in contrast to being used as a breakfast cereal) do not use the amounts listed in Group H. In this case, the grains contribution should be determined using the weights given in Groups A–G of Exhibit A corresponding to the appropriate food group, or calculated using the grams of creditable grains per portion (16 grams of the creditable grains provide 1.0 oz eq grains).
- For example, oatmeal bread may be credited in one of two ways: (1) using the finished serving weight in Group B of Exhibit A, or (2) using the grains contribution based on the standard 16 grams of creditable grains per oz eq.

B. Determining Serving Sizes Based on Creditable Grains Content

There are several situations where creditable grains would be used to calculate the serving size instead of using the serving weights given in Exhibit A. Some of these situations are: (1) a manufacturer’s formula demonstrates that a product provides a higher amount of creditable grains than the standard grams per oz eq (>16.0g for items in Groups A–G or >28.0g for Groups H and I) of Exhibit A; or (2) you are using a recipe and you choose to calculate the serving size based on grams of creditable grains instead of using Exhibit A.

In these cases, the program operators will need to obtain or maintain documentation (such as documentation from manufacturer or recipe) showing the weight of creditable grain(s) per portion of the grain item. This will be easy for grain items prepared on-site since the exact weight of the creditable grains can be documented using the recipe. For purchased products, the manufacturer will need to provide the required documentation showing the weight of creditable grain(s) per portion. Manufacturers may wish to provide this information using a PFS to protect their proprietary information. Sample PFS templates are located on the CN Labeling website at <https://www.fns.usda.gov/cnlabeling/food-manufacturersindustry>. If you have a situation where documentation is required, but the manufacturer cannot supply the

documentation, that product is not creditable toward the reimbursable meal.

When the exact or minimum amount of creditable grains can be documented, the grains contribution for items listed in Groups A–G of Exhibit A may be calculated using 16.0 grams of creditable grains as 1.0 oz eq or items listed in Groups H and I may be calculated using 28 grams of creditable grains as 1.0 oz eq.

There are three steps to determine how many oz eq grains a recipe yields when calculating based on the grams of creditable grains:

1. Divide the total grams of creditable grains in the recipe by the number of portions the recipe yields: (Note: 1 lb = 453.6 grams). One “portion” is the amount of the food product you plan to serve to each program participant to meet the daily and/or weekly grains requirements. One “portion” is not necessarily equivalent to 1.0 oz eq grains.

Total grams of creditable grains ÷ number of portions the recipe yields

This calculation gives you the total grams of creditable grains contained in one portion of your recipe.

2. Divide the total grams of creditable grains in one portion (the answer from the calculation in step (1) by 16.0 grams or 28.0 grams (note: 16.0 grams of creditable grains = one oz eq for Groups A–G of Exhibit A and 28.0 grams of creditable grains = one oz eq for Groups H and I of Exhibit A):

$$\frac{\text{Total grams of creditable grains in ONE portion}}{16.0 \text{ grams or } 28.0 \text{ grams}} = \text{the number of oz eq grains per portion}$$

3. Round down to the nearest 0.25 oz eq. To count as one oz eq, the product must contain no less than 16.0 grams for Groups A–G of Exhibit A or 28.0 grams for Groups H and I of Exhibit A of creditable grains.

4 | Grains

Worksheet for Calculating Grains Contribution Using Grams of Creditable Grains

Instructions:

1. On the worksheet (see page 4-15), list each creditable grain ingredient in the recipe. Grain ingredients that are whole-grain flour, whole-grain meal, corn masa, masa harina, hominy, enriched flour, enriched meal, bran, or germ are creditable toward the grains requirements for CNP.
2. Fill in the quantity (for example: cups, pounds, kilograms, ounces, grams, etc.) of each creditable ingredient in the recipe.
3. Convert the amount of each creditable grain ingredient in the recipe to grams. Use the chart below for commonly used conversions.

| Conversions | |
|---|---------------|
| Number of pounds of ingredient | x 453.6 grams |
| Number of ounces of ingredient | x 28.35 grams |
| Number of cups of enriched white flour | x 125 grams |
| Number of cups of regular rolled oats | x 81 grams |
| Number of cups of quick-cooking oats | x 81 grams |
| Number of cups of degermed, enriched cornmeal | x 138 grams |
| Number of cups of wheat bran | x 58 grams |
| Number of cups of wheat germ | x 115 grams |
| Number of cups of whole-wheat flour | x 120 grams |

4. Add the grams for each creditable grain ingredient to determine the total grams of creditable grains in the recipe.
5. Divide the total grams of creditable grains in the recipe by the number of portions in the recipe to determine the number of grams of creditable grains per portion of food product.
6. Divide the number of grams of creditable grains per portion by 16.0 grams (standard amount of enriched or whole-grain meal and/or flour, in 1.0 oz eq grains for Groups A–G of Exhibit A) or 28.0 grams (standard amount of grains, in 1.0 oz eq grains for Groups H and I of Exhibit A).
7. Round down to the nearest 0.25 oz eq grains.

