

THE MOST IMPORTANT BENEFITS OF GINGER FOR THE HUMAN BODY'S IMMUNITY

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Abstract: Ginger (*Zingiber officinale*) is a perennial herb with a thick rhizome, belonging to the monocot class, the ginger family. Distributed mainly in the tropics and subtropics. Ginger originated in Southeast Asia and was later cultivated. Distributed throughout the Indo-Pacific region to the Hawaiian Islands. Ginger was one of the first spices exported from Asia and was also brought to Europe for its purposes and used by the ancient Greeks and Romans.

Keywords: Ginger, anti-inflammatory, antioxidant, 5- lipoxygenase, gingerol, shogaol, *E. coli*, antimutagenic.

The ginger plant is widely used in modern scientific medicine. Main active ingredients of ginger considered shogaol and gingerol. Associated with these substances antioxidant, anti-inflammatory, antitumor, antimutagenic and other properties of the plant. 6-dehydroshogaol, a substance isolated from fresh ginger root has strong anti-inflammatory and antioxidant properties.

Ginger extract inhibits leukocyte chemotaxis into the affected tissue. Anti-inflammatory properties of ginger is also associated with the ability of its substances to inhibit synthesis prostaglandins, through inhibition of cyclooxygenases 1 and 2, affecting the synthesis of leukotrienes, inhibiting the enzyme 5- lipoxygenase. Zingerone, which is formed during cooking processing of ginger root has strong anti-inflammatory, antidiabetic, antispasmodic and other properties. Raw ginger extract, for external use reduces skin inflammation. Ginger is a plant substance that stimulates metabolic processes. Prevents platelet aggregation, thereby reducing risk of heart attack. Can be used for inflammatory processes in order to reduce temperature, as well as for the prevention and treatment of migraine [2]. Due to its properties, ginger has recently become the object of research by scientists. Ginger, like other medicinals plants, contains a complex mixture of pharmacologically active components, including them beta-carotene, capsaicin, caffeic acid, curcumin. In addition, the composition ginger contains all essential amino acids, including tryptophan, threonine, leysine, methionine, phenylanine, valine, magnesium salts, calcium, phosphorus, as well as various vitamins. Ginger speeds up metabolism substances, thereby stimulating the combustion process calories needed to maintain normal weight, therefore often used as weight loss product. Recently, ginger and turmeric have become very popular and are in great demand among the population not only as a spice, but also as products used for medicinal purposes. Due to the presence of different biological properties, they have different pharmacological activities. A survey of the population showed that ginger is most often used as a means of losing weight and increasing immunity. Both spices are used to normalize the digestive system and as an anti-inflammatory agent. The results of the study showed that tinctures of ginger and turmeric have antibacterial activity against strains of *E. coli*. Ginger and turmeric have recently become very popular and are in great demand among the population not only as spices, but also in medical purposes.

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