



DOWNER COWS

1. GIVE 1 BAG OF CALPROMAG INTO THE VEIN
2. GIVE ONE BAG OF CALPRO375 UNDER THE SKIN
3. Once she is sitting up and can swallow:
GIVE ONE BOTTLE OF CALOL AND/OR STARTER PLUS



The following can help you differentiate between the two most common metabolic syndromes:

MILK FEVER (LOW CALCIUM)

- Dry nose
- Dry dung
- Neck Flexed (S bend neck)
- +/- Bloating
- Usually seen in older cows
- Seen around calving
- Can be before or after calving

GRASS STAGGERS (LOW MAGNESIUM)

- Irritated
- Aggressive
- Rapid breathing
- Seizuring
- Frothing at mouth
- Collapse in cowshed/yard
- Usually seen from 10 days after calving till mid-lactation
- History of poor magnesium supplementation or wet weather

- ❖ Not all downer cows have milk fever or grass staggers. If you suspect there is a musculoskeletal injury (dislocated hip, calving paralysis, bruising etc) or an underlying infection (e.g. mastitis, metritis) then always call a vet.
- ❖ Often a downer cow can have milk fever AND grass staggers as well as other things such as ketosis and muscle damage. These cases can be complicated and hard to treat so we recommend if there is any confusion in signs or response to treatment – call us.
- ❖ You should see a response within 4 hours. If not there may be complicating factors and the cow needs veterinary attention. Please get her seen that day – the next day is too late!
- ❖ If you are not confident in diagnosing and/or treating then call us as soon as possible.

NURSING THE DOWNER COW

A downer cow is any cow that can't get up for an extended period of time. Cows will go down due to a specific cause (e.g milk fever) but even despite treatment they may stay down. The weight of the cows body restricts blood flow to the muscles and their access to feed and water is limited to what is around them. Cows that are down for long periods of time can suffer from:

- Muscle damage
- Nerve damage
- Metabolic diseases (eg Ketosis from not eating)

All of which perpetuate the existing problems and cause a downward spiral of the “downer cow syndrome”

GETTING A DOWNER COW UP:

1. Treat any underlying conditions (eg Milk fever, Mastitis etc)
2. Attempt to raise the cow
 - Gentle persuasion
 - Hip clamps (Maximum of twice daily – DO NOT leave cows hanging in hip clamps)
 - Cow sling
3. If unable to raise her, nursing care is required
 - Roll her every 3 hours to prevent muscle damage
 - Good soft, well-draining bedding (don't leave her on concrete)
 - Ample feed and water
 - Cover with a tarp, horse cover or blanket
 - Milk her daily
 - Give her anti-inflammatories Ketoprofen daily for up to 3 days.
4. Attempt getting her up regularly, the sooner she gets up the better her chance of survival.

ANIMAL WELFARE

Euthanasia is recommended for:

1. Animals down for more than 7 days and not responding to treatment
2. Animals in discomfort and pain
3. Animals with fractured bones or severe paralysis

RETAINED FOETAL MEMBRANES

Retained membranes are a common occurrence in spring. If the membrane has not passed within 6-8 hours of calving it often will not break away naturally and will need to be allowed to rot/break down for removal.

Treatment:

1. Cut the membranes off at the level of the vulva

Membranes hanging down get covered in cow faeces and wick undesirable bacteria into the uterus. They also annoy workers, and can be a risk for mastitis. Be sure to mark cows with RFM's so you can tell which ones to re-examine at exit from colostrums.

2. After 4 days attempt to GENTLY remove the membranes

At the exit of the colostrum mob (4 days) have a light pull – if the membranes don't come out fairly easily then they should be left. Forceful traction increases the risk of making the cow sick, does damage to the uterus lining, and decreases the cows fertility so should not be attempted. Try again in 4 days.

3. Record as "At-Risk" cows and metricure them 7-14 days after RFM removal

At-risk cows include cows with RFM's, assisted calvings, rotten calves, twins, inductions and those cows that are noted to have discharge. All of these animals (especially RFM's) are high risk for developing endometritis. All these cows should be treated with a metricure 3-4 weeks after calving. The remainder of the herd should be metrichecked in batches.

