

High Fiber Food Chart

Directions: Combine one portion of each food type to make a complete meal. The bulk of every meal should be vegetables (50 to 60% of your plate). Dark green leafy vegetables should be used most often. Protein from animal sources should preferably be raised on a wild diet (not farm raised). Fats should be minimally cooked or kept raw. Ideally, add fats after cooking your food. People with insulin resistance should limit themselves to one fruit per day, primarily berries. Fresh herbs and spices are unlimited. Record daily fiber intake per day. RDA is 25-30 grams of fiber for women and 30 to 35 grams of fiber for men. More than 50 grams of fiber per day is recommended to reduce cholesterol, don't be discouraged if this is not achieved with diet alone. To be avoided: White food, which includes enriched wheat, white bread, rice, pasta, sugar, milk, cheese, & potatoes. For beverages: drink water, soda water, tea, herbal tea, and juice (half juice/half water), one cup coffee per day is acceptable. Use stevia or Xylitol as a sweetener.

Vegetables	Proteins	Fats	Carbohydrates
1 ½ to 2 ½ cups	4-12 oz (palm size)	1 ½ (oils) - 8 Tbs (solids)	1/8 to 1 cup (fist size)
Asparagus-4g	Almonds	Almonds- #12, 2.5	Amaranth-6.7
Artichoke-6.4	Beef	Almond Milk	Barley, Pearled-0.8
Beets-3.6	Buffalo	Avocado-1 med 4.7	Black Beans-8.0
Bell Pepper-1.7	Chicken: white meat,	Baba Ganoosh	Brown Rice-4.5
Bok Choy-3.2	no skin	Borage Oil	Buckwheat
Broccoli-5.2	Clams	Brazil Nuts #6, 3.0	Bulgur wheat
Brussel sprouts-6.4	Cottage Cheese	Butter (ORGANIC)	Colorado Beans
Cabbage-3.4	Crab	Coconut*	Corn-3.2
Carrots-2.0	Eggs	Darions	Flax Seeds/Meal- 1 Tb=3g
Cauliflower-2.3	Haddock	Flax Oil	Faro
Celery-1.6	Halibut	Feta Cheese	Fruit: Apple 5.0, Banana 3.2, Blackberry
Chayote-0.7	Lamb	Hemp Oil	9.9, Blueberries 4.3, Cherries 3.0 Figs 15,
Chicory	Mahi Mahi	Hummus	Guave 10.6, Kiwi 3.0, Mango 3.1, Papa
Collards cooked-4.8	Mussel	Olive Oil*	4.0, Peach 2.7, Pear 6.8, Rasberry 5.2,
Cucumbers-1.0	Ostrich	Olives- 3.0	Strawberry 3.2, Tomato 1.0
Dandelion Greens	Salmon	Pecans-1/4 cu 1.8	Kamut
Eggplant-2.4	Scallops	Pine Nuts	Kidney Beans-19.4
Fennel	Shrimp	Pistachios-1/4 cu 3.4	Lentils-6.8
Kale (raw)-3.2	Soybeans-5.2	Pumpkin Seeds	Lima Beans-7.4
Kohlrabi	Tilapia	Safflower*	Millet
Leeks	Tuna	Soybeans-5.2	Oat Groats/Oats Steel-Cut-8.0
Lettuce: Arugula,	Turkey: white meat,	Soymilk (Unsweetened)	Peas, split green-28.0
Celtuce, Endive,	no skin	Udo's Oil	Peanuts-1/4 cu 2.9
Rapini, Romaine-0.5	Tofu-1.2	Walnut Oil	Pinto Beans-9.6
Mustard Greens-4.1	Wild Pig	Walnuts-1/4 cu 1.6	Popcorn-1/4 cu un-popped 6.0
Onions-3.2			Quinoa- Red,Black or White-4.6
Parsley		*The only oils to be used	Rye-bread, cracker
Spinach (raw)-1.2		in cooking, others are for	Rye-cream of- 1/3 cu 5.0
Summer Squash		salads/cold dishes	Spelt
Swiss Chard-			Triticale or Rye Flour -14.6/100g
Turnips (cooked)-4.1			Whole Grain Bread (2 grams or more
Zucchini-1.4			fiber per slice)- Sarah Lee
			Whole Grain Cereal (8 grams or more
			fiber per serving)- Fiber One, Kashi
			Whole grain pasta-3/4 cu 5.9
			Wild Rice-5.0

Fiber content reflects 1 cup unless otherwise indicated

Fish should be wild Alaskan, never farmed or Atlantic due to contamination

Whenever possible buy Free-Range Organic Animal Proteins and NOT corn finished.

