



# Whole Grain Resource

## for the National School Lunch and School Breakfast Programs

A Guide To Meeting the Whole Grain-Rich Criteria

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# Introduction

The Whole Grain Resource is designed to help Program operators identify and offer foods that meet the whole grain-rich criteria for the National School Lunch and School Breakfast Programs (NSLP/SBP). The United States Department of Agriculture (USDA), Food and Nutrition Service (FNS) created this resource to assist Program operators in implementation of the meal pattern requirements for grains.

Please note, the term “whole grain-rich” refers to FNS criteria for school meals and is an implied health claim about the fiber content, which is regulated by the U.S. Food and Drug Administration (FDA). Manufacturers should not use the term whole grain-rich on product label packaging.



# Grain Requirements for School Meals

## Ounce Equivalent Standards

Grains are required to be offered at each meal service as described by the NSLP/SBP meal patterns. Ounce equivalent (oz eq) standards are used to designate the contribution a given serving size makes toward the grains component. Therefore, grain products served must be credited based on oz eq standards. An ounce equivalent is the amount of a grain product that is considered equal to (or contains) 1 ounce creditable toward the grains component.

## Determining Equivalent Minimum Serving Sizes:

Breads, cereals, muffins, crackers, pasta, etc. all contribute differently to the grains requirement based on the weight of each product. The *Food Buying Guide for Child Nutrition Programs*' Exhibit A (Attachment A) provides a general guideline for crediting prepared grain items. It is the most important tool for determining how different grain foods contribute to the ounce equivalence requirement.

**Exhibit A of the *Food Buying Guide for Child Nutrition Programs* is the most important tool for determining how different grains contribute to the ounce equivalence requirement.**

The oz eq for grains from a given product may be determined by using either the weights or volumes listed in Exhibit A (Attachment A) or documentation from a standardized recipe or from a manufacturer describing the grams of creditable grains per portion. In Exhibit A (see page 32), similar types of grain products are grouped (Groups A - I). Determining ounce equivalents of various products are as follows:

- Baked goods, such as breads, biscuits, bagels, etc. (Groups A - G): 16 grams of creditable grain ingredients provide 1.0 oz eq. Of these 16 grams, at least 8 grams must be whole grain and the remaining, if any, must be enriched for the product to meet the whole grain-rich criteria.

The weight of each grain item that represents 16 grams of creditable grain, or 1 oz eq, will vary depending on the group to which it is assigned. For example, 22 grams of saltine type cracker (Group A) provides 1 oz eq grains, whereas 34 grams of pancake (Group C) provides 1 oz eq.

- Cereal grains, such as oatmeal, pasta, and brown rice (Group H): 28 grams (approximately 1.0 ounce by weight) of dry product provides 1.0 oz eq. Since these grains are served cooked and water is added in preparation, the cooked volume equivalent is ½ cup cooked cereal, pasta, or rice.
- Ready-To-Eat (RTE) breakfast cereals (Group I): 28 grams or 1.0 ounce of product provides 1.0 oz eq. One oz eq in volume for RTE cereals are: 1 cup flakes or rounds, 1.25 cups puffed cereal, and ¼ cup granola.

The contribution of grains in a recipe or product formulation for items listed in Exhibit A, Groups A-G, may also be calculated to determine the number of oz eq grains the recipe or product formulation provides based on 16 grams of creditable grain ingredients per ounce equivalent.

To determine how these food items credit as oz eq grains, divide the total amount in grams of creditable grain ingredients in the product formulation or recipe by the number of servings the formulation or recipe yields. Then, divide that number by the 16 grams per oz eq standard.

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For example, if a manufacturer’s documentation or a recipe indicates that a 1.0 ounce slice of bread has 20 grams of creditable grains, the 1.0 ounce slice credits as 1.25 oz eq grains (20 g divided by 16 g per oz eq = 1.25 oz eq).

For the food items listed in Groups H and I of Exhibit A to count as one full serving (1.0 oz eq), the weights or volumes listed in the Exhibit A must be used. Additional examples for calculations are provided on pages 30-31. Keep in mind, it is not necessary for a manufacturer to provide documentation to demonstrate how a grain item credits when using only Exhibit A to determine or declare the product’s meal pattern contribution.

One quarter (0.25) of an oz eq is the smallest amount allowable to credit toward the grains component.

## Whole Grain-Rich Criteria for School Lunch and School Breakfast

Eighty percent of the amount of grains served per week must be whole grain-rich. Whole grain-rich foods are those that contain 100% whole grain or at least 50 percent whole grain meal and/or flour. Any remaining meal/flour must be enriched, bran, or germ.

### How to evaluate if a grain product meets the whole grain-rich criteria:

Any one of the following items can be used to determine if a food meets the whole grain-rich criteria.

1. For grain items in Exhibit A, Groups A-G, the whole-grain content per oz eq must be at least 8.0 grams or more. For grain items in Groups H and I, the whole-grain content must be at least half of the volume or weight listed in the chart for the grain item you want to serve. This information may be determined from information provided on the product packaging or by the manufacturer, if available.

Also, if a grain product contains a meat/meat alternate, manufacturers may apply for a Child Nutrition (CN) label to indicate the oz eq of grains in a food product. (See p. 18 for more information about CN labels.)

2. The product includes one of the following FDA approved whole-grain health claims on its packaging:

*“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 certain 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.”*

3. Whole grains are the primary grain ingredient by weight. Specifically:

1. Non-mixed dishes (e.g., breads, cereals): A whole grain is the first ingredient listed on the product ingredient declaration (with the exception of water) or multiple whole grains are the primary ingredient by weight, and non-creditable grains, if any, are present in an insignificant amount (<2 percent by weight). See page 10 for more information on non-creditable grains.

Note: ingredients are listed in descending order of predominance by weight, which means that the ingredient that weighs the most is listed first, and the ingredient that weighs the least is listed last.

When a whole grain is not listed as the first ingredient, the primary ingredient by weight may be whole grains if there are multiple whole-grain ingredients and their combined weight is more than the weight of the other ingredients.



These products could meet the whole grain-rich criteria with proper manufacturer documentation. For example, a bread item may include three grain ingredients: enriched wheat flour (40% of grain), whole-wheat flour (30% of grain), and whole oats (30% of grain). The Program operator, with the assistance of the manufacturer, could determine that the whole grains are the primary ingredient by weight because the combined 60% whole-grain ingredients (whole-wheat flour and whole oats) are greater than the enriched wheat flour at 40%, even though the enriched flour may be listed first in the ingredient declaration.

II. Mixed dishes (e.g., pizza, corn dogs): A whole grain is the first grain ingredient listed on the product ingredient declaration, or multiple whole grains together are the primary ingredients by weight. For foods prepared by the school food service, the recipe is used as the basis for calculating whether the total weight of whole-grain ingredients exceed the total weight of non-whole-grain ingredients.

4. Schools can identify a whole grain-rich product by finding the product on any State agency's Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)-approved whole-grain food list.

Any grain product found on a State agency's WIC-approved whole-grain food list meets the whole grain-rich criteria for all Child Nutrition Programs. Program operators can obtain a copy of a State agency's WIC- approved whole-grain food list by contacting the WIC State agency. For a list of WIC State agency contacts, please see <https://www.fns.usda.gov/contacts/contact-map?f%5B0%5D=program%3A32>.

In the ingredient declaration of some grain products, a flour blend may be grouped together in parentheses, for example: "Ingredients: flour blend (whole-wheat flour, enriched flour), sugar, cinnamon, etc." In order for these grain products to meet the whole grain-rich criteria (a) the whole-grain content must be at least 8.0 grams per oz eq; or (b) the weight of the whole-grain ingredient(s) in the flour blend must be greater than the weight of the first ingredient listed after the flour blend, such as sugar in the example, as well as the enriched flour.

A ready-to-eat (RTE) breakfast cereal must list a whole grain as the primary ingredient and the RTE cereal must be fortified. RTE breakfast cereals that are 100 percent whole grain and do not contain other refined grains are not required to be fortified.

If the grain product includes enriched ingredients, or the product itself is enriched, the ingredients or the grain product must meet the FDA's Standards of Identity for enrichment (21 Code of Federal Regulations (CFR) Section 137).

Of the weekly grains requirement for lunch, up to 2.0 oz eq grains may be in the form of a grain-based dessert. While there is no specific definition of a grain-based dessert, Program operators should consider how the product is used in the meal and how children consume the product in determining if it is a grain-based dessert. Common grain-based desserts are cakes, cookies, pies, and sweet rolls. Grain-based desserts listed in Exhibit A are designated with a superscript of 3 or 4.



# What Is a Whole Grain?

A whole grain contains the entire cereal grain seed or kernel. The kernel has three parts — the bran, the germ, and the endosperm. Usually the kernel is cracked, crushed, or flaked during the milling process. If the finished product retains the same relative proportions of bran, germ, and endosperm as the original grain, it is considered a whole grain.

