



VET notes

YOUR TOTALLY VETS NEWSLETTER ALL ABOUT ANIMALS ON YOUR FARM

JULY 2015



Lloyd Smith Training Day

14 July 2015
10am-3pm

Flockhill Farm
202 Bluff Road
Kimbolton

Registrations are essential so contact the
Feilding branch on 06 323 6161 to book.

Cost: \$20 per person

Morning tea and lunch provided

WIN A ONE-ON-ONE TRAINING SESSION WITH LLOYD!

If you wish go into the draw please advise us at the time of registration. Four winners will be drawn to attend a training session with Lloyd on the afternoon of the training day. Clients will need to prove vaccination and worming status of their dog.

Dog food specials will be available on the day with lots of great giveaways.

Are your autumn bulls up to it?

Barny Askin

The bull mating period for an autumn herd is usually quite short, often just one cycle.

This is all the more reason to ensure that your bull team is up to the job. A short checklist to ensure nothing is overlooked is:

- If bulls are being carried over from a previous mating don't assume, because they worked well in the spring, that they will do the same again. Trauma acquired during a previous mating, such as to the penis, back or hips can render previously worked bulls to be unfit for breeding. If you are using virgin bulls then it is not too late to get them, and/or previously worked bulls, **fertility tested** to ensure peace of mind when they go out with the herd.
- If you are using newly purchased bulls **check they have been tested for Bovine**

Virus Diarhoea (BVD) before they arrive. Ask to be provided with written confirmation, either a copy of the lab tests or written documentation from a vet. If you are in any doubt about this then please give us a call at the clinic to discuss. It is **NOT** OK to have bulls that have been vaccinated, but not tested, for BVD.

- Even if you are not doing any other BVD vaccinations in your herd it is a very good idea to **vaccinate your bulls** for BVD. The most appropriate vaccine to use is the combined BVD/Infectious Bovine Rhinotracheitis (IBR) vaccine; Hiprabovis®3. This will protect the bulls against becoming temporarily infertile from being exposed to either BVD or IBR (and infectious pustular vulvovaginitis or IPV) virus that might be circulating in your herd.
- Do you **have enough bulls**? Remember the three percent plus one rule! 100 cows need three to four bulls with them at any one time.
- If a **bull goes lame** then remove it from the cows. A lame bull that is dominant can stop a fertile, but subordinate bull from working.

Call the clinic to book your bulls in for fertility and/or BVD testing today.



Totally Vets current stock health

Dairy

The transition period for spring calving dairy herds is almost upon us. Make sure systems are in place for appropriate mineral supplementation (especially magnesium), and that feed supply has been budgeted over this crucial period. Also, ensure you have adequate stocks of appropriate metabolic solutions for

downer cows and now would be a good time to check all your calving gear is organised, clean and working properly.

For any cows that are still milking, there is still time to consider the use of dry cow therapy, as this is the best time to cure chronic infections. Keep a watchful eye on heifers for mastitis around calving, particularly if they

HA HA



That sickly sweet no good smell

Cormac Chalmers

Afterbirth, or membranes, are considered to be retained when they remain undelivered by 12 hours after birth.

Factors that may predispose cows to having retained foetal membranes (RFMs) include:

- Abnormal gestation length (either too long or too short)
- Abortion
- Uterine inertia (ie an exhausted uterus that is unable to contract) often due to milkfever
- Difficult/assisted and/or twin calvings
- Low selenium level

The significance of an RFM depends largely on the degree of uterine infection that takes place. Uncomplicated cases may be little more than a bad smell or a nasty slap to the face during milking! However cows with RFMs are almost twice as likely to develop metritis (an infection in the uterus) and the degree of metritis that develops can lead to reduced appetite and/or impaired milk yield.

So what do we do about it? Do NOT pull on it! Forced extraction within the first 96 hours after calving significantly increases the risk



of subsequent infertility. Manual removal can cause damage to the uterine wall and disrupt the natural defensive mechanisms of the body. Even after 96 hours the removal should be limited to withdrawal of membranes that have already become detached. If attempts to remove them are unsuccessful they should be cut off at the level of the vulva (this reduces the wicking effect of infection that can occur) and left until they are shed. No further treatment is required unless the cow appears ill. If she is sick then veterinary attention should be sought at which point systemic antibiotics may be required.

