Is My Recipe Whole Grain-Rich in the Child and Adult Care Food Program?

Some Child and Adult Care Food Program (CACFP) operators prepare grain items from scratch. These items can be a wonderful addition to the menu and even count as a whole grain-rich food. You can follow the steps listed below to check if a recipe is whole grain-rich.

1. Circle or mark the grain ingredients in the recipe. For a list of common grain ingredients, see page 2. If your recipe has non-creditable flour or grains, there must be a greater amount of at least three other whole grain, enriched, bran, or germ ingredients in the recipe.

2. Write down the names and amounts of the whole grain ingredients. Add the amounts of whole grain ingredients together.*

<table>
<thead>
<tr>
<th>Amount</th>
<th>Ingredient</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 cups</td>
<td>whole-wheat flour</td>
</tr>
<tr>
<td>2 ½ cups</td>
<td>oatmeal</td>
</tr>
<tr>
<td><strong>Total:</strong> 4 ½ cups</td>
<td><strong>whole grain ingredients</strong></td>
</tr>
</tbody>
</table>

3. Write down the names and amounts of the enriched, bran, and germ ingredients. Add the amounts of these ingredients together.*

<table>
<thead>
<tr>
<th>Amount</th>
<th>Ingredient</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 cups</td>
<td>enriched flour</td>
</tr>
</tbody>
</table>

4. Compare the amount of whole grain ingredients to the amount of enriched, bran, and/or germ ingredients. If the total amount of whole grain ingredients is equal to or more than the total amount of enriched, bran, or germ ingredients, the recipe is whole grain-rich.

Example: 4 ½ cups of whole grain ingredients is more than 2 cups of enriched ingredients. Therefore, this recipe is whole grain-rich.

Oatmeal Muffins

- 2 cups whole-wheat flour
- 2 cups enriched flour
- 2 ½ cups oatmeal
- 2 teaspoons baking powder

*To convert fractions to decimals, see the Food Buying Guide for Child Nutrition Programs Table 6: Decimal Equivalents of Commonly Used Fractions at: https://foodbuyingguide.fns.usda.gov/Content/TablesFBG/Table6_FBG.pdf.
Common Grain Ingredients

Below are some common grain ingredients you might find in recipes. There are other whole grain, enriched, bran, germ, and non-creditable ingredients that are not listed below.

**Whole-Grain Ingredients**
- Brown rice flour
- Corn masa/masa harina
- Cracked wheat
- Graham flour
- Oats/oatmeal (any kind)
- White whole-wheat flour
- Whole grain corn flour/cornmeal
- Whole rye flour
- Whole-wheat flour (includes whole-wheat bread flour, whole-wheat pastry flour, etc.)

**Enriched, Bran, and Germ Ingredients**
- Enriched all-purpose flour
- Enriched bleached white flour
- Enriched bread flour
- Enriched corn flour/cornmeal
- Enriched rice flour
- Enriched unbleached white flour
- Oat bran
- Wheat bran
- Wheat germ

**Non-Creditable Grains or Flours**
- Bean flour (such as soy, chickpea, lentil, etc.)*
- Durum flour
- Nut or seed flour (such as almond, sesame, etc.)
- Oat fiber
- Potato flour*
- Rice flour
- Semolina
- Wheat flour
- White flour

*Not creditable toward the grain component, but may be creditable toward the Vegetables or Meats/Meat Alternates components. For more information, see [https://foodbuyingguide.fns.usda.gov](https://foodbuyingguide.fns.usda.gov).

Additionally, if the ingredient list includes the nutrients used to enrich the flour, then the flour is enriched. For example, an ingredient list for rice flour might read: “Long grain rice (niacin, iron, riboflavin, folic acid, thiamin).” The vitamins listed in the parenthesis indicate that the rice flour is enriched.
Giving Grains Equal Measure

The amount of an ingredient in a recipe can be measured in different ways. Some recipes use cups, tablespoons (tbsp), or teaspoons (tsp) while other recipes will use ounces (oz) or pounds (lb). When adding up the amounts of ingredients to see if a recipe is whole grain-rich, make sure the grain ingredients are written in the same unit of measure. For example, in the oatmeal muffin recipe on page 1, the whole-wheat flour, the oatmeal, and the enriched flour are all measured in cups.

