

ZSÍRGOLYÓCSKÁK MÉRETELOSZTLÁSÁNAK VIZSGÁLATA TEHÉN-, ÉS KECSKETEJEBEN

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ABSTRACT

Production of goat milk comes to the front nowadays again, however slowly, but various goat milk products are being increased, which are more favourable according to physiological viewpoint than the products made from cow milk. One of these advantages is the smaller diameter of fat globules in goat milk than in cow milk, published in the literature.

The size distributions of goat and cow bulk milk samples were investigated in autumn and in spring seasons. We explored significant difference related average fat globules diameter between goat and cow milk. The average diameter of fat globules are 2.75 μm in goat milk, while 3.62 μm and in cow milk calculated from all data. Our results confirm the statements in literature that fat globules in goat milk are smaller than in cow milk. We also found a little difference between in the average diameter of fat globules in samples from both species in autumn and spring but it was not significant in cow milk. Average diameter of fat globules was greater in spring goat milk, whereas in autumn cow milk.

The size distribution was not normal so we use medians in the evaluation. These were 2.51 μm in goat milk and 3.41 μm in cow milk samples calculated from all data. Considering the average diameters, the surface of fat globules in goat milk is 1.3 fold greater than in cow milk. This finding (considering the size distribution) stands close data related the summarized fat globule surface in the literature. T

This result suggests further differences in the physiological value (digestibility), in lipase activity, processing of milk e.g. in the separation, in the fermentation or renneting of milk.

Keywords: fat globule, goat milk, cow milk