



VITAMINS. CONCEPT OF VITAMIN. IMPORTANCE OF VITAMINS IN HUMAN LIFE TODAY

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Abstract: Vitamins are low-molecular organic compounds that are almost not synthesized in the body or are synthesized in very small amounts. Factors that determine the body's need for vitamins depend on a person's gender, age, physiological state, personal characteristics and external factors. Vitamins are very important in the human body. When there is a lack of vitamins in food, a person's ability to work decreases, and the body's resistance to diseases and adverse effects of the external environment decreases. Vitamin deficiency is caused not only by a lack of vitamins in food, but also by a violation of the processes of their absorption in the intestine, delivery to tissues, and transformation into a biologically active form.

Key words: Retinol, thiamin, riboflavin, pyridoxine, cyanocobalamin, calciferol, tocopherol, phylloquinone, bioflavonoid, choline, inositol, lipoate, orot, pangamate, paraaminobenzoic acid.

INTRODUCTION

The body's need for vitamins is mainly met at the expense of the nutrients taken in, and when the need arises, it is met by vitamin preparations or specially prepared decoctions and tinctures. When vitamins are lacking in food or their





digestion is disturbed, various unpleasant changes occur in the human body. Avitaminosis due to a complete lack of vitamins and hypovitaminosis occurs when consumption is less than the required amount. It is more common in case of hypovitaminosis. The occurrence of hypovitaminosis depends on exogenous and endogenous factors. Endogenous causes include various physiological and pathological states of the body (acceleration of vitamin breakdown under the influence of intestinal microflora, violation of their absorption in the gastrointestinal tract, liver diseases, diseases of the pancreas and biliary tract).

LITERATURE ANALYSIS AND METHODS

Below is a description of the most commonly used vitamins.

Retinol (vitamin A) is widely distributed in nature. It is found in plant tissues in the form of provitamin A (carotenoid pigments that turn into retinol in the body). Participates in the formation of vision pigments, ensures normal growth of the organism, adaptation of the eye to different levels of light. If there is a lack of retinol in the body, the skin becomes dry, scaly, itchy, small rashes appear, purulent skin diseases flare up, hair becomes dry, dull and falls out, and nails become brittle. Inability to look at the light, squint, conjunctivitis, blepharitis are mainly caused by lack of vitamin A. Provitamin A (carotene) is abundant in plants, especially in their green leaves, vitamin A is abundant in animal and fish liver, and fish oil.

Thiamine (vitamin B1) is included in many food products. It is found in legumes, meat, fish and mainly in the husk and husk (bran) of grain. Thiamine is important in carbohydrate metabolism in the body; if the food is rich in carbohydrates, more thiamine is required for their absorption. Without thiamine, polyneuritis occurs. If this vitamin is absent or lacking in the body, a serious disease of the nervous system - beri-beri appears, as well as the peristalsis of intestinal vitamin B packaging is weakened, constipation, muscle relaxation, and a decrease in physical and mental work capacity are observed.

Riboflavin (vitamin B2) participates in the growth process and is one of the growth factors. Participates in protein, fat and carbohydrate metabolism. Adjusts the state of the central nervous system, affects the metabolism of the eyeball, helps to perceive light and distinguish colors. Riboflavin enters the body with food, and if there is a lack of riboflavin in food, the corners of the mouth, lips crack (see Lip cleft), hair loss, and conjunctivitis are observed. Vitamin B2 is mainly found in animal products - eggs, cheese, milk, meat, and grains and legumes.





Pyridoxine (vitamin B6) is found in many plant and animal products: yeast, wheat germ, liver, fish, beef and legumes. It plays an important role in nitrogen metabolism, ensuring normal digestion of protein and fat. If there is a lack of pyridoxine in the body, children will not grow, the work of the gastrointestinal tract will be disturbed, and anemia will occur. Stomatitis, skin inflammation, irritability, insomnia are observed in pregnant women. The necessary amount of pyridoxine for the human body is produced by intestinal bacteria.

