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WORKING OUT A RECIPE OF MEATLOAVES WITH ADDITION OF OLEORESINS

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Introduction. The most challenging task the food industry is forced to cope with nowadays is to modify the products which have already been manufactured for some time as well as to develop principally new functional foodstuff with all the major attributes balanced along with a substantial profitability. Meatloaves should undoubtedly be regarded here as they make up rather a considerable part of worldwide meat production .

Compared with boiled sausages meatloaves contain less moisture providing firmer texture and a specific pleasant taste. Being the source of complete proteins, micronutrients and vitamins the product is at the same time well-shaped having nice color, taste and attractive smell. Considering all the properties of meatloaves one should evidently expect the gradual growth of the consumers demand for them.

One of the ways to improve organoleptical attributes of meatloaves such as flavor and smell consists in adding oleoresins and extracts of spices which can be made use of as an alternative analogue for supplanting natural spices and herbs.

For the last ten years, due to their numerous advantages oleoresins have been successfully superseding natural ground spices in food processing.

Materials and methods. The main goal of the research is to modify the recipes of meatloaves by selecting particular spice oleoresins for gaining pertinent flavor and aromatical qualities.

Results. For a long time the efforts to enhance the technology of meatloaves have been majorly focused on creating new recipes based on using alternative raw-materials and stuffings of both animal and vegetable origin. Therefore, the assortment of meatloaves has been greatly diversified meanwhile the price range has been broadened and a meatloaf itself has obtained attributes of a combined product with well-balanced nutrients.

Using the encapsulated spice oleoresins makes it possible to augment microbiological stability of products preserving the original scent and flavor of natural spices. Spice oleoresins are prepared from spice extracts after eliminating the ethanol . They contain flavor components of spices and from 10 to 25% of essential oils. Oleoresins differ from essential oils in containing volatile compounds along with

non-volatile extracts including resins and resin-like substances, non-volatile fatty acids, especially when seeds undergo the process of extraction.

The main oleoresins presented in the Meat Market subsume oleoresins of black, white and red pepper, allspice, nutmeg and mace, cardamom etc. They can vary in the content of essential oils, the type of solubility and the degree of processing. Because of a high concentration of active substances oleoresins are rarely put directly into the final product being applied with that purpose to a carrier that enables the most effective releasing of the flavor and aroma on a certain stage of product processing.

Nevertheless, numerous shortcomings hinder the overall application of oleoresins in food processing . Under the influence of air, light, high temperatures and water they tend to spoil and have rather a short shelf-life when keeping in inappropriate conditions. Dense and viscous texture can be a reason for problems with dispersion on the food matrix and processing. Mingled inside the food matrix and treated with high temperatures oleoresin is prone to losing it's moisture and aroma. In order to restrict or reduce the destruction of taste and smell during the processing or storage, to facilitate the form of applying, encapsulation of oleoresins before adding them to the food products can be regarded as an alternative and effective solution that involves covering or holding one substance or a compuond of substances inside another substance or a system of substances.

In exploring the scientific resources concerning the influence of oleoresins on the foodstuff a recipe of the meatloaf with addition of encapsulated form of oleoresin of nutmeg is going to be worked out at the laboratory of meat technology department and apropos reseaching work is going to be carried out to indicate the efficacy of using such a flavoring substance on the organoleptical properties of the meatloaf with combined composition and the shelf-life determined by the system of "an active packing".

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