4. Antibiotics

Until the membranes are out absolutely no antibiotics (or anything else) should be put INTO the uterus. This includes pessaries. If the animal becomes sick then they should be treated for metritis (Depocillin/Cefaguard, Ketoprofen, Fluids). Depocillin/Cefaguard may also be used at the time of diagnosis to reduce the risk of animals becoming sick or getting endometritis – discuss this option with your vet.

5. Oxytocin

Oxytocin can be given in the 1st hour after calving to assist with membrane release. It is routinely given with assisted calvings (5 ml in the muscle), especially where there is a dead calf. After the hour it is unlikely to have any effect. DO NOT USE BEFORE CALVING.

Summary

- Mark cow and record cow number
- Cut membranes off at level of vulva
- Antibiotics if animal gets sick
- Follow up treatment with a metricure

LAME COWS

- Identify which leg is lame.
- Restrain and examine the foot properly.
- Check between the claws for footrot, or any foreign bodies like stones.
- Check the sole and white line for bruises, abscesses and cracks.
- CUT BACK ALL UNDERUN HOOF.
- Try not to cut to where it bleeds.
- Scallop the edges of your cuts so no sharp bits of hoof dig into the soft tissue underneath.
- Cut to allow total drainage – do not create a hole that dirt will get trapped in!
- If you have removed significant hoof wall or sole – put a hoof slip on the good claw
- If she has foot rot bandage with copper sulphate (use our shoof refill packs)
- Treat with Antibiotics for 3 days if indicated. Depocillin (4ml/100kg) into the muscle, or Cefaguard (1ml/50kg) into the muscle.
- Spray with purple spray (Aerotet Forte)
- Treat with Ketoprofen daily for up to 3 days (12-15mls/500kg)
- If there is marked swelling of the foot above the hoof – call us as there may be a joint infection.
- Call us sooner rather than later if requiring assistance, as claw amputation is the least desirable outcome.

MILK LET DOWN

- Oxytocin can be used for heifers at first milking, to help encourage milk let down and reduce the incidence of environmental mastitis.
- Give a 2ml dose into the muscle at the time the cups are put on.
- Use a fine (20gauge) needle and be gentle to help avoid any stress.
- Try and reduce the stress of milking – no shouting, hitting with sticks, tying up legs. Go slow when approaching with the injection.
- Repeat if required at subsequent morning milkings at 1ml per cow.
- Not to be used longer than 4-5 days
- Can be used in cows that “hold” their milk.

HANDLING ANTIBIOTIC TREATED COWS

- Treated cows need to be marked clearly with bright spray paint or leg bands immediately after treatment. Ensure ALL staff know the marking system. Do not use leg bands if you use them for 3-titters.
- Draft the treated cows out of the herd and run in a separate mob for the treatment course and full withholding period. Milk these cows after the main herd.
- Record the following in your Fonterra/dairy book AND on the whiteboard:
 - Cow number
 - Type of disease e.g mastitis, metritis, foot rot
 - Product used
 - Date of first treatment
 - Date of last treatment
 - Date she can be returned to vat
- If you extend the treatment course you will need to extend the withholding date – if you are unsure on custom withholding times please ask us for advice.
- See specific product label instructions for once-a-day milking.
- NOTE: colostrum cows must not supply the milking vat for 8 milkings following calving.
- If you milk your antibiotic cows with the colostrum cows into the calf vat you must not feed it to bobby calves – see product label

If you suspect a cow has been milked into the vat prior to the completion of her withholding time, we can test for most antibiotics with a quick, in-house test. Bring a sample of milk from the vat in a clean pottle for testing before the milk is picked up. Allow some milk to flow out before taking the sample so you don't just get the milk from the outlet.



