

# *Journal of Healthy Nutrition and Dietetics*



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Useful and dangerous  
properties of juices:

- Quince
- Watermelon
- Melon
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- Orange
- Tangerine
- Grapefruit
- Lime
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- Kumquat
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## Quince juice is a valuable source of vitamins and nutrients

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**Abstract.** Quince, which is often called a false apple due to its external resemblance to the fruits of an apple tree, is rarely eaten in its natural form due to its astringency and hardness. After heat treatment, the taste of the fruit is transformed. It becomes soft, tender and very fragrant, which allows it to be used as an ingredient in many delicious dishes. But among admirers of traditional medicine, freshly squeezed juice from ripe quince fruits, rich in a huge amount of vitamins and minerals, is especially appreciated.

**Keywords:** quince, quince juice , useful properties, contraindications, composition, calorie content

### Composition and calories

Quince fruits are quite low-calorie (energy value is only 57 kcal per 100 grams of product <sup>[1]</sup>), which allows you to use quince juice without the risk of rapid weight gain, even for people who are strictly watching their figure. In addition, they contain a large number of substances useful for human health (vitamins, microelements, various organic acids <sup>[2]</sup>). In particular, quince is rich in the following components:

- **Potassium** (197 mg). The mineral contributes to the normalization of blood pressure, as well as reducing the risk of strokes and heart attacks, the development of coronary heart disease <sup>[3]</sup>).
- **Vitamin C**, or ascorbic acid, (15 mg). The main water-soluble oxidant - strengthens the human immune system, accelerates tissue regeneration, slows down the aging process, and normalizes brain function.
- **Phosphorus** (17 mg). Promotes better absorption of vitamins and minerals by the body, including B vitamins, normalizes the acid-base balance and improves metabolism.
- **Calcium** (11 mg). The trace element helps maintain healthy bones and teeth, improves sleep quality, and reduces anxiety <sup>[4]</sup>.

- Magnesium (8 mg). Reduces pain in the joints and muscles, regulates blood sugar levels, normalizes heart rate and reduces the risk of hypertension in old age <sup>[5]</sup>, in tandem with calcium improves bone density, prevents the development of osteoporosis <sup>[6]</sup>.

Quince also contains pectin, tannins and other biologically active compounds useful for the body.

## **Top 7 Health Benefits of Quince Juice**

### **1. Rich in Antioxidants**

Quince contains much more antioxidants, phenolic compounds, than other fruits, in particular, apples. <sup>[7]</sup> Flavonoids contained in quince juice effectively protect cells from oxidation and damage, act as a kind of protective shield against premature aging and chronic diseases of the body.

### **2. Helps fight viral infections**

Studies have shown that phenols, the strongest antioxidants contained in large quantities in quince fruits, have high antiviral properties, in particular, help fight influenza viruses <sup>[8]</sup>. To make the upcoming season of SARS and colds as easy as possible, supplement your usual diet with a delicious and fragrant quince drink and see for yourself how effective it is!

### **3. Eliminates the manifestations of nausea, prevents vomiting**

Possessing a wide range of pharmacological activity, quince juice shows much better efficacy in relieving symptoms of nausea and preventing vomiting in pregnant women than the standard pharmacy drug, vitamin B6. <sup>[nine]</sup>

### **4. Effective in the treatment of ulcers**

Phenols contained in quince contribute to the rapid healing of stomach ulcers and generally have a beneficial effect on the health and functioning of the gastrointestinal tract <sup>[10]</sup>. Drinking daily between meals a glass of healing quince juice, you can effectively prevent peptic ulcer and get rid of excruciating pain in the stomach forever!

### **5. Reduces Symptoms of Acid Reflux**

GERD, or gastroesophageal reflux disease, (the main symptom is heartburn resulting from the reflux of stomach contents into the esophagus) is one of the most common diseases faced by modern gastroenterologists. To effectively cope with the manifestations of the disease, along with expensive medications, a natural medicine, delicious quince juice, helps. <sup>[eleven]</sup>

### **6. Effective in the treatment of atopic dermatitis**

With the systematic use of fresh from quince fruits in patients suffering from such a common skin disease as neurodermatitis, or atopic dermatitis, the lesions of the skin are significantly reduced. <sup>[12]</sup>

### **7. Has antiseptic properties**

The drink has antimicrobial properties <sup>[13]</sup>, which allows it to be effectively used as an effective natural remedy for sore throat, stomatitis, and other inflammations of the oral cavity and gastrointestinal tract.

Also, experts recommend using quince juice for diarrhea and indigestion, as an effective antipyretic and immunostimulating agent.

### **Harm and features of drinking quince juice**

With all the positive properties, this drink has some contraindications. In particular, it is recommended to use it with caution for constipation and individual intolerance to the product.

### **Recommended norms for the consumption of juice from quince fruits**

Even babies can use healthy quince juice. You should start acquaintance with a new product with a few drops, previously diluted with drinking water. If there are no unpleasant consequences in the form of problems with the gastrointestinal tract or allergic manifestations, you can gradually increase the dose, first to a few spoons, and then up to 100 grams of the drink (at 2-3 years of age).

For more senior tasters, the rate of daily consumption of quince fresh juice can be from 1 to 2 glasses. To reduce the concentration of the drink and prevent the destruction of tooth enamel <sup>[14]</sup>, doctors advise diluting the juice with water in a ratio of 1:1, as well as thoroughly rinsing the mouth after contact with sweet and sour liquid.

### **How to prepare and store quince juice: recommendations, useful tips**

It is not recommended to process only the fruits plucked from the tree - they are still too hard, do not have enough sweetness. Fruit of early varieties should be kept after picking for about two weeks, later - about two months. After the allotted time, the quince ripens - it becomes softer, sweeter, fragrant and not so tart (the amount of astringent tannins decreases).

You can squeeze juice from both raw and lightly boiled fruits. In the latter case, they become not only softer, but also more useful! When heated, the fruit changes color, becomes pink-red, which is explained by the structural changes taking place in it - reddish phenolic resins are formed in it, which have an increased antioxidant capacity. <sup>[15]</sup>

To obtain juice, the fruits cut into pieces are passed through a juicer. If there is no such device on the farm, you can use a conventional meat grinder, and then squeeze the crushed mass through cheesecloth. You can eat freshly squeezed natural juice (if necessary, dilute with water to the desired consistency). But it should be borne in mind that prolonged contact of the drink with air leads to its oxidation and the gradual loss of most of the beneficial trace elements. In addition, over time, microorganisms that are unsafe for health can develop in the liquid. Therefore, in the presence of large volumes of fresh juice, it is recommended to preserve it by pasteurization (rapid heating to 80-90 degrees Celsius). Such juice can be safely stored in a cool, dark place for up to a year.

### **Expert comment**

#### **Tatyana Eliseeva, nutritionist, nutritionist**

Quince juice is not only a delicious refreshing dessert, but also has many useful properties - it saturates the body with essential vitamins and minerals, helps prevent the development and effectively fight many diseases, including anemia, cardiovascular diseases and even depression. I recommend adding this unique drink to your daily diet and make sure from your own experience that natural medicines donated by nature itself are no less effective than the usual pharmacy products!

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

*Received 19.09.2022*

**Quince juice is a valuable source of vitamins and nutrients**

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**Abstract.** The article discusses the main properties of quince juice and its effect on the human body. A systematic review of modern specialized literature and relevant scientific data was carried out. The chemical composition and nutritional value of the drink are indicated, the use of quince juice in various types of medicine and the effectiveness of its use in various diseases are considered. The potentially adverse effects of quince juice on the human body under certain medical conditions and diseases are analyzed separately.



## Watermelon juice - natural healing nectar for the body

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**Abstract.** Probably all kids and adults without exception love to feast on watermelons. This unique striped fruit, called a false berry for its thick, inedible skin, has been known to mankind since ancient times. The Egyptians and Arabs revered the watermelon for its many medicinal properties. It is no less popular with modern followers of traditional medicine. Moreover, not only the pulp of the fruit, but also its juice can be used as a healing dessert. Watermelon fresh perfectly quenches thirst and saturates the body with many healthy substances.

**Keywords:** watermelon, watermelon juice , useful properties, contraindications, composition, calorie content

### Composition and calories

Watermelon contains a minimum of fats and proteins (0.15 and 0.61 grams per 100 grams of product), but quite a lot of easily digestible carbohydrates (7.5%).<sup>[1]</sup> Mostly fructose, a fruit sugar that does not require insulin to process. Its consumption does not cause sharp jumps in blood sugar<sup>[2]</sup>, so even people with diabetes can drink delicious fresh watermelon juice (of course, in reasonable quantities).

Also, the sweet pulp of watermelon contains a large amount of useful vitamins and minerals:

- Potassium (112 mg). Helps normalize blood pressure<sup>[3]</sup> and the nervous system, improves oxygen supply to the brain and promotes mental clarity.
- [Phosphorus](#) (11 mg). An important element that contributes to the proper formation of bones and teeth<sup>[4]</sup>, the establishment of a full-fledged metabolism.
- Magnesium (10 mg). The lack of this element can cause muscle cramps and joint pain. Consumption of foods with sufficient magnesium content helps to get rid of insomnia and depression, prevents the formation of kidney stones.
- Vitamin A, RAE (28 mcg). Strengthens the retina and prevents the development of ophthalmic diseases, participates in the production of hemoglobin, recommended for people with iron deficiency anemia.
- Vitamin C (8.1 mg). Strengthens the immune system, has a preventive effect in the treatment of such unsafe, but frequent diseases of modern humanity as coronary heart disease, cataracts, oncology<sup>[5]</sup>.

Watermelon is also rich in various antioxidants, in particular:

- lycopene (4530 mcg)<sup>[6]</sup> - reduces the likelihood of developing prostate cancer and cardiovascular diseases, reduces the level of "bad" cholesterol in the blood;
- niacin (vitamin B3, or nicotinic acid) (0.178 mg) - regulates cholesterol levels in the blood, prevents the development of cardiovascular diseases<sup>[7]</sup>, reduces pain in arthritis, improves brain function.

In addition, the drink has a high water content, 91.4% (helps cleanse the body of toxins and toxins, starts the metabolic process) and a very low calorie content (30 kcal), which allows you to include exotic fresh juice in a variety of diet menus.

## **Top 7 Health Benefits of Watermelon Juice**

### **1. Helps in the treatment of diabetes**

Surprising but true! Studies show that sweet watermelon juice helps in the treatment of diabetes.<sup>[8]</sup> True, it is necessary to drink the drink in moderate doses, periodically monitoring blood sugar levels.

### **2. Prevents the development of dementia and cognitive disorders**

Watermelon contains a large amount of lycopene, a unique antioxidant that prevents aging of the body, including the oxidation of brain cells, resulting in the development of dementia, including senile dementia.<sup>[9]</sup> Daily consumption of at least a few glasses of refreshing watermelon juice significantly slows down the degenerative processes of the brain.

### **3. Protects against oncology and mastopathy**

Studies show that with age, the amount of lycopene in the blood, an antioxidant with powerful antitumor properties, decreases significantly, which can lead to the development of dangerous diseases. To naturally replenish its content in the blood and prevent the risk of developing oncology



and mastopathy, eating foods rich in this valuable substance will help. Delicious watermelon juice is one of them! <sup>[10]</sup>

#### **4. Helps Lower Blood Pressure**

Sugar sweet pulp contains beneficial amino acids responsible for arterial tone, arginine and L-citrulline <sup>[11, 12]</sup>. Therefore, watermelon juice is recommended for hypertensive patients as a preventive drink to reduce and normalize blood pressure. Agree, a great alternative to standard medications!

