

Health Facts *for you*

Fiber

An important part of a healthy diet is eating fiber-rich foods. This handout will explain what fiber is, where it's found, and how to increase the amount of fiber in your diet.

What is fiber?

Fiber is a part of plant food. There are two types of fiber:

- Insoluble fibers or “roughage,” are found in fruit and vegetable skins and in the bran layer of whole wheat.
- Soluble fibers form a gel in water. Good sources include citrus fruit, barley, oatmeal, oat bran, and dried peas and beans.

What does fiber do?

Insoluble fibers absorb water in the colon that softens and increases the bulk of the stool. This action helps relieve constipation and helps prevent colon disease and hemorrhoids.

Water-soluble fiber can help you lower your blood cholesterol and glucose (sugar) levels. Fruits, dried peas and beans, barley and rolled oats and oat bran are good foods to add to a low cholesterol diet, and can help people with diabetes improve how well they manage their condition.

All types of fiber can help you lose weight. Fiber is not digested, so it does not add extra calories to your diet. The added bulk helps you feel full with less food. Since foods with fiber take longer to chew, it also helps you slow the pace of your meals.

Can I eat too much fiber?

Fiber is just one part of a healthy diet. A balanced diet is always needed for good nutrition. Fiber can combine with certain vitamins and minerals and then they do not get absorbed in your body. If you eat a balanced diet, this effect is not great enough to cause concern. Even vegetarians, whose diets are very high in fiber, have normal vitamin and mineral levels.

Do I need to take a fiber supplement?

There is no need for you to take fiber pills or powders. Eating a variety of fiber foods should provide enough fiber and at the same time supply you with vitamins and minerals.

How should I increase the fiber of my diet?

Each day eat at least 5 servings of fresh or cooked vegetables and fruits and at least 2 servings of whole grain products. The goal for daily fiber intake is 25-35 grams.

It's best to slowly increase the amount of fiber in your diet over many weeks. This prevents problems with stomachaches, bloating, gas, and diarrhea.

Fiber and water both work to help in bowel function. Be sure to drink eight to ten (8 ounce) glasses of fluid every day. Without enough fluid, a high fiber diet can be constipating since fiber absorbs large amounts of water.

Compare these two meal plans. Which one is most like your diet?

Menu low in fiber

Breakfast

- Orange juice
- Scrambled eggs
- White toast
- Margarine
- Milk

Lunch

- Tomato soup
- ½ tuna salad sandwich on white bread
- Fudge brownie
- Milk

Dinner

- Baked chicken
- Buttered noodles
- Green beans
- Butterscotch pudding
- Milk

Fruits

Fruits are grouped by the amount of fiber in a serving. The list refers to fresh fruits unless noted. The serving size is ½ cup unless noted.

High Fiber Fruits

Over 3 grams fiber per serving

Prunes, 5 dried	3.1
Raisins	3.2
Apple, 1 large unpeeled	3.8
Dates, 3 dried	4.3
Pear, 1 unpeeled	4.7
Blackberries	4.9

Menu high in fiber

Breakfast

- Fresh whole orange
- Scrambled eggs
- Oat bran muffin
- Margarine
- Milk

Lunch

- Minestrone soup
- ½ tuna salad sandwich on wheat bread
- Fresh strawberries
- Milk

Dinner

- Chicken/broccoli stir-fry on brown rice
- Fresh fruit salad
- Apple crisp
- Milk

2.1 - 3.0 grams fiber per serving

Blueberries	2.1
Orange, 1 medium	2.2
Apple, 1g, peeled	2.6
Raspberries	2.6

Low Fiber Fruits

1.1 - 2.0 grams fiber per serving

Apricots, 4 halves Fresh, dried or canned	1.3
Strawberries	1.4
Peach, peeled	1.4
Cherries, sweet	1.5
Mango	1.5
Applesauce, cooked	1.5
Tangerine, 1 medium	1.5
Nectarine, 2-1/2"	1.6
Pears, 2 peeled halves	1.7
Banana (8-3/4" long)	1.9

Under 1 gram fiber per serving

Fruit juices	.2
Mandarin oranges	.3
Watermelon	.3
Grapefruit sections	.4
Olives, 5 green or black	.4
Friar & prune plum	.5
Honeydew melon	.5
Grapes, green or red	.5
Cantaloupe	.6
Pineapple	.7
Cherries, sour canned	.8
Fruit cocktail, canned	.9

Vegetables

Vegetables are grouped by the amount of fiber in a serving. A serving size is ½ cup of fresh vegetable unless otherwise noted.

