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**"Наукові проблеми харчових технологій та промислової
біотехнології в контексті євроінтеграції"**

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Наукові проблеми харчових технологій та промислової біотехнології в контексті євроінтеграції : Програма та тези матеріалів XI Міжнародної науково-технічної конференції, 7 листопада 2027 р., м. Київ. – К.: НУХТ, 2023 р. – 337 с.

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Метою конференції є розширене висвітлення наукових здобутків, ознайомлення експертів харчової промисловості та промислової біотехнології, підвищення рівня проведення експертиз проектів, що подаються на конкурси з отримання грантів для фінансування за кошти державного бюджету та їх спрямування на розширення тематики наукових проектів для можливості співпраці науковців у світовому науковому просторі.

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56. PROSPECTS FOR THE PRODUCTION OF CREAM DRINKS

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Developers of new food products for promoting healthy eating should take into account the need to address two main challenges: on the one hand, aligning the energy value of the diet with actual energy expenditure, and on the other hand, expanding the range of new products with improved properties, increased nutritional value, and specified quality indicators to provide the body with essential organic and inorganic nutrients.

One of the promising groups of products for fortification with functional ingredients includes dairy beverages, including creamy ones. The latter can be a convenient target for enriching with valuable food components, and their moderate cost and high consumer properties ensure mass consumption and demand among the population. The presence of beverages enriched with valuable plant components in the human diet contributes to a positive impact on health. Creamy beverages improve metabolism, have a positive effect on the cardiovascular system due to the presence of various vitamins and micronutrients, and regulate stomach acidity.

The nutritional value of creamy beverages is determined by the presence of extractive substances, such as proteins, carbohydrates, fats, lactic acid, choline, vitamins A, D, E, and K, riboflavin, phosphatides containing phosphoric acid and nitrogen base; minerals that determine the nutritional value of the finished product. The beneficial effects of creamy beverages are explained by the presence of vitamin A, which is essential for eye health and immune function; choline - it has a significant impact on brain development and metabolism in the human body; calcium and phosphorus - necessary for bone health, lecithin - contributes to the prevention of sclerosis, and more.

The concept of creating creamy beverages with specified properties is proposed, which involves two complementary approaches: exclusion from the composition of

beverages of expensive stabilizing systems that do not increase the nutritional value of the finished product; enrichment of beverages with essential nutrients that have a positive impact on human health.

According to the State Standard of Ukraine (DSTU) 2212:2003 "Dairy Industry. Milk and Fermented Milk Products Production. Terms and Definitions" a creamy beverage is a milk beverage whose main component is cream, which is produced from high-quality thermoresistant normalized cream subjected to homogenization and/or single-stage sterilization in a flow with subsequent cooling and packaging under aseptic conditions. Creamy beverages are poured into packages made of composite material.

To expand the range and increase the nutritional value, various flavorings and aromatic substances are added to the cream. The amount of dairy raw materials and fillers is determined according to the corresponding recipe. The technological process of producing creamy beverages is similar to the process of producing pasteurized and sterilized milk with fillers. The shelf life of finished beverages is no more than 72 hours at a temperature of 6°C for pasteurized creamy beverages, and for sterilized ones at a temperature from 0 to 20°C for three months.

Creamy beverages with sugar, cocoa, and coffee have become widespread. To stabilize the flavor fillers in the finished product, an aqueous solution of agar is added. In particular, a method for producing a beverage is known, for the preparation of which cream is mixed with vegetable fillers (syrups, fruit pastes, beet extract, etc.), sugar is added. Methylcellulose and gelatin are soaked in water, heated, and added to the mixture of dairy base with fillers. The mixture is subjected to heat treatment with subsequent cooling and packaging.

Therefore, significant raw material potential, a limited range, data on the state of the industry for the production of creamy beverages, and the marketing of the above products contribute to new developments, economically justified, and technically available technologies for beverages for production and wide consumption. The production of beverages based on cream is relevant, taking into account the mass consumption of these products and the easy assimilation of nutrients.