

Whole Grain Rich Requirements and Resources for Child Nutrition Programs

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SY 2014-15

- Requirement that all grains offered in the National School Lunch Program and School Breakfast Program must be whole grain-rich
- Foods that meet the whole grain-rich criteria for the school meals programs contain
 - At least 50% wholegrain meal and/or flour
 - The remaining 50% or less of grains, if any, must be enriched
- Foods that are 100% whole grain meet the whole grain-rich criteria (However, food are not required to be 100% whole grain.)
- **Foods containing between 50% and 100% whole grains are allowable**



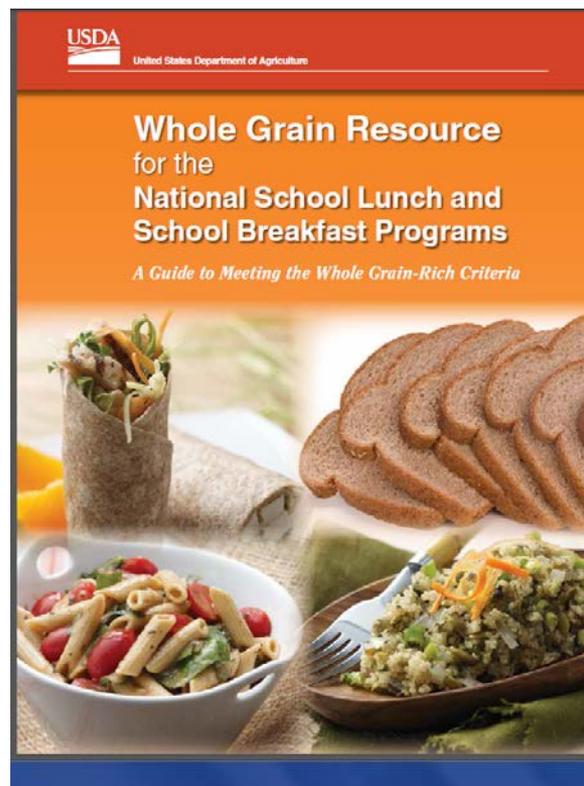
Whole Grain vs Whole Grain-Rich

- A whole grain includes all three parts of the seed grain: germ, endosperm, and bran. Whole grains have health benefits like decreasing the risk for heart disease and certain types of cancers, and they are helpful in regulating blood sugar.
- Whole Grain-Rich refers to FNS criteria for school meal requirements for grain
- Simply looking for the word “whole grain” on a packaged food item is not enough evidence that it meets the whole grain-rich requirements. **You must investigate further!**



USDA's Whole Grain Resource

- Outlines the whole grain-rich criteria for school meals
- Contains information to help program operators identify foods that meet the whole grain-rich criteria and offer them in their menus
- Reflects the 2010 Dietary Guidelines for Americans



Criteria for Whole Grain-Rich Foods

- All grain products served must meet serving size requirements for Grains
- Each product must contain at least 50% whole grains
- Any remaining grains must be enriched

AND

Must meet one of the following criteria:

- A whole grain is listed first on the ingredient list
- The product contains at least 8 grams of whole grain per oz eq
- The product packaging has one of the FDA-approved claims



Note

- *If the first ingredient in a product is water, a whole grain may be listed as the second ingredient and still meet the whole grain-rich criteria*



Identifying Whole Grain-Rich Products

- Look for the Amount of Whole Grain
 - 16g of whole grain per serving
 - 8g of whole grain per serving



Identifying Whole Grain-Rich Products

- Look for Whole Grain Ingredients
 - Whole Grain Spaghetti

Whole Grain Spaghetti Ingredients:

Whole grain wheat, whole grain brown rice, whole grain oats, wheat gluten, crystallized cane juice, natural flavor (soybean oil, natural flavorings), wheat bran



Identifying Whole Grain-Rich Products

- Pancake mix ingredient label may read

Pancake Mix Ingredients:

Whole wheat flour, enriched bleached flour (bleached wheat flour, niacin, reduced iron, thiamin mononitrate, riboflavin, folic acid), leavening (sodium bicarbonate, sodium aluminum phosphate, monocalcium phosphate), brown sugar, sugar, dried molasses, salt, wheat germ, hydroxylate soy lecithin, soy flour.



