



White cabbage (lat. Brassica)

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

Tkacheva Natalia, phytotherapist , nutritionist

Email: eliseeva.t@edaplus.info, tkacheva.n@edaplus.info

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

Keywords: white cabbage, useful properties, potentially dangerous effects, side effects, contraindications, diets

Beneficial features

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

Main substances (g / 100 g):	Raw cabbage contains: ^[5]
Water	92.18
Carbohydrates	5.8
Squirrels	1.28
Fats	0.1
Calories (kcal)	25
Minerals (mg/100 g):	
Potassium	170
Calcium	40
Phosphorus	26
Sodium	eighteen
Magnesium	12
Vitamins (mg/100 g):	
Vitamin C	36.6

Vitamin B4	10.7
Vitamin B3	0.234
Vitamin B5	0.212
Vitamin E	0.15

In medicine

White cabbage contains 16 free amino acids (among them tryptophan, lysine, methionine, tyrosine, histamine and others). Cabbage is rich in vitamins A, B1, B6, C (ascorbigen), P, K, antiulcer vitamin U; salts of potassium and phosphorus; trace elements: cobalt, copper, zinc, magnesium. It contains sugars, fats, enzymes (lactose, protease, lipase), hormonal substances, phytoncides.

Cabbage leaves contain fiber, which prevents the development of atherosclerosis and improves the functioning of the gastrointestinal tract. Of the mineral salts, the most important role is played by potassium salts, which activate the removal of excess fluid from the body, and sodium salts, which have the property of binding water. ^[7]

Cabbage owes its many-sided therapeutic properties to the impressive complex of chemicals contained in it. Experimentally and clinically confirmed the high efficiency of the use of fresh cabbage juice in the treatment of gastric and duodenal ulcers. The main active ingredient in the treatment of these diseases is vitamin U, which has antihistamine and antiserotonin properties, as well as improves the metabolism of lipids, thiamine and choline and the metabolism of the gastric mucosa, increasing its resistance to damaging factors and activating the healing process of ulcerative foci. In addition to stomach ulcers, the use of vitamin U is also indicated for enteritis, colitis, skin diseases (eczema, psoriasis, neurodermatitis, superficial allergic vasculitis) and cardiosclerosis. In all these cases, a good therapeutic effect is observed.

It is noteworthy that exposure directly to fresh natural cabbage juice gives better results compared to methylmethionine sulfonium chloride (vitamin U), since the juice has a number of additional properties: bactericidal, bacteriostatic, fungicidal , fungistatic and phytoncidal . It has been experimentally proven that cabbage juice acts as an antibacterial substance even on *Staphylococcus aureus* and tuberculosis microbacteria.

In addition, fresh cabbage juice has antitussive and expectorant properties. The almost complete absence of purine bases in cabbage makes it very useful in the diet of those suffering from gout and cholelithiasis. Juice, salads and cabbage dishes are recommended for diseases of the heart and kidneys (diuretic properties due to the high content of potassium salts), for atherosclerosis (the presence of pectins that can remove toxic substances and cholesterol from the body, as well as fiber that removes cholesterol and improves intestinal motor function).

Traditional medicine uses juice or fresh cabbage in the treatment of insomnia, headaches, jaundice and diseases of the spleen. Fresh and sauerkraut are used to increase appetite, enhance the secretory activity of the gastric glands, regulate intestinal activity, prevent scurvy and chronic dyspepsia, as a diuretic and mild laxative.

Sauerkraut or brine from it is advised for diabetes, liver disease, cholangiohepatitis ; cabbage pickle improves digestion, promotes bile secretion, and has a gentle laxative effect on hemorrhoids. Cabbage juice and its decoction with honey are used for laryngitis, bronchitis and other inflammatory processes of the respiratory tract. ^[eight]

In traditional medicine

Under the name "vitamin U", the industry produces an activated form of methionine - methyl methionine sulfonium chloride. Assign it to 1-2 tablets (0.05 g - 0.1 g) after a meal for a month or 40 days with stomach and duodenal ulcers, chronic gastritis and gastralgia .

