

Housing System May Effect Calf Behavior and Performance of Jersey Heifer Calves

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Housing of dairy calves may significantly affect their behavior, production performance, and welfare. The dairy industry in-large remains in favor of individually housing pre-weaned calves in order to avoid undesirable behaviors, such as cross-sucking, and reduce the risk for transmission of disease-causing organisms. The majority of research on housing systems published to date has been conducted with Holstein calves. The present study examined the effects of paired versus single housing of Jersey heifers in hutches on their behavior and performance. Forty female Jersey calves were allocated to either individual or paired housing treatments at birth and monitored for approximately 9 wk. Calves on both treatments were provided with a single hutch, and calves allocated to the paired housing treatment were provided with a pen enclosure twice the size of individually housed calves. All calves were fed milk replacer via bucket twice daily (1.9 L/feeding first 7 d, then 2.27 L/feeding until weaned) and had ad libitum access to calf-starter and water. Calves were decreased to one milk feeding per day on d 49 and weaning occurred on d 56. Grain consumption was monitored daily and calves were weighed weekly to calculate average daily gain (ADG). Body length and hip and wither heights were measured at birth, 3, 6, and 9 wk of age. Live behavior observations were conducted twice per week around milk feeding. Data were analyzed using the MIXED model procedure of SAS. The ADG tended to be higher for calves housed in pairs compared to those housed individually (0.67 versus 0.61 ± 0.02 kg/d; $P = 0.08$). Grain dry matter intake was similar across treatments ($P > 0.10$). Behavior data for this study are still being collected and analyzed. In conclusion, housing Jersey heifer calves in pairs allows for social interactions and may increase ADG.

Key words: Dairy calf welfare, housing method, performance, behavior