Identifying Whole Grain-Rich Products

- Look for the FDA approved Whole Grain Health Claim

“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.”

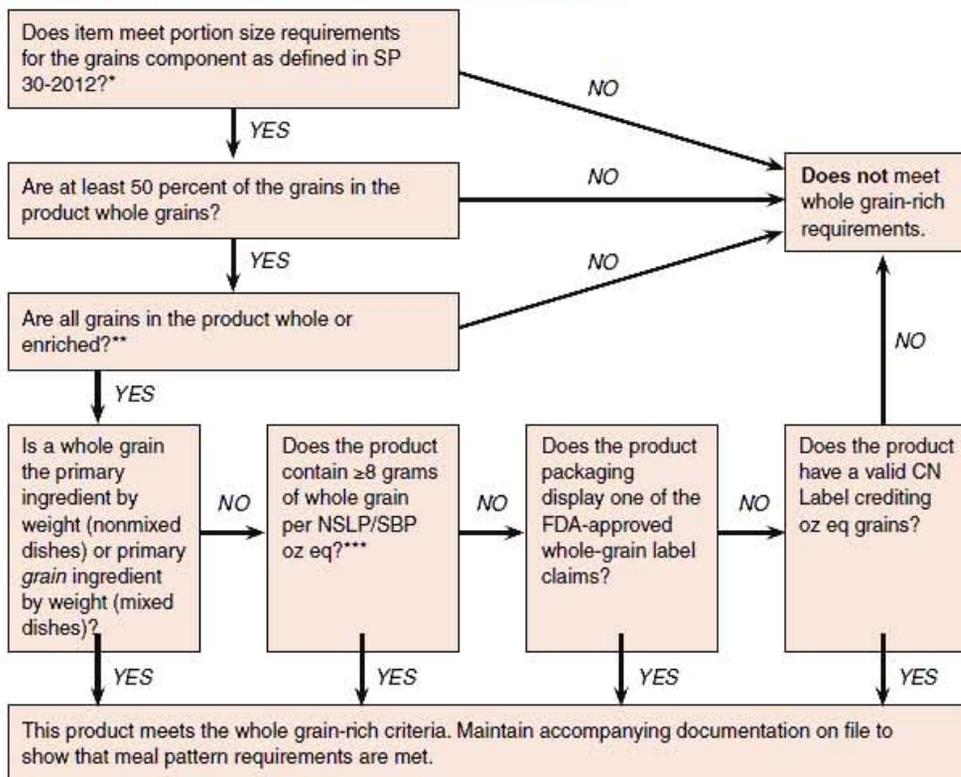
“Diets rich in whole grain foods and other plant foods, and low in total fat, saturated fat, and cholesterol, may reduce the risk of heart disease and certain cancers.”



How Do I Know if a Product Meets Whole Grain-Rich Criteria?

There are many foods labeled as whole grain, such as pizza crusts, buns, breads, tortillas, and other products. The chart below will assist you in determining if your whole-grain product meets the criteria.

Does My Product Meet the Whole Grain-Rich Criteria?



*Must contain at least 0.25 ounce equivalent grains in order to credit toward meal pattern requirements.

**Noncreditable grains should be limited to no more than 0.24 oz eq (3.99 grams for Groups A-G of the Revised Exhibit A or 6.99 grams for Groups H or I). See page 7 for more information.

***Applies to groups A-G of the revised Exhibit A only. Groups H and I require 28 grams of creditable grain per oz eq of which at least 14 grams are whole to meet the 50 percent whole grain-rich criteria.



