

Changes in Feeding Behaviour Identifies Cows at Risk for Subclinical Ketosis



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Problem:

Subclinical ketosis (SCK) after calving is difficult to detect and little is known on how to identify cows at risk for postpartum SCK prior to calving

Objective:

To determine if prepartum DMI can be used as a tool to identify cows at risk of developing SCK in the week after calving.

Methods:

- Daily TMR intake was recorded during the 3wk before and 3wk after calving
- Health and daily milk production were recorded for 3wk after calving
- SCK was defined as serum β -hydroxybutyrate $>1000\mu\text{mol/L}$ during the week immediately after calving
- 10 healthy cows were matched by parity with 10 cows with SCK in wk+1



Figure 1. Cow eating from Insentec bin used to monitor feed intake

Results:

- From wk-1 to wk+2 cows with SCK ate significantly less than healthy cows ($P < 0.01$)
- Every 1kg decrease in DMI during wk-1 increased the odds of a cow getting SCK by 2.2 times ($P_{\text{Wald}} = 0.02$; $CI_{95} = 1.11-4.31$)

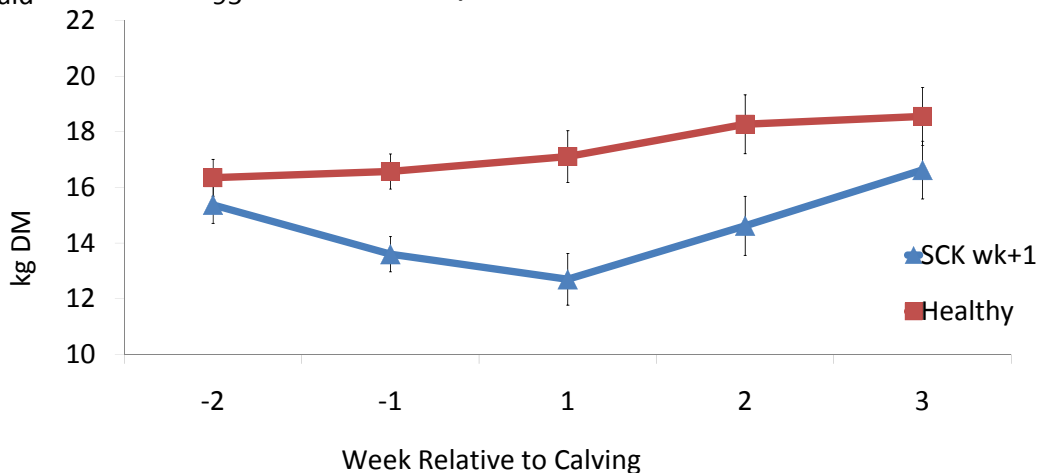


Figure 2. Average daily intake by week of healthy and subclinically ketotic dairy cows

Conclusion:

For high producing Holsteins, low DMI during the week before calving can identify cows at risk of developing subclinical ketosis during the week after calving