If a recipe lists the grain ingredients as different units of measure, follow the steps below to convert the ingredient amounts to the same unit.

**If the ingredients are in pounds and ounces:**

**Example:** 2 lbs 6 oz whole-wheat flour

Multiply number of ounces by 0.0625 to convert ounces to pounds.

6 oz x 0.0625 = 0.375 lb

Add the decimal to the whole number:

2 lb + 0.375 lbs = 2.375 lbs of whole-wheat flour

**If the ingredients are in teaspoons and cups:**

**Example:** 3 cups + 2 tsp whole grain cornmeal

Multiply number of teaspoons by 0.021 to convert teaspoons to cups.

2 tsp x 0.021 = 0.042 cups

Add the decimal to the whole number:

3 cups + 0.042 cups = 3.042 cups of whole grain cornmeal

**If the ingredients are in tablespoons and cups:**

**Example:** 1 cup + 2 tbsp brown rice flour

Multiply number of tablespoons by 0.0625 to convert tablespoons to cups.

2 tbsp x 0.0625 = 0.125 cups

Add the decimal to the whole number:

1 cup + 0.125 cups = 1.125 cups of brown rice flour

**If the ingredients are in teaspoons and tablespoons:**

**Example:** 1 tbsp + 2 tsp wheat bran

Multiply number of teaspoons by 0.33 to convert teaspoons to tablespoons.

2 tsp x 0.33 = 0.66 tbsp

Add the decimal to the whole number:

3 tbsp + 0.66 tbsp = 3.66 tbsp of wheat bran
Try It Out!

Look at the ingredients for each recipe below. Which recipes are whole grain-rich?

Dinner Rolls
- 1 tablespoon Active Dry Yeast
- 1 ½ cups Warm Water
- 1 ½ cups Enriched All-Purpose Flour
- ¼ cup Sugar
- 1 ½ cups Whole-Wheat Flour
- 1 teaspoon Salt
- 3 Large Eggs
- 2 teaspoons Canola Oil

Cornbread
- 1 ½ cups Whole-Wheat Flour
- 1 ¼ cups Enriched Cornmeal
- ½ cup Enriched Unbleached White Flour
- 2 tablespoons Sugar
- 1 tablespoon Baking Powder
- ¾ teaspoon Salt
- 2 Large Eggs
- 1 ¾ cups Nonfat Milk
- ¼ cup Canola Oil

Pancakes
- 2 ½ cups Rolled Oats
- 1 cup Enriched Rice Flour
- ½ cup Almond Flour
- ¼ cup Nonfat Milk
- 3 tablespoons Sugar
- 3 tablespoons Baking Powder
- 1 tablespoon Salt
- 1 tablespoon Baking Soda
- ½ cup Canola Oil

Is this recipe whole grain-rich?
- Yes
- No

Dinner Rolls: Yes, this recipe is whole grain-rich. This recipe has the same amount of whole grain ingredients (1 ½ cups whole-wheat flour) as enriched ingredients (1 ½ cups enriched all-purpose flour).

Cornbread: No, this recipe is not whole grain-rich. This recipe contains less whole grain ingredients than enriched ingredients. It contains 1 ½ cups whole grain ingredients (1 ½ cups whole-wheat flour and ½ cup whole-grain bran) and 1 ¾ cups enriched ingredients (1 ¾ cups bleached all-purpose flour).

Pancakes: No, this recipe is not whole grain-rich. This recipe has less whole grain ingredients than enriched ingredients (1 ½ cups whole-wheat flour and 1 ¾ cups enriched rice flour).