Determining Grain/Bread Contribution

- Calculation change for grams of grains per serving
- Beginning SY 2013-14 manufacturers and SFA's should use **16 grams of grains per serving** in place of the 14.75 grams in purchased products and in recipes
- See pages 21-22 of Whole Grain Resource for examples



Determining Grain/Bread Contribution

- *Exhibit A: School Lunch and Breakfast Whole Grain-Rich Oz Eq Requirements for School Meal Programs* reflect the calculation change
 - See page 23 of Whole Grain Resource
 - Reflects the updated oz eq criteria
 - Beginning SY 2013-14 the Exhibit A should be used in place of the original Exhibit A in the FBG



Exhibit A: School Lunch and Breakfast

Whole Grain-Rich Ounce Equivalency (Oz Eq) Requirements for School Meal Programs^{1,2}

GROUP A	OZ EQ FOR GROUP A
<ul style="list-style-type: none"> • Bread type coating • Bread sticks (hard) • Chow mein noodles • Savory crackers (saltines and snack crackers) • Croutons • Pretzels (hard) • Stuffing (dry) Note: Weights apply to bread in stuffing. 	1 oz eq = 22 g or 0.8 oz 3/4 oz eq = 17 g or 0.6 oz 1/2 oz eq = 11 g or 0.4 oz 1/4 oz eq = 6 g or 0.2 oz
GROUP B	OZ EQ FOR GROUP B
<ul style="list-style-type: none"> • Bagels • Batter type coating • Biscuits • Breads (sliced whole wheat, French, Italian) • Buns (hamburger and hot dog) • Sweet crackers⁴ (graham crackers - all shapes, animal crackers) • Egg roll skins • English muffins • Pita bread (whole wheat or whole grain-rich) • Pizza crust • Pretzels (soft) • Rolls (whole wheat or whole grain-rich) • Tortillas (whole wheat or whole corn) • Tortilla chips (whole wheat or whole corn) • Taco shells (whole wheat or whole corn) 	1 oz eq = 28 g or 1.0 oz 3/4 oz eq = 21 g or 0.75 oz 1/2 oz eq = 14 g or 0.5 oz 1/4 oz eq = 7 g or 0.25 oz
GROUP C	OZ EQ FOR GROUP C
<ul style="list-style-type: none"> • Cookies³ (plain - includes vanilla wafers) • Cornbread • Corn muffins • Croissants • Pancakes • Pie crust (dessert pies,³ cobbler,³ fruit turnovers,⁴ and meat/meat alternate pies) • Waffles 	1 oz eq = 34 g or 1.2 oz 3/4 oz eq = 26 g or 0.9 oz 1/2 oz eq = 17 g or 0.6 oz 1/4 oz eq = 9 g or 0.3 oz

¹ The following food quantities from Groups A-C, must contain at least 16 grams of whole grain or can be made with 8 grams of whole grain and 8 grams of enriched meal and/or enriched flour to be considered whole grain-rich.

² Some of the following grains may contain more sugar, salt, and/or fat than others. This should be a consideration when deciding how often to serve them.

³ Allowed only as dessert at lunch as specified in §210.10.

⁴ Allowed for desserts at lunch as specified in §210.10, and for breakfasts served under the SBP.

continued on next page



Whole Grain-Rich Ounce Equivalency (Oz Eq) Requirements for School Meal Programs^{1,2} (continued)