It should be remembered that with individual intolerance to vitamin U, nausea, vomiting and the appearance of severe pain are possible, which disappear when the dose is reduced or after the drug is completely discontinued. ^[eight]

In folk medicine

- With beriberi, stomach ulcers and duodenal ulcers, raw, freshly squeezed cabbage juice is prescribed in a warm form, half a cup three times a day for a month. Juice increases appetite and stimulates the release of food juices in gastritis with reduced secretory function.
- Cabbage juice with sugar acts as an expectorant, antiseptic and anti-inflammatory agent.
- Juice digested with sugar is used for a hangover, and mixed with a decoction of cabbage seeds - for sleep disorders.
- Cabbage seeds are used to expel parasites from the body. ^[7]
- In diseases of the liver, gallbladder and cholangiohepatitis , sauerkraut brine is prescribed in a warm form, half a cup three times a day before meals.
- For hemorrhoids accompanied by constipation and bleeding, take 2 cups of warm sauerkraut brine at one time. ^[eight]
- For stomach cancer, they drink warm cabbage juice with honey, half a glass three times a day, 60 minutes before meals. Or prepare a decoction of the seeds and roots of cabbage: boil a tablespoon of crushed raw materials in 200 ml of water for 10 minutes, leave for at least an hour and drink throughout the day.
- For flu, mix aloe juice with honey and cabbage juice (in equal proportions). Pour the mixture with dry wine and insist for a day. Take a teaspoon before meals.
- For insomnia, pour 2 tablespoons of cabbage seeds into 200 ml of boiling water. Let it brew for two hours, then strain and add a quarter cup of fresh cabbage juice to the infusion of seeds. Take three times a day before meals. ^[9]

Externally:

- Fresh leaves are applied to sore joints with gout. Cabbage leaves boiled in milk and mixed with bran are used as a poultice for scrofula and wet eczema. Crushed fresh cabbage leaves combined with egg whites are applied to purulent wounds, burns and old ulcers. Raw juice removes warts, juice diluted with water is effective for gargling with sore throat, stomatitis. ^[7]
- For pain in the neck, in the back of the head, after being in a draft, apply a compress from the mixture to the sore spot: a tablespoon of grated cabbage and three tablespoons of horseradish.
- For migraines, apply fresh cabbage leaves to the head, fixing them loosely with a towel or belt.
- With cracks in the heels, a recipe will help: you need to steam your legs in advance in a soda bath. Apply gruel from grated cabbage and horseradish to damaged heels. Fix the compress with polyethylene and a warm sock, and leave overnight. In the morning, rinse with cool water and lubricate the heels with a nourishing cream.
- With external tumors, cabbage leaves are crushed and the resulting slurry is applied to the neoplasm. ^[9]

in oriental medicine

Avicenna used cabbage for ailments of various origins. He attributed pain-relieving properties to the ashes from cabbage stalks. Cabbage broth and seeds, according to the legendary healer, save from intoxication. And cabbage root ash crushes kidney stones. Unanimously with ancient researchers,

Avicenna believed that the composition of cabbage juice and wine is a good remedy for the bites of a poisonous snake or a rabid dog. ^[9]

In scientific research

A team of British scientists representing a research group at the Francis Crick Institute (2018) during laboratory studies substantiated the role of cabbage (in particular, and cruciferous plants in general) in the fight against bowel cancer. **Does cabbage work against cancer?** In the course of the study, the chemical substance indole-3-carbinol was isolated, which is formed during the digestive process and digestion of cabbage (as well as other members of the cruciferous family). This substance promotes the regeneration of the inner layer of the lower intestine, stimulates the activity of new immune cells that control inflammation. This theory is confirmed by the British Institute for Cancer Research in the person of Dr. T. Key: "Studies ... prove that not only fiber, but also special substances found in cabbage and other Cruciferous, significantly reduce the risk of developing colon cancer."

An equally phenomenal property of cabbage is the ability to "remove" radiation pollution from the body. The chemical component of cabbage - 3,3-diindolylmethane - cleanses from the effects of irradiation. So say the scientists developing the project at Georgetown University. ^[ten]

Weight regulation

Cabbage is low in calories and contains no harmful fats. In addition, it contains tartronic acid, which prevents obesity: this acid slows down the conversion of carbohydrates into fats. This fact makes the vegetable indispensable in the menu of people who want to lose weight. But it is more reasonable to include cabbage in your diet if you are losing weight, of course, in fresh or pickled form, since tartronic acid is destroyed during heat treatment.

