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## **12. USAGE OF PROTEIN-LIKE RAW MATERIALS OF ANIMAL ORIGIN IN TECHNOLOGY OF MEAT SEMI-FINISHED PRODUCTS**

In many countries of the world, meat occupies a significant part of the diet and is the main food, and depending on preferences, the amount of meat in national dishes can vary from 100% (steak) to 10% (pizza).

Today, there is a tendency in the world to limit the consumption of meat products. The shortage of raw meat and the constant dynamics of the decline in the purchasing power of the population of Ukraine coincides with the global trend of developing innovative products and recipes for meat products with improved organoleptic properties.

One of the most attractive segments of the meat market is the production of chilled and frozen semi-finished products of a high degree of readiness: natural and chopped semi-finished products, stuffed and unfilled, with or without garnish.

In recent years, meat producers have increasingly used animal proteins. This trend is due, on the one hand, to the growing negative attitude of consumers towards meat products, which include soy proteins, on the other hand, much higher functional and technological properties of animal proteins.

However, the main disadvantage of collagen-containing protein preparations is the deficiency of the amino acid composition, which is due to the presence of limiting values for essential amino acids.

Therefore, along with collagen-containing raw materials, animal proteins made from the blood of cattle, beef and whey are also common. In the production of sausages, milk proteins, which have high nutritional value and functional properties, have become the most widespread.

To increase the functional and technological properties of minced meat to the maximum possible values, it is recommended to introduce into the minced meat protein ingredients (connective tissue proteins, soy protein preparations) in combination with milk protein concentrates.

The content of 10-11% of milk protein is the most optimal for the development of moisture and fat-binding abilities of minced meat. Further increase in total protein content by increasing the dose of milk protein is not recommended, because it causes a decrease in the quality of the finished product [1].

Blood plasma ranks second in the list of protein drugs that are most commonly used in the food industry. Plasma can be used in liquid form or in the form of dry powder dehydrated [2]. Blood plasma is a universal product, characterized by high emulsifying, gelling, foaming properties, ability to dissolve. Plasma is used in the food industry as a binder in the bakery industry, enriched with pasta proteins, as a substitute for fats and even polyphosphates.

Given the presented data, it should be noted that for industrial use it is necessary to focus on the choice of rational ratios of proteins, which will ensure constant stable technological functionality and product quality.

### **Literature**

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