GROUP D	OZ EQ FOR GROUP D
<ul style="list-style-type: none"> • Doughnuts⁴ (cake and yeast raised, unfrosted) • Cereal bars, breakfast bars, granola bars⁴ (plain) • Muffins (all, except corn) • Sweet roll⁴ (unfrosted) • Toaster pastry⁴ (unfrosted) 	1 oz eq = 55 g or 2.0 oz 3/4 oz eq = 42 g or 1.5 oz 1/2 oz eq = 28 g or 1.0 oz 1/4 oz eq = 14 g or 0.5 oz
GROUP E	OZ EQ FOR GROUP E
<ul style="list-style-type: none"> • Cereal bars, breakfast bars, granola bars⁴ (with nuts, dried fruit, and/or chocolate pieces) • Cookies³ (with nuts, raisins, chocolate pieces and/or fruit purees) • Doughnuts⁴ (cake and yeast raised, frosted or glazed) • French toast • Sweet rolls⁴ (frosted) • Toaster pastry⁴ (frosted) 	1 oz eq = 69 g or 2.4 oz 3/4 oz eq = 52 g or 1.8 oz 1/2 oz eq = 35 g or 1.2 oz 1/4 oz eq = 18 g or 0.6 oz
GROUP F	OZ EQ FOR GROUP F
<ul style="list-style-type: none"> • Cake³ (plain, unfrosted) • Coffee cake⁴ 	1 oz eq = 82 g or 2.9 oz 3/4 oz eq = 62 g or 2.2 oz 1/2 oz eq = 41 g or 1.5 oz 1/4 oz eq = 21 g or 0.7 oz
GROUP G	OZ EQ FOR GROUP G
<ul style="list-style-type: none"> • Brownies³ (plain) • Cake³ (all varieties, frosted) 	1 oz eq = 125 g or 4.4 oz 3/4 oz eq = 94 g or 3.3 oz 1/2 oz eq = 63 g or 2.2 oz 1/4 oz eq = 32 g or 1.1 oz
GROUP H	OZ EQ FOR GROUP H
<ul style="list-style-type: none"> • Cereal grains (barley, quinoa, etc) • Breakfast cereals (cooked)^{5,6} • Bulgur or cracked wheat • Macaroni (all shapes) • Noodles (all varieties) • Pasta (all shapes) • Ravioli (noodle only) • Rice (enriched white or brown) 	1 oz eq = 1/2 cup cooked or 1 ounce (28 g) dry
GROUP I	OZ EQ FOR GROUP I
<ul style="list-style-type: none"> • Ready-to-eat breakfast cereal (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 = 1/4 cup or 1 ounce for granola

⁵ Refer to program regulations for the appropriate serving size for supplements served to children ages 1 through 5 in the National School Lunch Program; and meals served to children ages 1 through 5 and adult participants in the Child and Adult Care Food Program. 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.



Checklist for Evaluating Whole Grain-Rich

- Element 1 – the food item must meet the oz eq requirements for the grains component. Refer to Exhibit A.
- Element 2 – the food item meets whole grain requirements
 - Per Exhibit A
 - Whole grains per oz eq are at least 8 grams or more for Groups A-G
 - The volumes or weights listed must be offered to credit as 1 oz eq, and whole grains must be the primary grains for Groups H and I
 - Or, the product includes the FDA-approved whole grain health claim on its packaging
 - Or, the product ingredient declaration lists whole grains first



Non-mixed VS Mixed Dishes

Non-mixed Whole Grain Rich Dishes

- Non-mixed dishes: whole grains must be the first ingredient by weight (a whole grain is the first ingredient in the list with the exception for water)
- Example: recipe calls for $\frac{3}{4}$ cup whole wheat flour and $\frac{1}{4}$ cup enriched grains - WGR

Mixed Whole Grain Rich Dishes

- Mixed dishes: whole grains must be the first ingredient by weight (a whole grain is the first grain ingredient in the list of grains)
- Recipe calls for $\frac{1}{4}$ cup whole wheat flour, $\frac{1}{4}$ cup oats, and $\frac{1}{2}$ cup enriched grains - WGR



Grain ingredients that should not be considered whole grains (please contact your State agency to determine if a questionable grain ingredient is creditable):

flour	phosphated flour	hominy grits
white flour	self-rising flour	hominy
wheat flour	self-rising wheat flour	farina
all-purpose flour	enriched self-rising flour	semolina
unbleached flour	bread flour	degerminated corn meal
bromated flour	cake flour	enriched rice
enriched bromated flour	durum flour	rice flour
enriched flour	corn grits	couscous
instantized flour		

