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Health state of the mammary gland based on somatic cell counts and urea level in milk of Jersey and Polish Holstein-Friesian cows of Black-and-White variety

S u m m a r y

The aim of the study was to investigate the effect of the health status of the udder determined on the basis of somatic cell counts milk urea content in Jersey and Polish Holstein-Friesian cows of Black-and-White variety kept under identical conditions. Statistical analyses were performed within and between breed groups. As a result of conducted analyses it was found that urea level in milk of Jersey and Polish Holstein-Friesian cows fell within the adopted standard. Statistical analysis showed a highly significant dependence between somatic cell counts and urea level in milk of Polish Holstein-Friesian cows. Milk with the highest somatic cell count was characterized by the lowest urea content. The health state of the mammary gland in Polish Holstein-Friesian cows, assessed on the basis of somatic cell counts in milk, influenced significantly urea level of milk. Obtained results may suggest gradually increasing feed protein conversion in metabolism (as may be evidenced by a lower urea level in milk) in cows depending on the progression of the mammary gland inflammation.