To prepare these cows for the following mating they should be metrichecked about a month prior to mating because they are at a high risk for developing endometritis (inflammation/ infection of the lining of the uterus) which negatively impacts fertility.

If you would like further information and/or experience a high number of RFMs then call your vet to discuss as there may be underlying factors, such as selenium deficiency, that are playing a part and are easily remedied.

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haven't had the benefit of Teatseal® or are calving down in dirty conditions.

Make sure your Leptospirosis vaccination programme is up to date, including young animals who need a third shot to be bought in line with the rest of the herd. Consider vaccinating your cows pre-calving with Rotavec® Corona or Scourguard® to help protect calves against scours, especially if you have previously diagnosed Rotavirus, Coronavirus or E.coli. Ideally these vaccines

are given three weeks before calving to maximise antibodies in colostrum.

Sheep and Beef

Remember pre-lamb vaccinations in ewes. To get maximum benefit from Clostridial vaccines pregnant ewes should be boosted two to four weeks prior to lambing. This gives the lambs six to eight weeks protection as well. Ensure lambing supplies such as tube feeders, stored colostrum, teats and bottles, lamb covers and the like, are at hand.

Deer

Now is the time to think about pregnancy scanning deer. Stags should be putting on condition again coming out of the rut. Hopefully, with good management strategies, we are now on the other side of the Yersinia risk period for weaners, but remember, if required, that vaccination is a very useful tool to counter this threat.



She can't get up!

Joao Dib

'Down' cows are most often seen around calving time, and are commonly, but not always, due to metabolic disease and/or calving paralysis.

In essence, if a cow has been in sternal (on her chest) or lateral (on her side) recumbency for more than 24 hours with no evidence of systemic disease then she is a 'down' cow. At this stage secondary damage will be occurring, so it is best to attempt to get downer cows on their feet as soon as possible and important to seek veterinary support if you don't have success.

Down cows are not a true emergency as such, however the longer she remains down, the worse the prognosis, so immediate attention is warranted. In broad terms you are far more likely to be successful sooner rather than later! Complications that often arise from prolonged recumbency include:

- Dehydration, loss of body condition and hypothermia which can become an animal welfare issue.
- Muscle damage to major muscle groups leads to irreversible damage to the kidneys due to toxins released.
- Nerve damage in the lower legs affecting movement and sensation (a bit like severe pins and needles).
- Secondary disease such as mastitis or pneumonia and/or secondary problems such as hip dislocation or damage to eyes.

So, she can't get up... what now? In a nutshell, tender loving care is the key!

- Treat suspect metabolic disease - call your vet if you need advice on this! ONLY give oral metabolics if you're sure the cow can swallow.
- Provide shelter (put in shed, by trees etc) or, if not possible, use a cover (cow cover, tarpaulin etc).
- Provide dry, soft bedding (shavings, straw, hay) that is not slippery if she tries to stand.
- Provide clean water and ample food.
- Ensure she cannot fall into lateral recumbency and be at risk of bloat - prop up (use farm bike, hay bales etc) if required.
- Alternate the side the cow is sitting on as often as possible (ideally three to four times daily) and give physio (flex and extend legs, massage etc) when possible.
- Monitor the udder for signs of mastitis and teat spray daily.
- Use hip lifters/sling to encourage the cow to stand. Remember they are used to LIFT up, NOT HOLD up! If moving her you MUST NOT do so by hip lifters alone - also use a chest strap (something as simple as a strop/tie down) to support her front end.

Have a discussion with your farm staff today to put in place clear expectations for care of down cows and create a plan for doing this PRIOR to spring. If you need any assistance/support in this process then please don't hesitate to call us.



Colostrum is liquid gold

Sarah Clarke

Colostrum is the first milk made by the cow after calving. It is particularly important because it contains antibodies, which play a vital role in protecting a newborn calf from disease.

In contrast to human babies, whilst inside its mum, a calf's circulating blood is kept separate from its mums, and antibodies are too big to cross the placenta before birth. Consequently a calf relies on a good feed of colostrum very soon after birth to provide a complete immune system and help ensure it will remain healthy.

The best colostrum is obtained from the first milking of adult cows (not heifers), and is called "gold" colostrum as it is by far the most

concentrated. Colostrum contains antibodies, which, as said already, are an essential part of the immune system. Additionally colostrum is also a rich source of energy, vitamins and minerals.

