

# Whole Grains, Whole Life

In the past, whole grains were relegated to dusty bins at the health food store or to the bottom shelf of the baking aisle, but stroll through the supermarket today and whole-grain foods seem to be everywhere.

Food manufacturers are responding to consumers' growing interest in healthy choices like whole grains — baked into breads, muffins, crackers and more. They're added to cereals, pilaf mixes, pastas and even baking mixes.

But what exactly is a whole grain and how much do we need?

Evidence shows that eating whole-grain foods may reduce the risk of heart disease and diabetes. Diets rich in whole grains are also associated with lower body weight. A key recommendation of the 2010 Dietary Guidelines for Americans, released by the U.S. Department of Health & Human Services, advises that at least half of daily grain intake should be whole grains (about 48 grams a day). For ages nine and up, this means eating at least three servings of whole-grain foods every day.

The average American consumes plenty of grains, about 620 calories' worth a day. However, an estimated 90 percent of that is refined flour. Whole-grain consumption has been slowly but steadily rising since 2005, but there's still a long way to go.

Whole grains and foods made from whole grains contain all the essential parts and nutrients of the entire grain seed or kernel.

- The **bran** is the outermost layer of the kernel. Bran contains fiber and some protein and trace minerals.
- The **endosperm** is the large middle layer of the kernel. It's high in carbohydrates to feed the developing plant. The endosperm also contains protein, iron and vitamins. It's the endosperm that is ground into refined or white flour.
- The **germ**, technically the embryo of the seed, is the small nutrient-rich core of the kernel. Its high fat content makes it susceptible to spoilage.



Please note that “whole grain” and “multigrain” are not interchangeable terms. “Whole grain” means that all parts of the grain kernel — the bran, the endosperm and the germ — are used. In contrast, “multigrain” means that a food contains more than one type of grain, although none of them may necessarily be whole grains. The same goes for other variations, such as “seven grain.”

If whole grains are so much healthier, why are refined grains like white flour and white rice so popular? Historically, people started milling wheat and other grains for practical reasons. Before the days of refrigeration and efficient transportation, whole grains were much more susceptible to mold and fungus than refined grains. Spoiled grain made people sick.

To replace some of the nutrients lost in the milling process, white flour is enriched with thiamin, riboflavin, niacin and iron. This mandate dates to the 1940s when the U.S. government realized that nutrient-poor white flour was contributing to widespread nutritional deficiencies in military recruits. Since 1996, folic acid has been added to enriched flours to cut down on birth defects.

Despite their enrichment, refined grains still lack fiber, a key component of a healthy diet.

## Whole Grains, Whole Life

### Bread

Americans consume, on average, one pound of bread every week. Most of that bread contains wheat. Nine out of 10 of those wheat loaves are white bread without even a kernel of whole grain. Yet whole-grain breads are on the rise.

When buying sliced bread — or rolls, biscuits, pita, bagels, sandwich wraps, flour tortillas, English muffins or other bread alternatives — check the ingredient list first. Choose brands where whole-wheat flour or another whole grain tops the list. Remember, when a whole grain is listed first, you're getting more whole grains than any other single ingredient. Look for brands where each serving provides three grams of dietary fiber.

### Breakfast Cereals

Many popular cereal manufacturers have jumped on the whole-grain bandwagon making it that much easier to start the day with a healthy dose of whole grains. When shopping for cereal, again look at the ingredient list first. You want to see a whole grain such as whole-grain oats or whole-grain wheat listed as the first ingredient. Take a look at the nutrition facts panel as well. Shoot for five grams of dietary fiber per serving, and watch out for added sugars. Even healthy-sounding cereals can still have substantial amounts of added sugar. This is especially true of breakfast cereals marketed to kids.

### Brown Rice

Brown rice is the entire grain with only the inedible outer husk removed. The outer bran layer gives the rice a slightly nutty flavor and chewy texture. Brown rice takes 10 to 15 minutes longer to cook than white rice although “quick” brown rice, like regular white rice, is ready in 15 minutes.

If you're a daily white rice eater, switching to brown rice is one of the best things you can do for your health. In fact, a large study recently showed that eating white rice regularly makes a person more likely to develop type 2 diabetes, while brown rice decreases the risk of developing the chronic disease.

If your family resists the switch to brown rice, you can win them over gradually. Cook brown rice or another tasty whole grain such as wheat berries, barley or quinoa until nearly done. Divide into one-cup portions and freeze in individual freezer bags. When making white rice, stir in the packet of frozen whole grain toward the end of cooking.

### Pasta

New types of pasta made from blends of semolina flour and whole-wheat, buckwheat, barley, oat or quinoa flour are showing up on supermarket shelves.

Many whole-grain pastas may take longer to cook compared to traditional pasta. Keep checking pasta as it cooks until it reaches the “al dente” stage.

Couscous, the tiny pasta that looks like a grain, is available in a whole-wheat version. Like regular couscous, it takes only two or three minutes to prepare. Measure couscous into a bowl, pour over an equal volume of boiling water or stock. Let it sit to absorb the liquid. Fluff with a fork and serve!

### 2013: Year of the Quinoa

Quinoa is a relative newcomer to the supermarket grains shelf. The Inca called quinoa the “mother grain” and to this day it's an important food in the Andes. The U.N. has declared 2013 to be the international year of quinoa to highlight the grain's high nutritional value and role in biodiversity.

Quinoa cooks in about eight minutes. With its mild flavor, quinoa can be served the same way you would serve white rice — as a side dish, in a salad, stuffing, as a hot cereal or in a cold dessert pudding.

### Look for the Whole Grain Stamp

Consumers searching the supermarket aisles for whole-grain foods can rely on a handy “search tool” called the Whole Grain Stamp. It indicates that the product contains eight grams or more of a whole grain.

