



## 7th Annual Dairy Awards

By Tristan Kamps

For those who weren't there, ask your friends, it was another great annual RVC dairy awards. Hosted by myself and the RVC team at the Rangiora RSA.

We had prizes (for everyone), awards and a great lunch sponsored by Boehringer Ingelheim. We also had a great motivational talk provided by Logan Williams.

For those who missed it, Logan Williams is a multi-talented entrepreneur who made his first million at 19. He has been involved in wool and dairy and all things inventive and he doesn't mind getting his hands dirty. His easily relatable stories gave us a view into his world and how he tackles problems and works towards achieving his goals.

Thanks to everyone was able to attend, for those who couldn't make it, we welcome you next year.

### 2021 Award Winners are:

- FERTILITY awarded to Bill Mason and Todd Portsmouth at Oxford Farming Ltd
- MILK QUALITY awarded to Martin and Theo Sneek at Groningen Farm Ltd - Poyntz Rd
- MOST IMPROVED FERTILITY awarded to Glen and Victoria Traynor at Motu Lodge Stud Ltd
- MOST IMPROVED MILK QUALITY awarded to Brian and Diana Te Awa and Eben Monk at Woolomee Dairies Ltd 2060
- HEIFER REARING awarded to Arjan and Amy Schouten at Schouten Dairies Ltd
- Zoetis Best Teatseal Lunch awarded to Harry & Claire Meijer at Silvacrest and Chris and Margaret Bailey



# Dirty Cows

By John Spearpoint

With heads down into calving, milking and calf rearing, time can quickly pass away and before we know it's time to get ready for mating season. Even though preparing for successful mating starts well before calving, managing dirty cows early can improve reproductive success.

Dirty cows have a condition called endometritis – an infection in the lining of the uterus which becomes inflamed and produces pus. A pus-filled uterus is a poor environment for a developing embryo and consequently affects conception rates.

## Who is most at risk?

Understandably, the cows most at risk of developing a uterine infection are those that have, or have had, an assisted calving, retained membranes, stillborn, twin births, rotten calving, down cows, mastitis, metabolic conditions, or calved in a body condition score of 4 or less.

Even so, studies indicate that almost 1 in 5 cows (18%) with no risk factors or health issues are also likely to have an infection. This represents a large proportion of the herd that may be missed!

## Why is it important to diagnose endometritis?

Dirty cows often don't show signs of illness and appear as normal healthy cows. Recent studies also indicate there is a high prevalence of endometritis within NZ dairy herds, with an average 1 in 4 cows (25%) diagnosed as metricheck positive. This does vary greatly across herds, with some only having a handful of metricheck positive cows to other herds having up to 50-65% of the herd affected.

## Delaying treatment of cows with endometritis leads to;

- More non-cycling cows
- Reduced 6-week in-calf rate
- Reduced conception rates
- Higher empty rates
- Less days in milk
- Higher culling rates due to poor reproductive performance

## Keeping endometritis in check with Metrichecking



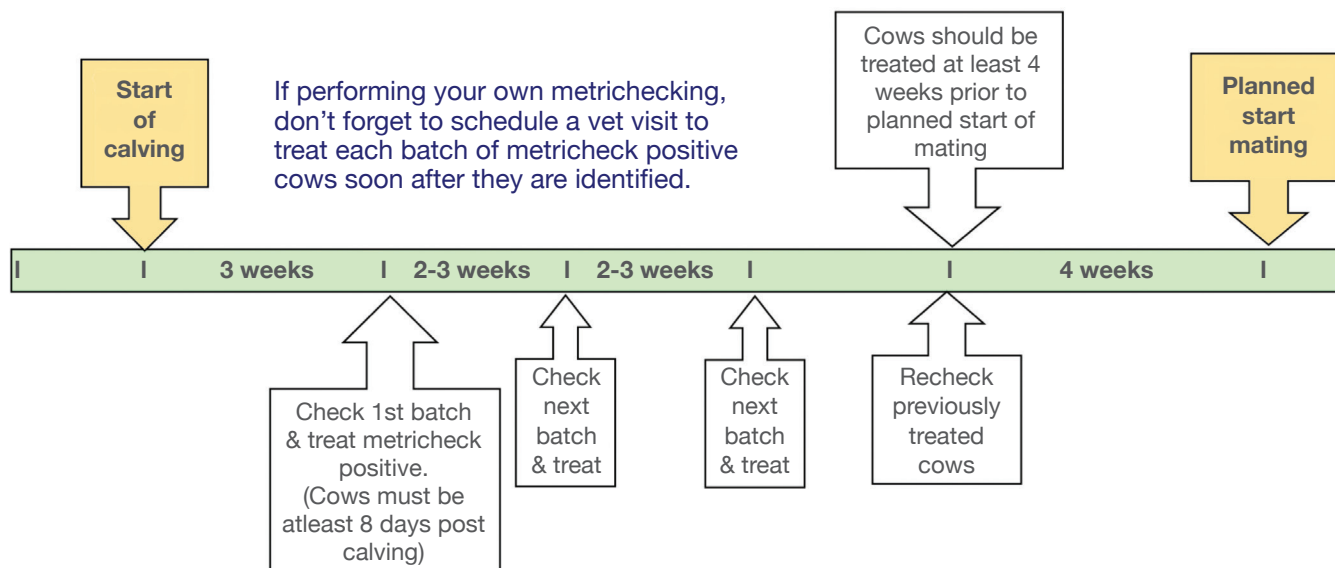
Endometritis is detected by inspecting vaginal mucous collected after insertion of a Metricheck™ device. Anywhere from the mere presence of flecks of pus to lots of pus, changes in colour or a foul odour is likely a sign of infection.

