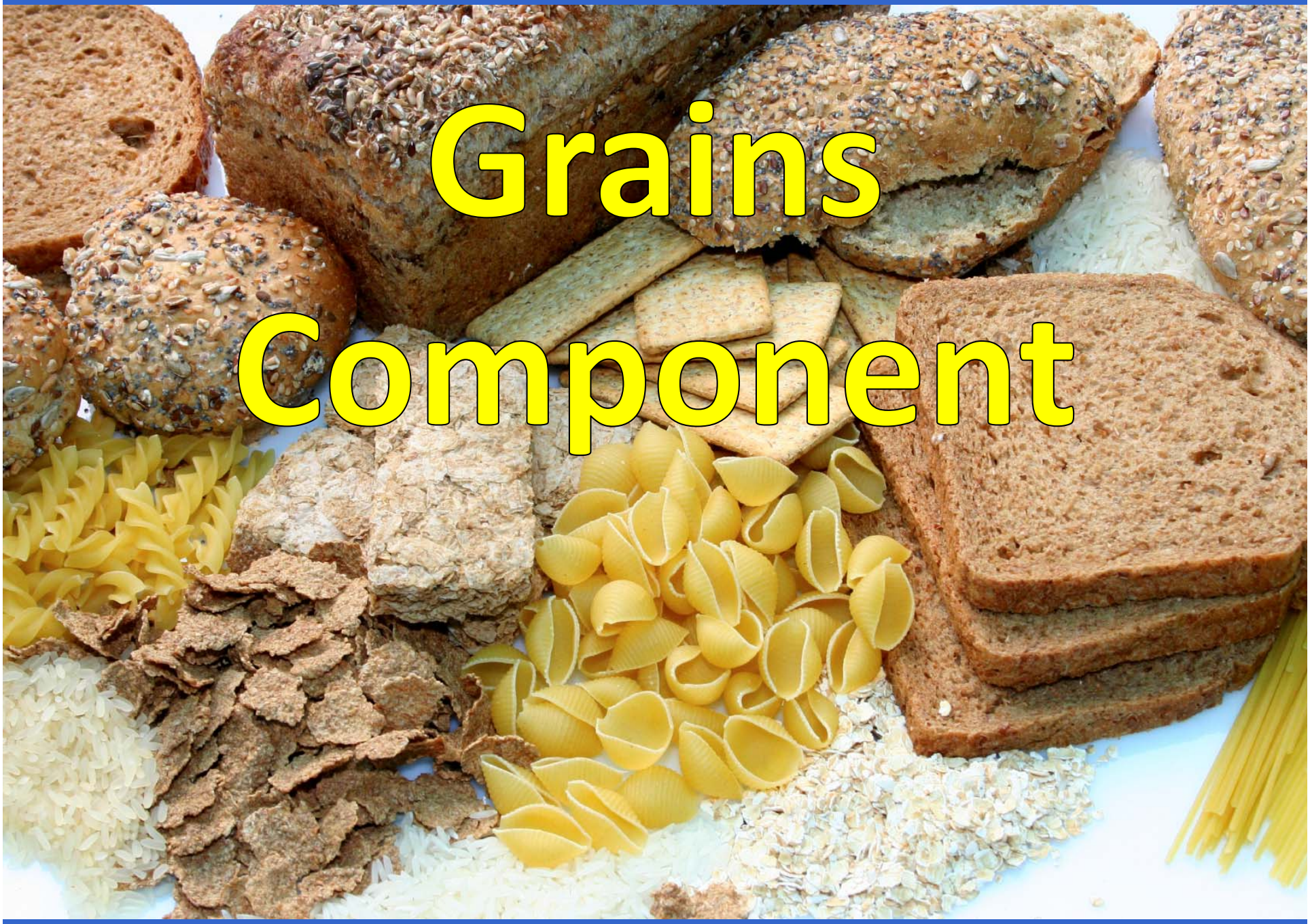
What's for Breakfast?

Meeting the Meal Pattern Requirements for the School Breakfast Program

Connecticut State Department of Education
Bureau of Health/Nutrition, Family Services and Adult Education

Grains Component



Criteria for Whole Grain-rich Foods

CRITERIA FOR WHOLE GRAIN-RICH FOODS

in the U.S. Department of Agriculture (USDA) School Nutrition Programs

Grains must be **whole grain-rich** (WGR) to meet the meal pattern requirements for the National School Lunch Program (NSLP) and School Breakfast Program (SBP). To credit at lunch or breakfast, all grain products must also meet the serving size requirements in the USDA ounce equivalents chart, *Whole Grain-rich Ounce Equivalents Requirements for School Nutrition Programs.*

The Connecticut Nutrition Standards apply the same WGR criteria to all grain products sold separately from reimbursable meals in public school districts participating in Healthy Food Certification (HFC) under Section 10-215f of the Connecticut General Statutes. To be sold a la carte in HFC districts, grain products must be WGR and meet all nutrient standards, e.g., calories, fat, saturated fat, trans fat, sodium and sugars. Grain products that meet these criteria are listed on the Connecticut State Department of Education's (CSDE) *List of Acceptable Foods and Beverages.*

To meet the WGR definition, grain products must comply with the three criteria below.

1. The product contains **at least 50 percent whole grains**, as indicated by at least one of the following criteria:
   - contains at least 8 grams of whole grains per ounce equivalent for groups A-G of the USDA ounce equivalents chart and provides the required volume or weight for groups H and I of the USDA ounce equivalents chart;
   - includes the Food and Drug Administration's (FDA) whole grain health claim; or
   - lists a whole grain first on the product's ingredients statement.

   For more information on evaluating products for compliance with this criterion, see Step 1 on page 2.

2. Any remaining grain ingredients in the product must be **enriched.** For more information on evaluating products for compliance with this criterion, see Step 2 on page 3.

3. If the product contains any **noncreditable grains**, they must be present at levels less than two percent (¼ ounce equivalent) of the product formula. To comply with this limit, the combined total of all noncreditable grains cannot exceed 3.99 grams for groups A-G (baked goods) or 6.99 grams per serving for groups H (cereal grains) and I (ready-to-eat breakfast cereals). **If noncreditable grains exceed these amounts, the entire product is considered noncreditable, even if the product meets the first two criteria above.** For more information on evaluating products for compliance with this criterion, see Step 3 on page 4.

Foods that qualify as WGR contain either 100 percent whole grains (every grain ingredient is whole grain) or a blend of whole-grain meal/flour and enriched meal/flour, of which at least 50 percent is whole grain. To determine if foods are WGR, schools must review package labels and product formulation statements, using the three steps below.

1. Determine if whole grains are at least 50 percent of the product's total weight.
2. Determine if all other grain ingredients in the product are enriched.
3. Determine if the product contains noncreditable grains, and if so, whether their combined complies with the specified limit.

Detailed guidance on each step follows. Pages 7-9 provide examples that demonstrate how to evaluate a product's ingredient statement for compliance with the three WGR criteria.

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www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/crediting/WGR_Criteria.pdf

Whole Grain-rich Ounce Equivalents

WHOLE GRAIN-RICH OUNCE EQUIVALENTS (OZ EQ) REQUIREMENTS FOR SCHOOL NUTRITION PROGRAMS [1, 2]

Effective July 1, 2013 (School Year 2013-14)

Group A	Oz Eq for Group A
• Bread type coating • Bread sticks, hard • Chow mein noodles • Croutons • Pretzels, hard • Savory crackers, e.g., saltines and snack crackers • Stuffing, dry *Note: weights apply to bread in stuffing*	1 oz eq = 22 grams or 0.8 ounce ¾ oz eq = 17 grams or 0.6 ounce ½ oz eq = 11 grams or 0.4 ounce ¼ oz eq = 6 grams or 0.2 ounce
Group B	**Oz Eq for Group B**
• Bagels • Batter type coating • Biscuits • Breads, e.g., sliced whole wheat, French, Italian • Buns, hamburger and hot dog • Egg roll skins • English muffins • Pita bread, whole wheat or whole-grain rich • Pizza crust • Pretzels, soft • Rolls, whole wheat or whole-grain rich • Sweet crackers, e.g., graham crackers and animal crackers, plain, all shapes [4] • Tortillas, whole wheat or whole corn • Tortilla chips, whole wheat or whole corn • Taco shells, whole wheat or whole corn	1 oz eq = 28 grams or 1 ounce ¾ oz eq = 21 grams or 0.75 ounce ½ oz eq = 14 grams or 0.5 ounce ¼ oz eq = 7 grams or 0.25 ounce
Group C	**Oz Eq for Group C**
• Cookies, plain, including vanilla wafers [3] • Cornbread • Corn muffins • Crackers including filled crackers, e.g., peanut butter or cheese • Croissants • Pancakes • Pie crust (dessert pies [3], cobblers [3], fruit turnovers [4] and meat or meat alternate pies) • Waffles	1 oz eq = 34 grams or 1.2 ounces ¾ oz eq = 26 grams or 0.9 ounce ½ oz eq = 17 grams or 0.6 ounce ¼ oz eq = 9 grams or 0.3 ounce
Group D	**Oz Eq for Group D**
• Doughnuts, cake and yeast raised, unfrosted [4] • Cereal bars, breakfast bars, granola bars, plain [4] • Muffins, all except corn • Sweet rolls, unfrosted [4] • Toaster pastries, unfrosted [4]	1 oz eq = 55 grams or 2 ounces ¾ oz eq = 42 grams or 1.5 ounces ½ oz eq = 28 grams or 1.0 ounce ¼ oz eq = 14 grams or 0.5 ounce

[1] To be considered whole grain-rich, the specified quantities of foods in Groups A-G must contain at least 16 grams of whole grain or 8 grams of whole-grain and 8 grams of enriched meal and/or enriched flour.

