



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

*Eliseeva Tatyana*, editor-in-chief of the EdaPlus.info project

*E-mail:* [eliseeva.t@edaplus.info](mailto:eliseeva.t@edaplus.info)

**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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*Received 19.09.2022*

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*E-mail:* eliseeva.t@edaplust.info

**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.