Buy the vegetables that have the most pesticides called the Dirty Dozen organically, www.ewg.org lists these.

Dietary Fiber Explained

Dietary fiber is that part of plant cell walls which our bodies cannot digest. There are two main types of fiber: insoluble and soluble. The best known insoluble fiber is cellulose. An example of this type of fiber is wheat bran. Wheat bran has been used for years to relieve constipation. However, insoluble fiber does not have as many benefits as do soluble fibers.

Soluble fibers include: hemicelluloses (oat bran), gums (guar gum), mucilages (psyllium seeds), pectins (apples) or ligans (dandelion root). These water soluble gel-forming fibers provide many beneficial effects including:

- Decreased transit time (food passes through the intestines more quickly)
- Decreased appetite
- Decreased blood fats
- Delayed stomach emptying (the stomach releases food into the intestines more slowly)
- Increased gastric and pancreatic secretions to aid digestion
- Increased stool weight
- Increased production of short-chain fatty acids (fuel for intestinal cells)
- More advantageous intestinal bacteria
- More soluble bile (to prevent formation of gall stones)

Fiber can relieve constipation by affecting the transit time. Cultures that eat a high fiber diet usually have a transit time of 20 hours and a fecal weight of 500 grams. In contrast, those cultures that typically eat a low fiber diet, have a transit time of greater than 48 hours and a fecal weight of only 100 grams. There is a direct correlation between transit time and stool weight and size. A larger, bulkier stool not only passes through the colon more easily, but also requires less pressure and straining during defecation.

Although dietary fiber increases the rate of transit through the gastrointestinal tract, it slows the rate at which the stomach empties, thus reducing after-meal elevated blood sugar. Also, enzymes secreted by the stomach, and pancreas increase in response to fiber, enhancing digestion.

A high fiber diet may also promote lactobacillus bacteria (good ones) while inhibiting endotoxin-producing bacteria (bad ones) in the colon. Having the proper microflora in the intestines helps with elimination and protects against foreign attack by other pathogenic bacteria.

The water-soluble gels and mucilaginous fibers can help lower serum cholesterol and triglyceride levels. When bile acid and fatty compounds bind to these fibers, more cholesterol and bile salts are excreted through the feces. Fiber may also play a major role in weight loss programs. Fiber is of benefit because it 1) increases the amount of chewing, 2) increases the amount of calories excreted by the body, 3) alters secretion of digestive enzymes and improves glucose tolerance by delaying the rate at which the stomach empties. This same effect also allows the individual to feel fuller longer.

Fiber can also be obtained through a diet rich in beans, whole grains, fruits, and vegetables. It is best to get at least 20-35 grams of fiber daily through diet and supplements. Eat all foods in the least processed form for optimal health, e.g. fresh produce, and whole unprocessed grains.

If you have been eating a low fiber diet, you may initially experience some gas if you drastically increase fiber intake, so ease into it gradually and drink plenty of water (aim for 2 quarts daily) to keep things moving through your digestive system.

Possible contraindications:

Excessive amounts of supplemental fiber can have some side effects although in general fiber used properly is totally safe and beneficial. More than 2 cups of psyllium daily can damage the intestinal lining but typical dosing is far less, usually 1 -2 tablespoons daily. Excessive carrageenan may cause gastrointestinal ulcers, intestinal damage, colon cancer, birth defects, and liver enlargement.

However, as stated above, these risks are rare and only with excessive amounts, so eat a fiber-rich diet and enjoy excellent health!

LEGUMES

The Leguminosae family contains members that bear seeds in a pod. The common food groups in this family are the beans, peas, and lentils. All legumes are high in protein, water-soluble fiber (pectin), vitamins and minerals. When combined with grains or cheese, legumes can make up a “complete protein”. A complete protein contains all eight of the essential amino acids. The beans with the highest protein content are: soy bean (the only legume that is a complete protein by itself), adzuki beans, kidney beans, broad beans, mung beans & lima beans. Dry peas are high in protein. Most legumes are considered “starches” (starch is a complex carbohydrate). This includes all dry peas and all dry beans except soy beans. Legumes are also rich in molybdenum and zinc.

Adzuki Bean (*Phaseolus angularis*)

Other names: feijao, adzuki, adsuki

Flavor: light, nutty

High in protein (25%), B vitamins, iron, calcium and thiamin.

