



High Fiber Diet

The high fiber diet is indicated in the treatment of diverticulosis, obesity, constipation, diarrhea and irritable colon. It is beneficial in the treatment of hyperlipidemia, hypercholesterolemia and diabetes mellitus. Evidence suggests that a high fiber diet is associated with a decreased risk of colon cancer. The high fiber diet may be contraindicated in the acute phase of diverticulitis and other situations where the bowel is inflamed, as in Crohn's Disease and ulcerative colitis, as well as in any type of bowel obstruction or stenosis. It is recommended to consume 25-35 grams of fiber and drink 7 glasses of fluids per day.

Dietary Sources

Fruits	Fiber (gm)	Vegetables	Fiber (gm)	Legumes	Fiber (gm)	Grains	Fiber (gm)
3 Figs	5.3	1/2 cup Baked Potato with Skin	4.2	3/4 cup Pinto Beans	14.2	1 cup Barley	8.6
1 Apple with Skin	4.7	1/2 cup Sweet Potato	3.4	3/4 cup Kidney Beans	13.8	1 cup Bulgur	8.1
1 Pear	4.3	1/2 cup Corn	5.0	3/4 cup Black-eyed Peas	12.3	1 tbsp Bran Meal	2.0
5 Dates	3.7	1/2 cup Peas	2.9	1 tbsp Almonds	0.6	1/2 cup All-Bran	10.4
10 Apricots	3.6	1/2 cup Winter Squash	2.9	3/4 cup Lima Beans	10.3	1 cup Oatmeal	7.0
5 Prunes	3.5	1 Carrot	2.3	3/4 cup Navy Beans	9.0	1 cup Quinoa	4.6
1/4 cup Cranberries	2.0	1/2 cup Asparagus	1.7	3/4 cup Chickpeas	7.1	1 cup Brown Rice	3.3
1 Plum	1.0	1/2 cup Okra	1.6	4 oz Baked Beans	8.0	2 slices White Bread	1.9
1 Orange	3.1	1/2 cup Broccoli	4.0	3/4 cup Lentils	5.6	1 cup Cornflakes	2.6
1 Kiwi	2.6	1 cup Spinach	3.5	3/4 cup Split Peas	4.1	1 cup Wheat	3.1
6 Strawberries	2.0	1/2 cup Turnip	2.0	3/4 cup Tofu	1.4	White Rice	1.3
1/4 cup Raisins	1.9	1/2 cup Beets	2.5			2 slices Wheat Bread	6.0
1 Banana	2.4	1/2 cup Cabbage	1.5			1 cup Raisin Bran	3.0
25 Blueberries	1.7	1/2 cup Cauliflower	1.4				
1/2 cup Blackberries	4.4	1/2 cup Brussel Sprouts	2.0				
Applesauce	1.5	1/2 cup Green Beans	2.1				
1 Peach	1.4	1/2 Tomato	0.8				
1/4 Cantaloupe	1.1	1/2 cup Celery	3.0				
1/2 cup Pineapple	0.9	1/2 cup Green Pepper	1.2				
1/2 Grapefruit	0.8	1 cup Lettuce	0.8				
1 cup Watermelon	2.0	1/2 cup Mushrooms	1.5				
20 Grapes	1.0						

Insoluble Fiber Sources

Cellulose: Whole Grains, Whole Wheat Flour, Bran, Vegetables, Apples, Beets, Brazil Nuts, Broccoli, Carrots, Celery, Green Beans, Lima Beans, Pears, Wax Beans, Cucumber Skins, Peppers, Peas, Cabbage.

Hemicellulose: Cereals, Bran, Whole Grains, Apples, Bananas, Beans, Beets, Cabbage, Corn, Leafy Greens, Pears, Peppers, Brussel Sprouts

Lignin: Cereals, Mature Vegetables, Whole Grains, Fruits with Edible Seeds, Brazil Nuts, Carrots, Green Beans, Peaches, Peas, Potatoes, Strawberries, Tomatoes, Radishes, Pears, Eggplant, Bran