However, thermally processed cabbage can also become the basis of a diet aimed at quick and gentle weight loss: we are talking about the famous low-calorie cabbage soup. The methodology of this diet allows you to include certain foods scheduled by day, but the main dish is cabbage soup. To prepare such a fat-burning soup, you will need: 2 large onions, 2 Bulgarian green peppers, two large tomatoes, 250 g of mushrooms, a bunch of celery greens, ½ head of cabbage, 3 carrots, salt, pepper, any seasonings or spices to taste. In a deep frying pan, fry finely chopped onions and peppers in a small amount of vegetable oil. Add chopped tomatoes, mushrooms, celery, cabbage, carrots to them and simmer for a couple of minutes over low heat. Transfer the vegetables to a saucepan, pour in 12 cups of water, add salt, spices and seasonings and cook over medium heat until the vegetable mass is soft. This cabbage soup for weight loss can be eaten several times a day. ^[4,11]

In cooking

As for hot first courses, it is unlikely that in the history of Russian cuisine there is a recipe that can compete with cabbage soup and bypass them in popularity.

In "National Cuisines of Our Nations", the fundamental work of a major scientist of the 20th century. Pokhlebkina V.V., describes the options for preparing cabbage soup: rich (full), prefabricated, lean, simple meat, daily, lazy (rahman), sour from fresh cabbage, gray (seedling), green, nettle and burdock cabbage soup.

- **Sour cabbage soup from fresh cabbage (according to the recipe of Pokhlebkina V.V.)**

You will need: 0.5-0.75 kg of beef brisket, the same amount of fresh cabbage, 6-8 pieces of small green unripe apples, 2 onions, 1/2 turnip, 2 tablespoons of chopped dill, 3 bay leaves, 8 black peppercorns, 100 g sour cream.

Prepare meat broth. When the meat is almost ready, cut the cabbage leaves into small squares, chop the onion, turnip, pour into the broth and cook for a quarter of an hour, then add the apples cut into strips, after another 5 minutes - greens and spices and cook until the apples are completely boiled. Serve with sour cream.

- **The classic recipe for meat cabbage rolls (from the Book of Tasty and Healthy Food)**

Ingredients: 300 g of meat, 800 g of white cabbage, half a glass of rice (it can be replaced with other cereals - pearl barley, millet), 1 onion, a tablespoon of flour, 2 tablespoons of tomato paste, sour cream and butter, a glass of water.

Prepare minced meat, boil rice. Finely chop the onion, lightly fry in butter, combine with minced meat and rice. Salt, pepper. Boil cabbage leaves for 5 minutes, let cool, stuff with minced meat with rice and onions, wrapping each leaf with a roll. In a frying pan, prepare the sauce from a glass of water, flour, sour cream and tomato paste. Bring the sauce to a boil, season with salt and pepper. Put the cabbage rolls in a saucepan, pour over the sauce, simmer under the lid over low heat for 40 minutes. When serving, serve with chopped herbs.

Hundreds of original and delicious dishes representing various world cuisines are created on the basis of cabbage: from dietary cabbage soup to exquisite cabbage millefeuille. And one of the most useful gastronomic pleasures, of course, is sauerkraut.

- **How to quickly ferment cabbage?**

Instant sauerkraut (in 2 hours): you will need 2 kg of white cabbage, 200 g of carrots, 100 ml of vegetable oil. For the marinade: 1 liter of water, 100 g of sugar, 60 g of salt, 120 ml of 9% vinegar, 3-4 peas of allspice, bay leaf. Shred the cabbage. Add grated carrots, lightly rub with your hands. Pour in vegetable oil, mix. Boil water with salt, sugar and spices. Remove from heat and add vinegar. Pour the marinade over the shredded cabbage until completely covered. Put under oppression and withstand 2 hours.

- **Crispy sauerkraut**

For cooking you will need: 3 kg of white cabbage, 200-250 g of carrots, 60 g of salt, 25 g of sugar. Shred the cabbage. Add grated carrots, salt and sugar, mix gently. Place tightly in a container and put under oppression. Keep at room temperature under oppression for 3 days. Every day, having removed the oppression, pierce the cabbage mass with a long wooden handle to expel the accumulated air. Store cooked cabbage in the refrigerator.

- **Soaked cabbage with apples**

Ingredients: 4 kg of white cabbage, 3 kg of apples, 250-300 g of carrots, 50 g of sugar, 50 g of salt. For brine: 1 liter of water, 25 g of salt, 20 g of honey (boil water and dissolve salt and honey in it).

Chop the cabbage, add grated carrots, salt and sugar, mix (so that the vegetables let the juice out a little). Put apples and cabbage in several layers in a container. Pour warm brine, cover with large leaves of cabbage and place oppression on top. Cabbage, which will be ready in 2 weeks, store in a cold place. ^[12]

In cosmetology

In the formulation of cosmetics based on white cabbage, cabbage juice, brine, sauerkraut, whole or chopped fresh cabbage leaves are used.

