

THE INFLUENCE OF CONTAMINATION YOGHURT, QUARK AND SEMI-HARD CHEESE BY YEASTS ON THEIR SENSORY PROPERTIES

Joana Šalomskienė, Irena Mačionienė

Food Institute of Kaunas University of Technology, Taikos av. 92, LT-51180, Kaunas, Lithuania;

phone: +37037312380; e-mail: mikrobjs@lmai.lt

Summary. The aim of our research was to determine the influence of contamination yoghurt, quark and semi-hard cheese by yeasts on their sensory properties. Products were made under laboratory conditions. Pasteurized milk for the manufacture of the experimental yoghurt, quark or cheese was contaminated by adding the quantity of yeast cultures or their mixtures required to reach yeast count in the product ranging from 10^5 to 10^7 CFU/g. Lactose fermenting yeasts *Candida kefir* and *Kluyveromyces marxianus* var. *marxianus* had a higher impact on the sensory properties of yoghurt than non-lactose fermenting yeasts such as *Saccharomyces cerevisiae* and *Debaryomyces hansenii*. The experimental yoghurt contaminated by *C. kefir*, *K. marxianus* var. *marxianus*, *S. cerevisiae* and *D. hansenii* received the total sensory evaluation resp. by 9.0, 11.5, 4.4 and 6.5 scores lower than the control yoghurt. The experimental quark contaminated by the mixture of yeast cultures of species *D. hansenii* and *Trichosporon cutaneum* was evaluated by 4.7 scores lower compared to the control quark. Total sensory evaluation of experimental semi-hard cheeses contaminated by the mixture of lactose fermenting yeast (*C. kefir*, *K. marxianus* var. *marxianus* and *K. marxianus* var. *lactis*) was up to 4.3 scores lower compared to control cheeses.

Key words: quark, yoghurt, semi-hard cheese, contamination, yeasts, sensory properties.