Whole grains provide a variety of nutrients to support proper growth and development in children. They also help to provide a feeling of fullness with fewer calories.

Dietary fiber in whole grains may help reduce blood cholesterol and lower risk of heart disease, obesity, and type 2-diabetes. Fiber is also important for proper bowel function.

## Common and usual names for types of whole grains:

The words listed below, describe whole grain ingredients based on the FDA's Standards of Identity:

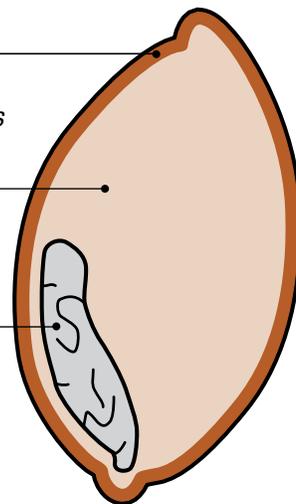
- Cracked wheat
- Crushed wheat
- Whole-wheat flour
- Graham flour
- Entire-wheat flour
- Bromated whole-wheat flour
- Whole-durum wheat flour

## Whole Grain Kernel

**Bran** —  
"Outer shell" protects seed  
*Fiber, B vitamins, trace minerals*

**Endosperm** —  
Provides energy  
*Carbohydrates, protein*

**Germ** —  
Nourishment for the seed  
*Antioxidants, vitamin E, B-vitamins*



## Other ways to identify whole grains:

- The word *whole* listed before a grain ingredient, for example, *whole* wheat
- The words *berries* and *groats* are also used to designate whole grains, for example, wheat *berries* or oat *groats*
- Products labeled as rolled oats and oatmeal (including old-fashioned, quick-cooking, and instant oatmeal)
- Reconstituted whole wheat can be considered whole grain when the reconstitution is done by the original milling facility to ensure the same batch of whole grain is returned to its original natural proportions. Request documentation from the milling company to state that they recombined the grain components to natural proportions of bran, germ, and endosperm.
- Some whole-grain products do not use the word "whole" in their description, for example, brown rice, brown rice flour, wild rice, quinoa, millet, triticale, teff, amaranth, or buckwheat.



While not an exhaustive list, the grain ingredients listed in the table below are common whole grains:

<b>WHEAT</b>		
bromated whole-wheat flour	stone ground whole-wheat flour	whole-grain bulgur
bulgur (cracked wheat)	toasted crushed whole wheat	whole-grain wheat
cracked wheat or crushed wheat	wheat berries	whole-grain wheat flakes
entire wheat flour	wheat groats	whole-grain wheat flour
flaked wheat	white whole-wheat flour	whole-white wheat
graham flour	whole bulgur	whole-wheat flakes
sprouted wheat	whole-durum flour	whole-wheat flour
sprouted wheat berries	whole-durum wheat flour	whole-wheat pastry flour
sprouted whole wheat		
<b>OATS</b>		
instant oatmeal	old-fashioned oats	whole-grain oat flour
oat groats	quick-cooking oats	whole oats
oatmeal or rolled oats	steel cut oats	whole-oat flour
<b>BARLEY</b>		
dehulled barley	whole-barley flakes	whole-grain barley
dehulled-barley flour	whole-barley flour	whole-grain barley flour
whole barley		
<b>CORN</b>		
nixtamalized corn*	whole cornmeal	whole-grain cornmeal
popcorn	whole-grain corn	whole-grain grits
whole corn	whole-grain corn flour	whole-corn flour
<b>BROWN RICE</b>		
brown rice	brown-rice flour	sprouted brown rice
<b>WILD RICE</b>		
wild rice	wild-rice flour	

\*Nixtamalized corn, (i.e., corn treated with lime), such as hominy, corn masa (dough from masa harina), and masa harina (corn flour) are considered whole grain when evaluating products for meal requirements. See p. 8 for further explanation.

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(Cont.) The grain ingredients listed in the table below are common whole grains:

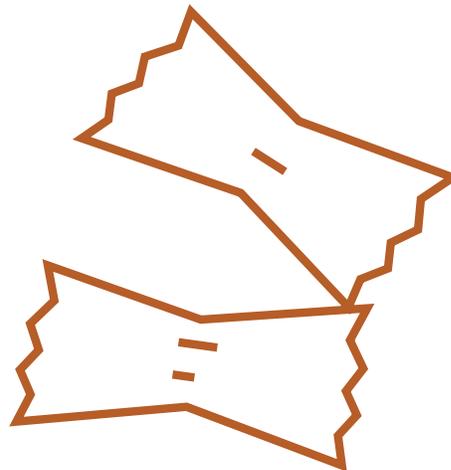
RYE		
flaked rye	sprouted whole rye	whole-rye flakes
rye berries	whole rye	whole-rye flour
rye groats		
OTHER GRAINS		
amaranth	whole sorghum (milo)	triticale
amaranth flour	whole-grain sorghum flour	triticale flour
buckwheat	spelt berries	whole einkorn
buckwheat flour	sprouted buckwheat	whole-einkorn berries
buckwheat groats	sprouted einkorn	whole emmer (farro)
millet	sprouted spelt	whole-grain einkorn flour
millet flour	teff	whole-grain spelt flour
quinoa	teff flour	whole kamut (Khorasan wheat)
		whole spelt

**The following corn ingredients also meet the whole grain-rich criteria for school meals.**

**corn masa**

**hominy grits**

**masa harina**



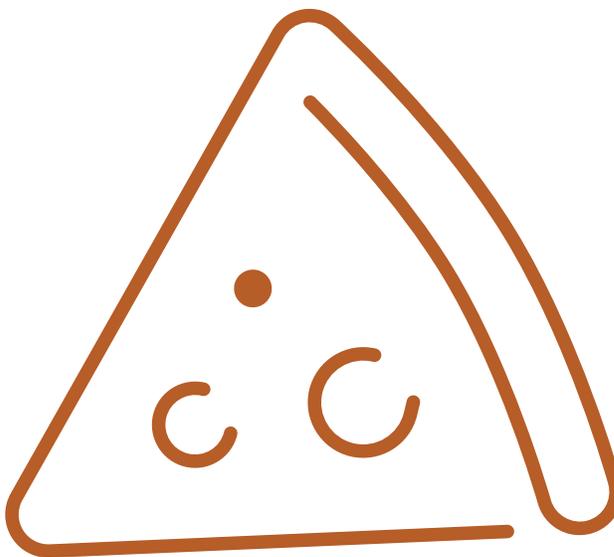
Nixtamalized corn, (i.e., corn treated with lime), such as hominy, corn masa (dough from masa harina), and masa harina (corn flour) are considered whole grain when evaluating products for meal requirements. Nixtamalization is a process in which dried corn is soaked and cooked in an alkaline (slaked lime) solution. This process increases the bioavailability of certain nutrients. 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.



The grain ingredients listed below are **not** considered whole grains (please contact your State agency to determine if a grain ingredient is creditable toward the grains component in school meals):

<b>NOT CONSIDERED WHOLE GRAINS</b>		
all-purpose flour	enriched bromated flour	potato flour
any bean flour	enriched flour	rice flour
any nut flour	enriched rice	self-rising flour
bread flour	enriched self-rising flour	self-rising wheat flour
bromated flour	farina	semolina
cake flour	flour	unbleached flour
corn flour	instantized flour	white flour
corn fiber	malted barley	wheat flour
couscous	milled brown rice	yellow corn flour
degerminated cornmeal	oat fiber	yellow corn meal
durum flour	phosphated flour	

*\*Some of the above products may credit as enriched. See page 10 for more information on enriched grain products.*



## Other grain products that may not be whole grains:

- “Pot” or “Scotch” barley and “pearl” or “pearled” barley are *not* whole grains because some or all of the bran has been removed. Look for the words whole barley or whole-grain barley on the product label or in the ingredient statement. FDA has recognized that “dehulled barley” is a whole grain.
- “Stone ground” does not necessarily mean that the product is whole grain. “Stone ground” describes the process used for making the flour or meal. Look for the word “whole” in combination with “stone ground” in the ingredient statement.
- When a grain name, such as wheat, rice, or rye flour, is listed in the ingredient statement, but has no descriptor (such as “whole-grain” for wheat or “brown” for rice), the Program operator needs to obtain further documentation from the manufacturer before purchasing the food product to ensure it meets the whole grain-rich criteria.

## Enriched and Fortified Grains

Up to 20 percent of the grain products served in school meal programs may be made from enriched or fortified grains. These are refined grains that have been processed to remove all or a portion of the bran and germ and then have certain nutrients added back to them after or during processing.

Nutrients may be added to a grain ingredient or to the entire product. For products where the enrichment was added to all ingredients, added nutrients appear at the end of the ingredients list.