[2] Some of these grains are high in sugar, salt and/or fat. This should be a consideration when deciding how often to serve them.

[3] Allowed only for dessert at lunch in the National School Lunch Program (NSLP) (no more than 2 ounce equivalents per week).

[4] Allowed only for dessert at lunch in the NSLP (no more than 2 ounce equivalents per week) and breakfasts in the School Breakfast Program (SBP).

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WHOLE GRAIN-RICH OUNCE EQUIVALENTS [1, 2]

Group E	Oz Eq for Group E
• Cereal bars, breakfast bars, granola bars, with nuts, dried fruit or chocolate pieces [4] • Cookies, with fillings or coverings, nuts, raisins, chocolate pieces or fruit purees [3] • Doughnuts, cake and yeast raised, frosted or glazed [4] • French toast • Sweet rolls, frosted [4] • Toaster pastries, frosted [4]	1 oz eq = 69 grams or 2.4 ounces ¾ oz eq = 52 grams or 1.8 ounces ½ oz eq = 35 grams or 1.2 ounces ¼ oz eq = 18 grams or 0.6 ounce
Group F	**Oz Eq for Group F**
• Cake, plain, unfrosted [3] • Coffee cake [4]	1 oz eq = 82 grams or 2.9 ounce ¾ oz eq = 62 grams or 2.2 ounce ½ oz eq = 41 grams or 1.5 ounce ¼ oz eq = 21 grams or 0.7 ounce
Group G	**Oz Eq for Group G**
• Brownies, plain [3] • Cake, all varieties, frosted [3]	1 oz eq = 125 grams or 4.4 ounces ¾ oz eq = 94 grams or 3.3 ounces ½ oz eq = 63 grams or 2.2 ounces ¼ oz eq = 32 grams or 1.1 ounces
Group H	**Oz Eq for Group H**
• Barley • Breakfast cereals, cooked [5, 6] • Bulgur or cracked wheat • Cereal grains [7] • Macaroni, all shapes • Noodles, all varieties • Pasta, all shapes • Ravioli, noodle only • Rice, brown or enriched white	1 oz eq = ½ cup cooked or 1 ounce (28 grams) dry
Group I	**Oz Eq for Group I**
• Ready-to-eat breakfast cereals (cold dry) [5, 6]	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 = ¼ cup or 1 ounce for granola

[1] To be considered whole grain-rich, the specified quantities of foods in Groups A-G must contain at least 16 grams of whole grain or 8 grams of whole-grain and 8 grams of enriched meal and/or enriched flour.

[2] Some of these grains are high in sugar, salt and/or fat. This should be a consideration when deciding how often to serve them.

[3] Allowed only for dessert at lunch in the NSLP (no more than 2 ounce equivalents per week).

[4] Allowed only for dessert at lunch in the NSLP (no more than 2 ounce equivalents per week) and breakfasts in the SBP.

[5] Snacks served to children ages 1-5 in the Afterschool Snack Program must follow the serving sizes in the Afterschool Snack Program Meal Pattern. Breakfast cereals are traditionally served as a breakfast menu item but may be served in meals other than breakfast.

[6] Cereals must be whole-grain, or whole grain and enriched or fortified cereal.

[7] Examples of cereal grains include amaranth, buckwheat, cornmeal, corn grits, farina, kasha, millet, oats, quinoa, wheat berries and rolled wheat.

For more information, see the Connecticut State Department of Education's (CSDE) Meal Patterns Web page and Crediting Foods Web page or contact the school nutrition programs staff in the CSDE Bureau of Health/Nutrition, Family Services and Adult Education, 25 Industrial Park Road, Middletown, CT 06457.

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www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/grains_ounce_equivalents.pdf

Grains Component

Grains at Breakfast (Oz Eq) All grains must be whole grain-rich				
Grades	Five-day Week		Seven-day Week	
	Daily	Weekly*	Daily	Weekly*
K-5	1	7-10	1	10-14
6-8	1	8-10	1	11-14
9-12	1	9-10	1	12.5-14
* Must meet weekly minimum but not maximum				

Two Requirements for Grain Products

1. Must be WHOLE GRAIN-RICH
   - 100% whole grain
   - At least 50% whole grain
2. Must meet MINIMUM serving sizes

NEW

Whole Grain-rich (WGR) Definition

1. Contains AT LEAST 50% whole grains by weight
   - whole grain is FIRST ingredient or if water is first ingredient, the second ingredient is whole grain
2. Any remaining grain ingredients are ENRICHED
3. Any noncreditable grain ingredients are LESS THAN 2%

WGR Definition Criterion 1
At least 50% WHOLE GRAINS

- **GRAIN-BASED PRODUCTS**, e.g., breads, cereals, waffles, muffins
  - Whole grain is the **FIRST** ingredient listed

- **MIXED DISHES**, e.g., pizza, lasagna, chicken nuggets
  - Whole grain is the **FIRST GRAIN** ingredient listed

Is it a Whole Grain?

- If a grain is listed in the ingredient statement without the word "WHOLE" the product might not be whole grain, for example
  - corn
  - rye flour
  - wheat flour

Require documentation from manufacturer to determine if these grains are whole

USDA Product Formulation Statement (PFS) for Grains

Formulation Statement for Documenting Grains in School Meals
Required Beginning SY 2013-2014
(Crediting Standards Based on Grams of Creditable Grains)

School Food Authorities (SFAs) 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. Grain products may be credited based on previous standards through SY 2012-2013. The new crediting standards for grains (as outlined in Policy Memorandum SP 30-2012) must be used beginning SY 2013-2014. SFAs have the option to choose the crediting method that best fits the specific needs of the menu planner.

Product Name: Wheat Smile Pancakes Code No.: 14005

Manufacturer: ABC Bread Company Serving Size 2 pancakes -50g (1.75oz)
(raw dough weight may be used to calculate creditable grain amount)

I. Does the product meet the Whole Grain-Rich Criteria: Yes x No____
(Refer to SP 30-2012 Grain Requirements for the National School Lunch Program and School Breakfast Program.)

II. Does the product contain non- creditable grains: Yes___ No____ **How many grams:**____
(Products with more than 0.24 oz equivalent or 3.99 grams for Groups A-G or 6.99 grams for Group H of non-creditable grains may not credit towards the grain requirements for school meals.) .)

III. Use Policy Memorandum SP 30-2012 Grain Requirements for the National School Lunch Program and School Breakfast Program: Exhibit A 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 servings of grain component based on creditable grains. Groups A-G use the standard of 16grams creditable grain per oz eq; Group H uses the standard of 28grams creditable grain per oz eq; and Group I is reported by volume or weight.)*
Indicate to which Exhibit A Group (A-I) the Product Belongs: C

Description of Creditable Grain Ingredient*	Grams of Creditable Grain Ingredient per Portion[1] A	Gram Standard of Creditable Grain per oz equivalent *(16g or 28g)*[2] B	Creditable Amount A ÷ B
Whole wheat flour (47%)	23.5	16	1.4687
Enrich flour (22%)	11	16	.6875
			2.15
Total Creditable Amount[3]			**2.00**

* Creditable grains are whole-grain meal/flour and enriched meal/flour.
[1] (Serving size) X (% of creditable grain in formula). Please be aware that serving sizes other than grams must be converted to grams.
[2] Standard grams of creditable grains from the corresponding Group in Exhibit A.
[3] 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 50 g (1.75oz)
Total contribution of product (per portion) 2.00 oz equivalent

I certify that the above information is true and correct and that a 1.75 ounce portion of this product (ready for serving) provides 2.00 oz equivalent Grains. I further certify that non-creditable grains are **not** above 0.24 oz eq. per portion. Products with more than 0.24 oz equivalent or 3.99 grams for Groups A-G or 6.99 grams for Group H of non-creditable grains may not credit towards the grain requirements for school meals.

