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CALF SCOURS: Fail to Plan, Plan to Fail Page 5

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VIP Calf Rearers MORNING TEA



Thursday 1st July 10.00am - 12.00pm

Discussion led by RVC Vet Tristan Kamps

Rangiora Vet Centre 181 Lehmans Road, Rangiora

PLEASE RSVP by Friday 25th June
to large animal office phone: 313 7438 xtn 2
or Colin 027 333 8989



7th Annual Dairy Awards

GUEST SPEAKER

Logan Williams

INNOVATION IN FARMING

Thurs 8th July 10.30am - 2.00pm

LUNCH PROVIDED

RANGIORA RSA 82 Victoria Street, Rangiora

PLEASE RSVP by 5 July to large animal office
phone: 313 7438 xtn 2 or Colin 027 333 8989

24hr/7day emergency care available by phoning 03 313 7438

Cnr Lehmans & Oxford Rds, (181 Lehmans Rd), Rangiora
www.rangioravetcentre.co.nz Em: rangvet@rangvet.co.nz



Improving Milk Quality

NEW RESEARCH

Many of you have done a great job at lowering cell counts and clinical mastitis in recent seasons, while reducing antibiotic use as well. As management and systems have improved, the opportunities to make further gains have become fewer. Getting to that next level can be challenging and we will need to find new innovations to achieve this.

One untapped area of the cow is the immune system. **A better immune system means the cow is better equipped to combat mastitis.** We have seen this in calves; A Multimin injection at birth can half death and disease in calves.

If we think a dose of Multimin helps the immune system in calves, could we then also use it in our cows, to make the immune system more robust before calving? A recent study performed by Virbac in New Zealand looked at this exact situation.

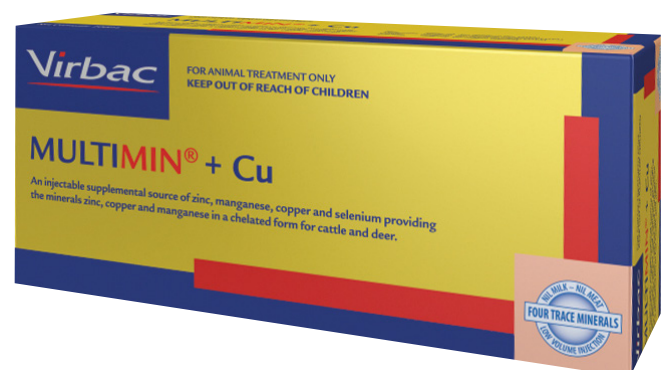
What did they do?

- 1700 cows, half of which were given 5mL of Multimin 2 – 4 weeks before calving
- Clinical and subclinical* mastitis rates were recorded in the first 30 days after calving
- Bloods were taken at the time of injection for selenium and copper evaluation

*Subclinical mastitis = more than 150,000 ISCC at the first herd test

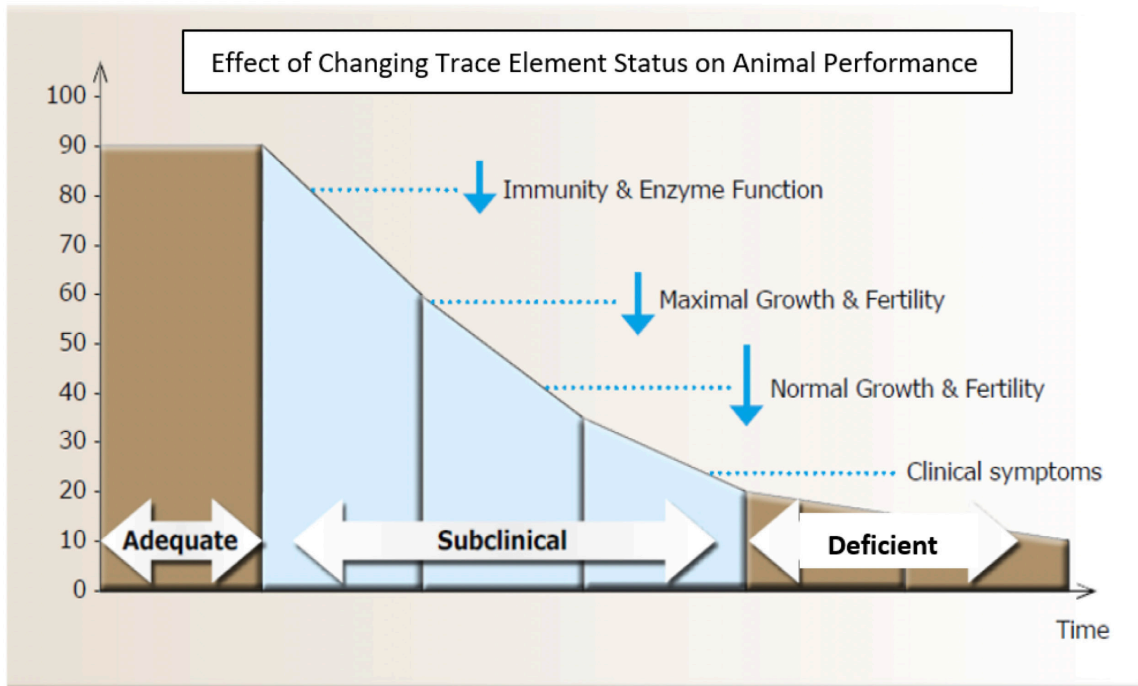
What did they find?

