





Welcome to

Grains 101

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No Phone Zone

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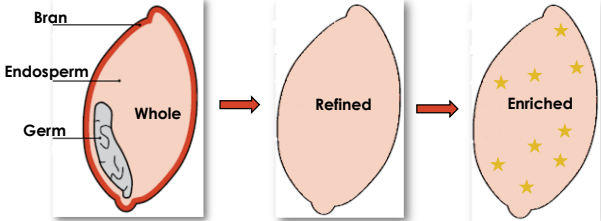

Objectives

- Define grain terms
- Explore the relationship between “creditable” and “whole grain-rich” foods
- Recognize the meal pattern requirements related to whole grain-rich foods
- Identify whole grain-rich foods using approved methods
- Practice calculating ounce equivalents (oz eq)

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Grains Defined

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What is a Whole Grain?

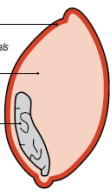
- Consists of the entire cereal grain seed or kernel
- Kernel has three parts
 - Bran
 - Germ
 - Endosperm


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

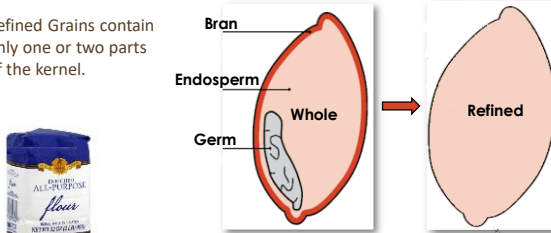





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Whole vs. Refined Grains

Refined Grains contain only one or two parts of the kernel.

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Refined Grains vs. Enriched Grains

Enriched Grains have key nutrients and vitamins added back.

Refined → **Enriched**

Why Whole Grains?

- Contain many important nutrients, including:
 - B-vitamins, vitamin E, magnesium, iron, copper, and fiber
- Consumption can decrease the risk of:
 - Heart disease
 - Stroke
 - Type 2 diabetes
 - Some cancers
- May aid in weight management

Make Half Your Grains Whole Grains

Choose **MyPlate.gov**

Grain Consumption Trends

Age Group	Sex	Average Refined Grains Intake	Average Whole Grains Intake	
1-3	Men	1.5 - 2.5	4.5	0.5
4-8	Men	2.0 - 3.0	5.5	0.5
9-13	Men	2.5 - 3.5	6.5	0.5
14-18	Men	3.0 - 4.0	7.5	0.5
19-30	Men	3.5 - 4.5	8.5	0.5
31-50	Men	4.0 - 5.0	9.5	0.5
51-70	Men	4.5 - 5.5	10.5	0.5
71+	Men	5.0 - 6.0	11.5	0.5
1-3	Women	1.0 - 1.5	3.5	0.5
4-8	Women	1.5 - 2.0	4.5	0.5
9-13	Women	2.0 - 2.5	5.5	0.5
14-18	Women	2.5 - 3.0	6.5	0.5
19-30	Women	3.0 - 3.5	7.5	0.5
31-50	Women	3.5 - 4.0	8.5	0.5
51-70	Women	4.0 - 4.5	9.5	0.5
71+	Women	4.5 - 5.0	10.5	0.5

The Recommendations and Requirements We Follow

- Nutrition Standards for Child Nutrition Programs are based on:
 - Dietary Guidelines for Americans
 - MyPlate

CACFP Meal Patterns Grain Requirements

- At least one serving of grains per day must be **whole grain-rich**.
 - Requirement for one whole grain-rich item served per day does NOT apply to the infant meal pattern.
- Grain-based desserts no longer count toward grain component.
- Breakfast cereals must contain no more than 6 grams of sugar per dry ounce.
- Ounce equivalents (oz eq) will be used to determine amount of creditable grain (starting October 1, 2021).

Grain-Based Desserts

- The following items ARE considered grain-based desserts and cannot count towards the grain component even if they are whole grain-rich.
 - Granola Bars
 - Cereal Bars
 - Breakfast Bars
 - Toaster Pastries
 - Sweet Rolls
 - Cookies
 - Cake
 - Brownies
 - Doughnuts
 - Sweet Pie Crusts



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Question – Are homemade granola bars or other homemade grain-based desserts allowed?

Answer – No, homemade and commercially prepared grain-based desserts cannot count towards the grain component in CACFP starting October 1, 2017. Granola bars are denoted with a superscript 4 in Exhibit A, so they qualify as a grain-based dessert. Based on stakeholder feedback, FNS decided using categories to define grain-based desserts was the best approach versus establishing nutrient standards or preparation requirements.



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Question – Pancakes and waffles are not grain-based desserts according to Exhibit A. If syrup, honey, jam or another sweet topping is served with the pancakes or waffles, are they then considered grain-based desserts?

Answer – No, adding a sweet topping, such as syrup, to pancakes or waffles does not make them grain-based desserts and they can continue to be counted towards the grain component.



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Question – Are sweet crackers, such as graham and animal crackers considered a grain-based dessert?

Answer – No, sweet crackers are excluded from being designated as a grain-based dessert in the CACFP. They are now designated with a superscript of 5 on the revised Exhibit A. Grain-based desserts are designated with a superscript of 3 or 4.



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Is This a Grain-Based Dessert?



- <https://kahoot.it/>
- Enter Game Pin
- Click Enter
- Enter a nickname and click “Ok, go!”



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Question – Is an animal cracker considered a grain-based dessert? Is an animal cookie considered a grain-based dessert?

Answer – If a product is labeled as a cookie it automatically falls into the grain-based dessert category as the term “cookie” is denoted in Appendix A as a grain-based dessert. Animal crackers according to exhibit A are not considered a grain-based dessert and are a creditable grain.

As a best practice centers and daycare homes should try and limit the amount of sweet crackers that are served as they are high in added sugars.




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Grain Foods Key Terms for CACFP

- **Creditable Grains**
 - Whole grain
 - Enriched meal and/or flour
- **Whole Grain** – contains 100% whole grains
- **Whole Grain-Rich**
 - Term designated by USDA Food and Nutrition Services (FNS)
 - Not a term found on products in grocery stores or from food distributors



Creditable Bread/Grain
Products containing whole grains and/or enriched meal and flours

Whole Grain-rich
Product containing at least 50% whole grain with remaining ingredients being enriched.




Grains in the CACFP Meal Pattern

- All grain products served must be **creditable**.
 - Creditable = made with enriched and/or whole grain.
- Each day, at least **one** meal or snack must include a **whole grain-rich** food.
 - If a child care center only serves breakfast, the grain must be whole grain-rich.
 - If they serve breakfast, lunch, and snack, choose which meal to serve the whole grain-rich food.


Question – Must centers and day care homes first determine if a grain is creditable before determining if a grain is whole grain-rich?

Answer – Yes, centers and day care homes must first determine if a grain is creditable before using one of the six options to determine if a grain is whole grain-rich. In order to be creditable, an enriched grain or whole grain must be the first ingredient or second after water.



Let's Talk About It...


1. Identify creditable grains.
2. Determine whether the grain item is whole grain-rich.
3. Calculate ounce equivalent for grain item.




Creditable vs. Non-creditable Grains

Foods that contribute to the grains component must be made from creditable grain ingredients:


- Whole grains
- Enriched grains
- Bran and Germ (not creditable in School Nutrition Programs)



Creditable vs. Non-creditable Grain Ingredients

The following ingredients are non-creditable UNLESS the ingredient label either states “enriched” or “whole” in front of the ingredient or the required enrichment ingredients are listed on the label:

• Bromated flour	• Malted barley flour	• Semolina
• Wheat flour	• Barley malt	• Farina
• White flour	• Corn	• Rice flour
• Durum flour	• Yellow corn meal	• Potato flour
• Oat fiber	• Yellow corn flour	• Any bean flour
• Corn fiber	• Degerminated corn meal	• Any nut flour



Identifying Enriched Grain Ingredients

To identify an enriched grain ingredient, look for the word **enriched**.

Examples:

- Enriched wheat flour
- Enriched corn meal
- Enriched self rising flour

OR look for the enrichment ingredients listed on the ingredient label.