For example, a label for an enriched pasta may say:

Ingredients: SEMOLINA (WHEAT), DURUM WHEAT FLOUR, NIACIN, IRON (FERROUS SULFATE), THIAMINE MONONITRATE, RIBOFLAVIN, FOLIC ACID.

This means the vitamins and minerals were added to the wheat and wheat flour so the whole product is enriched.

## Brans and Germs

Schools can credit bran and germ as if they are enriched grains; bran and germ can be offered to meet up to 20 percent of the weekly grains requirements.

## Non-Creditable Ingredients

Grain ingredients that are not whole, enriched, bran or germ are considered non-creditable in school meal programs. Some examples of non-creditable ingredients found in grain products include oat fiber, corn fiber, wheat starch, corn starch, modified food starch, and vegetable flours (such as potato and legume flours).

The grain portion of either a whole grain-rich or an enriched grain product can be creditable in school meals, if the non-creditable ingredients are less than 2 percent of the product formula (or less than 0.25 oz eq per portion). To have less than 0.25 oz eq per portion, the amount of non-creditable grains per portion cannot be greater than 3.99 grams for Exhibit A, Groups A – G and cannot be greater than 6.99 grams for Exhibit A, Groups H and I. Non-creditable ingredients are often listed on the ingredient statement as being less than 2 percent of the product. In this case, they are not required to be included in the calculations to determine the amount of non-creditable ingredients.



For example, if the label ingredient statement says “contains less than 2 percent wheat flour and corn starch,” the wheat flour and corn starch do not need to be included in the calculations of non-creditable ingredients. If the amount of non-creditable grains is not identified on the product label, additional information is needed from the manufacturer to determine the amount per portion.

School Program operators only need to calculate non-creditable ingredients when they are found in grain items (such as breads, rolls and muffins) and in the grain portion of mixed products (such as a cheese and vegetable burrito). This means non-creditable ingredients used in the cheese and vegetable portion of a mixed product should not be included when calculating the amount of non-creditable ingredients. For example, if the cheese and vegetable portion of a burrito includes corn starch as a thickening agent, the amount of this corn starch should not be included when determining the amount of non-creditable ingredients.

School Food Authorities (SFA) have flexibility to use a wide range of products in planning meals that meet NSLP and SBP meal patterns and dietary specifications. However, Program operators are strongly encouraged to offer food items that are low in added sugars, sodium, and saturated fat in order to meet these requirements and provide foods that are consistent with the *Dietary Guidelines for Americans*.

## “Extra” Foods

Grain products that meet the whole grain-rich criteria or that are made from creditable grains, such as enriched flour, contribute toward the grains component in the school meal patterns. If a grain item not made primarily from creditable grains is offered, it is considered an extra food. While extra foods do not contribute to the meal patterns, they must be counted toward the weekly dietary specifications, including calories, saturated fat, and sodium. Program operators should check with their State agency prior to purchasing grain products that contain questionable ingredients.



## Whole Grains in School Meals Success Story

### **Whole-Grain Pride! El Monte City School District, El Monte, California**

The El Monte City School District (CSD) Nutrition Services in California takes great pride in offering whole-grain foods! They slowly started implementing whole grains into the school menu by mixing white and brown rice in entrées. After roughly 4 months, the school nutrition program successfully switched over to strictly serving brown rice – with students enjoying the hearty and nutritious, whole-grain goodness of brown rice in cooked rice entrees like Teriyaki Chicken and Japanese Cherry Blossom Chicken. “Now that we have been on the mission for 8 years, our students see whole grains as *the norm*,” says Dr. Robert Lewis, Director of Nutrition Services for El Monte CSD. El Monte CSD even teamed up with television personality, Chef Rachel Ray, to develop another successful recipe, Yakitori Chicken, which uses whole-grain pasta.

Students also enjoy menu items like Blueberry Monster Bread and Home-Style Sweet Potato Bread prepared from scratch using whole-grain flour. All of their purchased products meet the whole grain-rich criteria for school nutrition programs. The district has been fortunate in establishing great relationships with vendors to procure and purchase whole-grain products, including regional favorites like tamales and enchiladas. They are committed to creating a healthier environment for students and are continually finding new ways of using whole grains.



**Blueberry Monster Bread, a freshly baked breakfast bread made with whole-grain flour.**



**Sweet Potato Bread includes whole-wheat flour as an ingredient.**



# Incorporating Products That Meet Whole Grain-Rich Criteria

## Purchasing Whole Grains

School Program operators have the flexibility to use a wide range of products in planning meals that meet NSLP and SBP meal patterns and dietary specifications.

Before purchasing products containing whole grains, look carefully at the entire product label. When soliciting bids from manufacturers, specify that products must be made from 50 percent or more whole grains with all remaining grains being enriched. Prior to purchasing, double check the ingredient statement and any accompanying manufacturer documentation to ensure that the product meets whole grain-rich criteria. To be consistent with the *Dietary Guidelines for Americans*, Program operators are encouraged to purchase and serve grain items that meet the whole grain-rich criteria that are also low in sugars and/or fat.

The *Food Buying Guide for Child Nutrition Programs (FBG)* is a helpful resource for purchasing grain items. It can help you buy the right amount of food and the appropriate type of food for your program and determine the specific contribution each food makes toward the meal pattern requirements. As an online resource, the *FBG Interactive Web-based Tool* allows you to easily search and navigate food yields, compare food yields, and create and save a list of favorite food items. It is also available as a mobile app to provide quick access to food yield information which helps you make quick purchasing decisions from your mobile device.

The Exhibit A Grains Tool is also available through both the FBG Web Tool and Mobile App. The Exhibit A Grains Tool allows you to: easily determine the grains contribution based on the grain product's Nutrition Facts label; calculate the amount to serve of a grain product based on a desired grains contribution; and, determine the amount to serve for a grain product based on the minimum grains requirement by age or grade group. These tools are available at <https://www.fns.usda.gov/tn/food-buying-guide-for-child-nutrition-programs>.

## Storing Whole Grains

As with all foods, use FIFO (First In, First Out) principles when storing whole-grain items. Because whole-grain ingredients (e.g., whole-wheat flour, brown rice) retain the bran and the oil-rich germ, these items may turn rancid when stored in warm areas and have a shorter shelf life than their refined counterparts. To increase shelf life, store these products in airtight containers, in a cool, dry place. If products will not be used within a short period of time, they should be stored in the refrigerator or freezer.

## Increasing Student Acceptance of Whole Grains

Some students may not be familiar with foods that meet the whole grain-rich criteria. Encourage them to try whole-grain options by conducting student taste tests to increase student appeal. By documenting the taste tests and student preferences, Program operators may develop a list of appealing products for purchase that meet the whole grain-rich criteria.

Serving items that meet the whole grain-rich criteria in foods that are popular with students increases acceptability. Introduce whole grains in student favorites, such as pizza or spaghetti.

The goal is to offer nutritious items that meet the whole grain-rich criteria and that students enjoy. If students prefer to select grain options that are lighter in color, you may choose to incorporate products or recipes that use white whole-wheat flour to increase acceptance.

Including a whole grain-rich grain-based dessert on a limited basis (2 oz eq per week at lunch) can also have the positive effect of increasing acceptance and encouraging children to more fully participate in the meal service.



Nutrition education in the cafeteria and classroom can also be an effective tool to help increase whole-grain intake in students. Here are some tactics that nutrition staff and teachers can use to encourage students.

- Use cooking and tasting demonstrations to allow students to sample new whole-grain food products and recipes;
- Display nutrition education material about whole grains in the cafeteria;
- Market/promote strategies for new whole-grain products and recipes as fun, exciting, ethnic, foodie-approved, adventurous, etc.;
- Solicit student and/or parent feedback for suggestions on whole-grain foods that students enjoy;
- Peer promotion of new whole-grain menu items.

## Ideas for Adding Products That Meet Whole Grain-Rich Criteria to Menus

To meet whole grain-rich criteria, consider adding whole grains to the menu item suggestions below, which tend to be acceptable to children.

- Bagels or muffins
- Breads, rolls, or buns
- Cooked breakfast cereals\*
- Cornbread
- Crackers
- Granola
- Granola bars or cereal bars
- Pancakes\* or waffles
- Pasta, such as macaroni,\* spaghetti,\* vermicelli, or other whole-grain noodles
- Pita pockets
- Popcorn
- Pretzels
- Ready-to-eat cereals
- Salads (cracked wheat, whole-grain bulgur, whole specialty grains)
- Side dishes (e.g., brown rice,\* wild rice, cracked wheat, whole-grain bulgur or barley, whole specialty grains)
- Soba noodles (with whole-buckwheat flour as primary ingredient)
- Tortillas,\* taco shells
- Other uses of whole grains (soups, casseroles, combination dishes)

\*Currently available through USDA Foods.



