

Journal of Healthy Nutrition and Dietetics

In issue:

Review juices from
the following berries:

- Sloe
- Rosehip
- Rowan
- Aronia

The useful and healing properties, composition and caloric content of each type of juice are specified. Contraindications and peculiarities of use are considered.

Recommendations on preparation and storage of each drink are given.



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Sloe juice - proven benefits and benefits of drinking a delicious drink

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Abstract. Thorn, or blackthorn, is a low shrub with thorny branches, often used in landscape design as an original hedge. The berries of the plant are also especially popular - both in the field of cooking and among admirers of traditional medicine. Small blue-black plums, slightly tart with a pronounced sourness, blackthorn fruits, which are sometimes called goat berries, are used as original fillings for pies, natural and healthy food colorings. ^[1] They are also used to make a variety of jams and preserves, prepare liqueurs and compotes, use them to make the famous sloe gin in England, and also squeeze out a tasty and very healthy fresh juice. Blackthorn juice belongs to the category of very healing drinks and, according to experts, when used systematically and correctly, it helps solve many health problems.

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

Composition and calorie content

Wild plum berries (this is what sloe is sometimes called) are quite juicy (contain 84% water) and low in calories - 100 grams of fruit pulp contains only 54 kcal. In addition, they contain a minimum of fats and proteins (0.3 and 1.5%), some carbohydrates (9.4%), which allows you to include fresh sloe juice in the diet of people who adhere to a healthy lifestyle and strictly monitor their own weight and figure .

But sloe juice has gained the greatest popularity among admirers of healthy lifestyle and traditional medicine due to its unique chemical composition.

The natural drink contains the following beneficial vitamins and microelements:

- Potassium - regulates the water balance in the body's cells and supports the healthy functioning of the kidneys, reduces the intensity of allergic reactions, and normalizes blood pressure levels.^[2]
- Phosphorus - takes an active part in the absorption of calcium and promotes the formation of healthy bone tissue - prevents the development of osteoporosis; accelerates metabolism and body recovery processes, has antibacterial properties.^[3]
- Magnesium - regulates blood sugar levels and normalizes heart rate, participates in the production of collagen and helps improve bone mineralization^[4], reduces pain in the joints and relaxes muscle tissue^[5] - prevents the accumulation of lactic acid in them, helps eliminate cramps.^[6]
- Vitamin C has powerful antioxidant and immunostimulating properties, promotes the body's production of its own collagen^[7], prevents the development of scurvy^[8] and is used in the treatment of periodontal disease, thins the blood and prevents the formation of blood clots.
- B vitamins, in particular B3, or niacinamide (good for the skin - evens out tone and eliminates yellowness of the skin, regulates sebum production, relieves itching, irritation and inflammation^[9]), B2, or riboflavin (improves the functioning of the reproductive organs, accelerates metabolic processes, promotes the production of the antioxidant glutathione, which has a positive effect on vision^[10], shows good results in the prevention of cancer^[11], and improves cognitive function^[12].

Sloe fruits also contain tannins, various organic acids, flavonoids (myricetin, catechin, epicatechin^[13], etc.), useful for the body, glycosides, etc.

Top 6 beneficial properties of thorn juice

1. Has an anti-inflammatory effect

It has been proven that sloe juice, rich in flavonoids, has powerful anti-inflammatory and wound-healing properties^[14], which allows it to be used as an analogue of pharmaceutical drugs that are routinely used to relieve inflammatory processes (for rinsing the mouth for stomatitis, tonsillitis, etc.^[15]).

2. Shows good results in the prevention and treatment of oncology

Research shows that the extract obtained from blackthorn berries exhibits high antioxidant activity and has a cytotoxic (destructive) effect on some types of cancer cells - in particular, it shows good results in reducing glioblastoma of the brain.^[16]

3. Improves digestion

Blackthorn fruits contain many beneficial flavonoids and anthocyanins that have prebiotic properties. It has been proven that systematic consumption of thorn juice has a positive effect on the intestinal microbiota and improves digestive processes in general.^[17]

4. Accelerates tissue regeneration

The healing process of wounds, especially with age, slows down for many people. Thorn juice rich in polyphenols helps speed up the process of restoration and regeneration of the epithelium and mucous membranes (by almost 70%, according to the results of studies).^[18]

5. Recommended for the prevention of diabetes

The fruits, rich in biologically active substances (the pulp of sloe berries contains numerous beneficial flavonoids, anthocyanins, polyphenolic acids, etc.) exhibit good antidiabetic activity, which allows us to recommend the drink, freshly prepared sloe juice, as an effective therapeutic agent for the treatment and prevention of diabetes.^[19]

6. Used in the treatment of diarrhea

Thanks to its antimicrobial^[20] and astringent properties, sloe juice has been successfully used in the treatment of diarrhea, as well as indigestion and food poisoning.

