

Pectin substances - description, benefits, effects on the body and the best sources

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Abstract. Marshmallows, marmalade, marshmallows, oriental sweets and other confectionery delicacies... The main gelling substances responsible for their structure and shape are pectin substances, and not gelatin, as is usually believed.

Pectin substances are found in apple and citrus pomace, sugar beet pulp, carrots, apricots, sunflower baskets, as well as in other equally popular plants. At the same time, the largest amount of pectin is concentrated in the peel and core of the fruit.

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

Products rich in pectin substances:

- Apples [1]
- Plums [2]
- Figs
- Peaches [3]
- Bananas [4]
- Pears [5]
- Pineapples [6]
- Apricots [7]
- Oranges [8]
- Melons [9]
- Dates [10]
- Strawberry [11]
- Mango
- Blueberry and blueberries [12]
- Carrot [13]

General characteristics of pectin

The discovery of pectin itself occurred about 200 years ago. The author of the discovery was the French chemist Henri Braconneau, who isolated pectin from plum juice [14].

However, more recently, when studying ancient Egyptian manuscripts, experts found in them a mention of a certain “transparent fruit ice that does not melt even under the hot sun of Memphis.” Scientists concluded that this was the first mention of jelly made using pectin.

Translated from Greek, pectin is translated as “*frozen*” (from the ancient Greek πηκτός). It is one of the galacturonic acid compounds and is present in almost all higher plants. Fruits and some types of algae are especially rich in it.

Pectin helps plants maintain turgor, drought resistance, and promotes long-term storage.

As for people, pectin stabilizes metabolism, lowers cholesterol levels [15], and improves intestinal motility. In addition, it has properties that will be discussed below.

Daily requirement for pectin

The daily intake of pectin depends on the goal being pursued. For example, to reduce blood cholesterol, it is enough to consume about 15 grams of pectin per day. If you intend to lose weight, then the amount of pectin consumed should be increased to 25 grams.

It should be noted that 500 grams of fruit contains only 5 grams of pectin. Therefore, you will have to eat from 1.5 to 2.5 kg of fruit daily, or use pectin produced by our food industry.

The need for pectin increases:

- in case of poisoning with heavy metals, pesticides and other substances unnecessary to the body;
- high blood sugar [16];
- high cholesterol;
- constipation [17];
- infectious diseases;
- overweight;
- oncological diseases.

The need for pectin decreases:

Due to the fact that every day we encounter a huge number of different substances that are not beneficial for our body, nutritionists do not recommend reducing the daily intake of pectin. Naturally, provided there are no allergic reactions to it, which is extremely rare.

Pectin digestibility

The absorption of pectin in the body does not occur, because its main task is the evacuation of substances harmful to the body. And he copes with it perfectly!

Beneficial properties of pectin and its effect on the body

When pectin enters the gastrointestinal tract, a jelly-like substance is formed in it, which protects the mucous membrane from irritation.

When pectin comes into contact with salts of heavy metals or with toxins, pectin forms a compound that is insoluble and is excreted from the body without having a harmful effect on the mucous membrane.

Pectin helps restore normal peristalsis and is an effective remedy for constipation.

It lowers cholesterol and blood glucose levels.

Pectin improves intestinal microflora, destroying pathogenic microorganisms (harmful bacteria and protozoa).

Interaction with other elements

When entering the body, pectin interacts with water [18]. Increasing in size, it inactivates and removes harmful substances from the body.

Signs of excess pectin

Due to the property of pectin not to linger in the body, its excess is not observed in the human body.

Signs of a lack of pectin in the body:

- general intoxication of the body;
- high concentration of bad cholesterol;
- overweight;
- constipation;
- decreased libido;
- pallor and sagging skin.

Pectin substances for beauty and health

In cosmetology, vinegar has also earned honor and respect. How much are vinegar wraps worth! Thanks to them, you can even get rid of the disgusting “orange peel” [19].

People who regularly consume foods high in pectin have healthy, elastic and clean skin, a pleasant complexion and fresh breath. Due to the release of the gastrointestinal tract from waste and toxins, with regular consumption of pectin substances, excess weight is reduced.

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