



# Veterinary Centre MoozNews

## Preventing Metritis and Endometritis

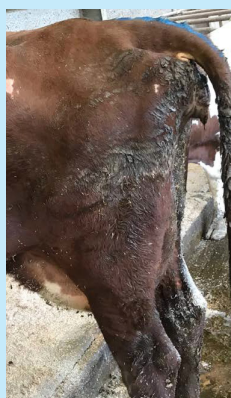


**Mat O'Sullivan BVSc – VETERINARY CENTRE Oamaru**

Last year we saw a number of herds with a high incidence of health alerts picked up in cows during the first 14 days post-calving. This coincided with high rates of metritis and endometritis in these herds. Once we see these alerts kicking off it may be hard to prevent the problem in cows that are already within 10 days of calving (springers). Five common causes are 1) Cows calving down too fat – these mobilise high levels of NEFA supressing the immune system 2) Cows calving down too skinny – these are also immune compromised due to energy status 3) Cows having inadequate dietary protein in the final 3-4 weeks of pregnancy – protein is required for production of antibodies and this may be preferentially drawn on by the calf when in short supply 4) Clinical or sub-clinical milk fever – slows the involution of the uterus 5) Selenium deficiency – reduces the immune function and increases the chances of retained membranes.

Optimal dietary protein intakes are regularly compromised in the last weeks of pregnancy when cows remain on Fodder Beet crops with low leaf yield together with low protein supplements. Ensuring that the springer diet is meeting the energetic needs and no more is also vital.

If metritis and endometritis has been a problem in the past – discuss transition cow prevention steps with your prime vet.



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## Keeping the Winter Diet Balanced for Pregnant Cows



**Mat O'Sullivan BVSc – VETERINARY CENTRE Oamaru**

The winter diet for a pregnant cow, through until about the last 3 weeks of pregnancy, requires about 11-12% crude protein in the diet (or 1.2-1.4kg of crude protein). In the final weeks, as well as cow's normal base protein requirements, she has the demands of a rapidly growing calf, the development of new udder tissue and production of colostrum antibodies. Cows under protein stress for significant periods of time will break down their own body tissues to meet foetal demands, but the end result may be muscle loss (calving difficulty), poor udder development, poor colostrum quality and poor cow immunity (placing her at greater risk of mastitis or metritis).

Optimal crude protein requirements increase to 15-16% plus in the last 3 weeks before calving. Typically Fodder beet bulbs have crude protein levels less than 10%, whereas the leaf is in the 15-20% range. If the crop you are feeding is losing leaf yield in July, ensure that cows are receiving an additional supplement that has higher protein content.

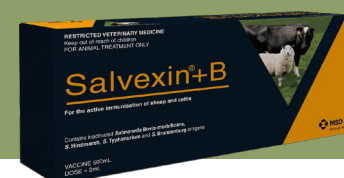


- BCS cows pre-calve
- Start Magnesium supplementation at least 3-4 weeks pre-calve
- Check Trace element status if necessary after winter grazing
- Rotavec/ScourGuard 4(K) vaccination is due for early calvers
- Consider Salmonella vaccination – discuss with a vet.



## Veterinary Conference

The recent veterinary conference attended by Veterinary Centre team. A great few days to re-charge and re-connect and to realise the world is rapidly changing around us ... the best the Veterinary Centre can do for you right now is a continued focus on providing really good animal health advice, service and sustainable product use...



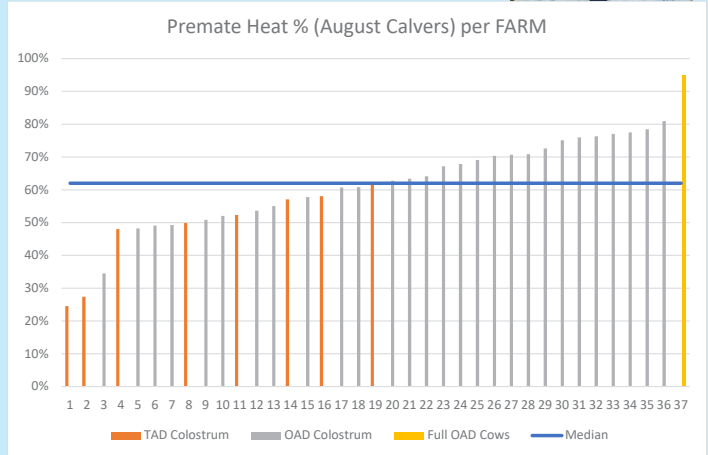
# Transition Management – The OAD Strategy



**Ryan Luckman BVMSc (Dist) MANZCVS (Epi) – VETERINARY CENTRE Waimate**

In 2018 The Vet Centre hosted nutritionist Sue Mackey as a guest speaker at our Autumn Seminars. One of the transition management tools she discussed at the time was keeping cows on OAD milking post-calving until their “rumen’s were wider than their udders”, a transition that was likely to take 8 days plus. In response many of our farmers started dipping their toes in the water, opting for 4 days on OAD, with the intention of getting ‘some of the benefit’ whilst ensuring there was minimal milk production lost.