Harm and features of drinking blackthorn juice

In addition to the above-mentioned beneficial properties, thorn juice also has some contraindications. In particular, it is not recommended for people who suffer from high stomach acidity and have a history of allergies to certain foods, including sloe fruits. In addition, it is recommended to drink the drink in strictly limited doses (no more than 100 ml per day), otherwise, instead of benefit, it can cause harm (for example, lead to an upset stomach).

Research shows that the greatest benefits of blackthorn juice come from diluting it with hot water—contact with the hot liquid maximizes all the beneficial and antioxidant properties of the nutrients contained in the pulp of the berries.^[21] Also, during the experiments, it was possible to prove that the antioxidant properties of blackthorn fruits are further increased by the interaction of fresh juice squeezed out of them with lemon juice.^[22]

It is recommended to taste sloe fresh, like any other natural juices, through a straw to minimize the contact of the sweet and sour liquid with tooth enamel and prevent the subsequent development of caries.^[23]

How to prepare and store sloe juice

Sloe berries initially have a characteristic tartness. But under the influence of low temperatures, as studies show, it disappears. Therefore, to prepare the juice, it is recommended to wait until the first frost and only then pick the fruits from the thorny branches for their subsequent processing.

To obtain juice, blackthorn berries should be carefully sorted, removing debris and spoiled fruits, washed in running water, dried, and then processed using a juicer or pressed through a regular colander with a wooden masher. In the latter case, you can add a glass of water to the squeezed seeds, bring the mixture to a boil and squeeze again, adding the resulting nectar to the initially squeezed juice.

The resulting fresh juice can be consumed immediately - either in its pure form or diluted with water (preferably hot - as mentioned above, it is hot water that allows all the beneficial substances contained

in the pulp of thorn berries to be revealed to the maximum) or any other juice: lemon or sweeter (pineapple, raspberry, strawberry ^[24-26], etc.).

You can also prepare sloe juice for long-term storage. For these purposes, the canning method with pre-pasteurization or freezing should be used. It is recommended to store rolled jars of fresh juice for no more than 1 year in a cool, dark place, avoiding direct sunlight.

Expert commentary

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Blackthorn juice is a tasty and very healthy drink, with which you can restore digestive processes without the use of special pharmaceutical products, get rid of skin problems and inflammatory processes in the oral cavity, and even prevent diabetes and cancer. Add this healing fresh juice to your family's diet and see its benefits and effectiveness from your own experience!

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[The HTML version of the article](#) is available on the edaplust.info website.

Received 20.01.2024

Sloe juice - proven benefits and peculiarities of drinking a tasty drink

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Abstract. Blackthorn is a low shrub with thorny branches, often used in landscape design as an original hedge. The berries of the plant are especially popular, both in the field of cooking and among fans of folk medicine. Small, like small plums blue-black slightly tart with a pronounced sourness blackthorn fruit, which are sometimes called goat berries, are used as original fillings for pies, natural and safe for health food coloring. They are also used to make a variety of jams and jams, liqueurs and compotes, used to make the famous in England thorn gin, and also squeezed tasty and very useful juice. Blackthorn juice belongs to the category of very healing drinks and, according to experts, with systematic and proper use it helps to solve many health problems.



Rosehip juice: 10 scientifically proven facts about the benefits of a healing drink

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Abstract. The rose hip, also called the wild rose for its close family connection with the queen of the garden, is widely popular both among professional flower breeders and among people interested in

cooking and traditional medicine. The latter pay special attention to the fruits of the plant, from which they prepare various candied fruits, jams, preserves, and also squeeze healthy, aromatic and very tasty fresh juice from them. Nowadays, rosehip juice, rich in vitamins and microelements, can be purchased either in specialized departments of supermarkets or health food stores, or you can prepare it yourself from fresh berries on hand.

