

Vitamins

Vitamins are organic substances necessary in small quantities, which the human body cannot create on its own and must therefore receive them in food. Their most important function is the catalytic effect in a number of metabolic reactions, where some vitamins act as coenzymes. Other vitamins form important oxidation-reduction systems in the body, which, among other things, act as protective factors that compensate for the negative effects of external factors on the body. Severe forms of vitamin deficiency (**avitaminosis**) with specific symptoms (for example, beriberi, pellagra, scurvy) are rarely encountered in our conditions, but lighter forms (**hypovitaminosis**) do occur. Deficiency symptoms are treated by administering the appropriate vitamin.

Fat soluble vitamins

The carriers of fat soluble vitamins are fats, therefore a significant restriction of fat in the diet can lead to their insufficient intake. Fat-soluble vitamins are stored in the body, so an excess can be toxic (vitamin A, D), but a regular daily dose is less important than for water-soluble vitamins. They are more stable than water-soluble vitamins during food processing and storage.

- Vitamin A
- Vitamin D
- Vitamin E
- Vitamin K

Water soluble vitamins

Water soluble vitamins are easily absorbed and their excess is excreted in the urine, so they are usually not toxic and their regular intake is important. Their content in food is reduced by processing and storage (thiamine by pasteurization, riboflavin by storage in light, vitamin C by storage and heat processing).

- Vitamin B₁ – thiamine
- Vitamin B₂ – riboflavin
- Vitamin B₃ – niacin
- Vitamin B₅ – pantothenic acid
- Vitamin B₆ – pyridoxine
- Vitamin B₇ – biotin
- Vitamin B₉ – folic acid
- Vitamin B₁₂ – cobalamin
- Vitamin C – ascorbic acid

The numbers that are missing in the series of B vitamins were originally assigned to substances that were later found to be either mixtures of substances or do not have vitamin character - they are not necessary for humans, e.g. orotic acid (vitamin B₁₃) or pangamic acid (vitamin B₁₅).

Link

Related articles

- ws:Vitaminy (1. LF UK, NT)