

STRUCTURE OF E-FOOD SUPPLEMENT AND ITS PROPERTIES

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ABSTRACT

This article discusses the compounds of nutrients E and their chemical composition. It also provides information about the beneficial and harmful properties of E. Another potent additive is E 952 - cyclamic acid and its sodium, potassium and calcium salts. It includes sweets, sodas, confectionery, chewing gum, sauces, dairy products, breads and baked goods, and more. As a result, about five hundred different additives are used in the food industry today, and the number of them mixed is many times greater.

KEYWORDS: *Food Coloring, Sulfur Dioxide, Tartrazine, Carcinogenicity, Allergic Reaction, Prohibited Additives.*

INTRODUCTION

We know that today scientific and technological progress gives us incomparable opportunities. At the same time, among other things, the reforms taking place in the world and in our country are taking place during the development of science and development. A person deliberately ignores the conditions created by nature for a healthy lifestyle. In the modern world, a rapidly developing industry has been created for storing food, increasing shelf life, processing and significantly changing everything that people have grown by their own labor or received from nature. That is, canning, flavoring, coloring, changing the taste of products, increasing the amount of flavoring substances.

In the 50s of the last century, the industrial production of sodium glutamate was launched. Initially, it was added to low-quality products and minced meat, which lost its original taste and was repeatedly subjected to prolonged freezing. Later, fish, chicken and meat products, canned food, sausages, soups, bouillon cubes, chips, fast food, convenience foods were added. These preservatives originally consisted of salt, sugar, and vinegar. Asian vegetables and tropical fruits such as turmeric and saffron root were used as dyes. Also, preservatives E 200-299 currently protect the product from microbes and fungi, extend its shelf life, and E 300-399 serve to protect products from oxidation. E 400-499 also provides a normal consistency of the product, while thickening additives increase their viscosity, and nutritional additives such as E 500-599 are made from two different liquids that do not absorb into each other, such as water and oil. similar mixture. In addition, E 250, a compound called sodium nitrate used in the meat and sausage industry, has been shown to prevent the development of a dangerous disease - botulism, although less safely. Another potent additive is E 952 - cyclamic acid and its sodium, potassium and calcium salts. It includes sweets, sodas, confectionery, chewing gum, sauces, dairy products, breads and baked goods, and more. Sodium cyclamate is a synthetic sugar substitute. It is thirty

times sweeter than its "friend" - sugar beets, and in combination with other artificial substances - even fifty times more. The component does not contain calories, therefore it does not affect the glucose in the human blood, does not lead to the appearance of extra pounds. The substance dissolves well in liquid, has no smell. Therefore, they were excluded from the production of sugar on the spot, and it turned out to be a strong carcinogen. E 120 - carminic acid (currently this work is harmful, but doctors strongly recommend avoiding it) Nutrient compounds E 124, E 127 and E 129 are strong carcinogens, so red food colors may be banned in a number of countries. These also include E 155 (brown dye) and E 180 (ruby ritol). In addition, E 220 - sulfur dioxide - should be used with caution in people with renal insufficiency. E 102, i.e. tartrazine causes asthma attacks and is also banned in several countries. Yellow dye E 110 should be added to the number of prohibited additives, as it provokes an allergic reaction and negatively affects the activity of the intestines and stomach.

Food additives are synthetic chemicals or natural substances that are never spontaneously consumed, but only add taste, texture, color, smell, shelf life, external to food, introduced to impart certain qualities, such as appearance. Recently, much has been said about the expediency of their use and its effect on the body. An example of this is the use of sodium nitrate in the food industry. Industrial use of sodium nitrite In 1906, its positive properties in the production of meat products were revealed and it was first approved as a food additive. Sodium nitrite is highly toxic. The lethal dose for humans ranges from 2 to 6 grams, depending on body composition. Improper use of food additive E 250 in the production of food from meat or fish can lead to serious poisoning, so sodium nitrite is used in combination with table salt.