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

Composition and calorie content

The rose hip, which, according to botanists, is still not a berry, but a multi-nut, is not particularly juicy - it contains only 58.66% water. At the same time, it is quite high in calories (162 kcal), 100 grams of the product contains 38.2 g of carbohydrates, 1.6 g of proteins and 0.34 g of fat. ^[1] But it is worth considering that all these “excess” numbers of calories and carbohydrates are more than offset by beneficial vitamins, microelements, and other nutrients contained in large quantities in the fruits of the wild relative of the rose.

One of the most important “riches” of rose hips, and, accordingly, the juice obtained from them, is vitamin C. According to official research data, 100 grams of rose hip pulp contains almost 10 times more ascorbic acid than the same amount of lemon! ^[2]

Rose hips are rich in other substances and microelements beneficial to the body. In particular, these are:

- Fiber (24.1 grams per 100 grams of pulp) - heals the intestinal microflora and improves its proper functioning, helps the body get full faster, which promotes weight loss, helps reduce blood sugar without the use of special pharmaceutical drugs, which is especially important for patients suffering from diabetes, as well as reduce blood pressure and cholesterol levels in the blood, which prevents the risks of developing cardiovascular diseases. ^[3]
- Calcium (169 mg) - a microelement that promotes bone strength and the growth of healthy bone tissue, in particular, prevents the development of osteoporosis ^[4], and, as studies show, its deficiency can cause the development of Alzheimer's disease and premature aging of the brain. ^[5]
- Magnesium (69 mg) - normalizes heart risk, relaxes muscle tissue and promotes their healthy functioning ^[6], helps get rid of cramps, in combination with calcium increases bone density, preventing their fragility and fragility, which is especially important for older people, useful for the brain and central nervous system - stabilizes the psycho-emotional state, helps cope with stress and avoid depression, recommended as an additional remedy in the treatment of insomnia. ^[7]
- Lycopene (6800 mcg) is a carotenoid pigment, a powerful antioxidant. Prevents the development of processes of premature aging of the body, the development of cataracts and decreased vision, protects the skin from exposure to ultraviolet radiation, and the prostate gland from pathological and age-related changes ^[8], shows good effectiveness in the treatment of diabetes. ^[9]

Natural rosehip juice also contains a variety of flavonoids (kaempferol, quercetin, etc.), the carotenoids lutein and zeaxanthin necessary for vision ^[10], tannins, organic acids (citric, linoleic, malic, etc.) and many other useful nutrients for health.

Top 10 beneficial properties of rosehip juice

1. Prevents the development of cardiovascular diseases

It is known that sweet and sour rosehip juice, rich in antioxidants, in particular ascorbic acid and phenolic compounds, has a powerful anti-atherosclerotic effect on the body when consumed systematically. It lowers cholesterol levels in the blood, which reduces the risks of the formation of sclerotic plaques and blockages of blood vessels, which contribute to the development of diseases such as heart attacks, strokes, etc. ^[11]

2. Helps reduce weight

It has been proven that systematic consumption of rose hips, including in the form of concentrated juice, has a positive effect on appearance and figure - the drink helps reduce blood glucose levels, prevents weight gain and the development of obesity. ^[12]

3. Prevents the development of diabetes

Research confirms that a useful supplement in the daily diet in the form of rosehip juice has an additional antidiabetic effect - it helps reduce the accumulation of lipids in the liver, normalizes lipid metabolism ^[13], improves insulin secretion ^[14] and thereby contributes to the treatment and prevention of diabetes.

4. Improves the condition of patients with arthritis

The results of a medical experiment show that drinking rose hip juice has a positive effect on the well-being of patients suffering from osteoarthritis and rheumatoid arthritis. By including the drink in your daily diet, joint pain is reduced, joint mobility is improved ^[15], and swelling and inflammation are relieved due to its powerful anti-inflammatory properties. ^[16]

5. Reduces blood pressure

As you know, rosehip is a strong diuretic (has a powerful diuretic effect), which helps not only to cleanse the kidneys and remove stones from them, but also to quickly reduce high blood pressure in hypotensive patients without the use of special pharmaceuticals. ^[17]

6. Improves liver function

Rosehip has powerful hepatoprotective ^[18] and choleretic properties. When drinking juice squeezed from the fruits of the plant, the flow of bile improves, liver cells are restored, and the liver itself is cleansed of waste and toxins.

