

Metricures – Treat them early!

Ryan Luckman BVSc (Dist) MANZCVS (Epidemiology) VETERINARY CENTRE Waimate

Was the diagnosis right? Did the treatment work?

One of the big advantages we've had with the Allflex Collar cows last season was being able monitor the effectiveness of treatment. Sick cows tend to have a drop in rumination rates, and we can judge how well they respond by how quickly their rumination returns to normal levels. In cases where they don't climb we need to look at other treatment options.

On the back of this one of our key findings was that endometritis (uterine infections) was one of the key drivers of low rumination in sick cows post-calving. The use of a Metricure in these cows consistently showed the best rumination recoveries, and tended to keep the rumination rates up compared to the use of systemic antibiotics (injectables like Engemycin / Bivatop / Betamox). The graph below shows a typical response posttreatment (note the red line indicates the target rumination level of 400 minutes per day).

We have historically thought of endometritis as a localised infection in the uterus. While we've known it causes reduced reproductive rates because of a poor uterine environment, we haven't traditionally expected to see an effect at the "cow" level. However, the fact that we're seeing reduced rumination rates in these cows indicates that the line between endometritis (local infection) and metritis (systemic infection) is a bit blurrier than we'd thought.

This anecdotal data further backs up the results of a 15,500 cow study in the Waikato looking at the timing and treatment of endometritis with Metricures. This compared early intervention with a single intervention 3 weeks before the PSM. The results of the study showed that:

• The optimal time to diagnose and treat was between 7 to 22 days post calving

- Cows treated early (vs late) had a 9.6% higher 6WICR, 3.25% lower Empty Rate, and conceived on average 8 days earlier
- The level infected remained very stable between days 7 and 22. This means that if a cow was infected at day 7 it was likely to remain infected (so early treatment shouldn't significantly increase metricure use)
- By day 35 the ability to accurately diagnose infection was gone. We expect low levels of metricheck positive animals at this point (around 5%), but the reproductive figures on these "self-cures" show that there is still infection / damage

Ultimately we want to avoid infection where possible. Talk to your prime vet about preventative measures including transition management, selenium, NEFA monitoring, calcium and magnesium, OAD milking, and Multimin use. However the key for those cows that do get a uterine infection is diagnosing and treating early. Check out the article on HealthCHECK in this issue – this decision tree has integrated a lot of what we've learnt looking at the collar data for Spring Health around treatments and diagnosis. It will be applicable for farms with and without collars so get in touch if you'd like to book in a training session with your staff.

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Health Alert Decision Tree

Finja Schmidt BVSc - VETERINARY CENTRE WAIMATE

After calving, a cow has a lot to recover from! Bearing that in mind, we wanted to help set up a framework for sick cows to be properly examined for their recovery. With a lot of clients jumping on board with the exciting new Allflex Collar technology, we have created a step-by-step process for dealing with health alert cows. However, this is an extremely useful tool for ALL farmers (regardless of collars or not).

Any sick cow should be examined thoroughly, sometimes this can be assessed visually or with the aid of the Allflex collars. Using the Allflex collars, any sick cow will be drafted as a health alert cow if their rumination and activity falls in relation to their peers. In the early parts of the season, there might be 15-20 cows on a given day that can come up as a health alert. Rather than the numbers of animals being overwhelming and being ignored, we have made a simple flowchart (see below) that can be utilised by all staff to follow. This ensures that all animals are examined in the key health

Fodder Beet Analysis



Mat O'Sullivan BVSc – VETERINARY CENTRE Oamaru

As most farmers will be aware, Fodder beet crops can be limiting in crude protein and the macro-minerals phosphate and calcium. Over the winter period this year I have been collecting Fodder beet samples and testing these for the above but also looking at some of the other macro and trace minerals.

The results between crops have been highly variable! It is generally considered that a dry cow needs 10-11% crude protein in her diet and this increases closer to 16% in the week before calving. Some bulbs have measured as low as 5-6% and some as high as 12%. Leaf protein will tend to be in the 18-22% range (but often only represent 10-15% of the total yield by late winter). Any crops that have a \geq 10% crude protein measure in bulbs will therefore (with the exception of fibre) be close to a fully balance diet. Bulbs that are sitting in the 5-8% range will probably need significant supplement inputs containing protein to ensure that the animals thrive.