Signature Title

Printed Name Date Phone Number

http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=333796

EXCEPTIONS: These grains do not state "whole" in their description but they are WHOLE GRAINS

- BERRIES or GROATS (e.g., wheat berries or oat groats)
- OATS or OATMEAL (old-fashioned, quick-cooking, instant)
- Amaranth
- Brown rice
- Brown rice flour
- Buckwheat
- Millet
- Quinoa
- Triticale
- Teff
- Sorghum

Examples of Whole-Grain Products and Ingredients *

BARLEY

- dehulled barley
- dehulled-barley flour
- whole barley
- whole-barley flakes
- whole-barley flour
- whole-grain barley
- whole-grain barley flour

BROWN RICE

- brown rice
- brown rice flour

CORN

- masa (whole corn treated with lime)
- whole corn
- whole-corn flour
- whole cornmeal
- whole-grain corn flour
- whole-grain grits
- whole-ground corn

OATS

- oat groats
- oatmeal, including old-fashioned, quick-cooking and instant
- rolled oats
- whole oats
- whole-oat flour

RYE

- whole rye
- rye berries
- whole-rye flour
- whole-rye flakes

* This list is not all-inclusive

Examples of Whole-Grain Products and Ingredients *

WHEAT (RED)

- bulgur (cracked wheat)
- bromated whole-wheat flour
- cracked wheat
- crushed wheat
- entire-wheat flour
- graham flour
- sprouted wheat
- sprouted wheat berries
- stone ground whole-wheat flour
- toasted crushed whole wheat
- wheat berries
- whole bulgur
- whole durum flour
- whole durum wheat flour

WHEAT (RED), continued

- whole-grain bulgur
- whole-grain wheat
- whole wheat
- whole-wheat flour
- whole-wheat pastry flour
- whole-wheat flakes

WHEAT (WHITE)

- whole white wheat
- whole white wheat flour

WILD RICE

- wild rice
- wild rice flour

LESS COMMON GRAINS

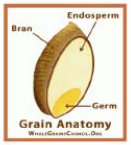
- amaranth
- buckwheat, buckwheat groats
- einkorn
- emmer (farro)
- Kamut®
- millet
- quinoa
- sorghum (milo)
- spelt
- teff
- triticale

* This list is not all-inclusive

Identifying Whole Grains

IDENTIFYING WHOLE GRAINS

Whole grains consist of the entire cereal grain seed or kernel, after removing the inedible outer husk or hull. The kernel includes the starchy endosperm, the fiber-rich bran and the nutrient-rich germ. Usually the grain kernel is cracked, crushed, flaked or ground during the milling process. A finished grain product is considered whole grain if it contains the same relative amounts of bran, germ and endosperm as the original grain. Whole grains contain a wide variety of nutrients and compounds that help reduce the risk of chronic diseases.



Misleading Terms

Careful label reading is important because the packaging for grain products can be misleading. When a grain name such as "corn" or "rice" is listed in the ingredients statement without a descriptor such as "whole" corn or "brown" rice, the product may not be whole grain. These ingredients cannot be considered whole grain unless the manufacturer provides a product formulation statement to document that they are whole grain.

Manufacturers often use terms in their product names or labels that make a product appear to contain a significant amount of whole grain when it does not. The chart below includes some common misleading terms found on product packages. Products with these terms are typically not 100 percent whole grain and do not contain much whole grain. They often contain refined flour (or other ingredients that are not whole grain) as the first or second ingredient.

Common Misleading Terms for Grains	
"Made with whole grains"	These products must have some whole grains but may contain mostly refined flour. The amount of whole grains can vary greatly among different products.
"Made with whole wheat"	These products must have some whole wheat but may contain mostly refined flour. The amount of whole wheat can vary greatly among different products.
"Contains whole grain"	These products may contain a small amount of whole grain but usually are mostly refined grains. The amount of whole grains can vary greatly among different products.
"100% wheat"	All bread made from any part of the wheat kernel is 100 percent wheat, which is different than 100 percent **whole** wheat. "100% wheat" products may contain some whole-wheat flour or may contain only refined flour. Look for "100% whole wheat" or "100% whole grain" to indicate that the product is made from only whole grains.
"Multigrain" or specifies number of grains, e.g., "seven-grain bread"	These products must contain more than one type of grain, which can include refined grains, whole grains or both. Some multigrain breads may have enriched flour as the primary ingredient with multiple grains in smaller amounts, while others contain mostly whole grains.
"Cracked wheat bread"	While cracked wheat is a whole grain, cracked wheat bread may contain refined flour as the primary ingredient with small amounts of cracked wheat.
"Stone ground" flour or meal	"Stone ground" describes the process used for making the flour or meal and does not necessarily mean that the product is whole grain. Look for "whole" in combination with "stone ground" in the ingredients statement.

IDENTIFYING WHOLE GRAINS, continued

Names for Whole Grains

The chart below lists examples of grain products and ingredients that are whole grains. If one of these terms is listed **first** on the ingredients statement, the product contains at least 50 percent whole grains. To meet the meal pattern requirements for the National School Lunch Program (NSLP) and School Breakfast Program (SBP), products must be **whole grain-rich** (WGR). WGR products contain at least 50 percent whole grains, any other grain ingredients are enriched and the combined weight of any noncreditable grains (such as modified food starch and bran) is less than two percent of the product formula. For more information, see the CSDE' handout, *Criteria for Whole Grain-rich Foods.*

This list may not contain all possible representations of whole-grain ingredient names on food labels.

Whole-Grain Products and Ingredients [1]

Barley
- dehulled barley
- dehulled barley flour
- whole barley
- whole-barley flakes
- whole-barley flour
- whole-grain barley
- whole-grain barley flour

Brown Rice
- brown rice
- brown rice flour

Corn
- masa (whole corn treated with lime) [2]
- whole corn
- whole-corn flour
- whole cornmeal
- whole-grain corn flour
- whole-grain grits
- whole-ground corn

Oats
- oat groats
- oatmeal, including old-fashioned, quick-cooking and instant
- rolled oats
- whole oats
- whole-oat flour

Rye
- cracked rye
- whole rye
- rye berries
- rye chops
- whole-rye flour
- whole-rye flakes

Wheat (Red) [3]
- bulgur (cracked wheat)
- bromated whole-wheat flour
- cracked wheat
- crushed wheat
- entire-wheat flour
- graham flour
- sprouted wheat
- sprouted wheat berries
- stone ground whole-wheat flour [4]
- toasted crushed whole wheat
- wheat berries
- whole bulgur
- whole durum flour
- whole durum wheat flour
- whole-grain bulgur
- whole-grain wheat

Wheat (Red), continued [3]
- whole wheat
- whole-wheat flour
- whole-wheat pastry flour
- whole-wheat flakes

Wheat (White) [5]
- whole white wheat
- whole white wheat flour

Wild Rice
- wild rice
- wild rice flour

Less Common Grains
- amaranth
- buckwheat, buckwheat groats
- einkorn
- emmer (farro)
- Kamut®
- millet
- quinoa
- sorghum (milo)
- spelt
- teff
- triticale

[1] Whole grains consist of the entire cereal grain seed or kernel, including the bran, germ and endosperm.
[2] Masa (often used in tortilla products) is a whole grain only if the manufacturer provides documentation that the manufacturing process used to prepare the corn with lime retains the pericarp (bran layer).
[3] Red wheat is the most common kind of wheat in the United States.
[4] "Stone ground" describes the process used for making the flour or meal. It does not necessarily mean that the product is whole grain. Look for "whole" in combination with "stone ground" in the ingredients.
[5] White whole-wheat products are lighter in color and lack the slightly bitter taste associated with the bran in red wheat. Read labels carefully to be sure products are white **whole** wheat and not "white wheat," which is not a whole grain.

www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/crediting/IdentifyingWG.pdf

WGR Definition Criterion 2
Any Other Grains are ENRICHED

ENRICHED GRAINS

Contain FIVE NUTRIENTS added within limits specified by FDA

- **THIAMIN (vitamin B1, thiamin mononitrate, thiamin hydrochloride)**
- **RIBOFLAVIN (vitamin B2)**
- **NIACIN (vitamin B3, niacinamide)**
- **FOLIC ACID (folate)**
- **IRON (reduced iron, ferrous sulfate)**

Sample Label with Enriched Flour

Ingredients: Whole wheat flour, enriched flour (wheat flour, niacin, reduced iron, thiamine mononitrate, riboflavin, folic acid) ….

Crediting Enriched Grains

CREDITING ENRICHED GRAINS

in the U.S. Department of Agriculture (USDA) School Nutrition Programs

Meal Pattern Requirements for Grains

Grains must be **whole grain-rich** to meet the meal pattern requirements for the National School Lunch Program (NSLP) and School Breakfast Program (SBP). Whole grain-rich products contain at least 50 percent whole grains, any other grain ingredients are enriched and the combined weight of any noncreditable grains (such as modified food starch and bran) is less than two percent of the product formula. Grain ingredients that are not enriched such as "unbleached all-purpose flour" or "cornmeal" are not creditable. For more information, see *Criteria for Whole Grain-rich Foods* and *Identifying Whole Grains* under "Resources" on page 2.