- White cabbage face mask (for oily skin): Mix 2 tablespoons of cabbage leaves crushed into a pulp with beaten egg white. Apply to cleansed skin. Leave on for half an hour, then rinse with warm water.
- For oily skin, it is recommended to wipe the face before washing with a cotton pad dipped in sauerkraut juice. Rubbing with a lotion made up of fresh cabbage and cucumber juices, taken equally, is also useful.
- Cabbage mask for dry skin: apply cosmetic cream or nourishing cream to cleansed skin. Moisten a cloth with 100 ml of fresh cabbage juice, and, squeezing slightly, apply to the face. As the napkin dries, moisten the cloth evenly with juice. Keep the application for at least a quarter of an hour.
- With dry skin, a mask is also effective: mix the slurry of fresh cabbage leaves with egg yolk and vegetable oil (all ingredients in equal parts). Apply to face, wash off after 20 minutes with warm water.
- Whitening cabbage mask: To get rid of freckles and age spots, it is useful to wipe your face with sauerkraut juice daily.
- Nourishing face mask: mix half a yeast stick with honey and fresh cabbage juice (take a teaspoon), knead the composition until smooth, leave to ferment in a dark place. When the mass increases in volume by 2-3 times, apply to cleansed face for about half an hour. Rinse thoroughly with warm water. A mask of a thick layer of sauerkraut also tones and nourishes the skin (hold for 20 to 30 minutes, rinse with cool water).
- Hair balm with cabbage juice: for thin hair with split ends, mix in equal proportions juices - fresh cabbage, lemon and spinach. Rub the composition into the hair and scalp, hold for about 20 minutes and rinse with warm water.
- With rough, rough skin of the hands, baths from sauerkraut juice are useful. At the end of the procedure, grease your hands with a greasy cream. ^[four]

Combination with other products

Cabbage is a green and non-starchy vegetable. White cabbage goes well with vegetables of its type: cucumbers, bell peppers, onions, garlic, radishes, carrots, beets, young pumpkin. Cabbage is not compatible with milk, but it works great paired with fats (for example, butter): a dish from such combinations is well absorbed. By itself, cabbage is a good side dish for a meat dish.

Beverages

Brine is prepared from cabbage, freshly squeezed juice, which is mixed with other juices and a vegetable cocktail is obtained.

Juice is squeezed from chopped leaves of fresh, ripe cabbage. Then filter and let it brew for several hours to clarify. The clarified juice is filtered again, very carefully, without shaking, and drunk both in its pure form and with additives.

Cabbage-beet juice

Table beets are washed, peeled, cut into several pieces, juice is squeezed with a juicer. Beetroot juice is mixed with sauerkraut juice (in a ratio of 3:2) and taken for therapeutic and prophylactic purposes. ^[9]

Dangerous properties of cabbage and contraindications

Individual intolerance to vitamin U, isolated from cabbage, is a contraindication to the use of a drug based on it - methylmethioninesulfonium chloride.

Due to the possible increased gas formation, it is contraindicated to drink cabbage juice for patients diagnosed with myocardial infarction.

In order to avoid exacerbation, it is not recommended to take cabbage juice with increased acidity of the stomach. ^[eight]

Botanical description

This is a vegetable crop of almost paramount importance (along with potatoes), widely spread due to its availability, universal taste and undeniable industrial importance.

White cabbage is classified by botanists as a variety of the species *Cabbage garden*, from the *Cabbage (Cruciferous) family*. The Latin generic name for cabbage is *Brassica*.

origin of name

The etymology of the Russian word "cabbage" is associated with the Latin noun *caput* ("head"). ^[one]

Story

In Europe, cabbage began to be grown about 3 thousand years ago (the botanical predecessor of modern white cabbage was a species with thick, fleshy leaves that can hold a lot of moisture). In Egypt, this vegetable was not cultivated until the Ptolemaic dynasty came to power. In the texts of the "father of botany" Theophrastus, there are references to cabbage, which allows us to conclude that it was known to the Greeks at least as early as the 4th century BC. e. In Cato's treatise "Agriculture" (2nd century BC), cabbage is already mentioned directly.

In Rome, cabbage was used in cooking, medicine and became one of the most sought-after vegetable crops. In his writings, Pliny the Elder already describes 7 types of cabbage known at that time. Cabbage heads of the round shape known to us first began to be cultivated in England in the 14th century.