7. Stops the aging process

It has been proven that drinking such a powerful antioxidant as rosehip juice ^[19] daily for 8 weeks has a positive effect on the condition of the skin - its aging process slows down, it smooths out wrinkles, becomes more youthful and elastic. ^[20]

8. Improves cognitive properties

Tests show that eating rose hips, including the juice squeezed from them, has a positive effect on a person's cognitive properties and helps improve memory. ^[21]

9. Has an anti-cancer effect

Rosehip juice, rich in phenolic compounds, has a pro-apoptotic effect on cancer cells, in particular, it shows good results in the treatment of lung, prostate ^[22], and colon cancer. ^[23]

10. Reduces the incidence of urinary tract infections

Due to catheterization, which is carried out during surgery (in particular, during cesarean section), patients often experience such unpleasant consequences as urinary tract infection. Medical research shows that drinking rose hip juice, rich in flavonoids and antioxidants, helps to significantly reduce the risk of UTIs and avoid inflammatory processes. ^[24]

Harm and features of drinking rosehip juice

Considering that rosehip itself is a fairly strong diuretic, experts do not recommend combining its juice with other diuretics, including pharmaceutical ones. Such a mix can cause significant harm to the body - lead to dehydration. Also, the drink should be treated with caution by people with a history of food allergies, including to foods with large amounts of ascorbic acid (which can manifest themselves, for example, in the form of eczematous skin irritations ^[25]), and people suffering from thrombosis and thrombophlebitis (fresh increases blood clotting).

How to prepare and store rosehip juice

To prepare juice, it is better to take slightly unripe fruits, collected before frost (they contain more useful vitamins and microelements). The berries should be thoroughly washed, the stems removed, poured with a small amount of water and boiled until soft. Then the broth must be filtered through a sieve or gauze and ground. The resulting juice can be tasted immediately. However, it should be borne in mind that the vitamin mass turns out to be quite thick. Therefore, it can be additionally diluted with water or other fresh juices to taste: apple ^[26], lemon ^[27], etc.

For longer storage, rosehip juice can be frozen, poured into special containers or zip bags, or canned by pre-pasteurizing it.

The cake remaining after squeezing the juice, which includes valuable seeds, can be used to prepare rosehip oil ^[28] or used as a useful antioxidant additive when making homemade gingerbread. ^[29]

Expert commentary

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Rosehip juice is a real storehouse of valuable microelements, which, without the use of special pharmaceutical products, helps get rid of many diseases and health problems. In particular, it can be used to cleanse the liver and kidneys of toxins, improve the health of the genitourinary system, stop the aging process of the body and brain, and prevent the development of cancer. Include this healthy drink in your family's menu and see its benefits and effectiveness from your own experience!

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[The HTML version of the article](#) is available on the edaplus.info website.

Received 06.02.2024

Rosehip juice: 10 scientifically proven facts about the benefits of the healing drink

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Abstract. Rosehip, also called wild rose for its close family connection with the queen of the garden, is widely popular both among breeders, professionally engaged in flower breeding, and among people

who are fond of cooking and folk medicine. The latter pay special attention to the fruits of the plant, from which they prepare various candied fruits, jams, jams, jams, as well as squeeze from them a useful, fragrant and very tasty fraiche. These days, rich in vitamins and trace elements rosehip juice can be purchased in specialized departments of supermarkets or health food stores, as well as prepare it yourself from the fresh berries at hand.



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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[The HTML version of the article](#) is available on the edaplust.info website.

Received 28. 02.2024

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

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Abstract. Trees with spectacular bright red bunches of berries can often be seen on homestead plots. Such popularity of plants is explained not only by their beauty and attractiveness, but also by their famous exoteric properties. Since ancient times, rowan was considered a strong amulet. Our ancestors planted it near houses to protect the living and its inhabitants from evil forces, fires, uninvited guests, as well as to bring wealth and prosperity to the family. But not all admirers of mountain ash know that in addition to the mysterious magical properties it has and quite real health-improving. Especially useful for health, according to experts, are bright red bunches of berries, the healing qualities of which are often used in modern folk medicine. [1] 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.



