

**DEVELOPMENT OF TECHNOLOGY FOR PREPARATION OF MEAT DISHES  
BASED ON THE USE OF BIOLOGICALLY ACTIVE ADDITIVES****Usmonjonova Hulkar Umarkulovna**

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**Annotation:** The use of biologically active additives is one of the important areas of increasing the quality and usefulness of meat dishes in the food industry, in particular, in the production of meat dishes. This article considers the issues of developing a technology for preparing meat dishes using biologically active additives. Biologically active additives are substances such as vitamins, minerals, probiotics and antioxidants that increase the nutritional value of the product and support the health of the consumer. The studies studied the application of additives to various meat products, their effect on taste, texture and shelf life. Also, optimal doses of biologically active additives and mixing technology were developed. The results show that through the use of biologically active additives, meat dishes are not only of high quality and safety, but also their functional usefulness increases. This approach is recognized as an innovative solution in modern food technology and is of great importance in creating products in accordance with the concept of healthy eating.

**Keywords:** biologically active additives, meat dishes, nutritional value, probiotics, vitamins, minerals, antioxidants, technology, quality improvement, functional food.

The modern food industry is characterized by an increasing demand for healthy and functional products. In particular, meat products provide consumers with high-quality protein and other nutrients. At the same time, the concept of healthy eating requires the use of biologically active additives in meat products. Biologically active additives are substances such as vitamins, minerals, probiotics and antioxidants, which serve to increase the nutritional value of the product and support the health of the consumer.

The use of biologically active additives in the production process of meat products not only improves quality, but also extends the shelf life of the product, ensures the efficient use of raw materials and increases economic efficiency. Therefore, it is important to determine the optimal type and dosage of biologically active additives when developing meat food technology.

Biologically active additives are diverse, each of which serves to increase the functional and nutritional value of the product. They can be divided into the following main groups:

1. Vitamins and minerals - micronutrients necessary for the normal functioning of the body. For example, iron, zinc, vitamin B12 and vitamin D are valuable additives in meat products.
2. Probiotics are beneficial microorganisms that improve the digestive system and support the immune system. By adding probiotics to fatty meat products, it is possible to create functional products.
3. Antioxidants provide protection of products from oxidation and extend their shelf life. For example, rosemary, garlic and vitamin C are used as natural antioxidants.[1]

Each additive has its own characteristics and effect on meat products. Therefore, it is important to coordinate them with each other when developing technological processes.

The introduction of biologically active additives into meat dishes is carried out by several methods:

1. Mixing additives - directly added to raw meat or finished products. This method is simple and effective, and is widely used to add vitamins and minerals.
2. Marinating process – biologically active additives are added to the marinade solution and the meat is kept in this solution. This not only enhances the taste, but also ensures better absorption of the additives.
3. Fermentation technology – is used in products where probiotics are used. By fermenting fatty meat, beneficial microflora is introduced into the product, resulting in probiotic meat products.[3]

The amount and timing of additives in the technological process are important. If the optimal dosage is not determined, the taste and texture of the dish may be impaired.

The effect of biologically active additives on product quality and shelf life

Studies show that biologically active additives have a positive effect on the following properties of meat products:

Nutritional value Increase in digestibility – the amount of vitamins and minerals increases.

Functional benefits – probiotics support the digestive system.

Antioxidant activity – reduces oxidation processes and extends shelf life.

Improved taste and texture – some additives increase the tenderness and water retention capacity of meat.[4]

The use of biologically active additives also increases the chemical and microbiological safety of the product.

The use of biologically active additives not only benefits product quality, but also environmental and economic aspects. For example, the creation of probiotic products by fermenting meat waste reduces waste. At the same time, high-quality and functional products increase the market value and become an additional source of income for manufacturers.

In conclusion, the introduction of biologically active additives into the technology of meat dishes is an innovative approach in the modern food industry. It increases the nutritional and functional value of the product, extends its shelf life and ensures environmental sustainability.

At the same time, it is important to determine the optimal types and doses of additives, properly organize technological processes and constantly monitor product quality. This approach allows meat products to be modern and competitive, in accordance with the concept of healthy nutrition.

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