



So, there's obviously a lot of changes coming with some restrictions on what treatments we will be able to use on our animals. With this in mind it is in our best interests to minimise stress and disease by taking care of our animal's immune systems.

One way in which we can have a huge impact is on the immune systems of our calves.

As you already know calves are totally dependent on the colostrum that they consume within the first 12-24 hours of life to supply the antibodies that help them fight infection and without adequate levels calves can go on to have high levels of disease, poor growth, poor reproduction and poor production.



Many factors contribute to how many antibodies calves can absorb in the first hours of life. One of these is how much bacteria is allowed to grow in the colostrum that we feed to our newborn calves. Colostrum that is older than 12 hours can have very high levels of bacteria in it. These bacteria bind to antibodies making them unable to be absorbed by the calf.

How do we limit bacterial growth in colostrum?
Feed fresh colostrum <12 hours old. Collect it from clean udders, through a plant cleaned twice daily with hot water and detergent, into clean test buckets or clean drums and feed to the calves in clean equipment. To keep feeding gear and test buckets, etc. clean these must be scrubbed with hot water and detergent e.g. dishwashing liquid after every use. If you are using colostrum older than 12 hours to feed to calves less than 24 hours old it should be preserved with potassium sorbate. We will be stocking 1kg & 2kg Potassium Sorbate.

Watch this space for more calf rearing tips in the next newsletter.
If you had problems with scours or other disease in your calves last season please don't hesitate to call us to book in a calf rearing review so we can plan ahead for the coming season.

After Being Stranded On A Deserted Island For 10 Years, All He Can Think About Is THIS.

One day an Irishman, who had been stranded on a deserted island for 10 years, saw a speck on the horizon. He thought to himself, "It's certainly not a ship." As the speck got closer he began to rule out even the possibilities of a small boat or a raft. Suddenly there strode from the surf a figure clad in a wet suit. Putting aside the scuba tanks and mask and zipping down the top of the wet suit stood a drop-dead gorgeous blonde woman! She walked up to the stunned Irishman and said to him, "Tell me, how long has it been since you've had a good cigarette?"
"Ten years," replied the amazed Irishman.
With that, she unzipped a waterproof pocket on the left sleeve of her wet suit and pulled out a fresh package of cigarettes and a lighter. He took a cigarette, slowly lit it, and took a long drag. "Faith and begorra," said the castaway, "This is so good! I'd almost forgotten how great a smoke can be!"
"And how long has it been since you've had a drop of good Jameson's Irish Whiskey?" asked the blonde.
Trembling, the castaway replied, "Ten years."
Hearing that, the blonde reached over to her right sleeve, unzipped a pocket there and removed a flask and handed it to him. He opened the flask and took a long drink. "Tis the nectar of the gods!" shouted the Irishman. "Tis truly fantastic!!"
At this point the gorgeous blonde started to slowly unzip the front of her wet suit, right down the middle. She looked at the trembling man and asked, "And how long has it been since you played around?"
With tears in his eyes, the Irishman fell to his knees and sobbed, "Jesus, Mary and Joseph!
Don't tell me that you've got golf clubs in there too!"



Children Are Quick

TEACHER: Why are you late?
STUDENT: Class started before I got here.
TEACHER: John, why are you doing your math multiplication on the floor?
JOHN: You told me to do it without using tables.
TEACHER: Glenn, how do you spell 'crocodile'?
GLENN: K-R-O-K-O-D-I-A-L'
TEACHER: No, that's wrong
GLENN: Maybe it is wrong, but you asked me how I spell it.
TEACHER: Donald, what is the chemical formula for water?
DONALD: H I J K L M N O.
TEACHER: What are you talking about?
DONALD: Yesterday you said it's H to O.
TEACHER: George Washington not only chopped down his father's cherry tree, but also admitted it. Now, Louie, do you know why his father didn't punish him?
LOUIS: Because George still had the axe in his hand

TEACHER: Now, Simon, tell me frankly, do you say prayers before eating?
SIMON: No sir, I don't have to, my Mum is a good cook.
TEACHER: Clyde, your composition on 'My Dog' is exactly the same as your brother's. Did you copy his?
CLYDE: No, sir. It's the same dog.
TEACHER: Harold, what do you call a person who keeps on talking when people are no longer interested?
HAROLD: A teacher.