Enrichment of Grains

• When a refined grain is enriched, the following nutrients are added back after processing:

- Thiamin
- Riboflavin
- Niacin
- Folic acid
- Iron



Enrichment Ingredients – Other Names to Look For

<p>Iron:</p> <ul style="list-style-type: none"> • Reduced iron • Ferric sulfate • Ferrous sulfate • Ferric orthophosphate • Ferrous orthophosphate • Ferrous fumarate 	<p>Thiamin:</p> <ul style="list-style-type: none"> • Vitamin B1 • Thiamine mononitrate • Thiamine hydrochloride 	<p>Riboflavin:</p> <ul style="list-style-type: none"> • Vitamin B2 	<p>Niacin:</p> <ul style="list-style-type: none"> • Vitamin B3 • Niacinamide 	<p>Folic Acid:</p> <ul style="list-style-type: none"> • Folate • Folicin • Vitamin B9
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Is this a creditable ingredient?

Ingredients

Wheat Farina, **Oil**, Defatted Wheat Germ, Guar Gum, Natural Flavor, Ferric Orthophosphate, Vitamin A Palmitate, Niacin, Riboflavin, Pyridoxine Hydrochloride, Thiamine Mononitrate, Folic Acid, BHT (to preserve freshness).

- Yes!
- “Wheat Farina” on its own is not creditable, BUT the presence of Iron (ferric orthophosphate), Niacin, Riboflavin, Thiamin (thiamine mononitrate), and Folic Acid tells us that this farina is enriched...and therefore creditable



Is this a creditable ingredient?

Ingredients:

WHOLE WHEAT FLOUR, WATER, WHEAT GLUTEN, FARINA, YEAST, SALT, CALCIUM PROPIONATE AND SORBIC ACID (TO PRESERVE FRESHNESS), SUGAR, GRAIN VINEGAR, SODIUM STEAROYL LACTYLATE, NATURAL BUTTER FLAVOR, MONO- AND DIGLYCERIDES, ETHOXYLATED MONO- AND DIGLYCERIDES, SUCRALOSE, SOY LECTININ, SOY WHEY.

- No!
- The ingredient is simply “farina” with no mention of being enriched, nor are there enrichment ingredients present on the label.



Other examples:

- Durum Flour, Semolina, and Wheat Flour are all non-creditable when they have not been enriched.
- In these examples, enrichment ingredients are present on the product ingredient label, so these products would be creditable.

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

INGREDIENTS: WHEAT FLOUR, DESMINATED YELLOW CORN MEAL, SUGAR, ANIMAL SHORTENING (LARD, HYDROGENATED LARD, TOSPOPERILS - PRESERVATIVE - BHT PRESERVATIVE, CITRIC ACID PRESERVATIVE), CONTAINS LESS THAN 2% OF EACH OF THE FOLLOWING: BAKING SODA, SODIUM ACID PYROPHOSPHATE, MONOCALCIUM PHOSPHATE, SALT, WHEAT STARCH, NIACIN, REDUCED IRON, TRICALCIUM PHOSPHATE, THIAMINE MONONITRATE, RIBOFLAVIN, FOLIC ACID, SILICON DIOXIDE.



Identifying Whole Grain Ingredients

To identify a whole grain ingredient, look for the words:

- Whole
- Groats
- Berries

Examples:

- Whole Wheat Flour
- Whole Durum Wheat Flour
- Oat Groats
- Wheat Berries



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Other Known Whole Grains

- Amaranth
- Brown rice
- Brown rice flour
- Buckwheat
- Cracked wheat (bulgur)
- Crushed wheat
- Dehulled barley
- Graham flour
- Millet flakes
- Nixtamalized corn (hominy, corn masa, and masa harina)
- Oatmeal
- Popcorn
- Quinoa
- Rolled oats
- Sorghum
- Teff
- Triticale
- Wild rice



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Question – Is corn, corn flour, or cornmeal that is treated with lime a creditable ingredient in the CNPs?

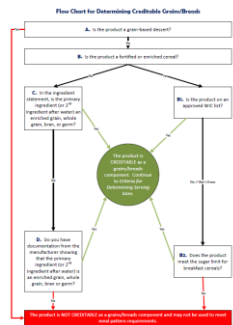
Answer – Yes. Through a process called “nixtamalization”, dried corn is soaked and cooked in alkaline (slaked lime) solution. This process increases the bioavailability of certain nutrients. Nixtamalized corn is used to make hominy, corn masa, masa harina, and certain types of cornmeal. Nixtamalized corn, such as hominy, corn masa, and masa harina are considered whole grain when evaluating products for CNP meal requirements.

Ingredients labeled as hominy, corn masa, or masa harina are considered whole grains. In addition, if the ingredient label lists corn, corn flour, or cornmeal that is “nixtamalized” or “treated with lime”, these ingredients are also considered whole grain. Corn that is not “whole” or “enriched”, or is not treated with lime (nixtamalized) does not credit as a grain ingredient in the CNPs.



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Flow Chart for Determining Creditable Grains/Breads



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Question – How do centers and day care homes know if a ready-to-eat breakfast cereal is “fortified”?

Answer – Cereal products that have been fortified are labeled as such and have an ingredient statement similar to the following (for EXAMPLE purposes only): “Ingredients: Whole wheat, sugar, oats, contains 2% or less of salt, baking soda, caramel color, annatto color, BHT for freshness. Vitamins and Minerals: Vitamin C (sodium ascorbate, ascorbic acid), niacinamide, vitamin B6 (pyridoxine hydrochloride), reduced iron, zinc oxide, folic acid, vitamin B2 (riboflavin), vitamin B1 (thiamin hydrochloride), vitamin A palmitate, vitamin D, vitamin B12.”



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Is This Product Creditable?

“Healthy Banana Nut Muffins”



Ingredients

Enriched Wheat Flour (Wheat Flour, Ascorbic Acid Added As Dough Conditioner, Niacin, Reduced Iron, Thiamine Mononitrate, Riboflavin, Enzymes, Folic Acid), Banana, Sugar, Soybean And/Or Canola Oil, Eggs, Walnuts, Cultured Buttermilk (Cultured Part-Skim Milk, Salt, Sodium Citrate), Water, Baking Powder (Sodium Acid Pyrophosphate,




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Is This Product Creditable?


“Wheat Blueberry Muffins”

Ingredients

Sugar, Enriched Wheat Flour (Wheat Flour, Ascorbic Acid Added As Dough Conditioner, Niacin, Reduced Iron, Thiamine Mononitrate, Riboflavin, Enzymes, Folic Acid), Blueberries, Eggs, Soybean And/Or Canola Oil, Water, Cultured Buttermilk (Cultured Part-Skim Milk, Salt, Sodium Citrate), Baking Powder (Sodium Acid Pyrophosphate, Sodium Bicarbonate, Cornstarch, Monocalcium Phosphate), Dextrose, Whey



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Is This Product Creditable?

“Corn Muffins”

INGREDIENTS: WHEAT FLOUR, DEGERMINATED YELLOW CORN MEAL, SUGAR, ANIMAL SHORTENING (LARD, HYDROGENATED LARD, TOCOPHEROLS), PRESERVATIVE, BHT, PRESERVATIVE, CITRIC ACID, PRESERVATIVE, CONTAINS LESS THAN 2% OF EACH OF THE FOLLOWING: BAKING SODA, SODIUM ACID PYROPHOSPHATE, MONOCALCIUM PHOSPHATE, SALT, WHEAT STARCH, NIACIN, REDUCED IRON, TRICALCIUM PHOSPHATE, THIAMINE MONONITRATE, RIBOFLAVIN, FOLIC ACID, SILICON DIOXIDE.




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Is This Product Creditable?

“Wheat Molasses Bread”

Ingredients: WHOLE WHEAT FLOUR, WATER, SUGAR, WHEAT GLUTEN, YEAST, RAISIN JUICE CONCENTRATE, WHEAT BRAN, MOLASSES, SOYBEAN OIL, SALT, MONOGLYCERIDES, CALCIUM PROPIONATE (PRESERVATIVE), CALCIUM SULFATE, DATEM, GRAIN VINEGAR, CITRIC ACID, SOY LECITHIN, WHEY, NONFAT MILK



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Is This Grain Creditable? – Relay Race




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Let’s Talk About It...

1. Identify creditable grain/bread.
2. Determine whether the grain item is whole grain-rich.
3. Calculate ounce equivalent for grain item.



