

# Histidine - description, benefits, effect on the body and the best sources

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**Abstract.** Histidine belongs to a group of amino acids that is still controversial. And they argue about this: whether this amino acid is replaceable or not. At the same time, most doctors and biochemists classify histidine as essential (amino acids that cannot be formed by our body independently and must be supplied to it from the outside).

Therefore, this amino acid must be included in food products. Histidine performs an important mission in protecting our body from all kinds of infections. Increases sexual activity in men and women due to its conversion to histamine. Strengthens the nervous system.

**Keywords:** histidine, general characteristics, daily requirement, digestibility, beneficial properties, signs of deficiency, signs of excess

## Foods rich in histidine:

- Hard cheese
- Processed cheese
- Beef
- Horse mackerel
- Cottage cheese [1]
- Powdered milk
- Walnut [2]
- Peas [3]
- Chicken
- Eggs [4]
- Squid
- Fig [5]
- Wheat
- Peanut
- Soya beans

## General characteristics of histidine

Histidine belongs to the class of conditionally essential amino acids. This amino acid is part of the myelin sheaths, protecting nerve cells from all kinds of irritants. Histidine is also necessary in the formation of leukocytes and red blood cells. In addition, it promotes the growth of new and restoration of damaged tissue.

## Daily requirement for histidine

According to medical standards, the daily requirement for histidine is 12 mg per 1 kg of body weight. In this case, it is necessary to take into account the level of the enzyme histidase, without the presence of which, histidine consumed with food can have a toxic effect on the central nervous system.

### **The need for histidine increases:**

- with increased methionine content (checked by laboratory tests);
- in case of indigestion;
- with low acidity of gastric juice;
- for injuries, regardless of their location and etiology;
- in the period from birth to 20 years.

### **The need for histidine decreases:**

- with individual intolerance to the substance;
- organic lesions of the central nervous system;
- arterial hypotension;
- bronchial asthma [6];
- manic-depressive psychosis;
- in the absence or deficiency of the enzyme histidase in the body.

### **Histidine digestibility**

Histidine is well absorbed. However, in order to avoid problems with the functioning of the central nervous system, the presence of the enzyme *histidase* is necessary. Otherwise, problems may arise with hearing loss, the development of psychoses, and general intoxication of the body.

### **Beneficial properties of histidine and its effect on the body:**

Histidine protects our body from the damaging effects of radiation. Helps remove heavy metals from the body. Improves stress resistance. Boosts immunity and speeds up recovery from injuries and illnesses. Used in complex therapy in the treatment of such diseases:

- atherosclerosis [7] of cerebral vessels;
- arthritis [8] rheumatoid;
- urticaria [9];
- gastritis [10] with high and low acidity;
- peptic [11] stomach disease;
- iron deficiency anemia [12];
- hepatitis groups A, B and C [13];
- AIDS (acquired immune deficiency syndrome) [14].

### **Interaction with other elements:**

Since histidine plays an active role in the cycle of amino acids and enzymes, its interaction with essential elements is an important link in life support. At the same time, histidine is well capable of being converted into a substance such as histamine. And it, in turn, determines whether humanity will continue its race or die out like the Neanderthals. Histidine takes part in the formation of such substances: histamine, hemoglobin, carnosine, anserine.

### **Signs of a lack of histidine in the body:**

- delayed mental and physical development;
- hearing impairment;
- decreased libido;
- fibromyalgia.

### Signs of excess histidine in the body:

- stressful conditions;
- various types of psychoses;
- copper deficiency [15] in the body.

### Histidine for beauty and health

They say that beauty and overall attractiveness often begin with the overall health of the entire body. Histidine helps improve the health of the nervous system, which has a positive effect on the functioning of all organs and systems of the body. It has a positive effect on sexual function, which in turn leads to an increase in the internal energy of the body and, as a result, to an increase in external attractiveness (skin, hair, nails [16-18], high spirits).

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