

# DAIRY TALK

PROVIDING  
VET CARE  
24/7

JULY 2015 | NEWSLETTER



## TOP TIP:

**Ask your local sales rep for a quote on magnesium or calf feed - we've been working hard to be able to offer you the best possible prices.**

## Articles:

Latest mastitis research timely for spring

Ketosis – symptoms, diagnosis and management

Magnesium and Calcium supplementation: are your cows ready to go?

Calf scours: Prevention is much easier (and cheaper!) than cure

Annual milk quality and reproductive performance awards.

Upcoming Events  
-Ready for Mating Seminar

Accounts Due  
Reminder

Calf Disbudding

**IT PAYS  
TO BELONG**  
anexa  
FVC



Become our friend on  
FaceBook - AnexaVets



## Latest mastitis research timely for spring

Treating clinical mastitis with an anti-inflammatory and an antibiotic can have a big impact on reproductive performance.

A recent largely multi-national study (the FERTILE study) involving over 500 cows in 6 countries, undertaken by Cognosco, found that cows treated for post-calving mastitis with the anti-inflammatory Metacam® 20 in addition to an intramammary antibiotic:

- were 10% more likely to conceive to the first service than cows receiving antibiotics alone
- had an increased bacteriological cure rate of 16%



The negative effects of mastitis on udder health and milk production are well understood. It is now clear that mastitis can have an influence on the long term future of dairy cattle by affecting their ability to become pregnant and remain in the milking herd.

Cows with a clinical case of mastitis or a high cell count have lower conception rates. It is thought that inflammation caused by mastitis affects:

- The ovary and its ability to produce high quality eggs for fertilisation and;
- The ability of the cow to maintain an early pregnancy

Using a single dose of Metacam® 20 in combination with your standard post calving mastitis treatment not only helps in recovery at the time, but also has the potential to provide significant longer term benefits for your herd.

To find out more about how Metacam® 20 might fit into your mastitis treatment plan, talk to your vet.



*"Welcome to the new farmers who have joined us for the upcoming season.*

*We're working hard to show new and existing members that "it pays to belong" to your local vet club. Our job is to give you options, then for you to decide what is going to achieve the best results on your farm."*

**Terry Youngman, CEO**

# Ketosis – symptoms, diagnosis and management

Ketosis is caused by an imbalance between energy uptake and energy demand and is often seen in the first 6 weeks post-calving. In this state of negative energy balance (NEB) the body resorts to breaking down its own fat and protein reserves to maintain lactation. Consequently, the liver can get overloaded by the amount of breakdown products and ketone bodies end up in the blood; this is called ketosis.

**Clinical signs of ketosis relate to the response of the body to hypoglycaemia and come in two different forms:**

- Wasting form: rapid loss of condition, reduction of milk yield and appetite reduction. The cow can become dull, lethargic and eventually go down.
- Nervous form: as above plus signs of nervous excitement, for example excessive salivation, aimless wandering, staggering and muscle tremors. Sometimes they can appear blind or display aggression.

Any cow affected by ketosis is also at increased risk of uterine infections, reduced fertility, mastitis and lameness.

Cows showing clinical signs of ketosis form the classical 'tip of the iceberg' as there will be a lot more cows with subclinical ketosis (no clinical signs, but positive on blood test).

Research has shown that the incidence of subclinical ketosis on New Zealand dairy farms is 9-31%. National data show the cost of ketosis to be approximately \$2700- per 100 cows.

## Diagnosis

If you would like to make sure your cows are getting the energy they require, diagnosis is easy and cheap through a blood test cow-side. Alternatively, blood samples can be sent to the lab when routinely testing a herd for trace element levels. Talk to your vet for more information.

---

## Magnesium and Calcium supplementation: Are your cows ready to go?

During the dry period your cow's metabolism has been in a dormant state, but this rapidly kicks into gear when lactation starts. Here's a reminder of the role of calcium and magnesium:

**Calcium (Ca):** it is an essential component of the skeleton and serves a role in muscle contractions, blood coagulation, enzyme activity and hormonal secretion. Demands rise dramatically when lactation starts. These sudden demands can result in milk fever cases as well as subclinical problems. Subclinical hypocalcaemia (low calcium) has been linked to "sad cow syndrome", retained membranes and infertility.

**Magnesium (Mg):** this is required for the production of hormones that are important for the absorption of calcium from the gut and the mobilisation of calcium from bone. Low magnesium levels can suppress a cow's appetite as well as cause irritability in the herd and reduce milk let down.

