DAIRY NEWS

May 2019

In This Issue:

Mastitis Testing now available In House at Vets On Alabama

Mastatest – "Know the bug".
Mastatest is a novel way to test mastitis milk samples at the vet clinic and get test results within 24 hours to help improve overall cure rates in your herd. Mastatest identifies the type of bacteria and the most effective antibiotic treatment for each case of clinical mastitis.

The cost of each sample is lower than testing at the laboratories, cost per animal, and discount for bulk.

Having accurate test results in under 24 hours instead of 3-5 days means farmers can take immediate action during the mastitis treatment period to improve cure rates (e.g. by extending treatment duration for harder to treat Staph Aureus cases)

This innovative technology was developed locally and the products are made in NZ.

Use of Mastitest can improve mastitis cure rates in your herd and enables more targeted use of antibiotics to combat the most prevalent disease in dairying.

In the future it is likely that we will need to milk test to justify antibiotic use. In Europe, antibiotics are only supplied after culture and sensitivity is completed. Samples can be fresh or frozen.

EXCELLENT COLOSTRUM MANAGEMENT LEADS TO MORE MILK

Good colostrum management prevents calf diseases, and recent studies have found it also influences growth rates up until weaning and significantly increases milk production in the first few lactations.

A study in calves in America found that 22% of the variation in milk production in first lactation heifers was due to differences in average daily gain (ADG) pre-weaning. Calves which met their ADG requirements before weaning produced 1500lbs (682 kgs) of extra liquid milk compared to calves that did not grow as efficiently. In NZ terms this would be equivalent to 58kg of milk solids at 8.5% MS/L. One of the main influences on ADG was found to be sufficient, quality, timely colostrum feeding.

The recommended ADG to achieve this depends on the birth weight of the calf. The minimum goal should be to double their birth weight by 56 days. E.g. for a 40kg calf at birth, they need to gain 40kg by 8 weeks, or just over 0.7kg/day. One of the big influences on their ability to achieve this will be the presence of disease.

The most common cause of illness in young calves is diarrhoea with rotavirus and cryptosporidium the most common causes of calf scours in NZ. Other major causes include salmonella, E.coli, and coccidia. Rotavirus, E.coli, and coronavirus can be prevented by vaccination of cows and heifers prior to calving, followed by good colostrum management.

What does good colostrum management look like?

1. Timeliness: To get the best quality colostrum, cows should be milked within 6 hours of calving. To get the best transfer of antibodies, the calf must be fed in the first 6 hours of life.

2. Quality: Colostrum quality can vary between cows or heifers for a variety of reasons. The best way to determine colostrum quality is to test the colostrum using a Brix refractometer. This handy, quick (10sec) test will tell you which colostrum is appropriate to feed your new calves, and which should go to older calves. Vaccination prior to calving will increase antibodies available to the calves. Continue feeding colostrum for the first few weeks to improve nutrition and help prevent disease via local action of antibodies in the gut.

3. Quantity: Each calf needs to receive 10% of its body weight in colostrum in the first 12 hours, divided into two feeds. E.g.: a 40kg calf will need 4 L split into 2 feeds.

4. Hygiene: Newborn calves have very little ability to fight off disease, so ensuring that colostrum collection and feeding gear is as clean as possible will improve outcomes.

It is recommended that you weigh your calves regularly to ensure they are meeting targets. A little extra effort in rearing your calves to weaning can pay big dividends in the long term.

The importance of vaccination:

Herd vaccination combined with good colostrum management is the best way to maximise the level of antibodies against scours in your calves. The gold standard is to vaccinate the whole herd within 2 weeks prior to start of calving.

Many of you will be familiar with Rotavirus and be aware that vaccination and management practices will go a long way towards effective prevention of the disease. Calves infected with Rotavirus often suffer severe diarrhoea and always suffer a growth check which will delay weaning and reduce growth rates over a long period. In some cases the disease can be fatal. Vaccination of cattle pre calving ensures a high concentration of Rotavirus antibodies in the colostrum so adequate colostrum feeding over the first 3 weeks of life should help prevent the disease.