Products that contain **only enriched grains** cannot credit toward the grains component in the NSLP and SBP. Some examples include enriched white bread, enriched white rice and crackers made with enriched flour. These products can only be served as "extra" foods that do not contribute to the meal patterns. This may not be practical because these products cannot count toward the minimum daily or weekly grain requirements but must count toward the weekly limits for calories, fat and sodium.

However, enriched grains can credit if they are an ingredient in a whole grain-rich product or recipe. For example, a mixture of half brown rice (whole grain) and half enriched white rice, or a sandwich made with one slice of whole-wheat bread and one slice of enriched white bread. In addition, schools can request a waiver to serve enriched pasta during school years 2014-15 and 2015-16, if whole grain-rich pasta is not available or accepted by students. For more information on this option, contact the school nutrition programs staff at the Connecticut State Department of Education.

Enrichment Nutrients

Enriched grains are refined grains (such as wheat, rice and corn) and grain products (such as cereal, pasta and bread) that have vitamins and minerals added to replace the nutrients lost during processing. These nutrients are added within limits specified by the Food and Drug Administration (FDA) and include: **thiamin** (vitamin B_1, thiamin mononitrate, thiamin hydrochloride); **riboflavin** (vitamin B_2); **niacin** (vitamin B_3, niacinamide); **folic acid** (folate); and **iron** (reduced iron, ferrous sulfate). Enriched products are not nutritionally equivalent to whole-grain products because enrichment does not replace all the nutrients, fiber and other health-enhancing substances originally present in the whole grain.

Identifying Enriched Grains

To determine whether a product is enriched, check the label for the term "enriched," e.g., "enriched flour" or check the ingredients statement for the five enrichment nutrients, e.g., "flour, niacin, ferrous sulfate, thiamine mononitrate, riboflavin, folic acid." If the ingredients statement includes all five nutrients (iron, thiamin, riboflavin, niacin and folic acid), the product is enriched. Not all refined products are enriched. For example, when corn is processed into cornmeal, the germ of the grain is removed. Unless the product indicates "enriched cornmeal" or the ingredients statement lists all five enrichment nutrients, the product is not enriched.

CREDITING ENRICHED GRAINS, continued

Resources

Calculation Methods for Crediting Grains:
http://www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/crediting/grain_calculations.pdf

Child Nutrition (CN) Labeling:
http://www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/crediting/CN_labeling.pdf

Crediting Foods (CSDE Web Page):
http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=333796

Criteria for Whole Grain-rich Foods:
http://www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/crediting/WGR_Criteria.pdf

Food Buying Guide for Child Nutrition Programs:
http://www.fns.usda.gov/tn/resources/foodbuyingguide.html

Identifying Whole Grains:
http://www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/crediting/IdentifyingWG.pdf

Meal Patterns (CSDE Web Page):
http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=333770

Menu Planning (CSDE Web Page):
http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=333780

Menu Planning Guide for School Meals:
http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=334320

Product Formulation Statements:
http://www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/crediting/PFS.pdf

Sample Product Formulation Statement for Documenting Grains in School Meals Required Beginning SY 2013-2014: http://www.fns.usda.gov/cnd/cnlabeling/PFSgrains13-14.pdf

Whole Grain-rich Ounce Equivalents Requirements for School Nutrition Programs:
http://www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/grains_ounce_equivalents_snp.pdf

For more information, see the Connecticut State Department of Education's (CSDE) *Menu Planning Guide for School Meals* and Meal Patterns and Crediting Foods Web pages or contact the school nutrition programs staff in the CSDE Bureau of Health/Nutrition, Family Services and Adult Education, 25 Industrial Park Road, Middletown, CT 06457.

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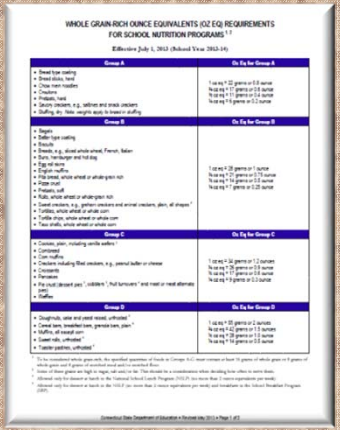
www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/crediting/EnrichedGrains.pdf

WGR Definition Criterion 3
Limit for NONCREDITABLE GRAINS

- **Combined total of all noncreditable grains must be LESS THAN 2% of product formula**
  - **3.99 grams for groups A-G (baked goods) of the USDA ounce equivalents chart**
  - **6.99 grams for groups H (cereal grains) and group I (ready-to-eat breakfast cereals) of the USDA ounce equivalents chart**



WHOLE GRAIN-RICH OUNCE EQUIVALENTS (OZ EQ) REQUIREMENTS FOR SCHOOL NUTRITION PROGRAMS [1,2]

Effective July 1, 2012 (School Year 2012-13)

Group A	Oz Eq for Group A
• Bread type coating • Bread sticks, hard • Chow mein noodles • Croutons • Pretzels, hard • Savory crackers, e.g., saltines and snack crackers • Stuffing, dry. Note: weights apply to breaded stuffing	1 oz eq = 22 grams or 0.8 ounce ½ oz eq = 11 grams or 0.4 ounce ¼ oz eq = 5.5 grams or 0.2 ounce ½ oz eq = 11 grams or 0.4 ounce ¼ oz eq = 5.5 grams or 0.2 ounce
Group B	**Oz Eq for Group B**
• Bagels • Batter type coating • Biscuits • Breads, e.g., sliced whole wheat, French, Italian • Buns, hamburger and hot dog • Egg roll skins • English muffins • Pita bread, whole wheat or whole grain rich • Pizza crust • Pretzels, soft • Rolls, whole wheat or whole grain rich • Sweet crackers, e.g., graham crackers and animal crackers, plain, all shapes [3] • Tortillas, whole wheat or whole corn • Tortilla chips, whole wheat or whole corn • Taco shells, whole wheat or whole corn	1 oz eq = 28 grams or 1 ounce ½ oz eq = 14 grams or 0.5 ounce ¼ oz eq = 7 grams or 0.25 ounce ½ oz eq = 14 grams or 0.5 ounce ¼ oz eq = 7 grams or 0.25 ounce
Group C	**Oz Eq for Group C**
• Crackers, plain, including vanilla wafers [3] • Cornbread • Corn muffins • Crackers including filled crackers, e.g., peanut butter or cheese • Croissants • Pancakes • Pie crust (dessert pies [3], cobbler [3], fruit turnovers [3] and meat or meat alternate pies) • Waffles	1 oz eq = 36 grams or 1.3 ounces ½ oz eq = 18 grams or 0.6 ounce ¼ oz eq = 9 grams or 0.3 ounce ½ oz eq = 18 grams or 0.6 ounce ¼ oz eq = 9 grams or 0.3 ounce
Group D	**Oz Eq for Group D**
• Doughnuts, cake and yeast raised, unfrosted [3] • Cereal bars, breakfast bars, granola bars, plain [3] • Muffins, all except corn • Sweet rolls, unfrosted [3] • Toaster pastries, unfrosted [3]	1 oz eq = 55 grams or 2 ounces ½ oz eq = 27 grams or 1.0 ounces ¼ oz eq = 13 grams or 0.5 ounce ½ oz eq = 27 grams or 1.0 ounce ¼ oz eq = 13 grams or 0.5 ounce

[1] To be considered whole grain-rich, the specified quantities of foods in Groups A-G must contain at least 16 grams of whole grain or 8 grams of whole grain and 8 grams of enriched meal and/or enriched flour.

[2] Some of these grains are high in sugar, salt and/or fat. This should be a consideration when deciding how often to serve them.

[3] Allowed only for dessert or lunch in the National School Lunch Program (NSLP), no more than 2 ounce equivalents per week.

[4] Allowed only for dessert or lunch in the NSLP, no more than 3 ounce equivalents per week; and breakfast in the School Breakfast Program (SBP).

