Penn State Extension

Creating Health & Nutrition Fact Sheets

Tip

Every whole grain in your diet helps, so eat one at every meal!

verybody's talking about whole grains. The 2010 Dietary Guidelines recommend that Americans eat half their grain intake as whole grains. For everyone age 9 and up, this means eating 3–5 servings or more of whole grains every day.

What Is a Whole Grain?

A whole grain contains all three parts of a kernel—the bran, the endosperm, and the germ. The bran is the outside coat and contains B vitamins and fiber. The germ is the embryo, which, if fertilized, will sprout to make a new plant and contains B vitamins, protein, and healthful fats. The endosperm is the germ's food supply and is mainly starchy carbohydrate and some protein. Most grains that are milled, such as wheat, have the germ and the bran removed, and the remaining endosperm is used to make the flour.

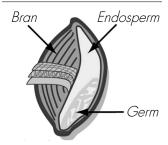
Whole Grains— Healthy Grains

What Are Examples?

Whole wheat, corn, brown rice, wild rice, farro, oats, barley, quinoa, sorghum, spelt, rye, bulgur, millet, and popcorn are whole grains. Whole grains can be whole, cracked, ground, rolled, or flaked kernels, but the mix of endosperm, germ, and bran must match that of the intact grain.

Why Eat These?

Whole grains supply B vitamins, protein, fiber, magnesium, iron, phosphorus, and vitamin E (in the germ). The fiber is mostly insoluble and is important for keeping you regular. Current scientific evidence shows



Graphic courtesy of Bob's Red Mill

that whole grains play an important role in lowering the risk of stroke, heart disease, type 2 diabetes, obesity, and some digestive system cancers, and helps with weight control. It is important to note that fiber varies from grain to grain. For example, rice has 3.5 percent fiber, while barley and bulgur have over 15 percent. Both fiber and whole grains have been shown to have health benefits, but they are not interchangeable. Check the Nutrition Facts label to find out whether the product is a whole grain and how much fiber it contains.

What Is a Serving of Whole Grain?

The United States Department of Agriculture (USDA) defines a grain serving as a grain product containing at

least 16 grams of flour. To be a whole-grain serving, the product you eat has to have at least 16 grams of a whole grain. The Dietary Guidelines recommend that Americans consume at least 3 servings of whole grain foods daily, which adds up to 48 grams of whole grain. You might get this by eating three 1-ounce equivalents of whole grain food labeled as 100 percent whole grain or by choosing six 1-ounce equivalents made with a mix of whole and refined grains. A slice of bread or one cup of ready-to-eat breakfast cereal usually weighs an ounce. Whole arain foods may contain different amounts of whole grain ingredients, but they can all count toward getting the recommended number of whole grain servings each day.

How Do I Find These in the Supermarket?

It's not easy. Current food labeling can make it difficult to find the whole

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grain in a food product. Whole grain does not appear on the Nutrition Facts panel, and the ingredient list does not clearly indicate the amount of whole grain present in a food. Luckily, there are tools you can use to help you choose whole grains at the supermarket. First, look at the ingredient label. If the first ingredient says "whole X" (e.g., whole wheat flour, whole oats,

whole rye), then that product is more likely to be a whole grain product. However, this is not quaranteed. If the whole grain appears farther down the list, the more likely the product does not have enough whole grain to make a USDA serving. Second, look for the Whole Grain Stamp on the package. The Whole Grain Stamp appeared on grocery

| Food | Source | What I buy | What I plan to buy |
|-------|--------------|-------------|-----------------------|
| Pasta | Whole grains | White pasta | Whole wheat pasta |

store shelves in mid-2005 and is seen on many products today. This stamp makes it easy to find products with whole grains. The 100 percent stamp lets you know that a food contains a full serving (16 grams) or more of whole grains in each labeled serving and that all of the grain is whole grain. There is also a Basic Whole Grain Stamp that you might see on a food product label. This stamp signifies that product contains at least 8 grams, or half a serving, of whole grain per labeled serving but may also contain some refined grain. Third, you may find food companies stating the amount of whole grains in a serving of their product or using a whole grain symbol to illustrate foods with whole grains. This will be on the front or top of boxes where you can see it as you shop. This is becoming more common on cereal packages.

Examine Your Choices

Our most common sources

crackers. Take a look at

pantry. How many would

the packages in your

of whole arains are

breads, cereals, and

6g or more EAT 48g OR MORE OF WHOLE GRAINS DAILY

qualify as whole grains? If not many, try to replace some of those refined grains with whole grains. Try substituting white rice or pasta with brown rice, wild rice, or whole wheat pasta. Experiment with the ancient grains that are making a comeback. These include quinoa, farro, bulgur, millet, spelt, and sorghum. You will find that whole grains are delicious as well as healthy!

Prepared by Nancy Routch, Extension Educator, Cumberland county.

Sources: Whole Grain Council (www .wholegraincouncil.org); General Mills Bell Institute of Health and Nutrition; Tufts Health & Nutrition Letter: "Your Complete Guide to Whole Grains" (February 2011).

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Fiesta Quinoa Salad

Serving size: makes 6 servings

Ingredients

1 cup quinoa

2 cups vegetable broth

2 ears corn, roasted and cut off cob

1 red bell pepper, roasted and chopped

1 15-ounce can black beans, rinsed and drained

3 scallions, sliced

1/2 cup chopped cilantro

juice of 3 limes

2 tablespoons extra virgin olive oil

1 teaspoon ground cumin

1/2 teaspoon salt

1/4 teaspoon fresh ground black pepper

1/8 teaspoon cayenne pepper

1. Put quinoa and broth in a medium saucepan. Bring to a boil, cover, and simmer for 15 minutes

2. In a large bowl, mix together quinoa, corn, pepper, beans, scallions, and cilantro.

3. In a small bowl, whisk together lime juice, olive oil, and seasonings. Pour over quinoa mixture. Cover and chill for at least 30 minutes to let flavors set.

Per serving: 240 calories; 7 g total fat (1 g saturated fat); 460 mg sodium; 37 g carbohydrate; 6 g fiber; 9 g protein.

Recipe courtesy of Oldways and the Whole Grains Council.