УДК 637.52:[633/635+637.131]-028.76 Biriuk¹ Y.V., Kushnir¹ A.O., undergraduates, Cherniushok¹ O.A., Ph. D., Cherniushok² L.Y.

¹National University of Food Technologies, (NUFT), Kyiv, Ukraine

²National Linguistic University Kyiv(KNLU)

34. USE OF NON-TRADITIONAL VEGETABLE AND DAIRY RAW MATERIALS IN THE TECHNOLOGY OF MEAT PRODUCTS

Introduction. Due to military events in the country, environmental conditions, and psycho-emotional stress, the population is increasingly suffering from protein, mineral, and vitamin deficiencies. All of this negatively affects people's health and work capacity [1]. One of the ways to solve this problem is to find new sources of dietary protein and develop ways to use it to enrich consumer food products.

Relevance of the topic. In times of martial law, disease epidemics, and constant stress, providing the population with food is one of the most important tasks. Food should not only satisfy physiological needs and serve as energy for the body, but also have a preventive and treatment effect. That is why the production of general and special purpose food products using biologically active substances and the promotion of rational nutrition habits among the population are of great importance.

Materials and methods. Modern scientific results of food industry research are used in the article.

Results and discussion. An effective way to improve the health of the population is to use natural regulators of the functions of organs and body systems. Demineralized whey powder enriched with Magnesium and Manganese has a high content of protein, vitamins and trace elements. The importance of Mg in vital activity is manifested in the fact that it is a universal regulator of biochemical and physiological processes in the body, participating in various metabolic processes. Manganese plays an important role in ensuring numerous reactions of intermediate and intracellular metabolism Oat flour is a complete product in terms of amino acid composition, the closest to valuable muscle protein. Sprouted oat grains rank first among cereals in terms of macro- and microelements. They are high in potassium, calcium, magnesium, iron, copper, and zinc.

When vegetable and milk proteins are added to minced meat, the moisture holding capacity (MHC) and fat holding capacity (FHC), as well as the stability of minced meat during heat treatment, increase in production volume while reducing the consumption of meat raw materials, stabilization of quality and increase in nutritional value of the product, and reduction in the cost of the finished product are adjusted [2].

Conclusion. The prospects for the use of enriched vegetable and dairy raw materials in the technology of production of chopped meat semi-finished products are analytically investigated. It is established that the introduction of such raw materials allows to improve the functional and technological properties of meat systems and to provide products with useful properties.

Literature

- 1. Novikova, N. V., Yefymova, A. L., & Antonova, D. S. (2023). Development of technology for the production of semi-finished meat products using vegetable raw materials. *Taurida Scientific Herald*. *Series: Engineering science*, (1), 89-95.
- 2. Cherniushok O.A., Biriuk Y.V. Use of oat flour and dry demineralized whey fortified with magnesium and manganese in the technology of chopped semi-finished products / Innovative technologies and prospects for the development of the meat processing industry: Program and abstracts of the III International Scientific and Practical Conference, October 18, 2022, NUFT, 2022 p. 164