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- **If exceeds this limit, not WGR food**

Examples of Noncreditable Grain Ingredients *

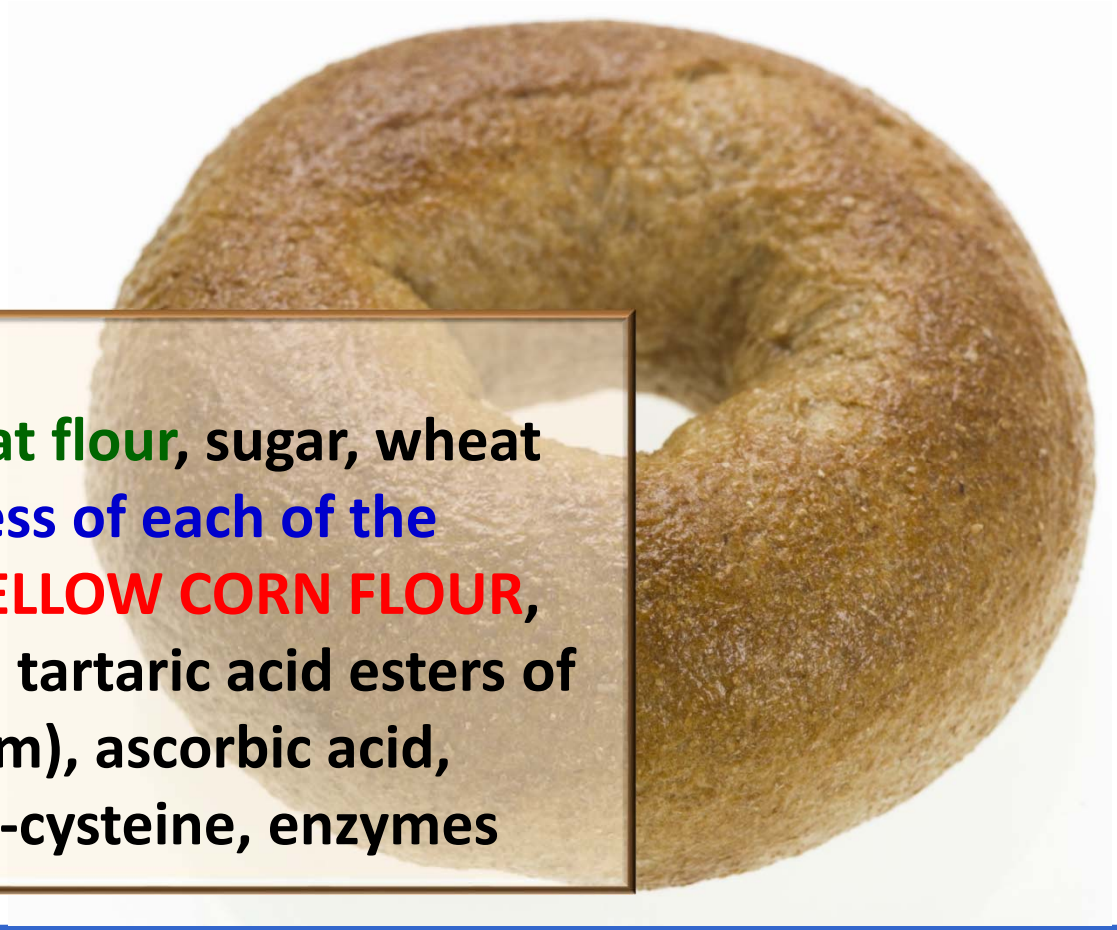
- barley grits
- bran
- corn bran
- corn fiber
- corn flour (not enriched)
- corn grits
- corn starch
- cultured wheat starch
- durum grits
- fava bean flour
- fermented wheat
- germ
- hydrolyzed starch
- malted barley flour (not enriched
- modified food starch (including potato, legume and other vegetable flours)
- modified corn starch
- modified rice starch
- modified tapioca starch
- modified wheat starch
- oat fiber
- potato flour
- potato starch
- rice flour (not enriched
- rice starch
- soluble corn fiber
- soy fiber
- soy grits
- soy flour
- tapioca starch
- wheat bran
- wheat germ
- wheat flour (not enriched)
- wheat starch

* This list is not all-inclusive

Criteria for Whole Grain-rich Foods: www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/crediting/WGR_Criteria.pdf

"Contains 2% or less"

- If product lists only ONE noncreditable grain after "contains 2% or less" PFS NOT NEEDED



WHOLE WHEAT BAGEL

Ingredients: Whole wheat flour, sugar, wheat gluten. Contains 2% or less of each of the following: honey, salt, YELLOW CORN FLOUR, yeast, molasses, diacetyl tartaric acid esters of mono-diglycerides (datem), ascorbic acid, mono-and diglycerides, l-cysteine, enzymes

"Contains 2% or less"

- **If product lists TWO OR MORE noncreditable grains after "contains 2% or less" PFS REQUIRED**
  - **Must document combined weight of all noncreditable grains**

WHOLE GRAIN BAGEL

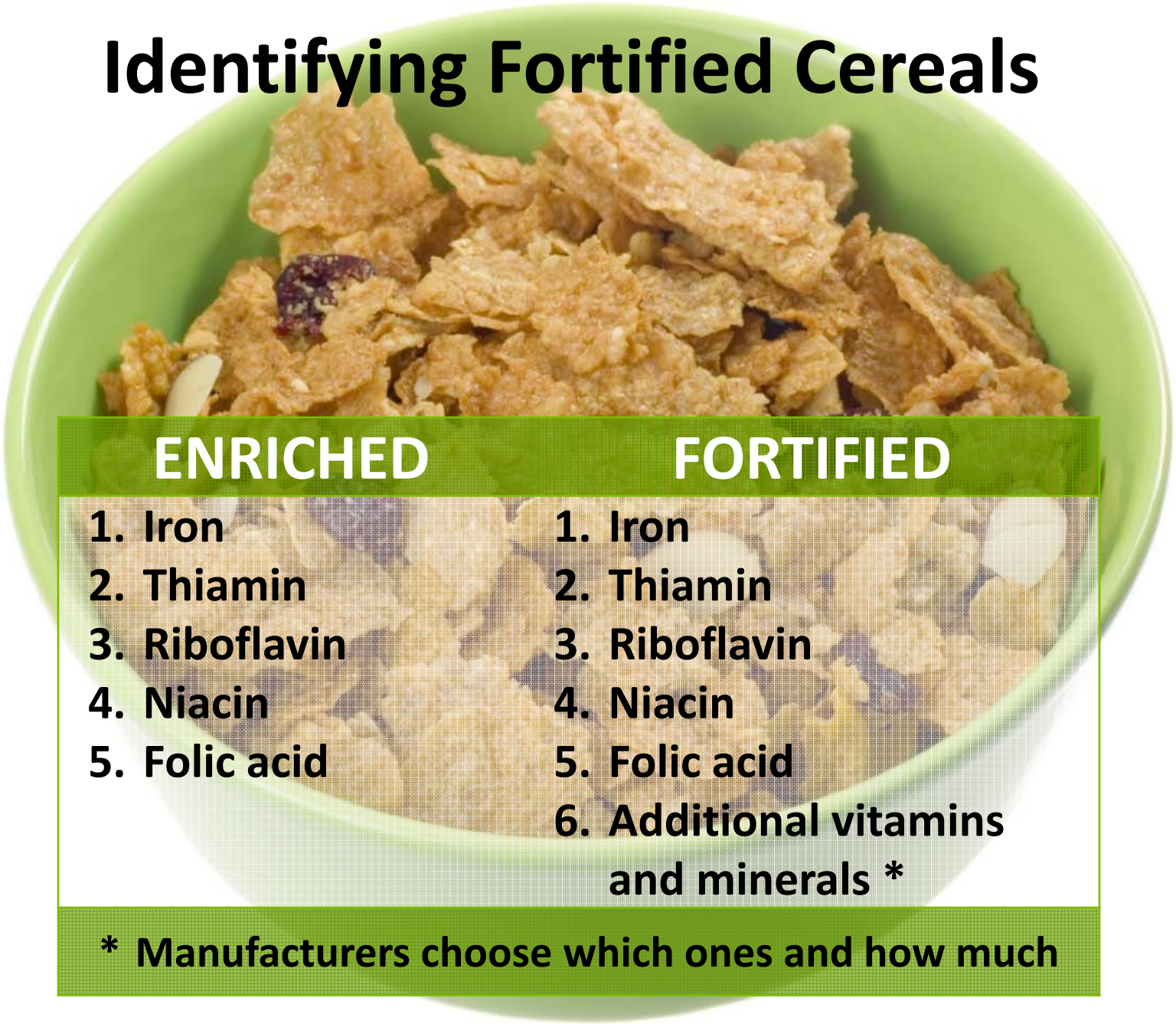
Ingredients: Whole wheat flour, enriched bromated wheat flour (niacin [a-B vitamin], thiamine mono nitrate [vitamin B-1], ferrous sulfate [iron], potassium bromate, riboflavin [vitamin B-2], and folic acid), water, brown sugar granulated sugar. Contains 2% or less of the following ingredients: salt, vital wheat gluten, mono & diglycerides, honey, CORN MEAL, calcium propionate, MALTED BARLEY FLOUR, molasses powder (molasses, WHEAT STARCH), ammonium chloride, ascorbic acid (vitamin C), l-cysteine hydrochloride, azodicarbonamide (ADA), calcium sulfate, enzymes

Two Exemptions for Noncreditable Grains

1. **FORTIFIED BREAKFAST CEREALS** that contain a **WHOLE GRAIN** as the first ingredient

2. **CEREAL BARS** made from a fortified breakfast cereal that contains a whole grain as the first ingredient

Identifying Fortified Cereals



ENRICHED	FORTIFIED
1. Iron	1. Iron
2. Thiamin	2. Thiamin
3. Riboflavin	3. Riboflavin
4. Niacin	4. Niacin
5. Folic acid	5. Folic acid
	6. Additional vitamins and minerals *