#### **5. Improve endurance, reduce muscle pain after sports**

The pulp of watermelon contains the amino acid L-citrulline - it reduces the concentration of lactic acid in the muscles, which provokes the occurrence of unpleasant painful sensations, krepatura, and also contributes to the rapid recovery of the body after intense physical exertion. Drinking a glass of refreshing watermelon fresh after a workout, you will quickly recover, you will be full of strength and energy! <sup>[13, 14]</sup>

#### **6. Helps to reduce weight**

Watermelon has excellent diuretic properties, improves metabolism, helps cleanse the body of toxins and toxins, and also helps to lose extra pounds effortlessly <sup>[15]</sup>. Therefore, a refreshing watermelon smoothie rich in useful vitamins and microelements is recommended to be included in the menu for those who follow their figure and health.

#### **7. Recommended in the treatment of gout**

The substances contained in the composition of the drink contribute to the dissolution and excretion of uric acid salts from the body (they are deposited on the joints and destroy them over time). The use of watermelon juice, while observing other items of the recommended diet, helps to reduce the inflammatory process, reduce swelling and tissue tenderness <sup>[16]</sup>.

Delicious juice from "striped berries" is also successfully used in cosmetology, it is used to make useful anti-aging masks for the skin of the face and body, and even used in the production of biofuels. <sup>[17]</sup>

#### **Contraindications and harms of drinking watermelon juice**

For all its usefulness, it has fresh watermelon and some contraindications, features of use. In particular, people suffering from frequent headaches should see if such a phenomenon is related to the appearance of watermelon in their menu. Studies show that some plant foods (and the fruit of the famous melon plant is in the first place in the list of products) can provoke migraine attacks. <sup>[eighteen]</sup>

You should also use watermelon juice with caution for people who already have large kidney stones. The drink has strong diuretic properties <sup>[19]</sup> - it can provoke the movement of oxalate stones, which will lead to painful renal colic.

#### **How much watermelon juice can you drink per day**

Watermelon juice contains more than 90% water, so it is allowed to drink it in almost unlimited quantities (if there are no contraindications or restrictions).

For example, during the period of weight loss, it is recommended to include at least 1.5 liters of refreshing liquid in the diet menu, to prevent gout, drink a glass of juice three times a day, to cleanse the kidneys and liver - up to 2 liters daily.

Babies can start getting acquainted with watermelon juice at the age of 2-3 years with a small dose (a teaspoon). Then the portion is gradually increased, bringing to half a glass. Older children, 3-6 years old, can drink about 200 grams of delicious refreshing fresh juice per day.

### **Features of the production and storage of watermelon juice**

To prepare watermelon juice, they usually take the ripe pulp of the fruit, peeled from the skin and seeds. True, studies show that a drink that additionally contains peel is more original and fresh in taste <sup>[20]</sup>. Try it, you might like this smoothie too!

**Remember!** Melons grown with nitrogen fertilizers (for their faster and earlier ripening) are hazardous to health. Therefore, for eating and preparing healthy watermelon nectar, it is recommended to choose only environmentally friendly seasonal berries.

Making watermelon juice is easy. To do this, use a blender (it turns out a thicker and healthier smoothie), a juicer or a regular sieve for squeezing the pulp. Freshly squeezed, untreated fresh juice can be consumed without health risks within 4 hours after its production. <sup>[21]</sup> Then pathogenic bacteria begin to multiply in the liquid. Watermelon juice can be heated up to 120 degrees Celsius. After the pasteurization process, the useful substances from the drink do not evaporate, it can be safely stored in a cool, dark place for 1 year. <sup>[22]</sup>

### **Expert comment**

#### **Tatyana Eliseeva, nutritionist, nutritionist**

Watermelon juice is a tasty and healthy drink, with which you can cleanse the body of toxins and toxins, saturate it with essential trace elements and even protect against many diseases. That is why I recommend not to miss the gourd season, but to supplement the menu daily during this period with a valuable refreshing drink that will certainly appeal to all members of the family!

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

Received 23. 09.2022

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## Melon juice: 7 benefits for the body

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**Abstract.** The famous rival of watermelon and a close relative of cucumber, dizzyingly fragrant false berries, the pulp of which is not only tasty, but also an extremely healthy dessert. Of course, we are talking about melon, whose honey pulp is a favorite treat for many kids and adults, and also has

numerous healing properties. The juice of gourds is no less useful for the body, although it is not as popular among users as other fruit juices. And absolutely in vain!

*Key words:* melon, melon juice , useful properties, contraindications, composition, calorie content

## Composition and calories

Despite the honey-sweet taste, melon belongs to products with a rather low sugar content <sup>[1]</sup> (8.12%) <sup>[2]</sup> and high water content (89.8%), which explains its rather low calorie content (36 kcal). That is why delicious melon juice can be included in various diet menus and healthy eating systems without the risk of gaining excess weight.

Melon fresh is not only tasty, but also very healthy - it contains a large amount of vitamins and minerals:

- Potassium (228 mg). It contributes to the normalization of blood pressure <sup>[3]</sup> and blood sugar levels, reduces the intensity of allergic reactions, improves the supply of oxygen to brain cells (guaranteeing clarity of mind and clarity of thinking).
- [Sodium](#) (18 mg). Normalizes the acid-base balance and water-salt metabolism of the body, stabilizes the work of the nervous and muscular systems.
- Phosphorus (11 mg). Improves metabolism, strengthens bone tissue <sup>[4]</sup>, contributes to the prevention and treatment of sarcopenia, age-related loss of muscle mass <sup>[5]</sup>.
- Magnesium (10 mg). Reduces the risk of developing hypertension <sup>[6]</sup>, acting in tandem with calcium, strengthens bone tissue, and also reduces pain in the joints, relieves muscle cramps. <sup>[7]</sup>
- Vitamin C (18 mg). Strengthens the immune system - helps in the fight against colds, improves tissue healing and improves skin condition <sup>[8]</sup>.
- Vitamin B6 (0.088 mg). It has a beneficial effect on the cardiovascular and nervous system, helps to maintain normal women's health (stabilizes the balance of sex hormones). <sup>[nine]</sup>
- Folic acid, or vitamin B9 (19 mcg). An essential trace element for expectant mothers - helps the body prepare for pregnancy, prevents the development of fetal pathologies <sup>[10]</sup>.

The skin of the melon also contains many nutrients and antioxidants, in particular flavonoids and polyphenols. <sup>[11]</sup> Therefore, it is recommended to squeeze the juice not only from the pulp of the fruit, but also from the peel.

## Top 7 Health Benefits of Melon Juice

### 1. Helps fight stress

Melon contains a unique antioxidant, superoxide dismutase. The enzyme has a positive effect on the psycho-emotional state, helps with depression and depression. <sup>[12]</sup> Returning a good mood and joy of life is simple and for this it is not at all necessary to take antidepressants. Freshly squeezed melon fresh can cope with this kind of task no less successfully!

### 2. Eliminates joint pain

Superoxide dismutase prevents the oxidation and destruction of cells and tissues (including muscles and cartilage), slows down the aging process. Turn back the clock by adding a drink of youth, hand-made from ripe honey melons, to your diet.

### 3. Effective in the treatment of oncology



Studies show that melon juice (although obtained not from ordinary, but from bitter melon, momordica) inhibits the growth of cancer stem cells and shows high efficiency in the treatment of oncological diseases, in particular, pancreatic cancer. <sup>[13, 14]</sup>

#### **4. Improves immunity**

It is an excellent immunomodulator, increases the internal strength of the body, provides it with reliable support during the period of viral and colds.

#### **5. Has Antioxidant Properties**

Most fruit and vegetable juices <sup>[15]</sup> contain powerful plant antioxidants, flavonoids, which provide plants with reliable protection against the harmful effects of the environment, diseases, and other dangerous factors. They are also preserved in freshly squeezed fresh juice - they transfer their properties to people who drink the drink. Provide reliable protection to your health by supplementing your daily diet during the gourd season with a few glasses of delicious and so healthy melon juice!

#### **6. Helps to cope with stress**

The drink prevents oxidative stress of the calf muscles due to their overload, which allows people involved in sports and other physical activity to recover faster after the loads received, less tired. <sup>[sixteen]</sup>

#### **7. Cleanses the body**

It has diuretic properties - removes excess fluid from the body, relieves edema, toxins, helps to eliminate the remnants of drugs after a course of chemotherapy, antibiotic treatment, general anesthesia.

Also, melon juice has a beneficial effect on the skin, relieves irritation and itching in case of allergies. People suffering from such diseases are recommended to undergo a complex of cosmetic baths with the addition of melon concentrate (1 cup per bath of water) to cleanse and soothe the dermis. With acne, rosacea, lotions with warm juice should be applied to problem areas of the skin or special masks should be made with it.

#### **Contraindications and features of the use of melon juice**

Even such a healthy drink has some contraindications. In particular, it is not recommended to use it for people who are allergic to this product <sup>[17]</sup>, and young mothers should drink it with caution during breastfeeding so as not to provoke an allergy or indigestion in the baby.

You should also avoid prolonged contact of the sweet liquid with the teeth. Concentrated juice can corrode tooth enamel, which will lead to the formation of caries. <sup>[18]</sup> It is recommended to dilute freshly squeezed juice with water, drink it through a straw and rinse your teeth with water to wash away any remaining liquid from them.

#### **Recommendations for drinking melon juice**

Drink melon fresh (as well as other juices) should be between meals, as a separate independent dessert. Drinking juice on an empty stomach, you can provoke his disorder, and immediately after eating - heaviness.

Drink healthy drink can be both adults and kids. They begin to accustom the crumbs to a new product from a small amount (a teaspoon), after diluting the concentrated natural fresh juice with clean water in a ratio of 1: 2. Then you can gradually increase the dose, bringing it to 100 grams. Adults are allowed to drink several glasses of melon juice daily.

### **Features of the preparation and storage of melon juice**

To prepare a healthy fresh juice, it is recommended to choose ripe juicy fruits without defects. Pathogenic bacteria can penetrate into the "wounds" and cracks on the skin, which then get into the drink, which will lead to its infection. It is also worth remembering seasonality - you can not use early fruits for food or for making fresh (pesticides can be used to ripen them).

As mentioned above, it is better to squeeze the juice together with the peel (it contains many useful substances). Wash the melon, cut it into pieces, clean out the seeds, pass through the juicer. Juice is ready to drink!

Studies show that pasteurization of melon juice leads to the elimination of pathogenic microbes, but at the same time, it has a detrimental effect on its beneficial properties (the concentration of vitamin C and phenolic compounds decreases).<sup>[19]</sup> Therefore, for the greatest benefit to the body, it is recommended to use freshly squeezed fresh juice. But if you want to stock up on a delicious health drink, you can can or freeze it in cubes. Ice is added to cocktails or used as cosmetic products.

### **Expert comment**

#### **Tatyana Eliseeva, nutritionist, nutritionist**

Melon juice is not only a delicious dessert, but also a very effective natural medicine. Get rid of extra pounds, cleanse the body of toxins and saturate it with useful vitamins and microelements on the eve of winter, just drinking several glasses of sweet melon nectar every day during the gourd season. It's so easy - try it!

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

*Received 05.10.2022*

## **Melon juice: 7 benefits for the body**

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**Abstract.** The article discusses the main properties of melon juice and its effect on the human body. A systematic review of modern specialized literature and relevant scientific data was carried out. The chemical composition and nutritional value of the drink are indicated, the use of melon juice in various types of medicine and the effectiveness of its use in various diseases are considered. The potentially adverse effects of melon juice on the human body under certain medical conditions and diseases are analyzed separately.