## Whole Grains in School Meals Success Story

### Local Wheat!

#### St. Labre Indian School Educational Association, Ashland, Montana

When Brian Jones, Food Service Director for the St. Labre Indian School Educational Association in Ashland, Montana, and his staff noticed that students were throwing away sandwiches, they knew they needed to make a change. The answer came in the form of local Montana white whole wheat that is now used to make 90 percent of the breads served at St. Labre's four schools and dormitory, housing up to 85 students during the school year.

Through research and trial and error, they found that Montana white whole wheat was the best product on the market to meet their needs. According to Brian, the staff says this particular wheat is easier to work with, and most importantly, it has reduced the number of sandwiches thrown away – which is great given that St. Labre serves over 7,000 sack lunches throughout the year.



**St. Labre Indian School baking with local Montana white whole wheat.**



### **Additional Resources:**

#### **The Child Nutrition Recipe Box**

<https://theicn.org/cnrb>

#### **The Food Buying Guide for Child Nutrition Programs**

<https://www.fns.usda.gov/tn/food-buying-guide-for-child-nutrition-programs>

#### **USDA Foods in Schools Product Information Sheets**

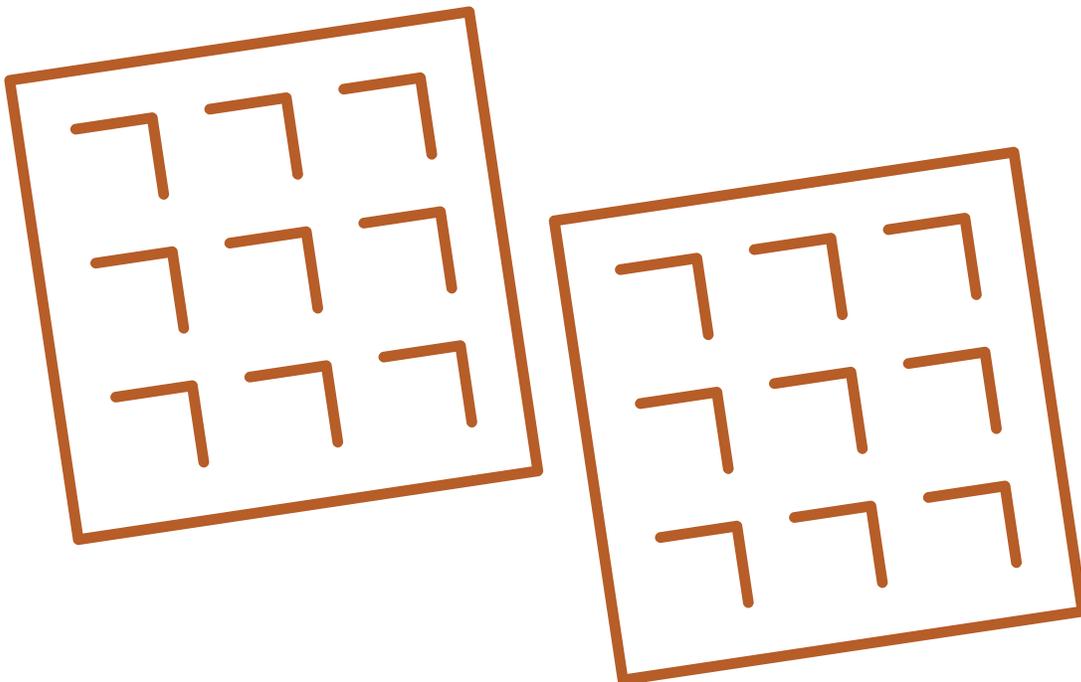
<https://www.fns.usda.gov/fdd/nslp-usda-foods-fact-sheets>

#### **USDA Standardized Recipes**

<https://www.fns.usda.gov/usda-standardized-recipe>

#### **Recipes for Healthy Kids Cookbook**

<https://www.fns.usda.gov/tn/recipes-healthy-kids-cookbook-schools>

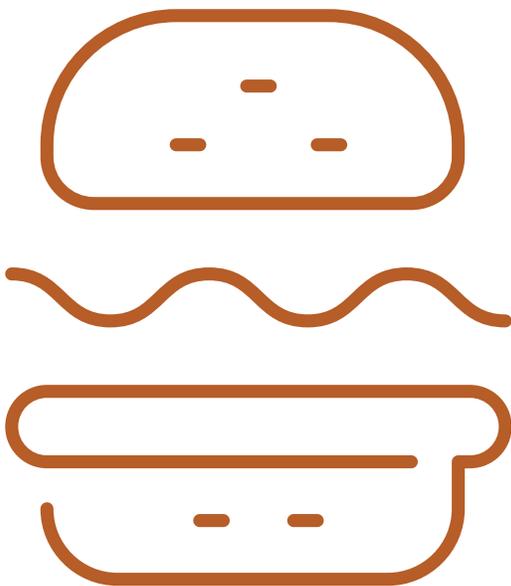


# Determining if Products Meet Whole Grain-Rich Requirements

Can you identify grain products that meet the whole grain-rich criteria? This section can help Program operators put the whole grain-rich criteria for school meals into practice!

Utilize the following sample products and explanations to build your skills in determining if products meet the whole grain-rich criteria. This section also helps you identify the type of documentation needed to ensure that reimbursable meal pattern requirements are met.

Program operators should check with their State agency prior to purchasing new grain products if they are unsure the item will meet requirements or if they have questions on what type of documentation is needed for documenting meal pattern compliance.



## Acceptable Forms of Documentation for Items That Meet Whole Grain-Rich Criteria

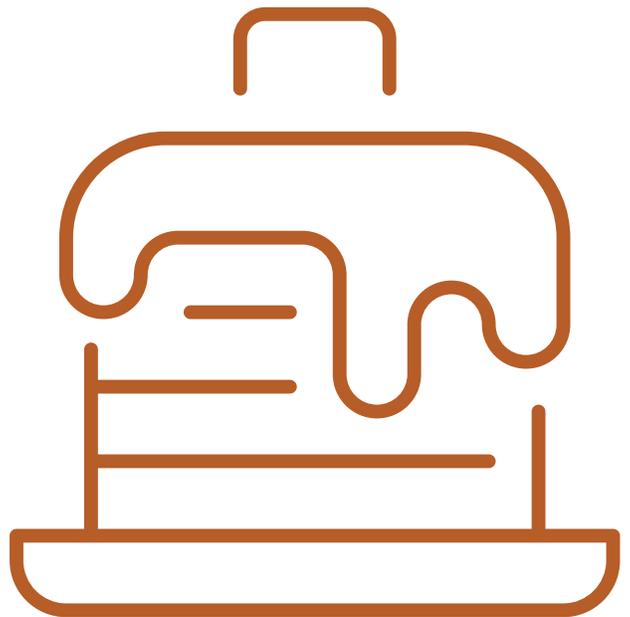
In order to document that the grain items served meet whole grain-rich criteria, Program operators should maintain one or more of the following types of documentation on file:

- An ingredient declaration from a product package that shows a whole grain as the primary ingredient by weight.\*
- A copy of a food label showing the amount of whole grain in grams provided for the appropriate NSLP/SBP serving size or a copy of a food label displaying one of the FDA whole grain health claims.\*
- A standardized recipe that includes the ingredients and ingredient amounts by weight or volume.
- USDA Foods Product Information Sheets that include whole grain-rich products. (<https://www.fns.usda.gov/usda-fis/usda-foods-product-info-sheets-grains>).

*\*Program operators may need additional information when using these items to document meal pattern compliance. Compare manufacturer documentation with the ingredient statement and verify that crediting calculations on the documentation are accurate.*



- USDA-Authorized CN label for entrée items that include grains. FNS Memo SP 11-2015(v2) *CN Labels Copied with a Watermark Acceptable Documentation* provides CN labeled product documentation requirements and may be accessed at <https://www.fns.usda.gov/cn/cn-labels-copied-watermark-acceptable-documentation>.
- A customized Product Formulation Statement (PFS) on manufacturer letterhead.\* Sample PFS templates for grain products can be seen on pages 34-37 of this resource and at the Food Manufacturers/Industry webpage at <https://www.fns.usda.gov/cn/labeling/food-manufacturersindustry>.



### **Child Nutrition (CN) Labeling Program**

Manufacturers may apply for a Child Nutrition (CN) label for qualifying products to indicate the number of oz eq grains that may credit. The term “oz eq grains” on the CN label indicates the product meets the FNS whole grain-rich criteria. Products containing predominantly enriched grain ingredients shall use the term “oz eq grains (enriched)”. Please refer to the CN Labeling Program website for details regarding qualifying products (e.g. entrée items with at least 0.50 oz eq of meat/meat alternate) at <https://www.fns.usda.gov/cn/labeling-program>.

You can also use the CN Labeling Verification System to verify that a product’s CN label is valid prior to purchase at: <https://www.fns.usda.gov/cnlabeling/usdausdc-authorized-labels-and-manufacturers>.

