This practice has been hotly debated for some years now. A recent study on farms in the USA demonstrated that feeding antibiotic milk from cows withheld from the vat resulted in a greater level of antibiotic resistance in the calf. E. coli in the faeces and pasteurella from the nose demonstrated increased resistance to enrofloxacin, streptomycin and florfenicol. However, it should be noted that we do not use much of these antibiotics at all in NZ. And in contrast, no increased resistance was seen to the B lactams (including cephalosporin) antibiotics, which are more commonly used here. So the debate rages on!

We have seen more mastitis from E. coli in the last 12 months than in the last 12 years! It is caused by faecal contamination of the udder, which has also resulted in coliform grading of the milk on several farms. Keeping udders dry and clean is critical - drying them pre-milking if necessary with new paper towels (not a shared cloth!). A recent study in the USA underlined the common approach of not using antibiotics for this sort of mastitis if it is mild, as the immune system will often clear it within 24 hours. However, anti-inflammatories and fluids will help if the cow is sick, and another study demonstrated better bacteriological cure rates if antibiotics are used. These bugs are often resistant to common antibiotics, so milk culture and sensitivity are very useful.

If you have not secured your supply yet, you may need to consider other options, including:

- Using Magnesium Chloride or Sulphate in the water
- Magnesium pidolate (Moremag) drenched to the springers lasts for 10 days
- Starter drench / calcium for freshly calved cows
- Altering DCAD by feeding maize silage with an ionic salts
- Supplementing with hay
We now have the new electronic Animal Health Plan

Tailored to your farm and suitable for sheep, beef and dairy units, this app-based system is accessed by both farmer and vet. Reminders are automatically sent to both parties by app or email. The best way to plan your animal health calendar, making it particularly easy for managing multiple mobs! Please contact your vet for details.

Velvet Handling Changes

Significant changes have been made to the hygiene requirements for the way velvet is handled and stored on farm for the coming season. Velvet antler can only be removed in a so called clean zone. This is your crush area or pens where velvet is removed either by you the farmer or a vet. Clean zones need to be identified and recorded. In a clean zone all walls, doors, gates, and other surface areas should have a surface that can be easily wiped and cleaned, and prevent the build-up of bacteria. Bare timber surfaces, including plywood, are no longer acceptable. These surfaces should either be painted [hi gloss is acceptable] or covered with a suitable substance that is capable of being hosed or washed down following each velvetting session. The smoother the surface the easier it is to keep clean. Floors in the clean zones must also be able to be washed clean and be treated with an approved disinfectant. An approved disinfectant can be obtained from any rural supplier. Bird droppings should be eliminated, and means taken to prevent entry to clean zones by birds.

Cold Chain Management

Thoroughly clean and disinfect your freezer prior to the season beginning. Velvet must be in the freezer no more than two hours after removal, the sooner the better. Your freezer must be capable of freezing down to minus 15 degrees Centigrade. Most common brands of freezer come with a standard factory setting of 4 on a scale of 1 to 6. A factory setting of 4 is capable of reaching minus 18 degrees Centigrade, settings of 6 will reach minus 24 degrees Centigrade, and many freezers have a digital read out showing the temperature. Both clean zones and freezers will be an important part of your velvet supervisory and/or auditing visit.
At Cambridge Vets we have a comprehensive range of what we think are the best products in the market place, at competitive prices, with professional advice to ensure you get through this season without a hitch.

<table>
<thead>
<tr>
<th>Products</th>
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<tbody>
<tr>
<td>Calving gear - ropes, chains, handles</td>
</tr>
<tr>
<td>Disinfectant, lube, gloves</td>
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<tr>
<td>Penicillin, oxytocin</td>
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<tr>
<td>Metabolics - Calcium, Magnesium, Oral treatments</td>
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<tr>
<td>Ketol, MPG, Starter Drench</td>
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<tr>
<td>Rumenox</td>
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<tr>
<td>Mastitis treatment, Intramammary &amp; Injectable</td>
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<tr>
<td>Bulk Magnesium, Molasses, Calcium, Salt</td>
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<tr>
<td>Eprinex / Dectomax / Genesis / Drench</td>
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<tr>
<td>Teatspray and Udder Cream</td>
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<tr>
<td>Hoof gear</td>
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**Calves**

