TECHNOLOGICAL FEATURES OF THE YOGURTS PRODUCTION WITH VEGETABLE FILLERS ADDITION

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Current food transition compels us to investigate alternatives to accompany the decrease in the consumption of animal-sourced products, such as dairy and meat, and tend towards a more plant-based diet. When referring to food transition, proteins are mainly targeted, and pulses, which are among the most protein-rich plants, are ideal candidates to substitute animal-sourced products or ingredients [1].

Innovations in the agricultural raw materials processing, in particular, the combination of dairy and vegetable raw materials, have led to the creation of a whole range of food products for a healthy diet. Yogurt, like other fermented milk products, occupies a large share in the diet of people of all ages. Dairy products are a source of complete protein and minerals. Yogurt, unlike milk, does not cause a negative reaction in people suffering from a deficiency of lactase enzyme, and this effect is due not only to the presence of microbial lactase, starter microflora in it, but also to its composition [1].

Fillers from vegetable raw materials enrich yogurt with dietary fiber and other biologically active substances, as well as flavoring substances. Numerous studies have shown that vegetable raw materials are source of antioxidants, the lack of which causes the development of diseases number, and also contributes to premature human aging [2].

To enrich yoghurts with herbal ingredients, a wide variety of raw materials (juices, fruit and vegetable purees) are used, called fillers. Yoghurts can be enriched with one-, two- and three-component fillers [1].

In the technology of yogurt, vegetable raw materials lead to the intensification of biotechnological processes due to the faster achievement of the isoelectric point necessary for the formation of a clot. At the same time, a change in the ratio of sugars is possible in the finished product, since lactose is used by the starter microflora during fermentation, and reducing sugars predominate in vegetable raw materials. As a result, the resulting product must have good consumer properties both in terms of quality and functional properties [2].

Thanks to new scientific achievements in this industry and the development of the yogurt market, the use of herbal ingredients (fillers) is relevant to expand their range. The addition of vegetable fillers to yoghurts should be carried out in order to enrich them with biologically active substances, as well as to adjust the taste and technological indicators.

References:

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