

The Effect of Milk Allowance on Performance and Starter Intake of Dairy Calves

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This study aimed to investigate the effect of higher milk allowances on performance, visits to the feeder and solid feeding behavior of dairy calves. Fifty-six Holstein group-housed calves received 6, 8, 10, or 12 L of milk per day from an automatic feeder until 34 d. Milk was reduced to 50% of previous allowance from 35 to 42 d, and reduced by 20%/d for the last 5d until weaning at d 48. Calves were provided ad libitum access to calf starter and hay. Calves on 10 and 12 L/d treatments had higher ADG (0.83 ± 0.04 and 0.88 ± 0.04 kg/d, respectively) compared to calves receiving 6 and 8 L/d (0.76 ± 0.04 and 0.76 ± 0.03 kg/d). Final weight at 61 d was highest for those calves receiving the highest milk ration (93.0 ± 2.7 , 92.8 ± 3.4 , 99.2 ± 3.3 , and 102.0 ± 3.6 kg, for 6, 8, 10 and 12 L/d, respectively). Calves on the 12 L/d treatment had the fewest rewarded visits to the milk feeder during the pre-weaning period (7.1 ± 0.3 , 7.9 ± 0.4 , 7.2 ± 0.2 , and 6.7 ± 0.3 visits/d, for 6, 8, 10 and 12 L/d, respectively). Calves receiving milk at 6 and 8 L/d treatment had more unrewarded visits to the milk feeder (9.7 ± 0.7 , 7.0 ± 0.6 , 5.5 ± 0.5 and 4.5 ± 0.5 visits/d, for 6, 8, 10 and 12 L/d, respectively). Daily starter intake did not differ among treatments (1.4 ± 0.2 , 1.6 ± 0.2 , 1.7 ± 0.2 , and 1.6 ± 0.2 kg/d, for 6, 8, 10 and 12 L/d). These results indicate that higher milk allowances of 10 or 12 L/d can be managed to achieve higher ADG, higher post-weaning weights and fewer unrewarded visits to the milk feeder, without reducing starter intake.

Implications: Higher milk allowances (10 or 12 L/d) when managed properly allows the calves to achieve higher ADG, higher post-weaning weights and fewer unrewarded visits to the milk feeder, without reducing starter intake.