

Properties of Orange Juice

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Abstract:

Orange fruits are rich in vitamins, which are important for the human body. Navernoe, sredi nas net nikogo, kto ne el orange. Now it's a bad time, it's just ego vkus, no i interesnye fakty o nem. Post 20% vsekh oranges, vyrashchivaemyx v mire, prodavutsya i potrebyayutsya kak frukty. Ostalnoe idet na proizvodstvo sokov, ekstratov i konservov.

Keywords: Orange, juice, protsentnoe sodержanie, extract, preserves, vitamin C, flavoring, acid orange, citrus, concentrate, orange flavoring.

Orange, orange (*Citrus sinensis* - Dutch appelsien - Chinese apple) is an evergreen tree and shrub belonging to the citrus family of the Rutaceae family. Homeland — Burma and Southwest China. Not found in the wild. It has been cultivated in tropical and subtropical countries for a long time (it has been cultivated in China for 2 thousand years, in Southern Europe since the 15th century, in the Black Sea regions of the Caucasus since the 11th century).

Height 6-12 meters. There are thin thorns on the branches and branches. The leaf is egg-shaped, and it is harvested mainly in November-December. The fruit is round or egg-shaped, yellow or reddish, weighs 300-400 g, has a sour taste, contains 12% sugar, 1-2% citric acid, 0.9% protein, vitamins A, B, C and essential oil (in the skin). It is eaten as a dry fruit. Juice, compote, jam and jam are made from it, and the oil extracted from the skin is used in the perfumery and confectionery industry.

An orange tree can live up to a hundred years. "Washington Navel" variety of orange does not have seeds, so it does not reproduce by pollination, but only by grafting. One citrus tree can have up to 60,000 flowers, but only 1% of them bear fruit.

Oranges are a symbol of fertility. This evergreen tree blooms, fruits and sheds its leaves at the same time. To get the fiber found in one orange, you need to eat seven bowls of corn pickles. After chocolate and vanilla, the smell of orange is recognized as the most pleasant smell in the world. Orange trees were first grown in China. According to statistics, a person eats about 5.5 kg of citrus every year, so oranges make up the majority. In the 18th century, British sailors took oranges with them to the ship in order to avoid seasickness. One orange contains the daily norm of vitamin C. Several trees can grow from one orange seed.

In many countries, the orange tree and its fruits are considered a symbol of love. In Renaissance paintings, artists depicted a couple in love standing among orange trees.

Sir water, fragrant, expensive fruits are famous all over the world. Orange fruit contains 6-8% sugar, 1.0-1.4% various acids, up to 1.0% pectin. There are 60-100 mg % vitamin C, a certain amount of vitamins A, V1, V2, RR. Because the peel is thick and the juice is acidic, the vitamins in it are well preserved. Orange has long been considered one of the best dessert fruits. The taste qualities of orange fruits - the combination of sugar and acid, strong aroma put it in one of the first places not only among citrus fruits, but also in front of all other fruits.



One large orange contains about 80 percent of the daily value of vitamin C. Ascorbic acid has many important functions in the body. It helps to strengthen and maintain immunity, prevents the development of inflammatory processes, stimulates the production of natural collagen in the body, and thus slows down the aging process. In addition, vitamin C increases the body's ability to use fat stores for energy. According to a study published in the American Journal of Clinical Nutrition, low levels of vitamin C in the body are directly related to the risk of weight gain.

The main problem in juice production is the formation of aromatic derivatives. Various technological methods are used to solve this problem. To evaluate the effectiveness of the fruit processing methods used, we need to measure the quality of the final product. In this case, the following parameters are available: color, density, dry extract content, Brix levels, acidity (citric acid content), essential oil content, ripeness index, turbidity, limonin content, pectinesterase (PE) content, naturalness index, hydroxymethylfurfural (OMF) composition, composition of ascorbic acid (vitamin C), effect of heat treatment on the quality of orange juice. The main goals of heat treatment are inactivation of the pectinesterase enzyme (PE). To achieve the result, the juice is exposed to a temperature of 98 ° C for 30 seconds. Prevention of the formation of hydroxymethylfurfural. It requires a short heat treatment time. Long processing time increases the amount of OMF and reduces the quality of the resulting product.



