Dairy Newsletter March 2022

CVC CLINIC NEWS

Welcome to the March dairy newsletter. The Autumn calving season has well and truly started with our vets already getting out and about delivering calves and replacing prolapses. Good transition management is essential to your cows calving down with minimal problems so we have included plenty of information about transition nutrition. As the weather starts to cool off, we are expecting an increase in cases of young stock affected by parasites, in particular Ostertagia so read on to know what to look out for! Finally, Covid's impact has inevitably caught up with us and you may find a slight price increase to some products due to manufacturer and supply chain adjustments.

Camperdown Veterinary Centre

1 Leura Street , Camperdown

Ph: (03) 5593 1077

Hours:

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

Medication and food collections only on Saturday mornings

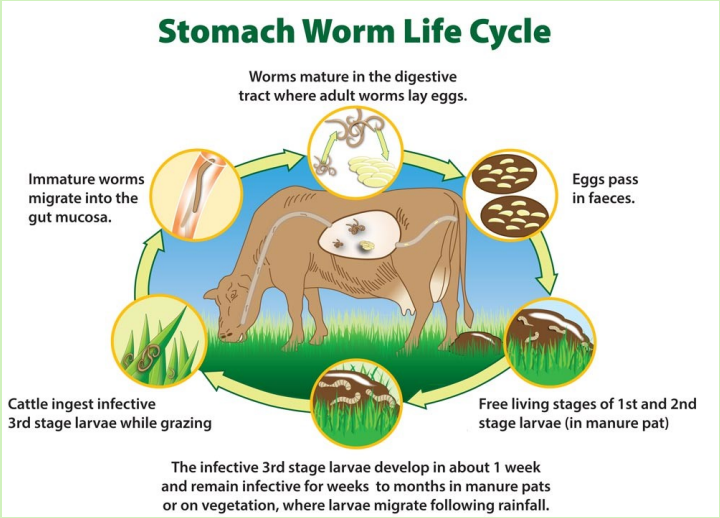
24-hour emergency service available by calling 5593 1077 and pressing "1" .

Osteragia in cattle

Ostertagia (brown stomach worms) invade the wall of the abomasum (4th stomach) and cause damage to it's surface which reduces the digestive ability of the stomach, causes the loss of protein components of the blood and a generalised inflammatory state. Affected cattle have a poor ability to digest and subsequently absorb nutrients from their diet and are susceptible to secondary diseases. **Diarrhoea, weight loss** and overall **poor production** are common findings and in severe cases death may also occur. The life cycle of Ostertagia is similar to many of the common gastrointestinal parasites of cattle. Larval development and survival on pasture is dependent on the prevailing climatic conditions through each season. Periods of regular rainfall/sustained moisture on pastures and temperatures maintained between 10-25°C favor development. In South West Victoria, peak development occurs between May and October. Over summer it is possible for large numbers of infective larvae to survive within faecal pats on pastures. With the onset of rainfall over several days in early Autumn, any larvae that have survived the Summer period migrate out onto pasture and infest animals as they graze. Cattle progressively develop high degrees of immunity to ostertagia and other worms as they age. Generally by 24 months of age cattle are highly resistant to the negative effects of carrying these worms. However, younger stock and stock with little or irregular exposure can be highly susceptible to the effects of these parasites.

Type II ostertagiosis

- Young stock that have been reared through Winter/Spring period the preceding year
- Occurs in Autumn following a return of cooler and higher rainfall conditions
- Dormant worms in the stomach wall ingested prior to Summer undergo sudden and synchronous resumption of development
- Causes sudden and severe stomach damage and severe state of inflammation which may be fatal
- Often seen in heifers in late pregnancy whose limited immunity is compromised by pregnancy and nutritional stress



Management timeline for dairy cows

Dry off

Mastitis prevention

Close up

(3 weeks prior to calving)

Calving

(3 weeks after calving)

Transition period

Lactation

Milk production

Mastitis management

Reproduction

Cow health targets during transition

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

Managing your cow's transition period

Transition cow management has been one of the most significant developments in dairy nutrition and production over the last 20 years, resulting in marked improvements in cow health, milk production and reproductive outcomes.

The transition period is the most critical stage in a cow's lactation because:

- There is a sudden and dramatic increase in metabolic demand, and
- Suppression of the immune system around calving results in increased risk of infectious diseases
- 80% of disease costs for adult dairy cattle occur in the first 4 weeks after calving.
- Milk fever, grass tetany, ketosis, retained membranes, uterine infections and LDAs are all diseases associated with poor transition management.
- Transition period is a peak period for involuntary culls and deaths.

The risks of adverse changes to a cows metabolic state during this period can be managed by careful attention to their nutrition. A good transition feeding plan should address the following aims:

1. **Reduce ruminal disruption**—help reduce the risk of lactic acidosis associated with rapid introduction of concentrates after calving by feeding concentrates during the transition period.
2. **Minimise calcium and magnesium deficiencies—** a cow's calcium intake should be limited during the dry period to allow priming of her calcium metabolism systems to cope with the increased calcium demands of lactation. Potassium interferes 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. 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 toxaemia.
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.