

BOVINE MASTITIS AS THE PRIMARY CONTAMINATION SOURCE OF MILK AND MILK PRODUCTS WITH *S. AUREUS* ENTEROTOXINS

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Summary. The milk of bovine mastitis has been identified as primary sources of contamination of milk and milk products with staphylococcal enterotoxins. The aim of the present study was to investigate the prevalence of enterotoxin producing *S.aureus* in milk of cows with mastitis, in raw milk and milk products in Latvia. Special emphasis was given to find out if the mastitic milk in Latvia is a primary contamination source of milk and milk products with *S.aureus* enterotoxins.

A total of 476 samples of raw milk of bovine mastitis from Latvian farms, 690 samples of raw milk, 330 samples of milk products and 313 samples of milk, and sour cream and cottage cheese, taken on Latvian markets, were analyzed.

The reverse passive latex agglutination assay *SET-RPLA Staphylococcus enterotoxin A, B, C, D detection kit* (TD 9000, Oxoid, U.K., 1996) was used to determine the enterotoxin serotypes.

The enterotoxin producing *S.aureus* in milk of bovine mastitis was present in 77.3% of samples examined, in raw milk – 29.7% of samples, in machine-made milk products – 24.1% of samples, and in sour cream and cottage cheese – 15.2% of samples were positive, respectively.

The results from this study confirmed, that milk of bovine mastitis can be identified as the primary source of contamination of milk and milk products with *S. aureus* enterotoxins in Latvia. It is likely that the contamination of raw milk and milk products with enterotoxin producing *S.aureus* in Latvia could be etiologically concerned with a high prevalence of bovine mastitis.

Key words: *Staphylococcus aureus*, enterotoxins, bovine mastitis, milk, milk products.