

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

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Abstract. Dietetics have long learned to distinguish between healthy and unhealthy fats. Particular attention is paid here to foods high in monounsaturated fatty acids (MUFA). Experts recommend building a diet to improve health and reduce waist size with the mandatory inclusion of such fats.

Keywords: monounsaturated fats, general characteristics, daily requirement, digestibility, beneficial properties, signs of deficiency, signs of excess

Foods High in Monounsaturated Fats:

- Olive oil [1]
- Canola oil
- Hazelnut
- Pecans
- Almond
- Peanut paste
- Pistachios
- Peanut
- Cashew
- Walnut oil [2]
- Mustard seeds
- Sesame
- Pine nut
- Grapeseed oil [3]
- Avocado [4]

General characteristics of monounsaturated fats

MUFAs are fatty acids in the structure of whose molecules no more than one double carbon bond is allowed.

Monounsaturated fats have one important distinguishing feature. At room temperature they have a liquid structure, but thicken as the temperature drops.

The most famous representative of monounsaturated fatty acids (MUFAs) is oleic acid (omega-9) [5], which is found in large quantities in olive oil.

In addition, MUFAs include palmitoleic, erucic, eicosenoic, and aceterucic acids. And eleven more less common monounsaturated fatty acids.

Monounsaturated fats are generally considered very beneficial substances for the body. Through their proper use, you can get rid of high cholesterol in the blood [6], improve vascular tone, and prevent heart attack [7] or stroke [8].

Vegetable oils will bring the most benefit to the body if they are not subjected to heat treatment, but consumed in salads.

Beware, rapeseed oil!

It turns out that not all monounsaturated fats are created equal for your health. As with any rule, there are exceptions...

The thing is that a large amount of erucic acid leads to disruption of fat metabolism. Rapeseed oil, for example, contains about 25 percent erucic acid.

Recently, through the efforts of breeders, a new variety of rapeseed (canola) was developed, which, unlike its predecessor, contains only 2% erucic acid. Further work on breeding stations in this area is currently underway. Their task is to reduce the amount of erucic acid in this oil plant.

Daily requirement for monounsaturated fats

Among all other types of fat consumed, the human body has the greatest need for monounsaturated fats. If we take all the fats needed by the body as 100%, it turns out that 60% of the diet should be monounsaturated fats. The norm of their consumption for a healthy person is, on average, 15% of the calorie content of the total diet.

An accurate calculation of the daily intake of MUFAs takes into account the type of primary human activity. His gender and age also matter. For example, the need for monounsaturated fats is higher for women than for men.

The need for monounsaturated fats increases:

- when living in a cold region;
- for those who are actively involved in sports or do hard work in production;
- for young children during the period of active development;
- in case of disruption of the cardiovascular system;
- when staying in environmentally unfavorable areas (prevention of cancer);
- for patients with type 2 diabetes mellitus [9].

The need for monounsaturated fats is reduced:

- for allergic rashes;
- for people who move little;
- for the older generation;
- for gastroenterological diseases.

Digestibility of monounsaturated fats

When consuming monounsaturated fats, you need to correctly determine their amount in food. If it is normal to consume monounsaturated fats, then the process of their absorption by the body will be easy and harmless.

Beneficial properties of monounsaturated fats, their effect on the body

Monounsaturated fats are part of the structure of cell membranes. They actively participate in metabolic processes, which leads to the coordinated functioning of the whole organism. They break down incoming saturated fats and prevent the appearance of excess cholesterol.

A balanced intake of MUFA fats helps prevent atherosclerosis [10], sudden cardiac arrest, reduces the risk of cancer [11], and strengthens the immune system [12].

For example, the most well-known, oleic and palmitic acids, have cardioprotective properties. They are purposefully used in the prevention and treatment of cardiovascular diseases. Oleic acid is also used in the treatment of obesity [13].

The main function of monounsaturated fats is to activate metabolic processes in the body. A lack of monounsaturated fats for the body is fraught with deterioration in brain activity, disruption of the cardiovascular system, and deterioration in well-being.

Helpful advice:

Monounsaturated fats are most preferred for frying. Therefore, nutritionists recommend that lovers of crunchy pieces purchase olive or peanut oil for this purpose. Advantages - minimal changes in the structure of the product when exposed to high temperatures.

Interaction with other elements

Eating monounsaturated fats along with foods rich in fat-soluble vitamins A, D, E [14-16] improves the absorption of nutrients.

Signs of a lack of monounsaturated fats in the body

- disturbances in the functioning of the nervous system;
- deterioration of skin condition, itching;
- brittle nails and hair;
- poor attention, memory;
- the appearance of autoimmune diseases;
- cardiovascular system disorders;
- increased amount of cholesterol in the blood;
- metabolic disease;
- other symptoms of a lack of fat-soluble vitamins.

Signs of excess monounsaturated fat in the body

- allergic skin rashes;
- stomach problems;
- increased skin oiliness.

Factors influencing the content of MUFA in the body

To replenish monounsaturated fat reserves, a balanced diet with sufficient content of the latter is necessary. After all, the main source of their intake is food.

Monounsaturated fats in the fight for slimness and beauty

Monounsaturated fats must be included in a weight loss diet. They help enrich the body with useful substances, giving the body energy for increased stress.

In addition, unsaturated fats of this group contribute to the rapid breakdown of saturated fats, which to a greater extent cause obesity if their amount exceeds the norm.

Research has shown that oleic acid helps break down fatty deposits. Consuming natural oils rich in monounsaturated fats helps improve your appearance. Hair and nails begin to radiate health and beauty [17,18].

The famous “Mediterranean diet” [19], rich in monounsaturated fats, allows you not only to quickly get into shape, but also contributes to the rapid recovery of the entire body. Olives, nuts, vegetable oils, fresh fruits and seafood will make your diet especially healthy and palatable.

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