The stability of the production and economic state of the meat industry enterprises, their ability to operate in the conditions of competition are largely determined by the quality level of their products and its value. On the base of Ukrainian market of meat products analyzing, it is possible to make conclusion that emulsion type products occupy 60–70% of the market volume.

The implementation of technological solutions for the production of food products with the addition of emulsifiers and stabilizers is one of the effective ways of ensuring the stability of meat emulsion systems. Modern resource-saving meat products technologies provide using of various food additives which improve the organoleptic, structural and mechanical, physicochemical indices of finished food products. For this purpose, hydrocolloids are actively used along with phosphates and emulsifiers; hydrocolloids are food additives which include wide range of substances which can improve the structural and mechanical indices of products. These ingredients act as thickeners, gel formers, structure stabilizers. Due to the fact that the use of hydrocolloids separately does not provide wide range of properties, we plan to consider the synergism, the effects of various hydrocolloids during combined use.

One of the priority ways of stabilization and improvement of functional and technological properties of the initial meat raw material is the use of polyfunctional additives which contain the phosphate part, hydrocolloids complexes, vegetable and animal proteins. A wide nomenclature series of these mixtures is formed both by different producers and brands within the limits of one producer. All above-mentioned stipulates the necessity of grounded production of the most effective mixtures with taking into account their composition, functional and technological properties and their action in particular technological process. Hydrocolloids mixture use allows changing the functional and technological properties of emulsion systems, producing products with low caloric content, while it improves the organoleptic, structural and mechanical properties and increases the moisture-retaining property of the emulsion type products.

During the research, the penetration degree of various types of hydrocolloids model compositions gels which are used in the production technological process of emulsion type meat products was analyzed. The obtained data allow recommending the use of vegetable origin hydrocolloids in the composition of complex mixtures for the emulsion meat products production.

Keywords: hydrocolloids, prickling, proteins, polysaccharides, mixtures, functional properties.