



Rowan juice: proven benefits for the body and recommendations for use

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Abstract. Trees with spectacular bright red clusters of berries can often be seen in garden plots. This popularity of plants is explained not only by their beauty and attractiveness, but also by their famous exoteric properties. Since ancient times, rowan has been considered a strong amulet. Our ancestors planted it near houses to protect the home and its inhabitants from evil spirits, fires, uninvited guests, as well as to bring wealth and well-being to the family. But not all fans of rowan know that, in addition to mysterious magical properties, it also has very real health benefits. Especially beneficial for health, according to experts, are the bright red clusters of berries, the healing qualities of which are often used in modern folk medicine. ^[1] In the autumn-winter period, refreshing kvass is prepared from them, delicious compotes and decoctions, jams and jellies are prepared, and rowan juice, rich in vitamins and various useful substances, is pressed.

Key words: rowan, rowan juice, beneficial properties, contraindications, composition, calorie content

Composition and calorie content

Red rowan berries are quite juicy (contain 81.1% water) and belong to the category of low-calorie products - 100 grams of fruit pulp contains only 50 kcal. In addition, they are relatively low in fat, protein and carbohydrates (0.2, 1.4 and 8.9%, respectively), which allows red rowan juice to be consumed even by people who strictly adhere to a healthy lifestyle and diet.

The drink is particularly unique due to its rich vitamin composition. In particular, red rowan juice contains large amounts of the following nutrients:

- Ascorbic acid, or vitamin C. Ascorbic acid belongs to the category of powerful antioxidants - it helps improve immunity, which is especially important during the autumn-winter period of viruses and colds, prevents the development of scurvy ^[2], stimulates collagen synthesis ^[3], which has a positive effect on the condition of the skin.
- Beta-carotene is a plant pigment found in bright orange-red fruits, which include red rowan. It is also a powerful antioxidant, stimulates the body's protective functions, is responsible for the health of the skin and eyes - it prevents the development of cataracts ^[4], strengthens the dermis, slows down the process of premature aging, and shows good results in the prevention and treatment of autism symptoms ^[5].
- Vitamin E, also called the "vitamin of youth," slows down the premature processes of cell aging and improves skin condition ^[6], stimulates the production of the main female sex hormones, estrogen and progesterone, and also helps maintain reproductive function - improves the menstrual cycle, alleviates the symptoms of menopause. Tocopherol also helps to increase sperm motility, which increases the chances of pregnancy ^[7] and improves cognitive function ^[8].
- Iron plays an important role in the production of red blood cells, namely hemoglobin, which is responsible for transporting oxygen through the tissues of the body. Microelement deficiency can lead to anemia ^[9], which entails the development of cardiovascular diseases and serious risks to the health of the mother and child during pregnancy ^[10]. Iron also helps support immunity and healthy thyroid function.

Red rowan berries contain the natural chemotherapeutic substance amygdalin, or vitamin B17 (it is what gives the fruit a bitter taste), which tends to turn into hydrocyanic acid. Therefore, it is not recommended to consume rowan berries or their squeezed juice in large quantities to avoid poisoning. And in recommended doses, this substance has a very positive effect on the body - analgesic, rejuvenating (stops the aging process), immunomodulatory ^[11], and also anti-carcinogenic. ^[12]

Top 5 beneficial properties of rowan juice

1. Has antimicrobial and anti-inflammatory potential

It has been proven that drinking rowan juice has a positive effect on the digestive system, eliminates fermentation processes, the development of pathogens ^[13], fungi and mold - it is a kind of natural antibiotic ^[14], and helps cope with inflammatory bowel diseases and colitis. ^[15]

2. Reduces the risk of developing cancer processes

Research shows that berries rich in anthocyanins, flavonoids, phenolic acids, and other beneficial substances (these undoubtedly include rowan fruits) have the properties of eliminating cancer cells. That is why juices, including rowan juice, are recommended for consumption by specialists as a prevention and therapy for cancer ^[16]. In particular, rowan fruits, containing such unique active compounds as chlorogenic and protocatechuic acids, rutin, etc., show good results in the treatment of melanoma. ^[17]

3. Has high antioxidant activity

As a result of a scientific experiment, scientists were able to find out that the bitter-sour rowan juice, which has a specific taste, is one of the most useful. In particular, it has the strongest antioxidant activity among all other fresh juices studied. ^[18] Systematic consumption of the drink helps slow down

the aging process of the body, normalize metabolism, and stabilize the functioning of the nervous and cardiovascular systems.

4. Successfully used in antidiabetic therapy

Red rowan berries have a low glycemic index - 25 units, which allows people with a confirmed diagnosis of diabetes to consume healthy rowan juice without any health risks. Moreover, according to research materials, red rowan fruits are successfully used in many European countries as an effective treatment for type 2 diabetes. ^[19]

5. Has a diuretic and laxative effect

To cleanse the body of waste and toxins, as well as quickly and without the use of special pharmaceutical drugs to reduce tissue swelling and high blood pressure - all this can also be achieved by the miraculous rowan juice, which has long been used in folk medicine as a natural and effective diuretic and laxative. . ^[20]

Contraindications and features of drinking red rowan juice

Like any other product, red rowan juice has certain contraindications. In particular, to avoid poisoning and unpleasant consequences, it is recommended to drink it in strictly limited quantities: the daily norm for an adult is fresh juice squeezed out of 100 grams of berries. Also, doctors and alternative medicine specialists advise people who suffer from high stomach acidity, gastrointestinal ulcers, increased blood clotting, and also people with individual intolerance to the product to avoid this drink .

Considering the specific sourish-tart taste of fresh rowan, it is recommended that before tasting it be additionally diluted with water or other sweeter juices: pineapple ^[21], pear ^[22], orange ^[23], etc.

How to prepare and store rowan berry juice

To prepare a healing drink, rowan berries must be thoroughly cleared of bunches and debris before processing, washed and dried, and then used for squeezing in a juicer or juicer.

The pomace remaining after squeezing the juice is a rich source of biologically active substances. That is why it is recommended not to throw them away, but to send them for further processing. For example, use it as a healthy ingredient when making delicious homemade cookies with increased antioxidant activity. ^[24]

You can store rowan juice in the refrigerator, but not longer than a few days. For a more long-term preservation of a valuable and vitamin-rich product, it is recommended to freeze it, pouring portions into special molds or zip bags, or preserve it by pre-pasteurizing it.

Expert commentary

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Rowan juice is an original taste, but a very valuable drink that is definitely worth trying in the autumn-winter period. Fresh red-orange berries have excellent anti-inflammatory and analgesic properties, help improve immunity, cope with gastrointestinal disorders and excessive swelling, and can also be used

as an adjuvant in the treatment of diabetes and oncology. Add this drink in recommended doses to your diet and see its benefits and effectiveness from your own experience!

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useful for health, according to experts, are bright red bunches of berries, the healing qualities of which are often used in modern folk medicine. From them in the fall and winter period make refreshing kvass, prepare tasty compotes and decoctions, jams and jellies, as well as squeeze rich in vitamins and a variety of useful substances rowan juice.