



Watermelon (lat. *Citrullus lanatus*)

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Abstract. The article discusses the main properties of watermelon 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 product are indicated, the use of watermelon is considered in various types of medicine and the effectiveness of its use in various diseases. Potentially adverse effects of watermelon analyzed separately on the human body under certain medical conditions and diseases. The scientific foundations of diets with its use are considered.

Keywords: watermelon, benefit, harm, beneficial properties, contraindications

Beneficial features

Table 1. Chemical composition of watermelon (according to [Food+](#)).

Main substances (g/100 g):	Fresh watermelon [1]	Dried watermelon seeds [2]
Water	91.45	5 , 05
Carbohydrates	7.55	15.31
Sugar	6.2	
Squirrels	0.61	28.33
Alimentary fiber	0.4	
Fats	0.15	47.37
Calories (kcal)	thirty	557
Minerals (mg/100 g):		
Potassium	112	648
Phosphorus	eleven	755
Magnesium	ten	515
Calcium	7	54

Sodium	one	99
Iron	0.24	7.28
Zinc	0.10	10.24
Vitamins (mg/100 g):		
Vitamin C	8.1	0.0
Vitamin PP	0.178	3,550
Vitamin A	0.17 1	0.0
Vitamin B6	0.045	0.089
Vitamin B1	0.033	0.190
Vitamin B2	0.021	0.145
Vitamin E	0.05	0.0

As can be seen from the table, watermelon is a low-calorie berry, consisting mainly of water. However, you should not abuse it and try to lose weight with it, because it contains a large amount of carbohydrates and sugars and has a very high glycemic index. Nevertheless, it is also impossible to underestimate the benefits of watermelon for the body, because it contains useful trace elements and vitamins. And its seeds, although they have an excessively high energy value, are the richest source of phosphorus, magnesium, zinc and vitamin PP.

Medicinal properties

At first glance, it may seem that watermelon, which is 90% liquid, does not particularly enrich the body with useful elements, but in fact, together with it, a person receives a significant dose of vitamin C, which protects cells from damage and gives skin and blood vessels elasticity, as well as vitamin A, which is directly involved in the process of visual perception. Despite the fact that the pulp of watermelon does not have a high content of B vitamins, including the extremely important folic acid, as well as vitamin PP, which regulates the release of energy from food, they are present in abundance in watermelon seeds.

As for minerals, watermelon provides the body with a large amount of magnesium, which has a beneficial effect on muscle contractility. In addition, it is essential for the normal absorption of calcium. Without magnesium, the process of bone tissue renewal is impossible. Especially a lot of this trace element in the seeds of watermelon (130% of the daily requirement in 100 g). Also, watermelon (to a lesser extent the pulp and to a greater extent the seeds) are rich in phosphorus, which gives strength to bones and teeth. By the way, contrary to popular myth, eating seeds does not lead to appendicitis.

American scientists have proven that watermelon is the richest natural source of L - citrulline , an amino acid from which nitric oxide is synthesized in the body, which, in turn, promotes vasodilation and maintains their tone. In one experiment, subjects after drinking citrulline was transferred to a room with a low temperature in order to provoke vasoconstriction. Then they measured the pressure, and it turned out that after the amino acid entered the body, the indicators were lower and the vessels narrowed less. Moreover, L - citrulline is able to remove lactic acid from the muscles ^[3].

The red color of watermelon pulp is largely due to the presence of carotenoids in its composition , which are converted into vitamin A in the body. However, one of them, lycopene , does not undergo this transformation. Instead, it exhibits high antioxidant activity. Some scientists attribute its effect to a reduced risk of developing cancers of the digestive system and prostate. In addition, its beneficial effect on blood vessels (lowers cholesterol and prevents the formation of plaques) and the functioning

of the heart are noted. Like other carotenoids, lycopene is good for vision and contributes to the prevention of age-related macular degeneration (impaired central vision).

