

WHY SHOULD WE FOCUS ON DRY MATTER INTAKES IN THE CLOSE UP PERIOD?

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Getting cows to eat isn't an issue normally. However, in the period immediately before calving, dry matter intakes drop considerably. How much they drop by can be the difference between a smooth transition or a bumpy one.

In our transition cow diets, we should be aiming to achieve dry matter intakes of around 13 kgs. As cows get closer to calving, a gradual decline in dry matter intake of 20 to 40% occurs¹, with the majority of this decrease occurring in the week immediately prior to calving.

Reducing intakes when nutrient requirements are about to dramatically increase seems counterproductive doesn't it? But recent research suggests the decline in feed intake prior to calving is part of a cow's normal physiological preparation for lactation².

Even if we cannot prevent the decline in feed intakes at this critical time, exacerbating feed intake decline as a result of mismanagement could lead to health problems and poor performance.



Cows that experience a greater decline in feed intake before calving are more likely to enter negative energy balance earlier, leading to greater concentrations of non-esterified fatty acids (NEFA) and beta-hydroxy butyrate (BHB) in the blood before and after calving². Higher circulating levels of both NEFA and BHB's will increase the risk of ketosis, fatty liver and displaced abomasum.

Therefore, managing the feed bunk for transition cows is critical.

Consider these practical tips:

- **Always clear away leftover feed before adding fresh feed**
- **Use forages that are free from moulds and not heating**
- **Feed at least 5% more to reduce risk of the feed bunk becoming empty**
- **Provide 85 to 100cm of feed space per cow**
- **Monitor rumen fill scores on a daily basis**
- **Avoiding feeding excessive levels of anionic salts**

It has been shown that acidifying diets too much, down to -18 mEq/100g DM for example, can reduce dry matter intakes³.

Our recommendations for target negative DCAD are not nearly as low as this, read our next article to find out more! ■



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Reference:

1 Hayirli, A., Grummer, R. R., Nordheim, E. v., & Crump, P. M. (2002). Animal and dietary factors affecting feed intake during the prefresh transition period in Holsteins. *Journal of Dairy Science*, 85(12), 3430-3443 **2** Santos, M. G. S. Mion, B., & Ribeiro, E. S. (2024). Magnitude of change in prepartum feed intake: Estimations using multiple classes of predictors and associations with transition metabolism, health, and milk production. *Journal of Dairy Science*, 107(11), 9803-9820. **3** Lopera C, Zimpel R, Vieira-Neto A, Lopes FR, Ortiz W, Poindexter M, Faria BN, Gambarini ML, Block E, Nelson CD, Santos JE. (2018). Effects of level of dietary cation-anion difference and duration of prepartum feeding on performance and metabolism of dairy cows. *Journal of dairy science*, 101(9), 7907-7929

NEXT IN THE SERIES: We'll discuss the target DCAD range and the advantages of monitoring this with urine pH.s.



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