



STUDY OF BLURRING AND HYSTERESIS OF PHASE TRANSFORMATIONS OF MILK FAT BY TRANSIT CALORIMETRY METHOD

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ABSTRACT

The so-called effective heat capacity of dairy products, which may include enthalpy changes due to the heat of phase transformations of individual components of the product is used in the technological calculations; the use of the additive rule in this case can lead to the significant errors. The use of the transit calorimetry method described in this article gives an opportunity to deepen the knowledge on the blurring phase transition in dairy products, to clarify information on technological and thermophysical characteristics of the products, to establish a connection between them, to reduce the expenses of energy and material resources per unit of finished products, to detect counterfeit dairy products. The result of the paper is to determine the probable quantitative characteristics of the heat capacity of milk fat of total phase, and the fraction of solid phase due to the phase transformations, their blurring and hysteresis.
