

Production of milk-protein concentrates

Kateryna Kuligina, Mariana Stryzhnova
National University of Food Technologies

Introduction. Milk industry is one of the leading branches of agro-industrial complex of Ukraine. The density of the branch in the common amount of food and processing industries is 10%. Milk products make the obligatory component of each man's food.

A human uses milk for providing his physiological needs of his organism. The most valuable in specific characteristic of milk protein is that according to its component it is similar to the protein of human's organism, and as the result it is better assimilated. Such dairy products as butter, sour-cream and cheese are most highly saturated with milk proteins.

One of the most promising direction of processing is picking out the protein and producing on its base milk-protein concentrates, for example sodium casein ate, that then is used during production of boiled sausage products. Also it is used in confectionary, bakery and other food industries.

One of the most modern directions is production of skimmed drinks: skimmed milk, kefir, curds. But the main thing is that human's health can be improved and supported by all these products (especially for elder people).

On the base of biological processing of natural whey there created the recipes of drinks for diet food. Lactose that is got from milk whey is used in pharmaceutical, food and other branches, as supplement to fruit juice, cream and sauces, where it provides emulsion stability.

The recycled milk material is substance processed in the dry and condensed condition. But this technological process is less economically profitable, because a great amount of energy is used for drying it, the price of which is rising gradually every year.

Dry whey and skimmed milk are used as a supplement in the cream cheese production: sausage smoked cheese, and other.

The consistency and taste of cream cheese is getting better by adding such supplements. The technology is developed for more than 50 kinds of cream cheese with different supplements and flavors.