<table>
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<tr>
<th>Products</th>
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</thead>
<tbody>
<tr>
<td>Iodine spray, Electrolytes, Tags, Feeders</td>
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<tr>
<td>Shed disinfectant, Teats</td>
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**Pre-Lamb Vaccination of Ewes**

Pre-lamb clostridial vaccination of ewes is one of the best investments you can make. Clostridial disease such as pulp kidney, tetanus and navel ill are important diseases of lambs; pulp kidney in particular will often strike the biggest, healthiest animals in the mob with little or no warning. Often the first indication of an outbreak is dead animals. Ewes should receive two doses 4-6 weeks apart at a young age followed by an annual booster within 4 weeks of lambing. The pre-lamb booster will trigger production of colostral antibodies giving protection to lambs against clostridial diseases for up to 12 weeks. Lambs born to unvaccinated ewes should be given tetanus antitoxin at tailing. Lamb vax for lambs born to vaccinated ewes this is unnecessary and they can begin a 5 in 1 or for extra protection Ultravac™ 6in1 programme. Lambs should begin their vaccination programme well before maternal protection ends. The administration of an appropriate 5 in 1 / 6 in 1 vaccine at docking with a booster 4-6 weeks later or at weaning will minimise the risk of a potentially lethal protection gap between the decline in maternally derived antibodies and the lamb’s immune response to vaccination.
Kelvin has put together some early bird deals on these essential spring products.

**Bomac metabolic products** - If you buy a box of 12, you will get one flexipack free! This includes the entire injectable range. The Bomac flexi pack range is proven and reliable. Get those cows up and milking. We stock the professional range of these products which includes a dose of B12 to boost appetite.

Our recommended treatment for down cows after calving is a bag of the appropriate calcium in the vein followed by an oral dose once the cow can swallow well and is alert. This will help to stop these cows relapsing and keep them eating. Remember that products containing dextrose like Glucalmax / Glucalphos should only be given in the vein. They are not absorbed well from under the skin.

**Oral calcium products**: We highly recommend the use of oral calcium products in conjunction with under the skin treatments, as long as the cow has a good swallow reflex. Oral calcium products give much more calcium than putting a bag under the skin and it lasts much longer. We find it drastically reduces the number of milk fever cows that relapse. Most of these products have a burst of energy as well. We stock the following proven oral products:

- **Calform Plus** - Rapid acting calcium and a shot of energy that’s easy to pour. The vets choice.
- **Oral Max** - 650ml bottle and 10 litre packs.

**Starter plus 200 litre** Our proven cost effective post calving start up drench. Keep them on their feet and eating through the transition period.

**Drenching** - We recommend all heifers and lighter cows are drenched at calving. There is good research work using Eprinex, in NZ, to show on average heifers get in - calf 12.9 days earlier and cows give an extra 7.4 kg of milk solids during lactation if treated as they calve.

- **Eprinex pour-on** - Buy a 25ltr and get a free coat.
- **Eclipse** - Buy a 12.5ltr and get a free coat.
- **Genesis pour-on** - 5.5 litre

**Rumenox and Milk Protein**

Rumen modifiers adjust bacteria in the rumen of cows allowing them to produce more energy from the feed they eat. This energy is then used to increase milk protein and reduce metabolic disease.

**Increase Milk Protein**

A range of NZ trials consistently show that it increases milk protein production. With the current milk price this equates to a response worth 29 cents per cow per day; at a cost of 7-8 cents the financial gains are easily quantified.

**Bloat Control**

Rumenox out-performs bloat oils when it comes to controlling bloat. This is due to the longer protection it offers dairy herds.

**Reduce Ketosis**

The extra energy produced by using Rumenox significantly reduces sub clinical ketosis (SCK), a metabolic disease that is now widespread throughout NZ dairy herds. Recent NZ research has linked SCK to increased endometritis and a staggering **7% reduction in six week in-calf rates**. **We can check your herd for ketosis at 2 weeks after calving with a simple test.**

Rumenox granules are easily administered daily through your in-line water dispenser, and GVL has recently launched a premix formulation of Rumenox designed to blend with silage, grains and molasses. Talk to us about this cost-effective option for your herd.
In the spring time, prompt treatment and good nursing are essential.

**METABOLICS**

The cow undergoes a huge metabolic shift as she calves and comes into lactation. Her demand for energy and minerals shoots up, often faster than the diet and body can allow for.

