



Carrot (lat . *Daucus carota subsp. sativus*)

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

Keywords: carrots , useful properties, potentially dangerous effects, side effects, contraindications, diets

Beneficial features

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

100 g of fresh carrots contains: ^[5]					
Main substances:	G	Minerals:	mg	Vitamins:	mg
Water	88.29	Potassium	320	Vitamin A	10.02
Carbohydrates	9.58	Sodium	69	Vitamin C	5.9
Sugar	4.74	Phosphorus	35	Vitamin PP	0.983
Alimentary fiber	2.8	Calcium	33	Vitamin E	0.66
Squirrels	0.93	Magnesium	12	Vitamin B6	0.138
Fats	0.24	Iron	0.3	Vitamin B1	0.066
calories	41kcal	Zinc	0.24	Vitamin B2	0.058

Carrots are a healthy non-calorie vegetable that contains a large amount of vitamins and minerals necessary for the body to function properly. Vegetables are useful to use, both raw and boiled.

Contrary to popular belief, heat treatment does not deprive carrots of benefits. When cooked, a vegetable loses a lot of vitamin C, but vitamins A and E are well preserved in it. Also, high temperatures destroy cell walls, allowing various nutrients to be released and better absorbed in the body. In addition, scientists claim that heat treatment of carrots leads to a 35% increase in the level of antioxidants in it. By the way, anthocyanin-rich purple carrot has the highest antioxidant capacity among all types of this vegetable.

Medicinal properties

Orange carrots are a real storehouse of beta-carotene (provitamin A) and one of the main natural sources of its production for the body. Under the influence of liver enzymes, it turns into vitamin A (retinol), which supports the work of many internal organs and systems. First, vitamin A is the foundation of overall eye health. With a lack of this vitamin, a person may experience a disorder of twilight vision, that is, he may lose the ability to see in dim light (popularly this disorder is called "night blindness").

Secondly, vitamin A is important for the normal functioning of the retina and prevents age-related degeneration of the inner lining of the eyeball. By the way, here it acts in combination with two other carotenoids contained in carrots - zeaxanthin and lutein. However, carrots are not a panacea, so you should not expect that eating this vegetable can correct or prevent myopia and farsightedness.

In addition, retinol takes an active part in the regulation of protein synthesis, redox processes in the body, and also contributes to normal metabolism and the functioning of the immune system. This vitamin is very important in the formation of the skeleton, teeth and nails. It is effective for seborrhea and brittle hair, as it is involved in regulating the activity of the sebaceous glands.

Vitamin A brings invaluable benefits during pregnancy. It is important for the normal development of the embryo and reduces the risk of having a premature baby. Retinol is also needed by the body to maintain good skin condition, as it stimulates the synthesis of collagen protein, as well as speeds up wound healing and reduces the risk of infections. Moreover, it plays an important role in slowing down the aging process.

Finally, beta-carotene is considered an excellent antioxidant that suppresses free radicals that provoke various dangerous diseases. For example, it is believed that beta-carotene is a good preventive measure that prevents the recurrence of cancer^[15]. In addition, this carotenoid helps to maintain and prolong the life of AIDS patients. It is also important in the prevention of diseases of the cardiovascular system.

It should be noted that vitamin A is a fat-soluble vitamin. In order for it to be absorbed by the body and bring benefits, it is necessary to use it along with fats. So, raw carrots are recommended to be eaten with a small amount of vegetable oil or sour cream. It is also important to know that a large amount of beta-carotene in combination with alcohol puts too much stress on the liver.

In addition to beta-carotene, for which carrots are so valued, it also contains significant doses of vitamins B, C and E. The latter helps the absorption of retinol, and also has a beneficial effect on the skin, being responsible for the regeneration of its upper layers. Vitamin C, in turn, contributes to the thickening of the walls of blood vessels, and B vitamins are involved in fat metabolism and hematopoiesis.

Among other things, the root crop contains fiber, which contributes to the normalization of digestion. A large amount of potassium and magnesium is useful in diseases of the cardiovascular system

(hypertension, atherosclerosis). Zinc, in turn, promotes the conversion of provitamin A into its active form.