Worksheet

| 1. Creditable Grain Ingredient | 2. Quantity (pounds, ounces, cups) | 3. Convert to Grams (reference conversion chart) | Grams |
|--------------------------------|---------------------------------------|---|-------|
| | | X | = |
| | | X | = |
| | | X | = |
| | | X | = |
| | | 4. Total Grams | = |

5. Total grams divided by number of portions in recipe.

$$\frac{\text{Total grams creditable grains from Step 4}}{\text{Number of portions per recipe}} = \text{Number of grams creditable grains per portion}$$

6. Divide the number of grams per portion by 16.0 or 28.0

$$\frac{\text{Number of grams creditable grains per portion from Step 5}}{16.0 \text{ or } 28.0} = \text{oz eq grains}$$

7. Round down to the nearest 0.25 oz eq grains.

$$\text{oz eq from Step 6} = \text{oz eq grains}$$

4 | Grains

Exhibit A: Grain Requirements for Child Nutrition Programs

The following Chart titled “Exhibit A: Grain Requirements for Child Nutrition Programs” provides a general guideline for crediting prepared grain items. Once you have determined that a food product is creditable (see pages 4-4 through 4-7), find the Group on the chart containing the name of the food product. Read the minimum serving size required for that group on the right-hand side of the chart.

Chart begins on next page

Exhibit A: Grain Requirements for Child Nutrition Programs^{1,2}

Color Key Footnote: **Footnote 3 or 4 = Red**, **Footnote 5 = Blue**

| Food Products per Group | Ounce Equivalent (oz eq) | Minimum Serving Size |
|--|---|---|
| Group A | Ounce Equivalent (oz eq) for Group A | Minimum Serving Size for Group A |
| Bread type coating Bread sticks (hard) Chow Mein noodles Savory crackers (saltines and snack crackers) Croutons Pretzels (hard) Stuffing (dry) Note: weights apply to bread in stuffing | 1 oz eq = 22 gm or 0.8 oz ¾ oz eq = 17 gm or 0.6 oz ½ oz eq = 11 gm or 0.4 oz ¼ oz eq = 6 gm or 0.2 oz | 1 serving = 20 gm or 0.7 oz ¾ serving = 15 gm or 0.5 oz ½ serving = 10 gm or 0.4 oz ¼ serving = 5 gm or 0.2 oz |
| Group B | Ounce Equivalent (oz eq) for Group B | Minimum Serving Size for Group B |
| Bagels Batter type coating Biscuits Breads—all (for example sliced, French, Italian) Buns (hamburger and hot dog) Sweet crackers ⁵ (graham crackers - all shapes, animal crackers) Egg roll skins English muffins Pita bread Pizza crust Pretzels (soft) Rolls Tortillas Tortilla chips Taco shells | 1 oz eq = 28 gm or 1.0 oz ¾ oz eq = 21 gm or 0.75 oz ½ oz eq = 14 gm or 0.5 oz ¼ oz eq = 7 gm or 0.25 oz | 1 serving = 25 gm or 0.9 oz ¾ serving = 19 gm or 0.7 oz ½ serving = 13 gm or 0.5 oz ¼ serving = 6 gm or 0.2 oz |

1 In the National School Lunch Program (NSLP), School Breakfast Program (SBP) (grades K–12), and NSLP afterschool snacks (by July 1, 2025), at least 80 percent of the weekly grains offered must meet the whole grain-rich criteria and the remaining grain items offered must be made from whole-grain flour, whole-grain meal, corn masa, masa harina, hominy, enriched flour, enriched meal, bran, germ, or be an enriched product, such as enriched bread, or a fortified cereal. Please note: State agencies have the discretion to set stricter requirements than the minimum nutrition standards for school meals. For additional guidance, please contact your State agency. For all other Child Nutrition Programs, grains must be made from whole-grain flour, whole-grain meal, corn masa, masa harina, hominy, enriched flour, enriched meal, bran, germ, or be an enriched product, such as enriched bread, or a fortified cereal. Under the Child and Adult Care Program (CACFP) child and adult meal patterns and in the NSLP/SBP preschool meals, at least one grain serving per day must meet the whole grain-rich criteria.

