

3. Foods to prevent premature aging

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Introduction. In the elderly there is a decrease in the intensity of metabolic processes and a decrease in the use of fats as the main energy material. With age for the course of optimal metabolism is important not only the absolute content in the diet of various nutrients, but also their ratio.

Materials and methods. The amount of protein for older age groups should be reduced. Carbohydrates should be consumed a little more, but mainly due to complex. Due to functional age changes, the absorption of trace elements such as vanadium (participation in lipid metabolism), nickel (participation in metabolism and membrane structure, ability to stabilize RNA and DNA), molybdenum (muscle metabolism), cobalt (deficiency is accompanied by anemia), fluorine (involved in calcium metabolism).

Results. The ratio of proteins, fats and carbohydrates 1: 0.8: 3.5 is most consistent with the age characteristics of the elderly. Alkaline diet helps to correct acidotic features of homeostasis, as 30% of older people develop compensated metabolic acidosis. To correct it, food must have alkaline properties (beets, carrots, tomatoes, cucumbers, apples, oranges), and contain dairy products rich in calcium. Acidification of the internal environment of the body contributes to the high content of protein, animal fats, carbohydrates give an alkaline effect.

As you age, the intestines begin to be dominated by putrefactive microflora, which is harmful to the body - there is intoxication with the products of life. The normal intestinal microflora largely determines the vitamin supply of the body. Aerobic microflora synthesizes vitamins K, B₂, B₆, B₁₂, H, pantothenic and folic acid, promotes the excretion of cholesterol, its metabolites from the body, increases its immune defenses; forming short-chain fatty acids, makes a contribution to the body's energy supply. It is in old age that the role of normal intestinal microflora in the optimization of metabolic processes is increased.

Normalize the intestinal microflora fermented milk products, the active factor of which is lactic acid, which creates favorable conditions for the growth of lactic acid bacteria, as well as the microflora of these products, which displaces putrefactive in the case of prolonged and continuous use. Dietary fiber is also important, which is the main substrate for the normal life of the intestinal microflora. Excessive consumption of protein-rich foods, especially meat, promotes the development of putrefactive microflora.

Food should be enriched with food geroprotectors - substances that inhibit the aging process and increase life expectancy. Alimentary effects that increase life expectancy include reduced protein intake, fat, tryptophan deficiency, a diet with a predominance of alkaline products, antioxidants.

Food geroprotectors with antioxidant properties are amino acids (methionine, cysteine, glutamic acid); trace elements (magnesium, manganese, copper, zinc, selenium); vitamins (groups B, P, K, A, E, ascorbic acid); substances of plant origin (flavonoids, polyphenols of aromatic herbs, tannins, lactic acid, beet dye - betanidine, etc.). Antioxidant properties have products mainly of plant origin: beans, sweet peppers, turnips, potatoes, tomatoes, cucumbers, celery, onions, cows, peas, chicory, fruit juices.

Conclusions. Almost all long-lived people have a negative attitude towards sausages, canned meat and smoked products. They eat a lot of red pepper and a variety of vegetables and fruits, use very little table salt and consume relatively many grape wines.