Unsaturated fats - description, benefits, effects on the body and the best sources

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Abstract. Today we receive a large amount of information about healthy and unhealthy fats, food compatibility, recommended intake and time of their consumption for maximum health benefits.

According to generally accepted information today, unsaturated fatty acids are recognized leaders among fats in terms of the content of nutrients.

Key words: Unsaturated fats, general characteristics, daily requirement, digestibility, beneficial properties, signs of deficiency, signs of excess

This is interesting:

- The number of Americans suffering from obesity has doubled over the past 20 years, which coincided with the beginning of the "low-fat revolution" in the United States!
- After years of observing animals, scientists have concluded that a lack of fat in the diet leads to a reduction in life expectancy.

Foods with the highest content of unsaturated fats:

- Canola oil
- Walnut oil
- Fish oil (salmon)
- Hazelnut
- Pine nuts
- Palm oil
- Sunflower seeds
- Sesame
- Peanut
- Poppy seeds [1]
- Flax-seed
- Mustard seeds
- Chocolate
- Soya beans
- Avocado [2]

General characteristics of unsaturated fats

Unsaturated fats are a group of useful substances necessary for building cells in our body and regulating metabolic processes.

Among fans of healthy eating, unsaturated fats take first place. These include monounsaturated and polyunsaturated fatty acids.

The difference between unsaturated fats and other types of fats is their chemical formula. The first group of unsaturated fatty acids has one double bond in its structure, while the second group has two or more.

The most well-known members of the family of unsaturated fatty acids are omega-3 [3], omega-6 and omega-9 fats. The most famous are arachidonic, linoleic, myristoleic, oleic and palmitoleic acids.

Typically, unsaturated fats have a liquid structure. The exception is coconut oil.

Foods rich in unsaturated fats most often include vegetable oils. Although you should not forget about fish oil, a small amount of lard, where unsaturated fats are combined with saturated ones.

In plant foods, as a rule, polyunsaturated fatty acids are combined with monounsaturated ones. In animal products, unsaturated fats are usually combined with saturated fats.

The main task of unsaturated fats is to participate in fat metabolism. This breaks down cholesterol in the blood. Unsaturated fats are easily absorbed by the body. The absence or deficiency of this type of fat leads to disruption of brain function [4] and deterioration of skin condition [5].

Daily requirement for unsaturated fats

For the normal functioning of the body of a healthy person who leads an active lifestyle, you need to consume up to 20% of unsaturated fats from the total calorie intake.

When choosing food products in supermarkets, information about the fat content of the product can be read on the packaging.

Why is it necessary to consume fats in the right quantities?

- our brain is 60% fat;
- unsaturated fats are part of cell membranes;
- Our heart receives about 60% of its energy from fat processing;
- fats are needed by the nervous system. They cover the nerve sheaths and are involved in the transmission of nerve impulses;
- fatty acids are essential for the lungs: they are part of the pulmonary lining and are involved in the breathing process;
- fats slow down digestion, promote more complete absorption of nutrients, are excellent sources of energy and keep you feeling full for a long time;
- fats are essential for vision [6].

Moreover, the fat layer reliably protects internal organs from damage. Certain types of fatty acids play an important role in maintaining the high tone of our immune system.

The need for unsaturated fats increases:

• with the onset of the cold season [7];

- with high loads on the body during sports [8];
- during work involving heavy physical labor [9];
- for women who bear a child and then breastfeed him [10];
- during active growth in children and adolescents [11];
- for vascular disease (atherosclerosis);
- during an organ transplant operation;
- during the treatment of skin diseases, diabetes.

The need for unsaturated fats is reduced:

- in case of allergic reactions on the skin;
- for heartburn and stomach pain;
- in the absence of physical activity on the body;
- in elderly people.

Digestibility of unsaturated fats

Unsaturated fats are considered easily digestible. But provided that the saturation of the body is not excessive. To improve the absorption of unsaturated fats, it is worth giving preference to food products that are prepared without heat treatment (salads, for example). Or boiled dishes - porridge, soups. The basis of a complete diet is fruits, vegetables, grains, salads with olive oil, and first courses.

The absorption of fats depends on their melting point. Fats with a high melting point are less easily absorbed. The process of fat breakdown also depends on the state of the digestive organs and the method of preparing certain products.

Beneficial properties of unsaturated fats and their effect on the body

By facilitating the metabolic process, unsaturated fatty acids perform a vital function in the body. They control the functioning of "good" cholesterol, without which the full functioning of blood vessels is impossible.

In addition, unsaturated fatty acids help eliminate poorly structured "bad" cholesterol [12], which has a destructive effect on the human body. This improves the health of the entire cardiovascular system.

Also, normal consumption of unsaturated fats controls brain function, strengthens the heart muscle [13], concentrates attention, improves memory [14], and helps strengthen the immune system [15].

A balanced diet with optimal fat content improves your mood and makes it easier to cope with depression!

Interaction with other elements

Vitamins of group A, B, D, E, K, F [16-21] are absorbed in the body only when combined harmoniously with fats.

An excess of carbohydrates [22] in the body complicates the process of breaking down unsaturated fats.

Signs of a lack of unsaturated fats in the body

- disruptions in the functioning of the nervous system;
- deterioration of the skin, itching;
- brittleness of hair and nails;
- deterioration of memory and attention;
- autoimmune diseases;
- disruption of the cardiovascular system;
- high cholesterol in the blood;
- metabolic disorder.

Signs of excess unsaturated fats in the body

- weight gain;
- blood flow disturbance;
- stomach pain, heartburn;
- allergic skin rashes.

Factors influencing the content of unsaturated fats in the body

Unsaturated fats cannot be produced independently in the human body. And they enter our body only with food.

Useful tips

To maintain health and visual attractiveness, try to consume unsaturated fats without heat treatment (if possible, of course!) After all, overheating fats leads to the accumulation of harmful substances that can worsen not only your figure, but also your health in general.

Nutritionists have concluded that fried foods do less harm to the body if the dish is prepared using olive oil!

Unsaturated fats and excess weight

The fight against excess weight continues to gain momentum. Internet pages are literally full of proposals on how to overcome this problem in a short time. Often, non-professional nutritionists advise eating low-fat foods or even suggesting a completely fat-free diet.

However, scientists have recently discovered a seemingly strange pattern. It is not uncommon for weight to increase as a result of using low-fat weight loss programs. "How is this possible?" - you ask. It turns out that this happens!..

Refusal of foods rich in fat is often accompanied by an increase in the amount of sugar in the diet, as well as the consumption of large amounts of simple carbohydrates. These substances, if necessary, are also transformed by the body into fats [23].

Normalized consumption of healthy fats brings energy to the body, which is actively used during weight loss!

Unsaturated fats for beauty and health

The best diet programs almost always include fish on the menu. After all, fish dishes are an excellent source of easy-to-digest unsaturated fats. Fatty sea fish (sardine, herring, cod, salmon...) are especially rich in unsaturated fatty acids.

If there is a sufficient amount of unsaturated fats in the body, then the skin looks healthy, does not flake, hair has a shiny appearance, and nails do not break [24-26].

An active lifestyle and a balanced diet with sufficient amounts of unsaturated fats are the best choice for those who want to maintain youth and health!

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