- Selenium and copper levels were at the upper end of normal, reflecting that these were herds that already had very good trace element management. This included dry period long-acting selenium injections and oral mineral mixes during lactation.
- **Clinical mastitis was reduced from 4.2% to 2.0%.** Even from this low baseline, in a well managed herd, Multimin halved clinical mastitis in the first 30 days post calving.
- Subclinical mastitis was also significantly affected. 17.1% of untreated cows were above 150,000 at the first herd test, and Multimin treatment lowered this to 12.9% - a reduction of about a quarter.



Why is this relevant?

The response to a Multimin injection was very significant, even on farms with good mastitis management and trace element supplementation. It means that we potentially have another tool in the kit, to make gains in milk quality and animal health on even the best performing farms. Why do we see such a dramatic immune response to supplementing trace elements, when animals are not in the deficient range? The graphic below helps to explain this effect:



The left-hand side of the graph is more relevant to modern farming. This shows that even a small dip in trace element levels will affect immunity first. The huge demand for trace elements at stressful times like calving, mean that it is almost inevitable that even well-managed herds will drop into this zone temporarily. Supplementing with Multimin prior to these times is a pre-emptive strike to reduce this immune suppression.

Is it worth the investment?

Using the SmartSAMM Gap Calculator, we can estimate the return in an average 800 cow North Canterbury herd (if the same results seen in the trial are achieved).

Assuming 400kgMS/cow and a conservative \$6.50 payout, the benefit is over \$18,000 - **a return on investment of about 4:1.**

Key Points

- Cows get stressed and this can easily deplete adequate trace element levels
- Multimin can help reduce the impact these stressful events have on trace element status
- Which can halve clinical mastitis and quarter subclinical mastitis post-calving

GET YOUR HERD AND YOURSELF PERFORMANCE READY THIS SEASON

WIN



STONEY CREEK

PACKS WORTH \$650!



To go in the draw, purchase MULTIMIN®, and enter online by visiting performanceready.co.nz or scanning this QR code with the camera on your phone.



Qualifying purchases: 1x 500 ml or 2x 200 ml of MULTIMIN®. 50 prize packs available in total. Draw is final, non-transferable for cash. Promotion runs 14th June 2021 to 30th September 2021. Visit performanceready.co.nz for full T&Cs. Registered pursuant to the ACVM Act 1997, No. A9374. Copyright © 2021 Virbac New Zealand Limited. All rights reserved. Virbac New Zealand Limited, 26-30 Maui Street, Pukete, Hamilton 3200. 05/21.



24hr/7day emergency care available by phoning 03 313 7438



Calf Scours:

Fail to Plan, Plan to Fail

Anybody who has been through a scours outbreak can tell you, it is one of the worst experiences in farming. If you prepare now, you can reduce your chances of having a scours outbreak this coming season.

Keeping calves healthy:

- 4 – 6 Litres of clean, good quality, first milking colostrum within 12 hours of birth
- At least 4L per day of colostrum for the first two weeks of life¹
- Hygiene, hygiene and hygiene!
- Good protocols for sick calves i.e., sick calf pen, separate feeders, places to wash boots between pens and clear protocols that all staff can understand and follow
- Vaccinating your heifers and cows!