Metrichecking has been shown to be a quick, simple and reliable method of detecting endometritis.

Metrichecking the whole herd is preferred, not just 'at-risk' cows as this will give a far greater positive benefits on reproductive performance.

## When to detect and treat

Early detection and treatment leads to better reproductive performance. The 1st batch can be checked 3 weeks after calving starts. Include cows that have calved at least 8 days prior. Then, check in batches every 2-3 weeks to allow earlier treatment of cows through the calving season.



**In a NZ study involving >15,000 cows**, treating metriceck positive cows earlier resulted in a 9.6% higher 6-week in-calf rate and a 3% higher 12-week in-calf rate, compared to delaying metricecking until closer to mating (ie. using the traditional approach of treating cows a month prior to mating). When treatment is delayed, the cervix is often closed, thereby preventing pus from escaping the uterus and making it harder to detect dirty cows. Early treated cows were also found to conceive 8 days earlier.

### Turning a dirty cow into a clean cow

Metricheck positive cows are treated with an infusion of antibiotics directly into the uterus. Unlike other antibiotics, these have a nil milk withhold. Using the scoring system pictured right, any cow with a score of 2 or greater should be treated (ie. mucous with flecks of pus, obvious pus, foul odour).

Treatment leads to excellent cure rates (up to 90%) so a single treatment is usually sufficient to treat the majority of affected cows. At times though, a cow may require further treatment, so it is useful to re-check all previously treated animals again prior to mating.

Research suggests some cows will over time naturally cure themselves. But leaving this to chance is a gamble as a negative metriceck result does not mean she has cured the infection and inflammation may still be present in the uterus.

Treating endometritis early can give a 4:1 ROI (return on investment). Finding, treating, and curing affected animals early will give them the greatest chance of getting back in calf earlier. So don't wait to treat cows just prior to mating!



**Score 1**



**Score 2**



**Score 3**



**Score 4**



**Score 5**

*Metricheck scores where  
1 = clear mucus with no pus,  
2 = mucus with flecks of pus,  
3 = mucus with <50% pus,  
4 = mucus with ≥50% pus,  
5 = mucus with ≥ 50% pus and foul odour.*

*Photo sourced from Dr S. McDougall (Anexa FVC).*

# How Now Down Cow

By John Spearpoint

Down cows at a busy time of year are frustrating to say the least, absorbing time and extra labour. Nevertheless, managing them appropriately with adequate nursing care will minimise impacts on milk production.

## She's likely got milk fever I hear you say.

Before rushing for a metabolic bag, it is worth considering:

1. Has she calved?
2. How old is she?
3. How long has she been down?
4. Has she been treated with anything yet?
5. What symptoms does she have?

While many down cows around calving time may indeed be due to milk fever, there are a number of other reasons why she may have gone down.

- **Calving paralysis or calving difficulty**
- **Metabolic disease**
  - Milk fever -> caused by low calcium levels in the blood
  - Grass staggers -> occurs when cows lack magnesium
  - Ketosis -> occurs when cows have low intake of energy
- **Infection**
  - Mastitis
  - Metritis
- **Injury**
  - Nerve or muscle damage during calving
  - Broken leg/back
  - Hip dislocation
  - Accident or trauma
  - Pain (lame, gut issues)

## Treating metabolic conditions

The three most common metabolic conditions around calving are milk fever, grass staggers, and ketosis. Many of the down cows seen by our team are termed "mixed metabolic cows" – they have a bit of milk fever, low magnesium and lack energy. For this reason, a layered treatment strategy is used.