* Manufacturers choose which ones and how much

Ready-to-Eat Breakfast Cereals

- Cereals containing **ONLY ENRICHED GRAINS, BRAN OR GERM** are not whole grain-rich and do not credit
- Cereals that contain **MORE THAN 2 PERCENT** of these ingredients only credit if
  - whole grain is first ingredient **AND**
  - cereal is fortified

Crediting Breakfast Cereals

CREDITING BREAKFAST CEREALS

in the U.S. Department of Agriculture (USDA) School Nutrition Programs

Grains must be **whole grain-rich** (WGR) to meet the meal pattern requirements for the National School Lunch Program (NSLP) and School Breakfast Program (SBP). WGR products contain at least 50 percent whole grains, any other grain ingredients are enriched and the combined weight of any noncreditable grains (such as modified food starch and bran) is less than two percent of the product formula. For more information, see the CSDE's handout, *Criteria for Whole Grain-rich Foods.*

Serving Sizes for Breakfast Cereals

Serving sizes (ounce equivalents) are based on the USDA ounce equivalents chart, *Whole Grain-Rich Ounce Equivalents Requirements for School Nutrition Programs.* This chart divides products into nine groups (A-I) based on their average grain content. Cooked breakfast cereals such as oatmeal are in Group H. Cold ready-to-eat breakfast cereals are in group I. Both groups require 28 grams or 1 ounce of product to credit as 1 ounce equivalent of grains in school nutrition programs.

Cooked Breakfast Cereals

Cereal grains in group H of the USDA ounce equivalents chart (such as oats, buckwheat, millet and quinoa) are served cooked and water is added in preparation, so they credit based on the **cooked volume equivalent of ½ cup**. All cooked breakfast cereals must meet the WGR criteria and list a **whole grain** as the primary ingredient. Cooked breakfast cereals that are 100 percent whole grain are not required to be fortified. For more information, see the CSDE's handout, *Identifying Whole Grains.*

Ready-To-Eat (RTE) Breakfast Cereals

For RTE cold breakfast cereals in group I of the USDA ounce equivalents chart, a 1-ounce equivalent serving equals 1 cup of flakes or rounds, 1 ¼ cups of puffed cereal and ¼ cup of granola.

To be WGR, RTE breakfast cereals must list a **whole grain** as the primary ingredient and the cereal must be **fortified**. Fortified breakfast cereals contain five nutrients (iron, thiamin, riboflavin, niacin and folic acid) lost during the refining process, as well as additional vitamins and minerals that do not exist naturally in grains. To determine whether a breakfast cereal is fortified, check the ingredients statement. Fortified cereals must contain:

- the **five enrichment nutrients** (iron, thiamin, riboflavin, niacin and folic acid); and
- **additional nutrients** such as vitamins A, C, D, E, B_6 (pyridoxine hydrochloride), vitamin B_{12} (cobalamin), pantothenic acid, phosphorous, magnesium and zinc. When fortification nutrients are added to cereals, they will either be listed directly in the ingredients statement or in the ingredients statement under "Vitamins and Minerals."

All fortified cereals must contain the five enrichment nutrients. However, manufacturers can choose which additional nutrients to use for fortification. Different cereal brands may list different fortification nutrients. The USDA does not specify a minimum number of nutrients or a minimum percentage for the level of fortification for breakfast cereals.

RTE breakfast cereals that are 100 percent whole grain are not required to be fortified.

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www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/crediting/crediting_cereals.pdf

Meets WGR Requirement?

Product 1

Whole-Wheat Bagel

Ingredients: Whole wheat flour, sugar, wheat gluten. Contains 2% or less of each of the following: honey, salt, yellow corn flour, yeast, molasses, diacetyl tartaric acid esters of mono-diglycerides (datem), ascorbic acid, mono-and diglycerides, l-cysteine, enzymes

☐ Yes ☐ No ☐ PFS Needed

Meets WGR Requirement?

Product 1

Whole-Wheat Bagel

Ingredients: Whole wheat flour, sugar, wheat gluten. Contains 2% or less of each of the following: honey, salt, yellow corn flour, yeast, molasses, diacetyl tartaric acid esters of mono-diglycerides (datem), ascorbic acid, mono-and diglycerides, l-cysteine, enzymes

☑ Yes ☐ No ☐ PFS Needed

Meets WGR Requirement?

Product 2

BRAND A White Whole-Wheat Bread Sticks

Ingredients: Water, whole wheat flour, unbleached unbromated enriched wheat flour (wheat flour, niacin, reduced iron, thiamine mononitrate, riboflavin, enzymes, folic acid), honey, yeast, salt, dough conditioners (mono & diglycerides, datem, l-cysteine, ascorbic acid, enzymes), modified food starch, fava bean flour, flavor (natural flavor, modified vegetable gum, hydrolyzed starch, maltodextrin), malted barley flour, dextrose, rye flour.

☐ Yes ☐ No ☐ PFS Needed

Meets WGR Requirement?

Product 2

BRAND A White Whole-Wheat Bread Sticks

Ingredients: Water, whole wheat flour, unbleached unbromated enriched wheat flour (wheat flour, niacin, reduced iron, thiamine mononitrate, riboflavin, enzymes, folic acid), honey, yeast, salt, dough conditioners (mono & diglycerides, datem, l-cysteine, ascorbic acid, enzymes), modified food starch, fava bean flour, flavor (natural flavor, modified vegetable gum, hydrolyzed starch, maltodextrin), malted barley flour, dextrose, rye flour.

☐ Yes ☐ No ☑ PFS Needed

Meets WGR Requirement?

Product 3

BRAND B White Whole-Wheat Bread Sticks

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, ascorbic acid, enzyme. May contain milk, soy, egg and sesame.

☐ Yes ☐ No ☐ PFS Needed

Meets WGR Requirement?

Product 7

Whole-Grain Blueberry Muffin

Ingredients: whole wheat flour, sugar, eggs, water, blueberries, enriched flour (flour, malted barley flour, niacin, reduced iron, thiamin mononitrate, riboflavin, folic acid), invert sugar, soybean oil, contains 2% or less of: palm oil, canola oil, propylene glycol mono- and diesters of fats and fatty acids, oat fiber, leavening (baking soda, sodium aluminum phosphate, monocalcium phosphate), mono- and diglycerides, modified food starch, potassium sorbate (preservative), sodium alginate, salt, soy lecithin, natural and artificial flavor, sodium stearoyl lactylate, wheat starch, blackberry juice concentrate, blueberry juice concentrate, malic acid, enzymes. Contains: wheat, egg, soy.

☐ Yes ☐ No ☑ PFS Needed

Meets WGR Requirement?

Product 4

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.

☐ Yes ☐ No ☐ PFS Needed

Meets WGR Requirement?

Product 4

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.

☑ Yes ☐ No ☐ PFS Needed

Meets WGR Requirement?

Product 5

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.

☐ Yes ☐ No ☐ PFS Needed

Meets WGR Requirement?

Product 5

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.

☐ Yes ☑ No ☐ PFS Needed

Meets WGR Requirement?

Product 6

Whole-Grain Ready-To-Eat Cereal

Ingredients: Whole grain wheat, sugar, brown 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.

☐ Yes ☐ No ☐ PFS Needed

Meets WGR Requirement?

Product 6

Whole-Grain Ready-To-Eat Cereal

Ingredients: Whole grain wheat, sugar, brown 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.

☑ Yes ☐ No ☐ PFS Needed

Meets WGR Requirement?

Product 7

Whole-Grain Blueberry Muffin

Ingredients: whole wheat flour, sugar, eggs, water, blueberries, enriched flour (flour, malted barley flour, niacin, reduced iron, thiamin mononitrate, riboflavin, folic acid), invert sugar, soybean oil, contains 2% or less of: palm oil, canola oil, propylene glycol mono- and diesters of fats and fatty acids, oat fiber, leavening (baking soda, sodium aluminum phosphate, monocalcium phosphate), mono- and diglycerides, modified food starch, potassium sorbate (preservative), sodium alginate, salt, soy lecithin, natural and artificial flavor, sodium stearoyl lactylate, wheat starch, blackberry juice concentrate, blueberry juice concentrate, malic acid, enzymes. Contains: wheat, egg, soy.

☐ Yes ☐ No ☐ PFS Needed

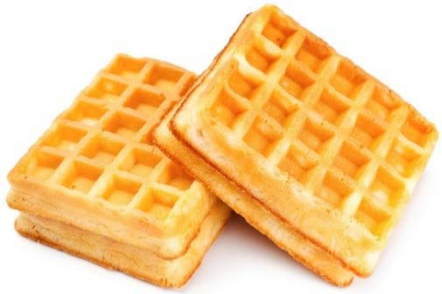
Meets WGR Requirement?