No water is needed for juicing, optimizing energy consumption as well as minimizing pollutants in waste water. After taking orange juice, it is necessary to remove its bitterness. This is done by neutralizing limonin, naringin and hesperidin compounds in it. In particular, for limonin, the starting concentration can reach 20 parts per million (ppm), and the final value should not exceed 0.1 ppm.

The input to the process is stabilized fresh juice and juice made from 15 Brix. It is placed in a centrifuge to separate the pulp. Next, Lewait® resin is added to the juice, which is then sent to a heat-treated warehouse.

Orange juice is rich in antimicrobial and anti-inflammatory phytoncides. When buying an orange, pay attention to its appearance. The skin of a quality product will not have dark spots and alloys. Many people pay attention to its color. But this is wrong, the healthy color of an orange is from orange to light and dark flame. It depends on the type of fruit.

Pay attention to the hardness of the orange. A pale orange will not be soft. Also, the grain of its quality is heavy, and the small ones are sweeter than the big ones. If there is an orange with a soft and sweet smell, know that it is not fresh. Orange grown in southern countries does not like cold. Therefore, it cannot be stored in the refrigerator for a long time. In addition, if placed in cellophane and vacuum containers with a closed mouth, it is nauseating. It can be stored for up to six months in a cool, well-ventilated, draft-free cellar, and up to one and a half months in a house or balcony at a temperature of 6-10 degrees. Tea brewed from orange peel is able to eliminate colds and neuroses.

To prepare it, put a tablespoon of raisins and half an orange peel into a teapot. Then you soak in boiling water with a teaspoon of dry tea as usual. You can drink the healing tea after 5-6 minutes of rest and add a little honey while it is warm.

Oranges are especially loved by children. Its juice contains a lot of antimicrobial and anti-inflammatory phytoncides. It also heals wounds and wounds, heals purulent areas. Its juice gives good results in the treatment of liver diseases.

Since orange juice is low in calories, you can drink it as much as you want. In the cold season, this juice prevents colds. Its properties such as strengthening the walls of blood vessels, lowering blood pressure, improving brain activity and blood composition, and regulating the metabolism in cells are particularly important. This fruit helps to lower body temperature and reduce joint pain. It can be used for external and internal treatments due to its ability to kill bacteria.

Useful and harmful properties of orange juice. There are many benefits of orange, it cannot be denied, but in certain cases, this popular fruit can have a negative effect on human health. Nutritionist Yulia Polovinskaya informed about this.

"Orange is very useful, contains a large amount of micro and macro elements. One orange contains the daily requirement of vitamin C. Orange contains flavonoids. "Oranges lower blood pressure, reduce the risk of cardiovascular diseases, strengthen the walls of blood vessels, are used in the treatment of stomach ulcers and ulcers, lower cholesterol levels and help preserve youth and beauty for longer," said Polovinskaya.

However, the expert added that oranges, like any citrus fruit, are a strong allergen. It is noted that when it is consumed in large quantities, allergic reactions and even anaphylactic shock may occur. Also, oranges should be eaten on an empty stomach in case of gastrointestinal tract diseases. Also, oranges have high acidity, which can have a bad effect on tooth enamel.

It is beneficial for cardiovascular diseases, high blood pressure, hypertension, infectious jaundice and shortness of breath.

To prepare juice from oranges, add boiled and cooled water in the amount of 1:10 to fresh juice, and store it in a brown glass container in the refrigerator for long-term use. Orange juice mixed with sunflower oil can be an excellent ointment for calloused hands: it is applied to the calloused area.

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