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Whole Grain-rich Determination

Foods meet at least one of the following requirements:

1. Labeled as “whole wheat” and has a Standard of Identity issued by FDA.
2. Found on any State Agency’s WIC approved whole grain food list.
3. Passes the “Rule of Three” with first ingredient a whole grain.
4. Lists a FDA approved whole grain health claim.
5. Meets the whole grain-rich criteria for the National School Lunch Program.
6. Standardized recipe, CN label or Product Formulation Statement.


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1. Labeled as “whole wheat” and has a Standard of Identity


Only breads with these exact names

- Whole wheat bread
- Entire wheat bread
- Graham bread
- Whole wheat rolls
- Entire wheat rolls
- Graham rolls
- Whole wheat buns
- Entire wheat buns
- Grahams buns



Standard of Identity

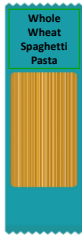
FDA rules for what a certain product must contain or may contain to legally be labeled with that product name.



1. Labeled as “whole wheat” and has a Standard of Identity


Only pastas with these exact names

- Whole wheat macaroni product
- Whole wheat macaroni
- Whole wheat spaghetti
- Whole wheat vermicelli



Standard of Identity

FDA rules for what a certain product must contain or may contain to legally be labeled with that product name.



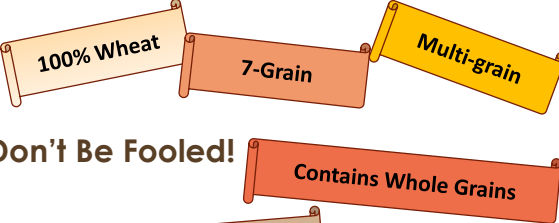


1. Labeled as “whole wheat” and has a Standard of Identity

Products with **No** Standard of Identity

- Crackers
- Tortillas
- Bagels
- Biscuits





Don't Be Fooled!


Don't be Fooled!

<p>By Color</p> <ul style="list-style-type: none"> • Pumppernickel <p>By Preparation Methods</p> <ul style="list-style-type: none"> • Stone ground <p>By Fiber Content</p>	<p>Misleading Names</p> <ul style="list-style-type: none"> • 100% wheat • Multigrain, 5-grain, 7-grain • Organic • Made with whole grain • Contains whole grain • Cracked wheat bread • Graham crackers
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Question – What is a FDA Standard of Identity?

Answer – A FDA Standard of Identity is a set of rules for what a certain product (like whole wheat bread) must contain or may contain to legally be labeled with that product name. FDA provides Standards of Identity for certain whole wheat bread products and certain whole wheat pasta products. Products that do not have a FDA Standard of Identity, such as crackers, tortillas, bagels, and biscuits, must be evaluated for whole grain-rich creditability for CACFP using one of the other five methods.



Questions?



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Whole Grain-rich Determination

Foods meet at least one of the following requirements:


1. Labeled as “whole wheat” and has a Standard of Identity issued by FDA.
2. Found on any State Agency’s WIC approved whole grain food list.
3. Passes the “Rule of Three” with first ingredient a whole grain.
4. Lists a FDA approved whole grain health claim.
5. Meets the whole grain-rich criteria for the National School Lunch Program.
6. Standardized recipe, CN label or Product Formulation Statement.

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2. Found on any State Agency’s WIC approved whole grain food list.

- Any grain product found on any State agency’s WIC-approved whole grain food list meets CACFP whole grain-rich criteria.
- Kansas WIC website: http://www.kansaswic.org/WIC-approved_foods/
- WICshopper App



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Questions?



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Whole Grain-rich Determination

Foods meet at least one of the following requirements:

1. Labeled as “whole wheat” and has a Standard of Identity issued by FDA.
2. Found on any State Agency’s WIC approved whole grain food list.
3. Passes the “Rule of Three” with first ingredient a whole grain.
4. Lists a FDA approved whole grain health claim.
5. Meets the whole grain-rich criteria for the National School Lunch Program.
6. Standardized recipe, CN label or Product Formulation Statement.

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3. Passes the Rule of Three

- **First** grain ingredient (or second after water) is a whole grain.
- The **next two grain ingredients** (if any) must be whole grains, enriched grains, bran or germ.


Disregarded Ingredients

Any grain derivatives or ingredients that are less than 2% of product weight.

Grain Derivative

By-products of grains

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“Rule of Three” Key Terms

- Whole Grain
- Brans and Germs
- Enriched Grains
- Disregarded Ingredients
- Non-creditable Grains or Flours

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Question – How do program operators apply the Rule of Three to breakfast cereals?

Answer – If the first grain ingredient is a whole grain and the cereal is fortified, the product meets the whole grain-rich criteria. In this situation, the second and third grain ingredients, if any, do not need to be considered.

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Question – If an ingredient statement has a flour blend listed as “whole grains (bulgur wheat, wheat, rye, oats, barley, triticale, corn, millet)”, is the flour blend considered to be a whole grain using the Rule of Three? Is this considered one grain ingredient or 8-grain ingredients?

Answer – This flour blend is not considered to be whole grain-rich. If a flour blend includes any grains that are not whole grains, then the flour blend is not considered a whole grain. This flour blend should be treated as one ingredient when applying the Rule of Three.

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3. Passes the Rule of Three

Ingredients:
~~WHOLE WHEAT FLOUR, WATER, ENRICHED WHEAT FLOUR, OAT FIBER, YEAST SUGAR, SALT~~

#1

- Is the **First** grain ingredient (or second after water) a whole grain?
- Are the **next two grain ingredients** (if any) whole grains, enriched grains, bran or germ?

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3. Passes the Rule of Three

Ingredients:
 WHOLE WHEAT FLOUR, WATER, SUGAR, WHEAT GLUTEN, YEAST, RAISIN JUICE CONCENTRATE, WHEAT BRAN, MOLASSES, SOYBEAN OIL, SALT, MONOGLYCERIDES, CALCIUM PROPIONATE (PRESERVATIVE), CALCIUM SULFATE, DATEM, GRAIN VINEGAR, CITRIC ACID, SOY LECITHIN, WHEY, NONFAT MILK

#2

- Is the **First** grain ingredient (or second after water) a whole grain?
- Are the **next two grain ingredients** (if any) whole grains, enriched grains, bran or germ?

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3. Passes the Rule of Three

Ingredients:
 WATER, WHOLE WHEAT FLOUR, YEAST, SUGAR, ENRICHED WHITE FLOUR, WHEAT GLUTEN, WHOLE RYE FLOUR, SALT, CONTAINS LESS THAN 2% OF WHEAT FLOUR AND CORN STARCH

#3

- Is the **First** grain ingredient (or second after water) a whole grain?
- Are the **next two grain ingredients** (if any) whole grains, enriched grains, bran or germ?

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3. Passes the Rule of Three

#4

INGREDIENTS: WHOLE WHEAT FLOUR, WATER, WHEAT GLUTEN, MODIFIED STARCH, SUGAR, YEAST, WHOLE GRAINS (BULGUR WHEAT, WHEAT, OATS, BARLEY, TRITICALE, CORN, MILLET), CELLULOSE FIBER, SALT, SOYBEAN OIL, PRESERVATIVES (CALCIUM PROPIONATE, SORBIC ACID), MONO- AND DIGLYCERIDES, NATURAL FLAVOR, WHEAT BRAN, CELLULOSE GUM, CALCIUM SULFATE, MONOCALCIUM PHOSPHATE, GROUND FLAXMEAL, REB A (NATURAL STEVIA LEAF SWEETENER), CORN STARCH, SOY LECITHIN, CITRIC ACID, GRAIN VINEGAR, HONEY SOLIDS, POTASSIUM IODATE.

- Is the **First** grain ingredient (or second after water) a whole grain?
- Are the **next two grain ingredients** (if any) whole grains, enriched grains, bran or germ?



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3. Passes the Rule of Three

#5

INGREDIENTS: WHOLE WHEAT FLOUR, WATER, FARINA, WHEAT GLUTEN, YEAST, SUGAR, SALT, PRESERVATIVES (CALCIUM PROPIONATE, SORBIC ACID), GRAIN VINEGAR, NATURAL FLAVOR, SODIUM STARCH, LACTYLATE, MONO- AND DIGLYCERIDES, ETHOXYLATED MONO- AND DIGLYCERIDES, SUCROSE, SOY FLOUR, NONFAT MILK, WHEY.