## Lemon juice is a unique drink for restoring and supporting the body.

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**Abstract.** The magical rejuvenating apples mentioned in many fairy tales exist! And these overseas fruits are nothing more than ... lemons. Citrus juice is widely used in cooking, cosmetology, and also, due to the presence of a huge amount of useful substances, it is considered a real elixir of youth and health - it can save the body from many problems and ailments. Try it!

*Key words:* lemon, lemon juice , useful properties, contraindications, composition, calorie content

### Composition and calories

Lemon juice contains a lot of water (92.3%) and a minimum of calories - in 100 grams of the product there are only 22 kcal <sup>[1]</sup>. It also contains many vitamins and minerals:

- Potassium (103 mg). It stabilizes the work of the heart <sup>[2]</sup>, regulates the content of salts and helps to reduce edema, improves the normal functioning of soft tissues (muscles, blood vessels, etc.).
- [Vitamin C](#) (38.7 mg). Water-soluble antioxidant - protects the body from infections caused by viruses and bacteria <sup>[3]</sup>, and shows good results in the treatment of cancer <sup>[4]</sup>.

- Folic acid (20 mg). It supports the work of the heart and blood vessels, reduces the risk of strokes <sup>[5]</sup>, it is recommended during pregnancy to prevent congenital fetal anomalies. <sup>[6]</sup>
- Phosphorus (8 mg). A microelement that contributes to the proper functioning of internal organs, the formation of high-quality bone and dental tissues, and regulates the level of hormones in the body.
- Vitamin A (6 IU). Improves skin condition and accelerates tissue healing <sup>[7]</sup>, regulates skin pigmentation and natural collagen production, participates in the synthesis of eye pigment responsible for the ability to distinguish colors and see in the dark.

Lemon juice contains a high concentration of citric acid (more than any other type of citrus fruit) <sup>[8]</sup> - a natural preservative often used in cooking and cosmetics.

## **Top 10 Health Benefits of Lemon Juice**

### **1. Treats gastritis and reflux**

Studies show that following a 2-week low-carb diet with the addition of acid-rich foods, such as the juice of two lemons daily, has amazing results. Patients experience a significant improvement in well-being or the symptoms of diseases disappear altogether! <sup>[nine]</sup>

### **2. Has disinfecting properties**

Lemon juice can also be used to disinfect water. Studies show that when adding 20 grams of lemon juice to 1 liter of liquid, cholera embryo bacteria die in it after 30 minutes. <sup>[10, 11]</sup> Don't forget to take a supply of citrus fruits with you when you go camping!

### **3. Acts as a contraceptive**

Experiments confirm that the decrease in pH caused by the acidification of the medium with lemon juice leads to an abrupt cessation of sperm movement (within only 1 minute). <sup>[12]</sup>

### **4. Improves potency**

Vitamin C and thiamine contained in lemon have a positive effect on potency and increase testosterone levels. <sup>[13]</sup> Drink several glasses of water daily with fresh lemon juice dissolved in it and see for yourself that a delicious refreshing drink works just as well as pharmacy Viagra!

### **5. Has a high antioxidant capacity**

Contains a high concentration of flavonoids <sup>[14]</sup> - slows down the aging process, reduces blood clotting, improves metabolism, increases the protective function of the body (helps it better fight infections and viruses).

### **6. Dissolves Kidney Stones**

Daily consumption of lemon water (100 grams of juice per two liters of drinking water) significantly reduces the risk of calcium kidney stones, and also dissolves existing stones. <sup>[15]</sup> Moreover, a tasty refreshing drink copes with this task no worse than special medical preparations, in particular, potassium citrate.

### **7. Prevents the development of gout**



Lemon juice neutralizes uric acid and prevents the crystallization of salts. <sup>[16]</sup> Purines are not deposited on the joints, which helps to avoid inflammation and pain, alleviates the condition of patients suffering from gouty and rheumatoid arthritis.

## **8. Good for the cardiovascular system**

The substances that make up the lemon, in particular, citrus flavonoids, have a beneficial effect on the tone of the heart muscle and blood vessels, cleanse them of bad cholesterol, and suppress tissue inflammation. Drinking water with lemon juice daily is a great way to prevent cardiovascular disease. <sup>[17]</sup>

## **9. Protects the liver**

The drink has excellent choleretic and hepatoprotective properties - it removes toxins from the liver and effectively protects it from the damage that the body receives as a result of alcohol consumption. <sup>[eighteen]</sup>

## **10. Promotes weight loss**

Supplementation in the form of lemon juice speeds up metabolism and promotes faster weight loss. <sup>[19]</sup> It is easy to get the desired shape, just by adding a few glasses of a refreshing drink to your daily diet.

And lemon juice is widely used in cosmetology. It is added to masks and creams, used in its pure form to refresh the complexion, eliminate dark spots from the skin, strengthen nails and whiten teeth.

## **Contraindications and possible harm of drinking lemon juice**

Lemons are classified as allergens. Therefore, lemon juice should not be consumed by people with intolerance to this product. Also, citrus lovers should be aware that drinking lemon juice in its pure form is unsafe for dental health. Acid destroys tooth enamel <sup>[20]</sup>, which leads to the formation of caries. Therefore, squeezed fresh juice must be diluted with water, and the mouth should be thoroughly rinsed from the remnants of the drink after tasting.

## **Norms and recommendations for the use of lemon juice**

Given the high acidity of lemon juice, doctors do not recommend drinking it in its pure form - fresh diluted with warm water will bring the greatest benefit to the body. It is not recommended to use boiling water to prepare a healing drink - at high temperatures, many useful substances are destroyed. To maximize the saturation of the body with vitamins and microelements per day, it is recommended to drink the juice of several lemons, previously diluted with water.

It is better to postpone the acquaintance of kids with a tasty and healthy drink until the age of 2 years. You should carefully introduce a new product into the menu of allergic children - start with a few drops and monitor the body's reaction.

## **How to prepare and store lemon juice**

In order for as much juice as possible to stand out from the fruit, it is recommended to pre-prepare it. Pour boiling water over, send for 20 seconds in the microwave or roll, with effort, on a hard surface - the fibers inside will burst, the juice will stand out better. You can squeeze out the acidic healing liquid using a special citrus juicer or manually.

Note! It is undesirable to store lemon juice for a long time without special treatment. Without pasteurization, it loses many vitamins, in particular, the concentration of vitamin C is halved. <sup>[21]</sup> Therefore, it is recommended to use it immediately or freeze it.

## Expert comment

### Tatyana Eliseeva, nutritionist, nutritionist

Lemon juice is an extremely useful product with which you can rejuvenate the body, reliably protect it from many diseases and get rid of depression. Drink in the morning and between meals at least a few glasses of water with natural lemon juice diluted in it and see the effectiveness of a delicious healing drink!

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

*Received 13.10.2022*

### **Lemon juice is a unique drink for restoring and supporting the body**

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**Abstract.** The article discusses the main properties of lemon juice and its effect on the human body. A systematic review of modern specialized literature and relevant scientific data was carried out. The chemical composition and nutritional value of the drink are indicated, the use of lemon juice in various types of medicine and the effectiveness of its use in various diseases are considered. The potentially adverse effects of lemon juice on the human body under certain medical conditions and diseases are analyzed separately.



## Orange juice is a natural source of health, youth and longevity

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**Abstract.** The juice of the most common citrus plant on the planet is also one of the most popular drinks. As statistics show, orange fresh is included in the daily diet of almost 20% of the inhabitants of the Earth. Which is not at all surprising. The refreshing drink contains many useful vitamins and microelements, has an exquisite taste and aroma, which allows it to be widely used both in traditional medicine and in cosmetology and cooking.

**Keywords:** orange, orange juice , useful properties, contraindications, composition, caloric content

### Composition and calories

Orange juice contains a small amount of calories (46 kcal per 100 grams of product) and quite a lot of water (88.2%), practically does not contain fat and protein (0.32 and 0.73 grams, respectively), <sup>[1]</sup> which allows you to include delicious fresh juice in the diet of people who monitor weight.

**Note!** The calorie content of a store-bought product is usually higher, since sugar is added to it as a preservative. Therefore, it is better not to use such a product for compiling dietary menus. If you are really serious about the issue of improving the body and losing weight, it is better to cook fresh juice yourself from natural fruits.

The composition of a delicious citrus drink includes many useful substances. Mainly:

- Vitamin C (26.9 mg). Improves collagen production and skin condition <sup>[2]</sup>, helps fight colds and depression. <sup>[3]</sup>

- Folic acid <sup>[4]</sup> (30 mcg). It is recommended as a mandatory vitamin supplement during pregnancy to prevent the development of intrauterine fetal pathologies. <sup>[five]</sup>
- Potassium (180 mg). Helps to maintain normal blood pressure - to avoid the risk of heart attacks, strokes. <sup>[6]</sup>
- [Calcium](#) (13 mg). Useful in the prevention and treatment of osteoporosis <sup>[7]</sup>, regulates heart rate and blood pressure, eliminates the problem of muscle spasm (convulsions).
- Phosphorus (18 mg). Phosphates improve metabolism, help the body produce energy, improve the functioning of the human nervous and muscular systems.
- Magnesium (10.6 mg). Helps to normalize the nervous system (to cope with depression, anxiety, insomnia) <sup>[8]</sup>, eliminate muscle cramps <sup>[9]</sup> and joint pain.

The fruit has a fairly low glycemic index (does not cause sharp spikes in blood sugar), which will allow even people with diabetes to drink the drink.

## **Top 11 Health Benefits of Orange Juice**

### **1. Helps Fight Obesity**

Orange juice, in particular, fresh from red oranges, especially rich in active compounds such as anthocyanins, flavonoids, ascorbic acid, has a beneficial effect on reducing body mass index and body volume. <sup>[10, 11]</sup> Just drink a glass of refreshing citrus juice between meals and see how your mirror image will change dramatically within a few weeks!

### **2. Suppresses Appetite**

Studies show that drinking orange juice with a meal speeds up satiety and dulls hunger for a longer time. <sup>[12]</sup> Just a few glasses of fresh juice throughout the day will significantly reduce the size of servings on plates.

### **3. Prevents the development of cardiovascular diseases**

The use of orange juice helps to reduce the amount of "bad" cholesterol in the blood <sup>[13]</sup>, to avoid the development of such dangerous diseases as angina pectoris, stroke, myocardial infarction.

### **4. Reduces inflammation in the intestines**

Citrus flavonoids have high anti-inflammatory properties <sup>[14, 15]</sup> — they reduce inflammatory processes in tissues, in particular, relieve the symptoms of such a dangerous disease as enteritis, inflammation of the small intestine. <sup>[sixteen]</sup>

### **5. Helps Lower Blood Pressure**

Daily consumption of 500 ml of juice squeezed out of orange pulp can reduce blood pressure in the subjects no worse than special pharmacy products. <sup>[17]</sup>

### **6. Protects Against Kidney Stones**

Orange juice is better than other citrus fresh juices in the function of preventing salt deposits in the kidneys. Drinking a delicious refreshing drink every day is a great way to prevent kidney stones.

