THE RELEVANCE OF THE USE OF FOOD ADDITIVES, NITRITES INTHE FOOD PROCESSING INDUSTRY

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Organoleptic properties of sausage products, especially color, are of great importance for the consumer. After all, it is not only the quality and freshness of the products, but also an indispensable sign of their recognition. In the meat processing industry, the main role, as a food additive, belongs to the color enhancer - sodium nitrite (E250), which reacts with proteins of meat [1]. Sodium nitrite is a functional food additive: It gives natural red color to food due to its reduction to nitric oxide and formation of nitrosomoglobin; prevents formation of toxins in products caused by anaerobic bacterium *Clostridium botulinum* and is an antioxidant [1]. A large number of studies on the carcinogenic effect of nitrite (production of nitrosamines) have not shown toxic effects of nitrite on the human body even when used at a level of 0,025% [2].

At the present time is optimal and appropriate for the technological process of production of sausage products reduction of sodium nitrite dosage in the production of boild sausages to 5 g per 100 kg for one-time addition of an optimized amount (25 g per 100 kg) bacterial preparation based on nitrite- destroying strain *S. Carnosus ssp. utilis* without affecting the color characteristics of the finished products and without the risk of spoilage of the finished products [3]. The use of a bacterial preparation has a positive effect on the formation of a set of necessary color characteristics of the finished product, intensifies the formation of nitrosopigments, increases color stability during storage of the product and reduces the risk of excess sodium nitrite in the human body [3].

It is because of multifunctionality and effectiveness of sodium nitrite when used in food processing industry practically completely exclude the possibility of finding alternatives to this food additive. However, excluding or limiting the use of nitrite in the food technology, conditioningits use, can lead to risks of occurrence of microbial contamination of finished products.

Reference:

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