

# CUD

“Cows Under Discussion” or “Something to Chew On”



June 2016

## Clinic News

Like you, we are in full winter mode now, with the cold wet weather certainly hitting with a bang. End-of-season and pre-sale scanning has turned up the usual range of “surprise empties” (1-5%) reducing some farms’ winter grazing costs quite significantly (as long as they haven’t already had DCT!). Cows seem to have dried off well, and most have transitioned on to winter crop without too much trouble – we hope those of you who attended our fodder beet feeding field day at Glenmarie Dairies, in association with Jim Gibbs from Lincoln University, found it helpful for managing this process. Heifer teatseal is over half way through, so we’re planning for Spring.

Hanna Loeffler, our locum at Balclutha is settling well, allowing Marek Misiewicz to spend more time through at Milton, where he is now based.

Stage 2 of the Balclutha building upgrade could be finished in as little as ten weeks, and walking around the site, all of us are quite excited imagining our new work spaces. By spring, you will be able to take advantage of our new small meeting rooms for consultations etc. The retail and reception areas are currently very noisy, dusty, cold and draughty, so we thank you, but more especially the staff who are working there all day, every day for your/their patience and understanding. Eyes on the prize!

## Acorn Toxicity

It seems to be a theme of winter that cattle fall victim to what they are eating. The following case is of a more unusual variety and is worth reporting as this toxicity can be quite devastating. We were recently presented with a case of sick calves fading away after some miserable weather. The calves were showing a general lethargy, losing condition, drinking a lot and the worst affected had a bloody scour. Post mortem examination revealed fluid around the kidney, reactive mesenteric (intestinal) lymph nodes – a sign of inflammation, and diarrhoea in the rectum. It was only when pathology reports from the sample of kidney came back that the cause became apparent. The pathologist found that the tubules of the kidneys were severely damaged, the most likely cause: acorn toxicity. Sure enough, it turned out the calves had been in a grass paddock shared by some old oak trees about 10 days previous.

Acorn toxicity occurs due to the tannins found in acorns. These tannins are absorbed in the gut, and travel via the blood to the kidneys where they are excreted. Unfortunately, high enough concentrations of the tannins cause death of the tissue which can lead to kidney failure. Acute kidney failure is a fatal condition that cannot be treated by standard injectable medications, animals suffering from the disease can only be supported by lots of fluids (intravenous preferably). As it takes some time for the tannins to be broken down in the gut, then absorbed, then excreted, and then for the kidneys to fail, it can take days to weeks before you see signs of any issues. The best thing is to avoid ingestion of the toxic substance in the first place. However, if you suspect your animals have been in contact with acorns then activated charcoal given orally can bind the tannins in the gut before they have been absorbed into the body. This will only work in the first 24 -48 hours after ingestion, so prompt action is required.

## Nitrate Poisoning

**What is it:** Nitrates are found in feed, and certain conditions will cause them to be present in higher than normal quantities. These quantities can overwhelm the animal’s normal mechanisms to break them down,

causing the formation of nitrite. Nitrite affects the red blood cells, affecting their oxygen carrying capacity, and the cow's circulatory system.

#### **What are the risk factors for Nitrate poisoning:**

- Active growth of plants after rain following dry or drought conditions
- Dull, overcast weather (sunshine tends to cause breakdown of nitrate)
- High rate of feed consumption, high carbohydrate in the diet, lack of adaptation to high nitrate feed, herbicide treatment of plants and soil sulphur and molybdenum deficiency.
- Plants that produce nitrate poisoning are usually grown in well manured soils.

#### **Plants that are high in Nitrate include:**

Rape, Turnips, Kale, Swedes, Perennial and Italian ryegrass, immature green oats, wheat, barley, white clover and more.

Typically the highest concentration of nitrate is found in the **stems and stalks** of the plants rather than the leaves.

#### **Signs:**

- Sudden death
- Gastrointestinal disturbances - salivation, apparent abdominal pain, diarrhoea, vomiting
- Oxygen Deprivation - Increased respiratory rate, struggling to breath, gasping, BROWN – pale gums
- Nervous system signs - Muscle tremor, weakness, incoordination, convulsions.

#### **What to do if you suspect Nitrate poisoning:**

- CALL US IMMEDIATELY
- Remove rest of herd from offending feed, and feed hay

#### **How to prevent Nitrate poisoning:**

- Test feed for nitrates before putting stock on – we can do this for you at the clinic.
- Proper transition management
- Limit time on high nitrate, or unknown status feed, to 1 hour
- Graze in the afternoon, not first thing in the morning
- Look for danger periods – eg dull warm weather, fast growing feeds.

#### **Thiamine Deficiency**

Calves grazing crops can develop a condition called polioencephalomalacia (PEM), which causes brain damage. Affected animals become blind and disorientated initially, then have seizures and die. Any sudden change in diet can upset the thiamine balance and cause this, however brassica crops tend to be particularly bad due to their high sulphur content. Affected calves can be treated successfully if caught early. Gradual introduction to the feed will prevent this condition occurring

#### **Checklist for this month:**

- Monitor cows & heifers transitioning onto crop
- Works livers on cull cows. Give us a call to request - you need when they are leaving the farm, where they are going, who they are going with & numbers
- Call us if you are thinking about heifer teatsealing
- BVD blood test 15 R1 heifers

## **Retail**

- **All Trace Bolus** - Contains controlled minerals and vitamins for 8 months. Cattle must be no less than 180kg. Ask at retail for more information on this great product.
- **Minerals** – Unsure on what you need for this season? Looking for something better or something cheaper? Talk to your Clutha Vet or direct to the company rep for Nutritech and Agvance. Early bird specials available..
- **Merial Ancare** - Purchase selected Cattle Pour-On or Injection and receive a Core vest or a Hi-Viz vest.
- **Eclipse E injection** - Purchase 3 500ml and get a 4<sup>th</sup> free.
- **Eclipse 5.5 Pour On** - Purchase a 5.5ltr and receive another 1lt FREE.
- **Eprinex Pour-on** - Purchase 3 get a 4<sup>th</sup> free.
- **Dectomax Injection or Pour On** – Purchase now & get bonus doses and a Victorinox knife set free.
- **Nexiprin inj with vitamin E** - Purchase 2 get a 3<sup>rd</sup> free.

**Contact retail for more information and quotes.**