Magnesium supplementation prevents grass staggers and helps the cow to mobilise her calcium stores to prevent milk fever.

Cows do not store magnesium, so a daily dose is required. This means that if we happen to have a patch of adverse weather and the cows miss out on their daily dose, you can expect some clinical cases. Lush, fast growing spring pasture is often very low in magnesium.

Calcium and magnesium demands are exceptionally high in the weeks surrounding calving for calf growth and lactation. High producing, older cows are often most susceptible to deficiency.

It is best not to give calcium in the three weeks coming into calving, because the cow needs to prime her body to mobilise her own calcium stores. Care must be taken to take the lime flour (calcium component) out of the maize balancer if you're using one.

## Methods of supplementation

Magnesium supplementation should begin 4 weeks pre-calving and continue for at least 4-6 weeks after the last cow has calved.

## Supplementation can be achieved in a variety of ways:

- Dusting pasture with magnesium oxide at a rate of around 100g per cow per day
- Drenching with magnesium oxide at a rate of 30-40g per cow per day.
- Maize silage is naturally very low in magnesium, calcium and salt, so needs to be balanced by adding these elements. If cows are eating a lot of supplement, then it is possible to add magnesium to this feed at a rate of 60g per cow per day. Remember that this 60g is over and above whatever magnesium you are adding to the maize silage to 'balance' it.
- Magnesium sulphate or chloride may also be added to the water supply, but care must be taken not to make the water unpalatable, as magnesium tastes bitter.
- Slow release magnesium capsules are also available, but these alone will not provide enough. They may be indicated for cows at grazing where dusting and water supplementation are impractical.

Talk to your vet if you're unsure of dose rates or routes of administration.

Careful management and supplementation around calving should prevent most problems.

You should not need to treat more than 1 to 2% of your herd for metabolic disease. If you're worried that numbers on your farm are higher than this target figure, you may need to talk to your vet about magnesium and calcium supplementation around calving.

# Calf scours: Prevention is much easier (and cheaper!) than cure

With calving approaching, it is vital to have the calf sheds and equipment ready to deal with any potential problems with calf rearing.

**One of the main problems is calf scours, can have a number of causes:**

- Nutritional scours:  
caused by overfeeding, a sudden change in diet or incorrect mixing of feed.
- Infectious scours:
  - Rotavirus
  - Coronavirus
  - E. coli
  - Cryptosporidium
  - Salmonella
  - Coccidiosis

When a calf is born, it has no antibodies to fight infection. This is why it's so essential to prioritise colostrum management. Absorption of antibodies from the calf's intestines can only happen within a short timeframe after birth – after 6-12 hours absorption is no longer possible. From then on any antibodies given through colostrum will continue to offer local protection in the intestines, but no antibodies are absorbed into the bloodstream.

Studies have shown that 40-50% of calves do not receive enough colostrum (and therefore antibody protection) within the first 12 hours of life! This makes them vulnerable to infections and affects their subsequent growth and production.

**To maximise your calf's potential and give them the best start:**

- Twice daily pick up is a minimal requirement
- Give 10-15% of their bodyweight of first milking colostrum within the first 6-12 hours of life
- Colostrum quality can be tested by you on farm with a Brix refractometer. This will take all of 5 minutes and a drop of colostrum. Ask us at the clinic, we can get you the refractometer for around \$100. It will give you invaluable information about one of the most important feeds for your calves.

The majority of scours in New Zealand are viral in origin. For the most part, this makes treatment of a scouring calf with oral antibiotics such as Scourban or scour tablets a costly and pointless exercise. All that you will achieve is destruction of the natural intestinal flora which will slow recovery and cause additional digestive upset. Scouring calves that show no other signs of illness such as a fever or depression should not need antibiotics.

Electrolyte therapy is essential because animals that scour die from dehydration and lack of energy, not generally from the infectious organism!

**We recommend the following treatment protocol:**

This protocol is set up for moderate scours. It's important to continue their normal milk feed for at least one feed per day, because a solution of electrolytes will not offer the necessary nutrients.

If you're dealing with severe scours (calf very dehydrated and lethargic), start with electrolyte feed, followed 4 hours later by milk and then electrolytes again.

Isolate any sick calves immediately and do not return them to the pen until weaning. Make sure there's no contamination between the sick pen and the other pens, which means feeding and treating the sick ones last and disinfecting your gumboots and gear between pens.

