

## Fiber Facts

Dietary fiber is plant material that is normally left undigested after passing through the body's digestive system. Food sources of dietary fiber are often classified according to whether they contain predominantly soluble or insoluble fiber. Plant foods usually contain a combination of both types of fiber in varying degrees, according to the plant's characteristics.

- Insoluble fiber, found in certain plant foods, particularly whole grains, absorbs water throughout the digestive system, helping to promote regular, healthy bowel movements by binding with water and forming a gel, which allows the body's waste to form into soft and bulky stools which helps to efficiently rid the body of toxins. Wheat bran is a good source of insoluble fiber. While we cannot digest the insoluble fiber in wheat bran, it is partially digested by beneficial bacteria in the gut, helping to ferment them into short-chain fatty acids that nourish our intestines.
- Soluble fiber, found in all plant foods, dissolves in water to form a gel-like substance. It is readily fermented in the colon and includes other plant components such as lignans, oligo- and polysaccharides, resistant starches, and inulin. Soluble fiber also promotes soft and bulky stools, delays gastric emptying, and binds with bile acids, helping to lower cholesterol levels. Foods that are considered good sources of soluble fiber include: oat bran, guar gum, dried beans and peas, apples with skin, seaweeds, and flaxseeds.

Lignans, a soluble fiber found in flax seeds, wheat, and legumes, are known to possess anticancer, antibacterial, and antiviral properties. They bind to estrogen receptors in the body, interfering with cancer promotion and helping to regulate estrogen levels. Soluble fiber also promotes a delay in the absorption of glucose and increases insulin sensitivity, resulting in improved glucose metabolism, ultimately helping to lower the risk of type 2 diabetes.

Inulin is another soluble fiber that is not digested in the upper GI tract. Low in calories, inulin stimulates the growth of beneficial bacteria, and does not lead to a rise in serum glucose or stimulate insulin secretion. Inulin has been used to improve the taste of low fat foods. Fructo-oligosaccharides (FOS) is one of the most common examples of inulin. FOS has a sweet, pleasant flavor and can be used to fortify foods with fiber, to improve the flavor of low calorie foods, while improving the texture of lower fat foods. Because these fibers stimulate the growth of beneficial bacteria, they are also called prebiotics. Besides FOS, good sources of inulin include: artichokes, garlic, leeks, onions, chicory, tofu, and other soy products, and grains such as barley, flax, oat, and wheat.

All fruits and vegetables contain fiber, but some have more than others. The list below focuses on the more important fiber sources. If there are less than 2 grams of fiber in a typical serving of a fruit or vegetable, it is not listed. At least 20-35 gm. of fiber is suggested each day by the ADA (American Dietetic Association).

### BEANS

	Fiber (g)/serving
Amy's Black Bean Chili, 1 cup	13.0
Nile Spice Lentil Soup, (dehydrated) 1 container	11.0
Health Valley Vegetarian Santa Fe White Bean Chili, 1 cup	9.0
Split peas, ½ cup cooked	8.0
Lentils, ½ cup cooked	7.8
Black beans, ½ cup cooked	7.5
Health Valley Minestrone Soup, 1 cup	7.0
Progresso 3 Bean Chili with Beef, 1 cup	7.0
Kidney beans, ½ cup cooked	6.6
Lima beans, ½ cup cooked	6.6
Amy's Indian Palak Paneer, 1 container (frozen)	6.0
Pinto beans, ½ cup cooked	5.5
Progresso Lentil Soup, 1 cup	5.0
Gardenburger, 1 patty (fiber depends on variety chosen)	4-5
Edamame, ½ cup cooked	3.8
Green peas, ½ cup, cooked	3.7
Hummus, ¼ cup	3.7

### BREADS

La Tortilla Factory Smart and Delicious High Fiber Tortillas, 1	12
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La Tortilla Factory Smart and Delicious Whole Wheat Tortillas, 1	8
Mission Carb Balance Whole Wheat or plain Whole Wheat Tortillas, 1	8
Orowheat High Fiber Bread, 1	6
Ezekiel Sprouted Whole Grain Tortillas, 1 slice	5
Great Harvest Caraway Rye, 1 slice	5
Ezekiel Sprouted Whole Grain Breads, 1 slice	3

### GRAINS AND PASTA

Kashi 7 Whole Grain Pilaf, ½ cup	6
Coconut flour, 2 Tbsp	6
Bulgur ½ c. cooked	4
Macaroni, whole wheat, 1 c. cooked	4
Barley ½ c. cooked	3
Quinoa, ½ cup cooked	2.6
Buckwheat, ½ cup cooked	2.4
Brown rice ½ cup	2.0