Nicotinamide, nicotinic acid (vitamin PP) participates in the respiration of cells, protein metabolism, accelerates the digestion of plant proteins in the body, normalizes the secretion and movement of the stomach, improves the composition of the secretion and juice produced by the pancreas, and stabilizes the work of the liver. Pellagra disease occurs when the body lacks nicotinic acid. Nicotinic acid is abundant in poultry, beef, liver, kidney, yeast, rice bran, and wheat bran.

Folic acid participates in the metabolism and synthesis of some amino acids, as well as in the synthesis of nucleic acids, enhances the bone marrow's blood-forming function, and helps in the better absorption of vitamin B12. Folic acid is abundant in plant and animal products, especially liver, kidney, and leafy greens. Intestinal microorganisms synthesize folic acid in large quantities.

Cyanocobalamin is a highly biologically active substance. Methionine participates in the synthesis of nucleic acids and blood formation. It enters the body with food, if it is not enough in the body, anemia occurs. Cyanocobalamin is especially abundant in beef liver. It is widely used in medicine, livestock and poultry farming.

Ascorbic acid (vitamin C) is important in metabolism, in the assimilation of connective tissues, in maintaining and restoring these tissues in a normal state. If there is a lack of vitamin C in the body, the structure of bones and joints is damaged, scurvy occurs. Ascorbic acid is not produced or accumulated in the body. Vitamin C is found in vegetables and fruits. Ascorbic acid is part of various multivitamin preparations.

Calciferol (vitamin D) affects the mineral exchange of substances and bone formation. It is especially necessary during the period of rapid growth and ossification of the skeleton of young children. It also protects the teeth. Lack of vitamin D in the body causes rickets. Vitamin D is synthesized under the influence of sunlight, and fish oil is a source of calciferol. In addition, it is abundant in milk, cottage cheese, butter, liver, and egg yolk.





Tocopherol (vitamin E, vitamin of reproduction) strengthens the activity of muscles and gonads, in internal organs, all fat-soluble vitamins help to accumulate, especially retinol. The green part of the plants and the oil extracted from them (for example, in sunflower oil) are abundant.

Phylloquinone (vitamin K) is one of the main factors of blood clotting. Bleeding from various organs (nose, gums, gastrointestinal tract, etc.) is observed when the body lacks vitamin K. Phylloquinone is found in the green part of lettuce, cabbage, spinach, and nettle. In addition to the above-mentioned V., there are other biologically active substances (vitamin-like compounds) necessary for the body. These include bioflavonoids, choline, inositol, lipoate, orot, pangamate, paraaminobenzoate acids, etc. substances are included.

RESULTS

A person can eat various things in his daily life. It contains various substances and vitamins. Vitamins A, B, B1, B2, B6, B12, C, D, PP, K are extremely necessary for the human body. Their influence plays a very important role in the functioning of the human body. If one of these vitamins is lacking, the conditions for the emergence of various diseases are created in the human body. By studying vitamins, we will learn what kind of products the body needs vitamins and what vitamins are produced by the body and their importance.

DISCUSSION

Fruits, vegetables and other ingredients lose vitamins when they are stored and cooked improperly. The most unstable of vitamins is ascorbic acid, which is destroyed by the sun, hot and humid air. When cooking, in order to preserve vitamins, especially ascorbic acid, vegetables should be quickly wiped, washed, cut, put in boiling water, and the lid of the pot should be closed. Vitamin preparations are available in pharmacies, but because of their strong biological effect, vitamins should be taken only on the advice of a doctor.

CONCLUSION

In order to ensure that all vitamins in the human body are in their norm, it is necessary to consume enough delicacies in four seasons of the year. If we do that, we will keep our body healthy.

When the human body lacks the above-mentioned vitamins, various negative changes can occur. These include falling nails, frequent rashes on the neck, and sores on the face. In these diseases, it is recommended to use more walnut, sunflower, hemp oil.

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