There was a noticeable association between the bulb crude protein percentage and leaf yield. Those crops with significant leaf die back (senescence) tended to be nitrogen stressed. Late season (March/April) nitrogen application is therefore a good way of conserving/lifting leaf yield and overall crude protein content.

Significant variation also occurred with calcium and phosphate levels. Some were almost balanced, whereas others require way more than the standard 50g recommendation of DCP and therefore a more tailored approach should be taken. Extended periods on un-supplemented crops are likely to result in metabolic issues in the spring.

Of the trace minerals – Selenium was universally close to nil and Zinc also tended to be very low, copper was marginal.

If anyone is interesting in getting their crops tested we can run these through Hills laboratory or alternatively Jim Gibbs has offered space in his study through Lincoln Uni (the Lincoln tests will be cheap - \$25/sample) but results will be delayed by a month, so will be of most benefit for planning for next season. areas: lameness, mastitis, endometritis/ RFMs, systemic illness and metabolic disease.

The goal of this is that any sick cow can be examined quickly and efficiently, and

if nothing else, they receive some oral calcium. Studies in the North Island estimated that 50% of our NZ cows will have subclinical milk fever post calving. This highlights that a lot of sick cows might be drafted on the health alerts because of milk fever BUT, we need to have a thorough framework in place to ensure that no other postcalving diseases are playing an additional role.

The decision tree is customisable to your farm. So, if you have invested into collars, OR you just want to enhance and upgrade staff systems, get us out for a health alert training day (HealthCheck) early this spring to help customise a decision tree with you and your staff!

Preserving Colostrum Quality



ess for ENERSC Land Cong Glas (201-4)

Finja Schmidt BVSc - VETERINARY CENTRE WAIMATE

We spend a lot of time talking about the importance of colostrum but there are some really easy things we can do **to look after** the quality once we've got it.

Measure gold colostrum with Brix refractometer; a **Brix value** > **22%** means it's likely enough antibodies are present. With practice, it only takes 10 seconds to take a reading on your milk!

Ensure that milk buckets **stay clean by using lids on buckets**. Bacteria in faeces will immediately start degrading the antibodies in the colostrum. Its's well worth getting in the habit of keeping it clean and being mindful of storage.

Antibodies in the colostrum will naturally start degrading immediately so **if not using the colostrum within 1 -2 hours then strongly consider the following**:

- **Freezing gold colostrum** i.e. 1.5L soft drink bottles filled with gold colostrum. When defrosting, do it slowly in a water bath.
- OR if wanting to use in short term, **preserve with potassium sorbate**. It is very easy to do and we have good resources at our respective clinics to help with this. The mix can then be :
 - Make a 50% solution of potassium sorbate and water.

Potassium sorbate	And add this mix into the according water volume and stir.	Water
50g		100mL
500g		1L
1kg		2L
5kg		10L

• Add this potassium sorbate solution and mix into colostrum to make a 1% potassium sorbate / colostrum mix.

Use the potassium sorbate solution	And add this	Colostrum
100mL	mix into the	10L
1L	according water	100L
2L	volume and stir.	200L
10L		1000L

If you are unsure on your colostrum quality management, get us to come and take bloods in your calves (<7 days old) and this will help evaluate if your current system is effective before a scours outbreak eventuates!

Value of doing Day 2 Colostrum bloods at calving



Finja Schmidt BVSc - VETERINARY CENTRE WAIMATE

- Gives reassurance and evidence to show that your cows are adjusting well over the transition period.
- May highlight potential problematic areas and target which minerals are involved in your down-cow conundrum. This enables you to make careful and directed changes to your supplementation programme.

What and why do we test?

- At day 2 post calving because this gives the most accurate results and allows for early intervention.
- Calcium and magnesium: very closely interrelated and indicate how well a cow is upregulating her calcium to meet lactational demands.
- Non-esterified fatty acids (NEFA): reflect fat metabolism and whether the cow is in a negative energy balance. When interpreting this along

Downer Cows

Luke Smyth BVSc – VETERINARY CENTRE OAMARU

Every dairy farm will experience some metabolic downer cow cases this spring and most are a relatively quick fix with metabolic treatment and up within a few hours.

