

The major welfare problems of dairy cows in French commercial farms: an epidemiological approach

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Abstract

Animal welfare enhancement requires that problems are reliably identified and ranked in order to prioritise corrective actions. Welfare problems vary with the conditions in which animals are maintained. The objectives were to highlight major welfare problems for dairy cows on farms in France, and find out how farm characteristics (housing and milking systems, breed) could impact specific welfare aspects on these farms. We conducted a cross-sectional survey on 131 French dairy farms. We used the Welfare Quality[®] protocol, which addresses all aspects of welfare, and yields scores for principles and criteria that represent how well farms meet welfare requirements (from 0 for a very adverse situation to 100 for an excellent one). We used descriptive statistics to highlight low welfare scores, and variance analyses to compare farms. Most farms were found 'Acceptable' according to the Welfare Quality[®] classification. Principles scores for Health, Feeding and Behaviour ranged from 33 to 39. The median score for eight of the welfare criteria was below 50 ('Pain', 'Integument alterations', 'Diseases', 'Comfort around resting', 'Social behaviours', 'Human-animal relationship', 'Positive emotional state', 'Hunger'), while the median score was above 50 for the four other criteria ('Thirst', 'Lameness', 'Expression of other behaviours', 'Ease of movement'). The scores varied widely between farms, within and between systems. Farms with cubicles obtained lower scores for 'Comfort around resting', 'Injuries'; farms with Holstein cows obtained lower scores for 'Hunger'; farms using an automatic milking system obtained lower scores for 'Expression of other behaviours' and 'Diseases' in Holstein herds. This survey yields information on bottlenecks in dairy cow welfare with all dimensions of welfare considered together. The results can be used by stakeholders to prioritise corrective actions in welfare plans, focusing either on the whole population of farms or on farms with characteristics that are at high risk for specific welfare problems.

Keywords: animal welfare, dairy cows, farm characteristics, risks factors, welfare criteria, welfare plan