It is vital to understand that after a calf is born, it absorbs antibodies through pores in the intestines, BUT those pores start to close at about six hours of age. By 24 hours, the pores have almost completely closed, and the calf can no longer take in the antibodies. Therefore it is essential that calves get an adequate feed of colostrum before "gut closure" occurs. An "adequate" feed being a minimum of 10% of its bodyweight, which for a 40kg calf is four litres. Ideally half of this needs to be ingested within the first six hours of life, the other half within the next six to twelve hours.

Interestingly, many calves (studies have shown up to 50%!) will not get enough colostrum when left to feed just from mum. This is why we recommend collecting calves twice a day, and feeding/tubing all calves with colostrum as soon as they are collected. It is also important

to note that, if colostrum is contaminated with bacteria, these bacteria also easily pass through the intestinal pores into the blood. Consequently, when feeding newborn calves, good hygiene is very important.

Calves typically need 10-15% of their bodyweight in colostrum each day for at least the first four days of life and preferably the first three to four weeks. The benefits of feeding it, even after gut closure, are evident as the antibodies have a protective local effect in the gut.

Vaccinating cows with products such as Scourguard® or Rotavec® Corona increase antibody levels in colostrum and can be a very useful tool to help control infectious scours in calves, however they still rely completely on good colostrum feeding.

Colostrum can be stored for future use except if it is very bloody or from mastitis treated cows. If you would like further information on this or to discuss your calf rearing and management don't hesitate to call the team at Totally Vets.

Gossip

The rain, wind and cold of winter haven't dulled the spirits of the **Totes Amaze** Awapuni clinic indoor netball team! The weekly trials and tribulations are a constant source of both fun and pain - **Rachel** is finally back walking normally after a decent strain of her calf muscle - say no more!

The "quieter" spring dairy herd dry period has seen a number of our production animal vets take some well earned annual leave prior to spring, including several attending the New Zealand Equine conference in Taupo and the Dairy Cattle Veterinarians conference in Queenstown. Meanwhile others have used this time to put on a number of fantastic seminars. In the last couple of months we have run down cow, calf rearing and numerous animal welfare

seminars. During July (Monday 13th) be sure to attend our **fertility seminar** in Feilding - for more information contact Gaye or Leisa at our Awapuni Clinic on 06 356 5011.

Eukanuba dog food is now available at our Awapuni clinic. There are great choices for adult dogs and puppies in-store both in Eukanuba and Nutro® Natural Choice product ranges.

Idiot's guide to the already famous Wairarapa capsule study

Ginny Dodunski

Last winter in Vetnotes we discussed the issues around pre-lamb worm treatments for ewes, and gave you some preliminary results from the Wairarapa capsule study.

This large scale piece of research (14 separate trials on commercial farms) was going to give us the answers we needed to make better informed decisions on the need (or otherwise) for ewes to be treated with long acting (LA) anthelmintic products pre-lamb.

That was last year! The data has gone through intensive analysis, and two scientific papers have been produced; one detailing the biological and productive outcomes, and one applying a cost benefit analysis to these. So now we can give you some simple advice around pre-lamb worm treatments that is backed by actual data. Well sort of...

Perhaps more importantly, we get some assessment of this by people who are top notch at analysing and understanding what makes profitable and successful farming businesses.

The first piece of key information is this... **The farms where there was no (or a very low) response to the LA treatments were**

those with a long-term history of a high performing, stable ewe flock with good feed levels and high level of management skill.

To paraphrase Mike Falloon, one of the trial participants, "There is no silver bullet as opposed to well fed animals".

On the positive side, for LA treatments:

- **Capsule treated ewes weaned heavier** (average 3.2kg, range 1.8-4.9kg) and this was significant in 12 of the 14 trials.
- **Some of this benefit was carried through to the next tupping** (average 2.5kg, but range -1.8 to +4.5kg). This reached significance in 9 of the 14 trials.
- Individual **lamb weaning weight was better** in capsule treated ewes' lambs, but not by as much as you might think (average 1.5kg, range 0.34 to 2.88kg).
- **Capsule treated ewes were cleaner** (less daggy) than untreated ewes.

The positive ewe liveweight response was independent of ewe body condition; thin ewes did not respond better than well-conditioned ewes. But they still gained weight, which is important when you're a thin ewe at lambing time!