*\*Program operators may need additional information when using these items to document meal pattern compliance. Compare manufacturer documentation with the ingredient statement and verify that crediting calculations on the documentation are accurate.*



## All Natural Whole-Wheat Pasta



**Ingredients:**

Whole-grain wheat flour, wheat flour, oat fiber.

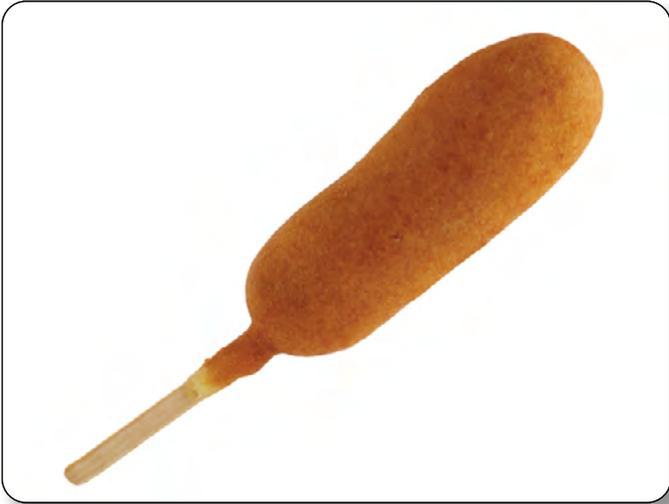
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**T**his product ingredient statement lists a whole grain as the primary ingredient by weight (whole-grain wheat flour). However, it also contains unenriched wheat flour, oat fiber, and the pasta itself is not enriched.

Many pastas contain a blend of whole-wheat flour and unenriched flour. Grain products containing 0.25 ounce equivalents or more of non-creditable ingredients per portion may not contribute toward the reimbursable meal. Request a Product Formulation Statement from the manufacturer and ensure the grams of non-creditable ingredients are less than 0.25 ounce equivalency (7 grams for items in Group H of Exhibit A) per portion prior to purchasing. If the product contains more than the allowable amount of non-creditable ingredients, it is not creditable toward meal pattern requirements.



## Whole-Grain Chicken Corn Dog



**Batter Ingredients:**

Water, whole-wheat flour, whole grain corn, sugar, leavening (sodium acid pyrophosphate, sodium bicarbonate), soybean oil, salt, egg yolk with sodium silicoaluminate, ascorbic acid, egg white, dried honey, artificial flavor. Fried in vegetable oil.

**Chicken Frank Ingredients:**

Mechanically separated chicken, water, corn syrup solids, contains less than 2% of salt, spices, potassium lactate, sodium lactate, sodium phosphate, flavorings, sodium erythorbate, sodium diacetate, sodium nitrite.  
CONTAINS: WHEAT, SOY, EGG, AND GLUTEN.

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Corn dogs are mixed dishes, as they contribute to both the grains component and meats/meat alternates component. This corn dog lists a whole grain as the primary grain ingredient (whole-wheat flour) in the batter and all other grains are whole, so the product meets whole grain-rich requirements. Maintain a copy of the label or Product Formulation Statement on file to show that whole grain-rich criteria for reimbursable meals are being met.



## White Whole-Wheat Breadsticks



**Ingredients:**

Whole-wheat flour, water, enriched unbleached wheat flour (wheat flour, malted barley flour, niacin, iron as ferrous sulfate, thiamine mononitrite, enzyme, riboflavin, folic acid), yeast, sugar, wheat gluten. Contains less than 2% of the following: soybean oil, salt, oat fiber, honey, sodium stearoyl lactylate, datem, acesulfame potassium, ascorbic acid, enzyme.  
MAY CONTAIN MILK, SOY, EGG AND SESAME.

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The ingredient statement for this product lists a whole grain first (white whole-wheat flour). Additionally, the remaining grain in the product is enriched, so this product meets the whole grain-rich criteria. Because there is only one non-creditable ingredient (oat fiber), and it is listed as being less than 2 percent of the product formula, there is no need to request additional information from the manufacturer. Note that wheat gluten is a disregarded ingredient when assessing grain products for all Child Nutrition Programs. Maintain a copy of the label on file for documenting that this product meets whole grain-rich requirements.



## Whole-Grain Cereal Bar



**Ingredients:**

Whole-grain rolled oats, brown sugar, crisp brown rice, whole-grain rolled wheat, soybean oil, whole-wheat flour, almonds, water, freeze dried bananas, whole-corn flour, sodium bicarbonate, malted barley extract, soy lecithin, natural flavor, caramel color, alpha tocopherol acetate, BHT.

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**T**his cereal bar contains a whole grain as the first ingredient (whole-grain rolled oats), and all other grains (crisp brown rice, whole-grain rolled wheat, whole-wheat flour, and whole-corn flour) listed are also whole; therefore, it meets the whole grain-rich criteria. Maintain a copy of the product label on file.



## Reduced Carb Wheat Tortilla



**Ingredients:**

Water, modified food starch, whole-wheat flour, wheat gluten, powdered cellulose, hydrogenated soybean oil, caramel color, wheat protein isolate (wheat gluten, lactic acid, sulfite), sodium bicarbonate, contains 1% or less of salt, cellulose gum, cornstarch, distilled monoglycerides.

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**T**his product does not list a whole grain as the primary ingredient by weight. Modified food starch is considered a non-creditable ingredient and in order for it to be creditable, it must contribute less than 2 percent of the product formula (or less than 0.25 oz eq). Therefore, this product will not meet whole grain-rich criteria.

If grain items with 0.25 oz eq or more of non-creditable ingredients per portion are served, they do not contribute toward the meal pattern requirements for grains. However, they must be included in the dietary specifications (including calories, saturated fat, and sodium) and, when applicable, count toward the weekly grain-based dessert limit.



# Whole-Grain Cheese Pizza



**Ingredients:**

Crust (Flour blend [whole-wheat flour, enriched wheat flour {bleached wheat flour, malted barley flour, niacin, reduced iron, thiamine mononitrate, riboflavin, folic acid}], water, soybean oil, dextrose, baking powder, yeast, salt, dough conditioners [wheat flour, salt, soy oil, ascorbic acid], wheat gluten). Shredded Mozzarella Cheese (Pasteurized part skim milk, cheese cultures, salt, enzymes). Shredded Mozzarella Cheese Substitute (Water, oil [soybean oil, partially hydrogenated soybean oil with citric acid], casein, milk protein concentrate, modified food starch, contains 2% or less of the following: sodium aluminum phosphate, salt, lactic acid, mozzarella cheese type flavor [cheese {milk, culture, rennet, salt}, milk solids, disodium phosphate], disodium phosphate, sorbic acid. Sauce (Water, tomato paste [not less than 28% NTSS], pizza seasoning [salt, sugar, spices, dehydrated onion, guar and xanthan gum, garlic powder, potassium sorbate, citric acid, tricalcium phosphate and soybean oil {prevent caking}], modified food starch). CONTAINS: WHEAT, MILK, AND SOY.

	CN	
		XXXXXX
CN	One 5.00 oz Wedge Cheese Pizza with Whole Wheat Crust provides 2.00 oz equivalent meat alternate, 1/8 cup red/orange vegetable, and 2.0 oz equivalent grains for the Child Nutrition Meal Pattern Requirements. (Use of this logo and statement authorized by the Food and Nutrition Service, USDA XX-XX.)	CN
	CN	

This pizza is CN labeled and credits “oz eq Grains” in the CN label Statement. This means that the crust meets whole grain-rich criteria, and the crediting on the CN label can be used. Check to make sure that the CN number is valid using the CN Labeling Verification System (<http://www.fns.usda.gov/cn/labeling/usdausdc-authorized-labels-and-manufacturers>) and maintain a copy of the product label on file.

Without a valid CN label, the manufacturer would need to provide the weight of the crust per slice or the grams of creditable grain per slice and the amount of unenriched wheat flour that is being used as a dough conditioner.



## White Corn Tortillas



**Ingredients:**

Corn masa flour, water, contains less than 2% of:  
cellulose gum, guar gum, amylase, and propionic acid,  
benzoic acid and phosphoric acid (to maintain freshness).

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**T**his corn tortilla lists corn masa flour as the first and only grain ingredient, hence, it meets the whole grain-rich criteria. Remember, corn masa, masa harina, and hominy are grains that have been nixamalized, which increases the bioavailability of certain nutrients and are considered whole grain-rich. Maintain a copy of the product label on file.



