



Behavioural Changes in Dairy Cows during the Transition Period

Background:

Careful management during the transition period (3 wks before to 3 wks after calving) is critical as dairy cows are vulnerable to infectious and metabolic diseases at this time. Nutritional, environmental and physiological changes are known to occur over this period, but little is known about behavioural changes during transition.

Objective: To describe the changes in feeding, drinking and standing behaviour during the transition period

Methodology:

- Holstein dairy cows (n= 15) were monitored 10 days before until 10 days after calving
- An electronic monitoring system, video cameras and modified dataloggers were used to monitor daily feeding, drinking and standing times respectively. Number of feeding and drinking meals/d, as well as number of standing bouts/d were also determined from this data.

Results:

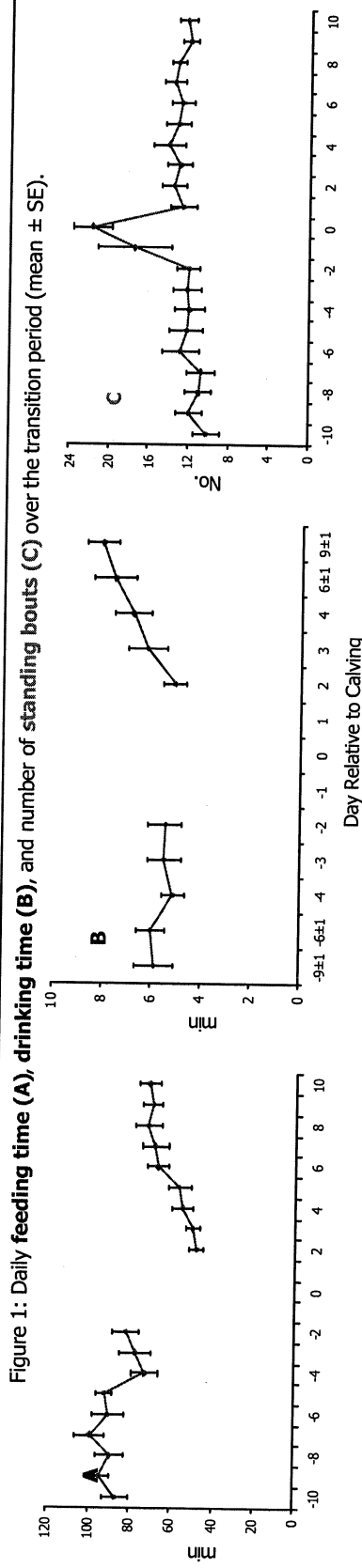


Figure 1: Daily feeding time (A), drinking time (B), and number of standing bouts (C) over the transition period (mean ± SE).

- Cows spent less time feeding after calving (Fig.1A), but the average number of meals/d increased from 9.2 in the pre-calving period to 11.0 after calving.
- Time spent drinking also increased post-calving (Fig. 1B), as did the number of drinking meals/d (from 6.6 in the pre-calving period to 9.4 after calving).
- Number of standing bouts peaked at calving (Fig. 1C). Standing time was also highest during the days around calving (14.4h/d) compared the pre-calving (12.3h/d) and post-calving (13.4h/d) periods.

Conclusions:

Feeding, drinking and standing behaviour all change over the transition period. Improved knowledge of these changes should help in the design of management and housing systems that promote cow health and comfort over this period.

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Reference: Huzzey, J.M., M.A.G. von Keyserlingk, and D.M. Weary. Behavioural Changes in Dairy Cows During the Transition Period. 2004. Official Proceedings of 39th Annual Pacific Northwest Animal Nutrition Conference. p. 151.

