PROSPECTS FOR THE USE OF SODIUM ALGINATE IN THE TECHNOLOGY OF RESTRUCTURED MEAT SEMI-FINISHED PRODUCTS

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Розглянуто та доведено перспективність використання альгінату натрію в технології реструктурованих м'ясних напівфабрикатів, розроблено рецептурний склад та технологічних процес виробництва нової продукції, визначені її основні показники якості.

The key point in the efficiency of the functioning of enterprises is the use and implementation of resource-saving and competitive technologies. In addition, the rapid increase in the number of people who use ready-made meals and semi-finished products with a high degree of readiness determine the prerequisites for the creation of fast-cooking products. This served as an impetus for the emergence and development of new directions in the technology of processing raw meat. The main one of them was the production of minced meat and the production of various products from it, including structured ones. Interest in such products is constantly growing all over the world. That is why the technology for the production of structured meat semi-finished products is promising and relevant in light of the changes taking place in the raw material base of the meat processing industry.

Important in the technology of structured products is the formation of structural integrity, which is realized by selecting a structure former and a method of structuring. After getting acquainted with the market of gelling agents, as well as with their main physic-chemical and functional-technological properties, it should be noted that each gelling agent has its own specifics, as well as many positive and negative moments in the structure formation process itself. Polysaccharide sodium alginate, which has high functional and technological properties, and is also a natural complexing agent with radioprotective and detoxifying properties, was chosen as a structure former in the technology of restructured semi-finished products.

The use of sodium alginate in concentrations of 0.5...3.0% has been tested experimentally. The obtained data indicate that the most optimal is the use of alginate in the amount of 2.0%. At the same time, the obtained product is characterized by the desired values of structural and mechanical indicators: elasticity, plasticity, resilience. It was experimentally established that an increase in the content of polysaccharide contributes to the deterioration of the consistency of the product, and a decrease does not lead to the desired effect.

The results of the expert evaluation indicate that this technological development is promising and requires further development in order to study the main physic-chemical, microbiological indicators of the product, its nutritional value, substantiation of storage conditions and terms.