In medicine

Carrots have long been considered a product with healing properties. For example, ancient Greek doctors recommended this vegetable to women as a contraceptive - to prevent pregnancy. By the way, modern scientists have confirmed that carrots contain enzymes that can block conception. However, their concentration is not enough to have a real effect. Since the 16th century, carrots have been used in Russia as a treatment for jaundice, cough, and hoarseness.

Modern research confirms the validity of the definition of carrots as a product of medicinal value. This vegetable is used as a raw material for the production of carotene. In addition, this multivitamin root crop is good both in the treatment of certain diseases and in dietary nutrition. Fiber, glucose, lecithin, as well as essential and fatty oils are also obtained from it.

Scientists do not ignore carrot seeds, from which they learned how to obtain an extract of daucarine - a complex of flavonoids (these plant pigments are involved in many processes in the body). In pharmaceuticals, it is presented in the form of tablets of 0.02 g and has an effect mainly on the coronary vessels. It is important to note that the drug is aimed at attenuating angina attacks, but does not stop them.

Carrots were also appreciated in dentistry. According to many dentists, in our time, when a person consumes a lot of thermally processed soft foods, he makes an insufficient amount of chewing movements, as a result of which the load on the periodontium (the tissue surrounding the tooth) is reduced. Dentists recommend eating raw carrots as a gum trainer. In addition, carotene has a beneficial effect on the oral mucosa, and also strengthens tooth enamel.

In folk medicine

Undoubtedly, carrots have a large number of useful and medicinal properties, which made them a very popular product in folk medicine. However, it is worth paying attention to the fact that it is almost impossible to cure any disease with carrots alone. This vegetable takes an active part in the prevention of various ailments, but before using it in treatment, you should definitely consult a doctor, because in some cases, carrots not only will not help, but can also lead to complications of the disease.

Traditional healers believe that carrots, unlike many other vegetables, are suitable for consumption in an unpeeled form. It is recommended to wash the root crop well, but do not peel it from the top skin, since it contains coarse dietary fiber. They allow you to normalize the functioning of the intestines and improve peristalsis. In addition, according to Japanese and New Zealand scientists, fibers are able to neutralize food toxins and carcinogens.

It is also believed that, thanks to vitamin E, carrots can help improve the condition of the male body, participating in the process of restoring sexual function. According to folk recipes, men suffering from lack of erection should include carrots boiled in milk, as well as carrot juice mixed with honey, in their diet. Drug treatment can also be accompanied by the use of a mixture of 1-2 apples, 1 carrot root and 1 teaspoon of honey.

- Infusions and powder

Medicinal infusions and decoctions are usually prepared on the basis of carrot seeds and have a positive effect on the state of the body with biliary dyskinesia, cholelithiasis, digestive and kidney

diseases, as well as constipation and hemorrhoids. Along with carrot juice, an infusion of the seeds is also recommended as an anthelmintic.

The influence of medicinal drinks is due to the fact that they, firstly, activate the formation and secretion of bile. Secondly, they have a diuretic effect, which helps to remove sand and small stones from the kidneys. Thirdly, infusions stop attacks of pain in renal colic. By the way, the elements contained in carrots are involved in the regenerative processes of renal epithelial cells, which are destroyed by the use of spicy foods and alcohol, therefore, not only the seeds, but also the root crop is useful in the treatment of kidney diseases.

Irregular eating and a sedentary lifestyle of a modern person often lead to constipation. Those, in turn, provoke stagnation of blood in the rectum and, as a result, hemorrhoids. Given that carrots have a mild laxative effect, they do not irritate the intestinal walls, but at the same time effectively solve the problem of constipation. To get rid of problems and normalize digestion, traditional healers recommend using either carrot seed powder or infusions. But tea from carrot tops helps to resist hemorrhoids.

