

BIOLOGICALLY ACTIVE SUBSTANCES IN LOCALLY GROWN FRUITS

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ANNOTATION

Studying the content of vitamins in fruits grown in local conditions and their medicinal properties, analyzing theoretical issues and putting them into a system.

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INTRODUCTION

Vitamins mitigate or eliminate the negative effects of many drugs on the human body. Lack of vitamins affects the condition of individual organs and tissues, as well as the most important functions: growth, reproduction, intellectual and physical capabilities, protective functions of the body. A long-term lack of vitamins first leads to a decrease in working capacity, and then to a deterioration in health.

Only in some cases, our body can synthesize individual vitamins in small quantities. For example, the amino acid tryptophan can be converted into nicotinic acid in the body. Vitamins are necessary for the synthesis of hormones - special biologically active substances that regulate various functions of the body.

Vitamin and its sources, demand for them, symptoms of avitaminosis are presented in the table below.

No	Vitamin	Vitamin sources	Daily requirement	Symptoms of avitaminosis
1	Vitamin A	peaches, apricots	vitamin A for adults - 1 mg, pregnant and lactating women - 1.25-1.5 mg, children in the first year of life - 0.4 mg.	entrepreneurship disease
2	Vitamin D	-	for men - 5 mcg, for women - 5 mcg, for children - 7 µg.	Paxit
3	Vitamin E	Pistachios, almonds	for men - 12 mcg per day, for women - 10 mcg per day, for children in the first year of life - 5 mg.	Miscarriage
4	Vitamin K	Raspberry, plum	1 µg per 1 kg of weight, 26 mg	Blood clotting
5	Vitamin F	Nuts, pistachios, almonds	about 1000 mg for adults,	hair dryness and brittleness

6	Vitamin B1	almonds, hazelnuts and walnuts	1 mg per day for children under 7 years old, from 7 to 14 years old - 1.5 mg, after 14 years old - 3 mg B1	Polyneuritis
7	Vitamin B2	almonds, hazelnuts and walnuts under	1 year - 1 mg, 3 years - 1.5 mg, 4-6 years - 2.5 mg, 7-15 years - 3 mg, 16 years and older - 3.5 mg	reproductive , immune systems, normal development of the thyroid gland
8	Vitamin B3	almonds, hazelnuts and walnuts under	1 year - 5 mg, 1-6 years - 10 mg, 7-12 years - 15 mg, 13-15 years - 20 mg, 16 years and older - 25 mg	Pellagra
9	Vitamin B5	the demand	for walnuts is about 20 mg for adults, about 25 mg for heavy workers, 6 mg for children from 6 months to 1 year; From 7 to 10 years - 15 mg;	dermatitis, diarrhea (diarrhea), dementia
10	Vitamin B6	orange, cherry.	Daily requirement for adults is 1.5-3 mg.	Nervous disorders
11	Vitamin B12	Apple, raspberry, cherry, cherry, walnut	15-20 mcg	Anemia
12	Vitamin B15	Stone fruits, sprouted seeds and sprouts of many plants contain	2-3 mg. The daily requirement for adults is 0.1-0.15 mg.	nervous breakdown, skin damage is observed
13	Vitamin C	walnuts, black currants, berries, citrus fruits for children under	7 years old - 50 mg, from 7 to 14 years old - 60 mg, over 14 years old - 70 mg (adult norm)	Scurvy
14	P-Vitamin	in rosehip, elderberry, linden, black currant, lemon peel.	10-50 mcg	has a positive effect on blood vessels
15	F-Vitamin	in newly growing leaves of plants, nuts, leguminous plants.	30-100 µg	rashes

With a normal diet, the body's daily need for vitamins is fully met. Lack of vitamins, malnutrition or impaired absorption and use can be the cause of various forms of vitamin deficiency.

Causes of vitamin deficiency in the body:

1) Food quality and preparation:

- Non-observance of storage conditions in terms of time and temperature;
- cooking for a long time;
- The presence of antivitamin factors in foods (cabbage, zucchini, parsley, green onions, apples contain a number of enzymes that destroy vitamin C, especially when cut into small pieces)
- Destruction of vitamins under the influence of ultraviolet rays, air oxygen (for example, vitamin A).

The microflora of the digestive tract plays an important role in providing and enriching the body with a number of vitamins:

- Absorption of vitamins is disturbed in many and frequent chronic diseases;
- Severe gastrointestinal diseases, misuse of antibiotics and sulfa drugs lead to the creation of a certain deficiency of vitamins that can be synthesized by beneficial intestinal microflora (vitamins B12, B6, H (biotin)).

Thus, if a vitamin is lacking or completely lacking in the body, the metabolism is disturbed. When there is a lack of vitamins in food, a person's ability to work decreases, the body's susceptibility to diseases and adverse effects of the external environment decreases. Vitamin deficiency is not caused by lack or lack of vitamins in the food, but also by disturbances in the

processes of their absorption in the intestine, delivery to tissues and transformation into biologically active form. But the excess of some vitamin beyond the physiological need can lead to hypervitaminosis.

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