## The importance of fiber for human's body, what you should know

FIBER

What is fiber?

Fiber is a type of carbohydrate that the body cannot normally digest. While most carbohydrates are broken down into sugar molecules called glucose, fiber cannot be broken down into sugar molecules and remains undigested. However, consuming dietary fiber provides many health benefits.

A high intake of dietary fiber reduces the risk of developing diseases such as coronary heart disease, stroke, hypertension, diabetes, obesity, and certain diseases of the digestive tract. In addition, increased dietary fiber intake improves serum lipids, lowers blood pressure, improves blood glucose control in diabetes, aids in weight loss, and appears to improve immune function.

The optimal daily amount of fiber varies depending on a person's age and gender. The current Dietary Guidelines for Americans recommend the following approximate daily amounts:

- adult men need about 34 grams (g), depending on age.
- adult women need about 28 grams, depending on their age.

For adults, a minimum of 25-35 grams of fiber per day on a 2,000-calorie diet is recommended for good health.

The recommended amount of fiber intake is different for certain age groups because energy needs differ at certain stages of life. Therefore, children are recommended to use less than adults. For example, teenagers aged 14 to 18 need 25.2-30.8 g, teenagers aged 9-13 need 22.4-25.2 g, children aged 4-8 need 16.8-19.6 g, and children from 1 to 3 years old need 14 grams per day. The lower limit is the recommended amount for women (girls) and the upper limit is for men (boys). People over 50 need less fiber, about 21g for women and 30g for men. Women who are pregnant or breastfeeding should consume at least 28 g per day. However, most people only get about 15 grams per day.

However, eating too much fiber can also cause side effects. Abdominal bloating, accumulation of gas in the intestines, as well as constipation or diarrhea, poor absorption of some basic nutrients, and in very rare cases

intestinal obstruction may occur. These side effects can occur if a person consumes more than 70 g of fiber per day. This is rare, but it can happen if someone is on a vegan or raw food diet and doesn't drink enough fluids.

Great sources of fiber are whole grains, fresh fruits and vegetables, legumes and nuts.

## Types of fibers

There are two types of fiber that are beneficial to health - soluble and insoluble. Soluble fiber, which dissolves in water, can help lower glucose levels and also help lower blood cholesterol. Foods that contain soluble fiber include oatmeal, chia seeds, nuts, beans, lentils, apples, and blueberries.

Insoluble fiber, which does not dissolve in water, can help food move through the digestive system, support regular bowel movements, and help prevent constipation. Foods that contain insoluble fiber include whole wheat products (especially wheat bran), quinoa, brown rice, legumes, greens such as kale, almonds, walnuts, seeds, and fruits with edible skins such as pears and apples.

## Benefits of fiber

Dietary fiber is an important part of a healthy diet. This is essential for maintaining a healthy gut and reducing the risk of developing chronic health conditions.

Consuming fiber has many health benefits.

May protect against heart disease. Numerous studies have demonstrated the effects of dietary fiber on heart health, including the prevention of cardiovascular disease and the reduction of blood pressure. Research results have shown that people who eat a high-fiber diet have a significantly reduced risk of cardiovascular disease and mortality from these diseases.

The study authors suggest that this heart-protective effect may be because fiber lowers total cholesterol and low-density lipoprotein (LDL) cholesterol, also known as "bad cholesterol," which is a major risk factor for heart disease.

*Improves bowel function*. Fiber is important for gut health. Eating enough fiber can help prevent or reduce constipation by helping food waste move smoothly through the digestive tract. It also promotes a healthy gut microbiota.

According to a review of research, dietary fiber has been found to increase stool volume, promote regular bowel movements, and reduce the time waste spends in the bowel. Back in 2009 research results have shown that dietary fiber has beneficial effects on gastrointestinal disorders, including colorectal ulcers, hiatal hernias, gastroesophageal reflux disease, diverticular disease, and hemorrhoids.

Reduces the risk of diabetes. And if you already have diabetes, increasing the amount of fiber in your diet can be just as beneficial. Fiber slows down the absorption of sugar and thus helps prevent spikes in blood sugar after a meal.

in 2018 research findings suggest that people who ate foods high in fiber, especially cereal fiber, had a lower risk of developing type 2 diabetes. Blood tests in these people also showed a slight decrease in blood glucose levels.

Helps to reduce body weight. People who want to lose weight are advised to eat foods rich in dietary fiber. And so you can regulate your body weight. High-fiber foods help a person feel full longer and avoid consuming unnecessary calories. in 2019 in a study conducted by researchers concluded that people who increased their intake of dietary fiber reduced their calorie intake and thus led to faster weight loss.

How to increase the daily amount of fiber in your diet

This can be done by making a variety of small changes to your eating habits. For example: eating fruits and vegetables with their skins because the skins are high in fiber, adding beans or lentils to salads, soups and side dishes, replacing white bread and pasta with whole wheat versions. As suggested by the American Heart Association, eat 4.5 cups of vegetables and 4.5 cups of fruit each day.

**But increase your fiber intake slowly**. If you are getting much less fiber than you need, don't try to consume the recommended amount from the next day or in one meal. Instead, slowly introduce more and more fiberrich foods into your diet over several weeks, distributing roughly equal amounts at each meal. If you eat too much fiber at once, you may experience discomfort in your stomach or intestines.

**Drink more water**. Fiber and water are important for a healthy digestive system. Drinking enough water will ensure that the fibers move through the intestines easily and prevent constipation. Lack of water can cause stool to build up in your intestines, which can lead to constipation.

*Create healthy habits*. Getting more fiber doesn't have to be hard work. Make a list of fiber-rich foods that you love and start adding them to breakfast, lunch, dinner, and snacks.

**Consider taking supplements.** If you still don't get enough fiber or are allergic to high-fiber foods, your doctor or pharmacist may suggest fiber supplements. Dietary fiber supplements can play an additional role in providing a high-fiber diet the health benefits of food. One such dietary fiber supplement is plantain seed husks (Sylliflor).

Plantain seed husks are a fiber that can be used as a dietary supplement with significant health benefits.

Benefits of consuming plantain seed husks

*Improves digestion*. The fiber in plantain seed pods helps regulate digestion. Fiber cannot be absorbed by the body and when mixed with water forms a gel that moves along the digestive system to eliminate waste. It helps the body to eliminate waste more easily, stimulates intestinal peristalsis, prevents gas build-up and softens the stool, thus reducing the risk of hemorrhoid formation or the associated pain.

**Prevents diarrhea and constipation**. Plantain seed pods absorb excess water from the digestive tract and increase stool mass. It is used to treat mild to moderate constipation and diarrhea. Plantain seed husks are used by many as a laxative because it stimulates intestinal contractions and speeds up the passage of stool through the digestive tract.

**Maintains proper blood sugar levels.** Starting to take plantain seed pods can lower blood sugar and reduce the risk of diabetes in high-risk patients. By slowing the absorption of sugar and other carbohydrates in the gut, it controls blood sugar levels and maintains a healthy insulin balance.

**Reduces cholesterol**. Studies have shown that daily consumption of plantain seed husks can lower total and low-density lipoprotein (bad) cholesterol, which may help reduce the risk of heart disease.

**Reduces hunger and helps reduce body weight**. Since the husks of plantain seeds are fibrous substances, consuming them for a longer period of time gives a feeling of fullness and reduces food cravings. Therefore, consuming plantain seeds can help you lose weight.

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