We have a range of easily recognisable colour-coed metabolic bags. Some of these are "vet only" and only available through RVC.

Glucalpos (brown bags) given into the vein are a good first choice since they provide calcium, energy and a bit of magnesium. Plus, give a bag of CalproMag or Calpro 375 under the skin. Once she's sitting up, give an oral calcium bolus, either a Calpro bolus or liquid Calcium solution will provide ongoing short-term boost to calcium, and a bottle of Starter Drench down the throat will provide extra energy for standing.



## Don't stop once she's up

Although standing is a great step forward, a previously down cow will need extra support to get into milk quicker. The metabolic solutions given to get her up are used quickly, and the large doses of calcium may cause a 'rebound' effect – a sudden rise in blood calcium followed by a dramatic drop. Further oral dosing with calcium will provide sustained blood calcium levels to stop her going down again. So give another oral dose of calcium the following day.

## The hidden cost of milk fever - Are you at the top of a cliff?

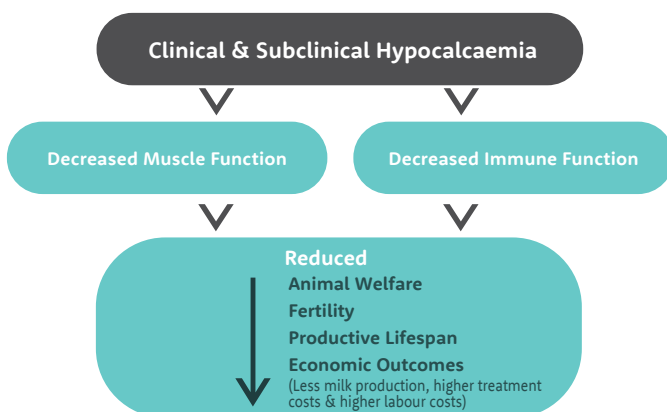
While the tell-tale signs of clinical milk fever in the down cow, inability to stand, trembling and weak, low blood calcium will also affect digestion, respiration, circulation and milk producing processes. When these processes are upset it can also pave the way to other conditions such as ketosis, mastitis and endometritis through reduced immunity.

## The NZ average herd-level prevalence of subclinical milk fever is 52%.

Your down cow may be telling you something. *Clinical milk* fever commonly only affects around 5 to 7% of cows. Alarmingly, sub-clinical milk fever affects a further 52% of cows after calving. That means the majority of cows affected by low calcium levels are the ones you can't see.

Switching from being dry to lactating places enormous demands on increased requirements for calcium. In fact, a cow needs to replace her total blood calcium levels every hour to meet these demands. Even though these cows haven't gone down, perhaps not yet, the consequences of sub-clinical milk fever are far-reaching (see below).

## Consequences of hypocalcaemia:

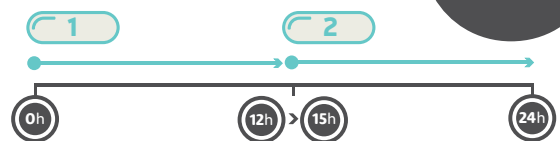


## Which animals are at greatest risk of milk fever and may benefit from calcium supplementation?

- Cows with previous history of milk fever
- High yielding cows
- Older cows (2<sup>nd</sup> lactation and older)
- Lameness

This year we have stocks of Calpro Bolus, the only ACVM registered and researched intra-ruminal calcium bolus on the market. These are given orally, with a portion of the bolus rapidly absorbed for fast effect along with providing a longer sustained affect. One bolus is given at calving, followed by another bolus 12-15 hours later (or at next milking).

### 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](http://www.bayeranimal.co.nz) | 0800 446 121



# When she wont get up

## DOWN COW NURSING CARE

**Positioning** – if she’s lying on her side, sit her up as lying down can cause bloating and aspiration. Later, roll her to the opposite side and repeat this several times a day to relieve pressure on tissues. Imagine the tingling sensation that comes from lying on your arm in bed all night. Cows will often attempt to stand but may end up crawling, leading to secondary nerve damage. Preventing movement forward may be necessary.

**Lifting** – hip lifters should only be used to promote standing. Don’t use these to move or drag her. Lift only to a height where the feet are on the ground but bearing minimal weight. Attempt to lift her twice daily.

**Cow Comfort** – don’t leave her lying on concrete or cold wet ground. And the mere weight of the animal on her muscles and nerves can lead to damage due to pressure. Move her to a sheltered area with deep straw bedding and away from other cows. Offer feed and water at all times and within easy reach. She may even need propping up with the placement of straw bales alongside. Provide regular udder relief by stripping milk out. Give anti-inflammatories/pain relief.



