

## CHANGES IN MILK COMPONENTS IN HEALTHY AND SICK WITH SUBCLINICAL MASTITIS COWS DURING THE PROCESS OF MILKING

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**Summary.** The aim of the work was to determine the changes in milk components both in healthy cows and those sick with subclinical mastitis during the process of milking.

It was determined that at the beginning of milking the amount of somatic cells in healthy cows was  $56,27 \pm 4,97$  thousand/ml, in the middle  $64,76 \pm 6,49$  thousand/ml and at the end  $191,63 \pm 2,03$  thousand/ml of milk. The amount of lactose was decreasing:  $4,84 \pm 0,03\%$  at the beginning,  $4,8 \pm 0,02\%$  in the middle and  $4,61 \pm 0,03\%$  at the end. The amount of protein remained unchanged, the amount of fat was increasing.  $1,65 \pm 0,09\%$ ,  $4,74 \pm 0,17\%$  and  $9,25 \pm 0,13\%$  respectively.

In the milk of cows with subclinical mastitis the amount of somatic cells was increasing during milking from  $1317,7 \pm 141,51$  thousand/ml,  $1724,64 \pm 176,83$  thousand/ml to  $3458,2 \pm 281,85$  thousand/ml respectively. A tendency of a decrease in the amount of lactose and protein and an increase in the amount of fat was observed. The freezing point of such milk, its alkalinity and total bacterial contamination are higher compared to the corresponding parameters of healthy cows.

**Keywords:** subclinical mastitis, somatic cell, lactose, protein, fat, freezing point, total bacterial contamination.