But a significant number stay down for long periods. Any cow which has been down for over 24 hours requires good nursing to ensure a full recovery but this can be very labour intensive and time consuming.

It is important to understand that these cows are often not down due to the primary condition (i.e. milk fever) but are down due to secondary complications such as muscle injuries, nerve damage and compartment syndrome. This damage can occur within as little as 3 to 6 hours of going down especially if the surface is hard and/or the animal is heavy. So a cow needs to be got back on her feet quickly or managed appropriately to prevent this secondary damage.

Nursing of a downer cow should only be undertaken if the cow has a reasonable chance of recovery and a competent person is on hand, who is prepared to invest the time and energy in the care of the cow. This is an important animal welfare message. If you are unable or unwilling to provide a high level of care then euthanasia should be elected early in the piece.

Inadequate care of down cows is one of the most common animal welfare complaints from members of the public.

Research has shown that over 45% of downer cows can recover with good nursing, while 0% of cows

with BCS, this can give valuable information on how the transition feeding has been going.

• Other trace minerals (i.e. selenium, zinc and copper): all involved in maintaining immune function.

What do you need?

 10x mixed age cows (>3 yo) that are representative of your herd. Unless you have been having problems in your heifers, there's no need to sample these.

If you are having particularly bad problems, it might also be worth doing some bloods in your springers to contrast with your day 2 colostrums. Please touch base with us if you are having issues and we can advise what will help give the most information. Sarah and Heather will be in touch with those clients that expressed interest from the RVMs.



will recover if very poor nursing is given!

- Ideally the down cow is sheltered and on clean, dry and soft bedding. Normally this means putting her in a calf shed. While the majority of down cows are nursed in the paddock, this is not ideal and she should at least have a cow cover put on her.
- Clean water and good feed should always be available. A cow should drink 40 litres a day and have at least 12-15kg of DM. A 1 litre bottle of Calstart or Headstart is equivalent to a kg DM.
- Longer acting anti-inflammatories such as Metacam and Rimadyl will definitely improve cow comfort and prognosis.
- Move the cow from side to side every 3 hours to ensure her weight is not always to one side and flex and extend the hind limbs each time the cow is moved
- Regularly milk the udder out by hand stripping, check she is not developing mastitis.
- Encourage the cow to rise, use hip clamps to get her to her feet only, never leave cows hanging in hip clamps.
- Regularly re-assess her progress and diagnosis. If you have any doubts ask for help.



Calcium for Down Cows

Lucy Cameron BVSc BSc – VETERINARY CENTRE WAIMATE

With some great new options available over the past couple of seasons, it's a good time to review your treatment options for down cows with suspected milk fever:

Calcium bags into

the vein – will cause blood calcium levels to peak within minutes enabling the cow to rise, and stay elevated for about 4 - 5 hours. A down cow needs 4g of calcium to restore her blood levels of calcium to normal, plus a buffer \rightarrow 10g is deemed sufficient for a 500kg cow. One pink bag of Calpro375 contains 15g of calcium and is the recommended treatment for a down cow.

Calcium bolus – an ideal follow up to IV calcium, a calcium bolus will give a sustained release of calcium for the next 12 hours, keeping the cow on her feet as she regains her appetite and her body's calcium homeostatic mechanisms are restored. No risk of aspiration pneumonia unlike with an oral solution.

Oral calcium

solutions – takes up to an hour to raise calcium levels, which will then stay elevated for around 12 hours. Can be used to follow up IV calcium treatment. Some contain energy as well as calcium. Bovaseal Pearls and Calol are very effective choices.

Calcium bags under the skin – are absorbed

slowly – especially if the cow is cold, they don't cause blood calcium levels to peak like they do for IV calcium, but will be elevated for the same time period, about 4 – 5 hours afterwards.

Uddernews

Simple things for a busy time

Milk is going to the factory on many farms now. Do you have systems in place that are understood by everyone who milks the cows to make sure that antibiotic milk does not get into the vat? Simple systems that everyone understands are vital, for example does everyone know...

- How is a cow that is in the colostrum herd identified? A "dot a day", or a series of stripes on the legs or different coloured tail tape etc.
- If a cow gets mastitis (or any other treatment with a withhold) how is she Marked, Recorded, and Separated, before being Treated (MRS T)?

