

The effect of conventional and TMR feeding systems on feed intake, cow productivity, milk composition and hygienic quality

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Summary

The objective of this study was to determine the effects of conventional and TMR feeding systems on the yield, composition and hygienic quality of milk in two herds of Polish Holstein-Friesian dairy cows. The study was conducted from November 2009 to October 2010. Dairy herd A was fed conventional feed, and herd B was fed a total mixed ration (TMR). The diet was composed of haylage made of grass and legumes, maize silage, dry roughage, concentrate and mineral feed. Each herd consisted of 30 animals kept indoors. Cows fed a TMR consumed 10 kg more feed per day, compared with cows fed conventional feed. Both daily and annual milk yield was higher in herd B than in herd A. Milk produced by cows fed the TMR had a higher protein and fat content, and it was characterized by better sanitary quality (in particular in the summer season), in comparison with milk from cows receiving conventional feed.

KEY WORDS: cows / conventional and TMR feeding systems/ milk yield / chemical composition of milk / hygienic quality of milk