Copper toxicity – A new caution

By C J Lyne

Very few dairy farmers did autumn trace mineral profiling in 2016. This is sad, and understandable given the prevailing economic climate at that time. However, there are a staggering number of farmers who purchase injectable copper within two weeks of mating having done no profiling for 12 – 24 months.



Copper is an essential trace element, we all need it, but it is also a poison when given in excess. Recent scientific work published by Franklin Vets has shown that injectable copper is particularly lethal to the cattle embryo when given within 10 days of planned start of mating. Control trials show that both 21 day submission rates, and 21 day pregnancy rates are negatively affected by such therapy. These findings open a big can of worms because at this time, we simply do not know how many weeks pre-mating injectable copper is toxic for.

Furthermore, we do not know whether or not the embryo of cows with good copper stores are more vulnerable to toxicity as opposed to the embryo of cows with no copper stores.

At this time, the take-home message is:

- 1. Do trace mineral profiling in autumn.
- 2. Treat to your vet's recommendation at, or early after, drying off.
- 3. Re-test again in early spring to determine whether a top up is necessary. (copper stores drop like a lead balloon over winter).
- 4. If injectable copper is required post calving, it should be given at least four weeks prior to mating.
- 5. Watch this space for further developments.

'Pink eye' is common, particularly in young stock, over the dry, dusty summer months. Animals present with squinting, increased blinking and ocular discharge.

This condition is very painful and if untreated can cause corneal ulceration or even rupture of the eye. Vaccination is a good preventive measure, with a single dose given to healthy animals 3–6 weeks before the start of the 'pink eye'

If 'pink eye' does occur, treatment involves administration of antibiotics and pain relief. **Good news -Orbenin Eye Ointment** is now back in stock after a supply issue!

Contact your local branch of The Vet Centre for further information and advice.

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YOUR FEEDBACK IS WELCOME:

If you have any suggestions for improvements, or you would like to discuss service received, we would appreciate the opportunity.

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A note from Sandy

February 2017

It does appear the weather Gods are frowning upon us again.

If ever there was a season that we needed to be favourable it was this one. I suppose that is farming and further exemplifies why Northland farmers are so tenacious.

I am friends with a young chap that has experienced his first foray into dairy farming in the Waikato. He is now firmly of the opinion that Northland farmers are far more capable than he ever realised and a damn sight more informed than many of their southern counterparts.

The summer is firmly upon us. That being the case we are again confronted with eczema prevention. The means of achieving this prevention are varied but all involve the use of zinc in one form or another. Some products are virtually out of stock already which immediately places stress upon the supply of alternatives. Please give your needs serious consideration and let us know in advance what you determine those needs are. Our vets can assist with advice on prevention options.

Another area of concern when the dry sets in is the growth of young stock. Calves on the dairy platform are often overlooked in favour of the producing animals. I always had problems giving the young stock priority when I was trying to maintain the volume of white stuff in the vat. 'Short sighted' was one way of describing my management style, foolish might have been more appropriate.

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THINGS TO DO THIS MONTH:

Book Dry Cow consults ahead of time

Autumn herds—book rotavirus vaccinations

Monitor cow body condition score

Consider early culling of 'empties'

Young stock must achieve those target weights if they are to produce in those subsequent seasons. I think one of the most disappointing aspects of farming is seeing those empty second and third calvers going down the road as boners.

I am only too aware that farmers are constantly ear bashed as to how they should manage their businesses. I would like to remind members that early identification of empties does mean priority feeding can be given to those animals that are expected to produce next season.

Our vets are well equipped with modern scanners so pregnancy scanning results are very accurate. That said, as with any diagnosis, there will be errors. It is recognised that approximately 1% of scanning results will be misinterpreted.

If you combine that with errors in recording the numbers, errors with MINDA details etc, it is not unreasonable to expect a few empties to calve or a few incalf cows to be empty.

Again, from personal experience, I always expected some cows to abort over summer especially as our herd had been exposed to Neospora, so an in-calf scan will not automatically result in a pregnant cow come July or August for many reasons.

That's all from me until next month.

Sandy

Getting the most out of dry cow therapy

By Emily Buswell

As the summer rolls on, many farmers are thinking about drying off some cows. The economic climate this time last year prompted some farmers to opt out of blanket treatment and to use shorter acting products and less teat sealant. Unfortunately a wet winter meant environmental mastitis was rife and widespread at calving. Herds that used short acting only or selective treatment (only some cows treated) were hit hardest, highlighting the importance of critically evaluating how much a preventive treatment really costs (or saves!!!) your business. The three main reasons for using dry cow therapy are:

Cure existing infections- high cell count cows Prevent new infections at drying off Reduce clinical mastitis around calving and in early lactation

Curing existing infections

Cows which have a cell count >150,000 cells/ml and heifers with a cell count >120,000cells/ml are at risk of harbouring a bacterial (subclinical) infection. The best chance of curing these infections and resetting the clock for your bulk SCC is with a dry cow antibiotic. All dry cow products are good at curing infections caused by common mastitis bacteria, however the longer acting products may be slightly better at curing subclinical infection caused by *Staph aureus*. The prevalence of this bacteria varies significantly from farm to farm.