Grain products that often do not meet the whole grain-rich criteria:

- “Pot” or “Scotch” barley and “pearl” or “pearled” barley are *not* whole grain because bran has been removed. Look for the words whole barley or whole-grain barley on the product label or in the ingredient statement. However, the FDA has recognized that “dehulled barley” is a whole grain.
- “Stone ground” does not necessarily mean that the product is whole grain. “Stone ground” describes the process used for making the flour or meal. Look for “whole” in combination with “stone ground” in the ingredient statement.
- Whole corn “treated with lime” (often used in tortilla chips, taco shells and tamales, and may be called “masa”). These items must bear one of the FDA whole-grain health claims on product packaging in order to meet the whole grain-rich criteria (see page 3 for complete health claims). Manufacturers may also provide documentation showing that their product meets the requirements for this claim to demonstrate that the whole grain-rich criteria are met. Please see FNS Memo SP 02-2013 (<http://www.fns.usda.gov/cnd/Governance/Policy-Memos/2013/SP02-2013os.pdf>) for complete guidance on selecting products made from corn masa. Please refer to the FDA Modernization Act for the full requirements of health claims related to whole-grain foods (page 31).

- When a grain name, such as wheat, rice, or rye flour is listed in the ingredient statement, but has no descriptor (such as “whole-grain” for wheat or “brown” for rice), the program operator needs to obtain further documentation from the manufacturer before purchasing the food product to ensure it meets the whole grain-rich criteria.

Noncreditable grains:

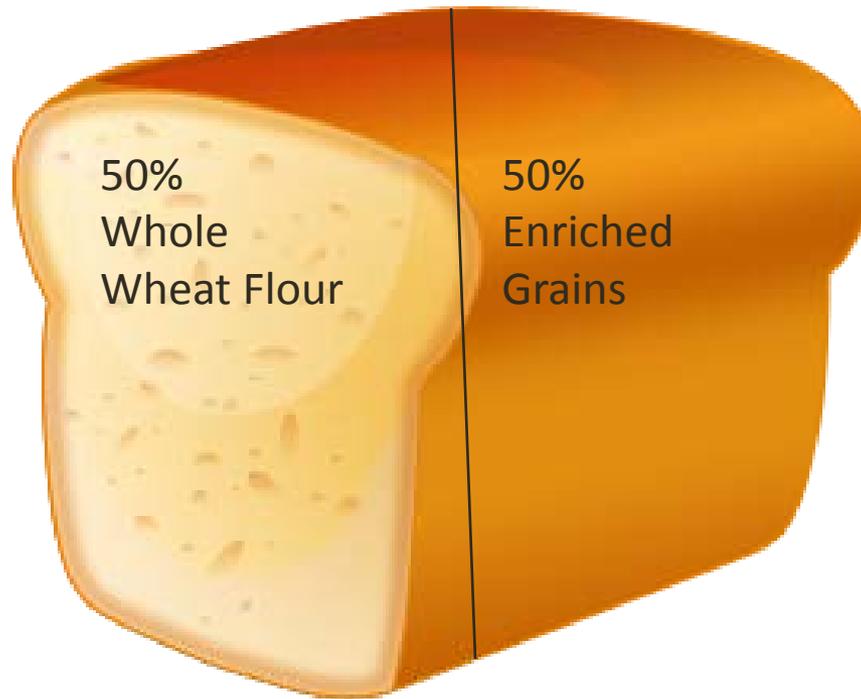
There are some grain ingredients such as oat fiber, corn fiber, bran, germ, modified food starch, corn starch, and wheat starch (including potato, legume, and other vegetable flours) that do not contribute toward meal pattern components. If purchased grain products include these ingredients they must be present at a level of less than 2 percent of the product formula (or less than 0.25 oz eq) for the product to be creditable at lunch or breakfast beginning SY 2013-2014.



