

May 2011

Ketosis in Dairy Cattle

We have seen many cases of ketosis over the last few weeks.

Ketosis is a metabolic disorder that occurs in dairy cattle when energy demands for milk production exceed energy intake. The cow starts to use body fat as an energy source, but if the fat is broken down faster than the liver can process it, then excessive amounts of ketones accumulate in the blood and the symptoms of ketosis occur.

Clinical signs:

- Body condition and weight loss
- Reduced milk yield
- Reduced appetite particularly for non-forage feeds
- Dull, stary coat and firm, shiny dung
- Acetone (pear drop) smell on breath or milk
- Some individuals develop nervous signs including excessive licking, salivation and staggering ("Nervous Acetonaemia")

If you have a case of clinical ketosis then it is likely that many other cows are suffering with sub-clinical ketosis.

Cows with sub-clinical ketosis are more likely to get a displaced abomasum, less likely to get pregnant on time and will produce less milk.

Diagnosis:

Apart from the clinical signs, it is possible to test the levels of ketones in the milk or urine using Rothera's powder which turns from pink to purple depending on the amounts present.



We are now using Ketone Meters which gives an immediate and accurate "cow side" reading of the blood Ketone levels. A blood ketone level greater than 1.4 mmol/l confirms ketosis.

Treatment of Ketosis:

Corticosteroids - these break down protein in muscle to produce glucose and help restore blood glucose levels back to normal. Steroids need to be used alongside a glucose precursor.

Glucose Precursors - These include Propylene glycol contained in Ketol and Botonic

Energy syringes and Glycerol contained in Aggers Glycerol Plus. These are given as drenches over a period of 3-4 days.



It is important to note that Propylene glycol is toxic if given in excessive amounts to cattle, so please follow dosing instructions carefully!

Prevention

The aim of any prevention regime is to maximise dry matter intakes around the calving period.

- Avoid over fat cows at calving-fat cows have poorer appetites both before and after calving and mobilise more fat.



- Reduce disease around calving-Calving difficulties, retained cleansings, milk fever, mastitis, lameness, will all increase the risk of Ketosis

- Feeding management - Good quality diets and forages, maximise feeding times and trough space
- Reduce stress - house fresh calved cows separately for the first few weeks of lactation ideally in straw yards.

Orf in sheep - Scabivax Forte vaccine temporarily unavailable

We have been informed by Intervet Schering Plough that the Orf vaccine, Scabivax forte, is currently unavailable due to a manufacturing problem.

Alternative control strategies for Orf include:

- Isolate any affected ewes or lambs immediately.
- Keep lambing areas well bedded as plenty of bedding reduces the chance of animals coming into contact with infected scabs.
- Apply oxytetracycline spray to raw lesions.
- Use long acting antibiotic injections to control secondary bacterial infections.

Forthcoming Meeting

Bovine TB

The NFU have a meeting on Bovine TB and on farm bio security at the Bentley Brook Inn, Fenny Bentley on Tuesday 10th May. Please see the enclosed leaflet for further details.