Calves that receive sufficient gold colostrum from vaccinated cows straight after birth are much less likely to get calf scours

A single 2ml dose of ROTOVEC CORONA® vaccine to the herd 3 - 12 weeks before the start of calving will increase levels of antibodies to Rotovirus, Coronavirus and E.Coli in the colostrum of cows calving in the first 9 weeks.

SCOURGUARD® 4K vaccine requires two x 2ml doses, 3 weeks apart. The second dose should be administered 2 – 12 weeks pre calving. This vaccine can also be given as an annual booster vaccination to animals vaccinated with ROTOVEC CORONA vaccine in the previous year.

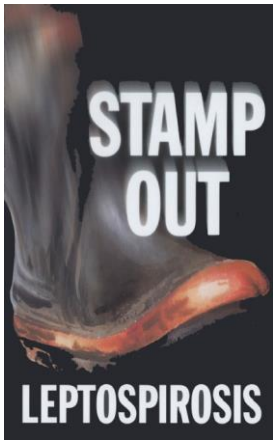
ROTAGAL requires two 3ml doses 5-12 weeks prior to calving, with the second dose given 3 weeks after the first. It is available in 90ml and 450ml flexi packs.

Contact us on 03 5786965 to order or discuss your herd's requirements.

Young Stock Copper and Drench

For those that have calf health planners we often recommend 10g copper @ 100kg and 20g bolus @ 200kg.Don't forget the 20g copper bullet for calves prewinter. This sustains copper levels through the winter and usually up until mating-and is safe providing they do not have access to PKE in the Autumn/winter.

Drenching frequency can reduce over the winter but autumn is still a high risk period for parasites. Spring born replacements should continue to get regular dual action drench-we usually recommend Eclipse pour on but some oral preparations are also suitable e.g. Arrest C. If in doubt whether to drench drop in some faecal samples and we can assess the risk. We are always happy to discuss your drench plan.



Lepto reminder

Herd, heifer and young stock lepto booster shots are now due and should be done in the next few months-before dry off. Remember leptospirosis is a 'zoonosis' that is a disease transmissible to man, and control through vaccination, particularly in dairy cattle, is essential.

Please ring the clinic to order the number of doses you need.

It is common practice throughout NZ for your veterinarian to carry out leptospirosis vaccinations – therefore if you would prefer us to come and do it for you, please let us know. We will then supply you with a certificate to verify that your herd Leptospirosis vaccination status is up to date.

Trace Elements

Autumn is a good time for testing for trace elements in cattle. If dairy cows are going to the works then optigrow liver samples can be a good option. You will need to notify the clinic before they go if you would like your animals tested. However sometimes cull cows do not provide representative readings for the herd and live cow liver biopsies can be performed on animals remaining in the herd. We will often discuss this option with you at the dry cow consult or before.

Often calves benefit from a prewinter copper bolus in this district as copper levels are usually low. Do not do this if calves are going to, or have had access to PKE. You may wish to do bloods to confirm trace element status in young stock. As a general rule at 200kg calves can have a 20g copper bullet.

ELEMENT	ROLE	DIAGNOSIS OF DEFICIENCY
Copper (Cu)	Multiple roles including bone growth, pigmentation, and certain enzyme systems.	Lameness, illthrift, faded coat, poor conception rates.
Selenium (Se)	Important in the production of the antioxidant glutathione perioxidase, and in maintaining integrity of cell membranes.	Illthrift, diarrhoea, abortion, retained placenta, low milk production.
Cobalt (Co)	Essential for the production of Vitamin B12 by microbes in the rumen.	Illthrift, reduced milk production.
Iodine (I)	Essential for thyroid functioning, which influences growth Goitre, low milk production, low reproductive efficiency.	Goitre, low milk production, low reproductive efficiency.
Zinc (Zn)	Is important in over 30 enzyme systems, and is essential for good skin condition, immune response and lameness.	Reduces milk somatic cell counts and incidence of lameness.

Body Condition Scoring

Autumn is the best time to have your herd body condition scored. This gives you time to make a plan/feed budget to achieve a score of 5 at dry off if possible and calving. We are scoring herds at the moment-let us know if you would like to use this service. Achieving 5 at calving is known as a key factor in hitting 6 week in calf rate targets.

1.5 (A) 3 (B) 4 (C)

VETS on ALABAMA