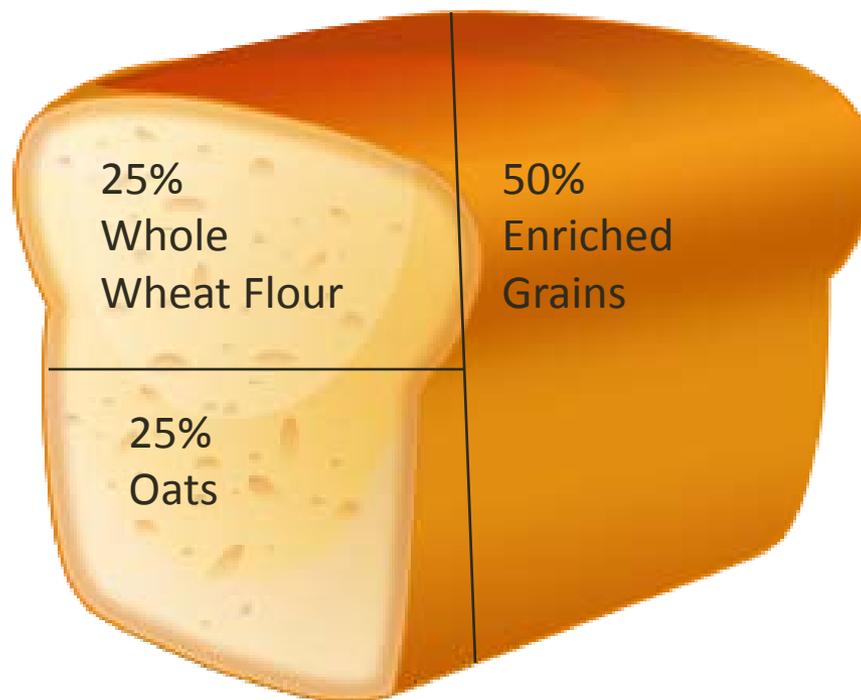
Is it Whole Grain-Rich?



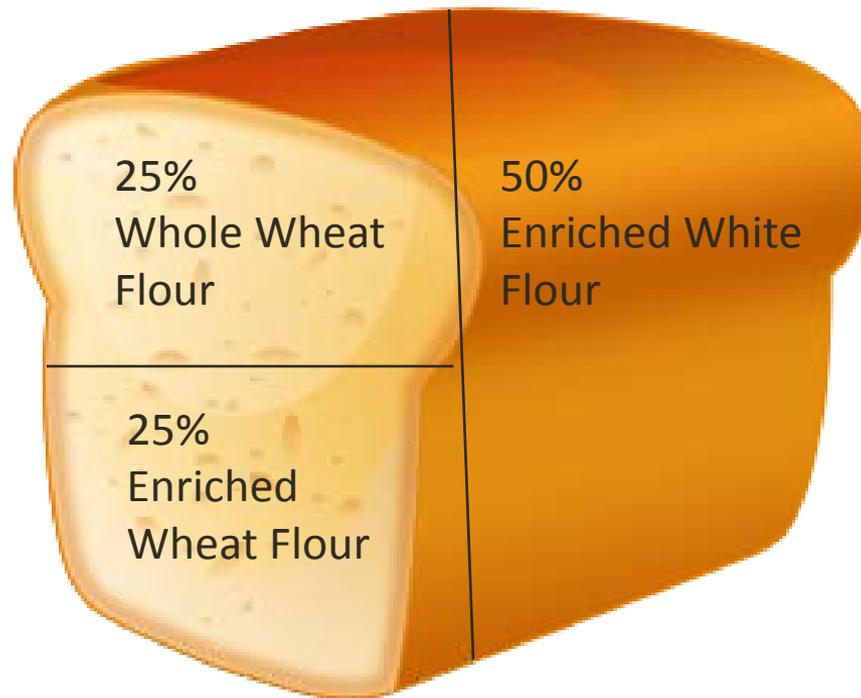
Is it Whole Grain-Rich?