Note: The amount of fiber in a cooked versus fresh vegetable (e.g. mushrooms) is not always the same. There is often a greater volume of vegetable in a ½ cup cooked portion compared to a ½ cup raw portion. Therefore, there is more fiber in cooked mushrooms or spinach compared to ½ cup raw.

High Fiber Vegetables

Over 3 grams fiber per serving

Brussels sprouts	3.1
Pumpkin, canned	3.5
Potato with skin, 1 large	4.7
Lima beans, cooked	5.1
Pork and beans, cooked	5.6
Kidney beans, cooked	6.6

2.1 - 3.0 grams fiber per serving

Mushrooms, canned	2.0
Carrot, 1 large	2.1
Turnip greens, cooked	2.1
Rhubarb, cooked	2.2
Spinach, cooked	2.3
Spinach, raw, 2 cups	2.3
Broccoli	2.7
Green peas	2.8

Low Fiber Vegetables

1.1 - 2.0 grams fiber per serving

Peppers	1.1
Celery	1.1
Onions	1.3
Green beans	1.4
Cauliflower	1.4
Asparagus	1.8
Sweet potatoes, Peeled	1.9

Under 1 gram fiber per serving

Mushrooms, fresh	.3
Lettuce, iceberg/leaf	.4
Chinese cabbage	.4
Cucumber, peeled	.5
Radish	.6
Zucchini	.7
Cabbage, raw	.7
Bean sprouts	.8
Tomato, ½ c. or 2 ½ " fresh	.8
Potatoes, peeled	.9

Bread, Cereal, Rice, and Pasta

The Nutrition Facts on food labels will list fiber content.

High Fiber Grains

Bran, includes oat and wheat bran
Brown rice
Buckwheat
Oatmeal
Foods made with whole oats
Peanut flour

Rye flour
Soybean flour
Wild rice
Whole wheat flour
Breads labeled "healthy" or mixed grain
breads

Cereals

Read food labels and choose high fiber cereals. Cereals that contain 5 grams of fiber or more are high fiber cereals.

Try this muffin recipe for a tasty way to add fiber.

Bran Muffins

5 tsp. baking soda
1 qt. Buttermilk
5 cups flour (3 whole wheat, 2 white)*
2 cups sugar
1 package (15 oz.) Raisin Bran cereal

2 tsp. salt
4 eggs slightly beaten, or 1 cup egg
substitute
1 cup oil

*1/2 cup wheat germ may be substituted for ½ cup whole-wheat flour.

Dissolve baking soda in buttermilk. Mix together remaining dry ingredients. Add eggs, oil, and buttermilk mixture and stir. Fill greased muffin tins about two thirds full. Bake at 400 degrees for 18-20 minutes. Makes 48 muffins.

One serving (1 muffin) = 174 calories, 26 g carbohydrate, 4 g protein, 6 g fat, 4 g fiber
(For diabetics: 2 bread exchanges, 1 fat exchange)

More Information

Fiber can be grouped as either soluble or insoluble. Natural fibers in food combine both groups, so plant foods in most cases contain a mixture of both soluble and insoluble fiber.

Insoluble fibers are cellulose, hemicellulose and lignin. Insoluble fibers are highest in foods such as whole grain breads and cereals, vegetables and seeds.

Soluble fibers are in pectins, gums, and mucilages. The soluble fibers are highest in foods such as fruit, barley, oatmeal, oat bran and legumes. Although these foods are high in soluble fiber, no food is more than about 40% soluble fiber.

Appearance, coarse texture, or color does not tell the fiber content in foods. Some grain products, such as bread, have fibers that appear light in color and very fine. Read the food label to show exact fiber content.

If you have more questions please contact UW Health at one of the phone numbers listed below.

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