To prepare the infusion, it is necessary to collect seeds in September (along with umbrellas). Then they need to be dried and stored in places with low humidity. Further, from the seeds, previously threshed (without umbrellas), you can make infusions or crush them into powder. To prepare a medicinal drink, pour 1 tablespoon of seeds with boiling water and leave to infuse in a thermos all night. After this, the infusion should be filtered and drunk warmed 3 times a day. The powder should also be taken three times a day, 1 gram.

As for the tops for brewing tea, they are harvested in the summer (June-July), dried and stored in dry boxes. To brew one cup of tea, 1 teaspoon of dry carrot leaves is enough. You can also add other herbs or dried berries to them. However, it should be borne in mind that for all its usefulness, the tops draw a large amount of nitrates from the ground, so pregnant and lactating women should be wary of such teas.

- Compresses

The use of carrots in folk medicine is not limited to internal use, but also involves external influences. So, this vegetable has a beneficial effect on various skin lesions, reducing pain and providing wound healing and anti-inflammatory effects.

Traditional healers claim that carrots promote the healing of not only superficial wounds, but also cope with more complex cases, pulling out pus from an infected focus. To do this, apply fresh carrots chopped to a mushy state to the damaged area, cover it with thick paper (it is important not to replace the paper with cotton wool and gauze, which will quickly absorb the juice) and bandage it.

Sliced raw carrots, fixed on the body with bandages, are suitable for relieving skin inflammation as a result of minor sunburn.

- Juice

Carrot juice in its pure form or with the addition of various ingredients is used for various pathologies and as a prophylactic. It is usually prepared with a juicer, but if you do not have one, you can try to do it manually. To do this, grate the carrots on a fine grater, and then squeeze the juice with your hands, wrapping the chopped vegetable in gauze.

Carrot juice is useful for hyperacidity, as well as for anemia (anemia). In the latter case, it is recommended to drink not just carrot juice, but a mixture of carrot, beet and radish juices. This addition to drug treatment usually lasts 2-3 months. The drink is taken 1-2 tablespoons per day. Carrot juice in combination with celery juice is necessary for the body in case of frequent stress and nervous disorders.

Orange root juice is also effective in fighting infections that affect the respiratory organs. For example, with laryngitis, folk healers advise drinking carrot juice with honey (1 tablespoon of honey per glass of fresh juice), 2 tablespoons 4-5 times a day. With angina, a similar mixture (1 tablespoon of honey per 100 g of juice and 100 g of water) is recommended to gargle.

Carrot juice is effective in treating the common cold. To prepare drops, you need to take half a glass of fresh juice, half a glass of vegetable oil and add 3-4 drops of garlic juice to this mixture. This medicine is instilled 3 drops into each nasal passage 3-4 times a day.

in oriental medicine

In oriental medicine, carrots are classified as neutral products that do not have a pronounced cooling or warming effect on the body. It is believed that the orange root vegetable has a beneficial effect on the work of the heart, and also strengthens the nervous system and relieves fatigue.

The use of carrots in traditional oriental medicine is not too different from domestic habits. For example, there, just like in our country, they practice making an infusion from carrot seeds. They are poured with boiling water, let it brew and then take 1 spoonful several times a day. It is believed that this drink warms the kidneys. Also, carrots have long been considered a good helper for poisoning and inflammation of the gallbladder and bladder. In addition, carrots are used to remove intestinal parasites.

In scientific research

Being one of the main sources of beta-carotene, supplying a large amount of vitamins and minerals to the human body, carrots were doomed to become the object of scientific research. It should be noted that this vegetable is of interest not only to medical scientists, but also to representatives of other fields of science.

However, studies and experiments related to the effect of carrots on human health are still of paramount importance. So, Dr. Kirsten Brandt from the University of Newcastle, during experiments on rats, found that eating carrots reduces the risk of developing cancer. She also found that the component responsible for this effect is the natural pesticide falcarinol, which protects carrots from fungi ^[8].

