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USE OF FOOD ADDITIVES IN SPECIALIZED FRUIT AND VEGETABLE FOODS FOR CHILD AND DIET FOOD

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Recently, the use of chemicals and natural compounds that prevent the deterioration of food and beverages or improve their quality and prolong their shelf life has become widespread in all countries. These substances usually do not have nutritional value, foreign to the human body, they are called food additives [1].

Food additives should not be detrimental to human health. In addition, it should be taken into account that they are consumed by people of any age throughout their lives. The term "food additives" refers mainly to foreign substances for the body and natural compounds that are not used alone as food. Recently, the use of the term "food additives" broken. food additives food industry technologists include those products that go beyond this definition. Thus, food additives are biologically active additives. It should be noted that substances and compounds that are added to foods for the purpose of enhancing their biological value (vitamins, amino acids, trace elements) are not considered as food additives. Various dietary additives that are added to a diet to enhance its therapeutic effect are also not considered as food additives [1, 2].

Different food industry produces a broad range of specialized products intended for children and diet. These products are designed for infants and children with certain diseases. The body of a sick child needs a specially selected diet, taking into account the physiological features and capabilities of the child's digestive apparatus.

Modern market research baby food show that in recent years the situation in the country in baby food area and provided child population corresponds to ation products are evaluated as unsatisfactory. Need children in different types of food products of domestic production at present satisfies is in the range of 9 to 54% depending on bridges from the main type used of raw materials.

Reaching the required level production of baby products supply satisfying the requirement of rational nutrition for children, only possible based on the% fundamental research in the field study of biological value raw materials, components, perfection technology and technology leadership [3].

Specialized products for infant and child nutrition are divided into six groups: infant formula adapted for infant formula, intended for mixed and artificial feeding of infants; dry cereal-based baby foods; liquid and pasty dairy products for young children; baby fruit and vegetable preserves (juices, mashed potatoes, mashed soups, etc.); baby specialties based on poultry and fish; specialized meat products.

In addition, more widespread with different biologically active food additives, which are used to enrich the diets of healthy and sick children.

Industrial production of specialized products helps to form the necessary assortment and composition of food products.

However, production of finished products, dishes and semi-finished products for children of the first three years of life has its technological and hygienic features. Specialized products for children and diet should be characterized by high nutritional and biological value, consistent with the biochemical, as well as anatomical and physiological and functional characteristics of the body [2].

Therefore, one of the most important hygienic features of the production of specialized products for baby and diet is the restriction of the use of dietary additives. The list of food additives authorized for the manufacture of baby food contains only a few names — pectin, citric acid, vanillin, etc., while other additives and flavors, except natural ones, are strictly forbidden [1-3].

The use of nutritional additives in mixtures for children of the first years of life is governed by the strict rules laid down in Directive 2009/39/EEC of 06.05.2009 on the approximation of the laws of the EU Member States relating to foodstuffs intended for special nutrition. The latter and infant feeding products and infants may contain HD such as gum arabic (E 414) and silicon dioxide (E 551). In this case, ready meals, which consist of such food, should not contain each of these substances more than 10 g / kg.

It is allowed to add E 421 (mannitol) as it acts as a base substance for Vitamin B12 (Vitamin B12: mannitol ratio should not exceed 1: 1000).

Special attention needs the use of food additives that affect the organoleptic properties of food (dyes, flavors, sweeteners), since the production of baby food products for their use is very limited. It is strictly forbidden the use of synthetic dyes. To provide attractive appearance and smell appropriate to use natural fruit concentrates and processed fruit and vegetables (extracts). For the manufacture of individual products, the use of vanillin and ethylvaniline is limited [2, 4].

Extraordinary attention in the manufacture of special and conventional baby food problem requires the use of sweeteners and sugar substitutes, especially for children under 3 years. Sugar substitutes are only allowed to be used in specialized baby foods when the baby's health is contraindicated in sugar consumption. It is necessary to take into account the fact that for children, not only the first three years of life, but also older simple and complex sugars are a necessary component of the diet.

Therefore, the use of sugar substitutes is undesirable because it is contrary to the basics of rational nutrition [2, 5]. It should be remembered that the metabolic rate of children is several times higher than in adults, so when calculating per unit body weight, children consume more carbohydrates and sugar.

References

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