

# Dietary Fiber: Essential for a Healthy Diet

**Dietary fiber offers many health benefits. Here's how to include more in your diet.**

Eat more fiber. You've probably heard it before. But do you know why fiber is so good for your health?

Dietary fiber — found mainly in fruits, vegetables, whole grains and legumes — is probably best known for its ability to prevent or relieve constipation. But fiber can provide other health benefits as well, such as lowering your risk of diabetes and heart disease.

Selecting tasty foods that provide fiber isn't difficult. Find out how much dietary fiber you need, the foods that contain it and how to add them to meals and snacks.

## What is dietary fiber?

Dietary fiber, also known as roughage or bulk, includes all parts of plant foods that your body can't digest or absorb. Unlike other food components such as fats, proteins or carbohydrates — which your body breaks down and absorbs — fiber isn't digested by your body. Therefore, it passes relatively intact through your stomach, small intestine, colon and out of your body. It might seem like fiber doesn't do much, but it has several important roles in maintaining health.

Fiber is commonly classified into two categories: those that don't dissolve in water (insoluble fiber) and those that do (soluble fiber).

- **Insoluble fiber.** This type of fiber promotes the movement of material through your digestive system and increases stool bulk, so it can be of benefit to those who struggle with constipation or irregular stools. Whole-wheat flour, wheat bran, nuts and many vegetables are good sources of insoluble fiber.
- **Soluble fiber.** This type of fiber dissolves in water to form a gel-like material. It can help lower blood cholesterol and glucose levels. Soluble fiber is found in oats, peas, beans, apples, citrus fruits, carrots, barley and psyllium.

The amount of each type of fiber varies in different plant foods. To receive the greatest health benefit, eat a wide variety of high-fiber foods.

## Benefits of a high-fiber diet

A high-fiber diet has many benefits, which include:

- **Normalizes bowel movements.** Dietary fiber increases the weight and size of your stool and softens it. A bulky stool is easier to pass, decreasing your chance of constipation. If you have loose, watery stools, fiber may also help to solidify the stool because it absorbs water and adds bulk to stool. For some, fiber may provide relief from irritable bowel syndrome.
- **Helps maintain bowel integrity and health.** A high-fiber diet may lower your risk of developing hemorrhoids, and small pouches in your colon (diverticular disease). Some fiber is fermented in the colon. Researchers are looking at how this may play a role in preventing diseases of the colon.
- **Lowers blood cholesterol levels.** Soluble fiber found in beans, oats, flaxseed and oat bran may help lower total blood cholesterol levels by lowering low-density lipoprotein, or "bad," cholesterol levels. Epidemiologic studies have shown that increased fiber in the diet can reduce blood pressure and inflammation, which is also protective to heart health.
- **Helps control blood sugar levels.** Fiber, particularly soluble fiber, can slow the absorption of sugar, which for people with diabetes can help improve blood sugar levels. A diet that includes insoluble fiber has been associated with a reduced risk of developing type 2 diabetes.
- **Aids in weight loss.** High-fiber foods generally require more chewing time, which gives your body time to register when you're no longer hungry, so you're less likely to overeat. Also, a high-fiber diet tends to make a meal feel larger and linger longer, so you stay full for a greater amount of time. And high-fiber diets also tend to be less "energy dense," which means they have fewer calories for the same volume of food.
- **Uncertain effect on colorectal cancer.** Evidence that dietary fiber reduces colorectal cancer is mixed — some studies show benefit, some show nothing and some suggest increased risk. If you're concerned about preventing colorectal cancer, adopt or stick with a colon cancer screening regimen. Regular testing for and removal of colon polyps can prevent colon cancer.

## Your best fiber choices

If you or your child aren't getting enough fiber each day, you may need to boost your intake. Good choices include:

- **Grains and whole-grain products** (oatmeal, shredded wheat, whole-wheat cereal, bran cereal, puffed wheat, brown rice, 100% whole-wheat bread, cracked wheat bread, rye bread, whole-wheat pasta)
- **Fruits** (best: unpeeled apples, apricots, berries, cherries, figs, grapefruit, oranges, unpeeled peaches, unpeeled pears, pineapple, plums, prunes, dried fruit)
- **Vegetables** (most every vegetable; unpeeled if possible)
- **Beans, peas and other legumes** (such as lentils)
- **Nuts and seeds**
- **Popcorn** (leave off the butter!)

Refined or processed foods — such as canned fruits and vegetables and pulp-free juice, white bread and pasta, white rice, and non-whole-grain cereals — are lower in fiber content. The grain-refining process removes the outer coat (bran) from the grain, which lowers its fiber content. Similarly, removing the skin from fruits and vegetables decreases their fiber content.

Whole foods rather than fiber supplements are generally better. Fiber supplements — such as Metamucil, Citrucel and FiberCon — don't provide the vitamins, minerals and other beneficial nutrients that high-fiber foods do. However, some people may still need a fiber supplement if dietary changes aren't sufficient, or if they have certain medical conditions such as constipation, diarrhea or irritable bowel syndrome. Always check with your child's doctor if you feel (s)he needs to take fiber supplements.

## Tips for fitting in fiber

Need ideas for high-fiber meals and snacks? Try these suggestions:

- **Jump-start your day.** For breakfast choose a high-fiber breakfast cereal — 5 or more grams of fiber a serving. Opt for cereals with "bran" or "fiber" in the name. Or add a few tablespoons of unprocessed wheat bran to your favorite cereal.
- **Switch to whole grains.** Look for breads that list whole wheat, whole-wheat flour or another whole grain as the first ingredient on the label. Look for a brand with at least 2 grams of dietary fiber a serving. Experiment with brown rice, wild rice, barley, whole-wheat pasta and bulgur.

- **Bulk up your baked goods.** Substitute whole-grain flour for half or all of the white flour when baking. Whole-grain flour is heavier than white flour. In yeast breads, use a bit more yeast or let the dough rise longer. When using baking powder, increase it by 1 teaspoon for every 3 cups of whole-grain flour. Try adding crushed bran cereal or unprocessed wheat bran to muffins, cakes and cookies.
- **Mix it up.** Add pre-cut fresh or frozen vegetables to soups and sauces. For example, mix chopped frozen broccoli into prepared spaghetti sauce or toss fresh baby carrots into stews.
- **Get a leg up with legumes.** Eat more beans, peas and lentils. Add kidney beans to canned soup or a green salad. Or make nachos with refried black beans, lots of fresh veggies, whole-wheat tortilla chips and salsa.
- **Eat fruit at every meal.** Apples, bananas, oranges, pears and berries are good sources of fiber.
- **Make snacks count.** Fresh and dried fruit, raw vegetables, and low-fat popcorn and whole-grain crackers are all good choices. An occasional handful of nuts is also a healthy, high-fiber snack.

High-fiber foods are good for your health. But adding too much fiber too quickly can promote intestinal gas, abdominal bloating and cramping. Increase fiber in your diet gradually over a period of a few weeks. This allows the natural bacteria in your digestive system to adjust to the change. Also, drink plenty of water. Fiber works best when it absorbs water, making your stool soft and bulky.