

Cholesterol – description, benefits, effects on the body and the best sources.

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Abstract. Cholesterol has recently gained enormous popularity: articles are written about it, books are published. Also, many health-conscious people are afraid of him. But is he really as scary as they say? And hasn't cholesterol become a potential culprit for all vascular diseases only because the real cause of such a terrible diagnosis, such as a heart attack, which is now widespread, has not been found? Let's look into this issue together.

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

Foods rich in cholesterol:

- Brain
- Liver, liver pates
- Fish caviar
- Eggs [1]
- Butter [2]
- Shrimps
- Hard cheese
- Pork
- Mutton
- Rabbit
- Squid
- Beef
- Chicken
- Cream 20%
- Cod

General characteristics of cholesterol

Cholesterol is a waxy solid from the group of sterols. It is present in large quantities in nerve and fatty tissues, as well as in liver cells. Moreover, it is a precursor not only of bile acids, but also of sex hormones.

Typically, cholesterol is found in animal products.

They are rich in eggs, fish, meat, shellfish, as well as natural dairy products. The body produces most of the cholesterol, about 75%, on its own, and only 25% comes to us with food.

Conventionally, cholesterol is divided into “good” and “bad”.

“Good” cholesterol is found in large quantities in foods of animal origin that are properly cooked. In a healthy body, excess cholesterol is eliminated independently.

As for “bad” cholesterol, it is formed from overheated fats, which are converted into trans fats. At the same time, the structure of cholesterol itself changes. The molecule becomes more lumpy, which contributes to the deposition of cholesterol plaques on the walls of blood vessels.

Daily cholesterol requirement

Representatives of official medicine call indicators equal to 200 mg/dl (from 3.2 to 5.2 mmol/liter) as normal. However, these figures are disputed by some data from studies conducted in the United States. Researchers say that for people of working age, the amount of cholesterol may be about 250 mg/dL - 300 mg/dL (6.4 mmol/liter - 7.5 mmol/liter). As for older people, their norm is 220 mg/dL (5.5 mmol/liter).

The need for cholesterol increases:

- With an existing risk of hemorrhage, when fragility of the vascular walls appears. In this case, healthy cholesterol plays the role of a patch that carefully closes the damaged area in the vessel.
- For problems with red blood cells. Here cholesterol is also essential. It restores the integrity of the damaged red blood cell wall.
- For weakness and poor health caused by low cholesterol levels.
- With a lack of sex hormones, as well as insufficient production of bile acids.

The need for cholesterol is reduced:

- For various liver diseases associated with the risk of gallstone formation, as well as for certain types of metabolic disorders.
- In case of recent operations (less than 2.5 months).
- For problems with the cardiovascular system.

Digestibility of cholesterol

It is well absorbed together with fats, as it is a fat-soluble substance. It is digested in the liver, which produces the necessary amount of bile acids for its absorption. Absorbed in the intestines.

The beneficial properties of cholesterol and its effect on the body

Cholesterol is necessary to strengthen the walls of cell membranes and is a building material for cells. Plays the role of an “ambulance” in case of damage to the walls of blood vessels and disruption of the integrity of red blood cells. Necessary for the production of corticosteroids, participates in metabolism.

Interaction of cholesterol with other essential elements

Cholesterol interacts with bile acids, which are necessary for its absorption, with vitamin D [3], as well as with animal protein [4].

Signs of a lack of cholesterol in the body:

- frequent depression;
- decreased immunity;
- increased fatigue and high sensitivity to pain;
- possible bleeding and disturbances in the structure of the blood;
- decreased sex drive;
- deterioration of reproductive function.

Signs of excess cholesterol in the body:

- Cholesterol plaques in blood vessels. If the body is unable to cope with excess “bad” cholesterol in the body, cholesterol plaques begin to deposit on the walls of blood vessels, gradually plugging the lumen of the vessel and disrupting the body’s natural hemodynamics.
- A slowdown in metabolic processes in the body, and as a result, an increase in body weight.

Cholesterol and health

In our world, it is generally accepted that cholesterol is enemy No. 1 for the cardiovascular system. At the same time, it is not always clear that these accusations do not at all apply to healthy cholesterol, which has the correct structure. After all, it is trans fats (bad cholesterol) that become the main culprits of vascular contamination.

Thanks to research by British scientists, it became known that the level of heart attacks and strokes has increased among the population group adhering to a low-cholesterol diet (light oils, margarines, exclusion of animal fats from food). It is necessary to take into account that all these products were obtained as a result of physicochemical processing, during which the structure of the cholesterol molecule was disrupted, turning it into poison.

In addition, the theory of the connection between high blood cholesterol levels and heart attacks and strokes is confirmed to be untenable. After all, before there were much fewer cardiovascular diseases, and people consumed much more foods containing cholesterol. And before there were no low-fat dairy products, “light” butter and other cholesterol-free “masterpieces” on the shelves of our stores!

According to Andreas Moritz, author of the book “The Secret of a Healthy Heart,” significant damage to blood vessels and the heart is caused by the familiar trans fats contained in deep-fried foods (chips, fast food, etc.), as well as by excessive consumption of protein foods and, of course, constant stress [5] and social insecurity.

It is nervous overload that leads to vasospasm, as a result of which the blood supply to the heart and brain deteriorates [6.7]. Supporters of Ayurvedic medicine believe that love and caring attitude towards each other can prevent a heart attack, and also contribute to a faster recovery of the patient after an illness.

And the third fact proving the harmlessness of high-grade cholesterol for the cardiovascular system is the diet of the inhabitants of Japan, the Mediterranean and the Caucasus, who, despite their high-cholesterol menu, are long-lived, healthy, joyful and energetic people.

That is why I would like to tell everyone who reads these lines that it is better to eat clean and healthy food, and also follow the main rule of medicine, which is called “Do no harm!”

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