### PREPARE NOW

- Prepare a downer cow kit containing essential metabolic bags and oral solutions.
- Prepare a down cow area where adequate nursing care can be provided. Good nursing care improves a cow’s survival and prevents secondary damage.
- Train staff in handling down cows. As always, we are happy to provide advice but the hard work and dedicated care must come from your team. A half-hearted approach will only yield poor results.

### TIPS

- Before giving a metabolic bag, immerse the bag in a bucket of warm water – this will make it easier to absorb.
- Check the udder! Severe mastitis can cause a cow to go down.
- Consider preventative treatment of cows at greatest risk or subclinical milk fever.
- Do everything on Day 1 to keep the cow’s motor running.
- Metabolic solutions are only a part of the treatment kit – lime flour and magnesium supplementation are essential.
- Use anti-inflammatories & pain relief if she stays down or has suffered trauma.

# Annual Calf Rearing Seminar

By Tristan Kamps

Thanks to everyone who came along to our calf rearing seminar. We had a great turn out for an interactive calf rearing session and morning tea with the team from MSD and Tristan to lead this year's discussion.

All aspects of calf rearing were handled, and it was a good refresher for experienced calf rearers as well as newbies.

## Last year's Annual calf rearer results were:

Highly Commended: Aoife - Claxby Estate Ltd  
 Runner up: Phillipa - Eyrewell Dairy, Waipapa Shed  
 Winner for the 2020 season: Edith Kay - North Eyre Holdings (*pictured*)

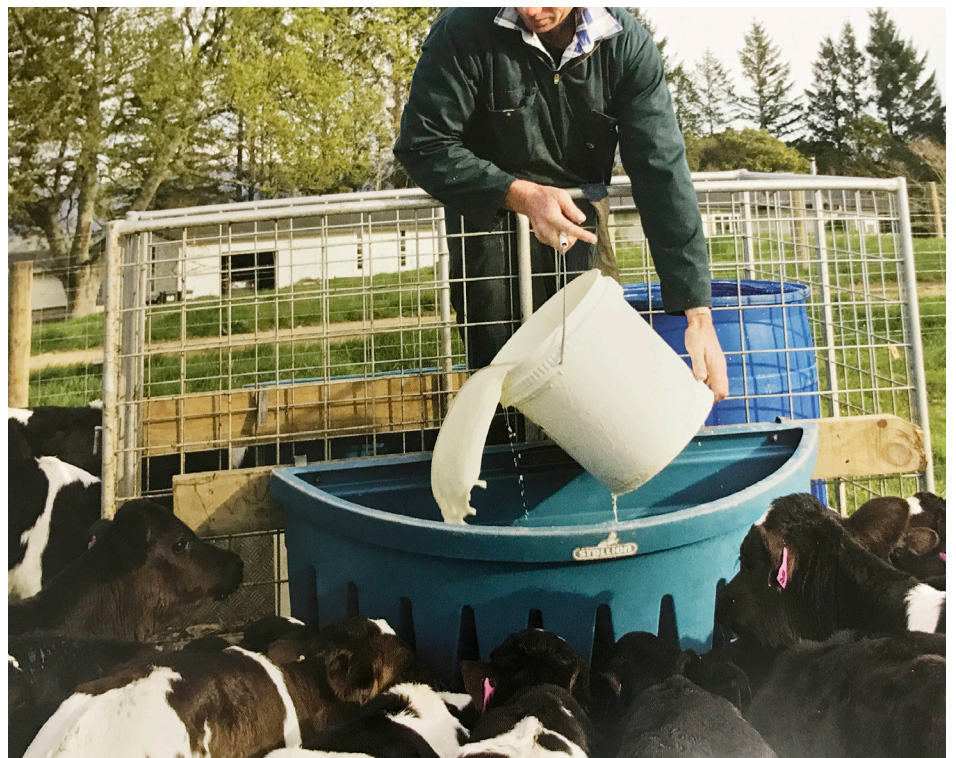
## 2021 CALF REARER OF THE YEAR NEW REQUIREMENTS

We took the time to introduce the new requirements for the 2<sup>nd</sup> Annual calf rearer of the year awards.

The main goal of the awards is to put the calf rearers in the limelight for the awesome job they do during the busiest time of the season.

And by now everybody should know that better calf rearing leads to better heifer weights which leads to increased milk production down the line. So not unimportant.

The procedure for nominations for this year's calf rearer of the year is to nominate and give a little explanation as to why the calf rearer is so awesome (self nominations are allowed!). This year the farm has to do FPT (failure of passive transfer bloods) on at least one batch of calves. We recommend this to be done at debudding by our tech team, or just give us a call for more information. The best five FPT results will get a visit towards the end of calving for judging (non-formal and fun!).