Vaccinating your heifers and cows with Rotavec® Corona 3-12 weeks before calving, boosts the antibodies in their colostrum and transition milk against three of the most common scours-causing pathogens: Rotavirus, Coronavirus (not the Covid-19 kind!) and E.coli. These antibodies can be excreted in the mothers milk for 28 days after calving².

Scour causing pathogens are present on most farms in New Zealand³ and calves are the future of your farm, so they need all the help they can get! Rotavec Corona will reduce the risk of your calves getting scours and will reduce the severity of any cases you do see⁴.

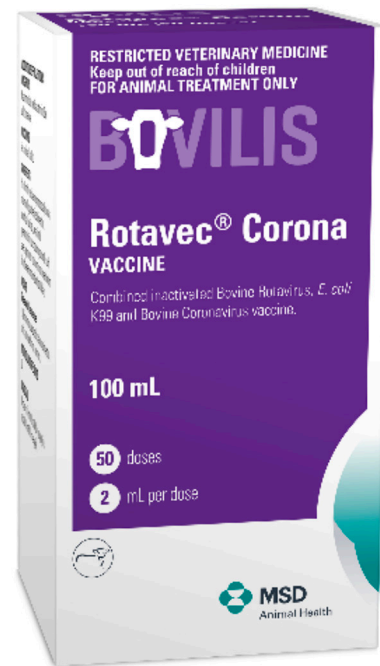
In addition to ordering your Rotavec Corona, now is also the time to start planning how you manage colostrum and calf shed hygiene during calving, and to make protocols which you can easily kick into gear at the first sign of a scours outbreak.

Check that all your colostrum storage buckets/barrels have lids, so that dirt and flies can't contaminate colostrum between collection and feeding. You can also fit-out your calf sheds with solid partitions between pens, which will help contain a scours outbreak by limiting the number of calves which have direct contact with one another.

Have a look at www.topfarmers.co.nz these guys have some great resources for you and your staff to upskill or refresh yourself before calving hits.

We are always here to help. Give us a ring if you want a hand checking over your calf rearing and colostrum management protocols. We can also help train or refresh staff.

Calving will be here before we know it, so be prepared, and get in touch with your vet about your calf rearing plan today.



REMEMBER our
Calf Rearers Morning Tea,
Thursday 1st July
10.00am – 12.00pm.
Full details on front page.

Calpro® Bolus

The only ACVM authorised intra-ruminal calcium bolus for the prevention and treatment of subclinical hypocalcaemia and as an aid in the prevention and treatment of clinical hypocalcaemia (Milk Fever) in cows. Backed by NZ peer-reviewed trial.¹

The insidious, invisible problem...

