The ‘auntie effect’: presence of an older companion reduces calf responses to weaning

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Background, Aim and Methods

- Dairy calves are typically separated from the cow and housed either individually or in groups of similar age. Under more natural conditions calves can learn from older social companions.
- We housed calves \((n=54)\) in groups of 3, composed of either all young calves (1 wk. of age at the start of the exp.), or 2 young calves and an older (3 mo. old) weaned calf. Pens were equipped with automatic milk, starter, and hay feeders and weigh scales. Weaning was by gradual reduction of milk from d 36 to d 40.
- We measured solid feed intake (hay and starter), calf growth, and visits to the milk feeder (an indicator of hunger) before and after weaning.

Results and Discussion

- Housing calves with an older companion increased solid feed intake overall: hay intakes were higher before weaning \((0.06 \text{ vs. } 0.03 \pm 0.005 \text{ kg/d})\) and starter intakes were higher after weaning \((1.5 \text{ vs. } 1.1 \pm 0.07 \text{ kg/d})\). This higher intake of solid feed resulted in higher weight gains before \((0.9 \text{ vs. } 0.7 \pm 0.04 \text{ kg/d})\) and after weaning \((1.3 \text{ vs. } 1.0 \pm 0.07 \text{ kg/d})\).
- At weaning, when milk was gradually reduced, calves housed with companions of their own age performed a higher number of visits to the milk feeder \((8.6 \text{ vs. } 12.6 \pm 0.9 \text{ visits/d})\). This higher motivation to assess the milk feeder likely reflects milk hunger and poor adjustment to the solid feed post-weaning.

Conclusion

- Housing dairy calves with an older companion can increase solid feed intake and weight gain and reduce signs of hunger around weaning.

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