

MEDICINAL PROPERTIES OF THE MINT PLANT

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Abstract. *Currently, due to the progress of medical sciences, most people are used to treatment with artificial drugs. Artificial drugs have both beneficial and harmful side. Therefore, it is appropriate to use medicinal plants in the treatment of diseases, because natural medicines are quickly absorbed by the body and do not have side effects. This article talks about the beneficial properties of mint, which is considered a medicinal plant, for humans.*

Keywords: *peppermint, water mint, Asiatic mint, mint, spearmint, leaf, stem.*

INTRODUCTION

Mint is a group of perennial herbaceous plants, a medicinal and essential oil plant, belonging to the “Labguldosh” family. 20-25 species are distributed in the warm climate regions of the Northern Hemisphere. In European countries, the USA, Ukraine, Belarus and the North Caucasus, spearmint and curly mint, field or water mint are cultivated in China, India, Brazil and other countries [1].

It is a fragrant herbaceous perennial with small flowers that gather in inflorescences. There is a legend that tells about love, guile and the creation of mint. The patroness of streams and springs, in ancient Greek myths, the young nymph *Mente* was the beloved of *Hades*. But his wife, offended by their relationship, poisoned the *Cop*. And as soon as the nymph drank the poisoned drink, she immediately disappeared, but a bush of juicy mint appeared instead.

In Uzbekistan there are 4 species of mint: water mint, Asiatic mint, spear mint and curly mint which grow in wild. The violet colored stem is vertically branched, 25-100 cm tall, the leaves are opposite, rhomboid, rascally or egg-shaped, the flowers are collected in an umbrella-like [2] inflorescence and it blooms in May-October. Mint is a light-loving, moisture-loving plant. Leaves contain 2.5-3%, flowers 4-6%, stems contain 0.3% menthol, attar which is rich in the component of *validol* as well as flavonoids, vitamins, and additives. Defecation and infusion made from mint leaves are used in medicine for nausea and as an expectorant. Peppermint oil obtained from leaves and stems is used in perfumery, food industry and medicine.

THE MAIN PART

The healing properties of peppermint have earned high praise, both in pharmacology and in folk medicine. Medicinal value is represented by the leaves and the entire aboveground part of the herbaceous plant. The active ingredient of peppermint is essential oil. Doctors have developed a number of drugs, which include mint oil.

Menthol is the main element of essential oil and serves as an active force in the ability to dilate the vessels of the brain, heart and lungs, and also reduces the sensitivity of nerve endings [3-6], thanks to the calming effect. The use of mint in complex preparations will help in the treatment of renal and cholelithiasis and the urinary system.

In folk medicine, the beneficial properties of peppermint are widely used in dentistry. It has a positive effect on the treatment of diseases of the liver, bile and upper respiratory tract, for

the normalization of the gastrointestinal tract, and is also used as an anti-inflammatory and analgesic.

A decoction and infusion of mint will soothe toothache, ease well-being during the menstrual cycle, with gastritis. It will help with depressive states. Externally, a strong infusion is used as lotions and dressings for inflammatory processes on the skin, rheumatic and arthric pains.

Juice and fresh mint are recommended for poor appetite and to improve digestion, eliminate nausea and heartburn, as well as alleviate the pain of coughing and inflammatory processes. Mint tincture relieves the effects of an alcoholic feast well. Menthol-based ointment is used for rubbing with arthritis, lumbago rheumatism and for light rubbing with migraines.

Chemical composition, nutritional value, caloric content. Menthol, a secondary metabolite of all clear-cut herbs, gives a specific aroma to mint leaves. They have learned to synthesize it to scare away animals, avoiding pungent odors and a chilling aftertaste [7].