### **7. Protects Against Cancer**



Orange juice, especially with red pulp, contains a huge amount of antioxidants and unique beneficial substances, limonoids. Studies show that citrus flavonoids block the reproduction of cancer cells much more effectively than some drugs. <sup>[19,20]</sup>

## **8. Improves Cognitive Function**

With age, many functions of the body gradually fade away. This also applies to mental abilities. The brain of older people for normal functioning must be supplied with additional useful substances. As scientists have found out, the necessary vitamins and amino acids are contained in sufficient quantities in the pulp of an orange. Studies have shown that people who have introduced a refreshing citrus drink (at least 500 ml) into their daily diet, after two months, memory improves by 8%, reaction and speech functions are restored. <sup>[21]</sup>

## **9. Strengthens bones**

The use of orange juice rich in calcium and vitamin D has a positive effect on the condition of the bone tissue of children and adults, and significantly reduces the risk of fractures. <sup>[22]</sup>

## **10. Helps fight anemia**

The daily presence of fresh orange juice in the diet promotes better absorption of iron. The veracity of this version was confirmed by an experiment in which 21 children aged 4 to 8 years participated. In children over 6 years old who drank fresh orange, the absorption of iron increased by almost 2 times. <sup>[23]</sup>

## **11. Prevents the development of scurvy**

A rather rare disease today, caused by a lack of vitamin C in the body. That is why it is recommended to include orange juice in the diet of babies and adults at risk as a preventive measure. <sup>[24]</sup>

You can also use orange juice as a tonic. A self-made cosmetic product perfectly refreshes, brightens and tightens the dermis, tightens pores and eliminates oily sheen.

## **Contraindications and possible harm of orange juice**

Orange juice is a fairly strong allergen <sup>[25]</sup>. Therefore, it is not recommended for people with individual intolerance to the product.

Orange juice should not be washed down with some medicines, as this affects their benefits. Specifically, this warning applies to a drug used to lower high blood pressure, celiprolol. The citrus flavonoid, antioxidant, hesperidin contained in the drink significantly reduces the absorption of the drug <sup>[26]</sup> and neutralizes the benefits of taking it.

Dentists recommend using a straw when drinking a sweet and sour drink to minimize its contact with tooth enamel, as well as thoroughly rinsing the mouth from the remnants of the liquid after tasting it. This is due to the high erosive properties of orange acid, which are reflected in tooth enamel. <sup>[27]</sup>

## **How much orange juice can you drink per day**

In order to fully saturate the body with all the necessary vitamins and minerals, an adult is recommended to drink about half a liter of refreshing orange juice daily. Children's norm below - 1

glass. But this amount of drink should be distributed over several doses so that the baby receives no more than 30-50 grams of juice at a time.

To begin acquaintance of crumbs with citrus juice should be no earlier than 12 months of age. You need to introduce a new product into the diet gradually, starting with a teaspoon. If there are no unpleasant consequences for the body, you can gradually increase the dose.

### **How to prepare and store orange juice**

To saturate the body with vitamins and nutrients, it is recommended to use self-made orange juice, and not factory analogues. Studies show that a store-bought drink contains practically no flavonoids<sup>[28]</sup>, that is, the antioxidant capacity of such a drink is practically zero.

**Note!** Mechanically squeezed juice is 3-10 times more aromatic than a hand-pressed drink. This is due to the fact that the fresh obtained by the first method is squeezed together with the peel. It is the oils contained in the orange peel that contain the largest amount of aromatic volatile substances<sup>[29]</sup>. If you want the prepared drink to have a brighter smell, use not only the pulp, but also the peel of the orange for squeezing.

To make juice, you will need a citrus juicer. If there is none, you can use a regular blender, then squeezing the resulting puree through a sieve.

It is recommended to drink freshly squeezed juice immediately, as over time it loses its beneficial properties, harmful microorganisms begin to multiply in it. If you've made too much food, you can freeze the leftovers and then use ice cubes to chill other drinks on a hot summer day.

### **Expert comment**

#### **Tatyana Eliseeva, nutritionist, nutritionist**

Orange juice perfectly quenches thirst, improves mood and well-being, helps protect the body from many diseases. I recommend that you include this healthy and affordable drink in your family's daily diet and make sure that the natural medicines that nature itself gives us work no worse than pharmacy products!

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

*Received 18.10.2022*

### **Orange juice is a natural source of health, youth and longevity**

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**Abstract.** The article discusses the main properties of orange juice and its effect on the human body. A systematic review of modern specialized literature and relevant scientific data was carried out. The chemical composition and nutritional value of the drink are indicated, the use of orange juice in various types of medicine and the effectiveness of its use in various diseases are considered. The potentially adverse effects of orange juice on the human body under certain medical conditions and diseases are analyzed separately.



## Tangerine juice: 7 health benefits of a delicious drink

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**Abstract.** Bright orange-yellow fruits, associated with the New Year holidays and the expectation of a miracle, today can be found almost all year round on the counter of any supermarket. But juice from them is a rarer commodity. Mandarin juice can be rarely found on store shelves due to the low profitability of its production. But you can always make a delicious drink yourself. Moreover, freshly squeezed fresh juice that has not been subjected to additional processing is much more useful than its factory counterpart.

**Key words:** tangerine, tangerine juice , useful properties, contraindications, composition, calorie content

### Composition and calories

The calorie content of exotic tangerine juice is quite low, only 43 kcal (the final figure depends on the variety and maturity of the fruit from which the fresh is pressed), and most of it consists of water (88.9%). Given the minimum amount of protein in the drink (0.5 grams per 100 grams of product), fats (0.2 grams) and carbohydrates (10.1 grams) <sup>[1]</sup>, it can be safely included in the menu of people who strictly monitor weight and figure .

In addition, the pulp of the fruit contains a large amount of vitamins and microelements useful for the body:

- Potassium (178 mg). It helps to lower high blood pressure <sup>[2]</sup>, normalizes the functioning of muscle tissues <sup>[3]</sup>, takes part in the supply of oxygen to the brain.



- Vitamin C (31 mg) is the strongest natural antioxidant. Contained in tangerine juice even in greater concentration than in orange! Ascorbic acid helps damaged tissues recover faster, prevents the growth of cancer cells <sup>[4]</sup>, improves skin condition (starts the production of natural collagen) <sup>[5]</sup>, reduces the risk of atherosclerosis <sup>[6]</sup> (strengthens the walls of blood vessels), has a positive effect on the nervous system.
- Calcium (18 mg). Supports the renewal of bone tissue, including the growth of teeth and proper development of the skeleton in babies <sup>[7]</sup>, stabilizes blood pressure <sup>[8]</sup>.
- Phosphorus (14 mg). It is necessary for the body to produce energy (prevents the development of obesity <sup>[9]</sup>), improves the functioning of muscles <sup>[10]</sup> and the brain. <sup>[eleven]</sup>
- Magnesium (8 mg). Promotes accelerated tissue regeneration, in tandem with calcium improves bone growth, stabilizes muscle tone and prevents the occurrence of seizures. <sup>[12]</sup>
- Vitamin A (253 IU). It has antioxidant properties and helps to prolong the youth of the body, accelerates skin regeneration <sup>[13, 14]</sup>, improves vision. <sup>[15]</sup>
- Beta-cryptoxanthin (214 mcg). Prevents the development of oncological diseases, <sup>[16]</sup> as well as asthma, <sup>[17]</sup> cataracts, cardiovascular problems.

Mandarin is rich in other useful substances: arginine, aspartic and glutamic acids, etc.

## **Top 7 Health Benefits of Tangerine Juice**

### **1. Promotes weight loss**

The fruit contains a special alkaloid, synephrine. The substance has high fat-burning properties - it is often used by weight and figure watchers as an effective supplement to strength exercises. <sup>[18]</sup> But why drink expensive and not always safe dietary supplements, if they can be replaced by a few glasses of delicious tangerine juice that you can make yourself!

### **2. Calms the nervous system**

Tangerine juice has a positive effect on the nervous system and can even be used in the treatment of neurological disorders. <sup>[19]</sup> Great replacement for antidepressants!

### **3. Helps Fight Intestinal Disorders**

Citrus flavonoids, found in abundance in tangerine pulp, have anti-inflammatory properties. Citrus juice has a positive effect on intestinal microbiotics, cleanses it of dangerous infections and stops fermentation processes, and generally improves gastrointestinal functions. <sup>[20]</sup>

### **4. Protects Against Cancer**

Studies show that fruits high in carotene, including [tangerines](#) (containing 38 micrograms of beta-carotene), help prevent the development of cancer in various organs. <sup>[21]</sup>

### **5. Reduces Inflammation**

Daily consumption of citrus fresh juices, including tangerines, has a positive effect on immunity. In addition, they contain a large amount of vitamin C, a water-soluble antioxidant, and important bioactive polyphenols, hesperidin, naringenin, which help reduce inflammation in tissues and organs. <sup>[22]</sup>

### **6. Improves men's health**

The systematic use of tangerine fresh has a positive effect on male potency. The drink improves sperm quality and increases sperm motility. <sup>[23]</sup> Are you thinking about adding to your family? Be sure to supplement your daily diet with delicious and healthy freshly squeezed tangerine juice!

## **7. Favorably affects the condition of the skin**

Tangerines are high in antioxidants. They block oxidative processes in the body, contribute to the resumption of the production of their own collagen, which has a positive effect on the beauty of the skin - they become more dense and toned. <sup>[24]</sup> The elixir of youth exists! And you can see for yourself by adding a few glasses of refreshing orange juice to your daily diet.

Mandarin juice is also widely used in cosmetology. Refreshing and rejuvenating masks, effective cleansing scrubs, moisturizing and softening balms are prepared from it. And alcohol tincture from the peel of citrus fruits, including mandarin, is an excellent anthelmintic. <sup>[25]</sup>

## **Harm and features of the use of tangerine fresh**

Citrus juices, in particular grapefruit and tangerine, are not recommended to drink medicines. Such a tandem can neutralize the effect of medications or even lead to dangerous side effects. <sup>[26]</sup>

The use of pure concentrated juices adversely affects the health of the teeth - the acid has a destructive effect on tooth enamel. <sup>[27]</sup> Therefore, it is recommended to drink such drinks through a straw to minimize acid contact with the teeth. Also, dentists advise to carry out thorough oral hygiene after tasting such liquids.

Mandarin, like other citrus fruits, belongs to the category of allergenic products. Therefore, it should be used with caution by people prone to allergies. It is also very careful to acquaint the kids with it. It is worth starting tasting crumbs (not earlier than from 12 months of age) with a small portion of juice, literally with a few drops diluted with water. If skin and intestinal reactions do not appear, the dose can be gradually increased.

## **Rules for the use of tangerine juice**

For babies under the age of 3, it is recommended to give tangerine juice in small quantities (up to 50 ml), further diluting the drink with water to reduce the concentration. For older children, the rate can be increased to 100 ml. Adults are recommended to drink up to 500 ml of tasty and healthy fresh juice daily.

## **How to make tangerine juice**

To prepare a drink, you need to choose juicy sweet intact fruits. It is desirable that they do not have bones. Peel the fruit from the peel (the skins can be dried and used to brew a fragrant healthy tea - the peel also contains a huge amount of antioxidants <sup>[28]</sup>). Pour boiling water over the slices beforehand to increase the liquid yield, and then squeeze the juice out of them using a juicer. If this household appliance is not on the farm, you can chop the fruit in a blender, and then squeeze the resulting puree through a sieve or gauze.

**Note!** The maximum health benefit comes from freshly squeezed fresh juice that came out of the juicer no later than 4 hours ago. It is in this drink that contains the most vitamin C and other trace elements. Over time, under the influence of ambient temperature and interaction with oxygen, beneficial substances gradually decompose and evaporate from the drink. <sup>[29]</sup>

## Expert comment

### Tatyana Eliseeva, nutritionist, nutritionist

Tangerine juice is not only a delicious dessert, but also an excellent substitute for numerous medicines. It helps to saturate the body with all the necessary vitamins and minerals, get rid of blues and depression, maintain a slim figure and even prolong youth! That is why, with the onset of the citrus season, I recommend that you definitely include this refreshing and healthy drink in your family's daily diet.