Despite the fact that scientists have not figured out what the mechanism of action of falcarinol is and what doses are needed for successful treatment, a desperate American Anne Cameron, who suffered from colon cancer with lung metastases, decided to test this method of treatment on herself. After reading on the Internet about the anti-cancer effect of carrots, she organized therapy for herself - every day to drink about five glasses (about 2 kg of root vegetables) of fresh carrot juice. After 8 months, her stage 4 cancer was cured.

However, doctors still argue that the treatment of cancer with carrots alone is simply impossible. They explain that, firstly, the tumor of this woman was operated on before she started drinking carrot juice, and, secondly, obscurations in the lungs were not biopsied, so it is no longer possible to say for sure that these were metastases now ^[14]. Nevertheless, doctors do not deny the beneficial effect of carrot

juice on the patient's body, since she refused postoperative chemotherapy, replacing it with a "carrot" diet and still managed to completely defeat the disease.

Thus, the treatment of cancer must be approached with great seriousness and not rely solely on the miraculous properties of certain foods and herbs. Dr. Brandt in his study says that carrots show a much better effect in the fight against cancer compared to other foods. The important thing here is that she compares the effects of carrots to those of other foods, not to drug effects.

A vivid and at the same time sad example of refusing treatment and timely surgery in favor of spiritual practices and a raw food diet (carrots were his favorite vegetable) was the famous head of Apple, Steve Jobs, who died of pancreatic cancer.

Scientists who studied the effects of beta-carotene on the development of lung cancer came to interesting conclusions. A large-scale study showed that beta-carotene, which enters the human body mainly from carrots, helps prevent cancer of the respiratory system. However, smokers and workers in asbestos factories, on the contrary, should be careful with large doses of beta-carotene, since under such conditions it may not prevent, but, on the contrary, provoke the development of the disease ^[9]. The reasons for the reverse action are not yet fully understood, but doctors are working on solving this puzzle.

As noted above, carrots are of interest not only to representatives of the medical field. For example, Scottish scientists have invented a way to turn carrot waste after juicing into nanofibers. This environmentally friendly and biodegradable material could in the future replace carbon nanofibers, widely used in the manufacture of motorcycle helmets, snowboards and automotive components. In this way, scientists hope to reduce the consumption of oil needed to produce carbon fiber ^[10].

Weight regulation

As a low-calorie, vitamin- and mineral-rich food, carrots are often used as a dietary staple ^[11]. However, people with diseases of the liver and organs of the digestive system, it is contraindicated. At the very least, before you "sit down" on it, you need to consult a doctor. You should also be prepared for the fact that consuming a large amount of this orange vegetable can lead to yellowing of the skin.

A diet from one product, even if it is a multivitamin carrot, cannot be called balanced in any way, so experts generally do not advise resorting to such measures for weight loss. It is better to replace carrots with fast food or eat one root vegetable shortly before a meal, in order to then eat a smaller portion and feel full faster ^[11]. But if you still decide to make yourself a mono-diet, you should not continue it for more than three days.

During this period, it is recommended to use both raw vegetables and boiled. By the way, a little fat must be added to raw carrots, but if the diet is aimed at weight loss, then you need to follow the proportions: 1 tablespoon of vegetable oil or 2 tablespoons of low-fat sour cream per 1 kg of root.

If we talk about therapeutic dietary nutrition, then carrots, as a rule, are always included in the diet. In addition, carrot purees and juices can be given to children as early as 6-7 months of age.

In cooking

Carrots are a familiar vegetable in almost all cuisines of the world. It is added to vegetable stews, salads, soups, all types of pilaf are cooked with it and used as a healthy snack. In many countries, an orange root vegetable is used in the preparation of various desserts: pies, puddings, tsimes (Jewish

sweet vegetable stew), etc. And in Japan, you can buy carrot and orange flavored ice cream. One of the most popular vegetable juices is also made from carrots.

In the past few years, there has been an ecological trend in cooking, which means that now the maximum use of all parts of a vegetable or fruit is in fashion. So, cooks came up with the use of carrot tops - they add it to soups, sauces, salads and casseroles.

