



Whole Grains are the Whole Package

These Natural Grains Pack a Nutritional Punch

-- By Leanne Beattie, Health & Fitness Writer

Health experts agree that we need to eat more whole grains for optimal health. But most people don't know what whole grains are. They have been shown to reduce the risks of heart disease, stroke, cancer, diabetes and obesity, but knowing the health benefits doesn't help you find them in your local grocery store or learn how to cook with them.

The Definition of Whole Grain

Every grain starts as a whole grain when it grows from the earth. This whole grain (actually the seed or kernel of the plant) has three parts: the bran, the germ and the endosperm.

1. The **bran** is the outer skin of the seed that contains antioxidants, B vitamins and fiber. (You may have heard of wheat bran or oat bran, which are available in stores and are common ingredients in certain cereals.)
2. The **germ** is the "baby" of the seed, which grows into a new plant when pollinated. It contains many vitamins, along with protein, minerals and healthy fats. (You may have seen jars of toasted wheat germ in stores, which can be added to a variety of foods to boost nutritional content.)
3. The **endosperm** is the seed's food supply that provides the energy needed for the young plant to grow. The largest portion of the seed contains carbohydrates, and smaller amounts of protein, vitamins and minerals.

So a whole grain is one that contains all three parts of the kernel.

When grains are processed and refined (the most common practice for making breads, cereals, pastas and flours), the bran and germ are removed, leaving behind the white endosperm. During this process, grains become less nutritious, losing 25% of their original protein content and 17 other essential nutrients. While manufacturers then "enrich" the flour with some vitamins and minerals, a naturally whole grain is still a healthier choice. Compared to refined grains (white bread, white rice, white flour), whole grains pack more protein, fiber, vitamins (B vitamins and vitamin E), and minerals (magnesium and iron), as well as some antioxidants not found in other foods.

Types of Whole Grains

Common types of whole grains include:

- Wild rice, which is actually a seed
- Brown rice
- Whole wheat
- Oatmeal and whole oats
- Barley

- Whole rye
- Bulgur
- Popcorn

Less common types include: amaranth, millet, quinoa, sorghum and triticale (a hybrid of rye and wheat).

Adding Whole Grains to Your Diet

New dietary guidelines established by the U.S. government in 2005 recommend that half of your daily grains servings should be whole grains. That's at least three servings of whole grains per day.

The easiest way to increase the amount of whole grains you consume is to **substitute** some processed grain products with their whole grain equivalent. This is as simple as having a slice of whole grain toast in the morning instead of using white bread, or using whole wheat flour in pancakes instead of white flour. If you're making homemade soup, toss in a handful of brown rice or barley for added fiber. Make your dessert a healthy one, such as oatmeal cookies, and you won't have to feel guilty—you're eating whole grains!

While at the grocery store, be extra careful **reading food labels**. Words such as multigrain, stone-ground cracked wheat or seven grain don't necessarily mean the product is made with whole grains. And color doesn't mean a whole grain either—some brown breads are simply white bread with added caramel coloring. The [Grain Council](#) created an official packaging symbol in 2005 called the Whole Grain Stamp to help consumers find whole grain products. But until use of the stamp is used widespread, look for the word "whole" near the top of the ingredients list. (For example, the first ingredient of whole grain bread or cracker should be "whole wheat flour".)

Besides switching to whole wheat bread, you can easily add **whole wheat pasta** and brown rice to the menu to increase your consumption of whole grains. Whole wheat pasta comes in all shapes and sizes and appears to be a darker beige color than regular pasta. You can find it in the pasta section of both natural food and regular grocery stores. If you're not going to eat it right away, you can store an unopened package for six to eight months in a cool, dry cupboard. Whole wheat pasta is prepared the same way as regular pasta (but usually takes a couple extra minutes to cook). To ensure that the pasta isn't mushy, rinse it off under cool water to stop the cooking process. One cup of cooked whole wheat pasta has about 200 calories and 4 grams of fiber.

Brown rice is healthier than white rice and has significantly more nutrients. The refining process that transforms brown rice into polished, white rice strips away most of the vitamins and minerals and completely removes all of the fiber and essential fatty acids—basically leaving only the starch behind. White rice must be "enriched" with vitamins B1, B3 and iron, but at least eleven lost nutrients are not replaced at all. Brown rice is a concentrated source of fiber, which speeds up the removal of cancer-causing

substances from our bodies. It is also an excellent source of selenium, which has been shown to reduce the risk of colon cancer. You can find quick-cooking "instant" brown rice, which are parboiled to speed cooking time. Because of this pre-cooked process, they are slightly lower in nutrients than regular, slow-cooking brown rice, which can take up to an hour to cook. However, look for microwavable pouches of brown rice on the shelf and in the freezer section. These are still high in nutrients and cook in minutes!

Studies Prove the Benefits of Whole Grains

A 2006 study by Tufts University showed that people who consume the most whole grains are 42 percent less likely to develop diabetes. Researchers from the Harvard School of Public Health found that people with a diet high in whole grains showed a lower risk of both diabetes and heart disease. In 1997, the FDA authorized the claim that the soluble fiber in oats reduced the risk of coronary heart disease; this approval was extended in 2005 to include the fiber in barley as well.

Whether you want to reduce your risk of disease or you simply want to eat fewer processed foods, adding whole grains to your diet makes sense. So the next time you sit down to watch a movie, bring along a bowl of popcorn and snack with a clear conscious. Whole grains couldn't be tastier!