The fact that the weaning liveweight benefit did not carry through to tupping at the same magnitude indicates a period where capsule treated ewes did not gain weight as fast as the untreated ewes. Previous work has shown a temporary slackening in parasite immunity after LA treatments run out; the above finding is likely a reflection of this.

The following findings may challenge your assumptions if you are a keen user of LA products in your ewe flock:

1. Overall, capsule treatment **did not improve the weight of lamb weaned per ewe**. This ranged from -5.2 to a massive +15.6kg; and was driven by big differences in ewe and lamb survival between mobs not related to LA treatment. In 9 of the 14 trials the treated ewes reared less lambs than the untreated ones!
2. Thus some of the improved weaning weight of treated ewes is attributable to the fact that they reared less lambs, ditto for the improved individual lamb weaning weight.
3. In 8 of the 14 trials the increase in individual lamb weaning weight was not statistically significant.
4. On some of the farms 25-30% of the capsule response was attributable to the minerals in the product (B12 and Selenium).
5. Concurrent 'mectin and white drench resistance was evident on a number of the farms with as many as 50% of the treated ewes having positive egg counts throughout the capsule payout period, with pure cultures *Ostertagia* being grown from these.

OTHER INTERESTING BITS:

- There was no productive or financial difference if capsules were given at scanning instead of pre-lamb.
- There was no productive or economic difference between different LA products (Bionic® Capsules, Extender® Capsules and Moxidectin LA injection), even where with the Extender® Capsule (white) there would have presumably been high levels of resistance on some of the farms.

Watch out in next month's Vetnotes for "What does all this mean for me?".

A reminder that **as of 1st July we will return to answering calls to our Awapuni clinic** number, 06 356 5011, AT our Awapuni clinic. For our Awapuni clients we know that this will be a welcome adjustment. Our two clinics, both Awapuni and Feilding, will continue to work closely together to ensure calls are answered and managed promptly. It will also ensure we have cover for seasonal peaks and holidays, and can provide the best customer service to you.

As you may be aware, the Palmerston North to Longburn walkway is nearing completion. This walkway crosses the Awapuni branch driveway so please take care when entering and exiting the gateway.





BVD Bulk Milk Testing

Hamish Pike

Nowadays we have access to reliable and relatively inexpensive laboratory tests for detection of Bovine Virus Diarrhoea (BVD). The most common tests used are a blood test, ear notch skin test and, on dairy farms, testing of the bulk milk from the vat.

There are two types of bulk milk BVD testing:

1. BVD antibody test
2. BVD antigen (virus) test

In simple terms, the BVD antibody test measures herd exposure to the BVD virus, whereas the BVD antigen (virus) test detects the presence of virus in the milk. As such,

testing for antigen detects whether the herd is currently infected and has at least one cow present that is persistently infected with BVD.

The BVD **antibody** test allows you to define your herd's BVD status as exposed (presently exposed or exposed sometime in the past) or naïve (never or not recently been exposed). It is not necessary to have all cows contributing milk to the vat (although aim for at least 90% of the herd) as this test is relatively unaffected by having a few cows missing on the day of sampling. This test can not only be used to define the BVD status of the herd, but also to monitor BVD status once BVD has been eradicated from a herd.

The BVD **antigen** (virus) test detects present infection, whether the herd has a cow(s) that is persistently infected with the BVD virus. This test is only useful when most (ideally all) cows are contributing milk into the vat on the day of sampling. This is because any cow(s) whose milk is missing on the day of sampling, such as those cows still to calve or cows being treated with antibiotics (such as for mastitis

or lameness), may potentially be persistently infected with the BVD virus. These cows would need to be individually tested to establish their status.

Split spring and autumn calving herds may need two BVD antigen (virus) tests, one before mating around September/October and around May/June, especially if replacement heifers have not been screened for BVD before they calved at two years of age.

Once virus is detected in the milk, then individual blood tests can be used to identify which cow(s) is persistently infected with BVD (the goal being to identify and remove any persistently infected cows). This is best done before mating so that all persistently infected cows are eradicated from the herd before planned start of mating.

Please don't hesitate to contact your Totally Vets veterinarian if you wish to discuss BVD monitoring, and potential eradication for your herd before next mating.

Ewe metabolic disease

Leisa Norris

Sleepy sickness and milk fever are metabolic diseases seen in sheep, most often affecting in-lamb ewes in the last few weeks before lambing.