Product 7

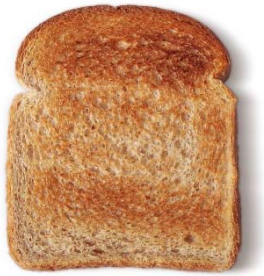
Whole-Grain Blueberry Muffin

Ingredients: whole wheat flour, sugar, eggs, water, blueberries, enriched flour (flour, malted barley flour, niacin, reduced iron, thiamin mononitrate, riboflavin, folic acid), invert sugar, soybean oil, contains 2% or less of: palm oil, canola oil, propylene glycol mono- and diesters of fats and fatty acids, oat fiber, leavening (baking soda, sodium aluminum phosphate, monocalcium phosphate), mono- and diglycerides, modified food starch, potassium sorbate (preservative), sodium alginate, salt, soy lecithin, natural and artificial flavor, sodium stearoyl lactylate, wheat starch, blackberry juice concentrate, blueberry juice concentrate, malic acid, enzymes. Contains: wheat, egg, soy.

☐ Yes ☐ No ☑ PFS Needed



Purchasing specifications are critical to ensure compliance with WGR requirements



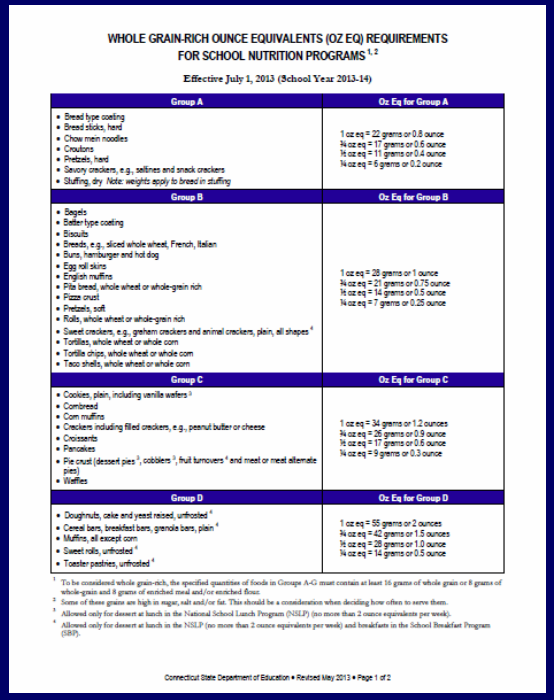
Serving Sizes for Grains

- Menu planner determines SERVING SIZES and NUMBER of servings
- Minimum of ¼ OZ EQ to count toward daily total
  - Amounts less than ¼ ounce equivalent NOT included in daily and weekly grains
- Can offer COMBINATION of various grains to meet daily total

Two Methods to Determine Serving Sizes for Baked Goods (Groups A-G)

- **METHOD 1**
  Use **WEIGHT OR VOLUME** in USDA ounce equivalents chart

- To use this method
  - all grains must be **CREDITABLE** (whole grain or enriched)
  - combined total of any noncreditable grains must be **less than 3.99 grams**



WHOLE GRAIN-RICH OUNCE EQUIVALENTS (OZ EQ) REQUIREMENTS FOR SCHOOL NUTRITION PROGRAMS [1, 2]

Effective July 1, 2013 (School Year 2013-14)

Group A	Oz Eq for Group A
• Bread type coating • Breed sticks, hard • Chow mein noodles • Croutons • Pretzels, hard • Savory crackers, e.g., saltines and snack crackers • Stuffing, dry *Note: weights apply to bread in stuffing*	1 oz eq = 22 grams or 0.8 ounce ¾ oz eq = 17 grams or 0.6 ounce ½ oz eq = 11 grams or 0.4 ounce ¼ oz eq = 6 grams or 0.2 ounce
Group B	**Oz Eq for Group B**
• Bagels • Batter type coating • Biscuits • Breads, e.g., sliced whole wheat, French, Italian • Buns, hamburger and hot dog • Egg roll skins • English muffins • Pita bread, whole wheat or whole-grain rich • Pizza crust • Pretzels, soft • Rolls, whole wheat or whole-grain rich • Sweet crackers, e.g., graham crackers and animal crackers, plain, all shapes [4] • Tortillas, whole wheat or whole corn • Tortilla chips, whole wheat or whole corn • Taco shells, whole wheat or whole corn	1 oz eq = 28 grams or 1 ounce ¾ oz eq = 21 grams or 0.75 ounce ½ oz eq = 14 grams or 0.5 ounce ¼ oz eq = 7 grams or 0.25 ounce
Group C	**Oz Eq for Group C**
• Cookies, plain, including vanilla wafers [3] • Cornbread • Corn muffins • Crackers including filled crackers, e.g., peanut butter or cheese • Croissants • Pancakes • Pie crust (dessert pies [3], cobblers [3], fruit turnovers [3] and meat or meat alternate pies) • Waffles	1 oz eq = 34 grams or 1.2 ounces ¾ oz eq = 26 grams or 0.9 ounce ½ oz eq = 17 grams or 0.6 ounce ¼ oz eq = 9 grams or 0.3 ounce
Group D	**Oz Eq for Group D**
• Doughnuts, cake and yeast raised, unfrosted [4] • Cereal bars, breakfast bars, granola bars, plain [4] • Muffins, all except corn • Sweet rolls, unfrosted [4] • Toaster pastries, unfrosted [4]	1 oz eq = 55 grams or 2 ounces ¾ oz eq = 42 grams or 1.5 ounces ½ oz eq = 28 grams or 1.0 ounce ¼ oz eq = 14 grams or 0.5 ounce

[1] To be considered whole grain-rich, the specified quantities of foods in Groups A-G must contain at least 16 grams of whole grain or 8 grams of whole-grain and 8 grams of enriched meal and/or enriched flour.
[2] Some of these grains are high in sugar, salt and/or fat. This should be a consideration when deciding how often to serve them.
[3] Allowed only for dessert at lunch in the National School Lunch Program (NSLP) (no more than 2 ounce equivalents per week).
[4] Allowed only for dessert at lunch in the NSLP (no more than 2 ounce equivalents per week) and breakfasts in the School Breakfast Program (SBP).

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Two Methods to Determine Serving Sizes for Baked Goods (Groups A-G)

- **METHOD 2**
  Determine WEIGHT of CREDITABLE grains
  - Requires MANUFACTURER DOCUMENTATION (PFS) for commercial products
  - Requires STANDARDIZED RECIPE for school-made products

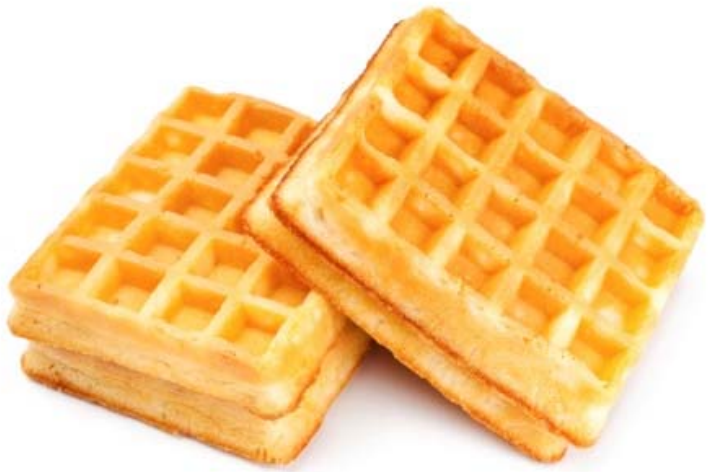
For both methods, round DOWN all calculations to nearest ¼ ounce equivalent

Whole-wheat Roll, 1.49 ounces

Group B: 1 ounce equivalent = 28 grams (1 ounce)
Credits as 1.25 ounce equivalents of grains

For both methods, round DOWN all calculations to nearest ¼ ounce equivalent

Whole Grain-rich Waffles, 2.6 ounces



Group C:

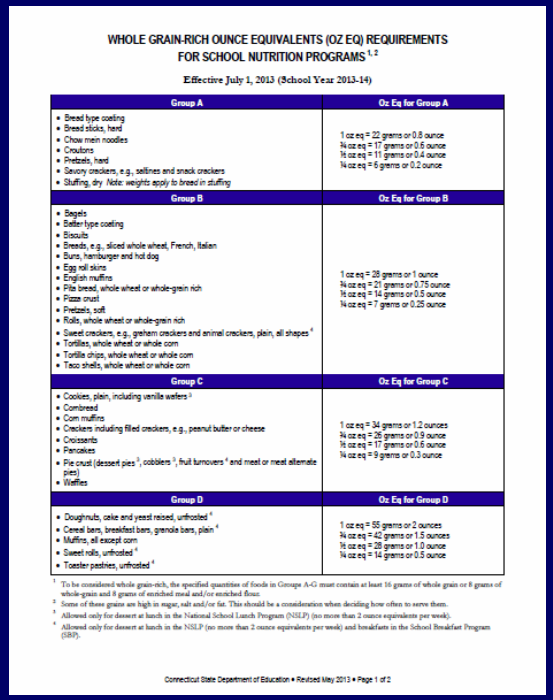
1 ounce equivalent = 34 grams (1.2 ounces)