### CEREALS

Kashi 7 Whole Grain Nuggets, ½ cup	7
Wheatena, 1 cup, cooked	7
Post Grape Nuts, ½ cup	7
Post Shredded Wheat, 2 biscuits	6
Quaker Oat Bran Cereal, ½ c., cooked	6
Arrowhead Mills Bran Flakes, 1 cup	4
Barbara's Breakfast O's, 1 ¼ cups	3
Oats, steel cut, 3 tbsp, dry	3
Oats, ½ cup, cooked	2

### CRACKERS, NUTS and SEEDS, and SNACK FOODS

Chia seeds, 1 Tbsp	6.8
WASA Lite Rye Crispbread, 2 crackers	6
WASA Fiber Crispbread, 2 crackers	4
RYVITA Sesame Rye, or Pumpkin Seeds and Oats, 2 crackers	4
Whole Wheat Matzos, 1	4
Flax seeds, 2 Tbsp., ground	4
Coconut (unsweetened), grated, 3Tbsp	2.4
Sesame seeds, 2 Tbsp	2.2
Lundberg Organic Sesame Tamari Rice Cakes, 1	2

### FRUITS

Raspberries 1 cup	8.0
Blackberries, 1 cup	7.6
Pear 1 med	5.5
Strawberries, 1 ½ cups	5.0
Apricots, dried, ½ cup	4.8
Kiwi, 2 medium	4.5
Blueberries, 1 cup	3.5
Prunes, dried, 5	3.4
Grapefruit, 1 whole	3.2
Apple, with skin, 1 med.	3
Figs, fresh, 2	3
Banana, 1 med.	3
Orange, 1 med.	3
Peach, 1 med.	2.2
Cantaloupe, 2 cups	2
Cherries, 15	2

### VEGETABLES

Artichoke, 1 med.	7
Acorn squash, ½ cup, baked	4.5
Brussels sprouts, 5 sprouts	3.8
Butternut squash, ½ cup, baked	3.3
Avocado, ¼ cup	2.5
Jicama, ½ cup raw	3.2
Potato, baked with skin, 1 small	3
Collards, ½ cup, cooked	2.8
Parsnip, ½ cup, cooked	2.8

Green beans, 1 cup, raw	2.7
Broccoli, ½ cup cooked	2.6
Yam, ½ cup, cooked	2.6
Kale, 1 cup, raw	2.6
Broccoli, 1 cup chopped, raw	2.4
Carrots, ½ cup, cooked	2.3
Cabbage, 1 cup chopped, raw	2.2
Spaghetti squash, 1 cup, baked	2.2
Sweet potato, baked, 1 small	2
Carrots, 1 whole, raw	2
Corn, ½ cup	2
Green beans, 1/2 c. cooked	2
Lettuce, romaine, 2 cup	2

The following are sample menu plans for incorporating more fiber in the diet

**Breakfast:**

Kasha Whole grain Nuggets, ½ cup	7
¼ cup nonfat milk, yogurt, or alternative milk	
½ cup strawberries	1.7

**Snack**

Hummus	3.7
Raw jicama, ¼ cup	1.6
Raw carrots, 1	2

**Lunch**

Ezekiel Sprouted Whole Grain Bread, 1 slice	3
Turkey breast	
Progresso lentil soup, 1 cup	5
Fresh apple with skin	3

**Snack**

Organic nonfat or low fat plain yogurt	
Flax seeds, ground, 1 Tbsp	2
½ cup blueberries	1.7
½ cup raspberries	4

**Dinner**

3 oz baked salmon	
½ cup baked acorn squash	4.5
½ cup steamed broccoli	2.6
Tossed green salad with vinaigrette dressing and:	
Romaine lettuce, 1 cup	1
½ cup raw cabbage	1.1
¼ cup edamame	1.9
Cherry tomatoes	1.8
2 fresh figs or 1 orange	3.0

Total 44

**Breakfast**

Shredded wheat, 2 biscuits	6
¼ cup nonfat milk, yogurt, or alternative milk	
½ banana	1.5

**Snack**

Fresh peach	2.2
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**Lunch**

Large green salad with vinaigrette dressing and:	
Romaine lettuce, 2 cups	2
raw broccoli, ½ cup	1.2
¼ cup kidney beans	3.3
Carrot, ½	1
Cauliflower, raw, ½ cup	1
Hardboiled egg, 1	
Fresh fruit salad raw	
Cantaloupe, 1 cup	1
Strawberries, 1 ½ cups	5

**Snack**

RYVITA, sesame rye, 2 crackers	4
Almond butter, 1 Tbsp	

**Dinner**

Oven roasted chicken breast	
Baked yam, ½ cup	2.6
Brussels sprouts, roasted, 5	3.8
Fresh pear	<u>5.5</u>
Total	40