

FOOD SECURITY FOR UKRAINIANS DURING THE ARMED CONFLICT

Liudmyla Nikolaevna PYLYPENKO¹, ORCID: 0000-0003-4259-2991

Yakov Grigorovich VERKHIVKER^{2*}, ORCID: 0000-0002-2563-4419

Antonina Viktorovna IEGOROVA^{3*}, ORCID: 0000-0002-3122-7692

¹*Odessa National University of Technology, Biochemistry, Microbiology and Nutrition Physiology Department, Odessa, Ukraine*

²*Odessa National University of Technology, Department of Commodity Science and Customs, Odessa, Ukraine*

³*Odessa National University of Technology, Biochemistry, Microbiology and Nutrition Physiology Department, Odessa, Ukraine*

*Corresponding author: Yakov Verkhivker, email: yaverkhivker@gmail.com

Recently, nutritional security has moved to the forefront of the pressing issues of nutritional science due to the global deterioration of environmental conditions. Of particular relevance at the present time, it has become for Ukraine, due to the active armed conflict lasting for half a year. Organization of food supply for the conflict participants and temporarily displaced children and adults requires urgent development of a special range of products. These products must be packed in easy-to-use packages. In addition, the nutrient composition of these products must have elevated health-recovering capabilities.

Therefore, the purpose of the work was to participate in the development of new types of products of increased nutritional value packed in containers convenient for consumers, ensuring compliance of products with sanitary and hygienic standards and inclusion of specialized products and metabolically oriented complexes in the diet.

An analytical review and experimental studies have been conducted to analyze the nutritional value of many types of raw materials. The nutritional density of their calories was established. Taking into account the achievements and recommendations of nutrition science, the use of modern methods of preserving the nutritional value of vegetable and animal raw materials during its technological processing is reasonable.

The developed types of canned products are to be packed in retort pouches of different capacities. Heat treatment regimens have been developed for them using modern sterilizing equipment. A complex of chemical-technological and microbiological studies of the developed range of canned products was carried out. The results of determining the residual microbiota showed the commercial sterility and microbiological stability of these canned products, and also confirmed their high quality. The general safety of these products was also confirmed by biotesting.

Thus, the new types of canned products have a balanced nutritional composition and health-recovering capabilities and meet requirements for safe nutrition of Ukrainians during the armed conflict.

Keywords: health-recovering capabilities, microbiological stability, new canned products, nutritional density of calories.