# Reap the Rewards

## OF CONTROLLING INFLAMMATION & PAIN

By Hannah Rowson *BVSc (Hons) MRCVS*

**A painkiller and non-steroidal anti-inflammatory drug (NSAID) such as KetoMax, are the new normal, or, if they're not, they should be!**

Cows are no different to us, they get inflammation and pain just like we do. Put yourself in their 'hooves' and ask yourself – would this cause inflammation and pain for me? If the answer is yes, then we should be giving these animals relief from that inflammation and pain, just like we would ourselves.

Here are a few scenarios to get you thinking:



- Why do humans limp? Due to inflammation and pain.
- Why does a cow show lameness (equivalent of a human limp)? Due to inflammation and pain.
- Do women get inflammation and pain giving birth? – YES (ask any Mum!)
- Do cows get inflammation and pain giving birth? YES
- If I had diarrhoea, would my stomach be inflamed? YES.
- If a cow/calf has diarrhoea, is their stomach inflamed? YES.
- If I stop eating, does my stomach hurt? YES.
- If a cow stops ruminating (eating), does her rumen (stomach) hurt? YES.
- Mastitis in women is defined as inflammation of breast tissue that results in breast pain, swelling, warmth and redness. Is mastitis in cows the same? YES - these girls get inflammation of their udder (breast tissue) leading to pain and swelling.

You get the idea. When animals are showing us signs something is not right, such as reduced appetite, poor movement, decreased milk yield, reduced growth, you can bet there is inflammatory pain involved. So, an injectable painkiller and NSAID will make a BIG DIFFERENCE!

The main aim is speeding up the recovery process, and for some farmers, administering an NSAID painkiller is now the new normal, because they have seen for themselves how quickly animals bounce back when pain, inflammation, and fever is reduced.

Whether it's an assisted calving, a down cow, or an animal that is just 'off colour', proactive pain relief helps give your girls the best chance of a healthy, productive season.

This isn't just guess work either, there have been numerous NZ studies proving the benefits of using NSAIDs on animal health, wellbeing, longevity and productivity.

Ask any of us vets just how easy it is to take the hurt out of pain and inflammation for your cows and calves.

They'll be better off, and so will you!





# Failure of Passive Transfer (FPT)

By Hannah Rowson BVSc (Hons) MRCVS

The bovine placenta does not allow the transfer of large immunoglobulin molecules (antibodies). New-born calves, therefore, have almost no antibodies and relies solely on passive immunity transferred from colostrum. Adequate transfer of antibodies is associated with short- and long-term health advantages by reducing pre- and post-weaning mortality due to infectious disease and increasing daily gain, feed efficiency, fertility, and milk production in the first and second lactation. FPT therefore is responsible for a higher level of disease, longer rearing period and increased use of antibiotics in calves.

## When we discuss colostrum, we think about the 3 Q's:

### QUICKLY

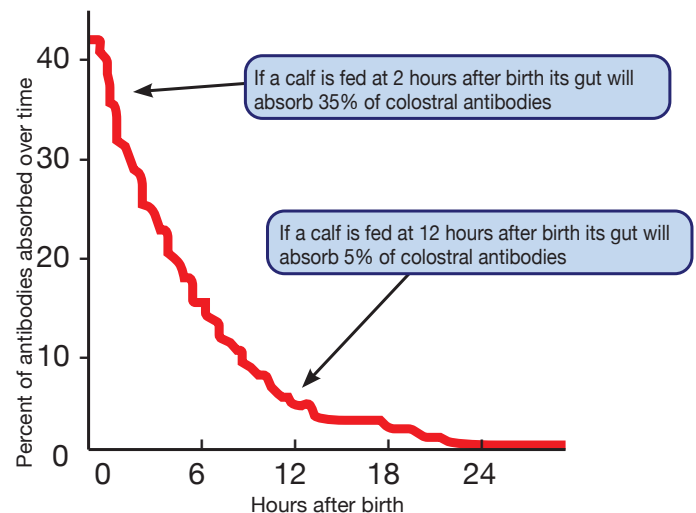
the first 4-12 hours is your time window to get successful passive immunity. After 12 hours the ability of the calf's small intestine to absorb antibodies rapidly begins to decline and is stopped completely at 24 hours.

### QUANTITY

feed calves 4-6 litres of colostrum in the first 4-12 hours of life (this can be over multiple feeds).

### QUALITY

the higher level of antibodies within the colostrum, the better quality it is. Test colostrum quality with a Brix refractometer, >22% = 'GOLD' colostrum, below this and you will need to feed more colostrum to get the same level of antibodies. DO NOT mix good with bad!!



