4. Theoretical justification of the usage of structure-forming compositions in the technology of meat- containing chopped semi-finished products

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Introduction. The topic of the research is "The use of structure-forming compositions in the technology of meat-intensive chopped semi-finished products". Development of mixtures, concepts, improvement of technologies and production processes of meat-containing and vegetarian semi-finished products is the main goal of the dissertation research. In addition, the study of organoleptic, physicochemical and technological characteristics of new products is an indispensable component of the dissertation research.

The latest technologies provide for the effective use of raw materials, and new structure-forming compositions are being developed for this purpose.

Topicality of research. Modern technologies for the production of semi-finished products involve the use of various food compounds that improve the organoleptic, structural-mechanical and physicochemical characteristics of the finished product. Functional mixtures, dietary fibers, proteins, stabilizing mixtures are used for this purpose. All these ingredients are able to modify and control the rheological properties of minced meat systems by binding a significant amount of moisture and at the same time reduce the cost of the finished product, giving it optimal organoleptic characteristics and texture: from liquid, paste-like to gel-like, elastic or brittle. This determines the wide use of this type of functional components in the meat industry and the prospects of scientific research in this direction.

The object of research. The technology for the production of semi-finished products with the use of structure-forming compositions provides:

- analysis of the market of semi-finished products;
- selection of ingredients to create mixtures with certain functional properties;
- justification of the use of mixtures;
- improvement of recipes and production process;
- assessment of the effect of the mixture on the finished product;
- developing normative documents;
- mixture testing and industrial testing at the production site.

Subject of research. A mixture of fibers, vegetable proteins, as well as some types of hydrocolloids. Minced meat Organoleptic, physical and chemical parameters of samples of semi-finished products.

Methods of projected research.

- methods of determining the general chemical composition, organoleptic characteristics (taste, smell, consistency, appearance);
- study of functional and technological indicators;
- mathematical processing of results.

Conclusions. Practical application of dissertation research. The results of the dissertation research will be used in the creation of functional compounds based on fibers, plant proteins, as well as some types of hydrocolloids, to make new semi-finished products.

References.

1. Elleuch, M.; Bedigian, D.; Roiseux, O.; Besbes, S.; Blecker, C.; Attia, H. Dietary Fibre and Fibre-Rich By-Products of Food Processing: Characterisation, Technological Functionality and Commercial Applications: A Review. *Food Chemistry*, 2011, pp 411-421.