At first glance, cooking carrots looks like a simple task, but in fact, the vegetable often turns out to be either undercooked or overcooked, so it's worth remembering that carrots cut into slices or cubes will cook in 8-10 minutes, and a whole root crop in 20-30. Carrots are baked at a temperature of 180 ° C for 40-45 minutes. As for frying, small circles or straws will be ready in 4-6 minutes.

Carrots go well with almost all foods, and are especially well absorbed with proteins and fats. It is also useful to eat carrots with foods rich in iron, as the root vegetable contributes to its maximum absorption.

Beverages

A lot has already been said about the beneficial properties of freshly squeezed carrot juice, so it's worth adding that you don't need to hope for a similar effect from juices from packs. Studies have shown that a fresh drink has 4 times more carotenoids, and the content of beta-carotene is 6 times higher than that of nectars. True, you should drink fresh juice immediately after preparation, because carotenoids are destroyed when exposed to sunlight.

In order to somehow diversify carrot juice, you can prepare a real vitamin cocktail. This will require a quarter of a medium beet, 1 orange, 2 medium carrots and a piece of ginger^[12]. First you need to squeeze the beetroot juice and let it stand in the refrigerator for a couple of hours, then chop and add all the other ingredients.

In cosmetology

In cosmetology, carrots are valued primarily due to the presence of beta-carotene in their composition, which is transformed into vitamin A in the body. It helps maintain the skin in good condition and promotes acne healing, therefore, its synthetic analogues of retinoids are often used in cosmetics.

Studies have shown that retinol increases collagen production and plays an active role in smoothing out wrinkles, which is why it can be found in stores in the form of a facial serum. If you want to get a more budget option or are afraid to apply any "chemistry" to your face, then you can try to prepare the product yourself using carrots.

The mask for oily skin consists of chopped carrots and a small amount of water (the mixture should be brought to a slurry). A remedy suitable for dry skin is a mask for restoring water balance. To prepare it, you need to mix 1 tablespoon of grated carrots, egg yolk and 2 tablespoons of sour cream. For normal skin, a remedy of 1/4 cup of kefir, 1/4 cup of carrot juice and 1 tablespoon of honey is suitable. Keep the mask on your face for about 15 minutes, then rinse with warm water.

Dangerous properties of carrots and contraindications

Carrots are a healthy low-calorie dietary product that, when consumed in moderation, has a predominantly beneficial effect on human health. However, as with any other product, there are cases in which the consumption of carrots should be limited.

First, you should not lean too much on fresh carrot juice, because it puts a serious strain on the pancreas.

Secondly, with exacerbations of diseases of the gastrointestinal tract, it is generally better to avoid carrots, since it contains a large amount of insoluble fibers that are difficult for a diseased intestine.

Thirdly, carrots are not recommended for use in liver diseases. It is important to note that this vegetable is useful as a prevention of gastrointestinal and liver diseases, but is contraindicated during exacerbations.

Finally, with the daily consumption of a large amount of carrots (more than two pieces), carotenemia can occur. In such a situation, the skin (on the palms and feet) and the whites of the eyes acquire a yellowish-orange color ^[13]. It does not cause much harm to the body, but it makes it clear that the consumption of carrots should be reduced. Also, do not forget that carrots easily absorb nitrates, which manufacturers add to the soil to accelerate growth.

Botanical description

From a botanical point of view, carrots are a biennial herbaceous plant, although in everyday life this is usually called its root crop used in cooking. Most scientists are of the opinion that cultivated carrots (Latin *daucus carota subsp. sativus*) belongs to the genus of wild carrots, family Umbelliferae. However, some botanists do not agree with this, considering the sowing and wild carrots to be different species ^[1]. At the same time, the homeland of the domestic species has not yet been found. True, scientists have not yet been able to cultivate and bring an edible vegetable out of the wild, so discussions continue.

origin of name

The word "carrot" comes from the Old Slavonic "*marky*", and the English "*carrot*", first found in written sources in 1530, was most likely borrowed from the French language, in which carrots are still called "*carotte*". The French name comes from the Latin "*carōta*", and that, in turn, from the Greek "*καρωτόν*" (*karōton*). It is believed that the Greek word has an Indo-European root *ker* - (horn), due to the similarity of the shape of the root crop with a horn ^[4].