2.6 ounces ÷ 1.2 ounces = 2.2 ounce equivalents

Credits as 2 ounce equivalents of grains

Method 1 – Ounce Equivalents Chart

- Use serving sizes (WEIGHTS) in USDA ounce equivalents chart
- Nine groups based on amount that provides 1 OUNCE EQUIVALENT of grains



WHOLE GRAIN-RICH OUNCE EQUIVALENTS (OZ EQ) REQUIREMENTS FOR SCHOOL NUTRITION PROGRAMS [1, 2]

Effective July 1, 2013 (School Year 2013-14)

Group A	Oz Eq for Group A
• Bread type coating • Bread sticks, hard • Chow mein noodles • Croutons • Pretzels, hard • Savory crackers, e.g., saltines and snack crackers • Stuffing, dry *Note: weights apply to bread in stuffing*	1 oz eq = 22 grams or 0.8 ounce ¾ oz eq = 17 grams or 0.6 ounce ½ oz eq = 11 grams or 0.4 ounce ¼ oz eq = 6 grams or 0.2 ounce
Group B	**Oz Eq for Group B**
• Bagels • Batter type coating • Biscuits • Breads, e.g., sliced whole wheat, French, Italian • Buns, hamburger and hot dog • Egg roll skins • English muffins • Pita bread, whole wheat or whole-grain rich • Pizza crust • Pretzels, soft • Rolls, whole wheat or whole-grain rich • Sweet crackers, e.g., graham crackers and animal crackers, plain, all shapes [4] • Tortillas, whole wheat or whole corn • Tortilla chips, whole wheat or whole corn • Taco shells, whole wheat or whole corn	1 oz eq = 28 grams or 1 ounce ¾ oz eq = 21 grams or 0.75 ounce ½ oz eq = 14 grams or 0.5 ounce ¼ oz eq = 7 grams or 0.25 ounce
Group C	**Oz Eq for Group C**
• Cookies, plain, including vanilla wafers [3] • Cornbread • Corn muffins • Crackers including filled crackers, e.g., peanut butter or cheese • Croissants • Pancakes • Pie crust (dessert pies [3], cobblers [3], fruit turnovers [4] and meat or meat alternate pies) • Waffles	1 oz eq = 34 grams or 1.2 ounces ¾ oz eq = 26 grams or 0.9 ounce ½ oz eq = 17 grams or 0.6 ounce ¼ oz eq = 9 grams or 0.3 ounce
Group D	**Oz Eq for Group D**
• Doughnuts, cake and yeast raised, unfrosted [4] • Cereal bars, breakfast bars, granola bars, plain [4] • Muffins, all except corn • Sweet rolls, unfrosted [4] • Toaster pastries, unfrosted [4]	1 oz eq = 55 grams or 2 ounces ¾ oz eq = 42 grams or 1.5 ounces ½ oz eq = 28 grams or 1.0 ounce ¼ oz eq = 14 grams or 0.5 ounce

[1] To be considered whole grain-rich, the specified quantities of foods in Groups A-G must contain at least 16 grams of whole grain or 8 grams of whole-grain and 8 grams of enriched meal and/or enriched flour.
[2] Some of these grains are high in sugar, salt and/or fat. This should be a consideration when deciding how often to serve them.
[3] Allowed only for dessert at lunch in the National School Lunch Program (NSLP) (no more than 2 ounce equivalents per week).
[4] Allowed only for dessert at lunch in the NSLP (no more than 2 ounce equivalents per week) and breakfasts in the School Breakfast Program (SBP).

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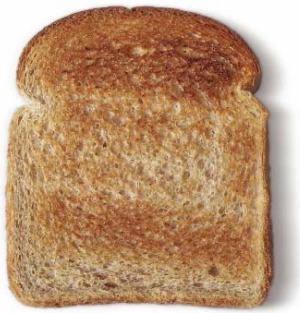
Weight Required for 1 Ounce Equivalent

Cereal 1 ounce

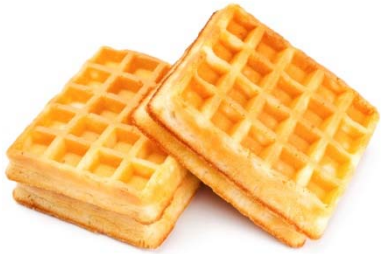
(1 cup for flakes and rounds, 1 ¼ cups for puffed cereal and ¼ cup for granola)



Toast
1 ounce

Graham Crackers
1 ounce

Corn muffin
1.2 ounces



Waffles
1.2 ounces

Blueberry Muffin
2 ounces

French Toast
2.4 ounces

Frosted Sweet Roll
2.4 ounces

How much equals 1 ounce equivalent?

Whole-wheat Bagel

GROUP B

1 ounce equivalent =

28 grams (1 ounce)

How much equals 1 ounce equivalent?

Granola Bars, Plain

GROUP D

1 ounce equivalent =

55 grams (2 ounces)

How much equals 1 ounce equivalent?

Oatmeal

GROUP H

1 ounce equivalent =

½ cup cooked or

28 grams (1 ounce) dry

Method 2 – Creditable Grains

- Calculate GRAMS OF CREDITABLE GRAINS per serving
- Requires documentation from
  1. an original CN LABEL from the product carton if the grains are part of a meat/meat alternate product

     OR

  2. a PFS signed by an official of the manufacturer

Calculation Methods for Crediting Grains

CALCULATION METHODS FOR CREDITING GRAINS

in the U.S. Department of Agriculture (USDA) School Nutrition Programs

Grains must be **whole grain-rich** (WGR) to meet the meal pattern requirements for the National School Lunch Program (NSLP) and School Breakfast Program (SBP). WGR products contain at least 50 percent whole grains, any other grain ingredients are enriched and the combined weight of any noncreditable grains (such as modified food starch and bran) is less than two percent of the product formula, i.e., no more than 3.99 grams for groups A-G (baked goods) of the USDA ounce equivalents chart, *Whole Grain-rich Ounce Equivalents Requirements for School Nutrition Programs*, or 6.99 grams for groups H (cereal grains) and I (ready-to-eat breakfast cereals). For more information, see the Connecticut State Department of Education's (CSDE) handout, *Criteria for Whole Grain-rich Foods*.

All grains must also meet the **serving size** requirements in the USDA ounce equivalents chart. Schools and manufacturers can use two different calculation methods to determine the contribution of grain-based products toward the USDA meal patterns for the NSLP and SBP (see "Calculation Methods for Groups A-C" below and "Calculation Methods for Groups H and I" on page 2).

Schools are not required to use these calculation methods if a product has a Child Nutrition (CN) label or the manufacturer provides a product formulation statement indicating the amount of grains provided. In these cases, the product credits based on the amount of grains specified by the appropriate documentation. However, schools should verify the accuracy of any product formulation statements prior to grain items being included in reimbursable meals. Schools must keep this documentation on file to verify meal pattern compliance for auditing purposes. For more information on CN labels and product formulation statements, see the CSDE's Crediting Foods Web page, and the handouts, *Child Nutrition (CN) Labeling* and *Product Formulation Statements*.

CALCULATION METHODS FOR GROUPS A-G

Grain products in groups A-G of the USDA ounce equivalents chart require **16 grams** of creditable grain ingredients (whole or enriched) to credit as 1 ounce equivalent of grains in the meal patterns for the NSLP and SBP. The calculation methods for groups A-G are described below.

- **Method 1 – Weight (Ounce Equivalents):** Divide the serving size of the product by the weight listed in the corresponding group (A-G) of the USDA ounce equivalents chart, then round down to the nearest quarter. If the weight is listed in ounces, divide by ounces. If the weight is listed in grams, divide by grams. This method can be used only if all grains in the product are creditable (i.e., whole or enriched) and the combined total of any noncreditable grains is less than 3.99 grams. For more information on noncreditable grains, see *Criteria for Whole Grain-rich Foods*.
- **Method 2 – Creditable Grains:** Divide the total weight (grams) of enriched and whole grains in the product by **16 grams**, then round down to the nearest quarter. If the weight is listed only in ounces, multiply ounces by 28.35 to convert to grams. This method requires a product formulation statement from the manufacturer for commercial products and a standardized recipe for school-made products. The combined total of any noncreditable grains must be less than 3.99 grams.

For more information on using each method, see "Choosing a Calculation Method" on page 4.

http://www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/crediting/grain_calculations.pdf

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Grains Component is the fourth section of the *What's for Breakfast* presentation available from the CSDE School Breakfast Program Web site

1. Meal Pattern Overview
2. Milk Component
3. Fruits Component (with Vegetable Substitutions)
4. Grains Component
   - Meat/Meat Alternate Substitutions
   - Grains Resources
5. Noncreditable Foods
6. Dietary Specifications (Nutrition Standards)
7. Offer versus Serve (OVS)
8. Meal or No Meal: Breakfast Edition
9. Menu Planning Resources

http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=320662