Watermelon is considered a functional food and is very beneficial for people who get a lot of exercise in their workouts. This berry simultaneously provides the body with fast carbohydrates, antioxidants, amino acids. Studies show that watermelon puree and juice (500 ml after training) affect the body in the same way as sports drinks. They reduce muscle soreness and aid recovery ^[18].

Finally, it should be noted that, contrary to popular belief, watermelon cannot be considered a magical remedy that flushes and cleanses the body of all toxins. Together with the pulp, we consume not only a large amount of liquid, but also an excess amount of sugar. To remove it, the kidneys are actively involved in the work, and the more sugar they need to remove, the more fluid they draw from the body. Thus, small portions can, in a good way, activate the work of these organs, but you do not need to lean on watermelons and create a heavy load on them.

In medicine

In scientific medicine, watermelon is still practically not used. But given that some of its components have a high therapeutic potential, it is possible that in the future scientists will use them to develop various medicines (for example, vasodilators).

To date, watermelon juice extract is used in a Korean remedy called " *Mighty Khan* " or " *Super Khan* ". Its action is aimed at enhancing potency, and watermelon juice is responsible for cleansing and expanding the vessels through which blood flows to the penis. True, let us pay attention to the fact that this remedy is not classified as a drug, but as a food supplement. Yes, and it is quite difficult to draw an unambiguous conclusion about its effectiveness. The degree of exposure depends on the causes of erectile dysfunction, so it is better to consult a doctor about the advisability of taking these capsules.

Also on the shelves of pharmacies, watermelon is presented in the form of an oil extract of its seeds, which is recommended for use in kidney diseases. This tool helps to remove sand and small stones. It improves the structure of the kidney tissue. In addition, the oil produces a slight diuretic effect, enhances the excretion of uric acid and is involved in maintaining the acid-base balance.

In folk medicine

In folk medicine, watermelon is used mainly in the treatment of diseases of the kidneys and urinary tract, but some recipes promise a solution to problems with the cardiovascular and digestive systems. Watermelon is also used externally to accelerate the healing of wounds and burns. Note that in the preparation of folk remedies, the peels and seeds of the watermelon fruit are used more often than the pulp.

Decoctions

A decoction of watermelon peels is advised to use when sand or small stones appear in the kidneys and gallbladder, as well as for colitis and dysbacteriosis. This remedy can be prepared both from fresh peel and from dried. If we are talking about fresh raw materials, then the first thing to do is to separate the crust from the pulp and clean it from the outer bright green film. Then grind and pour water at the rate of 100 g of raw materials per 1 liter of water. This mixture should be left on low heat for 30 minutes, then let it brew for about an hour and strain.

If there is a need to prepare such a decoction throughout the year, then you can make stocks for the winter. Peeled and cut into small pieces of crust should be laid out in one layer on a baking sheet and

put in an oven preheated to 50 ° C. When the moisture evaporates, the temperature is raised to 70°C. You can also leave the baking sheet in the sun or use an electric dryer. The resulting raw materials are usually stored in paper bags or ground into powder and transferred to glassware.

To prepare a decoction of 150 g of dry peel, pour 1 liter of boiling water (when using powder, take 1 tablespoon per 1.5 cups of water) and let it brew for an hour. Take this remedy one glass 3-4 times a day 20-30 minutes before meals. By the way, with diarrhea, healers advise taking one teaspoon of the powder with water every two hours until digestion improves.

There are also recipes for decoctions from the seeds of a watermelon fruit. To prepare such a drug, 40 g of seeds are kneaded in a mortar and pour 1 liter of hot water, leaving it on low heat for 30 minutes. Then you need to let the liquid brew for about an hour and strain. Next, add 150 g of mashed watermelon pulp, mix and send for storage in the refrigerator. Use this remedy for inflammation of the urinary tract and kidney disease 2 days a week according to the following scheme: 1 glass on an empty stomach, and then another glass 30 minutes after each meal.

