

## **Cardamom: 8 Proven Benefits research**

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**Abstract.** The article discusses the main properties of cardamom 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 cardamom is considered in various types of medicine and the effectiveness of its use in various diseases. Potentially adverse effects of cardamom are analyzed separately. on the human body under certain medical conditions and diseases.

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

It's not the most popular spice in the ginger family, but it's fantastically healthy. It contains many antioxidants, including glutathione, which removes heavy metals and speeds up recovery from viral diseases. Substances slow down aging, reduce the risk of chronic diseases and cancer.

Calorie content of cardamom per 100~g - 311~kcal. Green and black seeds have similar nutritional value. Greens differ only in that they are harvested to full maturity, while blacks are additionally intensively dried and crushed. Unripe grains are preferable not only because of the mild sweet taste - they have a little more benefit.

# **Top 8 Health Benefits of Cardamom**

## 1. Lowers blood pressure

The study showed that in order to normalize the pressure of hypertensive patients, it is enough to consume 3 g of cardamom powder daily. The exact reason for this result is unknown, but scientists suggest that it is associated with high levels of antioxidants and a diuretic effect. Some experiments

have shown that the spice has great potential to fight heart disease - it protects the heart from oxidation and controls the concentration of cholesterol in the blood, even with an abundance of fat in the diet. [12]

## 2. Has anti-cancer properties

The food supplement does not replace treatment, but can be used as a maintenance therapy - its phytochemical compounds help fight cancer. According to research, the powder enhances the ability of immune cells to attack cancer cells and stop their reproduction. For example, a short 15-day experiment resulted in a significant reduction in skin tumors. [3, 4]

## 3. Takes care of the liver

In Ayurveda, cardamom is used to eliminate toxins and this property is scientifically confirmed. The ability to detoxify has a positive effect on the liver, which neutralizes harmful substances and cleanses the body of them. Green spice supplements additionally protect the liver from damage, improve the condition of the organ in non-alcoholic fatty disease, obesity and overweight. [5]

## 4. Improves breathing and oxygen consumption

An increase in air flow to the lungs occurs during aromatherapy due to the invigorating aroma and when cardamom is taken orally - the extract relaxes the airways. Extract injections act faster, expanding the lumen of the larynx (relevant for asthma). Also grains have the potential in the fight against respiratory diseases.

## 5. Normalizes digestion and protects against ulcers

Cardamom is a remedy for discomfort, nausea, and vomiting. Best known for its ability to heal the stomach, reduce acid reflux and heal ulcers. In mice, the extract completely prevented the development of ulcers and reduced the size of existing ulcers by 50%. In a test tube test, it protected against the bacterium Helicobacter pylori , which causes most stomach problems. Its methanol extract helps fight high acidity, flatulence, and stomach cramps . <sup>[6]</sup>

## 6. Prevents caries and relieves bad breath

In ancient times, seeds were used instead of chewing gum to freshen breath after eating. Today, many companies use them in the production of chewing gums, toothpastes, mouthwashes - a natural product not only gives a fresh mint flavor, but also neutralizes bacteria in the oral cavity. Test-tube experiments have confirmed that the extract fights five caries-causing bacteria and reduces their numbers in saliva by 54%. <sup>[7]</sup>

## 7. Reduces blood sugar

Regulation of glucose and insulin levels occurs due to the suppression of digestive enzymes - when they are less active, the digestion of starch and proteins slows down. Other laboratory studies have shown that cardamom reduces oxidative stress and inflammation in obese, prediabetic women . [eight]

## 8. Has antibacterial properties

Candidiasis, staphylococcus, salmonella, campylobacter (one of the main causes of diarrhea in the world) and other dangerous bacilli die when exposed to the essential oil contained in cardamom grains. Natural compounds are not as effective as antibiotics, but they do not destroy beneficial bacteria. In the future, they may become an alternative therapy in the fight against antibiotic-resistant microbes. <sup>[9, 10]</sup>

## Contraindications to the use of cardamom

The use of seasoning is not safe in some cases:

- with diverticulitis;
- Crohn's disease, IBS;
- gallstones;
- endometriosis;
- pregnancy.

You should consult your doctor before consuming the spice, especially in large quantities.

## The rate of consumption of cardamom

There is no established safe dosage for cardamom pods or ground powder. For most people, 3 g is considered a daily allowance, but this portion is highly dependent on age, health, and allergies. You can buy a spice in advance and use it as needed - in a dry, dark, cool place, it is stored for at least a year.

#### What to cook with cardamom

A healthy ingredient that gives a delicious flavor to popular autumn dishes, drinks, desserts such as gingerbread, cakes, cider, pumpkin latte. It is added to coffee and tea at any time of the year, and in the Scandinavian countries it is flavored with sweet pastries instead of cinnamon. Ground seeds are mainly seasoned with soups, a side dish of rice, stewed vegetables, fruit salads. The powder is also mixed with honey and pepper to marinate the chicken. Whole green pods are used in vegetarian pulao, curries, and hot dishes.

# **Expert comment**

## Tatyana Eliseeva, nutritionist, nutritionist

Now you have enough reasons and excuses to add cardamom to your daily diet - you will get a lot of health benefits along with great taste and aroma. The spice enhances the antioxidant status of the body and is not in vain in almost every home in India, where it is considered a natural antidepressant, superfood for sexual health and high performance. Use spice in moderation, and it will greatly enhance the benefits of your usual sweet or savory dishes.

## Literature

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