Two seasons ago, with the growth in Allflex monitoring collars in our practice we were able to assess the rumination recovery of cows post calving on farms with extended OAD periods (14 days plus), vs short OAD periods (2-5 days only), vs the traditional TAD systems.



Example of the % of pre-mate cycling rates across our Allflex collar farms. Grey bars were farms that used OAD milking in their colostrum cows. Last season we had further growth in the use of the OAD system, with a lot of farms using a minimum of 10 days before drafting into a TAD milking mob if they had recovered sufficiently. The success of this measure appears to have been seen in three areas:

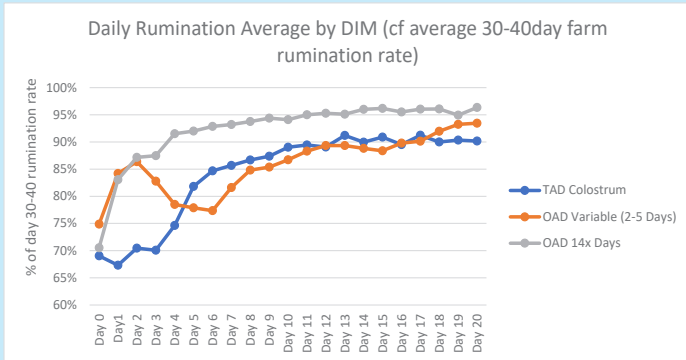
1. An improvement in pre-mate cycling rates
2. A reduction in the use of metricures (less endometritis)
3. A reduction in non-cyclers (and need for CIDR's)

However, one of the key take home points in the data set above was that not all OAD farms fared well. With our repro reviews this season we have been able to tease out some key factors that we found on the lower performing OAD farms:

1. Underfeeding of Springer Cows – these cows had low rumination rates on the day of calving and took longer to bounce back
2. Leaving freshly calved cows on the yard (rather than a drop in paddock)
3. Under-allocation of feed to the colostrum mob as more cows were added
4. Grazing to residuals lower than 1800kgDM
5. Use of 24 hour grazing management – the most successful farms had 3 or more feed offerings (i.e 2x grass breaks, 1x silage)
6. Insufficient limeflour – successful farms were using 250g limeflour in the colostrum mob

We currently still don't have a good answer on the affect of the OAD system on production. With production being back 5.6% across the district we weren't able to easily assess the change between years. However, we certainly had a lot of feedback around the cows maintaining better BCS post-calving, so we still expect that the anecdotal reports we've had over the past few seasons of higher or longer peaks are likely. The majority of farms that used the OAD system last year appear to be using it again this season.

Contact your Prime Vet if you would like to further discuss the application of this, or any other methods to optimise your transition management. Getting your system set up so that you hit the key points above will certainly help maximise the benefits and minimise the risk of this intervention strategy.



What was clear was that cows on OAD milking had much higher rumination rates in the immediate post-calving period than those on TAD. In the graph above the blue cows (milked TAD) took about a week longer than the grey cows (milked OAD) to reach 90%. All cows go into a negative energy balance (NEB) post calving and need to strip weight off their back to milk. However, cows with lower rumination rates during this period will be eating less, and therefore need to mobilise even more fat, which has known negative influences on health and reproduction. It has previously been shown that cows on OAD during this period will maintain higher BCS's.

## Veterinary Centre Spring Calving SEMINARS

Our popular 'Spring Calving Seminars' for farm staff will be held in July. These interactive sessions will include four modules covering spring mastitis, metabolic disease, calf rearing and calving a cow.

- Tuesday 5 July, 7-9pm at Veterinary Centre Waimate, 128 High St, Waimate.
- Tuesday 12 July & Thursday 14 July, 7-9pm at Veterinary Centre Oamaru.



Please contact your nearest clinic to register.

It'd be great to catch up!

**Book Today**

RSVP to [events@vet111.co.nz](mailto:events@vet111.co.nz)

**\$35** pp

## Transition Calcium Bolus

Treatment – to raise blood calcium to counteract hypocalcemia during transition to lactation

Bolus weight – **176 grams**

Price – **\$12.00** plus gst each

**Each Bolus Contains:**

- Calcium chloride: Offers a potent immediate release, but levels drop over time
- Calcium carbonate: Offers a low immediate release, but calcium levels increase over time
- Calcium Propionate (preservative)
- Vitamin D3

**Recommended dose:**

- 1 bolus prior to, or immediately after calving
- 1 bolus 12 hours after first bolus



# Optimal Calf Rearing Management

## – getting them off to a good start

Calf scours is the nightmare scenario for every calf rearer. It causes a lot of extra work and frustration, despite your best efforts you may not save all your calves. On top of that calves that recover have a higher risk of poor growth and poor life time performance.