Outdoor use

Traditional healers claim that both watermelon pulp and watermelon rinds are effective in treating minor wounds and sunburn. To do this, it is necessary to grind fresh raw materials with a blender to a puree mass, and then apply to the affected area of the skin and fix with a bandage. Wash off with cool water after an hour. To speed up the healing of wounds, you can make a compress from a decoction of watermelon peels.

In addition, traditional healers claim that applying fresh crusts to the temples for headaches and to the joints for arthrosis helps to reduce pain. However, the usefulness of such procedures is highly questionable.

Juice

In folk medicine, watermelon juice is considered an effective remedy for fever, hematological diseases and infectious inflammation of the genitourinary system. Usually it is taken one glass 4-5 times a day. In addition, watermelon fruit juice is often mixed with freshly squeezed juices from other vegetables and fruits. Among the most popular mixtures are the following:

- Watermelon- orange (mix in equal proportions and take 0.5 cup 3 times a day 30 minutes before meals). Reduces cholesterol levels, activates intestinal motility, helps with mild constipation, relieves symptoms of overwork.
- Watermelon- birch (mix in equal proportions and take 1 glass 3 times a day 30 minutes before meals). Reduces blood pressure, helps to relieve symptoms of arrhythmias, has choleretic, diuretic and antipyretic effects. She is recommended to rinse the mouth and throat with inflammatory processes.
- Watermelon- cherry (mix in equal proportions and take 1 glass 3-4 times a day). It helps with colds, has an anticonvulsant effect, normalizes the functioning of the gastrointestinal tract and improves appetite.
- Watermelon- apple (mix in equal proportions and drink throughout the day). It helps to restore or maintain the tone of the body, helps with mental and physical overwork, dizziness. It has a mild laxative effect.
- Watermelon- potato (mix in a ratio of 2 to 1 and take 1 glass 2 times a day). A mixture of these juices is useful for problems with the digestive system (gastritis with high acidity, enterocolitis, peptic ulcer of the intestine and stomach, dysbacteriosis, heartburn, constipation). It is also used as a lotion for sunburn.

By the way, with inflammation of the urinary tract and fevers, it is recommended to use “watermelon milk”. To prepare it, 50 g of seeds are thoroughly kneaded in a mortar, and then 500 ml of water are added and continue to be crushed until a milky liquid appears. The resulting mixture is filtered and drunk 1 teaspoon 6 times a day.

in oriental medicine

In the folk medicine of the eastern countries, watermelon has long been given close attention. For example, in China, it was classified as a cooling food and believed to have an effect on the heart, stomach, and bladder. It was believed that it produces a cleansing effect and is able to remove diseases from the body if it is regularly taken before meals. In addition, this berry calms the spirit and helps to get rid of anxiety and frustration ^[16].

Until now, Chinese traditional healers use watermelon to relieve diseases such as nephritis and hypertension ^[15]. Moreover, they believe that it has an antipyretic, diuretic and mild laxative effect. Special attention is paid to the seeds, which, when dried, are brewed like tea. Such a drink has a beneficial effect on the kidneys and helps to reduce pressure. **However, Chinese healers warn against eating watermelons those who have acute problems with the gastrointestinal tract.**

In Indian folk medicine, watermelon is considered primarily a cold and moist product that stimulates the appetite and improves the digestion process. In addition, it is recommended to use it for eye diseases, as well as use it externally for skin inflammations.

In scientific research

Watermelon gets into scientific research mainly due to the fact that it contains a high concentration of the carotenoid pigment lycopene. It was previously believed that the richest source of this antioxidant is tomato. However, later scientists found that watermelon with red pulp is not only not inferior, but even surpasses the tomato in this indicator by about 40% ^[4]. Moreover, in order to obtain a high dose of lycopene from a tomato, it must first be subjected to heat treatment, and from a watermelon, lycopene is absorbed by the body in full and directly ^[5].