Are you RMT or paddle testing every cow before she leaves the colostrum herd? Not every RMT positive cow will need treating, so put a dot on her and check her tomorrow most will pass but those that do not consider treating.

Is the teatspray getting on to the teats? Do

all your milkers appreciate how important this is? Have you checked the automatic teatsprayer is working as well as it can?

Hamish Newton BVSc, PhD VETERINARY CENTRE Oamaru

Inhibitory Substance Testing

If you suspect that an antibiotic treated cow has been milked into the vat, inside her milk withhold period, remember we can detect all of the dry cow products and most mastitis treatment drugs at the Oamaru clinic. Ring 0800 838 111 and tell us you are coming in with a sample of milk so we can get the testing equipment prepared and warmed up. Before you take the sample from the vat make sure the vat is well agitated/stirred, then discard the milk in the outlet pipe as this milk often does not get mixed. Then bring us in a sample of milk in a clean jar. Approximately 100ml is enough.

Treating multiple quarter mastitis

If you elect to use an injectable antibiotic for heifers in the colostrum period or multiple guarter mastitis the options



available are effectively limited to products containing penethemate (Mamyzin or Penetheject). If your antibiogram shows that your farms bugs are "a bit hard to kill with penicillin" (if your line is to the right of the graph on our Antibiogram) then consider using 10 grams followed by 5 grams (big bottle of mamyzin followed by a small bottle, or 40ml followed by 20ml of penetheject) rather than 5g three times.





Maize feeding - What to consider

Lucy Cameron BVSc BSc - VETERINARY CENTRE Waimate

With maize silage becoming an increasingly popular supplement in this area, it's timely to think about some key areas to consider if you're incorporating it into your system this season. Maize is a great combination of a moderately digestible forage with a high quality starchy grain, and if done well, can produce a large bulk of moderate energy, low protein feed which will complement high protein ryegrass pasture well. When feeding keep these points in mind:

Minerals:

- Maize is low in sodium (Na), calcium (Ca) & phosphorus (P) – these minerals should be supplemented if maize silage makes up more than 20-25% of the diet, particularly over springtime
- DairyNZ FarmFact 1-60 has good guidelines – if you're feeding up to 5kg maize with mainly pasture it will be around 60 – 70g limeflour, 15-25g Agsalt & 20-35g DCP, plus magnesium of course
- If maize makes up more than 40% of the diet, or feeds other than pasture make up a significant part of the diet, talk to us at the Vet Centre and we can check your mineral requirements for you

Acidosis:

- While it is a starchy feed, when introduced slowly at 1-2kg DM and stepped up every 3 – 4 days the risk of acidosis is low
- The longer maize silage has been in the stack, the more digestible the grain becomes, peaking at 6 months – step allowances back if changing from a newer stack to an older one

Protein:

- Maize silage is a low protein supplement at 7-8% CP, and this should complement spring pasture with its often excessive protein levels well
- If you're feeding more than 4-5 kgDM maize, or your pasture protein drops below 15-16% CP, then your cows may be deficient in protein - this will depend on their stage of lactation
- When feeding maize silage with other low protein feeds such as fodder beet advice should be sought to make sure protein and mineral balance is achieved
- If needed, we can analyse your overall diet to check the levels of protein and minerals are adequate for the stage of lactation

Inoculants:

- Adding a maize silage specific inoculant has the obvious advantage of increasing the likelihood of a favourable fermentation, some can also increase the stability of maize silage at feedout
- All the starches in maize can be an ideal environment for bacteria and moulds to grow once they are exposed to air as the stack is opened/silage fed out, the right inoculant can reduce the risk of this

Springers/Dry period feeding:

- Maize can be a good choice over the springer period in place of pasture silage as it has much lower potassium levels (av. 1.2% DM vs 2-2.5+% DM) and a lower DCAD
- If using over this time and the dry period seek advice if feeding with other low protein feeds e.g. fodder beet, particular in the last 2 -3 weeks of pregnancy when cows protein requirements increase



Tailpaint Identification Groups

Mat O'Sullivan BVSc - VETERINARY CENTRE Oamaru

Having a good tail-paint identification system/plan should make it a lot easier to identify groups for both metrichecking, noncycler treatment and then heat detection in the mating period.