The mainstay of preventing calf scours is careful colostrum management and good hygiene and feeding practices.

Ensuring calves get their full allowance of colostrum is the vital key to scour prevention with a focus on the three Q's being followed:

- Quantity – 10% of body weight (split over two feeds usually to prevent overfeeding). Practically this means calves should receive 2L within 6hrs and 4L within 12hrs
- Quality – Only top-quality first milking colostrum. Ideally measured using a refractometer of 22% or more.
- Quickly – Ideally the colostrum should be given within 6 hours of birth.

Pick up calves twice a day in a clean trailer and spray navel's with iodine before they go into the calf sheds. For the first 10 days calves should be fed twice a day. Calves should always have water and meal available.

Calf sheds should be clean, dry and draught free. Disinfect your pens twice a week with Virkon or Stalason powder. Avoid overcrowding pens, calves should have approximately 1.5 square metres and not more than 20 calves in a pen.

One of the first questions to ask when a calf gets scours is "is it a nutritional or infectious scour"? With nutritional scours the calf will often look healthy and still have a good appetite.

# Brix and FPT – What's new??

**Ryan Luckman BVSc (Dist) MANZCVS (Epi)**  
VETERINARY CENTRE Waimate



Over the past few years we've had a lot of farmers doing Brix testing on their day 1 colostrum. Previous research had shown that feeding colostrum with a brix over 22% to calves helped to reduce the risk of Failure of Passive Transfer (FPT).

However, one of the issues that has been faced on some farms is that they are seeing very few cows with high brix levels. New research has backed these anecdotal statements – on some farms the average brix levels were over 25% (with no cows under 22%!!), while on others the average was only 16%.

The research wasn't set up to investigate what caused these farm level differences, but did show that for every 1% increase in Brix % the odds of having Failure of Passive Transfer reduced by over 30%! So feeding 22% is great, but if you only have 20% then that will still be better than 18% and so on.

A second paper validated that potassium sorbate was the best option for preserving colostrum, but that yoghurt and citric acid were also effective. The use of a preserver will help all farms, but are probably even more critical on farms with low brix levels, as high bacterial counts can interfere with a calf's uptake of antibodies. Visit <https://www.dairynz.co.nz/animal/calves/0-4-days-old/colostrum/> for more detailed instructions on how to use them.

So keep testing the colostrum, it's definitely worthwhile!! However we'd love to hear from any farms that are seeing consistently low brix levels. We suspect that feeding in the late gestation period or springers could be contributing. If so, brix levels may be a good proxy measure of the success of this period.



# Transition Cow Anionic Salts – A Milk Fever Preventative

**Mat O'Sullivan BVSc – VETERINARY CENTRE Oamaru**

The old adage that prevention is better than cure definitely holds true for milk fever. Studies have shown that for every clinical case of milk fever that you see there will be another seven sub-clinical cases.

Every farmer should try and remove as many risk factors as possible, e.g. not let cows get over fat, start magnesium supplementation 3-4 weeks before calving, avoid high Potassium pastures and not overfeed springers. There will however be situations where some of these risks are unavoidable.

Transition Cow Anionic Salts when fed to springer cows will perform three jobs. The first is that they acidify the cow's system and thus enhance her ability to mobilise bone calcium around the time of calving. The second is that they should supply Magnesium to stimulate the parathyroid gland that encourages increases calcium uptake from the gut and frees bone calcium. The third is that they will provide a Springer cow safe form of Calcium.

We stock two Transition Cow mineral formulations (high or medium levels of Magnesium). These also contain a full complement of trace minerals, Rumensin and Vitamin E (cows coming off FB are often low). The daily dose of these minerals is quite high at 340g/cow/day. This should be fed – mixed with bailed/silage for an average period of 7-10 days pre-calving. The daily cost is ~75c/cow/day (excl GST). Please contact your Territory manager if you wish to order before calving.



ACVM A009374



**MULTIMIN**  
Enhancing Calf Immunity

A 2018 New Zealand study<sup>1</sup> demonstrated the health benefits of injecting calves with MULTIMIN® early in life. The effect was rapid (within three days of injection), with death and disease consistently halved at all ages for calves that were injected.