Researchers believe that this pigment has the necessary properties to prevent chronic diseases such as dyslipidemia (abnormal cholesterol levels), diabetes, osteoporosis and even cancer. In addition, it contributes to the fight against free radicals, oxidative stress (the process that leads to diseases of the cardiovascular and nervous systems) and neurodegenerative diseases ^[6].

For example, in one experiment, scientists introduced lycopene into the diet of healthy male smokers with a low intake of fruits and vegetables and found that the levels of oxidative stress in their bodies were significantly reduced. Moreover, improvements in the functioning of the endothelium (the innermost layer of blood vessels) have been documented ^[7].

According to the results of one study conducted at Harvard University, scientists found that men who regularly receive lycopene are less at risk of developing cancer, especially prostate cancer ^[8]. There is also evidence that among those who did develop the disease, there were 25% more people with a lack of this carotenoid pigment in the diet ^[9].

As for women, scientists believe that a sufficient amount of lycopene in the body helps to reduce the risk of developing cervical cancer by 5 times ^[10]. And if we take statistics that include other types of cancer, then among patients there were 44% more people who received an insufficient amount of carotenoid pigment ^[9].

Lycopene has also proven effective in hyperglycemia. Chinese scientists divided rats into groups, each of which was given this pigment at various doses (0, 250, 500 and 2000 mg/kg of body weight) for 28 days. At the end of the experiment, no abnormalities were found in the readings of blood and urine, except that the glucose level decreased markedly. Moreover, the higher the dose of lycopene, the more glucose fell ^[11]. In another similar study, not only a decrease in sugar was recorded, but also an increase in insulin levels ^[12].

In addition, from 1992 to 2003 large-scale work was carried out to monitor diabetic women of the middle age category. During this period, they followed a diet that was high in lycopene-containing foods. Scientists continued to monitor the condition of these women until 2013 and, as a result, concluded that, on average, their insulin levels increased by 37-45% ^[13].

Finally, in one of the most recent studies, scientists analyzed the effects, not only of lycopene, but of all the components of watermelon, on the body of rats that were kept on an atherogenic diet (which contributes to the development of atherosclerosis). In particular, special attention was paid to the antioxidant and anti-inflammatory properties of watermelon, as well as its effect on the lipid profile.

It turned out that in comparison with the control group, in rats that regularly received watermelon extract, the level of oxidative stress, cholesterol and triglycerides decreased, and the antioxidant capacity of the body increased, which, in turn, causes a decrease in the risk of developing cardiovascular diseases. ^[14].

Weight regulation

Usually, watermelon is added to the top of fruits and vegetables, which help to lose weight quickly. Often, a mono-diet is even based on it. On the one hand, such an attitude towards this giant berry seems justified, because it contains a lot of liquid and very few calories (100 g of pulp contains only 30 kcal). However, on the other hand, watermelon has a too high glycemic index, it is high in sugar and in large quantities it puts a huge burden on the kidneys.

So, the use of watermelon in diets for weight loss is possible, but its portions should not exceed 200-300 g per day. Despite the fact that this berry has fiber, which should provide a long-lasting feeling of satiety, after a watermelon, the appetite returns quite quickly. The thing is that its glycemic index is 80 units. This means that after eating the pulp in the blood, the level of sugar rises sharply, and then the level of sugar falls just as sharply, and the feeling of hunger quickly resumes. In addition, although the sugars in watermelon are simple, their excess does not bring benefits to the body.

If in diets with a varied diet, watermelon in moderation is quite acceptable and even useful because of its low calorie content and ability to remove excess fluid from the body, then it is better to refuse a watermelon mono-diet. Eating the same product, the body loses a huge amount of nutrients. In addition, along the way, watermelon washes out useful minerals that were already in the body.

