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Improving the technology of cooked sausages using protein-mineral-hydrocarbon additive

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Due to the catastrophic deficiency of animal protein in the world, it is relevant to use defective vegetable protein and supplements that are a combination of plant and animal protein. The main task of using such mixtures is to optimize the composition of the finished product with maximum technological and economic effect. This can be achieved by replacing certain components in the formulation with other high functional properties.

We explored mechanically separated poultry meat, boiled sausage with the addition of flour protein concentrate (FPC), hydrated soya protein, animal protein, serum protein, and developed protein-mineral-hydrocarbon additive.

It were used used methods of mathematical modeling of finished product formulations, experimental methods of chemical composition, physical and chemical parameters of a product.

Boiled sausage with a protein-mineral-hydrocarbon additive has higher consumer properties compared to control samples.

The moisture content of minced meat which has been added to the chitosan, namely the soy protein, animal protein, serum protein, FPC, and PMHA, increases by 10-15%, which enables to increase the yield of the finished product and plan the product properties after the completion of the technological stages of production.

Our studies of moisture content have shown that, that the addition of PMHA in the amount of 10% in hydrated state positively affects the technological properties, it provides support for moisture, fat during the heat treatment process, which is important when used in the technology of boiled smoked products.

This suggests that boiled sausage with mechanically separated poultry meat and protein-mineral-hydrocarbon additi has a well-balanced composition, it has high consumer properties and can be attributed to complete nutrition by content of essential amino acids.