Calf (less than 1 week old)  
Dose Rate – 1ml (under the skin)

**52%**  
REDUCTION  
IN DISEASE

**58%**  
REDUCTION  
IN DEATHS

**1ml**  
New Calf  
Cost per Dose  
**76c**  
Excl GST

1. Bates, A., Wells, M., Laven, R.A., 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.



**Hamish Newton** BVSc, PhD  
Oamaru Veterinary Centre



## Look after your Heifers

We are now in the run up to calving and the heifers will be calving at the end of this month. Heifers that are “happy” to be in the shed milk out quicker and better, as their milk let down reflex (release of oxytocin) is working. Heifers that milk out well are at reduced risk of mastitis. Having heifers that are used to being on concrete and that have walked through the shed or onto the platform prior to their first milking tend to milk out better. If the heifers do go through the shed prior to calving don’t miss the opportunity to teatspray them prior to calving. Teat spraying heifers 2 to 3 times a week prior to has been shown to reduce the number of Strep uberis infections by 50%. The majority of heifer mastitis infections you find in the colostrum period will be caused by Strep uberis. This is a bug from the cows’ environment, or to be blunt wherever on your farm a cow has pooped. Strep uberis gets into the udder via the teat end so if you are getting heifer mastitis look at where

your heifers are getting dirt/poo on their udders and see what can change. DairyNZ recommends that if there are two cow pats per square meter the environment the cow will lie in is too contaminated.

- Can you alter break sizes if it gets wet?
- Could you manage the heifers separately from the mixed age cows?
- Once a heifer has calved if not bringing her in, can she be “put under wire” to where it is less muddy/contaminated?
- Is there a bit of the track that is pooling water that can be drained?
- If a heifer is dripping milk pre calving consider milking her – but feed her well.
- If the heifers’ udders are dirty when they come into the shed wash and dry them prior to putting cups on.
- Get teatspray onto every teat after every milking.
- Do not let a heifer (or a cow) out of the colostrum herd until she passes the Rapid Mastitis Test (RMT).

### Have a fool proof system.

Is the system you have for treating mastitis

cases simple and fool proof? Can your staff tell you what needs to happen? If they can’t, then either they don’t know what you want done, or it is too complicated. I think all systems should be based around the MRS T acronym.

1. **Mark** the cow and quarter once a case of mastitis has been found.
2. **Record** the case, diary, white board, MINDA live, ProTrack etc.
3. **Separate** the cow – get her drafted out of the colostrum or milker herd into the treatment/red herd.
4. **Treat** according to the treatment plans we have provided for your farm. If you are concerned about a particular case or are collecting milk samples for monitoring take these samples prior to starting treatment.

### Teatseal residues vs mastitis clots

Finally, will your staff be able to differentiate Teatseal from mastitis? Mastitis clots when rubbed between the fingers disintegrate while teatseal “smears” along the fingers, and is “waxy”.

## Transition – Getting it Right

**Lucy Cameron** BVSc BSc – VETERINARY CENTRE Waimate

Spring is fast approaching and with it the most crucial few weeks of the year for your cows. The “transition period” over calving requires huge physiological changes – over only a few days her requirements for energy, calcium, glucose and much more increase exponentially, but unfortunately dry matter intakes will take longer to catch up. This imbalance must be managed well, or the consequences are an increased risk of milk fever, along with ketosis, mastitis and metritis.

Key actions to minimise the risk:

### Springer minerals

- **Magnesium** is essential for the efficient absorption and resorption of calcium, and so plays a vital role in preventing milk fever. All cows should be supplemented with magnesium for 2 – 3 weeks pre-calving until 4 months post-calving.
- On higher risk farms a **Transition Mix** can help – our specially formulated mix contains anionic salts to reduce blood pH and increase calcium absorption,

reducing the risk of milk fever

### Avoid high potassium pasture

- Potassium interferes with the absorption of magnesium in the rumen, thus increasing the risk of milk fever. Don’t graze springers on effluent paddocks, and consider feed testing potential springer paddocks and silage to better manage the risk.

### Maximise dry matter intakes

- At calving a cow’s DMI drops, and getting her intake ramped up is the key to supplying her with the extra energy and minerals she needs.
- Pick up calves quickly to minimise bonding and get calved cows on to ample fresh pasture as soon as possible.
- Tidy up paddocks with springers, late calvers, and/or mow in the second round so pasture quality does not suffer.

### Improve calcium status

- Colostrum cows should receive at least 100g limeflour/day, and up to 300g in a

higher risk herd.

- At the point of calving treating at-risk cows with calcium reduces the incidence of sub-clinical milk fever as well as down cows. Calcium boluses, starter drenches or Calpro bags are some available options.

### Monitor calved cows

- A simple blood test on your day 3 calved cows is a quick test of their energy and mineral status, giving us the best idea of how well they are transitioning. Get this done early so changes can be made before there is a negative impact on the season.

