Benefits of Social Housing for Dairy Calves

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Individual housing of dairy calves during the milk feeding period is very common. However, a series of experiments at the Animal Welfare Program at the University of British Columbia have demonstrated that this practice has costs for the welfare and performance of the calves compared to pair or group housing.

Calves pair-housed from the time they were a few days old were better able to adjust their behaviour when a previously learned rule (associating a specific colour with a milk reward) was changed than calves housed individually. A separate experiment provided evidence that pair-housed calves were faster to start eating grain when moved to a group pen after weaning, and so gained more weight than individually raised calves did in the first few days in the pen. The pair-raised calves also showed less signs of fear in a new pen and had more non-aggressive social interactions with other calves. These skills at adapting to new environments and interacting appropriately with group-mates are important for welfare and performance as they face management changes such as regrouping later in life.

Finally, a more recent study looked at the importance of the age at which calves are given social companions. Calves were housed individually or pair housed at either 6 days old or 6 weeks old. Those paired at 6 days old learned new rules more easily than individually housed calves, as in the previous experiment, with late paired calves' performance falling in the middle. For improving feeding behaviour, however, only early pairing was effective: calves paired at 6 days old consistently ate more grain, increased solid feed intake more after weaning from milk, and had higher weight gains at 10 weeks old than either of the other treatments. Providing calves with at least one social companion at a young age therefore seems best for their welfare and behavioural development.

Implications

Housing calves individually for the full pre-weaning period can interfere with their ability to learn and to adapt to new situations. For improved feed intake and weight gain, as well as potentially easier management later in life, we recommend social housing.