# FUNCTIONAL FOOD PRODUCTS - A PROMISING DIRECTION OF NEW INNOVATIVE TECHNOLOGIES IN DIETARY

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Abstract. Improving the quality and safety assurance system food products is a priority state policy. This is evidenced by the President Sh.M. Mirziyoyev "Action strategy for five priority areas of development of the Republic of Uzbekistan in 2017-2021 (hereinafter referred to as the Action Strategy), which was the most important program document that determined the main directions public policy in the medium term. Durable legal foundation for large-scale reforms, accelerated economic and social development, welfare improvement of the people approved within the framework of the implementation of the Strategy more than 30 actions in the "Year of Dialogue with the People and Human Interests" laws and 900 by-laws, including the Decree of the President PD-No.5303 dated January 17, 2018 "On measures to further ensuring food security of the country". Currently, a set of measures is being implemented in the republic, aimed at developing the food industry and increasing production of domestic food products.

*Keywords:* functional, food, product, promising, direction, new, innovative, technologies, dietary.

**Relevance.** Due In recent years, the quality of nutrition has improved significantly population, the structure of food consumption has changed, the average per capita consumption of meat and meat products increased by 1.3 times, milk and dairy products - 1.6 times, eggs -2.2 times, vegetables - 2.6 times, potatoes - 1.7 times, fruits - 4.0 times. Improving the structure and diet, among others factors that have a positive impact on health outcomes population. Over the past 10 years, the proportion of children with reduced body weight decreased by more than two times (from 4% to 1.8%), decreased by 2.5 times the incidence of anemia in women. Average duration life of the population of Uzbekistan increased by 6.5 years (from 67 to 73.5 years), and the average life expectancy of women is up to 75.8 years. However, positive economic transformation and rapid urbanization with the accompanying changes in the way of life of the population led to increase in the level of diseases associated with irrational nutrition, typical for all economically developed countries. Improving the structure and diet, among others. The World Health Organization has identified these diseases in a separate group of noncommunicable diseases. One of the achievements the end of the twentieth century is the development of a fundamentally new concept "functional nutrition", affecting many fundamental and applied aspects of human health, hygiene, nutrition, nutriology and biotechnology. Under the concept of functional nutrition in now understand such foodstuffs, which, when inclusion in the diet provide the human body not so much energy and plastic material, How many control and modulate (optimize) specific physiological functions, biochemical and behavioral reactions, promote health, reduce the risk of diseases and accelerate

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the healing process [1,2]. Recently, thanks to the development of biochemistry and molecular biology, it became possible to study nutrition at the level of cells and subcellular structures and numerous studies have proven that food, as well as medicines, can have a directed impact on the functioning of systems and organs of the human body. As a result, the food industry and nutritionists offer functional food products. Under the concept of functional nutrition at present understand such food products that, when included in the food diet provide the human body not only with energy and plastic material, how much control and modulate (optimize) specific physiological functions, biochemical and behavioral responses, contribute to the maintenance of health, reduce the risk of disease and speed up the process recovery [3]. The idea of creating functional foods originated in 1989 in Japan. In the same year in the Land of the Rising sun, a law was passed to improve nutrition. He is just was based on the concept of creating functional products - in other words, food (natural, not dietary supplements, tablets or powders), which would perform not only nutritional functions, but also healing, which could be an alternative medical methods of treatment. To the first list of products alternative food included about 600 items. In this connection, there is a need to promote products healthy nutrition according to new innovative technologies adopted in currently used as functional foods. Based on the foregoing, the aim of the study was to analyze functional properties of the most common local food products and formulating production and use functional food products. The informational analytical technology for studying interoperability and enrichment of the nutritional and pharmaco dynamic part components of various food products. According to the results of the research, it was revealed that the following products mutually compatible in the composition of organic acids and can be enriched with biologically active elements: Vegetable sauces per 1.0 1 (for clinics, canteens for dietary nutrition and in trade with the inscription on the packaging "Products "Functional nutrition":

- sweet pepper 1 red) fresh-200 gr

- fresh dill-50 gr

- parsley greens,

- celery-50 gr

-potato starch-5 gr

- extracts of biologically active substances.

Functional properties of the composition: the fruits of sweet pepper are richly vitamins C, B1, B2, B9, P, PP carotene. Dill greens contain vitamin C, carotene, vitamin B, nicotinic and folic acids, and also many valuable trace elements, such as calcium salts, potassium, iron, phosphorus. Parsley. According to the content of ascorbic acid superior to many fruits and vegetables. In 100 g of young green shoots parsley contains about two daily values of vitamin C. This almost 4 times more than in a lemon. Parsley contains a lot the amount of keratin, and according to this indicator is not inferior to carrots. It is important that 100 g of parsley contains two daily norms. provitamin A. Parsley is rich in B vitamins, folic acid, as well as salts of potassium, magnesium and iron, enzymatic substances. Parsley also contains inulin, which regulates exchange of glucose in the blood. Celery is rich in minerals Potassium (430mg), Calcium (72mg), Magnesium (50mg), Phosphorus (77mg), Iron (1.3 mg). Essential oil found in roots and stems celery, stimulates the secretion of gastric juice. Such a community vegetables contributes to the possibility of their use for weakened patients with diabetes mellitus, cardiovascular diseases suffering from arthritis, rheumatism and gout. In addition, it is generally

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known that parsley is useful for diseases. Kidneys, gastritis and peptic ulcer, as well as any inflammatory processes and impaired vision. Dill, parsley and celery equally often used in European, and in American, and in African and Oriental cuisines. Suggested combination for analytical research data has useful properties, necessary for oxygen exchange and maintenance of normal functions of the brain, adrenal and thyroid glands.

**Conclusions.** Studies of functional properties, the most common in the diets of local food products (cereals, dried fruits, dried vegetables and berries) to allow the development of the most optimal recipes for healthy and diet food. Products included in the functional nutrition system, must meet the following requirements: be harmless (not have side effects, do not cause an allergic reaction); keep organoleptic properties i.e. maintain natural taste, aroma; have pronounced dietary properties, replenish lack of certain elements necessary to maintain health or recovery, to prevent the occurrence of disease. Further biological research is needed usefulness, digestibility, metabolism, efficiency of new species functional food products by ability immunomodeling and antianemic properties.

## REFERENCES

- 1. Baturin A.K. Nutritional status and ways to optimize it. Federal and regional aspects // Materials of the All-Russian scientific-practical conference "Healthy nutrition healthy nation". M., 2009. volume 2. P. 89-90.
- 2. Ancheva I. A. Functional nutrition during pregnancy: scientific publication / I. A. Ancheva // Food Issues. M., 2016. Volume 85 N4. P. 22-28.
- Bazarnova Yu. G., Ivanchenko O.B. Composition study biologically active substances of wild plant extracts: scientific publication// Nutritional Issues. - M., 2016. - Volume 85 N5. - P.100-107.