## Here are a few other management tips to help you get the best passive immunity:

**CLEANLINESS** – is **EVERYTHING!!** Faeces is the burden of your lives; it is the main source of disease in calves, and it also prevents uptake of colostrum through the small intestine.

**STORAGE** – refrigerate collected colostrum between 2-4°C. A preservative can be added such as potassium sorbate at a concentration of 1% for 50% volume of solution.

**METHOD** – stomach tubing is an easy way to be certain a calf has received adequate levels of colostrum. (If you or any of your staff are unsure/lack confidence on how to

stomach tube a calf, just let us know and we can do some staff training to help.)

**VACCINATION** – helps you achieve that 'gold' colostrum, as it creates specific antibodies against the key diseases that affect calves in the first few weeks of life (Rotavirus, Coronavirus and E. coli).

Good news is, we can test for failure of passive transfer and it's easy as! It can be done during debudding, we simply take bloods from 12 calves who are between 12 hours to 7 days old. You receive the results the same day and changes can be seen in days! You don't know, if you don't have the information and FPT bloods are an incredibly useful tool to get that information. For further advice or any questions, please give us a call.

# Growing great calves

By Tristan Kamps

“Great calves make great heifers” and this starts before the calf is even born. How we feed and treat our pregnant cows, the length of the dry period and the conditions in which they calve has an enormous effect on the productivity and survivability of our heifer calves.

Directly after birth it is all about colostrum intake. Many people assume that newborn calves left in the paddock with the dam will receive enough colostrum quickly enough to build up a good immunity.

When this doesn't happen, Failure of Passive Transfer (FPT) occurs and this can lead to increased mortality and decreased general health.

In 2015 a large New Zealand study was carried out by Emma Cuttance and Winston Mason to test exactly this.

The main questions they were looking to answer were: Is it true that calves don't suckle off the dam? and How can farmers improve calves' suckling behaviour in the calving paddock?

Observations were carried out across four farms, two in Waikato and two in Canterbury. A scissor lift was used to observe cows and calves 24 hours a day over a 12 day period per farm. A total of 409 calves were observed.

## The results

- An average of 57% of all calves were fed from their dam in the paddock. (Range 40-87%)
- A large variance was found in times taken before 50% of calves had had a feed. Between 1.7 and 7.8 hours.
- Calves left longer in the paddock fed more but this reduced after six hours post birth.
- FPT occurred in 30% of all calves and was associated with poor welfare outcomes.
- FPT at day 1 (before being fed colostrum by the farmer) occurred in 72% of calves (Range 21 -82%)
- FPT at day 3 was 85 % more likely to have occurred in calves that had not fed in the paddock. This could be corrected if the farmer gave the calf high quality colostrum (>22g/L) early on day 1.
- FPT at day 3 was less likely in calves fed high quality colostrum compared to calves fed lower quality colostrum.
- Fewer FPT problems occurred during periods of warmer weather. During periods of rain it was seen that calves appeared to struggle to get up to feed and follow the dam.



## Take Home Message

- Around half of calves **won't** be fed by the dams in the paddock.
- This leads to around 75% of calves having FPT if no intervention is taken i.e. tubing of calves with colostrum.
- In calves with FPT this can be corrected if tubed early by the farmer with good quality colostrum (>22g/L).
- In periods of bad weather calves are much less likely to drink from the dam and we should expect FPT to be higher if no intervention is taken.

**RVC ADVICE**  **TUBE FEEDING SAVES LIVES**

# Hygiene Hygiene Hygiene!

By Paul Blondell

People often underestimate the effect of hygiene on the health of our calves. Keeping your trailer, calf pens, staff gear, milk and feed clean is hugely important. Poor management of environmental risks can easily overcome good vaccination and feeding (i.e. all that money spent on your herd rotavirus vaccination is wasted!).

Disease can be spread in various ways but is most common from faeces (either calf to calf or cow to calf).

## KEY AREAS TO FOCUS ON:

### CLEAN MILK:

- Milk colostrum from clean teats
- Take care with storage
- Clean feeding equipment regularly

**TRAILER HYGIENE;** This is hugely important, it is a major risk factor that is often over-looked

- An open navel = highway into calf for bugs
- Spray navels in paddock with spirit-based iodine (dries and disinfects) before going on trailer AND as the calves are removed from the trailer. And then once a day for next few days
- **Daily cleaning** of the trailer and **once weekly disinfection.** Rubber matting is easily cleaned in comparison to straw which is warm but needs regular removal
- Stress has a huge impact on the immune system! Drive carefully, cover the trailer, minimise time spent in the trailer and make more trips if necessary to prevent overcrowding

### STAFF HYGIENE AND PPE

- It is very important to clean your gumboots a and wet weathers between pens, especially before and after you enter the sick pen.
- ALWAYS wear gloves when handling calves – we can catch many of their diseases and they are not pretty!

