

INFORMATION ABOUT SUGAR

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Annotation: *Information about sugar*

The history of sugar and its main sources – sugar cane and beet – are known from the high school course. But the world and science do not stand still, technical progress is finding many sources of energy, one of which is sugar. The beginning of the new millennium was also marked by the fact that sugar molecules were found not only everywhere in the gas clouds in space, but also in the central part of the Milk Way.

Shakar haqida ma'lumotlar

Shakar tarixi va uning asosiy manbalari – qand qamishi va lavlagi – o'rta maktab kursidan ma'lum. Ammo dunyo va fan bir joyda turmaydi, texnik taraqqiyot ko'plab energiya manbalarini topmoqda, ularidan biri shakar. Yangi ming yillikning boshlanishi shakar molekulalari nafaqat koinotdagi gaz bulutlarining hamma joyida, balki Somon yo'lining markaziy qismida ham topilganligi bilan ham ajralib turadi.

Информация о сахаре

История сахара и его основных источников – сахарного тростника и свеклы – известна из курса средней школы. Но мир и наука не стоят на месте: технический прогресс находит множество источников энергии, одним из которых является сахар. Начало нового тысячелетия также ознаменовалось тем, что молекулы сахара были обнаружены не только повсюду в газовых облаках космоса, но и в центральной части Млечного Пути.

Introduction. So what are the benefits of sugar for the body? This product is a source of energy, it is converted into glucose by the body and used for energy. During physical exertion, especially during hard work in the field and during sports, the need for energy is quickly eliminated if sugar is consumed. In people, engaged in mental work, the brain's need for carbohydrates increases, and it can be satisfied by eating sugar at such a time. Sugar stimulates the production of the mood-enhancing hormone (serotonin) and provides nourishment to brain cells.

Along with the benefits of sugar, there are also many harms to the body. Let's talk about it.

1. Causes fat accumulation

Constantly consuming more sugar than the norm increases the glycogen reserve in the body, which turns into fat tissue, begins to accumulate in the abdomen and legs, and then leads to obesity (especially in children).

2. Creates a false sense of hunger

When sugar is consumed, it is quickly absorbed into the blood, causing a sudden increase in glucose levels, which in response causes the pancreas to produce additional insulin and rapidly lower glucose levels, which in turn stimulates appetite-stimulating cells in the brain. As a result, the appetite increases and a false feeling of hunger appears, a person eats a lot of food and eats sweets constantly. As a result, the constant increase in the amount of insulin in the blood creates the basis for the development of chronic diabetes mellitus or myocardial infarction.

3. Sugar causes rapid aging

High and long-term consumption of sugar accelerates the appearance of wrinkles on the skin. Because sugar affects the skin's collagen and reduces its elasticity. In the second case, the internal cells of the body die as a result of the call of sugar free radicals.

4. It affects the work of the heart

Sugar has an adverse effect on the heart muscle, a decrease in the amount thiamine leads to dystrophic changes in the heart muscle and extravascular fluid accumulation.

5. Reduces immunity

The higher the blood sugar, the lower the immunity. Why is there a lot of complications in diabetes, because it is based on the increase in the amount of sugar. In some cases, sugar causes varicose veins, reduces eyesight, causes gallstone formation and toxicosis in pregnant women, as well as endocrine, nervous, kidney, digestive, bone and kidney problems. It accelerates the development of many diseases by having a negative effect on the organs of the body.

6. Creates conditions for the growth of bacteria

Artificial sweets made of sugar are liked by children, and because of their frequent consumption, the bacteria in the oral cavity increases, as a result, the tonsils are often inflamed. Bacterial growth increases the acidic environment in the oral cavity, which leads to the destruction of tooth enamel and the development of dental caries. It is very common for children who eat a lot of sugar to have diseased teeth and loose teeth.

How much sugar should you eat per day?

Sugar and sugary foods are unfortunately one of the biggest problems in nutrition. In addition to their high calorie content, they are low in nutrients and can damage your metabolism in the long run. The harm of consuming too much sugar is that it causes various diseases such as weight gain, obesity, type II diabetes and heart disease. So what should be the daily sugar intake?

Unfortunately, there is no simple answer to this question. According to the American Heart Association (AHA), the maximum amount of sugar we should consume in a day is as follows:

MEN:150 caalories per day (37,5 grams or 9 teaspoons).

WOMEN:100 calories per day (25 grams or 6 teaspoons).

Oxygen, carbon and hydrogen – the sugar molecule consists of their atoms. Glucose, found pure in honey and fruit, is the sweetest of the monosaccharides. Alternative sources of sugar and sugar palm sap, millet and rice. As a rule, the process of preparing such types of sugar with malt and Candida is very long and time-consuming, but the people of the Asian region used this type of sugar long before the appearance of cane sugar. Interestingly, lemons have more sugar than strawberries. So choose what to drink tea with.

In addition to regular cane sugar and refined sugar cubes, sugar can be in liquid form (sucrose and invert sugar), as well as cut and caramel. The latter can be a good help in the fight against cough in children.

There are facts about sugar:

1. When sugar enters the body, it breaks down into fructose and glucose. Glucose supplies 50% of the energy in the body
2. For the first time, sugar production began in India.
3. Sugar is obtained from beets and sugarcane.
4. Sugar ensures that the dopamine hormone enters the brain's center of satisfaction and enjoyment. As a result, many people become addicted to sugar.
5. The stalk of sugarcane can grow up to 9 metres.
6. The craving for sugar and sweets is passed down from generation to generation.
7. Consuming too much sugar causes an increase in the level of insulin in the body. This increases the risk of cancer in the future.
8. Sugar is in the both ketchup and bread.
9. Natural sugar consists of lactose and fructose.
10. Research results of scientists have shown that eating a lot of sweets weakens memory and causes rapid aging of the brain.
11. The factory for extracting sugar from beets was built for the first time in the city of Kunerna, located in Poland, by a German named Archard.
12. A monument to white sugar was erected in the Czech Republic. Because white sugar was created in the same country in 1843.
13. Sugar from sugar cane is more beneficial than sugar from beet. It is absorbed faster by the body.

14. In the world, sugar is widely used in the production of plastics, pharmaceuticals and the tobacco industry.

15. In the Middle Ages in Europe, sugar was accepted as a medical drug and sold only in pharmacies.

16. Until the end of the 18th century, sugar was considered a luxury and was called "white gold".

17. Car fuel is obtained from sugar cane in Brazil and India. They say it pollutes the atmosphere much less than gasoline.

18. 110 million tons of sugar are produced worldwide every year.

Information on sugar in medicine

Sugar, sugar substance, sugar substance are low-molecular representatives of the class of carbohydrates (monosaccharides and oligosaccharides). Good solubility and crystallization in water is a characteristic of Q. substance. It is named after the source from which it was first taken. For example, glucose - grape sugar, lactose - milk sugar, maltose - malt sugar, sucrose - cane or beet sugar. Substance Q includes both natural and synthetic monosaccharides without Q. such substances are distinguished from ordinary Q. substances by their specific aspects. Instead of the hydroxyl group (-ON) in their molecule, there is another group, for example, hydrogen atom (deoxysaccharide), amino group N11, (aminosugar), mercaptogroup N (thiosaccharide), etc. will be; has a branched carbon skeleton (branched Q. substance) or an ultralow chain of 7 or more atoms (high Q. substance); an additional oxygen-absorbing ring (anhydrosugar) or a double carbon bond (unsaturated substance Q.) is present. Microorganisms are a rich source of diverse "non-sugar" Q. The structure of most natural Q. substances has been determined by chemical synthesis (see also Carbohydrates).

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