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*Received 26.10.2022*

### **Tangerine juice: 7 health benefits of a delicious drink**

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**Abstract.** The article discusses the main properties of tangerine juice and its effect on the human body. A systematic review of modern specialized literature and relevant scientific data was carried out. The chemical composition and nutritional value of the drink are indicated, the use of tangerine juice in various types of medicine and the effectiveness of its use in various diseases are considered. The potentially adverse effects of tangerine juice on the human body under certain medical conditions and diseases are analyzed separately.



## Grapefruit juice is a storehouse of useful vitamins and minerals

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**Abstract.** Grapefruit or, as it is also called “paradise citrus”, is a hybrid of orange and pomelo, famous for its refreshing and bitter-tasting flesh, highly valued by healthy lifestyle enthusiasts. It is believed that the systematic consumption of fruit helps to get rid of many diseases, improves mood and promotes weight loss. Grapefruit juice also has numerous positive properties for the body, contains a huge amount of useful vitamins and organic acids.

**Key words:** grapefruit, grapefruit juice , useful properties, contraindications, composition, caloric content

### Composition and calories

The drink belongs to fairly low-calorie foods - 100 grams of juice contains only 41 kcal. <sup>[1]</sup> In addition, most of it consists of water (89.8%). There are practically no fats (0.27%) in it, there is a minimum of proteins (0.57%) and very few carbohydrates (9.1%) - an ideal addition to the menu for people who strictly follow their weight and slim figure!

Like other citrus juices, grapefruit juice contains various organic acids (citric acid is the main one - 1080 mg), as well as many minerals and vitamins <sup>[2]</sup> :

- Potassium (128 mg). Contributes to the normalization of blood pressure <sup>[3]</sup> and the human nervous system.
- Phosphorus (15 mg). Normalizes metabolism, helps to more fully assimilate useful substances, improves the growth of bones and teeth.
- [Magnesium](#) (7.7 mg). Increases the body's resistance to stress <sup>[4]</sup>, improves performance <sup>[5]</sup>, promotes bone tissue regeneration. <sup>[6]</sup>
- Calcium (9 mg). Strengthens bones and helps in the fight against osteoporosis <sup>[7]</sup>, stabilizes blood pressure <sup>[8]</sup> and the functioning of the nervous system. <sup>[nine]</sup>

## **Top 7 Health Benefits of Grapefruit Juice**

### **1. Restores the liver**

Grapefruit (in the same bitter film that envelops each slice of fruit) contains a useful plant flavonoid naringin. It improves bile production and even reduces alcohol poisoning of the liver. <sup>[10]</sup>

### **2. Protects Against Cancer**

There are several varieties of grapefruit depending on the color of the peel and pulp: white, yellow, pink. The latter are considered the sweetest. In addition, they contain a large amount of lycopene, a carotenoid pigment. <sup>[11]</sup> It is not only responsible for the color of the fruit, but is also a powerful antioxidant that helps fight cell aging and protects against many types of cancer. It is pink grapefruits that are recommended for making tasty and healthy citrus fresh juice.

### **3. Strengthens bones**

Studies show that regular consumption of grapefruit juice promotes strong bones and is an excellent prevention of osteoporosis. <sup>[12]</sup> Want to reduce the risk of broken bones and protect older people from accidental injury? Add a few glasses of delicious refreshing fresh juice to the mandatory daily diet of each family member!

### **4. Helps in the treatment of diabetes**

Citrus pulp contains the bioflavonoid quercetin. The substance has powerful therapeutic properties, especially effective in the treatment of type 2 diabetes <sup>[13]</sup>, shows excellent performance in lowering blood glucose levels. <sup>[fourteen]</sup>

### **5. Promotes weight loss**

Daily consumption of a drink rich in flavonoids has a positive effect on the figure, helps in weight loss. <sup>[15]</sup> Want to experience the effectiveness of the drink for yourself? Complement your diet with a few cups of grapefruit juice!

### **6. Is a natural antidepressant**

Grapefruit juice contains the bioflavonoid hesperidin, which also has antidepressant properties. <sup>[16]</sup> Why take artificial, often addictive antidepressants when a great and safe cure for stress and bad mood can be made from the ingredients at hand?

### **7. Reduces the risk of heart attacks and strokes**



Pectin contained in the pulp of citrus fruits helps lower blood cholesterol levels, which reduces the risk of developing cardiovascular diseases. <sup>[17]</sup>

Fresh grapefruit is often used in cosmetology for the preparation of various anti-inflammatory masks and lotions. And the leftovers from the processing of grapefruit juice and whole culled fruits are used for the production of animal feed. <sup>[eighteen]</sup>

### **Contraindications and possible harm of grapefruit juice**

Multiple studies show that taking grapefruit juice with statins, drugs that suppress cholesterol production, (even in a 12-hour period) greatly increases the effect of the drug. <sup>[19]</sup> In addition, the fact that this drink has the property of multiplying the effect of many pharmaceutical drugs has been proven. Sometimes this can lead to undesirable consequences and even death. <sup>[20]</sup> This feature of grapefruit juice must be taken into account when taking any potent drugs - a preliminary consultation with the appropriate specialist is necessary.

Also, the contact of grapefruit juice with tooth enamel can lead to its destruction and the formation of caries. <sup>[20]</sup> That is why dentists recommend using all fresh juices with the help of special tubes, and also advise immediately rinsing the mouth with clean drinking water to wash away the remnants of sweet and sour liquid from the surface of the teeth.

### **Grapefruit Juice Guidelines**

To fully saturate the body with all the necessary vitamins and minerals contained in the fruit, it is recommended to drink at least two glasses of a delicious drink daily. For small tasters, the rate is reduced to one glass.

Introducing freshly squeezed fresh grapefruit juice into the crumbs menu as complementary foods is carefully, one teaspoonful at a time, carefully observing the reaction of the babies. It is recommended to start food experiments no earlier than 1 year. If a child has a food allergy to any products, acquaintance with an exotic drink should be postponed until an older age - at least until reaching 3 years.

### **Recommendations for the preparation and storage of grapefruit juice**

The most useful is a smoothie passed through a blender. This drink contains the most valuable pectin for the body. If you do not like drinking juice with pulp, you can squeeze it through a sieve or gauze. You can also use a juicer to make fresh juice.

It is recommended to eat freshly prepared juice (within the first 20 minutes after receiving it). Then it oxidizes from contact with oxygen and loses some of its beneficial properties. If it is not possible to drink the entire volume of the resulting drink at once, it is recommended to put it in the refrigerator to protect it from souring and the growth of pathogenic bacteria.

### **Expert comment**

#### **Tatyana Eliseeva, nutritionist, nutritionist**

Grapefruit juice is an original taste and a very healthy drink that brings invaluable benefits to the body. Freshly prepared fresh juice helps to increase immunity and mood without the use of additional pharmaceutical preparations, significantly reduce body volume and protect against such dangerous

diseases as oncology and diabetes. Convince yourself of the effectiveness and benefits of the drink by adding it to your family's daily diet!

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

*Received 06.11.2022*

### **Grapefruit juice is a storehouse of useful vitamins and minerals**

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**Abstract.** The article discusses the main properties of grapefruit juice and its effect on the human body. A systematic review of modern specialized literature and relevant scientific data was carried out. The chemical composition and nutritional value of the drink are indicated, the use of grapefruit juice in various types of medicine and the effectiveness of its use in various diseases are considered. The potentially adverse effects of grapefruit juice on the human body under certain medical conditions and diseases are analyzed separately.



### **Lime juice is a unique drink of health and longevity**

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**Abstract.** A miniature relative of the lemon with a showy green skin, it is often mentioned in various recipes and used in the preparation of a variety of dishes. Lime pulp has an original refreshing taste, contains many vitamins and minerals. You can prepare delicious and extremely healthy lime juice for the body yourself.

**Key words:** lime, lime juice, useful properties, contraindications, composition, calorie content

## **Composition and calories**

Natural lime juice contains over 90% water and is low in calories (25 kcal per 100 grams of product). It has a minimum of fats, proteins and carbohydrates (0.07%, 0.42%, 8.42%) <sup>[1]</sup>, which allows it to be included in a variety of unloading diets and menus for people who follow a healthy lifestyle.

Citrus juice is a source of various vitamins and nutrients:

- Vitamin C (30 mg). Ascorbic acid is a natural antioxidant. It increases the body's immunity, participates in the synthesis of natural collagen and even helps in the fight against cancer. <sup>[2]</sup>
- Potassium (117 mg). Normalizes the functioning of the nervous system and digestive tract, stabilizes blood pressure <sup>[3]</sup>, relieves muscle spasm and convulsions.
- Phosphorus (14 mg). Accelerates metabolism, helps to fully absorb all vitamins and minerals, strengthens bone tissue. <sup>[four]</sup>
- Magnesium (8 mg). Also, interacting in combination with calcium, it promotes bone density, stabilizes heart rate and blood pressure. <sup>[five]</sup>
- Niacin (vitamin B3) - 0.142 mg. It dilates blood vessels and regulates the level of cholesterol in the blood <sup>[6]</sup>, accelerates metabolism <sup>[7]</sup>, improves tissue healing.

Lime and lemon are the leaders in the content of citric acid (in grapefruit and orange juice it contains much less). <sup>[8]</sup> This substance is very useful for the body - it helps to remove toxins, improves immunity, and helps better absorption of calcium.

Also, lime juice contains many useful substances, in particular, flavonoids and coumarins. <sup>[9]</sup> The compounds have antioxidant and anticoagulant properties, reduce blood clotting and prevent the formation of blood clots, improve metabolic processes in the body.

## **Top 10 Health Benefits of Lime Juice**

### **1. Improves calcium absorption**

It is a proven fact that drinking lime juice along with foods containing calcium promotes better absorption of the mineral <sup>[10]</sup>, which strengthens bones and teeth. Prevent the development of osteoporosis by introducing healthy lime juice into your daily diet!

### **2. Helps Treat Malaria**

Studies conducted in one of the hospitals in Nigeria proved that lime juice, used in complex therapy in the treatment of patients with malaria, significantly increases the properties of the drugs used and

contributes to a faster cure for patients. When lime juice is included in the diet of patients, complete elimination of malaria parasites occurs within 3 days! <sup>[11], [12]</sup>

### **3. Regulates the menstrual cycle**

The systematic use of lime juice helps to reduce pain and discomfort during menstruation and can even delay ovulation and the onset of menstruation. <sup>[13]</sup>

### **4. Prevents the development of atherosclerosis**

Daily consumption of lime juice will help clear blood vessels from clogging cholesterol plaques and avoid such dangerous diseases as myocardial infarction, coronary heart disease, etc. <sup>[fourteen]</sup>

### **5. Disinfects water**

Studies have shown that adding lime juice to well or tap water, as well as food samples, kills the cholera virus. <sup>[15], [16]</sup>. Going on a hike, be sure to take a few fruits of this healthy citrus fruit with you!

### **6. Helps fight cancer**

Flavonoid-rich lime juice inhibits the growth and development of cancer cells. <sup>[17], [18]</sup> For the prevention of oncological diseases, doctors recommend including a healthy drink with the addition of fragrant lime juice in the daily diet.

### **7. Beneficial effect on potency**

Studies show that the natural product, lime juice, is an excellent analogue of Viagra - it increases potency and libido. <sup>[19]</sup> Why take risks and poison the body with unsafe chemicals, if you can get confidence in male strength with the help of delicious and absolutely harmless lime fresh!

### **8. Has Antioxidant Properties**

Lime peel and fresh juice are high in flavonoids, plant [antioxidants](#). <sup>[20]</sup> Protect cells from oxidation and premature aging, increase the protective functions of the body.