# Cornbread (School Recipe)

YIELD:		VOLUME:	
<b>50 Servings:</b>	4 lb 14 oz (batter) 1 half-sheet pan	<b>50 Servings:</b>	about 2 quarts 2 cups (batter) 50 pieces
<b>100 Servings:</b>	9 lb 12 oz (batter) 2 half-sheet pans	<b>100 Servings:</b>	1 gallon 1 quart (batter) 100 pieces

Ingredients	Weight	Measure
Flour, enriched bleached	1 lb	3 <sup>3</sup> / <sub>4</sub> cups
Flour, whole-wheat	½ lb	2 cups
Cornmeal, whole-grain	1 lb	3 <sup>3</sup> / <sub>4</sub> cups
Salt		1 <sup>1</sup> / <sub>4</sub> tsp
Eggs, whole	5 <sup>1</sup> / <sub>4</sub> oz	<sup>2</sup> / <sub>3</sub> cup
Baking powder		2 Tbsp 2 tsp
Sugar	5 <sup>1</sup> / <sub>4</sub> oz	<sup>3</sup> / <sub>4</sub> cup
Instant nonfat dry milk, reconstituted		3 <sup>3</sup> / <sub>4</sub> cups
Vegetable oil		<sup>1</sup> / <sub>2</sub> cup

Nutrients Per Serving					
<b>Calories</b>	108	<b>Saturated Fat</b>	0.45 g	<b>Iron</b>	0.90 mg
<b>Protein</b>	2.65 g	<b>Cholesterol</b>	13 mg	<b>Calcium</b>	68 mg
<b>Carbohydrate</b>	18.03 g	<b>Vitamin A</b>	51 IU	<b>Sodium</b>	151 mg
<b>Total Fat</b>	2.82 g	<b>Vitamin C</b>	0.1 mg	<b>Dietary Fiber</b>	1.0 g

In this recipe, the enriched flour, whole-wheat flour, and whole-grain cornmeal each count as creditable grains. The weight of the whole grain-rich ingredients (whole-wheat flour and whole-grain cornmeal) exceeds the weight of the enriched flour, so this product meets the whole grain-rich criteria. Maintain the recipe on file to document that the product meets meal pattern requirements.

For commercial products that contain more than one whole grain-rich ingredient with an enriched grain listed first in the ingredient statement, the manufacturer must provide a Product Formulation Statement demonstrating that the whole grain-rich ingredients exceed the enriched grains.



# Whole-Grain Ready-To-Eat Cereal



**Ingredients:**

Whole-grain wheat, sugar, rice flour, whole-grain oats, honey, canola oil, maltodextrin, salt, corn syrup, cinnamon, barley malt syrup, barley malt extract, color added, soy lecithin, artificial flavor, baking soda, trisodium phosphate, vitamin E (mixed tocopherols) and BHT added to preserve freshness.

Vitamins and Minerals: Calcium Carbonate, Vitamin E acetate, a B vitamin (niacinamide), Vitamin C (sodium ascorbate), Iron (a mineral nutrient), Vitamin B6 (pyridoxine hydrochloride), Vitamin B2 (riboflavin), Vitamin B1 (thiamin mononitrate), Vitamin A (palmitate), Vitamin B12, Vitamin D3.

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**T**o meet the whole grain-rich criteria, ready-to-eat (RTE) breakfast cereals must list a whole grain first in the ingredient list, and the cereal must be fortified. This cereal meets both requirements. Maintain a copy of the label on file. RTE cereals that are 100 percent whole grain (and contains an insignificant amount\* of non-whole grains) do not need to be fortified to meet requirements.

*\*An insignificant amount is defined as less than 2% by weight or <7 grams per oz eq (<0.25 oz eq).*



## Wheat Bran Muffin



**Ingredients:**

Wheat bran, whole-wheat flour, sugar, raisins, baking soda, baking powder, salt, milk, vanilla extract

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The primary ingredient in this example is wheat bran. Brans and germs are creditable ingredients in school meal programs as enriched ingredients. If the whole-wheat flour was the first ingredient, this muffin would be whole grain-rich. Based on the ingredient label, it is possible that the wheat bran and whole-wheat flour are present in equal proportions, in which case, the muffin would be whole grain-rich. However information from the manufacturer would be needed to determine this. Therefore, based on the ingredient statement alone, this bran muffin does not meet the whole grain-rich criteria for school meals.



# USDA Foods


United States Department of Agriculture



**USDA Foods  
in Schools**

**110393 - Pancakes, Whole Grain/Whole Grain-Rich**  
 Category: **Grains (Whole Grain)**



**Product Description**

- These whole grain-rich pancakes are made with whole wheat flour or a combination of whole wheat flour and enriched wheat flour. This item is delivered frozen in cases containing 144 1.2-ounce servings.

**Crediting/Yield**

- One case of pancakes provides 144 servings.
- CN Crediting: A 1.2-ounce serving of pancakes credits as 1 ounce equivalent grains.

**Culinary Tips and Recipes**

- Serve pancakes for breakfast or lunch. Add fresh or thawed frozen fruit as a pancake topping.
- Use pancakes as the grain component for a breakfast sandwich.
- For culinary techniques and recipe ideas, visit the [Institute of Child Nutrition](#) or [USDA's Team Nutrition](#).

**Food Safety Information**

- For more information on safe storage and cooking temperatures, and safe handling practices, please refer to: [Developing a School Food Safety Program Based on the Process Approach to HACCP Principles](#).

Visit us at [www.fns.usda.gov/usda-fis](http://www.fns.usda.gov/usda-fis)

**Nutrition Facts**

Serving size: 1 ounce equivalent (34g)

Amount Per Serving	
<b>Calories</b>	70
<b>Total Fat</b>	2g
Saturated Fat	0g
Trans Fat	0g
<b>Cholesterol</b>	3mg
<b>Sodium</b>	135mg
<b>Total Carbohydrate</b>	13g
Dietary Fiber	1g
Sugars	3g
<b>Protein</b>	2g

Source: USDA Foods Vendor Labels

**Allergen Information:** Product contains wheat, eggs, milk, and may contain soy. Please refer to the allergen statement on the outside of the product package for additional allergen information. For more product-specific information, please contact the manufacturer.

Nutrient values in this section are from the USDA Food Composition Database or are representative values from USDA Foods vendor labels. Please refer to the product's Nutrition Facts label or ingredient list for product-specific information.

January 2016

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USDA Foods provides a variety of whole grain-rich options to help schools successfully meet the whole grain-rich requirements. School districts can use the product packaging or USDA Foods Product Information Sheet (example above) as documentation that the products they serve meet whole grain-rich requirements.

School districts that choose to divert USDA Foods Bulk ingredients for processing need to verify the processed end products in the same way they would for a commercial item. USDA does not monitor the specific product formulations from USDA Foods processors for compliance with whole grain-rich requirements.



# Put Your Crediting Skills to the Test!

Program operators have the ability to credit ounce equivalents for grain products based on the ounce weights listed in Exhibit A or by the grams of creditable grain in each product portion (documented by standardized recipe or Product Formulation Statement signed by a manufacturer). The following examples demonstrate how each method may be used to determine how qualifying products meet ounce equivalent requirements for grains in the National School Lunch and School Breakfast Programs. Any of the following methods are acceptable to use based on the needs of the menu planner. Double-check manufacturer calculations to ensure accuracy and always document how products are credited. Keep in mind, it is not necessary for a manufacturer to provide documentation to demonstrate how a grain item credits when only using Exhibit A to determine or declare the product's meal pattern contribution.

## Sample Product 1:

### Whole-Grain Bread

- One slice weighs 0.9 oz
- Ingredient statement lists whole-wheat flour first. All other grains are enriched.
- Manufacturer documentation states that each slice contains 17 grams of creditable grain and no non-creditable grains

#### 1. Calculating based on total weight of creditable product:

We may credit the slice of bread using the Exhibit A weight. The weight of the bread slice is divided by the standard weight listed for Group B products (see page 32).

Calculation:  $0.9 \text{ oz} \div 1.0 \text{ oz} = 0.9 \text{ oz}$

0.9 oz rounds down to **0.75 oz eq grains** per slice.



#### 2. Calculating based on grams of creditable grain ingredient:

The same slice of bread may be credited using the amount of creditable grain. Manufacturers must provide documentation on company letterhead (or schools may retain a copy of their standardized recipe). Sample Product Formulation Statements are provided starting on page 34.

For this calculation, divide the grams of creditable grain by the standard of 16 grams per oz equivalent.

Calculation:  $17 \text{ g} \div 16 \text{ g} = 1.06$

1.06 rounds down to **1.0 oz eq grains** per slice.



## Sample Product 2:

### Whole-Grain Pasta

- Manufacturer documentation states that each ½ cup (cooked) portion contains 29 grams of creditable grain.
- Ingredient statement lists whole-wheat flour first. All other grains are enriched.
- One portion of dry pasta weighs 32 grams (including creditable grains and other ingredients).

#### 1. Calculating based on Exhibit A volume:

Group H of Exhibit A states that ½ cup of cooked pasta (made from creditable ingredients) provides 1.0 ounce equivalent grains. Product label and manufacturer documentation should be maintained on file.