### CALF PENS

- Now is the best time to sort your pens! Plan which pens are going to be learner/sick/bobby calves.
- All in, all out rule: calves stay in the same pen the whole time
- Disinfect twice weekly, sick pens daily (do not forget the outside of calf feeders + feed equipment) and between batches.

**RVC has virkon, vetsan and sterigene available.**

Ventilation  
but no draughts

Pens facing north,  
twice as deep as wide

Solid, easy to clean  
partitions between  
pens (1.5m high)



**2m<sup>2</sup> per calf -**  
overcrowding is going to  
add to your risk of disease

**Bedding:** good drainage,  
comfortable. eg sawdust (dries easily).  
Replace once soiled though as  
disinfectant won't work if compacted

# Enhancing calf immunity with MULTIMIN<sup>®</sup>

The pioneer multiple trace element injection in New Zealand, MULTIMIN is a unique concept of supplementation for cattle, used by farmers throughout the country.

- Contains copper, selenium, zinc and manganese for immune support.
- Chelated formulation that is safe and tissue friendly.
- Absorbed into blood within 8 hours and transferred to the liver within 24 hours.
- Scientifically proven in New Zealand conditions to improve calf health and survival.

## Get them off to a great start

It's well known that a new-born calf is the most susceptible animal to disease on the farm, and that trace elements are essential for cattle production and immunity. So it makes sense to ensure that every calf has enough trace elements to give it the best chance of fighting off the challenges they'll face in their first weeks of life.

## Should new-born calves be supplemented with trace elements?

Most farmers do their best to make sure the herd has been supplemented before calving

and assume this will pass on to the calf. However, the cow's own high requirements and variable intake of colostrum can mean calves enter the calf shed with less trace elements than expected, at exactly the time they need them most for growth and immunity. A severe deficiency will reduce weight gains, but even a minor shortfall will result in reduced immunity.

## Supported by science

A New Zealand trial<sup>1</sup> has shown the benefit of treating calves in the first 24 hours of life, despite their dams being fully supplemented prior to calving. In MULTIMIN treated calves, sickness and death rates due to scours, navel infections or other diseases were halved. A 5% reduction would have paid for the cost of injection.

## Why an injection?

The majority of death and disease occurs in the first few weeks of life, so supplementation to prevent this needs to be rapidly absorbed and given as early as possible. This is best achieved through an injection, as oral supplementation is generally slower and complicated by poor absorption and interference between elements in the gut.

## When and how to use MULTIMIN

MULTIMIN should be administered to calves (up to 12 months) at birth and at weaning.

In the trial, farmers injected calves on the first day they arrived in the shed, which easily fitted into their daily routine. MULTIMIN is administered as a subcutaneous injection at 1 ml/50 kg in calves. MULTIMIN has nil meat and milk withholding periods.

To learn more, including the benefits of using MULTIMIN in cows, beef cattle, and deer, visit [performanceready.co.nz](http://performanceready.co.nz) and ask your vet.

1. Bates, A., Wells, M., Laven, RA., Simpson, M. (2019) Reduction in morbidity and mortality of dairy calves from an injectable trace mineral supplement. Veterinary Record Published Online First: 25 April 2019. doi: 10.1136/vr.105082. Registered pursuant to the ACVM Act 1997, No. A9374.

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STONEY CREEK®

PACKS WORTH \$650!



