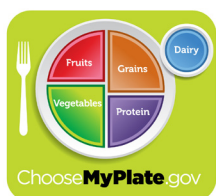


## MyPlate: Grains Group

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MyPlate, the United States Department of Agriculture (USDA) food guide system, helps individuals use the 2010 Dietary Guidelines for Americans to make smart choices from every food group. MyPlate includes an interactive, online guide that provides individuals with recommended food amounts to eat, based on gender, age, and physical activity level. Personalized guides can be found at [www.Choosemyplate.gov](http://www.Choosemyplate.gov) under the “SuperTracker and Other Tools” tab.

This publication describes ways to incorporate the Grains Group from MyPlate into the diet, especially whole grains.

Most people get enough grain food products in their diet but many don't get enough whole grains. At least one-half of all the grain foods you eat should be whole grain foods.



### What Foods Are in the Grains Group?

Foods in the grains group are made from cereal grains. Cereal grains are the seeds of grasses that are cultivated for food such as wheat, rice, oats, and barley. Examples of grain food products are bread, pasta, oatmeal, breakfast cereals, tortillas, and grits. There are two subgroups of grains: *whole and refined*.

### Whole vs. Refined Grains

**Whole grains** contain the entire grain kernel — the bran, germ, and endosperm.

- Bran: outer shell, protects seed, contains fiber, B vitamins, and trace minerals
- Germ: Nourishment for seed, contains antioxidants, vitamin E, and B vitamins
- Endosperm: provides energy, contains carbohydrates and protein

Whole grains provide fiber and other important nutrients. Examples of whole grains include whole wheat, rye, whole oats, oatmeal, whole grain corn, barley, sorghum or triticale, brown and wild rice, buckwheat, bulgur, millet, and quinoa.

**Refined grains** have been milled, a process that removes the bran and germ. These grains have a finer texture and longer shelf life, but the dietary fiber, iron, and many B vitamins are removed. Most refined grains are enriched, which means that certain B vitamins (thiamin, riboflavin, niacin, folic acid) and iron are put back into the product. Generally, fiber is not added back into the enriched product. It is important to check the ingredient list on refined grains to make sure the word “enriched” is included in the grain name. Examples of refined grains include white flour, de-germed cornmeal, white bread, and white rice.

### Buying Whole Grains — What to Look For

When buying whole grains, keep in mind that the less processed they are, the better. Coarsely ground grain does not digest as rapidly and has less of an impact on blood sugar than finely ground grain. Remember, color is not always an indication of a whole grain. For example, bread might look brown because of the addition of molasses or other added ingredients. Use the Nutrition Facts Label and choose whole grain products with a higher % Daily Value (% DV) for fiber. Many, but not all, whole grain products are good or excellent sources of fiber.

**Table I. Daily recommendations of amount of grains.**

	<i>Daily Recommendations*</i>		<i>Daily Minimum Amount of Whole Grains</i>
<b>Children</b>	2-3 years old	3 ounce equivalents	1½ ounce equivalents
	4-8 years old	5 ounce equivalents	2½ ounce equivalents
<b>Girls</b>	9-13 years old	5 ounce equivalents	3 ounce equivalents
	14-18 years old	6 ounce equivalents	3 ounce equivalents
<b>Boys</b>	9-13 years old	6 ounce equivalents	3 ounce equivalents
	14-18 years old	8 ounce equivalents	4 ounce equivalents
<b>Women</b>	19-30 years old	6 ounce equivalents	3 ounce equivalents
	31-50 years old	6 ounce equivalents	3 ounce equivalents
	51+ years old	5 ounce equivalents	3 ounce equivalents
<b>Men</b>	19-30 years old	8 ounce equivalents	4 ounce equivalents
	31-50 years old	7 ounce equivalents	3½ ounce equivalents
	51+ years old	6 ounce equivalents	3 ounce equivalents

\*These amounts are appropriate for individuals who get less than 30 minutes per day of moderate physical activity, beyond normal daily activities. Those who are more physically active may be able to consume more while staying within calorie intake. Eat fewer or more grains, depending on individual daily caloric intake. To find the calorie and grain intake level that is right for you, go to <http://www.choosemyplate.gov/myplate/index.aspx>.

