

Dairy Newsletter

February 2023



CAMPERDOWN
VETERINARY CENTRE



CVC CLINIC NEWS

Welcome to the February edition of the dairy newsletter. We have exciting news! We would like to welcome Dr Gemma to our team as a locum vet. Gemma has worked in South West Victoria for the last 5 years and just returned from a working holiday in New Zealand. She is VERY passionate about all things cattle and is more than happy to have a chat and help out wherever possible.

With the flies still around we are still seeing cases of pink eye. We thought this issue could focus on some of the causes of pink eye and how it develops in the eye. Given the time of year we also wanted to provide some information on the transition cow period as we know this is the most important period of a cow's productive life and the time of a cow's life when most health issues occur.

Camperdown Veterinary Centre

1 Leura Street , Camperdown

Ph: (03) 5593 1077

Hours:

- 8:00am – 5:30pm (Monday – Friday)
- 9:00am – 12:00pm (Saturday)

Medication and food collections only on Saturday mornings

24-hour emergency service available by calling 5593 1077 and pressing "2" .

Pink Eye

Pink eye, also known as infectious bovine keratoconjunctivitis, is a highly contagious disease which occurs in cattle of all ages. It is spread rapidly in the warmer months and can affect one or both eyes and in severe cases cattle can become blind or have compromised vision for life. While it only affects the eye, it can cause weight loss or reduced weight gain due to compromised vision and pain leading to major economic losses.

What Causes Pink Eye?

Pink eye is predominately caused by a bacteria called *Moraxella bovis* however recent studies have found other bacteria such as *Moraxella ovis* have the potential to also cause pink eye. Additionally there are a number of host and environmental factors which also predispose the animal to developing the disease.

Host Factors:

- Pink eye occurs more commonly in *Bos taurus* cattle than *Bos indicus*.
- Cattle with no pigment around their eyes generally develop pink eye more readily.
- Age of cattle plays a factor. Generally pink eye occurs in younger cattle. It is believed that it may occur less in older cattle due to a developed immunity.
- Damage to the cornea is a major predisposing factor as it allows the bacteria to infiltrate the cornea. Damage can occur due to increased exposure to the sun (during summer), dust blowing into eyes, scratches to the cornea from grazing round feeds like hay.

Treatment: Prompt treatment is essential. There are a range of treatments for pink eye and suitability will be dependent on severity. Treatments include topical antibiotics, systemic antibiotics, subconjunctival injections, pink eye patches and in severe cases third eyelid flaps to protect the cornea.

Did you know...some cattle can carry the pink eye bacteria for over a year meaning they can act as carriers in your herd



TRANSITION COW PERIOD

The transition period is of huge significance in dairy cattle production as cows are at a much higher risk of developing metabolic diseases during this period. It is defined at the time period 4 weeks prior to calving and 4 weeks post calving and is the period where a cow transitions from being a dry, pregnant cow to an empty lactating cow and therefore it is a period of massive metabolic change.

Lameness and metabolic diseases such as milk fever/ hypocalcaemia, ketosis, and displaced abomasums occur most commonly during the transition period and increased rates of these diseases can be seen when the transition period has not been managed well. Poor transition management can also cause an increase in retained foetal membranes and metritis in cattle. Cases of infectious disease generally also increase during the transition period due to suppression of the immune system associated with calving. In fact, it is estimated that 80% of disease costs on dairy farms occur during the transition period. Studies have found that the transition period is one of the highest risk periods for involuntary culls and cow deaths making management of this period imperative for optimum production.

Aims of the transitional period:

- 1. Reduce Ruminal Disruption/ Minimise Acidosis Risk**— by slowly introducing concentrates during the transition period you can reduce the risk of ruminal acidosis occurring when cows start getting fed the milking ration.
- 2. Minimise Calcium and Magnesium Deficiencies**— a cow's calcium intake should be limited during the dry period to promote calcium mobilisation from bone reserves going into lactation. By promoting this change in calcium mobilisation, cows will be less likely to become hypocalcaemic/ develop milk fever early in lactation. Potassium can also interfere with calcium metabolism and should also be restricted in the dry period.
- 3. Minimise Mobilisation of Fat and Protein Reserves**— The combination of a significant increase in milk production and a reduced appetite after calving can force dairy cows into a negative energy balance. This means they are not consuming enough energy to meet the demands of lactation. To meet the demands of lactation, cows will mobilise fat and muscle reserves which puts them at high risk of diseases such as ketosis, fatty liver and pregnancy toxemia.
- 4. Avoid Immune Suppression** - good nutrition during transition period is essential for good immune function.

There are many approaches to transition feeding in Australia including supplementing pasture and hay with anionic salts and concentrates, professionally developed commercially produced lead feeds, or total mixed rations that meet all the nutritional requirements of a transitioning dairy cow.

As always, if you have any questions regarding transition management in your herd, please do not hesitate to contact us. We are here to chat and would love to help you formulate the best nutritional plan for your cows going forward.



COW HEALTH TARGETS DURING THE TRANSITION PERIOD

Bellow are some general targets for to aim for in your herd during the transition period.

Health Problem	Target	Seek Help If	Health Problem	Target	Seek Help If
Milk fever	1% (Old cows >8 yo: 2%)	> 3%	Retained fetal membranes (>24 hours after calving)	< 4%	> 6%
Clinical ketosis	< 1%	> 2%	Vaginal discharge after 14 days	< 3%	> 10%
Abomasal displacements (LDA + RDAs)	< 1%	> 2%	Calvings requiring assistance	< 2%	> 3%
Clinical mastitis	< 5 cases/100 cows/ first 30 days of lactation	> 5 cases / 100 cows / first 30 days	Clinical acidosis	0%	1%
Lameness	< 2%	> 4%			
Hypomagnesaemia (grass tetany)	0%	1 case			