- Is the **First** grain ingredient (or second after water) a whole grain?
- Are the **next two grain ingredients** (if any) whole grains, enriched grains, bran or germ?



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3. Passes the Rule of Three

#6

INGREDIENTS: WHOLE CORN, VEGETABLE OIL, SALT, CHEDDAR CHEESE, MALTODEXTRIN, WHEAT FLOUR, ROMANO CHEESE, WHEY PROTEIN CONCENTRATE.

- Is the **First** grain ingredient (or second after water) a whole grain?
- Are the **next two grain ingredients** (if any) whole grains, enriched grains, bran or germ?



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Questions?



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Whole Grain-rich Determination

Foods meet at least one of the following requirements:

1. Labeled as "whole wheat" and has a Standard of Identity issued by FDA.
2. Found on any State Agency's WIC approved whole grain food list.
3. Passes the "Rule of Three" with first ingredient a whole grain.
4. Lists a **FDA approved whole grain health claim**.
5. Meets the whole grain-rich criteria for the National School Lunch Program.
6. Standardized recipe, CN label or Product Formulation Statement.



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4. Lists a FDA approved whole grain health claim

"Diets rich in whole grain foods and other plant foods, and low in total fat, saturated fat, and cholesterol, may reduce the risk of heart disease and some cancers."

OR



"Diets rich in whole grain foods and other plant foods, and low in saturated fat and cholesterol, may help reduce the risk of heart disease."



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4. Lists a FDA approved whole grain health claim

What if packaging contains the Whole Grain Stamp?

Not an Acceptable Method



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Questions?



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Whole Grain-rich Determination

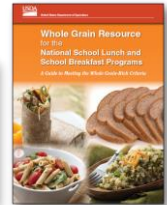
Foods meet at least one of the following requirements:

1. Labeled as “whole wheat” and has a Standard of Identity issued by FDA.
2. Found on any State Agency’s WIC approved whole grain food list.
3. Passes the “Rule of Three” with first ingredient a whole grain.
4. Lists a FDA approved whole grain health claim.
5. **Meets the whole grain-rich criteria for the National School Lunch Program.**
6. Standardized recipe, CN label or Product Formulation Statement.



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5. Meets the whole grain-rich criteria for the National School Lunch Program



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Questions?



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Whole Grain-rich Determination

Foods meet at least one of the following requirements:

1. Labeled as “whole wheat” and has a Standard of Identity issued by FDA.
2. Found on any State Agency’s WIC approved whole grain food list.
3. Passes the “Rule of Three” with first ingredient a whole grain.
4. Lists a FDA approved whole grain health claim.
5. **Meets the whole grain-rich criteria for the National School Lunch Program.**
6. **Standardized recipe, CN label or Product Formulation Statement.**



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6. Standardized Recipe, CN Label or Product Formulation Statement

- Standardized recipe
- CN label
- Documentation from a manufacturer
 - Product Formulation Statement



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6. Standardized Recipe, CN Label or Product Formulation Statement

- **Non-mixed Dishes:** the recipe is used to determine whether the total weight of whole grain ingredient(s) exceeds the weight of any of the non-whole grain ingredients.
- OR
- **Mixed Dishes:** a whole grain ingredient is the most abundant grain ingredient of all grain ingredients in the recipe.



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6. Standardized Recipe, CN Label or Product Formulation Statement

Breadstick Recipe

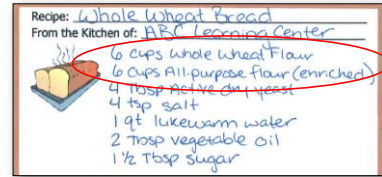
Recipe: 091263 WHOLE GRAIN Bread Stick-ELEM	
Recipe Source:	
Recipe Group: GRAINS & BREADS	
Alternate Recipe Name:	
Number of Portions: 300	
Size of Portion: 10Z	
050401 FLOUR, WHOLE WHEAT	5 LB + 4 OZ
050395 FLOUR, ALL-PURPOSE, ENRICHED, WHITE, UNBLEACH.	4 LB + 12 OZ
094451 WATER, HOT	3 CUP
094003 MARGARINE-COMMODITY PROCESSED VALUED	2 CUP + 1/4 CUP
000054 MILK, NONFAT DRY POWDER (INSTANT)	2 CUP
000092 YEAST, Active Dry	1 CUP
075300 SUGAR, GRANULATED	2 CUP + 3/4 CUP
085630 SALT	1/4 CUP
075015 GARLIC POWDER	2 TBSP
901095 ITALIAN SEASONING	1 TBSP
900963 MARGARINE, COMMODITY PROCESSED VALUED	3 TBSP
115860 CHEESE, PARMESAN, GRATED	3 TBSP



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6. Standardized Recipe, CN Label or Product Formulation Statement

Bread Recipe

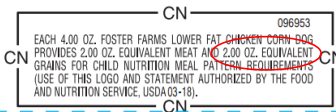


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6. Standardized Recipe, CN Label or Product Formulation Statement

Child Nutrition (CN) Labels

- Manufacturers may apply for a Child Nutrition (CN) Label for qualifying products.
- The term "oz eq grains" on the CN Label indicates the product meets both the oz eq method and whole grain criteria.



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6. Standardized Recipe, CN Label or Product Formulation Statement

Product Formulation Statement

- Documentation from manufacturer to show that whole grains are the primary ingredient by weight.

Ingredients	
WATER, ENRICHED WHEAT FLOUR, WHOLE WHEAT FLOUR, WHOLE OATS, SUGAR, WHEAT GLUTEN, YEAST, WHEAT BRAN, CORNMEAL, SALT	

Ingredient	Weight per Serving
Enriched Wheat Flour	0.5 oz
Whole Wheat Flour	0.3 oz
Whole Oats	0.25 oz



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Questions?



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Question – Do grain products have to be 100 percent whole grain to meet the whole grain-rich requirement?

Answer – No. Grain products do not need to be 100 percent whole grain to meet the whole grain-rich criteria. However, grain products that contain 100 percent whole grains do meet the whole grain-rich criteria. Whole grain-rich foods contain at least 50 percent whole grains and the remaining grains, if any, must be creditable (enriched grain, bran, and germ).



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Question – Can centers and day care homes use the Whole Grain Stamps from the Whole Grain Council to determine if a grain product meets the whole grain-rich criteria?

Answer – No. While the Whole Grain Stamps provide useful information on the amount of whole grains a product contains, they are not sufficient documentation to determine if a food is whole grain-rich. This is because products that display a Whole Grain Stamp may also contain high amounts of non-creditable grains, such as non-enriched, refined flour. Centers and day care homes may instead use any of the six options outline by USDA to determine whether the product meets the whole grain-rich criteria.



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Hunt for Whole Grain-Rich Foods



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Lunch Break



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Let's Talk About It...

1. Identify creditable grain/bread.
2. Determine whether the grain item is whole grain-rich.
3. Calculate ounce equivalent for grain item.



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Ounce Equivalents (oz eq)

- Starting October 1, 2021, ounce equivalents (oz eq) will be used to determine serving sizes
- National School Lunch Program and School Breakfast Program already using oz eq
 - Increases consistency among Child Nutrition Programs
- 0.25 oz eq is the smallest amount allowable to be credited toward grain requirements.