Sudden changes in feed, either feed type or grazing regime, will cause a check in feeding which can lead to either of the above problems. Holding for crutching or shearing heavily pregnant ewes, inclement weather, excessive droving, or diseases reducing intake can also trigger outbreaks.

Ewes with **milk fever** (being a drop in blood calcium called hypocalcaemia) will initially be staggy, then go down and progress to an apparently comatose state. Those left untreated will go into a deep coma after 24 hours and die. The response to treatment for

milk fever is usually rapid (within half an hour) unless complicated by sleepy sickness.

Sleepy sickness, also known as twin lamb disease, is due to ketosis when there is excessive fat breakdown. It most often occurs in late pregnant ewes carrying multiple lambs. Clinical signs are similar to milk fever but are usually slower to progress. Initially affected ewes lag behind the rest of the mob and appear depressed and/or blind (the classic 'star gazing' position). Later ewes become staggy, twitchy around the ears, eyes and muzzle, and froth at the mouth. Eventually

Do you have an early season mastitis issue?

Ryan Carr

Early season calving mastitis can have a significant and costly impact (on a number of levels), but how do you know if it is a problem on your farm? For some the sheer amount of cows that are being treated will make it obvious, but, in strictly numbers terms, how much is too much?

To work it out have a sit down with last year's mastitis records and count how many cows had a case of mastitis from two weeks BEFORE calving till two weeks AFTER calving. Base this on each cow's calving date. Use this number to figure out the **percentage of cows with a case of mastitis during these four weeks, out of the total number of cows calved**. If you are still up to it, to get an even better picture, repeat this for the heifers (first-calvers) also!

According to the SmartSAMM guidelines you should be concerned if more than 15% of calved heifers have a case of calving mastitis and if more than 8% of mixed-aged cattle (three years and older) have a case. So, if you have figured out you had a concerning level of calving mastitis in your heifers and/or cows

last year, now what? Please note that having a calving mastitis issue last year doesn't guarantee you will have a problem this season but it strongly suggests you may!

Areas to focus on in your plan to ensure you have low calving mastitis rates include:

DRY COW THERAPY

At this point you would have already worked out your antibiotic dry cow therapy (DCT) policy and dried off your cows, so that boat has sailed. DCT is one of the most powerful tools to help improve the rates of calving mastitis. If your current policy isn't providing results review it with your vet for this coming season.

CULLING

Culling chronic mastitis offenders, cows with ongoing high somatic cell counts (SCC) and those with suspect udder conformation will help improve calving mastitis. Even if these cows have been cured of an infection during the dry period they will be more susceptible to picking up new infections in the late dry period/early lactation.

TEAT SEALING HEIFERS

Teat sealing heifers can be a very effective way to improve calving mastitis if you have an issue in your first-calvers. Studies show it is likely to reduce calving mastitis rates by around 65%. We can easily run through a calculation to check whether it will make economic sense to use an internal teat sealant.



SPRINGER AND COLOSTRUM COW MANAGEMENT

Avoid calving down cows on effluent paddocks or muddy breaks. Bring freshly calved cows into the shed for complete milking out within 12 hours of calving. Manage colostrum cows as a separate mob and inspect their milk at least daily for signs of mastitis. Inspect milk from ALL quarters of ALL colostrum cows for suitability before allowing them to enter the vat. Keep a close eye on the cows for signs of mastitis once they are in supply and monitor the bulk milk SCC for spiking.

TREAT CLINICAL CASES QUICKLY AND AGGRESSIVELY

Unless milk culture results indicate otherwise, penicillin based products are the best treatment for calving mastitis cases. Be prepared to treat difficult infections for longer (six tubes) provided progress is being made (but remember to prolong milk withholding periods if you do).

Prepare now and come up with a plan to tackle early season mastitis, and don't hesitate to talk to your vet about any issues you may be facing. Together we can get/keep on top of any pesky, costly, painful calving mastitis problems.

ewes will become comatose and, generally after several days, will die. The response to treatment for sleepy sickness is variable, and often disappointing. Sheep with the characteristic 'razor back' and wool pull are very unlikely to respond to therapy. If the ewe is still eating, the prognosis is more favourable, but if she is down and has stopped eating the prognosis is grave.