The schedule below is simple and easy to follow and ensures groups are identified for timely management. The regimen has been based on a 1st of August PSC for cows and a 24th October PSM – adjust these dates to suit your herd.

Tailpaint Regime for Metrichecking

- Planned Start of Calving (PSC) for cows 1st August
- 0-2 weeks after the official PSC (up to ~14th of August)
 Mark all cows with a Blue stripe over the hips
 - This group to be metrichecked 7-10 days later ~21st August
- 3-5 weeks after the official PSC (up to ~4th September)
 Mark all cows with a Green stripe over the hips
 - This group to be metrichecked 7-10 days later ~ 11th of September
- 6-9 weeks after official PSC (up to ~25th of September)

 Mark these with a Yellow stripe over the hips
 This group needs to be metrichecked 7-10 days later ~1st of October
- 10 weeks plus after PSC (after ~25th of September), mark these cows with a **DOUBLE** Yellow stripe over the hips
 - This small group could be metrichecked around mid-October

Tailpaint Regime for Identification of Non-Cyclers

- Planned Start of Mating (PSM) for cows 24th October
- 35 days before the PSM (~19th of September) all cows that had calved up to the 4th of September (Blue and Green Hip Stripe cows) to get Red Tailpaint on Tailhead. All cows that calved after this date get Yellow Tailpaint on the Tailhead.
- Touch up every 5 days. As cows cycle repaint them in Green
- 9-5 days before PSM all remaining Red Tailpaint cows are eligible for CIDR treatment
- 1 day (24hrs) before PSM repaint all cycled cows with Green.
- As cows are mated paint them Blue
- 8-11 day into mating all remaining Yellow Tailpant cows with ONE hip stripe are eligible of CIDR treatment
- 21 Days after the PSM all second-round inseminations to be painted Orange.
- 24 days into mating all outstanding non-mated cows (including the Yellow TWO hip stripe – very late calvers) are eligible for hormonal treatment.







Products of the Month

Winter Lice Control in Cattle



8

Genesis Pour On 10 LITRE

Dose Rate 1ml/20kg (400 x 500kg Doses) \$1.98 +GST per Dose Meat Withhold - 35 days Milk Withhold - NIL Bobby Calves Withhold - 16 days

Destruct Pour On 5 LITRE

Dose Rate 1ml/10kg (100 x 500kg Doses) \$2.13 +GST per Dose Meat Withhold - 5 days Milk Withhold - 3 days Bobby Calves Withhold - 5 days

\$395

Blaze Pour On 5 LITRE

Dose Rate 1ml/20kg (200 x 500kg Doses) \$1.72 +GST per Dose Meat Withhold – 28 days Milk Withhold – NIL Bobby Calves Withhold – NIL





Bobby Calves Withhold - NIL

Transition Cows Management

Mat O'Sullivan BVSc VETERINARY CENTRE Oamaru

Getting it right in the transition period (2-3 weeks pre and post calving), is critical for the reduction of metabolic disease, improved early lactation appetite, the control of condition loss, increased production and subsequent reproductive performance.

OAD milking in the Colostrum period (and beyond)

OAD milking will positively alter the energy balance of the cow. Cows milked OAD are less likely to mobilise excessive condition –not only do they produce less milk, but they have higher dry matter intakes over the first 10-14 days postcalving. Cows will be in better immune status and recover from metritis and mastitis faster. The egg development in the ovaries is of higher quality leading to better fertility. Ensure milk withholds are complied with as instructed.

Tip – collect freshly calved cows from springers TAD and milk within 12 hrs of birth. The second milking should occur 24-36hrs later – i.e. in the mornings. Cows should ideally stay on OAD until "the belly is wider than the udder", indicating they are eating well. Based on cow collar data the average OAD milked cow takes 10-14 days before dry matter intakes start to plateau - so this is our recommended OAD period. Poor condition heifers will benefit from remaining on OAD milking right up until early October. There will be little production loss if poor conditioned mature cows are milked OAD for the first 3-4 weeks of lactation. Over conditioned cows and poor condition cows will equally benefit.