Finally, a huge burden falls on the kidneys, so such a diet is not only undesirable, but contraindicated for people who already have problems with these organs or who suffer from inflammation of the genitourinary system. Dangerous consequences can also await those who have diseases of the cardiovascular and digestive systems or diabetes.

In cooking

The traditional way to consume watermelon is fresh and often separate from other foods. However, everything is not limited to this, in many cuisines of the world, watermelon is dried, salted, fried. It is used to make jam, honey (traditional Astrakhan nardek), it is added to desserts, oysters, salads and

even soups (for example, one of the options for summer gazpacho). In addition, the inhabitants of the Mediterranean prefer to spread cream cheese on watermelon, and the Thais have a habit of sprinkling salt on the pulp. By the way, in China, watermelon with salt is also quite common, so they even released the popular Fanta drink with the appropriate flavor.

According to its taste qualities, watermelon goes well with both sweet and salty foods. However, it is worth paying attention to the fact that salt retains water, and watermelon just supplies it to the body in large quantities. This combination can lead to fluid retention and swelling. It is useful to combine this berry with fat-containing foods, because lycopene and carotenoids are fat-soluble pigments. In this sense, a salad of watermelon, feta cheese and mint, seasoned with olive oil, is well suited.

If you want to experiment and bring a little exotic to your daily diet, then you can try frying watermelon slices. First of all, they need to be peeled and seeds, and then cut into small pieces. For batter, mix 2 egg whites and 4 tablespoons of potato starch (previously diluted in a small amount of water). Dip slices of watermelon in flour, then in batter and fry in deep fat or in a pan. After that, sprinkle with powdered sugar.

Another interesting summer dessert is watermelon cake. To prepare it, peel the watermelon from the peel and use a knife to give it any shape (it will serve as the basis for the dessert). Then grind the pieces of coconut to a puree state, heat this mass and add gelatin to it, stirring until completely dissolved, pour in cold whipped cream and put it in the refrigerator for an hour. Then coat the watermelon pulp with this cream and sprinkle with almond flakes.

By the way, not only the pulp can come in handy in cooking, but also the peel, from which jam is made. The recipe is extremely simple, but it will take time. Washed and cut into small pieces of peel put in sugar syrup and boil for 15 minutes, then left in the refrigerator for 12 hours. During this time, the skins become translucent and acquire an amber hue. After that, they must again be put on fire and boiled for 15 minutes, and then hidden in the refrigerator for 12 hours. For the third time, while boiling in the jam, you need to add orange zest and spices to taste.

Finally, watermelon makes for some very spectacular summer cocktails. To prepare such a “drink in a barrel”, you need to cut a small hole for a blender in the upper part of the fruit, immerse it inside and beat the pulp. Then add rum or any other kind of alcohol, mint and lime and insert straws.

Whatever way you are going to cook the watermelon, it is important to remember that it must be washed first, otherwise when the peel is cut, the bacteria from the surface will get inside to the edible part.

In cosmetology

Unlike official medicine, in cosmetology, watermelon has long received well-deserved recognition. Pulp extract, as well as watermelon seed oil, are used in beauty products for various purposes. For example, due to its high liquid content, the berry is especially valuable for moisturizing products, and the presence of simple sugars (sucrose, glucose and fructose), which contain glycolic acid, justifies its appearance in gentle peeling products . This acid helps to remove the layer of dead cells without damaging the skin underneath.

In addition, watermelon introduces pectins into the chemical composition of cosmetic products, which activate the protective function of the skin and soften the aggressive effects of the environment. Vitamin C and antioxidants give the epidermis elasticity and firmness, thus protecting it from premature aging. Finally, B vitamins stimulate the process of filling cells with oxygen and thus

maintain skin tone. Note that watermelon also provides a slight whitening effect, which can be useful for owners of pigmented and freckled skin.

