

Whole-grain goodness

How to best enjoy the many benefits of these nutrient-rich foods. By Alisa Blackwood

WHOLE GRAINS ARE in the midst of a renaissance. Since their 1970s heyday, the findings from scientific research have expanded on these fiber-rich foods' abilities to help protect against heart disease, type 2 diabetes, and obesity. Such results led the government to urge us all, in its 2005 dietary guidelines, to eat at least three servings of whole grains daily.

Joanne Slavin, RD, PhD—one of the country's foremost experts on fiber and whole grains—recalls grain's first go-round. "I was in graduate school pursuing a nutrition degree. This was during the mid-1970s, and there was a ton of interest in

fiber then," she says. "I thought that by the time I got my doctorate degree everyone would be eating to get enough fiber." Not so. Most of us still average just one serving of whole grains a day. As a professor of food science and nutrition at the University of Minnesota-St. Paul, she finds she has to spread the word. "Many people have questions about whole grains and how to work them into their diets," she says.

To help answer them, we asked Slavin, along with several other experts, to provide a primer on successfully choosing and cooking with whole grains.



What are whole grains?

Whole grains are made of three parts: the bran (or outer layer), the germ, and the endosperm. "In order for a grain to be considered whole, it must contain all three components of the grain," says Nicola McKeown, PhD, a scientist who studies whole grains at Tufts University in Boston. Together the bran, germ, and endosperm contribute to whole grains' high levels of nutrients, nutty taste, and dense, chewy texture.

How can I eat more of them?

Eating three servings a day of whole grains is easy. For example, Slavin opts for simplicity when she's short on cook-

ing time, choosing oatmeal or a whole-grain cereal for breakfast (one serving) and a sandwich at lunch made with two slices of whole-grain bread (two servings). Here's how typical serving sizes of other whole-grain foods measure up:

- ½ cup cooked whole grains such as brown rice, bulgur, or quinoa
 - ½ cup cooked oatmeal
 - ½ cup cooked whole wheat pasta
 - 1 slice whole-grain bread, made with whole wheat, whole rye, or whole oats
 - 1 small muffin (weighing one ounce) made with whole wheat flour
 - 1 whole-grain tortilla
 - 1 cup whole-grain cereal flakes
- Slavin suggests substituting whole

grains for their refined counterparts. Whole-grain bread is a good starting point. "There are so many good breads available," she says. Another option: Substitute quick-cooking frozen brown rice for white.

What are other good whole-food sources of whole grains?

Cooking with whole grains is the surest way to know that you're obtaining whole grains' full spectrum of antioxidants, vitamins, and minerals. "It doesn't take much effort to find good grains," Slavin says. Once tucked away in high-end grocery stores or natural food stores, renewed interest has made

You can obtain three servings of whole grains from one to two meals.





Look beyond the front of the package to determine if a food is a good source of whole grains.

whole grains such as barley, bulgur, buckwheat, quinoa, amaranth, and spelt easy to find in the bulk section or natural foods aisle of your grocery store.

What are helpful cues that a packaged food contains whole grains?

The ingredients list is your best source of information. "Look for the word 'whole.' The ingredients list should say 'whole wheat' or 'whole oats' or 'whole rye,'" says Nadine R. Sahyoun, PhD, RD, an associate professor of nutrition and food science at the University of Maryland. If it doesn't say "whole," it may not be. Also, the list is in order—the closer a whole-grain ingredient is to the top, the more of it the food contains.

Two labels also may indicate foods that are good sources of whole grains. The Whole Grains Council developed a black and yellow

stamp that food manufacturers can use to tout products that contain at least half a serving or more of whole grain. You also can look for an FDA-approved health claim on breakfast cereals if at least half the cereal is made with whole grains. The claim states that a diet rich in whole-grain foods and low in saturated fat and cholesterol may help reduce the risk of heart disease.

"There are a lot of products out there that use tricky wording so you believe it's whole grain when it's not," says Cynthia Harri-man, director of food and nutrition strategies at the Whole Grains Council, a subsidiary of the nonprofit food advocacy group Oldways Preservation Trust. For example, consider a cracker that boasts "made with whole grains" on its packaging, but lists enriched flour as its first ingredient. The grain

may have been harvested whole, but it was later refined. Also, watch out for phrases like “stone ground” and “multi-grain.” These terms don’t necessarily mean the whole grain was left intact.

What is an enriched grain? Is it “whole?”

Check the ingredients label of many pastas, breads, and crackers, and you’ll see “enriched flour.” That means the grains used to make those products were refined by removing the bran and germ, which is where all the fiber and nutrients are. Refining makes grains less chewy, easier for manufacturers to use in packaged foods, and gives foods a longer shelf life. To make up for the lost nutrients, manufacturers add B vitamins and minerals, along with folic acid. “Whole grains aren’t enriched because they already have nutrients,” Slavin says.

What are the nutritional benefits of whole grains?

Whole-grain foods are nutrient dense, meaning they pack an array of nutrients into a small package that’s low in calories, a rich source of complex carbohydrates, and even contains small amounts of protein and fat. Antioxidants like vitamin E are found in whole grains in levels rivaling fruits and vegetables. They help protect against inflammation and damage caused by free radicals, which can lead to cancer. Phytosterols, another type of antioxidant found in whole grains, help reduce cholesterol, which keeps blood vessels free of buildup. Whole grains also contain magnesium, potassium, and folate.

Although fiber isn’t technically a nutrient (the body doesn’t absorb it), it gives whole grains much of their nutrition bragging rights. Fiber comes in two forms. Soluble fiber—found in oats and products made with oat flour, along with fruits, vegetables, and legumes—helps block the absorption of cholesterol, a risk factor for heart disease. Insoluble fiber—found in fruits, vegetables, and all whole grains—promotes digestive health by moving food through your system.

How do whole grains affect health?

In addition to digestive health, whole grains have also been linked to the following benefits:

1 **Preventing heart disease.** “People with high intake of grains have much less heart disease,” Slavin says. A meta-analysis published earlier this year in the journal *Nutrition, Metabolism and Cardiovascular Diseases* found that two-and-a-half servings of whole grains a day were associated with a 21 percent decrease in the risk of developing heart disease. People who ate mostly refined grains did not experience the same results, says study author Philip Mellen, MD, assistant professor at the

Wake Forest School of Medicine in Winston-Salem, North Carolina. Mellen attributes the benefit to synergy. “The combination of whole grains’ nutrients work together to reduce cardiovascular disease,” he says.

2 **Dodging diabetes.** When you eat foods that cause a rapid increase in blood sugar (glucose), the pancreas responds by producing insulin. Foods made with refined grains, such as white breads or baked goods, are processed into glucose more quickly than whole-grain foods. “Over time, you can develop insulin resistance, a precursor to type 2 diabetes,” McKeown says. “Foods that are rich in fiber blunt the insulin response, and people with a higher whole-grain intake have less risk of developing type 2 diabetes,” she says.

3 **Maintaining a healthy weight.**

“Whole-grain foods high in fiber delay hunger, so maybe you’ll eat less over the course of the day,” McKeown says. Because fiber is indigestible, it adds bulk to foods, which in turn slows down digestion. The result: You feel fuller longer after eating fiber-rich foods. Bonus: Maintaining a healthy weight can also help you avoid health problems such as heart disease and diabetes. ♡

Alisa Blackwood is a freelance writer based in Minnesota’s Twin Cities. She is a former editor and writer for Health and The Associated Press.

Find information and preparation suggestions for whole grains at CookingLight.com/features.

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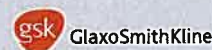
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