

Detection of Illness by Feeding Behaviour in Group-Housed Calves

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Calf illness is of particular concern to dairy producers because of the high morbidity and mortality rates during the milk feeding phase. In four separate experiments we examined whether illness in group housed dairy calves up to 21 d of age fed either low (13 calves) or high (19 calves) milk rations resulted in changes in feeding behavior that could be detected by automated milk feeding equipment, and whether these changes were affected by feeding level.

We matched paired calves that succumbed to illness with healthy calves on the same feeding level. Sick calves fed high levels of milk or milk replacer showed a decrease in milk intake and frequency of visits to the milk feeder, and an increase in the duration of each visit to the milk feeder as compared to healthy calves fed at the same level in the days following the detection of illness. However, sick calves fed low levels of milk or milk replacer only showed a decrease in the duration of each visit to the milk feeder in the days following detection of illness as compared to healthy calves. The changes in feeding behaviour associated with illness are different for calves fed high or low milk levels.

Implications: Changes in feeding behaviour recorded by an automated feeder could be useful to identify sick calves. However, these changes depend on the feeding level.