In NZ the average herd-level prevalence of subclinical hypocalcaemia is 52%²

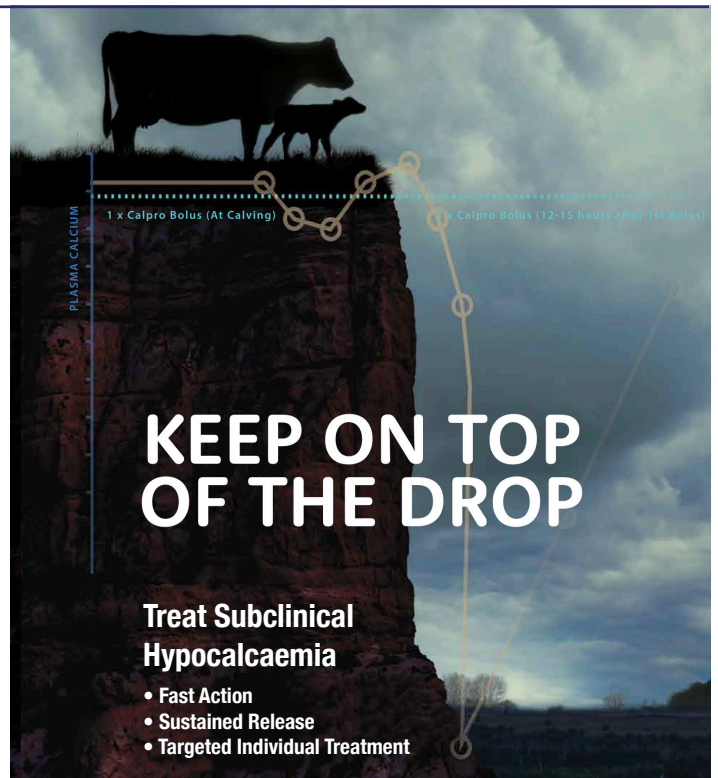
Explaining Hypocalcaemia

At calving, a dairy cow must switch from being non-lactating (dry) to lactating (in milk), rapidly adapting to the nutritional demands of milk production. A crucial mineral component of milk is calcium and at calving there is an immediate and increased requirement for calcium. Calcium is transported in the animal in the blood and it has several important roles including the mineralisation of bone and correct functioning of muscles. The sudden increased requirement for calcium at calving can lead to a measurable fall in blood calcium, referred to as hypocalcaemia. If the drop in blood calcium is severe it can lead to increasing paralysis of muscles and the serious clinical condition of Milk Fever (clinical hypocalcaemia). If left untreated, Milk fever leads to recumbency and potentially to the loss of the cow. By measuring the blood calcium level of cows without clinical signs of milk fever around calving, it has been shown that many still have a drop in blood calcium that results in serious health and productivity consequences (subclinical hypocalcaemia).

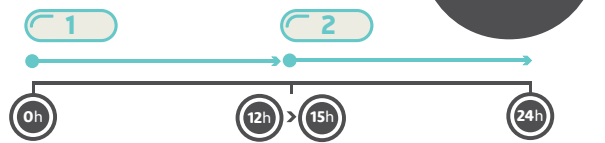
Subclinical Hypocalcaemia

With increased demand to produce more milk, cows are under pressure around the calving period. Milk fever or hypocalcaemia is a disorder caused by low blood calcium levels. Milk fever occurs due to an imbalance between the cow's demand for calcium and her ability to mobilise her calcium reserves quickly enough, progressing to 'negative calcium balance' and possibly culminating in clinical milk fever.

To get an idea of the magnitude of the problem, the production of 10kg of colostrum by the cow requires 23g of calcium. A cow producing 25kg of colostrum would have to replace her total blood calcium level every hour! To help animals cope with the delayed adjustment to the change in the demand for calcium, calcium boluses are proving to be both popular and effective.



Treatment Period



Dosage

Administer orally to animals over 400kg.

- Administer one bolus if calving is imminent OR one bolus immediately after calving.
- Administer a second bolus 12-15 hours later.

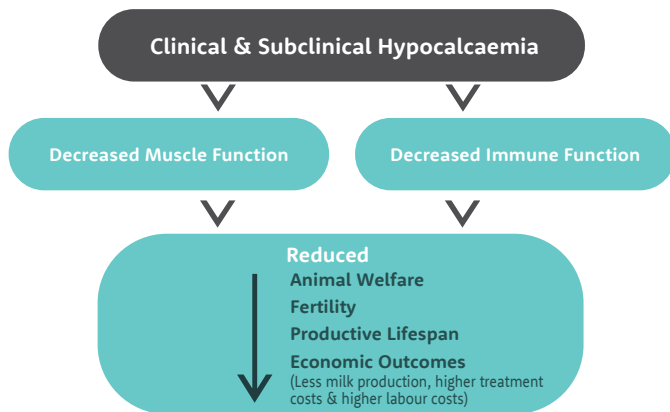
Withholding Period



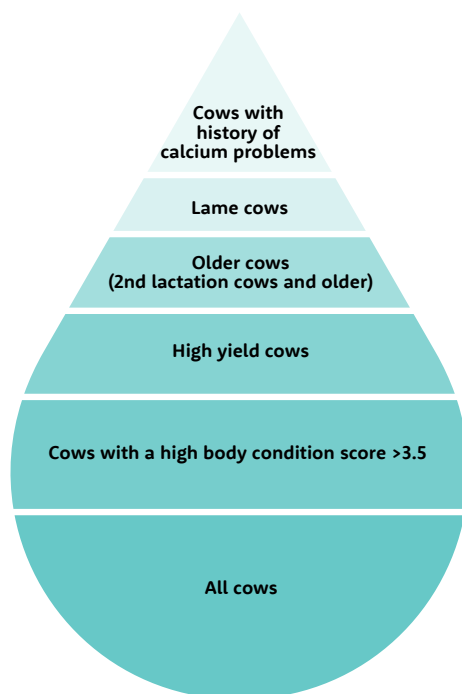
Calpro® is a registered trade mark of the Bayer Group. Calpro Bolus is registered under the ACVM Act 1997. Bayer New Zealand Limited, 3 Argus Place, Hillcrest, Auckland 0627, New Zealand. www.bayeranimal.co.nz | 0800 446 121

Hypocalcaemia negatively effects optimum health and production.