Cultivation history

Carrots are one of the oldest cultivated vegetable crops. Based on archaeological excavations, rock paintings and written evidence, it can be argued that it is already about 4 thousand years old. ^[2]. Researchers believe that the countries of Western Asia - Afghanistan and Iran - were the place where this vegetable appeared. The seeds of this vegetable have also been discovered in Switzerland during excavations of Bronze Age pile structures. There is evidence that the carrot was known to the ancient Romans and Greeks. Judging by written evidence, in those days people considered it a real delicacy and served it at the table during big festivities ^[3].

Interestingly, in contrast to modern use, in ancient times, carrots were grown primarily for their seeds and fragrant tops. The earliest references to the use of the root crop were found in ancient sources and date back to the 1st century AD. Carrots were known not only as a food product, but also as a medicine. Many medical works of antiquity describe the healing properties of this plant. Moreover, the Hellenes called it "*philtrion*" - the magic of love and believed that eating carrots would help a person find his love faster.

It is believed that carrots were brought to Europe around the 9th-13th centuries. The first to adopt it in their diet were the Spaniards and the French. This vegetable was especially popular at the court of Charlemagne. Starting from the thirteenth century Carrot cultivation began in China, Japan and India. But the Americans at first did not appreciate the taste and healing qualities of carrots at all, letting the crops feed to pigs. The first written mention of carrots in Russia is an entry in the "Domostroy" of the 16th century, although it is believed that it was known here much earlier.

However, it is worth noting that until the seventeenth century, carrots were not at all the same as we are used to seeing them today, as you can see by looking at the canvases of the masters of European painting of those times. The main difference is the color of the root crop. Scientists believe that white and purple carrots were the most widely distributed, but varieties of red and yellow flowers were also known. According to Academician N. Vavilov, the birthplace of white and purple carrots was Afghanistan, yellow - China, and red - the Mediterranean ^[1].

The bright orange carrots familiar to us were bred by Dutch gardeners only in the 17th century. The reason why the vegetable received this particular color is not known for certain. Perhaps this option took root and was appreciated due to its taste characteristics. But according to legend, the color of carrots is associated with the Dutch royal dynasty of Orange, whose official color has long been orange. In gratitude to William of Orange, under which Holland gained independence, or simply to please the "orange prince", gardeners brought out a vegetable of just that color.

Selection and storage

First of all, it is recommended to choose medium-sized carrots that are not too large. Naturally, there should be no visible damage, spots or growths on the root crop, it must be solid. A greenish color at the base of a carrot means it will taste bitter. If you buy carrots with tops, then the leaves should in no case be withered, but on the contrary, fresh and bright green.

As for storage, this vegetable is not too whimsical and is quite capable of lying in a plastic bag in the refrigerator for up to 1 month. True, it is important to immediately cut off the tops from the root crop, since it draws all the freshness and moisture out of it. Also, carrots should not be stored next to apples, which emit ethylene gas, which contributes to its rapid overripeness and decay. If we are talking about storing large quantities of carrots, then usually gardeners lower it into the cellar. Some summer residents recommend storing the vegetable in boxes with a mixture of sand and wood shavings, which should prevent moisture from evaporating and slow down the rotting process.

Carrots can also be cut or grated and frozen - in this form they can be stored for a whole year. Although given that this vegetable is quite available in the markets and in supermarkets at any time of the year, people usually do not make large stocks. For the same reason, it doesn't make much sense to follow a lot of advice from the Internet and wrap carrots in wet towels or store them in jars of water in order to extend their lifespan.

If your carrots still have a slight mold, then do not rush to throw it away. Unlike soft foods, in which the fungus spreads extremely quickly, it is more difficult for it to cope with hard carrots. Thus, cutting off the affected part and another small piece, the vegetable can be used.