2 Improve Calcium Status and Supplementation

Providing cows with magnesium and calcium anionic salts as springers will reduce much of the milk-fever risk, but also take away a lot of the subclinical issues that most cows experience on the 1st day of calving. Getting it right will reduce mastitis and increase DM intakes.

Tip – use transition mixes containing CaSO4, MagSO4, MagCl and CaCl, for approx. 10-15 days pre-calving. Discuss quantities with your Prime Vet. Effective Ready-made Transition Cow pre-mixes (also containing trace minerals, Rumensin and Vit E) are available at ~40c/cow/day, these can be ordered through the Vet Centre. Providing additional Ca on the day of calving may further improve the results. This is best given to the cow by either a Calcium Bolus (which have become very popular as they are the most effective), or a starter drench, oral Calol (Bovaseal Pearls) or a Ca bag under the skin.

Tip – give this at the first milking within 12 hrs of calving. Greatest benefits will be seen in cows of 4-5 years of age and greater.

Fibre to keep the rumen in top condition and reduce energy content of diet

Diets which are low in volume or fibre (e.g. FB) may result in the rumen muscles getting out of condition.

Tip - Feed up to 5kg of straw or hay to springers to maintain rumen muscle fitness and to dilute the energy density of the springer diet.

4 Rumen microbial adaption

It takes 7-10 days for rumen microbes to change from one diet to the next. Rumen fermentation needs to be at its peak efficiency at the time the cow calves.

Tip – Make sure that springers cows are exposed to the feed they will be offered as colostrums and milkers. This may mean that they are back on grass and also get some grain in the shed, silage or PKE starting 7-10 days before calving. They do not necessarily need to be taken completely off crop (although best not to feed more than 2-3kg of FB to springers). Feeding Rumensin will increase feed conversion efficiency by more rapidly selecting beneficial bacteria.

5 Protein

In late gestation the foetus is rapidly growing, the mammary gland is regenerating, and large volumes of colostrum antibodies must be produced. Springer cows (from 3-4 weeks pre-calve have an increased protein requirement. Deficient cows have compromised immune function and production.

Tip – cows within 7-10 days of calving need ~2.0 kg of Crude Protein per day. For a springer eating 14kgDM, this would be a total dietary crude protein of 15-16%. Soya, canola, peas, DDG and Italian ryegrass are a good source of additional protein. FB, straw and cereal balages are very poor.

6 Springer Energy Intakes

For the last five years the industry recommendation has been to slightly restrict intakes of springer cows. The benefit of doing this was to prepare the liver for post-calving fat metabolism and reduce milk fever.

Tip – springer cows should ideally be eating 2.8% of their body weight daily. (min 2.5% - max 3.1%). Within this DM allocation aim for 500kg cows to be getting 110-120MJME/day down the throat (90-95% of total requirements).

7 Trace Minerals

Make sure that cow Trace mineral status is adequate at calving. The big three to ensure good immune function are Selenium, Copper and Zinc.

Tip – most farmers provide cows with short acting selenium as springer cows return home, consider extending this to the highly researched Multimin injection which provides all three for extra coverage. Analysis of Fodder Crops in our area shows that they are consistently low in Zinc.

8 Early Calf Removal

Removing the calf within 12 hours ensures that cow bonding is reduced, and cows are less likely to 'pine' at the gate. The risk of mastitis is significantly reduced by shortening the suckling period and the colostrum when harvested within 12 hours will be far superior to a cow that has been calved 24hrs.

Tip – use the fact that you are milking the main colostrum mob just OAD to free up time for TAD calf and cow pick up. Graze colostrum cows from the back of the paddock to the front so they are not hanging out at the gateway. Alternatively putting a wire across the paddock corner on a 45° angle, 30 m from closest corner to the shed will defect them out of that area

6



Bobby Calf Welfare

Jess McKenzie BVSc VETERINARY CENTRE Waimate

Animal welfare is at the heart of any good farming business. All calves, regardless of their purpose, should be treated with care and respect. Bobby calf welfare is important – the following guidelines will help you meet the welfare needs of animals in your care and to comply with the requirements of the Animal Welfare Act 1999:

- **Colostrum** bobby calves must be fed colostrum (10% bodyweight minimum) within the first 12 hours of life. Good quality colostrum should be fed twice daily for the first 4 days of life.
- Handling handle calves gently and with care at all times.
- Housing bobby calves should be moved to a sheltered, draught-free calf shed with comfortable bedding as soon as practicable after birth.
- Water calves must have free access to clean, fresh water at all times.
- Age calves must be a minimum of four days old before transporting them.

