## ERI-ONLINE-1-BFT(R)-01

# DEVELOPMENT OF A NEW TYPE OF ALCOHOLIC ICE CREAM ${ }^{2}$ 

Professor Oksana Kochubei-Lytvynenko, DSc<br>Professor Galyna Polishchuk, DSc<br>Associate Professor Tetiana Osmak, PhD<br>Department of Milk and Dairy products Technology<br>National University of Food Technology, Kyiv, Ukraine<br>E-mail: okolit@email.ua, milknuft@i.ua, osmaktg@ukr.net

Associate Professor Uliana Kuzmyk, PhD<br>Assistant Oksana Bass, PhD<br>PhD student Artur Mykhalevych<br>Department of Milk and Dairy products Technology<br>National University of Food Technology, Kyiv, Ukraine<br>E-mail: ukuzmik@gmail.com, kleona@meta.ua, artur0707@ukr.net


#### Abstract

The modern range of milk-based ice cream with an alcohol component was analyzed. The choice of alcoholic tincture in the composition of milk ice cream was substantiated. The cryoscopic temperature of the mixtures was determined using a measuring complex, the dynamic viscosity was determined by a Heppler viscometer, the melting resistance was determined by the melting time of the hardened ice cream samples, and the ice cream was whipped by the weight method. The possibility of using tinctures with an alcohol content of $20 \%$ as a part of milk ice cream has been scientifically confirmed. The selection of the structure stabilizer and rational modes of maturation of milk-alcohol mixtures were substantiated by the values of the coefficient of dynamic viscosity. According to the cryoscopic temperature of ice cream mixtures, it was found that the production of ice cream with a mass fraction of alcohol up to $3 \%$ determines the possibility of using conventional freezing modes to obtain a product of guaranteed quality. A new type of milk ice cream with the use of tinctures can be recommended for the introduction of the classical technological scheme of production with the clarification of maturation modes.


Key words: tinctures, ice cream, cryoscopic temperature, maturation.

## REFERENCES

Syed, Q. A., Anwar, S., Shukat, R., \& Zahoor, T. (2018). Effects of different ingredients on texture of ice cream, Journal of Nutritional Health \& Food Engineering, 8(6), 422-435.

Polishchuk, G. E., \& Semko, T.V. (2012). Research of the water phase of mixtures and ice cream with natural structuring components, Collection of scientific works of VNAU, 2 (1), 109116 (Оригинално заллавие: Поліщук, Г.Є., Семко, Т.В., 2012, Дослідження водної фази сумішей та морозива з натуральними структуруючими компонентами, Збірник наукових праць ВНАУ, 2 (1), с. 109-116.).

Cook, K.L.K., \& Hartel, R. W. (2010). Mechanisms of Ice Crystallization in Ice Cream Production, Comprehensive reviews in food science and food safety, 9(2), 213-222.

[^0]
[^0]:    ${ }^{2}$ Reports Awarded with "Best Paper" Crystal Prize - 60th Science Conferenceof Ruse University, Bulgaria, 2021, as a hard copy (ISBN 978-954-712-826-2) and on-line on the Conference Website