It's a good idea to have a thermometer in the calf shed. If the calf has a temperature greater than 39.5°C or is severely dehydrated, call your vet.

To prevent more cases and make treatment more specific, take a faecal sample from the affected calf before treatment to get it tested for the causative agent. This is especially important if you're dealing with multiple scouring calves.



## Anexa FVC annual milk quality and reproductive performance awards.

Vet Katrina Roberts presented the results of our annual awards for milk quality and reproductive performance.

Thirty five of Anexa Animal Health clients (who pregnancy tested early enough to have an accurate 6 week in-calf-rate) had a 6 week incalf rate of 78%. As we expected the mating length was on average shorter by 1.5 weeks this year. The empty rate after 11.5 weeks was 12%, which is considerably higher than the last few years' average of 8%. However, when we compare the incalf rate after 6, 9 and 12 weeks the difference between this season and last season is much smaller

Year	6 week incalf rate	9 week incalf rate	12 week incalf rate
2013/2014	72%	84%	89%
2014/2015	71%	83%	87%

The winner was Carlos Alatorre, herd manager for Bruce and Ailie Haultain (this herd has been in the top few herds every year we have run the competition!), and equal runners up were Shaun and Jo Wallis from Overton Oaks (Raglan) and Fiona Knight herd manager for John Armstrong. As well as exceptional 6 week incalf and final empty rates, all 3 of these herds mated for less than 9 weeks.

Our milk quality winners were Patrick & Natasha O'Shea, from Valentia Farms, and runner up was Jimmy Leggett from Legless Holdings. Both of these herds, not only had a low average and maximum bulk tank SCC, but also had <3% of the herd treated for clinical mastitis (both by recorded cases and drug purchases)!

**Congratulations to all the winners!** Next year we look forward to including the performance of the FVC clients to this database.



**Gordonton Spring Hours start Saturday 11th July  
Clinic open from 10am - 1pm**



## Upcoming Training Events

### Ready for Mating?

We are running a **practical on farm session to help you get more cows in calf faster.** Accurate heat detection in your herd is so important! Did you know that every missed heat is worth \$200-\$300? Have you ever wondered what's actually going on inside the cow for her to cycle and get back in calf again?

We will cover all this and more at our pre-mating workshop. More details on dates and locations next month. If you are interesting in attending, contact your local clinic or email [anexa.events@anexafvc.co.nz](mailto:anexa.events@anexafvc.co.nz)

**Members:** Our prompt payment discount applies when your account is paid by the due date, which is the 21st of every month. If this date falls during the weekend the discount is applicable on the Monday (or first business day) following the weekend. Contact us to set up a direct debit to ensure you get the discount every month.

If you have not yet become a Member please contact your local clinic to enable you to be eligible for this discount.



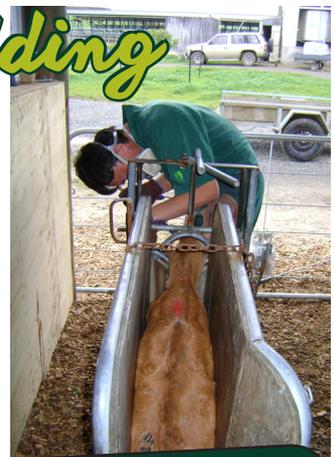
## Calf Disbudding

Technician or Veterinarian service available

Optional extra's include:

- ✓ Long acting pain relief
- ✓ Vaccinations

**For more information or to book in your calf disbudding, call your local clinic today.**



## TECHNICIAN SERVICES On-farm Support

- ✓ Calf disbudding
- ✓ Weighing
- ✓ Drenching
- ✓ Hoof trimming

**Book at your local Anexa FVC clinic**

0800 2 THE VET | [anexafvc.co.nz](http://anexafvc.co.nz)

**Coromandel**  
P: 07 866 8556

**Huntly**  
P: 07 828 7660

**Matamata**  
P: 07 888 8068

**Ngaruawahia**  
P: 07 824 8630

**Paeroa**  
P: 07 862 8815

**Rototuna**  
P: 07 853 0027

**Te Kauwhata**  
P: 07 826 3581

**Gordonton**  
P: 07 824 2103

**Maramarua**  
P: 09 232 5891

**Morrinsville**  
P: 07 889 5159

**Ngatea**  
P: 07 867 7256

**Raglan**  
P: 07 825 8390

**Te Aroha**  
P: 07 884 8014

**Thames**  
P: 07 868 7005