To find whole-grain foods, look for one of the following listed first on the ingredient label:

- brown rice
- buckwheat
- bulgur
- oatmeal
- quinoa
- rolled oats
- whole-grain barley
- whole-grain corn
- whole-grain sorghum
- whole-grain triticale
- whole oats
- whole rye
- whole wheat
- wild rice

**How Much is Needed?**

The amount of grains you need to eat depends on your age, gender, and level of physical activity (*Table I*).

**What Counts as an Ounce?**

In general, 1 slice of bread, 1 cup of ready-to-eat cereal, or ½ cup of cooked rice, cooked pasta, or cooked cereal can be considered as a 1 ounce equivalent from the Grains Group. Below are examples of specific amounts that count as 1 ounce equivalents toward your daily recommended intake:

- Bagel — 1 mini bagel, ½ regular-size bagel, ¼ large bagel
- Biscuit, Muffin — 1 small (2-inch diameter)

- Breads — 1 regular slice, 1 small slice French, 4 snack-size slices rye bread
- Ready-to-eat breakfast cereal — 1 cup flakes or rounds, 1¼ cups puffed
- Cooked grains (e.g., bulgur, couscous, quinoa) — ½ cup cooked
- Cornbread — 1 small (2½ inches by 1-inch by 1½-inches)
- Crackers — 5 whole wheat crackers, 2 rye crispbreads, 7 square or round crackers
- English Muffin — ½ muffin
- Oatmeal — ½ cup cooked, 1 packet instant, 1 ounce (½ cup) dry (regular or quick)
- Pancakes, Waffles — 1 (4½-inch diameter), 2 small (3-inch diameter)
- Popcorn — 3 cups, popped
- Rice, pasta — ½ cup cooked, 1 ounce dry
- Tortillas — 1 small flour (6-inch diameter), 1 corn (6-inch diameter)

## Tips to Eat Whole Grains

- Stash whole grain breakfast cereals, crackers, pretzels, or bagels in your gym bag for a snack that is ready any time you are.
- When making meatloaf or meatballs, add whole wheat bread crumbs or crackers to the meat before cooking. Dip fish or skinless chicken in low-fat milk and then roll in cereal, crushed crackers, or fine bread crumbs before baking.
- Replace a white roll with a whole-wheat roll at dinner.
- Use brown rice in place of white rice.
- Snack on popcorn, low-fat granola made with whole oats, brown rice cakes, and snack mixes made with whole grain cereal. Enjoy polenta, cornbread, and corncakes made with stone ground, whole-cornmeal.
- Go for ½ cup whole grain pasta salad instead of french fries at lunch.
- Try using half whole grain and half all-purpose flour when making cookies or other baked treats. Or add whole grain flour or oatmeal.
- Substitute a whole grain product for a refined product such as:
  - whole wheat bread for white bread
  - whole wheat pasta for regular pasta
  - whole wheat tortillas for flour tortillas
  - whole wheat crackers for saltines
- Use whole grains in mixed dishes such as barley in vegetable soup or stews, and bulgur wheat in casseroles or stir-fries.

### Health Benefits and Nutrients

Whole grains are an important source of several nutrients, including dietary fiber, B vitamins, and minerals.

- **Being active.** Carbohydrates provide endurance and energy during physical activity.
- **Dietary fiber and chronic disease.** Dietary fiber from whole grains may help reduce blood cholesterol levels and lower risk of heart disease, obesity, and type 2 diabetes.
- **Weight management.** Consuming whole grains also may help with weight management because fiber-containing foods help provide a feeling of fullness with fewer calories.
- **B vitamins.** Riboflavin, niacin, and thiamin are B vitamins that help release energy and contribute to vision and skin health. Folate (folic acid), another B vitamin, helps the body form red blood cells. Women of childbearing age who may become pregnant should consume adequate amounts of folate to reduce the risk of neural tube defects, spina bifida, and anencephaly during fetal development.
- **Magnesium and selenium.** Whole grains are sources of magnesium and selenium. Magnesium is a mineral used in building bones and releasing energy from muscles. Selenium protects cells from oxidation, and is also important for a healthy immune system.
- **Iron.** Many teenage girls and women in their childbearing years have iron-deficiency anemia. They should eat foods high in heme-iron (meats) or eat other iron-containing foods along with foods rich in vitamin C, which can improve absorption of non-heme iron. Whole and enriched refined grain products are major sources of non-heme iron in American diets.

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## Resources

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