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Ounce Equivalents (oz eq)

- One ounce equivalent is the amount of food product that is considered equal to one ounce from the grains component.
- 1 oz eq = 16 grams of creditable grains



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Calculating Ounce Equivalents

- Grain ounce equivalents can be calculated two different ways:
 - Determining contribution based on Exhibit A: Grain Requirements for Child Nutrition Programs
 - Determining contribution based on creditable grain content



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EXHIBIT A: Grain Requirements For Child Nutrition Programs

- Group A
- Group B
- Group C
- Group D
- Group E
- Group F
- Group G
- Group H
- Group I

EXHIBIT A: GRAIN REQUIREMENTS FOR CHILD NUTRITION PROGRAMS ^{1,2}		
Group A	Group A	Minimum Serving Size for Group A
• Bread-type coating	1 oz eq = 25 gm or 0.9 oz	1/4 serving = 12 gm or 0.4 oz
• Bread sticks (flat)	3/4 oz eq = 19 gm or 0.7 oz	1/4 serving = 12 gm or 0.4 oz
• Crackers (flat)	2/3 oz eq = 15 gm or 0.5 oz	1/4 serving = 12 gm or 0.4 oz
• Starchy Crackers (sabbies and snack crackers)	1/4 oz eq = 6 gm or 0.2 oz	1/4 serving = 7 gm or 0.2 oz
• Cereals		
• Pretzels (hard)		
• Stuffing (dry) Note: weights apply to bread or stuffing		
Group B	Group B	Minimum Serving Size for Group B
• Biscuits	1 oz eq = 25 gm or 0.9 oz	1/4 serving = 12 gm or 0.4 oz
• Dinner-type coating	3/4 oz eq = 19 gm or 0.7 oz	1/4 serving = 12 gm or 0.4 oz
• Breads	2/3 oz eq = 15 gm or 0.5 oz	1/4 serving = 12 gm or 0.4 oz
• Breads - All (for example dried, French, Italian)	1/4 oz eq = 6 gm or 0.2 oz	1/4 serving = 7 gm or 0.2 oz
• Buns (dinner-type and hot dog)		
• Starchy Crackers ³ (granola crackers - all shapes, round crackers)		
• Egg roll skins		
• English muffins		
• Pita bread		
• Pizza crust		
• Pretzels (soft)		
• Rolls		
• Tortillas		
• Tortilla chips		
• Taco shells		

CACFP 02/2017 Page 1

Calculating Oz Eq Grains Using Exhibit A

- Determine which group the product belongs in.
- Identify the amount of product required to provide 1 oz eq grains.
 - On the Nutrition Facts Label or by weighing one serving
- Divide the product serving size by the weight required for 1 oz eq grains.
 - Ensure measurement units are the same (i.e. if the serving size is in grams, use the gram weight from Exhibit A; if the serving size is in ounces, use the ounce weight from Exhibit A)
- Round down to the nearest 0.25 oz eq.



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Determining Grains Contribution Using Exhibit A

- #### Snack Crackers
- Determine Group
 - Group A
 - Amount required for 1 oz eq
 - 22 gm or 0.8 oz
 - Serving Size (from nutrition facts label)
 - 31 grams
 - Divide the serving size by the amount required to credit as 1 oz eq
 - 31 grams / 22 grams = 1.4 oz eq
 - Round down to the nearest 0.25 oz eq
 - One serving equals 1.25 oz eq



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Using Exhibit A to Determine Minimum Serving Size Needed

- Package serving size often too large for young children
 - i.e. In the previous example, one serving as listed on the package is 15 crackers which equals 1.25 oz eq Grains
- Minimum requirement for 3-5 year olds is 0.5 oz eq Grains
- Use information in Exhibit A to determine appropriate serving size to meet the desired Grains contribution

Group A	Grain A	Choice Equivalent (Oz Eq) for Group A
• Bread-type coating	1 oz eq = 22 gm or 0.8 oz	
• Bread sticks (hard)	1.8 oz eq = 2.2 gm or 0.8 oz	
• Chewy Mince pastilles	1.1 oz eq = 1.1 gm or 0.4 oz	
• Cracker Crackers (softbuns and stack crackers)	1.4 oz eq = 0.9 gm or 0.3 oz	
• Cereals		
• Pretzels (hard)		
• Stuffing (dry) Note: weights apply to bread in stuffing		

For a 3-5 year old, 11 grams or 0.4 oz of snack crackers would be a more appropriate serving size to meet meal pattern requirements of 0.5 oz eq Grains



Using Exhibit A to Determine Minimum Serving Size Needed

- Translating minimum serving size needed from weight to number of pieces/crackers:
- Determine meal pattern requirement for the age group
 - Locate grain item in Exhibit A
 - Determine amount of product needed to meet meal pattern requirement
 - Find serving size in grams and number of pieces on the nutrition facts label
 - Divide serving size (in grams) by the number of pieces in that serving size
 - Divide serving size to meet meal pattern requirement by grams per piece
 - Round up to a whole number.



Using Exhibit A to Determine Minimum Serving Size Needed

Example: Snack Crackers

- Determine meal pattern requirement for the age group

Snack	Ages 1-2	Ages 3-5	Ages 6-12
Grains	½ oz eq	¾ oz eq	1 oz eq

- Locate grain item in Exhibit A
- Determine amount of product needed to meet meal pattern requirement

Group A	Choice Equivalent (Oz Eq) for Group A
• Bread-type coating	1 oz eq = 22 gm or 0.8 oz
• Bread sticks (hard)	1.8 oz eq = 2.2 gm or 0.8 oz
• Chewy Mince pastilles	1.1 oz eq = 1.1 gm or 0.4 oz
• Cracker Crackers (softbuns and stack crackers)	1.4 oz eq = 0.9 gm or 0.3 oz
• Cereals	
• Pretzels (hard)	
• Stuffing (dry) Note: weights apply to bread in stuffing	



Using Exhibit A to Determine Minimum Serving Size Needed

Example: Snack Crackers

- Find serving size in grams and number of pieces on the nutrition facts label
- Divide serving size (in grams) by the number of pieces in that serving size
- Divide serving size to meet meal pattern requirement by grams per piece
- Round up to a whole number



$30 \text{ grams} / 27 \text{ crackers} = 1.11 \text{ grams per cracker}$

$11 \text{ grams} / 1.11 \text{ grams per cracker} = 9.9 \text{ crackers}$

Serve 10 crackers



Determining Grains Contribution Using Exhibit A

English Muffin

- Determine Group
 - Group B
- Amount required for 1 oz eq
 - 28 gm or 1.0 oz
- Serving Size (from nutrition facts label)
 - 57 grams
- Divide the serving size by the amount required to credit as 1 oz eq
 - $57 \text{ grams} / 28 \text{ grams} = 2.03 \text{ oz eq}$
- Round down to the nearest 0.25 oz eq
 - One muffin equals 2.0 oz eq
 - Half muffin equals 1.0 oz eq

Group B	Oz Eq for Group B
• Bagels	1 oz eq = 28 gm or 1.0 oz
• Bread-type coating	1 oz eq = 22 gm or 0.8 oz
• Biscuits	1.7 oz eq = 14 gm or 0.5 oz
• Breads, all (for example, sliced, French, Italian)	1.4 oz eq = 1.1 gm or 0.3 oz
• Buns (hamburger and hot dog)	
• Chewy Crackers (softbuns and stack crackers)	
• Cereals	
• English muffins	
• Flatbread	
• Pizza crust	
• Pretzels (soft)	
• Rolls	
• Tortillas	
• Tortilla chips	
• Taco shells	

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Determining Grains Contribution Using Exhibit A

Frozen Waffles

- Determine Group
 - Group C
- Amount required for 1 oz eq
 - 34 gm or 1.2 oz
- Serving Size (from nutrition facts label)
 - 70 grams (for 2 waffles) OR
 - 35 grams (for 1 waffle)
- Divide the serving size by the amount required to credit as 1 oz eq
 - $70 \text{ grams} / 34 \text{ grams} = 2.05 \text{ oz eq}$ (two waffles) OR
 - $35 \text{ grams} / 34 \text{ grams} = 1.02 \text{ oz eq}$ (one waffle)
- Round down to the nearest 0.25 oz eq
 - Two waffles = 2 oz eq OR
 - One waffle = 1 oz eq

Group C	Oz Eq for Group C
• Cookies (plain - includes vanilla waffles)	1 oz eq = 34 gm or 1.2 oz
• Cornbread	1.7 oz eq = 14 gm or 0.5 oz
• Corn muffins	1.7 oz eq = 17 gm or 0.6 oz
• Cinnamon	1.4 oz eq = 1.1 gm or 0.3 oz
• Pancakes	
• Pie crust (bottom pie), "cobbler", "hot dumplings", and "apple pie" (any pie)	
• Waffles	




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Determining Grains Contribution Using Exhibit A

Blueberry Muffin (homemade)

- Determine Group
 - Group D
- Amount required for 1 oz eq
 - 55 gm or 2.0 oz
- Serving Size (from weighing one serving)
 - 1 oz
- Divide the serving size by the amount required to credit as 1 oz eq
 - 1 oz/2 oz = 0.5 oz eq




Group D	Oz Eq for Group D
Doughnuts (cake and yeast raised, unfilled)	1 oz eq = 55 gm or 2.0 oz
Donuts (with or without filling, unfilled)	1 oz eq = 55 gm or 2.0 oz
Muffins (all, except corn)	1 oz eq = 55 gm or 2.0 oz
Other yeast-raised breads	1.2 oz eq = 28 gm or 1.0 oz
Toaster pastries (unfilled)	1.4 oz eq = 14 gm or 0.5 oz

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Determining Grains Contribution Using Exhibit A

- Remember that products in Exhibit A are grouped based on their grain content.
- Items in group A have a high percent of grains compared to other ingredients.
- For the muffins in group D, there are a lot of other ingredients (sugar, oil, and blueberries), causing the product to weigh more, but contribute less to the grains component.