Black Bean (*Phaseolus vulgaris*)

Other names: ‘turtle soup’ bean, frijoles negros

Flavor: subtle mushroom like

Nutrients: 23% protein, high in iron, calcium and B vitamins.

Blackeye Bean (*Vigna unguiculata*)

Other names: blackeye suzies, cow pea, blackeye pea, oea beans, China beans, marble beans

Flavor: light texture, pleasant & savory

Nutrients: High in protein (22%), iron, calcium, B complex vitamins and vitamin A. Has a thinner skin - no need to soak before cooking. Young pods can be eaten as a fresh vegetable, the young leafy shoots taste similar to spinach.

Broad Bean (*Vicia forba*)

Other names: wax bean, fava bean, ful medames, ful, ful misri

High in protein - best used as a puree in soups, pates and pies.

Needs long soaking up to 36 hours.

Butter Bean (*Phaseolus lunatus*)

Other names: pole bean, curry bean, Madagascar bean, lima bean

Flavor: savory and smooth texture

Nutrients: high in protein, iron and calcium

Chick Pea (*Cicer arietinum*)

Other names: garbanzo, bengal gram, ceci, kabli channa

Flavor: rich, full

Nutrients: high in protein, fat, calcium, iron, and B vitamins.

Kidney Bean (*Phaseolus vulgaris*)

Flavor: rich

Nutrients: high in protein, iron, folacin, phosphorus, thiamin, riboflavin, niacin, zinc, magnesium, manganese, potassium, calcium and fiber (18 gram fiber for 1 cup of cooked beans) low in sodium does not contain fat or cholesterol.

Lentil (*Lens esculenta*)

Nutrients: high in protein (25%), rich in iron and B vitamins thought to be easier to digest than larger legumes.

Mung Bean (*Phaseolus aureus*)

Other names: green gram, golden gram, mung dal, moong dal

Can be used whole or sprouted, the sprout has 5X more food value and is easily digested. The tender young pods can also be eaten as a vegetable.

The sprout is rich in vitamin C, B12, protein (24%) and B vitamins.

Pea (*Pisum sativum*)

Split pea is one variety. It requires no soaking and cooks quickly.

Pinto Bean (*Phaseolus vulgaris*)

Soya Bean (*Glycine max*)

Other names: soy, soy bean

Hardest of all legumes - needs long soaking time before cooking

Nutrients: high in protein (is a complete protein), vitamin A, E, B vitamins, lecithin, calcium, potassium, phosphorus

Common Products of Soybeans

Miso - soy paste; very concentrated food with B vitamins and beneficial bacteria for digestive system. Do not boil as that destroys nutritional quality best to add just before serving.

Soy Sauce or Tamari--thought to strengthen and stimulate digestive juices.

Tofu or soy cheese - bean curd; high in protein, vitamins and minerals, low in saturated fat, calories and carbohydrates.

Soy Flour--yellow in color, strong flavor, use small amounts (2 - 3oz/1 lb. of wheat flour). High in protein low in gluten can be used as an egg substitute in cakes and batters (1 mounded teaspoon = 1 egg).

Soy Milk--higher in iron, calcium and phosphorus than cow's milk can use in baking or as a beverage.

Edamame—soybeans cooked in the pod.

Tempeh—fermented soy in a hard, flat form.

Approximate Cooking Times For Beans

<u>Type of Bean</u>	<u>Simmering</u>		<u>Pressure Cook (15 lbs)</u>	
	<u>Soaking Time</u>	<u>Cooking Time</u>	<u>Soaking</u>	<u>Cooking Time</u>
Adzuki bean	overnight	3/4-1 hour	6 hours	10 minutes
Black bean	overnight	1-1 1/2 hours	6 hours	10 minutes
Blackeye bean		3/4-1 hour		8 minutes
Broad bean	overnight	1 1/2-2 hours	6 hours	15 minutes
Butter bean	overnight	1 1/2-2 hours	6 hours	15 minutes
Canellini bean	overnight	-1 1/2 hours	6 hours	10 minutes
Chick peas	overnight	2-2 1/2 hours	6 hours	25 minutes
Field bean	overnight	1-1 1/2 hours	6 hours	10 minutes
Kidney bean	overnight	1-1 1/2 hours	6 hours	15 minutes
Lentils		1/2-3/4 hour		8 minutes
Mung beans	overnight	3/4-1 hour	6 hours	10 minutes
Peas (split)		3/4-1 hour		8 minutes
Pinto beans	overnight	1-1 1/2 hours	6 hours	10 minutes
Soy bean	24 hours	3-3 1/2 hours	24 hours	25 minutes