

The Use of Nanotechnology in the Production of Ice Cream

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Introduction. The work aims to clarify the benefits of using nanotechnology in the food industry, namely, obtaining nano ice cream using cryogenic freezing at temperatures below -70°C .

Materials and methods. Nanotechnology - harm or benefit? Consider the benefits of nanotechnology for example nano ice cream. What are the advantages expects consumer? Incredible taste, utility, unlike conventional ice cream and naturalness. The manufacturer guarantees that this products contains no GMO, no chemical preservatives, and this ice cream has a low fat content (4%), which greatly improves the nutritional properties of the product. Feedback from consumers drawback is the high price of such products. It should be noted that the naturalness of the product is not in doubt.

Results and discussion. As an object of research was chosen ice cream flavored "cherry blast". It consists of water, maltodextrin, sugar, citric acid. It can be added natural and artificial flavors: FDC & C Red №4 E129, blue №1 E133, less than 0.5% of mono- and diglycerides, gums Throw bean tree E410, E412 guar gum, karrahenyn E407. The advantages of using nanotechnology in the food industry are many, and is expected to rapidly they grow. This new, rapidly progressing technology impact, in which every aspect of the food system from production to processing, packaging, transportation, shelf life is new. Obviously, the commercial use of nanomaterials in the food industry will grow because of their unique and new features. Thus, the impact on health of various nanomaterials in the food sector are important to society. Throughout the life cycle of products, nutrition is critical to the production, safety and potential benefits of the food consumed. Public acceptance of food and food products that contain nanomaterials, will depend on their safety. The only international regulatory framework for nanotechnology in food is mandatory to verify the quality of product produced. Experiments show that the production ice cream like this, they used an ice with pieces of candy of cherry. Careful analysis showed that nano ice cream may be present in small amounts of some contaminants that adversely affect the health of diabetics.

Conclusions. Thus, the use of the results leads to the conclusion about the benefits nano ice cream body, which is in doubt. Since neither benefit nor harm to the body of the components is not proven. So the choice to use nano ice cream depends on you.

References

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