Varieties

Cultivated carrots are usually divided into table (for human consumption) and fodder (for pet food). Thanks to the work of breeders, the table variety of cultivated carrots has a large number of different varieties intended for various purposes. For example, some of them (Bolero F1, Maestro F1) are perfect for making fresh juice. And the Kazan F1 variety was bred specifically for cooking pilaf.

In addition, yellow, purple and red carrots did not remain in the Middle Ages at all, they are still grown and successfully used in many countries of the world. The color of a vegetable depends on the content of one or another pigment in it. So, the yellow color of the carrot gives lutein, red - lycopene, purple - anthocyanin, orange - beta-carotene. All these substances are useful in their own way and have a predominantly positive effect on the body.

Among the unusual varieties that attract attention with their appearance, one can single out Dragon, whose long fruits (up to 25 cm) have a bright purple color and spicy taste, Lunar White - with white fruits and "Yellowstone" - with canary-yellow fruits. One cannot ignore the Parisian Carrot variety, the fruits of which, although traditionally orange in color, have a rounded shape (3 to 6 cm in diameter) and resemble radishes. But carrot varieties "Cosmic purple" hides bright orange flesh behind a purple skin.

By the way, the baby carrot that has recently gained popularity did not actually appear as a result of breeding a new variety, but only because California farmer Mike Yuroshek was tired of throwing away part of the crop due to curvature or other minor "mutilations" of root crops. Then he threw illiquid carrots into a potato peeler and at the exit received small peeled fruits, which supermarkets began to buy from him at a price much higher than the price of ordinary carrots. True, over time, breeders brought out a real baby carrot with very small and sweet fruits.

Description and features of growing carrots

Depending on the variety, the carrot root can reach a weight of 200 g and a length of 30 cm with a diameter of 2.5 to 6 cm. It can also take on a different shape: conical, cylindrical or round. Usually the root crop is in the soil at a depth of about 60 cm, and the roots of the plant go even deeper into the ground - about 1.5-2 m. In the ground part, carrots have stems covered with hard hairs and three-pinnate leaves on long petioles. During flowering, the plant produces white umbrella-shaped inflorescences. Pollination occurs due to various insects.

Best of all, this vegetable grows on loose soil cleared of weeds. Carrots are very fond of sunlight, so it is preferable to choose unshaded places for planting. At the same time, the vegetable is very moisture-loving and does not tolerate drought well, starting to fade quickly.

They begin to plant carrots mainly in April, but in order to obtain the earliest possible harvest, they practice sowing before winter - with the first frosts. Harvesting takes place depending on the variety. In early ripening carrots, the growing season is 80-100 days, and in late-ripening - 120-150.

Diseases and pests

Of all diseases, carrots are the most susceptible to attack by various rots. The most common is white rot, which affects root crops, both during growth and during storage. This disease manifests itself in the form of a white "fluffy" plaque, which thickens over time, forming black sclerotia. To prevent the appearance of white rot during the growth period of carrots, it is necessary to carefully cultivate the land by deep plowing. It is required to store root crops at a temperature of 4-5 degrees.

Black and gray rot, in turn, hit the leaves of the plant. The first covers them with brown spots, and the second affects the veins and petioles of the leaves with gray-brown spots, which eventually pass to the fruits. The cause of these diseases is infected seeds, root crops and plants left in the soil. Therefore, it is important to carry out the correct crop rotation, thin out and weed carrots in time and feed them with potash fertilizers. In addition, you should carefully harvest, protecting carrots from injury.

Among pests, the so-called carrot fly causes the greatest harm to carrots - a black shiny insect with a greenish tint, reaching 5 mm in length. These flies are especially dangerous during heavy rainfall. The insect lays eggs, and the developed larvae penetrate the root crop and pierce it with dark holes. Such fruits begin to gradually lag behind in growth, and the leaves of the plant change color to purple, wither and die. Experts say that damage can be avoided by choosing light soil for sowing and deep plowing of the soil in the fall. Weeding and thinning carrots is also required.

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Carrot - useful properties, composition and contraindications

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