1 oz muffin = 0.5 oz eq??

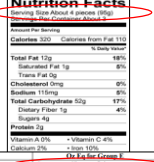


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Determining Grains Contribution Using Exhibit A

French Toast Sticks

- Determine Group
 - Group E
- Amount required for 1 oz eq
 - 69 gm or 2.4 oz
- Serving Size (from nutrition facts label)
 - 95 grams
- Divide the serving size by the amount required to credit as 1 oz eq
 - 95 grams/69 grams = 1.37 oz eq
- Round down to the nearest 0.25 oz eq
 - One serving (4 pieces) equals 1.25 oz eq



Group E	Oz Eq for Group E
Cereal bars, breakfast bars, granola bars (with dried fruit, nuts, or chocolate pieces)	1 oz eq = 69 gm or 2.4 oz
Cookies (with nuts, raisins, chocolate pieces and/or fruit pieces)	1.2 oz eq = 35 gm or 1.2 oz
French toast (with yeast raised, breaded or glazed)	1.4 oz eq = 18 gm or 0.6 oz
French toast (without yeast raised, breaded or glazed)	
Toaster pastries (filled)	

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Exhibit A – Groups F & G

- Products in these two groups are considered grain-based desserts and are not creditable in CACFP

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Group H – Cooked Pastas and Cereals without Added Ingredients

- 1 oz eq grains = 1 oz dry weight OR ½ cup cooked volume
- ½ oz eq grains = 0.5 oz dry weight OR ¼ cup cooked volume

- Rice
- Oatmeal or Wheat Cereal
- Pasta
- Noodles
- Cereal Grains (barley, quinoa, couscous, etc)

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Group I – Ready-to-Eat Breakfast Cereals

- Ready-to-Eat (RTE) Cereals are credited by volume:
- 1 oz eq grains = 1 oz/28 grams dry weight
- ½ oz eq grains = 0.5 oz/14 grams dry weight

OR

RTE Cereal Type	Amount Needed to Provide:	
	½ oz eq grains	1 oz eq grains
Flakes or Rounds	½ cup	1 cup
Puffed Cereal	¾ cup	1 ¼ cup
Granola	¾ cup	¾ cup

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Exhibit A Grains Tool

- **NEW** feature in the Food Buying Guide for Child Nutrition Programs Interactive Web-Based Tool
- Users can search for a grain product (as listed on Exhibit A) and enter in the serving size as listed on the product package
 - Tool determines the oz eq grains for the grain product (or grains/bread servings for those not using oz eq)
- Can also determine amount of product needed to serve to obtain a specific meal pattern contribution
 - Ex: number of crackers
- <https://foodbuyingguide.fns.usda.gov>



Exhibit A Grains Tool – Determining Grains Contribution

Product Name: Cheese Crackers Date: 07/30/2019 (mm/dd/yyyy)

Choose Method: Counce Equivalent (oz eq) Grains (SBPNSLP/CACFP) Grains/Breads Servings (CACFP/SFPNSLP Afterschool Snack Service)

Item keywords: Exhibit A cracker Search Clear Search

Enter one or more keywords to perform search

Action	Item Name	Group	Grains per 1 oz eq	Crackers per 1 oz eq	Servings per 1 Bread Serving	Crackers per 1 Bread Serving
+	Seedy Crackers (butter and snack crackers)	Group A	25 g	0.8 oz	25 g	0.7 oz
+	Great Crackers (butter and snack crackers - all shapes, animal crackers)	Group B	25 g	1 oz	25 g	0.8 oz



Exhibit A Grains Tool – Determining Grains Contribution

Nutrition Facts
Serving Size: 20 Pieces (25g) • Fat: 8g
Servings Per Container: About 28

Grains Contribution Select to Serve

Description of Food Item per Exhibit A: Seedy Crackers (butter and snack crackers)

Grains Contribution: 1.25 oz eq

Grains Contribution: 33 grams of Seedy Crackers (butter and snack crackers) provide 1.25 oz eq.



Exhibit A Grains Tool – Determining Amount to Serve

Nutrition Facts
Serving Size: 20 Pieces (25g) • Fat: 8g
Servings Per Container: About 28

Amount to Serve

Description of Food Item per Exhibit A: Seedy Crackers (butter and snack crackers)

Amount to Serve: To provide 6.5 oz eq of Seedy Crackers (butter and snack crackers), serve 21.00 pieces (525.00g)



Oz Eq Contribution Using Exhibit A



Calculating Ounce Equivalents

- Grain ounce equivalents can be calculated two different ways:
 1. Determining contribution based on Exhibit A
 2. Determining contribution based on creditable grain content



Using Creditable Grain Content to Determine Contribution

- Formula for calculating oz eq grains for dry ground grain ingredients in baked goods recipes:

$$\text{Oz Eq Grains per serving} = \frac{(\text{total grams}^* \text{ of grain ingredients in recipe}) \div (\text{servings yielded}) \div 16}$$

- Whole wheat flour, enriched flour, oats, cornmeal
- Based upon 16 grams creditable grain per 1 oz eq
- Recipes for products listed in Exhibit A Groups A-G
- *Note: 1 oz = 28.35 grams*



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Using Creditable Grain Content to Determine Contribution

Ground flours and meals in baked goods recipes

- Determine weight of grain ingredients
- Divide total grams of creditable grains (from the recipe) by the number of portions the recipe yields = total grams of creditable grains in one portion
- Divide the total grams of creditable grains in one portion by 16 grams
- Round down to the nearest 0.25 oz eq



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Converting Measurements to Weights in Recipes

- Converting measure to weight
 - Find the approximate weight per measured volume from a resource or
 - Weigh the measured amount of ingredient



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Converting Measure to Weight

$$\frac{\text{Recipe Ingredient Measure}}{\text{Measure per pound}} = \text{Converted Recipe Weight}$$



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Converting Measure to Weight

$$\frac{7 \text{ cups}}{\text{Recipe Ingredient Measure}} \div \frac{4 \text{ cups}}{\text{Measure per pound}} = \text{Converted Recipe Weight}$$

- There are 4 cups of flour in 1 pound
- $7 \div 4 = 1.75 \text{ lb}$



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Determining Grains Contribution Using Recipe

Whole Wheat Breadsticks

- Determine weight of grain ingredients
 - 3 cups x 113.4 grams = 340.2 grams creditable grains
- Divide total grams of creditable grains by the number of portions
 - $340.2 \text{ grams} / 16 = 21.26 \text{ grams/serving}$
- Divide the total grams of creditable grains in one portion by 16 grams
 - $21.26 / 16 = 1.32 \text{ oz eq}$
- Round down to the nearest 0.25 oz eq
 - 1.25 oz eq

Whole Wheat Breadsticks

Serving Size: 7 Breadsticks

Serves: 16

Ingredients:

- 1 tsp Warm water
- 1 1/2 tsp Active dry yeast
- 2 Tbsp Brown sugar
- 2 tsp Salt
- 3 cups Whole wheat flour





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Determining Grains Contribution Using Recipe

Oatmeal Blueberry Pancakes

- Determine weight of grain ingredients
 - White Whole Wheat Flour – 1.25 cups x 113.4 grams = 141.75 grams
 - Quick Oats – 0.5 cup x 78.8 grams = 39.4 grams
 - Total grams creditable grains = 181.15
- Divide total grams of creditable grains by the number of portions
 - 181.15 grams / 12 = 15.09 grams/serving
- Divide the total grams of creditable grains in one portion by 16 grams
 - 15.09 / 16 = 0.94 oz eq
- Round down to the nearest 0.25 oz eq
 - 0.75 oz eq