### **9. Protects against scurvy**

Due to the high content of vitamin C in the pulp of the fruit, lime juice is recommended as an effective prophylactic drug for the treatment and prevention of scurvy. <sup>[21]</sup>

### **10. Effective in the treatment of dysentery**

Lime juice has powerful antimicrobial properties - it shows excellent results in the treatment of such an unsafe disease for the body as dysentery. <sup>[22]</sup>

Lime juice is often used in cooking. It has a preservative effect. When an acidic liquid is added to the dough, the shelf life of the finished bread is significantly increased (mold does not appear in it for a long time). <sup>[23]</sup> Citrus fresh is often used as a marinade for meat - it contributes to the quality softening of muscle fibers. <sup>[24]</sup> Would you like to enjoy a tender shish kebab? Pre-marinate the meat in freshly squeezed lime juice!

### **Contraindications and possible harm of lime juice**

Lime juice contains unique heterocyclic compounds, furocoumarins, which, when in contact with the skin, make it extremely sensitive to ultraviolet light. In some people, exposure to sunlight on the skin, previously treated with lime juice, can lead to phyto dermatitis - irritation and inflammation of the dermis. <sup>[25], [26]</sup> To avoid such unpleasant consequences, make sure that the juice of the fruit does not get on the skin, wash your hands thoroughly after contact with citrus.

Also, when drinking lime juice in pure or diluted form, you need to take extra care of dental hygiene - rinse them with clean water after contact with the liquid. Since the acid contained in fresh juice provokes erosion of tooth enamel, which can lead to caries. <sup>[27]</sup>

### **Rules for drinking lime juice**

It is recommended to eat fresh only squeezed fresh juice. The liquid, subjected to heat treatment, changes its color and loses most of the vitamins and nutrients. <sup>[28]</sup>

Due to the high concentration of acid, drinking lime juice in its pure form is not recommended. It must be diluted with water, added to other juices and drinks (compotes, teas, cocktails, etc.).

### **Tips for making and storing lime juice**

To prepare juice, you need to select whole fruits with a shiny skin. In order to extract the maximum juice from the pulp, it is recommended to pour hot water over the fruit before processing, and then roll it on a hard surface, pressing it with the palm of your hand with force. Thus, the membranes containing the juice are destroyed and the liquid is more easily and fully squeezed out of the pulp. You can squeeze the juice from the fruit with your hands or with a special citrus juicer.

It is advisable to use the resulting fresh immediately. If too much liquid is squeezed out, pour it into a glass resealable container and store in the refrigerator (but not longer than a few days).

### **Expert comment**

#### **Tatyana Eliseeva, nutritionist, nutritionist**

Lime juice is an extremely healthy drink rich in numerous trace elements. With it, you can increase immunity, saturate the body with essential vitamins, get rid of many diseases and health problems. Convince yourself of this by introducing this fragrant and healthy fresh juice into your family's diet!

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*Received 17.11.2022*

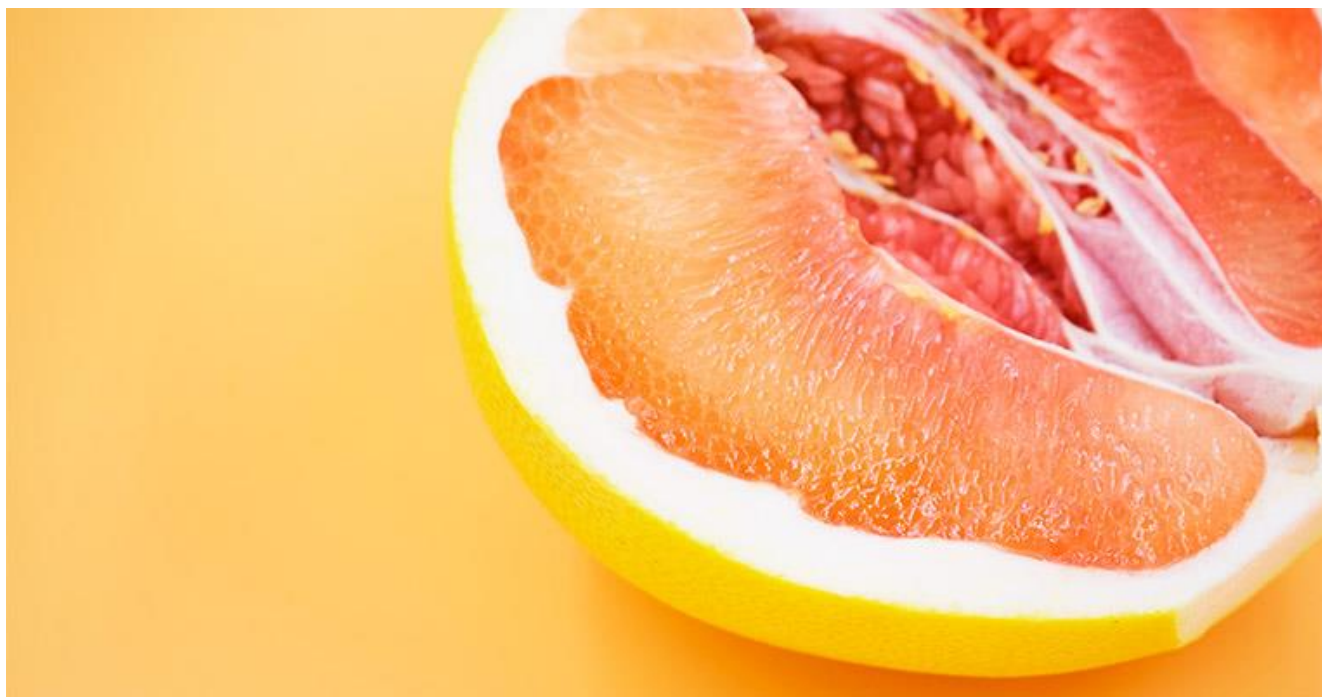
### **Lime juice is a unique drink of health and longevity**

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**Abstract.** The article discusses the main properties of lime juice and its effect on the human body. A systematic review of modern specialized literature and relevant scientific data was carried out. The chemical composition and nutritional value of the drink are indicated, the use of lime juice in various types of medicine and the effectiveness of its use in various diseases are considered. The potentially adverse effects of lime juice on the human body under certain medical conditions and diseases are analyzed separately.



## Pomelo juice - an exotic drink of health and longevity

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**Abstract.** The largest among citrus fruits, called in Portuguese " *swollen lemons* " ( *pomposos limones* ), have an original taste and contain many vitamins and nutrients. The refreshing sweet and sour pulp of the pomelo is a part of many national dishes of China and Thailand, and its juice is recommended to be used as an effective immunostimulating agent that helps to avoid many diseases. On the shelves of supermarkets, pomelo juice can be found infrequently, but anyone can cook it on their own.

*Key words:* pomelo, pomelo juice , useful properties, contraindications, composition, calorie content

### Composition and calories

Pomelo pulp is 89.1% water. It contains virtually no fat (0.04%) and protein (0.76%), carbohydrates are only 9.6%, and calories - 38. <sup>[1]</sup> This allows us to classify freshly squeezed pomelo juice into the category of low-calorie diet drinks recommend it as a mandatory refreshing supplement when compiling a varied diet. The usefulness of the drink is explained by the rich content of various vitamins and minerals. <sup>[2]</sup>

In particular, it contains:

- Potassium (216 mg). <sup>[3]</sup> Contributes to the normalization of blood pressure <sup>[4]</sup> , is an effective immunomodulator - improves the supply of oxygen to the brain, which contributes to clarity and clarity of thinking.
- Phosphorus (17 mg). A microelement that ensures the normal functioning of the body: in tandem with calcium, it strengthens bone tissue <sup>[5]</sup> , regulates the acid-base balance, stabilizes

the gastrointestinal tract, helps to fully absorb B vitamins - fills the body with energy, improves well-being.

- Magnesium (6 mg). It helps to avoid the risk of premature birth, overwork, chronic fatigue syndrome, headaches and insomnia, prevents the occurrence of muscle cramps <sup>[6]</sup>, regulates blood pressure, and improves mood. <sup>[7]</sup>
- Calcium (4 mg). It plays an important role in regulating blood pressure and preventing cardiovascular diseases, is the basis of healthy bone tissue, and prevents the development of osteoporosis. <sup>[8]</sup>
- Sodium (1 mg). Stabilizes the balance of fluids, promotes the formation of a sufficient amount for the full functioning of the body of saliva, blood plasma, gastric juice, helps to fully absorb carbohydrates.
- Vitamin C (61 mg). Ascorbic acid is involved in the synthesis of collagen <sup>[9]</sup> (rejuvenates and makes the skin more elastic, strengthens blood vessels and ligaments), improves the functioning of the immune system <sup>[10]</sup>, helps to fully absorb iron <sup>[11]</sup>, accelerates wound healing. <sup>[12]</sup>

Pomelo is also a valuable source of various natural antioxidants useful for the body <sup>[13]</sup>. It contains thiamine, or vitamin B1, (0.034 mg) - slows down the aging process, improves brain function (prevents the development of Alzheimer's disease, Parkinson's <sup>[14]</sup>), reduces the negative effects of tobacco and alcohol on the body. Vitamin B6 (0.036 mg) contributes to the normalization of the nervous system <sup>[15]</sup>, helps to get rid of leg cramps <sup>[16]</sup> and numbness in the hands.

## **Top 5 Health Benefits of Pomelo Juice**

### **1. Helps Fight Obesity**

The composition of the pulp of the fruit includes a variety of flavonoids, which have powerful antioxidant properties, and also prevent the development of obesity. <sup>[17]</sup> Therefore, in the menu of people who follow the figure and weight, it is mandatory to include such a healthy and tasty drink as pomelo juice.

### **2. Improves digestion, promotes the removal of toxins**

The fruit contains a lot [of fiber](#). It absorbs toxins and promptly removes them from the body. <sup>[18]</sup> The use of freshly squeezed pomelo juice improves digestion and prevents constipation.

### **3. Reduces the risk of cancer**

The flavonoid naringin, found in citrus fruits, including pomelo, has powerful anti-inflammatory and anti-cancer activity. <sup>[19]</sup> Fresh, obtained from the fruits of exotic "bloated lemons", shows high efficiency in the fight against the growth of cancer cells.

### **4. Can be used by diabetic patients**

Pomelo juice has a low glycemic load, which allows it to be included in the menu of people suffering from type 2 diabetes. <sup>[20]</sup> Of course, it should be used in moderation. The daily norm for diabetics is no more than 200 grams of fruit pulp or 150 ml of freshly squeezed fresh juice. Also, the addition of this citrus juice in the diet of patients significantly improves the effectiveness of antidiabetic treatment. <sup>[21]</sup>

### **5. Has an anti-inflammatory effect**

Numerous studies confirm that the unique citrus flavanoids contained in the fruit (hesperidin, naringin, nobiletin) help reduce inflammation in the body. <sup>[22]</sup>

Also, pomelo juice is often used in cooking and even in cosmetology. It is included in the basis of various cosmetic masks and creams, they wipe the skin with the aim of moisturizing it, nourishing it, and normalizing the functioning of the sebaceous glands.

### **Contraindications and possible harm to pomelo juice**

**Note!** Like grapefruit, pomelo contains enzymes that interact with drugs, which can lead to changes in the properties of drugs. <sup>[23]</sup> Therefore, it is not recommended to consume the juice of these citrus fruits together with drugs, especially those intended for lowering cholesterol, treating depression, thrombosis, heart disease, etc.

Also, a delicious drink should not be included in the diet of people suffering from food allergies, especially to citrus products, to be consumed during an exacerbation of peptic ulcer.