April 2017

Heard of the phrase "prudent use"? How about "Judicious Use"? Or "Stewardship" Let's try AMR? That stands for antimicrobial resistance. Or CIA's. Not what you think; it stands for 'critically important antibiotics'. Why am I hitting you with this? Well you are going to get very used to these words & phrases over the next few years. In fact, if you turn to page 5 in your March edition of the Dairy NZ Technical Series, you'll see that it has already begun.

The US Centre for Disease Control & Prevention reports that AMR "is one of the most serious health threats" and estimates that over 2 million people a year are sickened through antibiotic resistant infections. In the UK, there is an organisation called RUMA (Responsible Use of Medicines in Agriculture) who suggest that prudent or judicious use means "to use medicines as little as possible and as much as necessary".

All this is about to impact on us as veterinarians & you as farmers. Recent guidelines for dairy vets recommend that antimicrobial treatments are increasingly reserved for situations where:

- a. There is evidence of a bacterial infection (or sufficient cause to suspect one) and
- b. That the infection would be unlikely to resolve without antimicrobial therapy

So, treatment of clinical mastitis for example, would continue to remain acceptable, but antibiotic use at dry off will require justification.

There are two reasonable lengthy articles in this newsletter dedicated to this topic & how it will impact our prescribing behaviour in the years ahead. I urge you to read them.

Don't get too worried - we're not about to take all your drugs off you. We have some time to get used to the idea & you are about to be bombarded with information from all sides in the months & years to come I suspect.

The NZVA even has a mission statement or long term goal along the lines that by 2030 we will "no longer need to use antibiotics in farming". Something like that anyway – thank the Lord I'll be retired by then ...

Prescriptions Time Again

It's around the end of the current season that our attention turns to your prescriptions for next season. To be exact your "Authority to Supply Registered Veterinary Medicines (RVMS)". Now most years this is simply a "roll-over" exercise after considering your drug use for this season & historical use. However sometimes it's not a bad idea to have a chat with us about what you use & why. Sometimes there are drugs on there that really just sit there & hardly get used. Maybe it's time to take them off or discuss alternatives?
If you would like to discuss your RVM authority for next season, please feel free to make an appointment with one of us at the clinic or ask the girls to put aside 10-15 minutes after a farm visit to go over your RVM authority in the shed with the Vet.

Farmers Golf Day
at Eltham Golf Club
Thursday 8th June
Entry Fee \$10.00. Entries limited.
Entries to the clinic by 26th May
Ambrose format—teams of three

1st June Farm Changes
Has anything changed on your farm? New worker - please advise name & address so we can send our newsletter, plus phone numbers so we can contact if vet running early/late.
New sharemilker/manager? - please ask them to call into the clinic to receive a new client pack and meet some of the team.

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Railway Street, Eltham
Ph. (06) 764 8196
Trading Depot
Hollard Engineering,
Victoria Street, Kaponga
Ph. (06) 764 6686
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Joan Hughes Sue Morresey
Jill Watson CVN/RAT
Nicola Childs CVN/RAT
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Daniel Kidd Frank Suter

Critically Important Antibiotics and their future use in Veterinary Medicine

Moves are afoot to restrict veterinary access to antibiotic drugs used commonly in human medicine.

These are given the name “Critically Important Antibiotics” or “CIA’s”.

Apparently, we use too many of these in animal medicine & it is increasing the global risk of widespread antibiotic resistance.

Certainly, in many parts of the world (especially in overcrowded parts) the widespread use of antibiotics in farming and in human medicine when they are not needed is causing resistance. In places like Hong Kong for example you can walk into a chemist & pretty much buy any antibiotic you want over the counter. And in China (after speaking to some vets who have visited there) you wouldn’t believe what drugs they have on farm.

