

# FIBER-ENHANCED DIET

## PURPOSE

This diet is designed to emphasize foods rich in dietary fiber as a part of preventive and/or therapeutic nutrition. High-fiber diets may be used in the treatment of irritable bowel syndrome, uncomplicated diverticulosis, and constipation.

## DESCRIPTION

The high-fiber diet is based on the Food Guide Pyramid, with an emphasis on fiber-rich foods such as fruits, legumes, vegetables, whole-grain breads, and high-fiber cereals. The Daily Reference Value for fiber is 25 grams (based on 2000 calorie-per-day diet). The American Diabetes Association has reported that up to 40 gm fiber daily, or 25 gm per 1000 Kcal, may be beneficial (National Cancer Institute recommends 25-30 gm a day). A maximum of 50 grams of fiber per day is suggested.

## BASIC INFORMATION

Dietary fiber is the component found in many foods that cannot be digested by the enzymes in the intestinal tract. Adequate fluid intake is important when following a high-fiber diet due to the water binding capacity of fiber. Fiber should be increased in the diet slowly to avoid unpleasant side effects (gas, abdominal bloating, cramps). Unprocessed wheat bran can increase fiber intake. Its intake should be increased slowly. It can be added to milk, cereal, yogurt, and other recipes and mixes. Dietary fiber can be divided into two separate categories: Water-insoluble fiber and water-soluble fiber.

**Water-Insoluble Fiber:** Water-insoluble components, such as cellulose, hemicellulose, and lignin, remain essentially unchanged during digestion. Foods containing water-insoluble fiber include the following: fruits, vegetables, cereals, and whole-grain products. Research suggests that insoluble fiber may be beneficial in the prevention and/or treatment of constipation and diverticular disease and may decrease the risk of colon cancer.

**Water-Soluble Fiber:** Water-soluble fiber, such as gum, pectin, and mucilages, does dissolve in water and is found in oats, beans, barley, and some fruits and vegetables. Some studies show that this type of fiber may improve blood glucose and cholesterol levels and appetite regulation.

## NUTRITIONAL ADEQUACY

The high-fiber diet is adequate in all nutrients. Some studies indicate that excessive consumption of some high-fiber foods may bind and decrease the absorption of the following minerals: calcium, copper, iron, magnesium, selenium, and zinc. However, it is theorized that with a varied, well-balanced diet, mineral or nutrient imbalances are unlikely to happen in those consuming a high-fiber diet.

## DIETARY FIBER CONTENT OF FOODS IN COMMONLY SERVED PORTIONS

FOOD GROUP	Less than 1 gm	1-1.9 gm	2-2.9 gm	3-3.9 gm	4-4.9 gm	5-5.9 gm	Over 6 gm
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Breads (1 slice)	bagel, white,	French whole-wheat,	flour tortilla	bran muffin	corn tortilla		
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Cereals (1 oz) Rice-Krispies, Special K, cornflakes oatmeal, Nutri-Grain, Cheerios Wheaties, Shredded Wheat, Total Cream of Wheat, Honey-Bran, Malt-O-Meal Bran Chex, 40% Bran-Flakes, Raisin-Bran Corn Bran All-Bran, Bran Buds, 100% Bran, Fiber 1

Pasta (1 cup) macaroni, spaghetti whole-wheat spaghetti

Rice (1/2 cup) white brown

Legumes (1/2 cup) cooked lentils lima beans, dried peas kidney beans, baked beans, navy beans

Vegetables (1/2) cup cucumber, lettuce (1 cup), green pepper, mushrooms, onions asparagus, green beans, cabbage, cauliflower, potato (no skin), celery, sweet potato broccoli, Brussels sprouts, carrots, corn, potato (with skin), spinach peas

Fruits (1 medium unless stated) grapes (20), watermelon (1 cup), plums (5) apricots (3), pineapple (1/2 cup), peach with skin, grapefruit (1/2) apple without skin, banana, orange apple with skin, pear with skin, raspberries (1/2 cup)

#### SAMPLE MENU

Suggested Meal Plan/Suggested Foods and Beverages

#### BREAKFAST

Fruit Juice: Prune Juice (1/2 cup)

Cereal: All-Bran Cereal (1/2 cup)

Meat/Meat Substitute: Poached Egg (1)

Bread - Margarine Slice Whole Grain Toast & Margarine/Jam (1 tsp each)

Milk/Beverage: 1% Milk (1 cup) & Coffee or Tea

#### DINNER: NOON OR EVENING MEAL

Meat/Meat Substitute: Meat Loaf (3 oz)

Potato/Potato Substitute: Baked Potato (1)

Vegetable and/or Salad: Lima Beans (1/2 cup), Tossed Salad (1 cup)/Dressing (1 Tbsp)

Bread/Margarine: Slice Rye Bread & Margarine (1 tsp)

Dessert: Fig Cookies (4)

Beverage: Coffee or Tea

#### SUPPER: EVENING OR NOON MEAL

Soup or Juice: Lentil Soup (1/2 cup)

Meat/Meat Substitute: Baked Chicken (3 oz)

Vegetable and/or Salad: Banana Squash (1/2 cup), Tossed Salad (1 cup)/Dressing (1 Tbsp)

Bread/Margarine: Slice Rye Bread w/Margarine (1 tsp)

Dessert: Baked Apple (1)

Milk/Beverage: 1% Milk (1 cup) & Coffee or Tea