Calculation:  $\frac{1}{2} \text{ cup served} \div \frac{1}{2} \text{ cup per oz eq} =$   
**1.0 oz eq grains**

#### 2. Calculating based on dry weight:

For this calculation, the weight of the dry portion of pasta is divided by the weight listed for that product in the appropriate group of Exhibit A.

Calculation:  $32 \text{ g} \div 28 \text{ g} = 1.14$

1.14 rounds down to **1.0 oz eq grains** per portion of dry pasta.



#### 3. Calculating based on grams of creditable grain ingredient per portion:

The same pasta may be credited using the percent of creditable grain. Manufacturers must provide documentation on company letterhead.

For this calculation, divide the grams of creditable grain by the standard of 28 grams per oz equivalent for Group H of Exhibit A.

Calculation:  $29 \text{ g} \div 28 \text{ g} = 1.03$

1.03 rounds down to **1.0 oz eq grains** per ½ cup cooked pasta.



# Exhibit A: Grain Requirements for Child Nutrition Programs

## Exhibit A: Grain Requirements For Child Nutrition Programs<sup>1,2</sup>

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

Food Products per Group	Ounce Equivalent (oz eq)	Minimum Serving Size
<b>Group A</b>	<b>Ounce Equivalent (oz eq) for Group A</b>	<b>Minimum Serving Size for Group A</b>
Bread type coating Bread sticks (hard) Chow Mein noodles Savory Crackers (saltines and snack crackers) Croutons Pretzels (hard) Stuffing (dry) <i>Note: weights apply to bread in stuffing</i>	1 oz eq = 22 gm or 0.8 oz 3/4 oz eq = 17 gm or 0.6 oz 1/2 oz eq = 11 gm or 0.4 oz 1/4 oz eq = 6 gm or 0.2 oz	1 serving = 20 gm or 0.7 oz 3/4 serving = 15 gm or 0.5 oz 1/2 serving = 10 gm or 0.4 oz 1/4 serving = 5 gm or 0.2 oz
<b>Group B</b>	<b>Ounce Equivalent (oz eq) for Group B</b>	<b>Minimum Serving Size for Group B</b>
Bagels Batter type coating Biscuits Breads - all (for example sliced, French, Italian) Buns (hamburger and hot dog) <i>Sweet Crackers<sup>5</sup> (graham crackers - all shapes, animal crackers)</i> 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 3/4 oz eq = 21 gm or 0.75 oz 1/2 oz eq = 14 gm or 0.5 oz 1/4 oz eq = 7 gm or 0.25	1 serving = 25 gm or 0.9 oz 3/4 serving = 19 gm or 0.7 oz 1/2 serving = 13 gm or 0.5 oz 1/4 serving = 6 gm or 0.2 oz
<b>Group C</b>	<b>Ounce Equivalent (oz eq) for Group C</b>	<b>Minimum Serving Size for Group C</b>
<i>Cookies<sup>3</sup> (plain - includes vanilla wafers)</i> Cornbread Corn muffins Croissants Pancakes Pie crust ( <i>dessert pies<sup>3</sup>, cobbler<sup>3</sup>, fruit turnovers<sup>4</sup>, and meats/meat alternate pies</i> ) Waffles	1 oz eq = 34 gm or 1.2 oz 3/4 oz eq = 26 gm or 0.9 oz 1/2 oz eq = 17 gm or 0.6 oz 1/4 oz eq = 9 gm or 0.3 oz	1 serving = 31 gm or 1.1 oz 3/4 serving = 23 gm or 0.8 oz 1/2 serving = 16 gm or 0.6 oz 1/4 serving = 8 gm or 0.3 oz
<b>Group D</b>	<b>Ounce Equivalent (oz eq) for Group D</b>	<b>Minimum Serving Size for Group D</b>
<i>Doughnuts<sup>4</sup> (cake and yeast raised, unfrosted)</i> <i>Cereal bars, breakfast bars, granola bars<sup>4</sup> (plain)</i> Muffins (all, except corn) Sweet roll <sup>4</sup> (unfrosted) Toaster pastry <sup>4</sup> (unfrosted)	1 oz eq = 55 gm or 2.0 oz 3/4 oz eq = 42 gm or 1.5 oz 1/2 oz eq = 28 gm or 1.0 oz 1/4 oz eq = 14 gm or 0.5 oz	1 serving = 50 gm or 1.8 oz 3/4 serving = 38 gm or 1.3 oz 1/2 serving = 25 gm or 0.9 oz 1/4 serving = 13 gm or 0.5 oz

<sup>1</sup> In the NSLP and SBP (grades K-12), at least eighty 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 CACFP child and adult meal patterns, and in the NSLP/SBP preschool meals, at least one grain serving per day must meet whole grain-rich criteria.

<sup>2</sup> For the NSLP and SBP (grades K-12), grain quantities are determined using ounce equivalents (oz eq). All other Child Nutrition Programs determine grain quantities using grains/breads servings. Beginning Oct. 1, 2021, grain quantities in the CACFP and NSLP/SBP infant and preschool meals will be determined using oz eq. Some of the following grains may contain more sugar, salt, and/or fat than others. This should be a consideration when deciding how often to serve them.

<sup>3</sup> 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/SBP infant and preschool meals as specified in §§226.20(a)(4) and 210.10.

<sup>4</sup> Allowable 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 and NSLP/SBP infant and preschool meals as specified in §§226.20(a)(4) and 210.10.

<sup>5</sup> 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), CACFP, NSLP/SBP infant and preschool meals, and SFSP.

continued on next page



# Exhibit A: Grain Requirements for Child Nutrition Programs

Group E	Ounce Equivalent (oz eq) for Group E	Minimum Serving Size for Group E
Cereal bars, breakfast bars, granola bars <sup>4</sup> (with nuts, dried fruit, and/or chocolate pieces) Cookies <sup>3</sup> (with nuts, raisins, chocolate pieces and/or fruit purees) Doughnuts <sup>4</sup> (cake and yeast raised, frosted or glazed) French toast Sweet rolls <sup>4</sup> (frosted) Toaster pastry <sup>4</sup> (frosted)	1 oz eq = 69 gm or 2.4 oz 3/4 oz eq = 52 gm or 1.8 oz 1/2 oz eq = 35 gm or 1.2 oz 1/4 oz eq = 18 gm or 0.6 oz	1 serving = 63 gm or 2.2 oz 3/4 serving = 47 gm or 1.7 oz 1/2 serving = 31 gm or 1.1 oz 1/4 serving = 16 gm or 0.6 oz
Group F	Ounce Equivalent (oz eq) for Group F	Minimum Serving Size for Group F
Cake <sup>3</sup> (plain, unfrosted) Coffee cake <sup>4</sup>	1 oz eq = 82 gm or 2.9 oz 3/4 oz eq = 62 gm or 2.2 oz 1/2 oz eq = 41 gm or 1.5 oz 1/4 oz eq = 21 gm or 0.7 oz	1 serving = 75 gm or 2.7 oz 3/4 serving = 56 gm or 2 oz 1/2 serving = 38 gm or 1.3 oz 1/4 serving = 19 gm or 0.7 oz
Group G	Ounce Equivalent (oz eq) for Group G	Minimum Serving Size for Group G
Brownies <sup>3</sup> (plain) Cake <sup>3</sup> (all varieties, frosted)	1 oz eq = 125 gm or 4.4 oz 3/4 oz eq = 94 gm or 3.3 oz 1/2 oz eq = 63 gm or 2.2 oz 1/4 oz eq = 32 gm or 1.1 oz	1 serving = 115 gm or 4 oz 3/4 serving = 86 gm or 3 oz 1/2 serving = 58 gm or 2 oz 1/4 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) <sup>6,7</sup> Bulgur or cracked wheat Macaroni (all shapes) Noodles (all varieties) Pasta (all shapes) Ravioli (noodle only) Rice	1 oz eq = 1/2 cup cooked or 1 ounce (28 gm) dry	1 serving = 1/2 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) <sup>6,7</sup>	1 oz eq = 1 cup or 1 ounce for flakes and rounds 1 oz eq = 1.25 cups or 1 ounce for puffed cereal 1 oz eq = 1/4 cup or 1 ounce for granola	1 serving = 3/4 cup or 1 oz, whichever is less

<sup>3</sup> 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/SBP infant and preschool meals as specified in §§226.20(a)(4) and 210.10.

<sup>4</sup> Allowable 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 and NSLP/SBP infant and preschool meals as specified in §§226.20(a)(4) and 210.10.

<sup>6</sup> 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.

<sup>7</sup> In the NSLP and SBP, cereals that list a whole grain as the first ingredient must be fortified, or 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; cereals served in CACFP and NSLP/SBP infant and preschool meals must contain no more than 6 grams of sugar per dry ounce.



