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**50. PROSPECTS OF USING ERENGI MUSHROOMS  
IN THE TECHNOLOGY OF CUT SEMI-FINISHED PRODUCTS**

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Eryngii mushrooms (*Pleurotus eryngii*), also known as royal oyster mushrooms, have attracted considerable attention in the food industry in recent years due to their

high nutritional properties, pronounced taste characteristics and versatility in culinary use. They have a dense texture that feels like meat, making them a promising raw material for creating new types of vegetable or combined chopped semi-finished products.

The chemical composition of erengi is characterized by a high content of protein (18–25% in terms of dry matter), essential amino acids, dietary fiber and biologically active components - polysaccharides, antioxidants, B vitamins. The presence of beta-glucans makes these mushrooms not only nutritious, but also functionally valuable, since they can exhibit immunomodulatory and antioxidant properties. In combination with low calorie content, erengi act as an attractive ingredient for creating dietary and health products.

One of the key reasons for the interest of erengi in the production of chopped semi-finished products is their ability to form a dense and juicy structure of the product. Due to the high content of natural fibers and structural polysaccharides, mushrooms retain moisture well, which has a positive effect on the juiciness and consistency of minced meat. When added to meat and combined recipes, erengi can partially replace meat raw materials, reducing the cost of production without losing organoleptic characteristics. The technological properties of erenga also contribute to improving emulsification and water-holding capacity in chopped semi-finished products. Chopped mushrooms are able to be evenly distributed in the minced mass, contributing to the stabilization of the structure and reducing mass losses during heat treatment. This is an important factor in the production of cutlets, meatballs, rolls and other semi-finished products, where the uniformity and stability of the structure determine the quality of the final product.

The growing demand for alternative protein products is also driving interest in using erengi mushrooms in vegetarian recipes. Due to their natural fiber content, erengi can act as the main shaping ingredient in vegetable mincemeat, replacing textured vegetable protein or reducing the need for stabilizers and thickeners. The use of mushrooms allows for the creation of cleaner products that meet the current clean label trend. Another advantage of erengi is their pronounced taste, which can enhance the taste characteristics of semi-finished products without the need for additional use of

flavor enhancers. This makes it possible to reduce the amount of salt in the recipe and improve the nutritional value of the product. This is especially relevant for dietary nutrition, where taste balance and safety are key.

From an economic point of view, the use of erengi in the production of chopped semi-finished products opens up the prospect of reducing the cost of the finished product and increasing profitability. Mushrooms have a stable harvest throughout the year, are grown on inexpensive substrates and are characterized by a high yield of marketable products. This makes them an attractive raw material for large-scale industrial production.

Therefore, erengi mushrooms have significant potential for introduction into the technology of minced semi-finished products. Their nutritional, functional and technological properties allow creating innovative high-quality products focused on modern consumer requirements: naturalness, usefulness and diversity. Further research can be aimed at optimizing recipes, determining optimal dosages, studying the influence of pre-treatment of mushrooms on the textural characteristics of minced meat and developing new types of combined or vegetable semi-finished products.

### **References**

1. Y.A. Yastreba, V.M. Pasichny. Research on the biological value of powdered semi-finished product from oyster mushrooms. Scientific Bulletin of the S.Z. Gzhytskyi LNUVMBT Vol. 12 No. 2(44) Part 4, 2010, pp. 124-128.