From Europe, cabbage migrated to America, India, Japan. In the history of navigation of the past centuries, this vegetable played an important role, since it was sauerkraut that became almost the only source of vitamin C, the reserves of which on board the ship were able to prevent scurvy. ^[2]

Varieties

Achievements in breeding provide gardeners and gardeners with a huge opportunity to choose varieties and hybrids of white cabbage. Varieties are usually divided into early-ripening, mid-ripening and late-ripening (sometimes early-ripening varieties are defined in a separate category). Early cabbage is good for salads, juicy and tender, but not suitable for long-term storage. Medium and late varieties are perfectly stored for a long time, they are used for making sauerkraut, pickled cabbage.

Growing early-ripening varieties, you can get two harvests per year. Popular varieties of early cabbage are "Golden Hectare", "Malachite", "Dawn", the middle one is "Dobrovolskaya", "Kupchikha", the late one is "Geneva", "Amager". There is also a selection of varieties for certain climatic conditions:

the division into so-called regional varieties, the cultivation of which gives the highest yield in a particular region.

Some varieties of cabbage have become truly legendary and entered the world history of vegetable growing, such as the famous Saint-Saens variety, some specimens of which reached a weight of 20 kg, and the length of the largest leaves was up to 100 cm. Saint-Saens cabbage was in great demand in French market until the 19th century. Further, its popularity began to decline and since 1999 the variety was included in the Catalog of garden plants in France, where it was given the special status of an old variety, "recommended to amateur gardeners." [3]

Growing features

In the first year of cultivation, cabbage gives a dense head of cabbage, collected from fleshy and juicy leaves. The following year, the plant forms a stem with flowers collected in a brush. The fruits are elongated pods (up to 10 cm), the seeds are dark brown in color. Cabbage belongs to moisture-loving and moderately heat-loving plants (heat above 25 ° C has a bad effect on the vegetable - heads of cabbage often deteriorate and are attacked by pests). Abundant watering is necessary throughout almost the entire growing season. Soil preparation for cultivation is carried out in two stages: the first (to a depth of 0.25 m) and the second (spring, to a depth of 0.2 m) plowing the beds. Top dressing is also carried out in stages: for the first time, the soil is fertilized with a mineral composition two weeks after planting the seedlings. A higher yield of cabbage can be achieved if its so-called "predecessors" on the site were table carrots or early potatoes.

- How to deal with cabbage pests?

One of the most environmentally friendly methods is the treatment of seedlings with horse sorrel infusion. Pour three buckets of crushed sorrel with water in a garden barrel and cover with foil. After 10 days, collect the slurry formed closer to the surface of the water in a separate bucket. Spray the beds with cabbage with a prepared wormwood broom. This method reliably protects the cabbage from the cabbage butterfly. [1,9]

Selection and storage

The right choice will be not crumbling, hard forks (head) with intact and clean, strong and dense fresh leaves of white or light green color.

Fresh cabbage can be stored for a long time in the cellar or in the refrigerator. You should avoid storing the vegetable in open sunlight, as the leaves turn green in this case. In boxes, cabbage quickly begins to deteriorate. Damaged leaves should be noticed and removed in a timely manner. Outside the refrigerator, each head should be stored separately from the others, wrapped in thick paper. [4,9]

Literature

1. Reference book on preparations of medicinal plants / D. S. Ivashin, Z. F. Katina, I. Z. Rybachuk et al. - 6th ed., isp. and additional - K.: Harvest, 1989. - 288 p.: ill.
2. History of cabbage, [source](#)
3. cabbage, [source](#)
4. Healing products. Food is medicine, medicine is food. Compound. A.D. Milskeya, - H.: Phoenix, 1998. - 479 p.
5. Cabbage, raw, [source](#)
6. Cabbage, cooked, boiled, drained, without salt, [source](#)
7. Karhut V. V. Medicines around us. - K.: Health, 1993. - 232 p.

8. Medicinal plants: encyclopedic reference book / ed. A. M. Grodzinsky. – K.: Olimp, 1992. – 544 p.: ill.
9. Dubrovin I. All about ordinary cabbage. - 2009 - 163 p.
10. How the humble cabbage can stop cancers, [source](#)
11. Cabbage soup diet , [source](#)
12. Great encyclopedia of folk medicine. - M .: "Publishing House ANS", 2005. - 1120 p.: ill.
13. Sauerkraut , [source](#)

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

White cabbage - useful properties, composition and contraindications

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

Tkacheva Natalia, phytotherapist , nutritionist

E-mail: eliseeva.t@edaplust.info, tkacheva.n@edaplust.info

Received 10/23/18

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