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## **PROSPECTS OF USING NON-TRADITIONAL VEGETABLE RAW MATERIALS FOR THE DEVELOPMENT OF POLYCOMPONENT FISH PRODUCTS**

The current state of the diet of the population of Ukraine is characterized by a shortage of many indispensable component of nutrition. One way to solve this problem is to create food products based on raw materials of animal and plant origin. The development of multicomponent fish products with the set consumer properties and the balanced nutrient structure is actual.

The aim of the work is to substantiate the nutritional and biological value of non-traditional raw materials of plant origin – quinoa cereals and clover flakes as ingredients in the recipe of fish culinary products.

Quinoa cereal is considered one of the most valuable products in the world. It contains more protein than buckwheat, pearl barley or oatmeal. Some varieties contain up to 19–20% protein. Quinoa proteins have a high biological value. They are easily digested and are not inferior to proteins of animal origin [1]. 100 g of cereals contain 57.2 g of carbohydrates, their glycemic index varies between 35 and 53, they are more slowly digested, absorbed and metabolized, so they cause less and slower rise in blood sugar and insulin levels. Another advantage of the chemical composition of cereals are dietary fiber – their content is 11–16% [2].

Clover flakes contain the following main active ingredients: vitamins B<sub>1</sub>, B<sub>3</sub>, E, C; mineral elements such as calcium, iron, cobalt, zinc;

polysaccharides and flavones that improve liver detoxification function; saponins and fatty acids that normalize lipid metabolism in the liver, preventing its fatty degeneration; isoflavones, which have a hormone-like effect [3].

Clover leaves Used for salads, soups, vegetarian cutlets [3].

In the traditional recipe, fish meatballs are wheat bread, which is added in an amount of 6.5 %, which, in our opinion, reduces their taste characteristics and nutritional value. RESEARCH has proven the feasibility of modifying the traditional recipe to improve organoleptic characteristics and improve the biological value of meatballs by introducing ingredients of plant origin, namely quinoa cereals and clover flakes. The optimal content of quinoa groats and clover flakes in the recipe of the new recipe of fish meatballs is established.

Thus, the possibility of using quinoa groats and clover flakes in the recipe of fish culinary products to improve the organoleptic properties and increase the biological value of the products is justified.

*Key words:* quinoa groats, clover flakes, polycomponent fish products.

### **List of sources used**

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