Consequences of hypocalcaemia:



All animals are susceptible to milk fever, but some are at greater risk: Cows that can benefit from **Calpro Bolus**:



The Calpro Bolus solution

Use Calpro Bolus for the prevention and treatment of subclinical hypocalcaemia and as an aid in the prevention and treatment of clinical hypocalcaemia (Milk Fever) in cows. Calpro Bolus offers peace of mind because it is the only ACVM authorised calcium bolus and is supported by a published, peer-reviewed New Zealand study¹.

Calcium is released in two forms, calcium chloride and calcium sulphate (refer to Fig 2.)

What is of critical importance with any supplementary calcium is that it does not interfere with the innate control mechanisms. Freshly calved cows need to access both the supplementary calcium and their own reserves.

Calpro Bolus boluses support the calcium control mechanism by lowering urine pH so natural body reserves of calcium are more readily available to the animal and assisting absorption of the supplementary calcium from the bolus within 1 hour of administration.

Bolus Technology

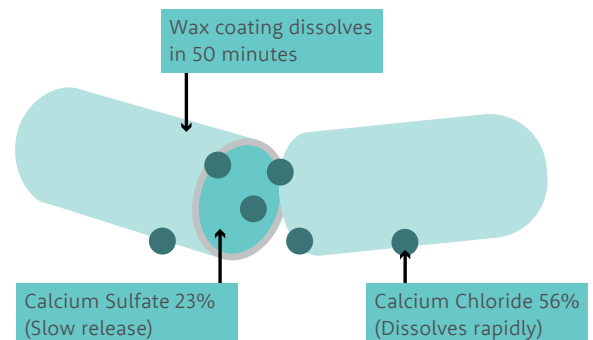


Fig. 2 Each 203g Bolus contains 43g of Calcium

Reducing the risk...

1. Calpro Bolus has been backed by peer-reviewed research in NZ¹.
2. Calpro Bolus is the only ACVM authorised intra-ruminal calcium bolus in NZ - this ensures Calpro Bolus has the highest quality assurance standards, stewardship and approved manufacturing.
3. Immediately after calving, cows experience high levels of calcium loss through milk and colostrum³. At this time of peak demand for calcium, Calpro Bolus prevents and treats subclinical hypocalcaemia and is also an aid in the prevention and treatment of clinical hypocalcaemia (Milk Fever).
4. Calpro Bolus delivers two essential types of calcium: chloride and sulphate. These two calcium ingredients have been proven to help get cows back to optimum performing levels .

5. Calcium chloride is rapidly absorbed, and the calcium sulphate is absorbed over a longer period.
6. Peace of mind with the standard dose regime of two boluses administered 12 hours apart providing a sustained increase in serum calcium over 24 hours.
7. Calpro Bolus dissolves completely in the reticulorumen. The coating of the bolus protects against irritation of the epithelial surface of the throat and oesophagus. Furthermore, the bolus has a neutral taste, which makes it easy to administer.

1. KI Roberts, J Bennison & S McDougall (2019) Effect of treatment with oral Ca boluses following calving on concentrations of Ca in serum in pasture-based dairy cows, New Zealand Veterinary Journal, 67:1, 20-26, DOI: 10.1080/00480169.2018.1520654
 2. KI Roberts & S McDougall (2019) Risk factors for subclinical hypocalcaemia, and associations between subclinical hypocalcaemia and reproductive performance, in pasture-based dairy herds in New Zealand, New Zealand Veterinary Journal, 67:1, 12-19, DOI: 10.1080/00480169.2018.1527732
 3. Goff JP. The monitoring, prevention and treatment of milk fever and subclinical hypocalcaemia in dairy cows. Vet J 2008;176(1):50-57