The benefits of mint can be judged by the content of vitamins, minerals, amino acids in its composition:

retinol (fat-soluble vitamin A) - supports the health of the organs of vision, hair, nails, accelerates the regeneration of the skin, participates in the synthesis of proteins;

ascorbic acid (vitamin C) — is responsible for immunity, strengthens capillaries, helps to get rid of excess cholesterol;

riboflavin (B2) — stabilizes metabolic processes;

niacin (B3 or PP) — enhances blood circulation, tissue trophism, regulates the cardiovascular system;

pyridoxine (B6) — stimulates cerebral circulation, improves the conduction of nerve impulses;

folic acid (B9) — participates in cell proliferation, nutrient breakdown, serotonin production;

iron — participates in hematopoiesis, gas exchange, normalizes the thyroid gland, increases immunity;

potassium — supports neuromuscular connections, water balance in the body;

magnesium — reduces the excitability of the nervous system;

manganese — affects blood clotting, hemostasis;

rosemary acid — protects against germs;

tryptophan — stabilizes the psycho-emotional state and sleep;

lysine — improves memory, attention;

valine — increases brain activity;

arginine — strengthens the walls of blood vessels.

The nutritional value of mint is provided by vegetable protein (3.29 g / 100 g) and carbohydrates (8.41 g / 100 g). The grass contains almost no fats (0.73 g / 100 g). The energy value of the product is 44 kcal/100 g [8].

Useful properties. Firstly, peppermint is recognized by biologists as a natural antioxidant that works against free radicals formed during metabolism. They provoke the activity of cancer cells, accelerate the aging of the body, trigger destructive mechanisms. Secondly, mint herb is able to have a therapeutic and preventive effect in several directions at once:

soothing — relaxes nerve centers, relieves psychological stress;

anti—anti-inflammatory - suppresses the action of the enzyme COX-2, responsible for the synthesis of pain and inflammation mediators;

antimicrobial — slows down the growth and reproduction of pathogenic flora (viruses, bacteria, parasites);

antispasmodic — relieves muscle spasms, improves neuromuscular conduction, reduces the sensitivity of pain receptors;

prokinetic — enhances the motility of the digestive organs, while preventing contractions of smooth muscles;

hemodynamic — improves blood circulation, blood supply to tissues;

choleretic — stimulates the synthesis of bile acids, facilitates the flow of bile into the intestine no worse than pharmacological cholagogues.

According to nutritionists, mint taste and aroma suppress hunger, reduce appetite, keep from overeating.

It is propagated vegetatively (by dividing the roots in the spring). American scientists have discovered another beneficial property of mint that no one knows about yet. It turned out that mint has only a positive effect on brain activity [9]. Studies have shown that regular consumption of peppermint improves attention and memory.



Medicinal properties of peppermint for children. Peppermint has a calming effect, helps with vomiting and nausea in children. Peppermint tea is given to babies to relieve colic and reduce stomach cramps (dysbiosis). Calming properties are used in children with anxiety and poor sleep. Most often, these are babies under one year old, because their nervous system has not yet fully formed. In such cases, mint tea is also prepared [10].

Healing properties of peppermint for women. Women use this herb for cosmetic and medicinal purposes. For example, baths based on this vegetable oil are great for gynecological problems. But they should be used for no more than 20 minutes, as long-term dizziness may occur. Dizziness is an alarming symptom, it is worth stopping the treatment regimen.

Peppermint contains phytoestrogens, which reduce production. Therefore, it can be beneficial for women due to excess testosterone, excess hair on the face and body.

Healing Properties of Peppermint for Men. Many people have heard about the effects of peppermint on male potency. However, there are currently no clear research results. American scientists conducted an experiment on mice and gave them mint infusion as a drink. Peppermint tea helps to quit smoking. As a result, sexual activity in rodents decreased. However, this

experiment should not be taken as definitive results, since the animals were not given any other drink, and an overdose cannot be ruled out.

Many folk recipes are confirmed by evidence-based medicine. The use of mint is approved in gastroenterology, neurology, cardiology, pulmonology, otolaryngology. A decoction of peppermint leaves is prescribed as an additional remedy for treatment:

functional digestive disorders — dyspepsia, nausea, smooth muscle spasm, flatulence;
cholestasis (inhibition or stopping of bile secretion);

gastritis, stomach ulcer;

neurological disorders — increased anxiety, insomnia, tension headaches, migraines;

somatoform dysfunction of the autonomic nervous system;

cardiovascular pathologies — hypertension, angina pectoris.

Mint tincture is useful to take at night — after a busy working day.

Steam inhalations with essential oil help well with diseases of the upper respiratory tract — bronchitis, tonsillitis, sinusitis, tracheitis. Mint extract is contained in many sprays, lollipops, lozenges, which are prescribed for relieving coughing attacks, analgesia of the throat mucosa. In the means for sublingual reception, a combination of two or three medicinal products is more common.