As for watermelon seed oil, then, according to cosmetologists, it has a beneficial effect on hair. Stearic, oleic, linoleic and palmitic acids nourish the curls, and L-arginine affects the blood supply to the hair follicles, stimulating the growth process and, if necessary, starting the recovery process. Due to the content of copper and zinc, products with watermelon seed oil will be especially useful for hair prone to oiliness and active pigment loss (graying). Finally, we note that due to its fresh and slightly sweet aroma, watermelon is often used in both women's and men's perfumes, especially when creating summer scents.

As for the preparation of cosmetics at home, among the most popular recipes, the following can be distinguished:

- To provide a refreshing and tonic effect, it is recommended to freeze watermelon juice in an ice mold and then wipe the skin of the face with it. Wash off the remaining liquid after 15 minutes.
- When acne appears, place 10 g of watermelon seeds in a mortar and grind them well, gradually adding 100 ml of water. Apply to the skin, leave for 20 minutes and then rinse with cool water.
- With roughness and dryness of the skin of the hands, you should cut off the upper part of the watermelon fruit, beat the pulp inside a little with a blender, add a glass of warm milk there and dip your palms into this mixture for a few minutes. Then apply the fatty fraction (any vegetable oil) to the skin.

Dangerous properties of watermelon and contraindications

Moderate consumption of watermelon has a beneficial effect on the body, however, abuse can lead to negative consequences:

- More than 30 mg of that very useful antioxidant lycopene can cause digestive disorders (especially in older people), cause nausea and diarrhea.
- In people with hyperkalemia, large amounts of watermelon can cause muscle spasm and arrhythmias.
- An excess of potassium can also lead to a sharp decrease in pressure.
- A large amount of sugar is a strong glycemic load on the body, especially those suffering from diabetes. It is better to combine eating watermelon with plant foods rich in fiber. This will make the jump in glucose not so sharp.
- With kidney problems, large portions of watermelon can provoke severe edema, since the liquid simply cannot quickly leave the body.
- Watermelon seeds contain so-called antinutrients (phytins, tannins, trypsin inhibitors - an enzyme that breaks down proteins), so it is better to use them not raw, but dried or fried.

Selection and storage

Determining the period from which it becomes safe to buy watermelons and choosing a good ripe berry is not difficult, although surrounded by many myths. It is best to start eating watermelons with the beginning of the season, that is, in August. Of course, there are also early ripening varieties that ripen earlier, but there are relatively few of them on the market, but the probability of running into a fruit whose growth was forced by fertilizers is quite high.

It should be noted that almost all melon growers use nitrogen fertilizers when growing watermelons, but the main thing is not to exceed the permissible norms. With an excess of nitrogen, the fruit ripens quickly, but it contains a large amount of nitrates. In the same way, unripe berries are dangerous.

Nitrates from fertilizers must go through a period of bound form and excretion, and in the case of an early harvest, harmful substances do not have time to do this and remain inside.

Despite the fact that there can be an excess of nitrates in watermelon and this is not very beneficial for the body, it is almost impossible to get poisoned by them. The allowable intake of nitrates by a person weighing 60 kg is 300 mg. Even in the most "contaminated" watermelon fruit, there are approximately 270-280 mg of harmful substances per 1 kg of pulp. For comparison, up to 1000 mg of nitrates / 1 kg are sometimes found in meat, and up to 2500 mg / 1 kg in greenhouse spinach and arugula .

Poisoning, which is usually associated with the use of watermelon, does happen, but not at all due to nitrates, but rather due to poor hygiene. Nausea, abdominal pain, and diarrhea are symptoms that accompany intestinal infections that are caused by the ingestion of bacteria living on the surface of unwashed vegetables and fruits. When cut, they fall on the pulp, and then into the gastrointestinal tract. So you should wash the watermelon well and thoroughly before use.

When choosing a fruit, you should pay attention to the peel: it should not be damaged or dented. The surface of a ripe watermelon is usually shiny and bright green, but on one side there should be a yellow-brown (earthy) spot - the place on which the watermelon lay when ripening. It is quite normal when there is a bee cobweb on the peel of a watermelon - thin ornate gray-brown stripes . It is believed that this is a sign of the special sweetness of the fruit. The tail or the place where it is attached must be dry, and the sound when tapped must be sonorous.