Ingredients	Weight	Measure
1 1/4 cups White Whole Wheat Flour	141.75 g	1 1/4 cups
1 cup Quick Oats	39.4 g	1 cup
1/2 cup Baking Powder	39.4 g	1/2 cup
1/2 cup Salt	39.4 g	1/2 cup
1 1/2 cups Plain-Style Milk	394 g	1 1/2 cups
1 Large Egg	50 g	1 large
1 Tbsp Vegetable Oil	14.2 g	1 Tbsp
1 cup Blueberries, fresh or frozen	113.4 g	1 cup



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Determining Grains Contribution Using Recipe

Angel Biscuits, Whole Wheat

- Determine weight of grain ingredients
 - 15 oz total
 - 15 oz x 28.35 = 425.25 grams
- Divide total grams of creditable grains by the number of portions
 - 425.25 grams / 25 = 17.01 grams/serving
- Divide the total grams of creditable grains in one portion by 16 grams
 - 17.01 / 16 = 1.06 oz eq
- Round down to the nearest 0.25 oz eq
 - 1.0 oz eq

Ingredients	Weight	Measure
Flour, white, whole wheat	8.00 g	1/4 cup
Flour, all-purpose, enriched	7.00 g	1/4 cup
Vanilla, pure	1.00 g	1/2 tsp
Sugar, granulated	3.00 g	3/4 tsp
Baking powder	1.00 g	1/4 tsp
Lactating Soda	1.00 g	1/4 tsp
Salt	1.00 g	1/4 tsp
Vegetable Shortening, mono fat	1.00 g	1/4 tsp
Butter, milk, low-fat	10.00 g	1/4 cup



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What About Baking Mixes?

- Weight of creditable ingredients is unknown in a baking mix
- Two options for crediting products made from mixes:
 - Use Exhibit A crediting information based on weight of finished product
 - Request a Product Formulation Statement from the manufacturer



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Using Creditable Grain Content to Determine Contribution

- Formula for Calculating Oz Eq Grains for cereal grains and/or pastas cooked in recipes:

$$\text{Oz Eq Grains per serving} = \frac{\text{total ounces of cereal grains in recipe} \times \text{servings yielded}}{\text{servings yielded}}$$

- Rice, pastas, noodles, quinoa, orzo, barley cooked into a recipe
- Based upon 28 grams dry weight per 1 oz eq
- *Note: 1 oz = 28.35 grams



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Determining Grains Contribution Using Recipe

Macaroni & Cheese

- Determine weight of grain ingredients
 - 6 oz
- Divide total ounces of cereal grains by the number of portions
 - 6 oz / 6 servings = 1 oz eq
- Round down to the nearest 0.25 oz eq
 - 1.0 oz eq

Ingredients	Weight	Measure
Water	180 g	1 1/2 cups
Macaroni, elbow, whole grain	6.00 g	1/2 cup
Water, purified	180 g	1 1/2 cups
Cheddar cheese, low-fat	113.4 g	1 cup
Water, purified	180 g	1 1/2 cups
Prepared, homemade cheese sauce	113.4 g	1 cup
Milk, skim	113.4 g	1 cup
Margarine, liquid	11.34 g	1/4 cup
Pepper	1.134 g	1/4 tsp
Cheese, American, shredded	113.4 g	1 cup



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Product Formulation Statement

- Documentation from manufacturer showing amount of creditable grains
- Using Exhibit A, a 2 oz muffin would credit as 1 oz eq grains
- However, this PFS shows that the amount of creditable grains in the muffin = 1.75 oz eq grains

Product Name	Customer Product Name	Code No.
Muffins	Best of Co.	12345
Manufacturer	Best of Co.	Serving Size: 1 muffin (2 oz)
<p>1. Does the product meet the Whole Grain-Rich Criteria? Yes ___ No ___</p> <p>2. Does the product contain any available grains? Yes ___ No ___</p> <p>3. Does the product contain any available grains? Yes ___ No ___</p> <p>4. Does the product contain any available grains? Yes ___ No ___</p>		
<p>5. Does the Public Measurement for School Lunch Program and School Breakfast Program Exhibit A is determined if the product fits into Group A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, AA, AB, AC, AD, AE, AF, AG, AH, AI, AJ, AK, AL, AM, AN, AO, AP, AQ, AR, AS, AT, AU, AV, AW, AX, AY, AZ, BA, BB, BC, BD, BE, BF, BG, BH, BI, BJ, BK, BL, BM, BN, BO, BP, BQ, BR, BS, BT, BU, BV, BW, BX, BY, BZ, CA, CB, CC, CD, CE, CF, CG, CH, CI, CJ, CK, CL, CM, CN, CO, CP, CQ, CR, CS, CT, CU, CV, CW, CX, CY, CZ, DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, DK, DL, DM, DN, DO, DP, DQ, DR, DS, DT, DU, DV, DW, DX, DY, DZ, EA, EB, EC, ED, EE, EF, EG, EH, EI, EJ, EK, EL, EM, EN, EO, EP, EQ, ER, ES, ET, EU, EV, EW, EX, EY, EZ, FA, FB, FC, FD, FE, FF, FG, FH, FI, FJ, FK, FL, FM, FN, FO, FP, FQ, FR, FS, FT, FU, FV, FW, FX, FY, FZ, GA, GB, GC, GD, GE, GF, GG, GH, GI, GJ, GK, GL, GM, GN, GO, GP, GQ, GR, GS, GT, GU, GV, GW, GX, GY, GZ, HA, HB, HC, HD, HE, HF, HG, HH, HI, HJ, HK, HL, HM, HN, HO, HP, HQ, HR, HS, HT, HU, HV, HW, HX, HY, HZ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, IK, IL, IM, IN, IO, IP, IQ, IR, IS, IT, IU, IV, IW, IX, IY, IZ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, JK, JL, JM, JN, JO, JP, JQ, JR, JS, JT, JU, JV, JW, JX, JY, JZ, KA, KB, KC, KD, KE, KF, KG, KH, KI, KJ, KK, KL, KM, KN, KO, KP, KQ, KR, KS, KT, KU, KV, KW, KX, KY, KZ, LA, LB, LC, LD, LE, LF, LG, LH, LI, LJ, LK, LL, LM, LN, LO, LP, LQ, LR, LS, LT, LU, LV, LW, LX, LY, LZ, MA, MB, MC, MD, ME, MF, MG, MH, MI, MJ, MK, ML, MM, MN, MO, MP, MQ, MR, MS, MT, MU, MV, MW, MX, MY, MZ, NA, NB, NC, ND, NE, NF, NG, NH, NI, NJ, NK, NL, NM, NN, NO, NP, NQ, NR, NS, NT, NU, NV, NW, NX, NY, NZ, OA, OB, OC, OD, OE, OF, OG, OH, OI, OJ, OK, OL, OM, ON, OO, OP, OQ, OR, OS, OT, OU, OV, OW, OX, OY, OZ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ, PK, PL, PM, PN, PO, PP, PQ, PR, PS, PT, PU, PV, PW, PX, PY, PZ, QA, QB, QC, QD, QE, QF, QG, QH, QI, QJ, QK, QL, QM, QN, QO, QP, QQ, QR, QS, QT, QU, QV, QW, QX, QY, QZ, RA, RB, RC, RD, RE, RF, RG, RH, RI, RJ, RK, RL, RM, RN, RO, RP, RQ, RR, RS, RT, RU, RV, RW, RX, RY, RZ, SA, SB, SC, SD, SE, SF, SG, SH, SI, SJ, SK, SL, SM, SN, SO, SP, SQ, SR, SS, ST, SU, SV, SW, SX, SY, SZ, TA, TB, TC, TD, TE, TF, TG, TH, TI, TJ, TK, TL, TM, TN, TO, TP, TQ, TR, TS, TT, TU, TV, TW, TX, TY, TZ, UA, UB, UC, UD, UE, UF, UG, UH, UI, UJ, UK, UL, UM, UN, UO, UP, UQ, UR, US, UT, UY, UZ, VA, VB, VC, VD, VE, VF, VG, VH, VI, VJ, VK, VL, VM, VN, VO, VP, VQ, VR, VS, VT, VU, VW, VX, VY, VZ, WA, WB, WC, WD, WE, WF, WG, WH, WI, WJ, WK, WL, WM, WN, WO, WP, WQ, WR, WS, WT, WU, WV, WW, WX, WY, WZ, XA, XB, XC, XD, XE, XF, XG, XH, XI, XJ, XK, XL, XM, XN, XO, XP, XQ, XR, XS, XT, XU, XV, XW, XX, XY, XZ, YA, YB, YC, YD, YE, YF, YG, YH, YI, YJ, YK, YL, YM, YN, YO, YP, YQ, YR, YS, YT, YU, YV, YW, YX, YZ, ZA, ZB, ZC, ZD, ZE, ZF, ZG, ZH, ZI, ZJ, ZK, ZL, ZM, ZN, ZO, ZP, ZQ, ZR, ZS, ZT, ZU, ZV, ZW, ZX, ZY, ZZ</p>		