2 For the NSLP, SBP (grades K–12), NSLP afterschool snacks, and CACFP, and NSLP/SBP infant and preschool meals grain quantities are determined using ounce equivalents (oz eq). Summer Food Service Program (SFSP) may determine grain quantities using grains/breads servings. Some of the following grain items may contain more sugar, salt, and/or fat than others. This should be a consideration when deciding how often to serve them.

5 Allowed in NSLP (up to 2.0 oz eq grain-based dessert per week in grades K–12) as specified in §210.10. May count toward the grains component in the SBP (grades K–12), NSLP afterschool snacks, CACFP, NSLP/SBP infant and preschool meals, and SFSP.

Chart continues on next page

4 | Grains

| Food Products per Group | Ounce Equivalent (oz eq) | Minimum Serving Size |
|--|--|--|
| Group C | Ounce Equivalent (oz eq) for Group C | Minimum Serving Size for Group C |
| Cookies ³ (plain - includes vanilla wafers) Cornbread Corn muffins Croissants Pancakes Pie crust (dessert pies ³ , cobbler ³ , fruit turnovers ⁴ , and meats/meat alternate pies) Waffles | 1 oz eq = 34 gm or 1.2 oz ¾ oz eq = 26 gm or 0.9 oz ½ oz eq = 17 gm or 0.6 oz ¼ oz eq = 9 gm or 0.3 oz | 1 serving = 31 gm or 1.1 oz ¾ serving = 23 gm or 0.8 oz ½ serving = 16 gm or 0.6 oz ¼ serving = 8 gm or 0.3 oz |
| Group D | Ounce Equivalent (oz eq) for Group D | Minimum Serving Size for Group D |
| Doughnuts ⁴ (cake and yeast raised, unfrosted) Cereal bars, breakfast bars, granola bars ⁴ (plain) Muffins (all, except corn) Sweet roll ⁴ (unfrosted) Toaster pastry ⁴ (unfrosted) | 1 oz eq = 55 gm or 2.0 oz ¾ oz eq = 42 gm or 1.5 oz ½ oz eq = 28 gm or 1.0 oz ¼ oz eq = 14 gm or 0.5 oz | 1 serving = 50 gm or 1.8 oz ¾ serving = 38 gm or 1.3 oz ½ serving = 25 gm or 0.9 oz ¼ serving = 13 gm or 0.5 oz |
| Group E | Ounce Equivalent (oz eq) for Group E | Minimum Serving Size for Group E |
| Cereal bars, breakfast bars, granola bars ⁴ (with nuts, dried fruit, and/or chocolate pieces) Cookies ³ (with nuts, raisins, chocolate pieces and/or fruit purees) Doughnuts ⁴ (cake and yeast raised, frosted, or glazed) French toast Sweet rolls ⁴ (frosted) Toaster pastry ⁴ (frosted) | 1 oz eq = 69 gm or 2.4 oz ¾ oz eq = 52 gm or 1.8 oz ½ oz eq = 35 gm or 1.2 oz ¼ oz eq = 18 gm or 0.6 oz | 1 serving = 63 gm or 2.2 oz ¾ serving = 47 gm or 1.7 oz ½ serving = 31 gm or 1.1 oz ¼ serving = 16 gm or 0.6 oz |
| Group F | Ounce Equivalent (oz eq) for Group F | Minimum Serving Size for Group F |
| Cake ³ (plain, unfrosted) Coffee cake ⁴ | 1 oz eq = 82 gm or 2.9 oz ¾ oz eq = 62 gm or 2.2 oz ½ oz eq = 41 gm or 1.5 oz ¼ oz eq = 21 gm or 0.7 oz | 1 serving = 75 gm or 2.7 oz ¾ serving = 56 gm or 2 oz ½ serving = 38 gm or 1.3 oz ¼ serving = 19 gm or 0.7 oz |

3 Allowed in NSLP (up to 2.0 oz eq grain-based dessert per week in grades K–12) as specified in §210.10 and at snack service in SFSP. Considered a grain-based dessert and cannot count toward the grains component in CACFP or NSLP afterschool snacks (effective July 1, 2025), or NSLP/SBP infant and preschool meals as specified in §§226.20(a)(4) and 210.10.