As for the storage of watermelon, after cutting it can be kept in the refrigerator for no more than 3-4 days. By the way, inventive lovers of this berry came up with a useful life hack - cover the remaining half of the watermelon with a shower cap. Due to the gum, it holds well and protects the flesh from chapping.

At room temperature, a whole watermelon can lie on average for about 2 weeks, but the timing depends on the degree of its maturity. Interestingly, this fruit can be preserved even until the New Year. To do this, it must either be placed in a net and hung, or placed on shelves, wrapped in straw, in a dark and cool (4-5 ° C) room. True, as scientists have found out, under conditions with a low temperature in watermelons, the content of lycopene decreases (from 8.1-12.7 mg/100 g to 7.8-8.1 mg/100 g) ^[17] .

Varieties and cultivation

Previously, it was believed that watermelon can grow only in a hot southern climate. However, the work of breeders made it possible to grow this berry in less favorable conditions, the main thing is to choose the right variety for your region. The melon should be located on the south side of the site and protected from strong winds. Note that the proximity of groundwater is unacceptable, and for a better outflow of fluid and warming up the earth, you can even make beds 15 cm high. Sandy or sandy soil is best suited for the structure.

You can sow watermelon directly into the ground when the temperature has reached 15-16 ° C, and the earth has warmed up about 10 cm deep. Watering the plant may occur infrequently, but should be plentiful (about 3 buckets per 1 square meter). During the flowering period, moisturizing should be carried out 2 times a week, and during ripening, watering is no longer required.

The varietal variety of watermelons is amazing: you can choose a berry for almost any climatic conditions. They will differ in terms of vegetation, frost and drought resistance, but taste characteristics and appearance remain basically unchanged. Although there are some exceptions.

For example, breeders managed to bring out "moon" watermelons with yellow flesh. And on the Japanese island of Hokkaido, watermelons of the Densuke variety grow. Their peel is dark green without stripes, which is why they are also called black. In one season, a very small amount of fruits are harvested there, but it is believed that they have a special sweetness. This explains their average price of \$ 250 for a 6-7 kg berry, and the largest black watermelon was sold at auction for \$ 6,100. Usually sold in stylish black boxes, they are considered a very valuable gift.

In addition, there are varieties in which seeds are completely absent (we are not very common, but in Europe they make up 80% of the market). In some countries, tiny portioned berries (about 10 cm in diameter) have gained popularity. Also, Japanese melon growers are actively experimenting with the form, growing pyramidal and cubic fruits. By the way, if pyramid watermelons were created, rather, for marketing purposes, then the appearance of cube watermelons is explained by quite practical considerations. Such berries take up much less space and are more convenient to transport.

You can grow a cubic fruit in your garden. At the moment when the ovary reaches the size of an apple or a tennis ball, it is covered on top with a plastic cube (designed for 4-5 kg) with transparent walls and holes for air to penetrate. When the berry fills the entire space, the cube is removed and the fruit is left to ripen.

In general, watermelon is not just a refreshing water, but a source of essential amino acids, antioxidants, vitamins and minerals. It is low in calories and fat, but has fiber. These berries have long been used in cosmetology, and now their properties are being actively studied by doctors. When consumed in moderation, watermelon contributes to the normal functioning of the cardiovascular and digestive systems, it also contributes to the antioxidant defense of the body and helps prevent the development of many chronic diseases.

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Watermelon - useful properties, composition and contraindications

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Abstract. The article discusses the main properties of watermelon 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 product are indicated, the use of watermelon is considered in various types of medicine and the effectiveness of its use in various diseases. Potentially adverse effects of watermelon analyzed separately on the human body under certain medical conditions and diseases. Considered scientific basics diets With his application.