



THE UNIVERSITY OF
BRITISH COLUMBIA

Effect of Feeding Frequency on the Quality of TMR Available Throughout the Day



Trevor DeVries, Marina von Keyserlingk, and Karen Beauchemin

INTRODUCTION:

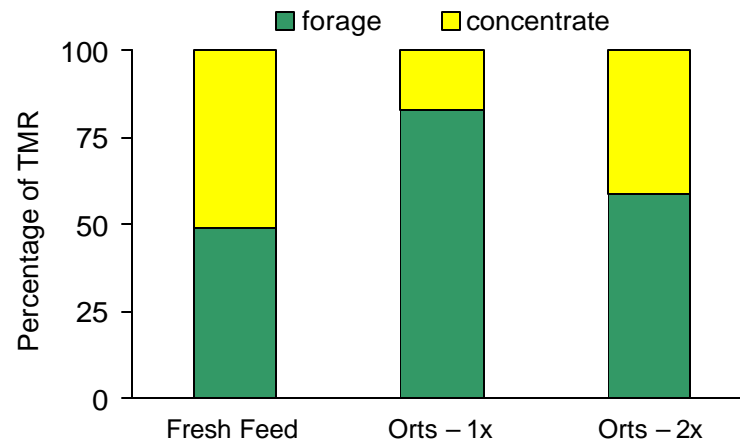
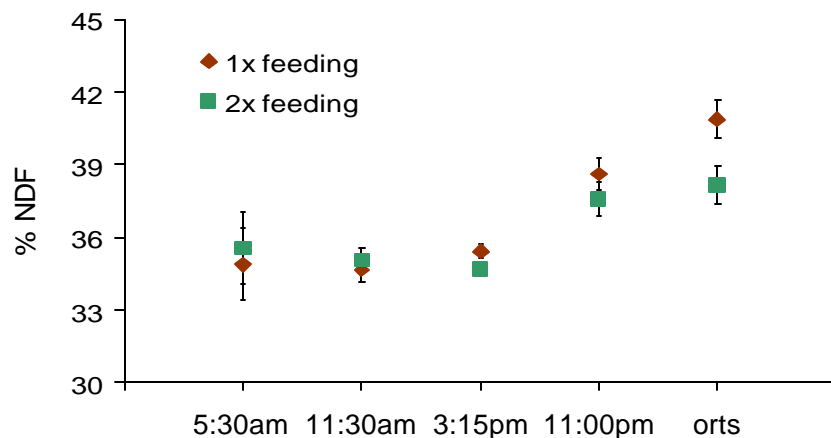
Many dairy producers are electing to deliver the daily allotment of TMR only once per day due to increased labor costs. Questions have been raised regarding the quality of the TMR available to the cows over the course of the day. In cases where cows may preferentially sort for the grain component of the TMR, they may leave the longer forage components, leading to an increase in the fiber content of the remaining feed. The objective of this study was to examine how this management practice affects the quality of the TMR over the course of the day.



METHODOLOGY:

Forty-eight lactating Holstein cows, in groups of 12, were subjected to each of two treatments: 1) feeding a TMR once per day (at 5:30am), and 2) feeding a TMR twice per day (at 5:30am and 3:15pm). The TMR was sampled from the feed bunk at 5:30am, 11:30am, 3:15pm, and 11:00pm, and the orts were sampled at 5:00am. Feed samples were then analyzed for fiber (%NDF) content.

RESULTS:



The fiber content of the feed increased throughout the day for both treatments, however, the effect was greatest when feed was delivered once daily.

A greater proportion of forage in the orts from the once daily feeding indicates that more sorting occurs when feed is delivered once daily.

IMPLICATIONS:

Twice a day feed delivery reduces the variation in the composition of feed consumed by the cows. This could have dramatic effects for those submissive cows, which may have inadequate access to feed during peak feeding times.

ACKNOWLEDGEMENTS: Thanks to NSERC, DFC, BC Dairy Foundation, and many others for their financial support.

Contact: trevorjd@interchange.ubc.ca