Is it Whole Grain-Rich?



Is it Whole Grain-Rich?



Is it Whole Grain-Rich?

Ingredients:

Whole grain wheat, wheat flour, white flour, bread flour, wheat gluten, crystallized cane juice, natural flavor (soybean oil, natural flavorings), wheat bran



Grains (Breakfast)

- Schools may substitute meat/meat alternate for grains once daily grains minimum is met
- You must serve a whole grain-rich item FIRST
- THEN, you may serve a meat/meat alternate and count it as a second whole grain-rich item to meet your weekly requirements



Grains: Formulated Grain-Fruit

- What is a formulated grain-fruit product?
 - A grain product that has been approved by USDA to credit as both a grain and fruit serving in the SBP
 - Will include a statement on the package that it meets requirements
 - Highly fortified (may not actually contain fruit)
- This change does not prohibit
 - Energy, granola, cereal, or breakfast bars (with or without fruit pieces or spread)
 - Fortified cereal or cereals with fruit pieces
 - These credit per typical requirements and do not require a statement on the package



Ready-to-Eat Cereals

- To be considered whole grain, the cereal must list a whole grain ingredient as the first ingredient



CN Labeling Change

- Whole grains should be listed as oz equivalent or “grains” for **whole grain-rich items**
- If a label lists bread/bread alternate, then it is not up-to-date and is likely a **non-whole grain-rich item – which is not creditable in SY2014-15**



CN Labeling Change

- The temporary approval given to manufacturers has expired as of June 30, 2014
- At this time, all grain products must be credited based on per oz equivalent standards:

CN Statement: Five 0.60 oz. fully cooked, breaded chunk shaped chicken patties provide 2.00 oz. equivalent meat/meat alternate and 0.75 oz. equivalent grains for the Child Nutrition Meal Pattern Requirements.

Note: If the CN labeling does not clearly identify whole grains, consider using other methods to determine whole grain-rich.



Crediting Battered/Breaded Products

- All grains which are part of battered and/or breaded products offered must be counted towards the weekly grain requirement
 - All grains equal to or greater than 0.25 oz eq must be counted towards the weekly grains



Whole Grain Time Frame

- SY 2014-2015
 - All grains offered must be whole grain
- Food Buying Guide is updated to reflect whole grain changes at this time. The FBG has additional instructions for calculating oz eq in a recipe.



Preparing Breads with Whole Grain

- Whole grain recipes require more liquid
 - 62:100 water to flour ratio for white bread
 - 68-70:100 water to flour ratio for 100% whole wheat bread
- Less mixing time is needed; avoid over mixing the dough.
- Lower oven temperature by 25-50°F to lessen crust darkness



Preparing Whole Grain Brown Rice

- Quantity needed to serve 50 people may be different and may be affected by cooking method
- Cooking time is **longer**
 - 20-25 minutes longer than white rice
 - TOTAL cooking time is ~50 minutes
- Amount of water changes based on cooking method
 - Steamer – need less water above the rice
 - Steam jacketed kettle – need more water above rice
- Popular seasonings or cooking broth may help to enhance flavor.



Preparing Whole Grain Pasta

- Amount of water recommended should be 2-4 inches above pasta
- Cooking time depends on product
 - Check for doneness
 - Do not overcook or hold too long
- Add sauces to enhance flavor and help prevent stickiness.



Storage of Whole Grains

- Whole grain ingredients have a shorter shelf-life compared to refined grains
 - The bran and germ in whole grain products contain unsaturated fats that can become rancid with time and increased temperature
- Store in a cool, $\leq 75^{\circ}\text{F}$, and dry $\leq 50\%$ humidity
- Do not store near spices or other aromatic foods
- Use first in/first out (FIFO) ingredient rotation
- Refrigerate or freeze whole grains to extend shelf-life.



Examples

- Please pull out your *USDA Whole Grain Resource*

Thank you!