

Dairy cow feeding behaviour: Basics concepts and practical implications

Trevor J DeVries

Department of Animal and Poultry Science, University of Guelph, 50 Stone Road E., Guelph, ON, N1G 2W1, Canada

tdevries@uoguelph.ca

The productivity, efficiency, health, and welfare of dairy cows are largely influenced by nutritional management strategies. Much of that influence is moderated through the consumption behaviour of dairy cows. It is well established that milk production is largely driven by the amount of nutrients consumed, that is, total dry matter intake (DMI). Dry matter intake is largely a function of feeding behavior, impacted by changes in meal size, duration and frequency, as well as feeding time and rate. Changes in DMI require concomitant changes in different aspects of feeding behaviour. Feeding behaviour is not only important from a total DMI standpoint, but also to keep the rumen healthy and working efficiently. Consuming longer and larger meals, more quickly, has been associated with an increased incidence of sub-acute ruminal acidosis in dairy cows. Recent research has suggested that management strategies that promote frequent consumption of feed in small meals throughout the day are important to optimize production and efficiency. In addition to the time course of eating, the composition of feed consumed may also impact productivity. Sorting of a TMR by dairy cows may result in a ration consumed being greater in highly-fermentable carbohydrates than intended and lesser in effective fibre, thereby increasing the risk of depressed rumen pH, lower milk fat, and lower efficiency of production. In addition to how and what cows consumed, the post-consumption behaviour of rumination is also important in terms of keeping the rumen healthy and functioning efficiently. From a practical standpoint, this all means that we need to be providing diets, and managing the delivery and access to those diets, in such a manner that cows are motivated to consume that feed in a manner that is good for them and consume that feed as it is provided to them.

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