

YOGHURT PRODUCTION TECHNOLOGY WITH ADDITION OF CANDIED FRUITS

Vakasova K.A., *karinavak1@gmail.com*
Dmytro Motornyi Tavria State Agrotechnological University

Yoghurt is one of the most popular soul milk products. Pleasant tender taste is not its only advantage. Regardless of its variety, the product is rich in valuable elements and vitamins. Yes, the usual natural delicacies without additives contain: basic macronutrients - potassium and sodium, calcium and magnesium, phosphorus and chlorine, etc.

Improved technology of yogurt production is supplied with the highest quality raw materials, with the necessary organoleptic, physical, chemical and microbiological parameters. Milk is stored in separate tanks at a temperature not higher than 2 - 4 ° C for 4 hours before processing [1].

After that, the milk is purified, separated, and already normalized by the mass fraction of fat and dry matter. The dry components (stabilizers, sugar) are pre-mixed, dissolved in milk at a temperature of 30 - 45°C, the mixture is left to stand for 30 - 60 minutes (depending on the type of stabilizer) and mixed with the bulk of the mixture. Next, the normalized mixture is purified, homogenized under a pressure of 15 - 20MPa (megapascal) and a temperature of 65 - 95°C, pasteurized at a temperature of 90 - 95°C for up to 15 minutes. The mixture is cooled to a fermentation temperature of 35 - 45°C and sent to the tank for fermented milk products. Fermentation is carried out immediately after cooling; the amount of direct fermentation depends on its type and activity. Fermented for 4 - 10 hours before the formation of a clot, the optimal acidity of which is from 4.4 to 4.7. The finished clot is stirred and cooled to a temperature of from 20 to 25°C.

In the yogurt production with fruit and other fillers, they must be added to the chilled clot. After cooling and mixing with the fillers, the yogurt is sent for bottling. The packaged product is sent to a refrigeration chamber for cooling to a temperature of 6 °C.

Fillers - candied fruits are fruits, berries or vegetables cooked in concentrated sugar syrup, then separated from it and from which a certain amount of moisture is removed. Despite the high sugar content, candied fruit also contains a lot of fiber needed for normal digestion, as well as trace elements and vitamins. Bananas are a source of potassium needed by the heart, liver, brain, bones, teeth, and most of all, muscles. Banana contains the protein tryptophan, which is converted into serotonin, which, in its turn, improves mood, helps to relax. Dried cherry helps to concentrate. Apples restore the balance of vitamins and minerals and improve digestion. Apples are low-calorie dried fruits. Fresh apples are not recommended for people who already have diseases of the digestive system, including the stomach and duodenum, as well as people with high stomach acidity [1].

Useful properties of yogurt lie in its anti-inflammatory properties, which help to clear the skin and fight infection. It perfectly satisfies hunger, improves metabolism and supplies our body with nutrients. Lactic acid is the main source of carbohydrates for the body and energy for the brain and nervous system.

The benefits and harms of yogurt depend on how fresh and natural the product is. Real yogurt with live bacteria is safe for anyone who does not suffer from hypolactasia, and has a wonderful effect on the body. Fermented milk products, among other foods, occupy one of the leading positions. The presence of easily digestible substances (proteins, fats, carbohydrates), as well as mineral elements needed by the body, requires their presence in our daily diet.

References

1. Mauro Fisberg, Rachel Machado Nutrition Reviews. *Oxford Academic*. 2015. Volume 73. Pages 4–7. URL: <https://doi.org/10.1093/nutrit/nuv020> (дата звернення: 08.11.2020).

Language adviser: *Kryvonos I.A., Senior Teacher of the Department of Foreign Languages, Dmytro Motornyi Tavria State Agrotechnological University*