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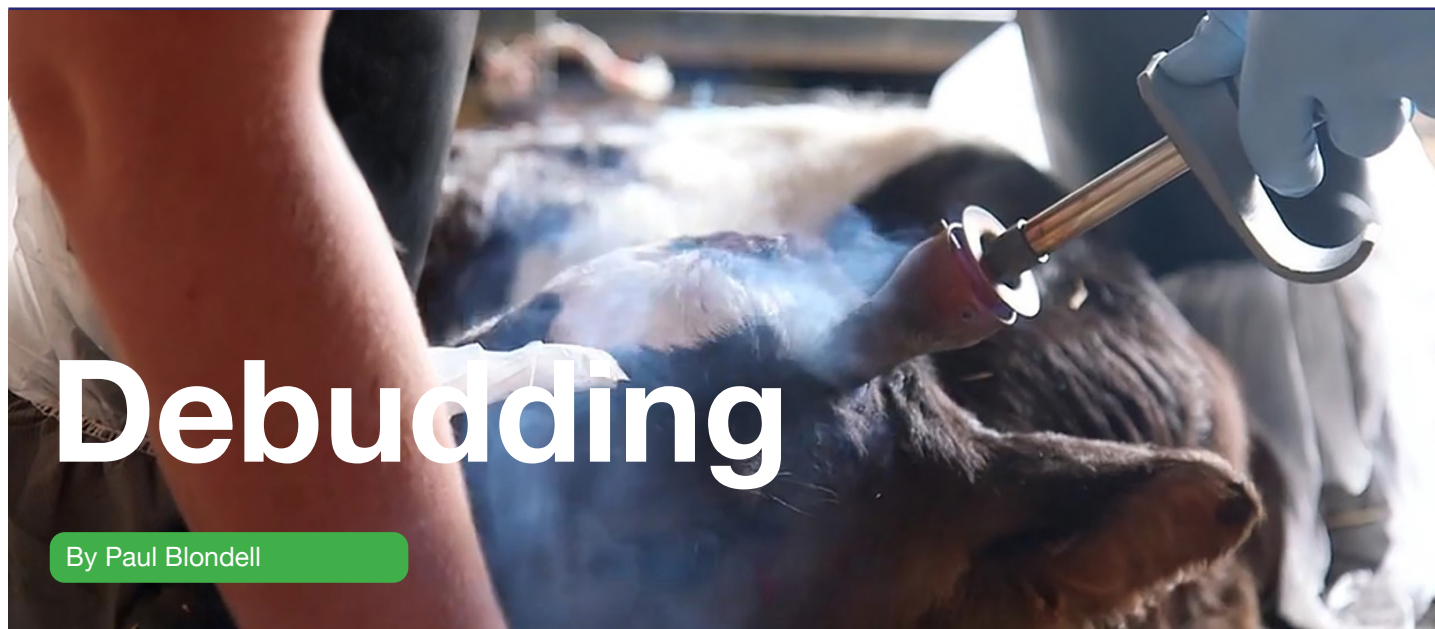


Qualifying purchases: 1x 500 ml or 2x 200 ml of MULTIMIN®. 50 prize packs available in total. Draw is final, non-transferable for cash. Promotion runs 14th June 2021 to 30th September 2021. Visit [performanceready.co.nz](http://performanceready.co.nz) for full T&Cs. Registered pursuant to the ACVM Act 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.



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# Debudding

By Paul Blondell

Most of us have that one cow in the herd that has horns. The one who loves to make life difficult for you and for the rest of the cows. If only we could have prevented her from growing horns in the first place!

In all seriousness, we all know the importance of debudding; no horns mean a much lower chance of injuries to other cows and more importantly you and your staff! In recent years debudding has been classified as a 'significant surgical procedure,' meaning that steps must be taken by authorised individuals to reduce pain.

## So how do we do it?

- We sedate the calves fully so the process is less stressful (for them and for us). While the calves are asleep it is a good idea to take advantage and get other things done such as NAIT tagging, DNA testing or BVD testing!
- We inject local anaesthetic around the horn buds so that it is completely pain free at the time of debudding. No pain = happier calves!
- We use a hot iron burner to remove the horn bud from the head, effectively preventing horn growth.
- After the debudding is complete recommend vaccination with either Ultravac 5 in 1 or Covexin 10 for protection against clostridial disease.
- Also, we give each calf a long acting injection for pain relief in the form of Melovem. NZ trial work done in 2019 showed that adding a long acting pain relief in addition to the use of sedation and local anaesthetic resulted in significantly higher calf live weight gains post procedure.

We also offer other services while on farm, such as: checking and removing extra teats, castrating bull calves,

checking navels for infection and blood sampling younger calves for FPT (see Hannah's great article on FPT included in this newsletter for more information!).

It is always better to book debudding ahead of time, as Kellie and the teach team get very busy very quick once spring hits.

**Please contact Kellie for further information on 021 338 717 or ring Sacha or Rebecca at the clinic.**

## Clostridium in Calves

Clostridia are a group of bacteria which live in the soil and produce harmful toxins causing major damage to various body organs. The toxins can be ingested directly or can be produced by clostridia bacteria already living in the gut. Clostridial diseases have extremely quick onset of clinical signs and can cause sudden death. Tetanus and Botulism are two of the most well known clostridia bacteria.

Control of these diseases is best achieved by vaccination of susceptible animals.

## Vaccination of calves

Best practice is to give the first vaccination of a 5 in 1 vaccine at debudding with a second and third injection of 7 in 1 (with leptos) at 4 week intervals. A 10 in 1 vaccine can be given instead of the 5 in 1 injection if your herd has a high risk of clostridial infections.