



Ketosis

September 24

Ketosis is a condition caused by the cattle being in Negative Energy Balance (NEB), typically around calving when the start of lactation causes energy demands to increase dramatically. If cows don't maintain intakes during this period to keep up with this demand they will start to metabolise fat stores. This process of metabolism results in the production of ketones including BHB (beta-hydroxy butyrate) which we can measure on farm.

Why is this important?

Ketone bodies are associated with a reduction in milk yield, reproductive performance and impaired immune function. On farm this can lead to increased transitional disease including retained fetal membranes, displaced abomasum and metritis.

The threshold for an animal being at risk of disease associated with ketosis is 1.2mmol/l of BHB in the blood. Often at this level the cow won't appear sick, but these animals are at higher risk of associated diseases such as metritis and LDAs, as well as having an increased risk of culling. Cows with subclinical ketosis have been shown to give 358kg less milk a lactation, as well as being 50% less likely to hold to the first service. Costs associated with hidden ketosis are estimated at £220 per animal.

What cows are at risk of ketosis?

While all cows can develop ketosis if conditions around transition and calving are not properly managed, some animals are at significantly higher risk. These cows include:

- **Sick** – cows who have been lame or sick in the dry period
- **Old** – Lactation 3 and above cows
- **Fat** – animals with a body condition score of >3. Often this will include animals that have an extended dry period
- **Twins** – Cows who are pregnant with twins

Think **SOFT**. These cows are particularly at risk and should be carefully monitored for signs of ketosis around (and particularly post) calving.

How can I reduce ketosis on my farm?

Transition cow management is the foundation to managing and reducing ketosis. Maximising intakes during the last 3 weeks pre-calving, ensuring transition cows have adequate feed space and ration formulation for both the transition and fresh cows are all vital to a successful transition. Regular body condition scoring is also extremely useful to both identify individual at risk animals but also to look at herd trends and adjust nutritional management accordingly.

Monitoring of BHB levels between 2-14 days after calving is the best method for monitoring the prevalence of sub-clinical ketosis on your farm. This can either be done by your vet or you can purchase a BHB monitor and perform the test yourself. Once we've identified if ketosis is having an impact on your fresh cows an assessment of the transition environment with your vet will identify possible causes.

Although overall transition management is vital, even in perfect systems, particularly high-risk cows can still be at risk of ketosis. Until recently this is where Kexxtone boluses have been useful to give these cows extra protection. However, due to license issues Kexxtone has recently become unavailable.

Cholovite boluses are a good alternative to Kexxtone for these cows that are at increased risk of ketosis. These boluses contain choline and methionine which improves fat metabolism in the liver and therefore helps to prevent sub-clinical ketosis.

If you have any concerns regarding the level of ketosis on your farm, please let your vet know.



Best wishes,

Jonah Dickie
BVM BVS MRCVS

MEETINGS COMING UP

FIRST AID FOR FEET

WEDNESDAY 18.9.24
@ THE PRACTICE
9AM - 5PM

YOUNGSTOCK - SHORT COURSE

WEDNESDAY 25.9.24
@ IRON ACTON
1PM - 4PM

PRE-WEANING CALF HEALTH MEETING

Looking at pre-weaning benchmarking data, with a focus on pneumonia prevention including ventilation and how we've implemented lung scanning on farm.

Lunch will be provided

11am - 2pm, Tuesday 24th September
@ Woodhill Farm
(SN15 5AU, www/documents.skews.crispy)



CHARITY FARMERS SKITTLES EVENING

@ The Golden Swan, Wilcot, SN9 5NN
On Thursday 10th October at 7pm

@ Old Royal Ship, Luckington, SN14 6PA
On Wednesday 16th October at 7pm

@ The Farmers Arms, Guiting Power, GL54 5TZ
On Wednesday 23rd October at 7pm

@ The Anchor Inn, Epney Saul, Glos GL2 7LN
On Wednesday 30th October at 7pm



Charity calendar -£10 each - all proceeds split between FCN & DPJ Foundation.

If you would like to attend any of our meetings or buy our charity calendar, please contact us:
01666 823035 or farm@georgevetgroup.co.uk

T: 01666 823035 Option "1" for visits or enquiries, "2" for medicines, "3" for TB testing