Effects of age and milk allowance on responses to abrupt weaning in dairy calves

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INTRODUCTION

Dairy calves are provided less milk and weaned at a much younger age than would occur naturally. Ad libitum feeding of milk promotes faster growth, and early weaning may be economically desirable. However, the effects of these factors on weaning distress are not well understood. The objective of this research was to determine the effects of weaning age and amount of milk fed on responses to abrupt weaning.

METHODS

Holstein calves (n = 36) were fed either ad libitum or restricted (10% BW) milk, and were weaned at either 4 or 8 wks of age. Time standing and number of visits to the milk feeder were electronically monitored from 1 wk before weaning until 2 d after weaning. Body weight was recorded each time calves visited the feeder. Averages of the pre-weaning values were used as a baseline to compare responses post-weaning.

RESULTS

All calves showed strong behavioral responses during the 24 h after weaning

Daily standing time increased 37% (P < 0.001) after weaning

Non-nutritive visits to the milk feeder increased 350% (P < 0.001) after weaning

Restricted-fed calves tended (P < 0.1) to return to baseline values for both behaviors faster than the ad libitum-fed calves

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