Cosmetologists recommend using a decoction of leaves for daily facial skin care. It can be applied to a cotton pad or pre-frozen in ice molds.

Dental floss, mouthwashers and mouth fresheners with the addition of a mint component are trusted by dentists. The anti-inflammatory and antimicrobial properties of the plant help prevent the development of caries, periodontitis, gingivitis [11].

Contraindications of peppermint. Any medicinal plant, except for useful properties and indications, has contraindications and possible side effects. These include:

low blood pressure – the use of mint at low pressure is contraindicated, because it promotes vasodilation and an even greater decrease in pressure, the constant use of mint is the cause of serious consequences;

varicose veins – due to the pronounced effect on the vessels, the course of varicose veins is aggravated;

allergic reactions – no one is immune from the formation of allergies, even medicinal plants can provoke it and mint is one of them.

decreased libido in men – mint is useful for women's health, but not for men: it is known that the constant use of peppermint is the reason for a decrease in libido function.

concentration disorders – peppermint-based drugs have a pronounced sedative effect and mint is contraindicated for those whose activities require increased concentration of attention.

CONCLUSION

It grows in all regions of Uzbekistan in wet lands, along streams and rivers. It is known to many that peppermint itself raises the mood and ensures an increase in the hormones of happiness in the body. In addition, peppermint eases digestion, aids in the elimination of swelling in the body.

The use of peppermint. Peppermint is used not only in folk, but also in traditional medicine, medicinal preparations and cosmetics are prepared on its basis.

For pain relief. A decoction of peppermint will help relieve pain syndrome of any origin. Rinsing the mouth and throat with a decoction helps to reduce the pain somewhat. Analgesic effect is provided by a combination of cooling effect and control of local blood circulation.

For the digestive system. Peppermint has a beneficial effect on the entire digestive system, improves peristalsis, resists fermentation processes, therefore, reduces the symptoms of flatulence. The decoction relieves nausea, heartburn, and stomach pain well.

With cystitis. Decoction: 2 tablespoons of mint pour 500 ml of boiling water and insist for 15 minutes. Take 1 tablespoon 4-5 times a day.

For the respiratory tract. Despite the pronounced aroma, peppermint has a positive effect on the course of asthmatic attacks, but only if there are no allergic reactions. Decoctions of peppermint are prescribed for bronchitis, acute respiratory viral infections. *Decoction:* 2 tablespoons of dried peppermint leaves, brew 300 ml of boiling water and insist for 1.5 hours in a dark place. Take 1 tablespoon 4-5 times a day.

For the cardiovascular system. This medicinal plant has a beneficial effect on the work of the heart and blood vessels, improves blood circulation and controls blood pressure.

For the nervous system. A decoction of peppermint relieves nervous tension, is recommended for neurosis, hysteria, overstrain, depression and chronic stress. The therapeutic effect is achieved due to the pronounced sedative effect.

For women. Women with painful menstruation are also recommended to drink a decoction of mint. *Decoction:* 2 tablespoons of mint brew 500 ml of boiling water. Take 150 ml twice a day.

During pregnancy. Peppermint will help normalize the emotional background due to the sedative effect, resist colds, stop nausea in the early stages of pregnancy. However, it can be used only after consulting a doctor, because side effects are possible.

In cosmetology. A decoction of peppermint will get rid of skin problems. The broth can be poured into an ice mold, and already wipe your face with these cubes every morning.

Daily norm of mint. For the treatment and prevention of chronic diseases of the digestive system, the dosage is determined by a gastroenterologist. Usually adult patients are prescribed 100 ml of decoction or 10-15 drops of peppermint tincture. You should drink 2-3 times a day — a quarter of an hour before meals. The course of therapy is 10-14 days. For gastronomic pleasure, it is recommended to add 2-3 freshly picked twigs to the tea per cup. The herb will enrich the drink with taste and aroma.

As a seasoning for meat, vegetables and desserts, it is advisable not to abuse mint grass. Excess spice can change the taste of the dish not for the better.

If there are no contraindications, mint can and should be used as a useful dietary supplement.

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