Fresh squeezed from a pomelo, like other fruit juices, contains sugar. Therefore, after tasting a delicious drink, dentists recommend immediately rinsing the mouth with clean water from the remnants of sweet and sour liquid to avoid the risk of caries. <sup>[24]</sup>

### **Norms and recommendations for drinking pomelo juice**

To fully saturate the body of an adult with all the necessary vitamins and minerals contained in the fruit, it is recommended to drink about half a liter of freshly squeezed fresh pomelo pulp daily. For children, the norm is slightly lower: for children aged 5 to 12 years - 100 ml of drink, for teenagers - up to 1 glass.

Juice should be drunk fresh (within a few hours after squeezing). Over time, it oxidizes from contact with oxygen, losing many useful substances. There is also a risk of reproduction of unsafe microorganisms in it.

### **How to prepare and store pomelo juice**

Making juice from a pomelo is no more difficult than from other citrus fruits. Select whole fruits (the heavier the fruit, the more juicy it is), peel them by making longitudinal cuts on it, remove the slices and peel them from the film, which is quite simply removed. The seeds contained in the pulp are also easily extracted from it.

Peeled slices can be passed through a juicer or squeezed manually with gauze. The resulting juice is recommended to drink immediately or put in the refrigerator for short-term storage.

### **Expert comment**

#### **Tatyana Eliseeva, nutritionist, nutritionist**

Pomelo juice, saturated with numerous vitamins and minerals, has many beneficial properties - it improves well-being and mood, and also protects against many diseases. That is why this exotic healing drink is recommended to be included in the diet of every family, especially during the season of cold and colds.

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

*Received 10.12.2022*

### **Pomelo juice - an exotic drink of health and longevity**

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**Abstract.** The article discusses the main properties of pomelo juice and its effect on the human body. A systematic review of modern specialized literature and relevant scientific data was carried out. The chemical composition and nutritional value of the drink are indicated, the use of pomelo juice in various types of medicine and the effectiveness of its use in various diseases are considered. The potentially adverse effects of pomelo juice on the human body under certain medical conditions and diseases are analyzed separately.



## Sweetie juice is a delicious healing drink for the whole family

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**Abstract.** A hybrid of pomelo and white grapefruit, bred by Israeli scientists in the early 80s of the last century, has an original sweet and sour taste and is a unique source of numerous microelements useful for the body. It is for this reason that delicious and healing juice from suites is recommended to be included in the daily menu for both adults and kids.

**Key words:** sweetie, sweetie juice , useful properties, contraindications, composition, calorie content

A hybrid of pomelo and white grapefruit, bred by Israeli scientists in the early 80s of the last century, has an original sweet and sour taste and is a unique source of numerous microelements useful for the body. It is for this reason that delicious and healing juice from suites is recommended to be included in the daily menu for both adults and kids.

### Composition and calories

A reduced variety of pomelo, called "oroblanco" or "white gold" by American entrepreneurial farmers, is juicy (80% water) and rather low in calories - it contains only 58 kcal. Considering that the fruit contains a minimum of fats and proteins (0.2% and 0.7%) and a small amount of carbohydrates (9%), fresh from suite is considered a dietary product - it can safely be included in the menu of people who strictly monitor their weight and figure .

Also, the composition of the drink includes many vitamins and nutrients:

- [Vitamin C](#) , or ascorbic acid (45 mg). It is a powerful antioxidant - it prevents the aging of body cells, starts the production of its own collagen, strengthens the immune system, helps fight viruses, colds <sup>[1]</sup> and even periodontitis. <sup>[2]</sup>

- Potassium (212 mg). It normalizes blood pressure <sup>[3]</sup>, improves oxygen supply to cells, promotes healthy bones <sup>[4]</sup> and mental clarity, and has an anti-allergic effect.
- Calcium (23 mg). Regulates blood clotting processes, prevents the development of osteoporosis <sup>[5]</sup> and the occurrence of seizures, promotes healthy bones and teeth, helps in weight loss, and prevents the occurrence of polyps in the colon. <sup>[6]</sup>
- Sodium (13 mg). Helps to maintain intracellular fluid, prevents the occurrence of heat stroke and the development of dehydration, promotes the healthy functioning of muscles and nerves. <sup>[7]</sup>
- Phosphorus (18 mg). It normalizes metabolic processes in the body, provides energy production sufficient for its healthy functioning, helps to absorb vitamins and minerals, stabilizes the muscular and nervous systems, promotes bone growth (in particular, it is recommended for pregnant women for the proper formation of the fetal bone skeleton <sup>[8]</sup>).

In addition, citrus fruits, which include suets, are rich in flavonoids. In particular, they contain naringin and narirutin, which strengthen the walls of blood vessels, help lower blood pressure <sup>[9]</sup>, and provide a powerful anti-inflammatory effect. <sup>[10]</sup>

The juice has a low glycemic index and can be consumed by patients suffering from diabetes. Of course, in reasonable quantities.

## **Top 5 Health Benefits of Sweetie Juice**

### **1. Has detoxifying properties**

Studies have proven that sweetie juice, or oroblanco (as this fruit is often called in America), has a beneficial effect on the liver - it has a detox effect, cleanses it of toxins and toxins. <sup>[eleven]</sup>

### **2. Is a powerful antioxidant**

Among all citrus fruits, it is the pulp of the suet that has the most powerful antioxidant potential. <sup>[12]</sup> Do you want to protect the body from the negative effects of the environment and the ruthless passage of time? Add healthy and delicious sweetie juice to your daily diet!

### **3. Reduces blood cholesterol levels**

It has been established that the juice of a citrus hybrid is distinguished by a high content of biologically active compounds that contribute to a decrease in the level of lipids in the blood. <sup>[13]</sup> Freshly squeezed sweetie pulp is recommended as a healthy natural supplement for people suffering from hypercholesterolemia (high blood cholesterol levels).

### **4. Prevents Cognitive Impairment**

The high content in the drink of a unique citrus flavonoid, nobiletin, helps slow down the development of such incurable diseases as Alzheimer's disease and Parkinson's disease. <sup>[fourteen]</sup>

### **5. Positively affects the work of the heart and the cardiovascular system**

Regular consumption of juice squeezed from the pulp of citrus fruits helps cleanse blood vessels from cholesterol plaques, normalize blood pressure and improve the functioning of the cardiovascular system as a whole. <sup>[15]</sup>

Tasty and healthy sweet juice is often used in cooking and cosmetology. In particular, it is added to various masks and creams. It perfectly nourishes, moisturizes and cleanses the skin, normalizes its hydro-lipid balance.

### **Contraindications and possible harm to sweet juice**

Healthy and tasty sweet juice also has its contraindications. In particular, it is recommended to try it with caution for people suffering from various food allergies. Also, they should not be abused in the presence of inflammation of the gastrointestinal tract, etc.

Like any other natural fresh juice, sweet fruit juice has a destructive effect on tooth enamel, which can lead to caries.<sup>[16]</sup> Dentists therefore recommend consuming the drink through a straw and thoroughly rinsing the mouth with clean water after contact with the delicious sweet and sour liquid.

### **Norms and recommendations for the use of Sweetie juice**

To fully replenish the body's needs for vitamins and minerals, it is recommended to consume at least 1 glass of a delicious drink daily. This is the norm for adults. For babies over the age of 5 years, the recommended dosage is slightly less - up to 100 ml.

It is worth gradually starting to get acquainted with a new product. Initially, with 1 teaspoon of liquid, gradually increasing the rate, if there is no negative reaction from allergic manifestations and the gastrointestinal tract.

### **How to prepare and store sweetie juice**

Even a ripe sweetie has a green skin. Therefore, focusing on the color of the citrus peel when choosing fruits is not worth it. Choose whole, heavy fruits without dents or cracks with shiny, healthy skins. Please note that suites, like pomelo, have a fairly thick skin, which affects the amount of pulp present in it. This fact should be taken into account when choosing fruits selected for juicing.

Fresh is squeezed out of suite by analogy with other citrus fruits. Peel the fruit from a thick peel, and then slices from a thin skin, pass the peeled pulp through a juicer, or use ordinary gauze to squeeze. The resulting drink is recommended to be consumed immediately, since prolonged contact with air leads to the volatilization of some of the beneficial substances. Also, microorganisms dangerous to health can develop in the product over time. To slow down these processes, the juice can be stored in the refrigerator for several hours.

### **Expert comment**

#### **Tatyana Eliseeva, nutritionist, nutritionist**

Tasty and healthy juice from sweetie will help to fill the lack of vitamins and improve mood in the gloomy autumn-winter period, as well as reliably protect the bodies of kids and adults from many seasonal and other diseases. That is why a healing preventive fresh juice from a juicy sweet hybrid of pomelo and grapefruit is recommended to be introduced into the family diet at least periodically.

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

*Received 14.12.2022*

### **Sweetie juice is a delicious healing drink for the whole family**

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**Abstract.** The article discusses the main properties of the juice from the retinue and its effect on the human body. A systematic review of modern specialized literature and relevant scientific data was carried out. The chemical composition and nutritional value of the drink are indicated, the use of juice from the retinue in various types of medicine and the effectiveness of its use in various diseases are considered. The potentially adverse effects of juice from the retinue on the human body under certain medical conditions and diseases are analyzed separately.



## **Kumquat juice is a unique drink to restore strength and restore youth**

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**Abstract.** Exotic miniature citrus fruits, resembling small plums in shape and size, and similar in taste to tangerines, have several names: *kumquat*, *fortunella* or *kinkan*. And they are also known to admirers under the name "golden tangerine". This is how the name "kumquat" is translated from Chinese. In addition to the fact that fruits have an original sweet and sour slightly spicy taste and an unusual shape, they are also a source of numerous trace elements. That is why tasty and healthy kumquat juice is recommended to be included in the diet of kids and adults as a mandatory vitamin supplement, especially during the difficult autumn-winter period of viruses and colds.

**Keywords:** kumquat, kumquat juice, useful properties, contraindications, composition, caloric content

### **Composition and calories**

Kumquat juice is 80.8% water, contains a small amount of fat and protein (0.86% and 1.88%). There are slightly more carbohydrates in its composition than in other citrus fruits familiar to us (15.9 grams per 100 grams of product <sup>[1]</sup>), which explains its higher calorie content (71 kcal versus 46 kcal of



orange or 41 kcal of grapefruit juice). This fact must be taken into account when compiling a diet, if you strictly follow the figure and the number of calories consumed.

Kumquat juice contains many useful vitamins and minerals:

- Potassium (186 mg). It normalizes blood pressure <sup>[2]</sup>, stabilizes the water balance in the body, plays an important role in the functioning of the nervous system, prevents muscle spasms, and improves performance.
- [Calcium](#) (62 mg). In addition to the fact that this chemical element is the basis of bone tissue (ensures its density and health) <sup>[3]</sup>, it is also responsible for blood clotting, normalization of blood pressure, the implementation of proper metabolic processes in the body, and reduces PMS symptoms.
- Magnesium (20 mg). Normalizes heart rate and blood sugar levels, improves bone growth <sup>[4]</sup>, helps the body fully absorb vitamin D, prevents seizures <sup>[5]</sup>, reduces joint pain.
- Phosphorus (19 mg). It improves metabolism, helps to fully assimilate many chemical elements, relieves pain in the muscles (eliminates cramps) <sup>[6]</sup>, improves mood and prevents the development of depression.
- Sodium (10 mg). The main component of blood plasma. It establishes the proper functioning of the whole organism: it maintains a harmonious balance of fluid in the body, prevents dehydration <sup>[7]</sup>, promotes the production of saliva and lymph, stabilizes the work of the nervous and muscular systems, etc.
- Vitamin C (43.9 mg). Like all citrus fruits, kumquat is a valuable source of ascorbic acid. A water-soluble antioxidant slows down the aging process, improves skin condition <sup>[8]</sup> - promotes accelerated tissue regeneration, improves the production of its own collagen and elastin, normalizes brain function, slows down the growth of tumors, and helps fight stress. <sup>[nine]</sup>

Fruits also contain polyunsaturated fatty acids, lipids. <sup>[10]</sup> They are involved in the production of hormones, help the proper absorption of vitamins, and are a building material for nervous tissue.

