

THE SECOND NORTH AND EAST EUROPEAN CONGRESS ON FOOD

NEEFood - 2013 Kyiv

May 26-29, 2013

NUFT, Kyiv, Ukraine

Organized by:



National University
of Food Technologies

and



Association
«Higher Educational Institutions and
Enterprises of Food Industry
UkrUFoST»

In cooperation with:



INNOVATIVE TECHNOLOGY OF CONDENSED MILK CANS

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Financial instability, lack of high-quality raw milk and its cost, increase of competition with the imported products, and tendencies to improvement of balanced daily diet of people – are the main factors influencing development of canned milk industry in Ukraine. These factors stimulate producers to direct their activities towards the development of innovative, cost-effective, energy-saving technologies with the intensification of technological processes and production of new types of condensed milk products with a balanced composition, higher biological value with desired organoleptic and physic-chemical properties.

Since the chemical composition of condensed canned milk with sugar does not meet the modern requirements of nutrition, namely daily needs in the use of vitamins, minerals and nutrients, it is proposed to use as filler for canned milk plant material. Plant origin supplements can reduce the deficit of daily diet in vitamins, minerals and other nutrients.

Fruit syrups are recommended from wide range of fillers for use thanks to their organoleptic, physical and chemical characteristics.

The analysis of trends in the food products market has shown that due to unhealthy diet, which leads to the development of several diseases (cardiovascular, obesity, tachycardia, and hypertension), there exists the need for health-care, dietary, healthy and functional products. Analysis of Ukrainian nutrition shows lack of nutriciology due to inadequate consumption of vitamins, minerals, and overload of carbohydrates.

Taking into account current priorities of food industry direction nutrition the technologies of condensed canned milk with sugar and fruit and berry syrups and technology of canned milk with sweeteners (fructose and crystalline fructose syrups) were developed by department of the technology of milk and dairy products. It was found out that adding syrups contributes to the formation of better consistency comparing with traditional products, generates stronger taste and smell of the product. It was established that introduction of the fruit syrups in milk cans allows to receive product with a higher content of biologically active substances.

KEY WORDS: condensed milk cans, fillers, sweeteners.