Chokeberry juice: 10 good reasons to add it to your diet

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Abstract. A frequent resident of domestic gardens, chokeberry, which is sometimes mistakenly called chokeberry, is actually an interspecific hybrid of the above-mentioned plant. The famous breeder Ivan Michurin almost 100 years ago, back in 1935, “cultivated” the American chokeberry - he crossed it with mountain ash and developed a new species, the same chokeberry, or chokeberry, also called Michurin’s chokeberry. The plant differs from its overseas ancestors in its more impressive size, as well as larger and tastier berries. The fruits of chokeberry are widely used in modern cooking, and they are also often used in pharmaceuticals.

Particularly popular among admirers of healthy lifestyle and traditional medicine is the delicious fresh juice pressed from the ripe berries of the plant. Today you can find chokeberry juice on wide sale, for example, in specialized stores or supermarket departments, but, according to experts, the most useful drink is still considered to be a self-prepared drink.

Keywords: chokeberry, chokeberry, chokeberry juice, beneficial properties, contraindications, composition, calorie content

Composition and calorie content

Chokeberry berries belong to the category of low-calorie products (100 grams of pulp contains 55 kcal). They also contain virtually no fats and proteins (0.2 and 1.5%, respectively) and quite a few carbohydrates - 10.9%. With such introductory notes, chokeberry juice is an ideal drink even for fans of a healthy lifestyle and people who strictly monitor their weight and figure. But these are not all the advantages of fresh juice. Thanks to the rich composition of various nutrients, it is able to saturate the body in a very short time with all the useful substances necessary for full-fledged work and thereby prevent the occurrence and development of many dangerous diseases. In particular, chokeberry juice contains the following vitamins and microelements:

- Vitamin C, or ascorbic acid. It is a powerful antioxidant, promotes the body's production of its own collagen ^[1], and is recommended by experts for the prevention of scurvy, coronary heart disease, cataracts, cancer ^[2], as well as periodontal diseases: gingivitis, periodontitis, periodontal disease. ^[3]
- Vitamin P, or rutin. Strengthens blood vessels and capillaries, helps prevent nosebleeds and other bleeding, improves blood circulation, has anti-inflammatory and anti-cancer activity ^[4], has a positive effect on the female reproductive system - promotes the development of ovarian follicles and ovulation, suppresses the development of ovarian cancer cells. ^[5]
- Iodine. A vital microelement normalizes the production of thyroid hormones and stabilizes its function - prevents the development of iodine deficiency diseases such as goiter, hearing loss, hypothyroidism, cretinism ^[6], neurological disorders, obesity, problems of the cardiovascular, skeletal and digestive systems, etc. ^[7]
- Iron. The trace element is part of hemoglobin and helps transport oxygen through the tissues of the body - consuming foods rich in iron prevents the development of iron deficiency anemia ^[8], prevents the development of cognitive disorders, Alzheimer's disease, dementia, helps get rid of insomnia, helps improve physical performance and reduce symptomatic fatigue. ^[9]

In addition, chokeberry berries contain a natural low-calorie sugar substitute, which is part of starchy fruits and berries - sorbitol. Unlike regular sugar, it does not provoke osmotic diarrhea and an increase in blood glucose levels. ^[10] Therefore, even people suffering from digestive system disorders and diabetes can drink delicious chokeberry juice without risk to health. ^[eleven]

Top 10 beneficial properties of chokeberry juice

1. Effective in preventing cancer

Research shows that chokeberry fruit contains 40 times more antioxidants than tomatoes, famous for their powerful anti-cancer properties, or even acai berries. ^[12] In particular, scientists came to the conclusion that a 50 ml serving of freshly squeezed chokeberry juice already 24 hours after consumption reduces the growth rate of intestinal tumor cells by more than 50%!

2. Improves the condition of the cardiovascular system

During a 16-day medical experiment, scientists found that daily consumption of 330 ml of freshly squeezed black rowan juice has a positive effect on the well-being of patients. Such a useful dietary supplement helps lower blood pressure and reduce mild inflammatory processes in the body ^[13], which, in turn, reduces the risks of developing cardiovascular diseases (such as hypertension, hyperlipidemia, hypercholesterolemia, etc. ^[14])

3. Has a good antidiabetic effect

Chokeberry fruits are rich in potent biologically active compounds and have one of the most powerful antioxidant compositions. ^[15] Numerous scientific experiments confirm that Michurin chokeberry juice is very effective in combating oxidative stress caused by hyperglycemia and shows good results in the treatment of type 2 diabetes. ^[16]

