Utilization of body fat reserves during early lactation versus productivity in dairy cows

Summary

The aim of this study was to determine the relationships between the body condition of Polish Holstein-Friesian cows evaluated at calving and changes in body condition score (BCS) during early lactation, and productivity levels. BCS was estimated using a five-point scale proposed by Wildman. The animals were divided into subgroups based on BCS at calving and a decrease in BCS from the level noted at calving to the lowest value. Within the examined population, the largest group was formed by cows, whose BCS at calving ranged from 3.25 to 3.75 points. During the first 100 days of lactation, the highest milk yield was reported in cows whose BCS at calving did not exceed 3.00, and over 305-day lactation – in cows whose BCS at calving ranged from 3.25 to 3.75. As regards the effect of the extent of body condition loss in early lactation on cow productivity, the highest milk yield was observed in the group of cows whose BCS decreased to the greatest extent (>0.75).