Functional food products intended for the systematic use in composition of food rations by all age groups of healthy population belong to the new generations of food products that have emerged as a result of the fundamental research development in number of science fields. Such products reduce the risk development of many diseases associated with nutrition, preserve and improve the health due to the presence of biologically active functional food ingredients in their composition. For the emulsion fat products (such as mayonnaise, sauces, spreads), the spectrum of physiologically functional ingredients which is enriched is greatly expanded due to the presence of fat and water phases.

Therefore, the research aimed at the technologies development and functional emulsion fat products range extension enriched with physiologically important components is actual and relevant. The purpose of the article was to study the emulsifying characteristics of additives from hydrobionts. As an object of study, it has been chosen the parameter of the emulsifying ability of additives of hydrobionts of vegetable and animal origin. The emulsifying ability of additives was evaluated by the phase inversion point determination. The obtained data indicate that the additives of hydrobionts of vegetable origin manifest in the interval from 1 to 10% of the emulsifying properties. Additives of both types of kelp show the greatest emulsifying properties in the concentration range 3–5% for which the phase inversion point are Laminariae thalli (laminaria saccharina) and Alga Kombu (laminaria japonica), respectively, 18,5–21,5 points) and 27,3–28,2 points. Additive Cystoseira barbata doesn’t inferior to emulsifying properties of laminaria additives, but its optimal concentration is in the range of 6–8%, which corresponds to 27,8–28,1 points. High results (46,5–48,1 units) in the concentration range of 7–9% show the samples of duckweed (Lemna minor).

According to the obtained data, the emulsifying characteristics of the additives of animal additives is 1,5–2,5 times higher than those of vegetable origin. In the range of collagen concentrations 1,0–4,0%, there is a gradual increase of the emulsifying capacity; at collagen concentration 4,0–8,0%, the emulsifying ability is maximum (38,7–41,6 units). Hydrolyzate from mollusks shows the maximum emulsifying ability in the range of 6–9% and it is 52,5–54,1 points. The perspective of further researches is emulsions stability determination with additives of hydrobionts with the purpose of further development of the emulsion systems of food products with their use.

**Keywords:** emulsion, hydrobionts, phase inversion point, fat products, algae.