

## WEAK CHAINS IN THE QUALITY MANAGEMENT OF MILK PRODUCTS FROM SMALL RUMINANTS' MILK

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The standardization of small ruminants' milk is a widely discussed topic, but the lack of the development of different national standards restricts the improvement of product quality as well. We mention two areas related this problem, namely the Freezing Point (FP) of goat milk and Somatic Cell Count (SCC) of sheep and goat milk. More than 500 SCC and FP data were determined from five different goat breeds, from relation between SCC of Tsigai sheep milk and texture properties of lactic curd. MT-02 fast SCC unit (Agro Legato, Hungary) and fluoro-optical reference method, Brookfield QTS 25 texture analyser (UK) and Gerber Funke Cryostar I. were used. SCC of goat milk samples showed a wide range ( $1.6 - 11.7 \cdot 10^5 \text{ml}^{-1}$ ) confirming data from literature. General average SCC was  $6.64 \cdot 10^5 \text{ml}^{-1}$ . Goat milk SCC values did not differ significantly by genotypes, by seasons (spring:  $5.85 \cdot 10^5 \text{ml}^{-1}$ ; autumn:  $6.22 \cdot 10^5 \text{ml}^{-1}$ ). Sheep milk samples represented SCC between  $1.1 \cdot 10^5 \text{ml}^{-1}$  and  $24.5 \cdot 10^5 \text{ml}^{-1}$ . Strong linear regression was explored between SCC of sheep milk and texture properties of yogurt. Higher CSS caused weaker texture properties.  $-0.5567^\circ\text{C}$  FP mean of goat milk samples was found, corresponds with most of published data was lower by  $0.0367^\circ\text{C}$  than actual EU reference value giving a chance for the adulteration. We suggest the use of  $8.0 \cdot 10^5 \text{ml}^{-1}$  SCC value as an action limit – as the first step – and  $-0.545^\circ\text{C}$  Freezing point limit for raw goat milk, in order to the improvement of national standards and the quality of milk products. This study was supported by TÁMOP-4.1.1.C-12/1/KONV-2012-0014 Project”

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