Milk fever and sleepy sickness can be really hard to tell apart, and ewes will often have both so we tend to treat them the same! It is also important to note that lambs born from

recovered ewes are commonly stillborn (sleepy sickness), or have poor survival rates (milk fever).

Treatment options - do BOTH unless sure it is only milk fever	
Milk Fever	Sleepy Sickness
Calpro 250 100-150ml under the skin of the neck Once only	Ketol 120ml orally Once AND
	Revive (electrolytes) 2L orally 2-3 times daily Ensure access to water at all times

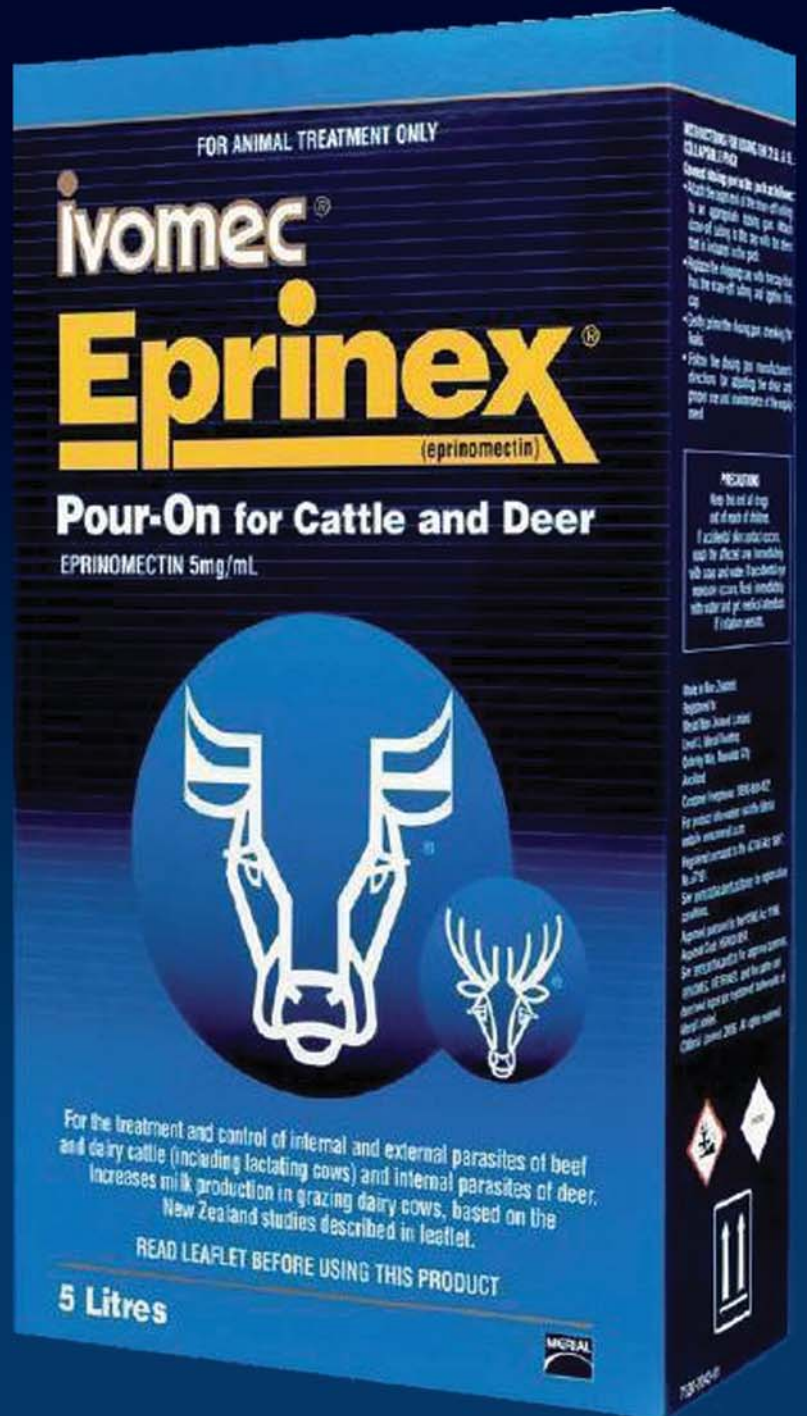
If you have any questions, or would like further information, please don't hesitate to give the team at Totally Vets a call.

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