Preventing new infections at drying off

Normal shrinkage of the udder after dry-off involves formation of a keratin plug in the teat canal which provides excellent protection from infection. In some cows, this plug forms quickly after dry off but in others, it can take weeks, or even months! After 6 weeks about 25% of cows will still not have a keratin plug. Dry cow antibiotic administration not only prevents bacteria intruding into the gland from establishing infection, but also helps to promote the formation of a healthy keratin plug. Teat sealant provides a physical barrier to new infections at this time, and doesn't rely on the formation of a plug. >>>

>>> Reducing clinical mastitis at calving and in early lactation

After the plug has formed in mid dry period the udder is resistant to infection, but in the late dry period (4 weeks pre calving), the keratin plug breaks down and the gland becomes vulnerable again. One of the most surprising facts about early lactation mastitis is that the majority of cases you see in the first 2-3 months of lactation are caused by organisms that went up into the udder in the dry period. Bacteria can happily sit in the udder and go unnoticed until the cow is in milk, when they flare up into clinical cases. Long acting dry cow products and teat sealants can significantly reduce early lactation mastitis by preventing bugs getting into the gland in the dry period. Long acting antibiotics can provide protection for up to 10 weeks, and teat sealants will last until it is stripped at the first milking, proving in some cases to reduce infections acquired in the dry period by up to 90%.

Dry cow consults are an opportunity to review mastitis on your farm and ensure the choices you make around the use of DCT are sensible and practical. Bring along the last 2-3 seasons' BTSCC graphs, records of clinical mastitis throughout the season and any herd test results you have to make the most of it.

Talk to us to determine the most appropriate dry-cow treatments for YOUR herd

The Vet Centre carries a variety of dry cow and teat sealant products to meet your herds needs

At your Dry Cow Consult our Vet will discuss treatment options, costs and your herd-specific situation with you

At the end of the drought....

By Graham Goodall



Whilst we are currently in the middle of a drought, thought must be given to looking after your stock when it eventually does rain.

Grazing stock can lose a lot of condition when the rain comes. This is due to a number of factors:

- Standing dry feed tends to turn to 'mush' and have little or no feed value.
- Parasite eggs all hatch, and young stock especially face a large worm challenge.
- Short fresh grass is more likely to be mineral deficient.
- A facial eczema challenge may arise.

Contingency plans need to be made to help your calves, cows and other grazing animals recover from the drought.

Club members can hire cattle scales from The Vet Centre to help monitor the weight of your calves and heifers. They are too valuable to you to leave to guesswork! Provide them with good quality feed, don't just leave them to clean up the paddocks.

Your parasite control programme for young stock will be triggered when the drought breaks, so have a drenching plan worked out and ready to go.

Facial eczema spore tests can be done for \$10 per sample. If you're not sure how to collect a sample, give us a ring. For every animal showing signs of photosensitivity, 20% of the mob are likely to suffer subclinical disease.

Talk to one of our vets to discuss potential problems and examine your options.

Make time to monitor the growth rates of your young stock

Autumn Calving's Easy...Yeah Right

By Erin Grundy

Summer is slowly coming to an end, kids are back at school so that can only mean one thing...autumn calving is on the horizon. Most split calving farms are preparing to dry off their autumn herd, if they haven't done so already. Once in the dry period, you can prepare for the calving period. Some may say autumn calving is 'easier' than spring calving, while it does have its advantages over spring calving, it's not a walk in the park either.

Calving in the autumn has its own set of challenges surrounding cattle health. The main complication with autumn calving is low magnesium or grass staggers. It is important to always supplement with magnesium, especially close to calving regardless of season. In autumn, however, magnesium levels can drop drastically due to the lush grass so it becomes even more important to supplement magnesium. Dosing for zinc to combat facial eczema should not interfere with magnesium supplementation so both can be supplemented at the same time, keeping in mind that zinc should not be supplemented for more than 100 days.



Nitrate poisoning can also be an issue in autumn, especially after a dry summer. Nitrogen is generally applied at a high rate on maize or other summer crops. If ground moisture is low over summer then lots of nitrogen can remain in the soil (residual nitrogen) When the same paddock is used to plant an annual at the end of summer followed by rain and persistent cloud cover, you can get an increase in nitrate levels in the dry matter potentially resulting in deadly nitrate poisoning.

If you are concerned about the nitrate levels in your annuals, bring in a sample of the grass into your local Vet Centre branch to have it tested.