CALF REARING: IMPORTANT POINTS

- Every calf must get at least 2L of “Gold” colostrum within 6 hours.
 - o Gold colostrum = 1st milk only, ASAP after calving.
 - o Can have up to 5L. More is better.
- Every calf must have a total of 4L in first 12hrs of life.
 - o Even if you think she suckled from her mum, feed more colostrum. Usually they haven’t had enough.
- Suckling is better than tubing. If you can get it to drink do so. If it won’t suckle, tube it.
- Spray navels with iodine spray as they get put on the trailer.
- Spray navels daily until dried up.
- Have maximum of 20 calves per pen.
- Each calf must have 1.5 to 3m² of space in the pen.
- Keep first milking colostrum (gold) separately.
- Store colostrum in CLEAN plastic container/drums with lids.
 - o Stir twice daily.
 - o Preferably keep chilled
- Feed “Silver” colostrum (2nd milking onwards) for at least 4 days after calf born.
- Potassium Sorbate can be used to help preserve colostrum. Easiyo yoghurt has not been shown to decrease bacterial growth in stored colostrum.
- Ensure pens are: dry, draft free, warm, ventilated, light and have adequate bedding.
- Bedding should be 20-30cm deep and topped up regularly!
- Keep Bobby’s away from replacements.
- Spray pens with a virucidal spray twice a week.
 - o Virkon/Sterigene/Virusan/Trigene etc.
- Keep sick calves isolated and do them last.
- Have a foot bath containing one of the above virucidal agents outside the sick pen to walk through.
 - o Clean your boots and clothing thoroughly after dealing to sick pen.
- Isolate and treat sick calves ASAP! Mark those you have treated clearly.
- Ensure all calves drink the same amount – don’t let the guts get it all.
- Feed twice daily:
 - o Can go to once daily at 2-3 weeks if circumstances require
- Provide lots of water and meal:
 - o 1kg meal per calf.
- Provide some straw rather than hay to nibble on:
 - o This encourages them to eat more meal which is better!
- “Optiguard” powder can help prevent/treat mild dietary scours and can be offered ad lib/with meal straight away.
- Can go out onto grass at 3 weeks.
- Wean when:
 - o 70-100kg (breed dependant Jersey – Friesian)
 - o Or at least 25kg above birth weight
 - o Or when eating 1-2kg of meal per day

- Use a meal that contains 20% protein.
- Use a meal that contains a coccidiostat (e.g rumensin, bovatec, deccox etc).
- Get your calves disbudded by us from the age of 4 days old. The younger the better as they recover faster.
- Our disbudding service includes the following
 - o Humane pain free removal of horn buds under local and general anaesthetic
 - o Antibiotic spray on remaining horn wounds
 - o Elastrator ring application of bull calves (castration) if requested
 - o Check navels for infection and appropriate treatment
 - o Removal of any extra teats
 - o 5-in-1 vaccination
 - o Blood sampling can be done at the same time for BVD or DNA testing
- Once calves have been on grass for 3-4 weeks they will need their first drench.
- Use an oral drench containing Levamisole such as ArrestC or OxfenC every 4 weeks.
- When doing an oral drench every 4 weeks becomes too labour intensive switch to a pour-on such as Eclipse or Boss.
- Calves need to be vaccinated for Lepto. They should receive their first shot in December-January. Their 2nd shot will be approximately 4 weeks later. You can also vaccinate against for BVD at this time if required.
- Remember to protect your calves against Facial Eczema with Zinc Bullets through the risk period (January – may) but seek veterinary advice if water supply contains zinc also.
- Copper should be supplemented with a 10g rumen bullet in Autumn after Zinc treatment is well and truly finished.
- B12 and Selenium can be supplemented with an injectable if required.



CALF SCOURS

Calves with diarrhoea will die of dehydration and lack of energy – not diarrhoea. Electrolytes keep calves hydrated and help replace lost body salts however they do not contain enough energy therefore milk is required as an energy source. They also do not have any antidiarrhoeal properties so one of the 3 options below (Scourban Plus, Phoenix tablets, ScourSTOP) should be used to slow the passage of intestinal contents through the gut a.k.a “bind them up”.

Use a good quality electrolyte (you get what you pay for) like **Revive®**

To help prevent scours in your calves next year, vaccinate your cows with Rotavac or Rotagal pre-calving.

Daily electrolyte treatment for scouring calves:

Calf condition	Morning	Noon	Afternoon	Overnight
Severe diarrhoea	Electrolytes(2 L)	Milk (1 L)	Electrolytes (2 L)	Ad lib electrolytes
Mild - Moderate diarrhoea	Milk (1-2 L)	Electrolytes (2 L)	Milk (1-2 L)	Ad lib electrolytes
Normal	Milk (2 L)	Ad lib meal and water	Milk (2 L)	Ad lib water

STOMACH TUBE ELECTROLYTES ONLY. DO NOT STOMACH TUBE MILK.

PLUS **+**

Scourban Plus: Liquid oral drench - helps bind faeces and slows passage through gut. Initial treatment 60mls per 25kg, then 30mls per 25kg every 12 hours. Treat for 2-3 days (maximum of 7days). NOT FOR USE IN BOBBY CALVES. Meat withhold 14 days. Do not mix with milk. Should be used in conjunction with electrolyte treatment if calves are dehydrated.