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The classic **Milk Fever** is a deficiency in calcium. As this is required for the functioning of muscles, the cow is often wobbly, or down and unable to get up. She is recumbent, and looks all floppy, often with an S-bend in the neck. Cows are most susceptible to this at the time of calving and for a few days after; by this time the body has normally adapted through increasing the circulating levels of calcium.

**Treatment:** Is the administration of calcium, either in the vein or via an oral drench. Prevention normally consists of supplementing the herd with magnesium from a month before calving, as this is an essential catalyst for the mobilization of calcium. Options include water treatment, pasture-dusting, boluses or drenching (Moremag is a drench that lasts for 10 days).

However, magnesium can be a primary deficiency in the form of **Grass Staggers**. These cows may also be recumbent, but they tend to be twitchy, often with tremors, but care needs to be exercised as their nervous system is excitable and they are prone to charging!

**Treatment:** Is with administration of magnesium under the skin or as an oral drench. Intravenous magnesium may cause heart failure, so caution is advised to say the least! Affected animals may even start convulsing or paddling. Both Milk Fever and Grass Staggers can be fatal, and the longer the animal is down, the more muscle damage she suffers, and the lower her chances of recovery.

**KETOSIS**

Ketosis is a deficiency of energy, leading to fat mobilization, which makes the cows feel dopey and causes reduced production and is a gateway disease to metritis etc.

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The other two components of metabolic issues are **low phosphorous** and **ketosis**.

**Low phosphorous** may complicate milk fever, and the distinguishing feature is that it initiates a haemolytic anaemia leading to redwater (although there are also other causes of red urine). **Ketosis** is when the cow does not have enough energy for the demands of lactation; the body produces ketones as a short term energy source, but as these levels rise they cause her to become slow and dopey. This can be a big problem for the herd as a sub-clinical picture, leading to reduced milk yield and a gateway to follow-up diseases & reduced fertility. **We can check the herd for ketosis about 2 weeks after calving with a cow-side test.**

For details on supplementation & treatment, please see our website or one of our vet team.

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**CALF HEALTH**

Ensure calf pens are clean, disinfected, dry and warm with a separate isolation pen. Colostrum intake is so critical; ensure systems are in place to get adequate volumes of Day 1 colostrum into day 1 calves on Day 1!

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**SPRING PREPARATIONS**

Dry cows should be getting magnesium, and this needs to extend to calved cows through spring. Options are dusting / feeding causmag (80+g mag oxide depending on wastage), Mag chloride or sulphate through the water (max 60g per cow daily). Colostrum cows may benefit from limeflour (150g) or a starter drench. Maize silage helps lower the DCAD, but anionic salts can also help for the springers. If maize is being fed, extra magnesium, limeflour and salt may need to be added as it is low in these. If Fodder beet is being fed, phosphorous may need to be added.

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**MASTITIS**

With an industry focus on reducing antibiotic use, it is really important to minimize mastitis: get the milking plant serviced by MPTA, address any challenging areas of mud, get heifers teat sealed, train staff up on the importance of teat spraying and mastitis detection by stripping / RMT.

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**ANIMAL WELFARE**

Welfare update reminder – 2 new regulations for calves will come into effect from 1st August:

Loading and Unloading Calves – facilities must be provided (and used) so that young calves being transported for sale or slaughter can walk onto and off vehicles by their own action.

Suitable shelter must be provided for young calves before and during transportation and at points of sale and slaughter.
Unfortunately golf day this year got rained off, thank you to everyone who did turn up and participate but we still enjoyed a good evening meal together & prize giving!

The seminar was attended by a keen group of “blockies”! We had a good evening discussion and presentations covering nutrition on the small block, alpacas, calf health, minerals, facial eczema & Chris Crickett’s take on the F word (facilities). It was suggested we should do a practical session, please contact us if you would be interested!

The gorgeous little kunekune piglet pictured below, recently came in to the clinic for an x-ray. She was off her food and very sore in the abdomen. It turned out she had just been a bit of a pig and ate her weight in stew!

A big Congratulations to one of our front counter staff Katrina whom has just recently got married to Hamish Meerkerk on the 22nd of April and unlike most couples she got to celebrate “Two Weddings” one in New Zealand and one in the U.K. We wish them all the best on this wonderful journey as they build their new lives together.