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Checking Grain PFS for Accuracy

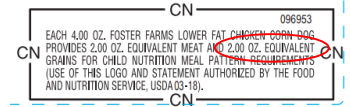
- PFS must include:
 - Letter head or company logo
 - Signature of person in authority to certify the product content
 - Product name
 - Product code number
 - Serving size including serving weight
 - Whole grain rich criteria met
 - Indication of which Group (A-I) in Exhibit A the product fits



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Child Nutrition (CN) Labels

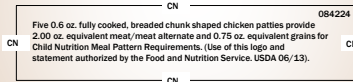
- CN labeled products that contribute to the grains component will show the grain contribution in the CN label
- Reminder - The term “oz eq grains” on the CN Label indicates the product meets both the oz eq method and whole grain-rich criteria.



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Chicken Nuggets – Adjusting Portion Size

- 5 nuggets = 2 oz eq M/MA and 0.75 oz eq Grains
- 4 nuggets = ?



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Chicken Nuggets – Answer Key

- To determine the components for a different amount:
 - Determine the crediting amount of M/MA and Grains for each nugget (piece)
 - M/MA: 2 oz eq/5 nuggets = 0.4 oz eq M/MA per nugget
 - Grains: 0.75 oz eq/5 nuggets = 0.15 oz eq Grains per nugget
 - Multiply crediting information per nugget by the number of nuggets per serving.
 - 0.4 x 4 = 1.6 oz eq (rounds down to 1.5 oz eq M/MA)
 - 0.15 x 4 = 0.6 oz eq (rounds down to 0.5 oz eq Grains)



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Brain Break

- [Farm Brain Break](#)



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Calculating Oz Eq Grains from a Recipe



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Whole Grain-Rich Menu Documentation

- Identify whole grain-rich items on menu
 - Color Code
 - WGR English Muffin
 - WW Bread
 - Whole Grain Tortilla
 - Denote with an *

Item	Monday, May 13th	Tuesday, May 14th	Wednesday, May 15th	Thursday, May 16th	Friday, May 17th
Breakfast	Waffle & Pancake	French Toast	Waffle	Waffle	Waffle
Lunch	WGR Sandwich	WGR Sandwich	WGR Sandwich	WGR Sandwich	WGR Sandwich
Snack	WGR Muffin	WGR Muffin	WGR Muffin	WGR Muffin	WGR Muffin
Dinner	WGR Pasta	WGR Pasta	WGR Pasta	WGR Pasta	WGR Pasta
Breakfast	Waffle & Pancake	French Toast	Waffle	Waffle	Waffle
Lunch	WGR Sandwich	WGR Sandwich	WGR Sandwich	WGR Sandwich	WGR Sandwich
Snack	WGR Muffin	WGR Muffin	WGR Muffin	WGR Muffin	WGR Muffin
Dinner	WGR Pasta	WGR Pasta	WGR Pasta	WGR Pasta	WGR Pasta

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Record Keeping Requirements

- Keep labels supportive of menu for previous and current month of menus:
 - Ingredient Statement
 - Actual Product Food Label – whole grain foods and cereals
 - Valid CN Label
 - Product Formulation Statement
 - Standardized Recipe
- Not keeping current labels on file may result in corrective and fiscal action

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Best Practice – Label Documentation

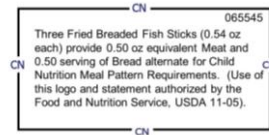
- Notebook or Pocket Folder
- Legible Pictures



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CN Label – Keep Current!



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Introducing Foods That Meet Whole Grain-Rich Criteria

- Some children may not be familiar with whole grain-rich foods
- Encourage trying new items by:
 - Conducting taste tests
 - Get children involved
 - Provide a choice
 - Bake with white whole wheat flour
 - Keep trying
 - Be a good role model
 - Stay positive

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Ideas for More Whole Grain-Rich Foods - Breakfast

- Offer whole grain toast, bagels, or English muffins instead of enriched white breads
- Make whole grain pancakes or waffles (or buy them frozen)
- Serve oatmeal and let kids add their favorite toppings
- Opt for whole grain-rich breakfast cereals

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Ideas for More Whole Grain-Rich Foods - Lunch

- Swap white bread for whole grain-rich bread
- Make tacos, wraps, or quesadillas from whole grain-rich tortillas
- Use whole grain-rich English muffins to make mini-pizzas
- Use whole wheat pasta in place of enriched white pasta

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Ideas for More Whole Grain-Rich Foods - Snacks

- Serve whole grain-rich crackers with cheese slices so children can build their own "cracker sandwiches"
- Offer muffins or other quick breads made with whole wheat flour
- Provide whole grain-rich graham or animal crackers

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Purchasing Grain Items that Meet Whole Grain-Rich Criteria

- Prior to purchasing, double check the ingredient statement and/or any accompanying manufacturer documentation.
- Specify to vendors that products must be made from 50% or more whole grains and that remaining grains must be enriched.

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Types of Whole Wheat Flour

- Red Whole Wheat
 - Traditional (brown-colored) flour
- White Whole Wheat
 - Lighter color and texture
 - Milder (sweeter) flavor
 - Nutritionally equal to red whole



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Farm to Plate

- White Whole Wheat Flour
 - Grown and milled in Kansas
- Products made using this flour have been highly accepted by children.
- Improve child health while supporting local and regional farmers!



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Resources for New Recipes

- KSDE's Healthier Kansas Menus
www.kn-eat.org, CACFP, Resources, Healthier Kansas Menus - CACFP
- Whole Grains Council
www.wholegrainscouncil.org
- Kansas Wheat Commission
www.kswheat.com
- USDA Resource Center
Mixing Bowl
- Healthy Meals Resource System
<https://healthymeals.fns.usda.gov/>

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Menu Planning Resources


- CACFP Meal Standards webpage
<http://www.fns.usda.gov/cacfp/meals-and-snacks>
- CACFP Policy Memos
<http://www.fns.usda.gov/cacfp/policy>
- CACFP Meal Pattern Training Tools
<https://www.fns.usda.gov/tn/cacfp-meal-pattern-training-tools>
- Menu Planning & Production Record Resources
www.kn-eat.org, CACFP, Guidance, Menu Planning & Production Records
- Meal Pattern FAQs
www.kn-eat.org, CACFP, Guidance, Menu Planning & Production Records




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Where to find Meal Pattern FAQs



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Question – Are products and/or recipes labeled “CACFP Approved” creditable in the CACFP?

Answer – Use of the term “CACFP Approved” or other marketing materials language should not be used for determining crediting of any product as USDA does not “approve” any products or Product Formulation Statements (PFS) for crediting in CNP. USDA does not endorse the term “CACFP Approved.” All food served in CACFP must be evaluated by the menu planner. If a menu planner needs assistance in crediting a food, contact KSDE CNW for assistance.

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CACFP Meal Pattern Training Worksheets

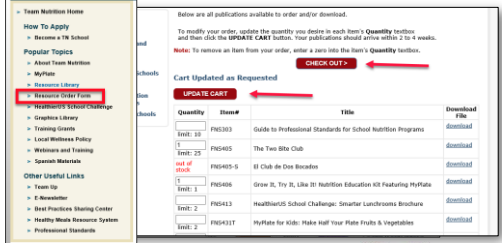


<https://www.fns.usda.gov/tn/meal-pattern-training-worksheets-cacfp>


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<https://www.fns.usda.gov/tn/resource-library>



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Questions?



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**Thank you
for helping create
healthy eating habits!**



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