## **Top 5 Health Benefits of Kumquat Juice**

### **1. Is a Powerful Antioxidant**

Kumquat is a source of unique flavonoids. <sup>[11]</sup> Substances of plant origin activate the work of enzymes, increase the body's resistance to the effects of various viruses (have an antimicrobial effect), and also slow down the aging process, reduce the risk of developing oncology and cardiovascular diseases. Kumquat juice is a real drink of youth and health!

### **2. Helps in the treatment of cancer**

Studies have shown that the essential oils contained in the peel and pulp of exotic citrus effectively slow down the development of oncological processes in the body. <sup>[12]</sup> Say a resounding no to cancer by drinking a daily glass of a delicious health drink called fresh kumquat to your health.

### **3. Promotes Immunity Boost**

Kumquat juice helps fight stress and various diseases by activating the natural production of unique killer cells. <sup>[13]</sup> NK cells effectively protect the body from pathogens, promptly eliminate malignant and damaged cells, preventing their uncontrolled reproduction.

### **4. Provides Prevention of Cardiovascular Diseases**

The systematic use of a healthy drink has a beneficial effect on blood vessels - it cleanses them of bad cholesterol, stabilizes blood pressure, and reduces the risk of developing cardiovascular diseases. <sup>[14]</sup> To avoid stroke and heart attack, to significantly improve well-being will help the systematic use of delicious sweet and sour juice from exotic citrus fruits.

## **5. Speeds Up Metabolism, Helps Fight Obesity**

The conducted experiments prove that the systematic use of kumquat juice has a positive effect on the health of people suffering from metabolic disorders, as well as their appearance. <sup>[15]</sup> Make it a habit to drink a glass of freshly squeezed kumquat fresh juice every day, and in the near future you are guaranteed to see a pleasant result in a mirror image!

## **Contraindications and possible harm to kumquat juice**

Kumquat juice has practically no contraindications except for allergies to citrus fruits. Also, it should be used with caution during the period of exacerbation of gastrointestinal ulcers and people suffering from high acidity of the stomach.

Drinking a sweet and sour drink, like any other concentrated natural juice, is recommended by dentists through a straw, and it is also advised to thoroughly rinse the mouth after contact with the liquid with clean water. Such precautions will help to avoid the processes of destruction of enamel and caries of the teeth. <sup>[sixteen]</sup>

## **Norms and recommendations for the use of kumquat juice**

To fully saturate the body with all the necessary vitamins and minerals, an adult is recommended to drink about 2 glasses of freshly squeezed kumquat juice daily. For teenagers over the age of 12, the norm is 1 glass, for kids from 3 years old - about 100 ml.

Adding new drinks to the diet of babies should be done carefully to avoid the risk of allergic reactions. If the baby has not previously tried either the kumquat itself or its juice, start your acquaintance with citrus fruits with a few drops of liquid. In the absence of negative reactions, you can increase the amount to 1 teaspoon, gradually bringing the rate to 100 ml.

## **How to prepare and store kumquat juice**

To prepare the drink, it is necessary to select whole fruits and pass them through a juicer. Note! It is not necessary to remove the skin from the fruit. In addition to the fact that these citrus fruits are eaten with the skin (it is even sweeter in taste than the sweet and sour pulp), experts say that it contains much more phenols and flavonoids. To increase the concentration and overall yield of useful substances from fruits, it is recommended to immerse them in hot water for a few seconds before processing. <sup>[17]</sup> The fruit is then juiced using a standard juicer.

It is recommended to drink the drink immediately after squeezing, until it has had time to oxidize from contact with oxygen, dangerous pathogenic bacteria have not begun to develop in it. If you cannot drink all the juice obtained at one time, you can store it in the refrigerator for a short time (for several hours).

## **Expert comment**

**Tatyana Eliseeva, nutritionist, nutritionist**

Kumquat juice is an exotic but very healthy drink. It is able in the shortest possible time to fully saturate the body with all the vitamins and minerals it needs, quickly strengthen immunity for the next season of colds and colds, and prevent the development of many dangerous diseases. That is why I recommend adding this delicious healing fresh juice to the standard diet of kids and adults as often as possible.

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

*Received 19.12.2022*

### **Kumquat juice is a unique drink to restore strength and restore youth**

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**Abstract.** The article discusses the main properties of kumquat juice and its effect on the human body. A systematic review of modern specialized literature and relevant scientific data was carried out. The chemical composition and nutritional value of the drink are indicated, the use of kumquat juice in various types of medicine and the effectiveness of its use in various diseases are considered. The potentially adverse effects of kumquat juice on the human body under certain medical conditions and diseases are analyzed separately.



### **Tangelo juice - a refreshing drink to restore youth and rejuvenate**

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**Abstract.** Tangelo is a juicy and fragrant hybrid of a variety of mandarin and grapefruit, resembling a pear in shape due to the slightly elongated upper part. For this, he received the original name "honey

bell" and is especially popular in cooking. Its delicious sweet and sour pulp is often used in national dishes of American and European cuisines. And it also contains a large amount of vitamins and minerals useful for the body. They are preserved in full and in freshly squeezed tangelo juice, which explains the popularity of the drink among people who adhere to a healthy lifestyle.

*Key words:* tangelo, tangelo juice , useful properties, contraindications, composition, calorie content

## Composition and calories

Fresh citrus contains a lot of water (85.2%), few carbohydrates (13.3%), a minimum of fats and proteins (0.31 and 0.81%, respectively), which explains the low calorie content of the product - 53 kcal per 100 grams of liquid. <sup>[1]</sup> Nutritionists confirm that such a drink without risk to the figure can be included in various diet menus.

In addition, tangelo juice is very useful - it can saturate the body with many valuable trace elements. In particular, it contains:

- **Potassium** (166 mg). It normalizes blood pressure <sup>[2]</sup>, improves the supply of oxygen to the brain and promotes mental clarity, reduces the risk of heart attacks and strokes, prevents muscle spasms (eliminates convulsions).
- **Calcium** (37 mg). Regulates the processes of blood clotting and blood pressure, strengthens bone tissue <sup>[3]</sup> (helps prevent osteoporosis), prevents the development of Alzheimer's disease. <sup>[four]</sup>
- **Vitamin C** (26.7 mg). Ascorbic acid is a powerful antioxidant — it protects cells from aging, restores natural collagen synthesis <sup>[5]</sup> (improves the condition of skin, hair, nails), improves tissue healing, reduces the risk of cardiovascular diseases, and helps in the fight against oncology. <sup>[6]</sup>
- **Phosphorus** (20 mg). Promotes the full absorption of many useful substances, including calcium (participates in the formation of healthy bone tissue), improves the proper functioning of the gastrointestinal tract and cardiovascular system.

Also, the drink contains a lot of folic acid (restores immunity, recommended during pregnancy - provides prevention of fetal development <sup>[7]</sup>), choline (improves mood, activates the brain <sup>[8]</sup>), vitamin A (improves reproductive function, participates in the formation of bone and cartilage tissues, protects against viruses and infections, helps in the restoration of epithelial tissues <sup>[9]</sup>).

## Top 5 Health Benefits of Tangelo Juice

### 1. Recommended for cancer prevention

Citrus fruits, including tangelo pulp, contain a unique bioflavonoid, hesperidin. Numerous studies have proven that the substance has powerful antimicrobial, antiviral and antifungal activity, and also effectively inhibits the growth of cancer cells. <sup>[10]</sup>

### 2. Effective in treating diabetes

The natural antioxidants found in citrus pulp have the ability to normalize blood sugar levels. <sup>[11]</sup> Therefore, despite the sweetness of the fruit, tangelo juice is recommended to be added to the diet of diabetics as an additional effective therapeutic agent.

### 3. Restores the walls of the stomach

Citrus fruits, including tangelo, are a source of a unique plant flavonoid, naringenin. The substance has a powerful anti-inflammatory effect - it reliably protects the walls of the stomach from the formation of ulcers, hemorrhagic damage, which can occur upon contact with ethanol. <sup>[12]</sup> That is why at feasts in tandem with alcoholic beverages it is recommended to display freshly squeezed fresh tangelo without fail.

#### **4. Protects the liver from damage**

Naringenin has a positive effect on other organs of the body. In particular, studies show that tangelo juice is effective in protecting liver cells from damage. <sup>[13]</sup> Help your liver recover quickly from unhealthy foods and medications by incorporating a delicious, refreshing tangelo pulp juice into your daily diet.

#### **5. Has Antioxidant Properties**

Juice obtained from tangelo fruits is rich in various flavonoids and vitamin C. <sup>[14]</sup> The substances belong to the group of antioxidants - they protect body cells from damage, restore brain function, help in the fight against oncology, etc. Scientists have proven that it is possible to slow down the passage of time! And a natural and quite affordable product can help in this - freshly squeezed fresh tangelo.

#### **Contraindications and possible harm to tangelo fruit juice**

The drink has practically no contraindications except for individual intolerance. Refuse to use it is recommended for people suffering from food allergies. It is also worth taking into account that a number of products, including citrus fruits, which include tangelo, can cause such an unforeseen reaction of the body as a migraine attack. <sup>[15]</sup> People suffering from frequent headaches should carefully examine their diet and eliminate suspicious ingredients from it.

Drinking tangelo juice, like other fresh juices, is recommended through a straw to minimize contact of the liquid with the teeth. Dentists also recommend thoroughly rinsing the mouth after tasting a sweet and sour drink. Such precautions are explained by the fact that concentrated juices cause erosion of tooth enamel <sup>[16]</sup>, which can lead to caries.

#### **Norms and recommendations for the use of tangelo juice**

To fully saturate the body with all the necessary vitamins and minerals, adults are recommended to drink about half a liter of freshly squeezed tangelo juice daily. For younger tasters (aged 10-14 years old) the daily rate is 200 ml, for 7-10 year olds - up to half a glass.

Given the increased allergenicity of citrus fruits, acquaintance with a tasty and healthy fresh juice should begin no earlier than from the age of 3. And with a minimum amount - a few drops of juice, diluted with water. If the taster does not show any negative reactions on the skin and from the gastrointestinal tract, you can gradually increase the daily rate, gradually bringing it up to 50 ml of the drink.

#### **How to make and store tangelo pulp juice**

When selecting fruits, special attention should be paid to their integrity - the peel should be without damage, dents, dark spots. Too light weight may indicate dry fruit - you will not get enough juice from such fruits. Therefore, for the preparation of fresh, select weighty, aesthetically attractive fruits with a whole, intact skin.



Preparing fruit for processing is easy. Remove the skin (it easily separates from the pulp), squeeze out the juice with a juicer. It is recommended to drink the drink within the first few hours after squeezing, until it has oxidized and has not lost some of the vitamins. Also, prolonged contact with air can provoke the souring of the product due to the ingress of pathogenic bacteria into it. The juice can be safely stored for several days in the refrigerator. For longer storage, it is recommended to use the preservation method.

## Expert comment

### Tatyana Eliseeva, nutritionist, nutritionist

Juice from the tangelo fruit is a source of numerous useful substances and vitamins vital for the full functioning of our body. In addition to the immune-stimulating function, it also effectively helps prevent the development of many dangerous diseases, including oncology, diabetes, stomach ulcers and others. That is why this healthy and tasty refreshing drink is recommended to be consumed systematically by all family members, young and old.

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

*Received 29.12.2022*

### **Tangelo juice - a refreshing drink to restore youth and rejuvenate**

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