4 Allowed in NSLP (up to 2.0 oz eq grain-based dessert per week for grades K–12) as specified in §210.10. May count toward the grains component in SBP (grades K–12) and at snack and breakfast meals in SFSP. Considered a grain-based dessert and cannot count toward the grains component in the CACFP, NSLP afterschool snacks (effective July 1, 2025), or NSLP/SBP infant and preschool meals as specified in §§226.20(a)(4) and 210.10.

Chart continues on next page

| Food Products per Group | Ounce Equivalent (oz eq) | Minimum Serving Size |
|---|---|---|
| Group G | Ounce Equivalent (oz eq) for Group G | Minimum Serving Size for Group G |
| Brownies ³ (plain) Cake ³ (all varieties, frosted) | 1 oz eq = 125 gm or 4.4 oz ¾ oz eq = 94 gm or 3.3 oz ½ oz eq = 63 gm or 2.2 oz ¼ oz eq = 32 gm or 1.1 oz | 1 serving = 115 gm or 4 oz ¾ serving = 86 gm or 3 oz ½ serving = 58 gm or 2 oz ¼ serving = 29 gm or 1 oz |
| Group H | Ounce Equivalent (oz eq) for Group H | Minimum Serving Size for Group H |
| Cereal grains (barley, quinoa, etc.) Breakfast cereals (cooked) ^{6,7,8,9} Bulgur or cracked wheat Macaroni (all shapes) Noodles (all varieties) Pasta (all shapes) Ravioli (noodle only) Rice | 1 oz eq = ½ cup cooked or 1 ounce (28 gm) dry | 1 serving = ½ cup cooked or 25 gm dry |
| Group I | Ounce Equivalent (oz eq) for Group I | Minimum Serving Size for Group I |
| Ready to eat breakfast cereal (cold, dry) ^{6,7,8,9} | 1 oz eq = 1 cup or 1 ounce for flakes and rounds 1 oz eq = 1¼ cups or 1 ounce for puffed cereal 1 oz eq = ¼ cup or 1 ounce for granola | 1 serving = ¾ cup or 1 oz, whichever is less |

3 Allowed in NSLP (up to 2.0 oz eq grain-based dessert per week in grades K–12) as specified in §210.10 and at snack service in SFSP. Considered a grain-based dessert and cannot count toward the grains component in CACFP, NSLP afterschool snacks (effective July 1, 2025), or NSLP/SBP infant and preschool meals as specified in §§226.20(a)(4) and 210.10.

6 Refer to program regulations for the appropriate serving size for supplements served to children aged 1 through 5 in the NSLP; breakfast served in the SBP, and meals served to children ages 1 through 5 and adult participants in the CACFP. Breakfast cereals are traditionally served as a breakfast menu item but may be served in meals other than breakfast.

7 In the NSLP and SBP, cereals that list a whole grain as the first ingredient must be fortified. If the cereal is 100 percent whole grain, fortification is not required. For all Child Nutrition Programs, cereals must be whole-grain, enriched, or fortified.

8 Effective July 1, 2025, cereals served in NSLP, SBP, and NSLP afterschool snacks must contain no more than 6 grams of added sugars per dry ounce.

9 Effective October 1, 2025, cereals served in CACFP and NSLP/SBP infant and preschool meals must contain no more than 6 grams of added sugars per dry ounce. Prior to October 1, 2025, breakfast cereals served in the CACFP must contain no more than 6 grams of total sugars per dry ounce.

4 | Grains

Instructions for Using Yield Data

The data for grains in the yield table includes yield information on common types and customary portion sizes of products that you can buy on the market. All grains served must meet program requirements.

Explanation of Columns

The approximate weight of an oz eq grains is given in the table.

Column 1: Food as Purchased (AP)

In general, foods are arranged in alphabetical order. The Group number is listed for each product. For additional information on these groups, see Exhibit A (pages 4-16 through 4-19).

Column 2: Purchase Unit

The purchase unit for grain items is generally by the pound or, for cold dry cereals, a package. You can use data for one purchase unit to determine how much of the item you need for the number of people you serve.

Column 3: Servings per Purchase Unit, Edible Portion (EP)

This column shows the number of oz eq obtained from each purchase unit. Numbers in this column are generally rounded down to help ensure enough food for the number of servings.

Column 4: Serving Size per Meal Contribution

The size of an oz eq grains is expressed in weight and/or volume.

Column 5: Purchase Units for 100 Servings

This column shows the number of purchase units needed for 100 servings. Numbers in this column are generally rounded up to help ensure enough food for the number of servings.

Column 6: Additional Information

This column gives other information to help you calculate the amount of food you need to prepare meals. For example, the number of cups you will get from one pound of food as purchased is shown for many grain items.