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FEATURES OF MODERN MANUFACTURING TECHNOLOGIES SMOKED SMOKES

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A feature of modern sausage production is the intensification of technological processes. Despite the economic crisis, delicatessen types of meat products are in great demand, namely smoked sausages, which differ from other types of sausages by their dense consistency, specific aroma, pleasant taste, high biological and energy value, and high quality for a long time.

Smoked sausage acquires specific properties as a result of complex enzymatic and physicochemical reactions that occur during its maturation. Recently, to accelerate the technological process, more and more sausage producers use starter crops in the production of smoked sausages. Cultures of microorganisms on the basis of which bacterial leavens are created differ in the activity and properties therefore sausages made with use of these cultures will differ a little in physicochemical, microbiological and organoleptic indicators. [1].

In practice, in recent decades, a number of ways to accelerate the technological process of making smoked sausages have become widespread. One of the first ways to speed up the process of making smoked sausages, prevent the development of unwanted microflora and increase the efficiency of sodium nitrite was the use of glucono-delta-lactone (GDL), known as food additive E575. However, due to the decrease in organoleptic characteristics, in particular the deterioration of taste due to oxidative processes of the fat fraction of finished products, today the most widespread technology of smoked sausages using starter crops.

Starter crops provide rapid ripening, color formation, traditional aroma and taste. New technologies of smoked sausages also involve the use of multifunctional additives that regulate biochemical processes, form the quality of the finished product. As a result of application of starting cultures due to intensification of process and reduction of time of fermentation production safety increases. Targeted use of starter crops reduces production shortages, allows to obtain a standardized, high quality product [2,3]. Microorganisms that are part of the starting cultures, break

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down sugar into lactic acid, which leads to a decrease in pH, inhibition of the growth of unwanted microflora at the beginning of the production of sausages, accelerating the denitrification process and stabilization of fermentation. These factors significantly reduce the process time, increase the economic efficiency of production and allow you to get a high quality product.

From a wide range of starting crops presented on the market, we have studied the following crops made by Chr. Hansen, Denmark [4,5]:

- Flora Italia, gives a distinctly smooth and delicate aroma of Italian salad, but with rapid acidification for added safety and stability;
- B-LC-007, combined culture that provides fast acidification and an attractive taste profile of "Southern Europe", as well as anti-pollution control Listeria monocytogenes.

Thus, the use of starting bacterial cultures directly determines the quality and technology of production of smoked sausages. The conducted scientific researches allow to state that introduction of bacterial preparations of firm Chr. Hansen, Denmark ensures the accelerated development and dominance of beneficial microflora in the production of smoked sausages using modern technologies and improves their safety.

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