# Attachment B: Product Formulation Statement for Documenting Grains in Child Nutrition Programs – templates and examples



United States Department of Agriculture

Food and Nutrition Service

## Product Formulation Statement for Documenting Grains in Child Nutrition Programs

*(Crediting Standards Based on Grams of Creditable Grains (ounce equivalent))*

Program operators should include a copy of the label from the purchased product package in addition to the following information on letterhead signed by an official company representative. Program operators have the option to choose the crediting method that fits their specific menu planning needs.

Product Name: \_\_\_\_\_ Code No.: \_\_\_\_\_

Manufacturer: \_\_\_\_\_ Serving Size: \_\_\_\_\_  
(raw dough weight may be used to calculate creditable grains)

I. Does the product meet the whole grain-rich criteria? Yes \_\_\_\_\_ No \_\_\_\_\_

II. Does the product contain non-creditable grains? Yes \_\_\_\_\_ No \_\_\_\_\_ How many grams? \_\_\_\_\_  
*(Products with more than 0.24 ounce equivalent (oz eq) or 3.99 grams (g) for Groups A-G or 6.99g for Groups H and I of non-creditable grains do not credit toward the grains requirement for school meals.)*

III. Use Exhibit A: Grain Requirements for Child Nutrition Programs in the *Food Buying Guide for Child Nutrition Programs (FBG)* to determine if the product fits into Groups A-G (baked goods), Group H (cereal grains) or Group I (RTE breakfast cereals). *(Different methodologies are applied to calculate the grains contribution based on creditable grains. Groups A-G use the standard of 16g creditable grains per oz eq; Groups H and I use the standard of 28g creditable grains per oz eq or volume.)*

Indicate which Exhibit A Group (A-I) the product belongs to: \_\_\_\_\_

DESCRIPTION OF CREDITABLE GRAIN INGREDIENT*	GRAMS OF CREDITABLE GRAIN INGREDIENT PER PORTION <sup>1</sup>	GRAM STANDARD OF CREDITABLE GRAINS PER OZ EQ (16g or 28g) <sup>2</sup>	CREDITABLE AMOUNT
	A	B	A ÷ B
<b>Total</b>			
<b>Total Creditable Amount<sup>3</sup></b>			

\* Creditable grains vary by Program. See the FBG for specific Program requirements.  
<sup>1</sup> (Serving size) X (% of creditable grains in formula); serving sizes other than grams must be converted to grams.  
<sup>2</sup> Standard grams of creditable grains from the corresponding Group in Exhibit A.  
<sup>3</sup> Total Creditable Amount must be rounded **down** to the nearest quarter (0.25) oz eq. Do **not** round up.

Total weight (per portion) of product as purchased \_\_\_\_\_

Total contribution of product (per portion) \_\_\_\_\_ oz eq

I certify that the above information is true and correct and that a \_\_\_\_\_ ounce portion of this product (ready for serving) provides \_\_\_\_\_ oz eq grains. I further certify that non-creditable grains **are not** above 0.24 oz eq per portion. Products with more than 0.24 oz eq or 3.99g for Groups A-G or 6.99g for Groups H and I of non-creditable grains do not credit toward the grains requirement for school meals.

Signature \_\_\_\_\_ Title \_\_\_\_\_

Printed Name \_\_\_\_\_ Date \_\_\_\_\_ Phone Number \_\_\_\_\_

### Product Formulation Statement (PFS) with ounce equivalent grains highlighted

September 2020



# Attachment B: Product Formulation Statement for Documenting Grains in Child Nutrition Programs – templates and examples



United States Department of Agriculture

Food and Nutrition Service

## Product Formulation Statement for Documenting Grains in Child Nutrition Programs

*(Crediting Standards Based on Exhibit A Weights per Ounce Equivalent)*

Program operators should include a copy of the label from the purchased product package in addition to the following information on letterhead signed by an official company representative. Program operators have the option to choose the crediting method that fits their specific menu planning needs.

Product Name: \_\_\_\_\_ Code No.: \_\_\_\_\_

Manufacturer: \_\_\_\_\_ Serving Size: \_\_\_\_\_

I. Does the product meet the whole grain-rich criteria? Yes \_\_\_\_\_ No \_\_\_\_\_

II. Does the product contain non-creditable grains? Yes \_\_\_\_\_ No \_\_\_\_\_ How many grams? \_\_\_\_\_  
*(Products with more than 0.24 ounce equivalent (oz eq) or 3.99 grams (g) for Groups A-G and 6.99g for Groups H and I of non-creditable grains do not credit toward the grains requirement.)*

III. Use Exhibit A: Grain Requirements for Child Nutrition Programs in the *Food Buying Guide for Child Nutrition Programs (FBG)* to determine if the product fits into Groups A-G (baked goods), Group H (cereal grains) or Group I (RTE breakfast cereals). *(Different methodologies are applied to calculate the grains contribution based on creditable grains. Groups A-G use the standard of 16g creditable grains per oz eq; Groups H and I use the standard of 28g creditable grains per oz eq or volume.)*

Indicate which Exhibit A Group (A-I) the product belongs to: \_\_\_\_\_

DESCRIPTION OF PRODUCT PER EXHIBIT A	PORTION SIZE OF PRODUCT AS PURCHASED	WEIGHT OF ONE OZ EQ AS LISTED IN EXHIBIT A	CREDITABLE AMOUNT
	A	B	A ÷ B
<b>Total Creditable Amount<sup>1</sup></b>			

<sup>1</sup> Total Creditable Amount must be rounded **down** to the nearest quarter (0.25) oz eq. Do **not** round up.

Total weight (per portion) of product as purchased \_\_\_\_\_

Total contribution of product (per portion) \_\_\_\_\_ oz eq

I further certify that the above information is true and correct and that a \_\_\_\_\_ ounce portion of this product (ready for serving) provides \_\_\_\_\_ oz eq grains. I further certify that non-creditable grains **are not** above 0.24 oz eq per portion. Products with more than 0.24 oz eq or 3.99g for Groups A-G or 6.99g for Groups H and I of non-creditable grains do not credit toward the grains requirement for school meals.

Signature \_\_\_\_\_ Title \_\_\_\_\_

Printed Name \_\_\_\_\_ Date \_\_\_\_\_ Phone Number \_\_\_\_\_

### Product Formulation Statement (PFS) with ounce equivalent grains highlighted

September 2020





# Attachment B: Product Formulation Statement for Documenting Grains in Child Nutrition Programs – templates and examples



United States Department of Agriculture

Food and Nutrition Service

## Product Formulation Statement for Documenting Grains in Child Nutrition Programs

(Crediting Standards Based on Exhibit A Weights per Ounce Equivalent)

Program operators should include a copy of the label from the purchased product package in addition to the following information on letterhead signed by an official company representative. Program operators have the option to choose the crediting method that fits their specific menu planning needs.

Product Name: Wheat Smile Pancakes Code No.: 14005

Manufacturer: ABC Bread Company Serving Size: 2 pancakes – 50g (1.75 oz.)

I. Does the product meet the whole grain-rich criteria? Yes  No

II. Does the product contain non-creditable grains? Yes  No  How many grams?           
 (Products with more than 0.24 ounce equivalent (oz eq) or 3.99 grams (g) for Groups A-G and 6.99g for Groups H and I of non-creditable grains do not credit toward the grains requirement.)

III. Use Exhibit A: Grain Requirements for Child Nutrition Programs in the *Food Buying Guide for Child Nutrition Programs* (FBG) to determine if the product fits into Groups A-G (baked goods), Group H (cereal grains) or Group I (RTE breakfast cereals). (Different methodologies are applied to calculate the grains contribution based on creditable grains. Groups A-G use the standard of 16g creditable grains per oz eq; Groups H and I use the standard of 28g creditable grains per oz eq or volume.)

Indicate which Exhibit A Group (A-I) the product belongs: C

DESCRIPTION OF PRODUCT PER EXHIBIT A	PORTION SIZE OF PRODUCT AS PURCHASED	WEIGHT OF ONE OZ EQ AS LISTED IN EXHIBIT A	CREDITABLE AMOUNT
	A	B	A ÷ B
Pancakes	50 grams	34 grams	1.47
<b>Total Creditable Amount<sup>1</sup></b>			<b>1.25</b>

<sup>1</sup> Total Creditable Amount must be rounded down to the nearest quarter (0.25) oz eq. Do not round up.

Total weight (per portion) of product as purchased 50g

Total contribution of product (per portion) 1.25 oz eq

I further certify that the above information is true and correct and that a 1.75 ounce portion of this product (ready for serving) provides 1.25 oz eq grains. I further certify that non-creditable grains are not above 0.24 oz eq per portion. Products with more than 0.24 oz eq or 3.99g for Groups A-G or 6.99g for Groups H and I of non-creditable grains do not credit toward the grains requirement for school meals.

Signature \_\_\_\_\_ Title \_\_\_\_\_

Printed Name \_\_\_\_\_ Date \_\_\_\_\_ Phone Number \_\_\_\_\_

### Product Formulation Statement (PFS) with ounce equivalent grains highlighted

September 2020











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