Bran: Bran, Whole Grains

Soluble Fiber Sources

Gums: Oat Bran, Guar Gum, Legumes, Barley, Dried Beans

Pectin: Apples, Bananas, Beets, Cabbage, Carrots, Citrus, Peas, okra

Tips for Planning a High Fiber Diet

- High fiber diet with added psyllium may reduce riboflavin absorption.
- Cooking fruits and vegetables does not destroy fiber although its structure is changed.
- 6-11 servings of grains is recommended.
- The diet may require decreases (about 10%) in insulin requirements. Oral agents may need to be decreased by one-third to one-half.
- At least 3-5 servings per day of vegetables and all vegetables juices should be included.
- Additional fluid should be included in beverages. 8-12 cups per day has been recommended.
- Unprocessed, coarse bran may be added to foods at a rate of 2 tsp. 3 times a day if constipation is a problem. It may also be used in cooking, as in casseroles, meat loaf, etc. If bran is added in the diet, be sure to include adequate fluid.
- Increase high fiber foods gradually. Abrupt increases in dietary fiber may cause gas and/or loose stools as well as interfere with mineral absorption such as calcium and zinc. Increments of 5-10 grams allow adaption of GI function and flora.



High Fiber Diet

- A variety of high fiber foods from all the food groups should be selected to get a balance of the various types of dietary fiber.
- At least 2-4 servings per day of fruits including fresh, frozen, dried or canned should be included.
- You can add 10 grams of fiber with two tablespoons of whole oat bran or wheat bran, psyllium (a seed native to Iran and India), Metamucil, Citrucel (methylcellulose), Konsyl, Benefiber, Fibercon or others.

Adequacy

The high fiber diet can be planned to meet the National Research Council's Dietary Reference Intakes for all nutrients. However, the absorption of calcium, iron, zinc and other trace minerals may be compromised by an increase in fiber. When stores are depleted, a multivitamin is recommended for supplementation. The addition of ascorbic acid to the meal with fiber will improve iron absorption. The DRI's range from 21-38 grams of fiber per day for adults. The National Cancer Institute recommends 20-35 grams of fiber daily.

Quick Method for assessing daily total dietary fiber intakes

Servings of refined grains x 1gm.....	= _____
Servings of whole grains x 2.5gm.....	= _____
Serving of vegetables x 1.5gm.....	= _____
Servings of fruit (Juice is not counted) x 1.5gm.....	= _____
Additional foods (concentrated fiber sources, legume, nuts and seeds) =	_____
Total =	_____ gm

Sample Menu Plan

Suggested Meal Plan	Sample Menu	Dietary Fiber (gm)	Your Menu
Breakfast			
Fruit or Juice	Fresh Orange (1 medium)	2.4	
Cereal with Fruit	Bran Flakes (3/4 cup) Raisins (2 tbsp)	4	
Bread	Whole Wheat Toast (1 slice)	1.5	
Margarine/Jelly	Margarine/Grape Jelly	1.4	
Milk	Low Fat Milk (1 cup)	0	
Beverage	Coffee	0	
Noon Meal			
Soup or Juice	Navy Bean Soup (1 cup)	7.5	
Meat/High Protein Food	Sliced Chicken (2 oz)	0	
Bread	Whole Wheat bread (2 slices)	2.8	
Vegetable	Lettuce/Tomato (1/2 cup)	0.7	
	Carrot Sticks (1/2 cup)	2.3	
Fruit/Dessert	Fresh Fruit Cup (1/2 cup)	2.4	
Milk	Low Fat Milk (1 cup)	0	
Beverage	Iced Tea	0	
Evening Meal			
Meat/High Protein Food	Broiled Fish	0	
Starch	Brown Rice (1/2 cup)	1	
Vegetable(s)	Frozen Green Peas (1/2 cup)	3.6	
	Raw Vegetable Salad Lettuce (1 cup) French Dressing	1.7	
		2.5	
Bread	Tomato (1/2 medium)	3.9	
Margarine	Bran Muffin (1)	0	
Fruit/Dessert	Margarine (1 tsp)	1.9	
Milk	Fresh Sliced Peaches with Skin (1/2 cup)	0	
Beverage	Low Fat Milk (1 cup)	0	
	Iced Tea/Sugar		
Total Dietary Fiber		39.6	



High Fiber Diet

We recommend rotating the food and fiber types. Avoid foods to which you have food allergies, intolerances or sensitivities. Gradually increase the fiber in your diet until your bowel movements are optimum for you. A temporary increase in intestinal gas is to be expected. Fennel seed may help reduce flatulence. Diabetics should not change their diet without consulting their physicians as fiber may affect your blood sugar. Excessive fiber via supplements may decrease the absorption of iron, zinc and calcium. Finally, be patient as it may take 6 weeks to see the ultimate benefit of adding fiber to your diet. For persistent constipation or change in the caliber of your stool see your doctor.