Our situation is different. New Zealand is the 3rd lowest user of antibiotics in farmed animals in the world by mass of antibiotic per stock unit. And of that, over 50% of antibiotic use is in pig & poultry farming. The rest make up less than 50%, of which Dairy is the biggest user (no surprise there). Within Dairy farming, mastitis treatments make up well over 50% of all antibiotic use. So, we’re actually doing pretty well as things stand. But worldwide, the spectre of antibiotic resistance looms larger every year. And, whether we like it or not the risk of resistance goes up if we use the same antibiotics in veterinary medicine as they do in human medicine. Ironically, the risk of getting resistance via treatment of mastitis is very low. But for other diseases such as campylobacter & salmonella, the risk is real & is already present. Therefore, the medical profession would prefer we steer clear of certain classes of antibiotics where alternatives exist which are not used nearly as much in human medicine. And if we don’t take ownership of this issue then it will go from being a “preference” or “polite request” to a blanket removal of a large number of antibiotics that are useful in Veterinary medicine.

Because of this a “traffic Light” system has been put in place. **Green, Orange & Red.**

Antibiotics in the green zone are fine for us to use. Those in the yellow/orange zone can still be used for specific conditions & under veterinary direction. They should be the second line of attack if the green zones ones don’t work. Those in the red zone should never be put on farmers’ RVM authorities & only used after definitive diagnosis & demonstration that other treatments either aren’t working or this is the only practical option. So, which antibiotics are we talking about?

Green Zone antibiotics: mostly Penicillin family (Intracillin, Duplocillin, Masticillin, etc) & Penethemate (Penethaject & Mamyzin)

Yellow Zone antibiotics include many of the standard mastitis products such as Orbenin LA, PenClox & most of the Dry Cow Products. That’s ok because they are under prescription anyway on your RVM based on what works in your herd for a specific condition, i.e. Mastitis). It also includes things like Amphoprim & Pink Scour Tablets - as treatments for calf scours they have been under prescription for a while.

Red Zone antibiotics include 3rd & 4th generation cephalosporins. Those are things like Excede LA, Excenel, Kelacef, etc. Because these drugs get used a lot in human medicine we are being asked to take them off your RVM authorities & use them only on a case by case basis with veterinary authority. So, you can still get a shot of Excede LA for a particular cow for a particular condition after consultation with a vet. But we will be removing these products from your RVM authorities starting from 1st June this year. Luckily for you there are a few earlier generation cephalosporins still around, which we are allowed to prescribe. There is an injection called Cephalexin, which we can prescribe so if you still want a non-withholding antibiotic for your lame cows we can provide you with this one.

Another class is the Fluoroquinolones of which we use Marbocyl & Draxxin – that’s okay because we only use them for certain conditions & wouldn’t normally put them on your RVM authority anyway.

But here’s where it gets awkward:

One of the other classes in the red zone are the Macrolides. That name won’t mean anything to you but the names **Tylan & Tylofen** (tylosin) certainly will. Apparently, despite that fact that Tylosin itself isn’t used much if at all in humans, other drugs from this family are used a lot to treat campylobacter (amongst other things) & we are being asked to stop prescribing them for routine use in the treatment of mastitis. In this family, resistance to one member generally confers resistance in another, which is why they would prefer we started reducing our use & eventually stop using it altogether.

That’s a tricky one. These drugs have been very successful in the treatment of mastitis but what has happened over time is that many of you have started using it as your first line of treatment & that’s the problem. So, we have 3 years to wean you off this class of antibiotic & put it back on the top shelf reserved for special cases where it used to be before it became so popular. We’re not going to simply remove it from your RVMs this coming season; that would be too drastic & counter-productive but we are going to reduce how much we allow on your RVM & increase the amount of intramammary products to compensate.

You need to start saving Tylan & Tylofen for the nasty, complicated cases & use Intramammaries or Mamyzin, Penethaject or Masticillin for the majority of your mastitis cases. Otherwise they will simply take Tylan-type antibiotics off us.

Right now, these are all “recommendations” & “guides” but take it as read; if we don’t toe the line & start doing this it will be mandated & then we lose control over what we can prescribe & use. Already the ACVM is moving to “re-classify” certain drugs to make sure we don’t use them routinely. So, we had better get used to it & act responsibly.

