

Evaluation of the body condition and health status of dairy cows during the dry period and the initial period of lactation

Summary

The aim of this study was to determine the relationship between the body condition score of dairy cows and their performance and health status, expressed as the chemical composition of milk and blood biochemical indices. The body condition of 53 PHF cows was evaluated during the dry period and the first 100 days of lactation. In early lactation (100 days) samples of milk and blood were collected as well. In three consecutive measurements during the dry period (60, 30 and 10 days before calving), cows with body condition scores >4 BCS points constituted the largest group in the study population (58.49%, 45.28% and 58.33%, respectively). The greatest decline in body condition during the study period occurred in cows whose body condition was highest during the dry period (>4). The highest average milk yield was obtained in cows whose body condition score in the dry period ranged from 3.1 to 3.5. Significant differences were noted in the content of the milk components (protein, lactose, casein, non-fat dry matter) and in metabolic profile indicators (protein, creatinine, AST) between cows with different body condition scores in the dry period and the first 100 days of lactation.

KEY WORDS: milk, body condition, metabolic profile