Scientists came to this conclusion after analyzing all available studies and publications on the use of the E 250 additive, as well as more than a century of experience in the use of sodium nitrite in the food industry. Sodium nitrite is an important food additive for the meat industry. However, this does not mean that foods containing nitrites and nitrates should be completely excluded from the diet (these substances are found in small quantities in tomatoes, potatoes and many other vegetables and fruits), the addition of E 250 additive gives them a more juicy taste. red color gives Sodium nitrate E 251 gives sausages and meat products a characteristic "meat color". Food preservative E 251 sodium nitrate is used as a color stabilizer or dye. In addition, food preservative E 251 sodium nitrate can cause dysbacteriosis, cholecystitis, and severe allergic reactions. However, at present, no type of sausage can be made without sodium nitrate in its chemical composition, however, these food additives also have a beneficial effect on the human body.

Currently, it is often used to artificially improve the taste of foods and drinks, extend their shelf life and give them an attractive appearance. It is true that such additives have been widely used in the food industry for many years as preservatives and colorants.

Initially, such preservatives consisted of salt, sugar and the familiar vinegar. Today, with the development of the chemical and food industries, there are countless additional products that can be used in place of synthetic spices. According to industry insiders, it is impossible not to use such tools in the production of products with a long taste and attractive appearance. As a result, about five hundred different additives are used in the food industry today, and the number of them mixed is many times greater. The extent to which artificial ingredients or integral nutritional supplements affect the human body is currently one of the most pressing consumer

concerns. It is used in the production of long-term stored sausages, meat products and canned food. Compounds with codes E 231 and E 232 can cause tragedy on human skin. Additives for meat and confectionery. Dyes and preservatives with indices E 126 and E 127 disrupt the body's immune system, which fights diseases. As a result, the natural intestinal microflora is damaged, which leads to metabolic disorders, decreased liver function and, ultimately, to the development of oncological and cardiovascular diseases. Antioxidants with codes E 300 and E 399 slow down the oxidation process in oil-fat emulsions. As a result, the oils do not react and do not change color over time. Additional code E 311 can lead to allergies and asthma attacks. Additives E 320 and E 321 increase the level of cholesterol in the body.

E300 - ascorbic acid, it is also vitamin C, improves immunity, improves skin condition. E 320 - lecithin - supports the immune system, improves the quality of bile and blood formation processes. E 916 - Calcium-iodine is used to fortify foods with iodine. The most common dietary supplement, curcumin, or E 100, is a substance that helps control weight and is widely used by people who exercise regularly.

TABLE. 1 GENERAL INFORMATION ABOUT SOME COMPOUNDS

Recommended dietary supplements	Food supplements you can take	Food additives harmful to health
E101, E160, E182, E200, E270, E299, E300, E322, E399, E400, E499, E500, E599, E600, E699, E900, E916, E918, E999.	E102, E110, E120, E124, E127, E129, E155, E180, E220, E250, E323, E328, E365, E409, E418, E467, E480, E521, E535, E541, E622, E629, E640, E906, E926, E943a, E1001, E1105, E1503, E1521.	E103, E105, E121, E123, E125, E126, E130, E131, E142, E152, E171, E173, E210, E213, E217, E221, E226, E240, E311, E313, E320, E322, E330, E338, E341, E407, E447, E450, E461, E465, E466, E943b, E1000, E1504.

E 101 is a popular vitamin B2 that is known for its hemoglobin synthesis and is involved in metabolism. These include E 160-lycopene, which helps strengthen the immune system. E 270 is a powerful antioxidant widely used in pharmacology. Compound E 916, that is, calcium iodate, is also used to enrich the product with iodine. We must not forget about E 322-lecithin, because it is also widely used and used to increase immunity, enrich the blood with macro- and microelements.

Therefore, avoid bright, unnatural colors. They may contain many dyes and preservatives. Pay special attention to natural products, cereals and cereals, legumes, yogurt, as well as vegetables and fruits. Does not contain harmful and dangerous substances. To stay healthy for a long time, try to avoid foods containing harmful food additives - food additives "E".

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