THE IMPACT OF TECHNOLOGICAL FACTORS ON THE LEVEL OF THE CHLORAMPHENICOL IN MILK AND MILK PRODUCTS

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Summary. Chloramphenicol (CAP) is a broad-spectrum antibiotic previously used in veterinary medicine because of its broad range of activity and its low cost. Because the European Union (including Lithuania) prohibits the use of CAP as a veterinary drug for milk producing animals, great attention is paid for residues detection of CAP in milk and milk products.

The objectives of performed study were to determine the impact of different technological factors, e.g. pasteurization, freezing, boiling, warming and fermentation on the level of CAP in milk and milk products. There were no impact of pasteurization (from 63°C to 90°C), boiling (at 92°C for 15 minutes), cooling (at 8°C for 50 hours), freezing (−20°C) and warming (+10°C) on the level of CAP in milk and milk products. Furthermore, the fermentation of milk with ferments (Jomix 433, Jomix 860, XT 312) or with a single cultures of microorganisms (Str. lactis, Str. thermophylus, L. acidophylus) had no influence on CAP level.

This investigation showed that the different milk technological factors e.g. pasteurization, freezing, boiling, warming and fermentation have no impact on the level of chloramphenicol (CAP) in milk and milk products.

Key words: chloramphenicol, milk, milk products, technological factors.