

News & Comments

Loose-Housed Dairy Cows' Housing and Management on a Selection of Welfare Quality

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Since dairy calves are kept in dense housing for the most of their lives, housing conditions have a significant impact on the animals' welfare. Numerous research looked at the various impacts of housing conditions on specific animal welfare markers. a connection ($p < 0.05$) between the type of flooring and the likelihood of becoming lame. Compared to farms with solid floors, farms with slatted floors had a greater probability of lame cows. In addition to the housing conditions in the barns, farming practices have the potential to impact the level of animal wellbeing directly or indirectly for dairy cows. Gloves are more likely to be used during milking in herds with bulk milk somatic cell counts below 400,000 cells/mL, and coliform mastitis vaccination lowers high bulk milk somatic cell levels.

The goal of this study was to use a benchmarking strategy to investigate how housing and management characteristics affected animal welfare indices in dairy cows. Selected animal welfare indicators from the Welfare Quality® methodology (body condition score, integument changes, lameness, milk somatic cell count, and social behaviour) were used to evaluate 63 conventional dairy cattle farms in Northern Germany that practice zero-grazing.

A highly trained assessor collected data on 63 conventional loose housing dairy cattle farms with zero-pasturing in Northern Germany from October 2014 to September 2016 over this time. The level of animal wellbeing was evaluated using the entire WQP. The organization of the farm acquisition was aided by various agricultural players (e.g., chamber of agriculture, milk recording association, and research facilities). According to the WQP's specifications for dairy cattle, the assessment of animal welfare indicators was done. Using tertile calculations, the prevalence of the chosen welfare indicators (body condition score, integument modifications, lameness, milk somatic cell count, and agonistic interactions) was dichotomized.

The current study compared housing and management elements of dairy cattle farms that had more significant differences in a few key WQP animal welfare indicators, including body condition score, integument modifications, lameness, milk somatic cell count, and agonistic interactions. Because it is so time- and money-consuming, this animal welfare indicator system is only partially appropriate for use in agricultural practice. Farms that provided new feed more than once a day were probably less likely to have animals with poor body condition scores ($p < 0.20$). Comparatively to dairy farms with lower cow-to-stall ratios, those with greater cow-to-stall ratios ($> 105\%$) had a higher probability of severely lame cows. According to the authors, other cows' butting interrupted 42% of the visits to the concentrate feeder. The current study also discovered positive connections between the availability of



concentrate feeder stations and shorter trough lengths per cow (<4.7 cm) and higher numbers of agonistic encounters ($p < 0.20$).

In the univariable statistical analysis, the results of the present study show several connections between housing and management characteristics and particular animal welfare indicators of the WQP for dairy cattle. A multivariable statistical analysis, however, only found single impacts on social behaviour, milk somatic cell count, and severe lameness. Given these restrictions, the employed benchmarking strategy produced encouraging outcomes.

Source: [Veterinary Sciences](#)

KEYWORDS

Animal welfare; dairy cow; housing; management; Welfare Quality® protocol