4. Has an anticolytic effect

The introduction of chokeberry juice rich in polyphenols into the diet of patients has a positive effect on the condition of their intestines - its microbiota is restored ^[17], existing toxins are neutralized, the inflammatory process is eliminated, and the risk of developing colitis is reduced. ^[18]

5. Improves men's health

Experiments confirm that long-term use of chokeberry juice (more than 90 days) significantly improves sperm quality in patients over 40 years old - the level of sperm DNA fragmentation decreases and their activity increases, which increases the likelihood of pregnancy naturally. ^[19]

6. Helps lower cholesterol

In the course of scientific research, scientists were able to find out that daily intake of chokeberry juice for 6-8 weeks helps to significantly reduce cholesterol levels in the blood, even without the use of special pharmaceutical drugs. ^[20]

7. Improves liver function

Aronia Michurin juice has powerful hepatoprotective properties - it provides a choleretic effect, and also helps cleanse the liver of waste and toxins, improving its functioning in general. ^[21]

8. Helps normalize metabolism

Rich in polyphenols, in particular phenolic acids, chokeberry juice has strong antioxidant activity - it provides good prevention of various chronic diseases, including metabolic disorders ^[22], and even helps to lose weight, while improving lean body mass. ^[23]

9. Improves skin condition

The juice obtained from chokeberry fruits is also beneficial for the skin. Masks made from this product, rich in vitamin C and other useful microelements, promote accelerated synthesis of collagen

in tissues and are recommended by specialists for the safe and effective treatment of aging and damaged dermis. ^[24]

10. Good for runners

Long-distance running can be dangerous for recreational runners—increased cardio exertion increases the risk of cardiac arrest by increasing platelet activation. Experiments show that drinking chokeberry juice daily alleviates increased platelet aggressiveness and significantly reduces the risk of heart problems during increased physical activity. ^[25]

Contraindications and features of drinking chokeberry juice

Despite its many beneficial properties, chokeberry juice has a number of contraindications. In particular, it is not recommended to include it in the diet of hypotensive people, people suffering from low blood pressure, as well as patients with peptic ulcers ^[26] of the digestive system.

It is recommended to drink fresh chokeberry through a straw to prevent direct contact of the sweet and sour liquid with tooth enamel and prevent its destruction and subsequent formation of caries. ^[27]

Recommendations for preparing and storing chokeberry juice

Making chokeberry juice at home is quite simple. It is necessary to carefully sort through the berries, separating the ripe whole fruits from litter and illiquid waste, carefully wash and dry them, and then squeeze out the healing drink from them. For squeezing, you can use a juicer (preferably an auger) or a juicer. In the latter case, the resulting fresh juice does not have to be further pasteurized before preservation. The prepared juice can be immediately poured into sterilized jars and bottles and rolled up, then sent for long-term storage in a dry, dark place.

If the amount of processed product is not too large, then you can store it in the refrigerator (for 1-2 days) or freeze it, pouring it into zip bags or special containers.

Expert commentary

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Chokeberry juice is not only a delicious dessert, but also a very healthy drink. With its help, you can quickly saturate the body with many of the vitamins and microelements it needs, as well as get rid of many diseases or prevent their development. In particular, such fresh juice will help reduce cholesterol levels in the blood, improve metabolism and lose weight, improve the liver and even protect against cancer. Add chokeberry juice to your family's diet and see its benefits and effectiveness from your own experience!

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Received 29.03.2024

Aronia juice: 10 good reasons to add to your diet

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Abstract. A frequent resident of domestic gardens, black-fruited mountain ash, which is sometimes mistakenly called black-fruited chokeberry, is actually an interspecific hybrid of the above-mentioned plant. The famous breeder Ivan Michurin almost 100 years ago, in 1935, "domesticated" American chokeberry - crossed it with mountain ash and brought out a new species, the same blackberry, or black-fruited mountain ash, also called Michurin's chokeberry. The plant differs from its overseas ancestors by its more impressive size and larger and tastier berries. The fruits of blackcurrant rowan are widely used in modern cooking, and they are also often used in pharmaceuticals.

Among the admirers of health and folk medicine, a tasty juice squeezed from the ripe berries of the plant is especially popular. Today you can find blackcurrant rowan juice in wide sale, for example, in specialized stores or supermarket departments, but the most useful, according to experts, is still considered a self-made drink.