



DYNAMIC AGING

Fiber Fitness

Dietary fiber, or roughage as it was once called, is the part of food consumed that passes unchanged through the digestive tract. In other words, we don't digest it. So, what does happen and why is it so important?

Different types of plants have varying amounts and kinds of fiber. There are two types of fiber: soluble and insoluble. Water-soluble fibers (such as pectin and gum) are found inside plant cells. They slow the passage of food through the intestines but do nothing to increase fecal bulk. Legumes, oat bran, fruit, and to a lesser degree, vegetables, contain soluble fiber.

In contrast, fibers that are part of the cell walls of a plant are water insoluble. These include cellulose, hemicellulose and lignin. Such fibers increase fecal bulk and speed up the passage of food through the digestive tract. Wheat bran, whole grains, vegetables, and nuts contain the most insoluble fiber.

Benefits of Fiber

The Colorado State University Extension website gives us a good summary of the major benefits of fiber in the diet: "Insoluble fiber binds water, making stools softer and bulkier. Therefore, fiber, especially that found in whole grain products, is helpful in the treatment and prevention of constipation, hemorrhoids and diverticulosis. Diverticula are pouches of the intestinal wall that can become inflamed and painful. In the past, a low-fiber diet was prescribed for this condition. It is now known that a high-fiber diet gives better results once the inflammation has subsided."

The article continues to tell us that "low blood cholesterol levels (below 200 mg/dl.) have been associated with a reduced risk of coronary heart disease. The body eliminates cholesterol through the excretion of bile acids. Water-soluble fiber binds bile acids, suggesting that a high-fiber diet may result in an increased excretion of cholesterol. Some types of fiber, however, appear to have a greater effect than others. The fiber found in rolled oats is more effective in lowering blood cholesterol levels than the fiber found in wheat. Pectin has a similar effect in that it, too, can lower the amount of cholesterol in the blood."

High-fiber diets may be useful for people who wish to lose weight. Fiber itself has no calories, yet provides a "full" feeling because of its water-absorbing ability. For example, an apple is more filling than a half cup of apple juice that contains about the same calories. Foods high in fiber often require more chewing, so a person is unable to eat a large number of calories in a short amount of time.

Tips on Sources of Fiber

Canned and frozen fruits and vegetables contain just as much fiber as raw ones. Consume the fruit or vegetable intact with no peeling or paring if possible. Preparation with heat should be minimal; just enough applied to achieve a tendercrisp state of doneness. Steaming is the preferred method of vegetable preparation. Use the USDA Food Pyramid as a guide. If you eat 2-4 servings of fruit, 3-5 servings of

vegetables, and 6-8 servings of whole grains, you should have no trouble getting the recommended daily fiber intake of 25-38 grams.

- Items highest in dietary fiber per serving are: whole grain cereals (3-8 grams), fruits (1-3 grams), vegetables (1-5 grams), legumes (6-7 grams).
- The amount of total dietary fiber per serving is listed on food labels.