The Future of Dry Cow Therapy

Recently I attended a vet meeting in Palmerston North sponsored by the NZ Vet Association, The Dairy Cattle Veterinarian’s Society & MPI. It was all about “stewardship of restricted veterinary medicines (RVMs) & judicious use of antibiotics”.

The first part of the meeting was about Dry Cow Therapy & how we will be using it by 2020. Here’s the position statement from the NZVA:

“The NZVA recognises that the use of DCT in non-infected cows is no longer appropriate in an era of effective alternatives such as internal teat sealants (ITS) and improved management practices. By 2020 DCT will only be used in the treatment of existing intramammary infections.”

So basically by 2020 we are expected to only prescribe DCT to cows that are considered infected. Back to the SAMM plan really. Whether the criteria changes by then I’m not sure but for now that would be any cow with a SCC above 150,000 & any heifer above 120,000 would get DCT & anything below would either get no treatment or ideally a teat sealant to prevent infection during the dry period & in early lactation. If this becomes mandatory (& the word is that all the industry players are in agreement with this sentiment) then to do this would require everyone to herd test, otherwise how do we use those criteria? Would herd testing become compulsory? Subsidised? Who knows? But from a market perspective the perception is that we are “mass medicating” animals with antibiotics that actually don’t need them.

So, I guess I can live with that; people with real problems would still be able to do the whole herd, but whole herd therapy for the sake of it (even though we all know how effective it is) would become a thing of the past.

You’re going to hear a lot more about this via Farmsource, Inside Dairy, Industry websites & newsletters over the coming months so get used to hearing terms such as ‘AMR’s (antimicrobial resistance) CIA’s (critically important antibiotics) ‘judicious use’ and ‘antimicrobial stewardship’ amongst others.

Don’t panic - we’ve got 3 years to get used to the idea & a lot of water will pass under the bridge between now & then.

Protecting Cows with Teatseal at Drying Off

Teatseal’s® ability to prevent mastitis in heifers and in cows is well proven and Teatsealing is a widespread dairy farm practice. Many cows are dried off with combination dry cow therapy (DCT) - antibiotic DCT combined with Teatseal. The antibiotic cures existing infections and the Teatseal stops new ones from establishing over the dry period. But what about those cows that are not infected at drying off? Do they need that antibiotic? If there is no infection to treat, all we need to do is prevent new infections from establishing, and Teatseal is a very effective way of achieving that.

Firstly, what is an “uninfected” cow? We actually don’t know if a cow is infected or not unless we run a milk culture on every cow at drying off. Therefore, we use the cow’s mastitis and SCC history. Combined, those two pieces of information are very accurate at sorting infected cows that should be treated with antibiotic DCT from uninfected cows that don’t need antibiotic DCT.

This was demonstrated recently in studies by Dr Scott McDougall, a NZ veterinarian and researcher. So by “uninfected” cows, we mean cows that did not have clinical mastitis and whose SCCs did not exceed a threshold (typically 150,000 cells/ml) during the season.

Numerous trials from NZ and overseas have demonstrated that using Teatseal alone in uninfected cows roughly halves their mastitis rate next spring, compared to no treatment. Teatseal was also shown to be as effective as long acting antibiotic DCTs in uninfected cows.

Teatseal prevents mastitis until it is removed by suckling or stripping at first milking. Most NZ cows are dry for much longer than the length of cover offered by the longest acting antibiotic DCTs. Relying on antibiotic DCT alone means your cows are unprotected during the period of highest risk for mastitis infections establishing, i.e. as they bag up and calve.

So should you use Teatseal alone in your uninfected cows? It depends on your farm’s mastitis pattern. You should consider it if:

- You want to protect your cows for the entire dry period.
- You have little contagious mastitis circulating through your herd.
- You want to minimise antibiotic use.
- You want to minimise inhibitory substance risk.
- You want to save money on unnecessary combination therapy.
- You have herd test results and good mastitis records.

Finally, whether it is cows or heifers, DCT or Teatseal hygiene is paramount.

Please follow instructions & take great care to make sure the job is done cleanly & hygienically.