

## PROBLEMS OF PRODUCTION OF THE CURD GLAZED CHEESES

Dyomina L. S., Zoloch K. L., Tymoshenko V. A., Strelnikov L. S., Rybalkin M. V.

National University of Pharmacy, Ukraine, Kharkiv

linka.mandarinka@mail.ru

**Introduction.** One of most quickly developing to date segments of milk industry for the last 10 years, producing of the curd glazed cheeses. A total production of this group of soul-milk foods volume in Ukraine increased more than in 3 times. Experts say that production will grow. And it is not surprising, as an all greater number of population realizes the necessity of introduction in to the ration of feed more foods providing the normal functioning of organism.

The glazed curd cheese is the product made from curd mass and glazed. On State standard, the glazed cheese is the wet-process curd mass, got from the subpressed curd, covered by a food glaze, by mass no more than 75 gramme. The glazed cheeses differ in a high food value due to high maintenance of proteins and carbohydrates. The proteins of curd are better mastered by an organism, than proteins of fresh milk. The product does not get heat treatment. That's why it saves all properties of fresh curd. Curd have lots of proteins, fats, carbohydrates, and organic acids. Organic acids normalizes work of gastrointestinal tract. 100 gramme of curd mass have day norm of A vitamin, and lots of B vitamin. These vitamins keep our emotional health. Also curd mass has a lot of minerals such as calcium, phosphorus, magnesium, potassium, manganese, and others. Besides it has lipotropic. Lipotropic normalize fat metabolism. It inhibits accumulation of fats in the liver. Curd mass have lactobacillus. Lactobacillus improves digestion and protect from gastrointestinal tract cancer. Curd mass have only one problem its calorie content.

Now our **aim** is, to light up the modern production of the curd glazed cheeses in Ukraine, and to ground the necessity of verification of these products to the corresponding requirements. First requirement is organoleptic indicators, second is physical and chemical indicators. Organoleptic indicators to be check are: appearance, taste, smell and color. Physical and chemical indicators to be check are: acidity, mass fraction of fats and moisture. On state standard 52790-2007, acidity should be 160-220 °T including. Mass fraction of fats should be 5-26% including. Mass fraction of moisture should be 55-33% including. According to the got results, it is necessary to define perspective in creation of not only delicious but also useful foods. That means, we need to create products with good organoleptic indicators and more useful for human body using natural, no synthetic analogs. And implement it in to the production.

**Results and discussion.** Mostly basic components of the curd glazed cheeses are: curd, sugar, fat vegetable, modified starch, sodium alginate, guar gum, flavoring

identical to natural, vanillin, sorbate of potassium, palm-oil, cacao-powder, lecithin. Glazed curd cheeses are made from curd with low mass fraction of moisture. Making is going on in a mixing machine, according to composition. Received mixture cools to 5-9°C and puts in the bunker of molding vehicle. Mixture goes out as molded streams from molding vehicle. This streams is automatically cut to pieces, by mass for a 40 grams. These cheeses enter frosting machine, where they covered by a couverture. Stream of warm air retires superfluous glaze from cheeses. The underbody of cheeses is glazes by revolved rollers of enrobing machine. Further conveyer brings curds in the chamber of the air cooling, where at a temperature -1-1 °C a glaze hardens. Prepared cheeses pack and lay in boxes. Keep the prepared products at the temperature no more than 8 °C. It should be noted that the curd glazed cheeses presented at the modern market contain the least of useful substances, and their basis is a vegetable fat and sugar. Experts often finds in dangerous ingredients not indicated on packing. All other in composition is an enormous amount of harmful sugar, cheap fats, starch, colorants, flavours, stabilizers, emulsifiers. Synthetic components can easily hide low quality of raw materials. Also producers can give almost full synthetic product instead natural. The examination conducted by the program "The Control purchase" educed, that in cheese of trade mark of "Rostagroexport" were found out the preservatives not indicated on packing, and in cheese of trade mark of "Danone" the amount of yeasts in 7 times exceeded a norm, that is dangerous for a consumer. In addition, the glazed cheeses of "Dmitrov a suckling plant" and "Carat" contained to the coliforms, and in cheese of trade mark of "Dmitrov milk plant" was found out mould. Besides it harm of these cheeses consists in high enough indexes of cholesterol, that grounds fully to eliminate it product from the ration of feed of some groups of people. For example, people with diabetes, by an ovenweight and suffering the diseases of the cardiovascular system. Aurococcus discovered in one of the standards investigated in the program. Aurococcus causes weakening of immunity, festering infections, stomach-aches, diarrhoea, vomiting, furunculosis et cetera. Collibacillus of E. coli, discovered exactly in the half of the standards investigated in the program. Collibacillus, causes the accumulation of toxic substances, failures in-process gastrointestinal tract process, negatively influences on the functions of buds, liver, immunity. Infection by the collibacillus of E. coli even can result in a fatal outcome for children. Scientists think that all this violation happens because of ignoring hygiene regulations. Similar researches show the necessity of creation of not only delicious but also useful, safety for human health foods.

**Conclusions.** That's why the department of biotechnology of NPhaU works on development of composition and technology of the curd glazed cheeses. This goal still actual and perspective in nowadays.