How do I know if my calves are fit for transport?

In addition to being a minimum of four days old before transport, the following signs will indicate if a calf is fit for transport:

- **Healthy** eyes are bright, not dull or sunken. Ears are upright. No signs of visible disease (eg. scours), deformity, injury, blindness or disability.
- **Strong** able to bear weight on all four legs. Be strong, able to rise unassisted and move freely around the pen.
- Hooves firm and worn, not rounded and soft.
- **Navel** dry and withered, not pink/red, raw or fleshy.
- **Fed** at least ½ the days ration of colostrum no more than 2 hours prior to collection, or as per your supply contract.

Slow and unsteady calves, those with a wet navel, concave (sunken stomach) or scours are unfit for transport and should not be presented. Truck drivers are not permitted to load unfit calves.





OmniEye Lameness Detection Camera



Euan Tait BVMS VETERINARY CENTRE Waimate

Dunedin based Iris Data Science have been developing "OmniEye" – a lameness detection camera. OmniEye is an automated on-farm livestock monitoring system that provides real time locomotion scores for your herd. Through the real time scoring, lame cows are detected earlier allowing for prompter treatment and better resolution of lameness. Chronic lameness cases will be decreased and both welfare and longevity of your herd will improve along with the added productive and reproductive benefits of decreased lameness.

From Iris Data Science:

- The non-intrusive camera-based scoring and monitoring system collects tens of thousands of data points from every cow, every day to give you an "intelligent eye" over your livestock and allow you to make the best decisions for the welfare of your herd
- OmniEye Locomotion allows for early lameness detection and drafting of animals, and results in a reduction of the prevalence of lameness, less suffering, and less costly interventions and culling.
- It enables automatic or remote diagnostics for individual livestock by a vet and others who are authorised to do so on farm
- Through our visual diary, OmniEye also provides visual verification of an animal's condition over time to track other the long-term condition of your herd.
- Iris is looking for up to 50 farms to join an exclusive pilot to codesign and help improve the revolutionary technology.

For further information about OmniEye or if you are interested in joining the pilot, please get in touch with Euan in Waimate (03 689 7213) or Mat in Oamaru (03 434 5666).



Cow Flow Solutions to Poor Cow Flow



Euan Tait BVMS VETERINARY CENTRE Waimate

With the new season starting, cow flow issues often begin to arise with training heifers, cows establishing hierarchy and possibly staff changes. Good staff training and potentially some infrastructure changes within the shed can lead to a dramatic improvement in cow flow and associated lameness.

Some focus areas that will help cow flow are -

- **Patience** it is important to take your time with heifers
- **Backing gate use** don't move the backing gate within the first 20 minutes of milking and only move small distances at a time
- Top gate use should be limited to small amounts or not at all – farms can go whole seasons without needing to use the top gate
- Entry and exit on to platform (rotary) entry only needs to be around 900mm wide, and exit should ideally be 3 bails wide to prevent excess pressure on feet
- Foot baths ideally these should be permanent structures that can be emptied and refilled – this allows cows to become used to them and when needed they flow smoothly through stepping through it rather than jumping
- **Tracks** structure, width, camber and maintenance are all very important in lameness reduction and prevention e.g. no crusher dust within 300m of collecting yard. Good tracks will allow for good cow flow to and from the shed
- Breast rail height (herringbone) if cows are hesitant to enter the shed, changes from 800mm high to only 740mm can make big improvements in cow comfort during milking (by reducing pressure on point of the shoulder) and therefore improve cow flow

Implementing a good plan from the outset of the season and some simple changes in management and potentially shed structure can have very positive outcomes in reducing cow flow issues and lameness.

OUR CLINICS

Oamaru Ph 03 434 5666 Waimate Ph 03 689 7213 Palmerston Ph 03 465 1291 Glenavy Ph 03 689 8118 Kurow Ph 03 436 0567 Omarama Ph 03 438 9868 Ranfurly Ph 03 444 1020