OR

Phoenix pink scour tablets: Initial treatment one tablet per 35kg, then half a tablet per 35kg every 12 hours. Treat for 2-3 days (maximum of 7 days). NOT FOR USE IN BOBBY CALVES. Meat withhold 21 days. Should be used in conjunction with electrolyte treatment if calves are dehydrated.

OR

ScourSTOP: Antidiarrhoeal powder for mixing with warm water to provide a drinkable liquid. Not for use in conjunction with electrolyte treatment. Nil withholding.

OR

No-Scour Calf: A natural alternative anti-diarrhoeal oral paste. 30ml morning and night for 1-2days. Nil withholding.

PLUS **+**

Metacam® is an anti-inflammatory and will dramatically improve recovery rates. Calves will feel better and will start drinking again quicker. They need only one injection under the skin which lasts for 2-3 days. Approximately 0.7ml for a Jersey or 1ml for a Freisian calf. NOT FOR USE IN BOBBY CALVES. Meat withhold 10 days.

SICK CALVES

SIGNS OF ILLNESS IN CALVES:

- Decreased appetite
- Swollen navel
- Coughing
- Lameness
- Lethargy/dullness

If you see any of the above signs, take the temperature of the affected calf. It should be between 38-39C. If it is more than 0.5C from this range then hospitalise and begin treatment.

HOSPITALISATION: Isolate the calf in the pen it is currently in to limit the spread of any contagious diseases – simply done by putting a solid gate across a corner in the pen. DO NOT SWAP PENS. Always provide access to fresh water.

NAVEL ILL:

- Inspect all navels regularly in first three weeks of life.
- Spray all navels with iodine/alcohol mixture (tincture) as soon after birth as possible.
- Don't overcrowd transporter or let calves stand on each-others navels.
- Infected navels are swollen, painful, red or discharging. These need early, aggressive antibiotic therapy treatment for at least 5 day.
- Veterinary examination is required if abscesses develop.

JOINT ILL:

- Examine any lame calf for joint infection (swollen joints, lameness).
- Treat early and aggressively and for 5 to 10 days.

PNEUMONIA:

- Rapid breathing or struggling to breathe, lying down a lot, reluctant to drink.
- Recommend veterinary assessment.
- Requires aggressive treatment.

TREATMENT:

Amphoprim (1ml/15kg) injection in the muscle. Do NOT under dose. Treat daily for 5-10 days. Five days is a minimum treatment.

PREVENTATIVE MANAGEMENT:

- Ensure adequate and PROMPT colostrum intake after birth (see Calf Rearing Tips)
- Warm, dry, draft free housing/pens
- Avoid overcrowding
- Good hygiene practices

WHAT MASTITIS DRUGS TO USE AND WHEN: OUR RECOMMENDATIONS

**SPRING MASTITIS
FIRST LINE
BEST OPTION:**



IF TREATMENT
NOT SUCCESSFUL



OTHER OPTION IF
NOT WORKING



**SPRING ALTERNATIVE
OPTION TO INTRACILLIN:**



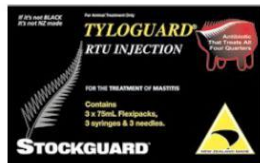
**HEIFER MASTITIS OR
COW WITH MULTIPLE
QUARTERS :**



OR



**COW SICK FROM
MASTITIS:**



OR



**LATE LACTATION
FIRST LINE BEST
OPTION:**



OTHER OPTION IF
NOT WORKING



**LATE LACTATION
ALTERNATIVE OPTION
TO PENCLOX:**

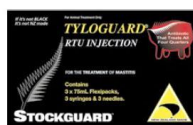


**ADD METACAM
FOR BETTER RESULTS:**



METACAM IS NOT AN ANTIBIOTIC. IT IS AN ANTI-INFLAMMATORY. USE IT FOR COWS THAT ARE SICK AND/OR SWOLLEN AND/OR PAINFUL. IT ALSO HELPS THEM GET IN CALF QUICKER AFTER MASTITIS! NOT FOR USE WITH TYLOFEN

**PRODUCTS YOU
CAN USE IN COMBO
(INTRAMAMMARY+INJECTABLE)
FOR NON RESPONSIVE CASES
OR SICK COWS WITH MASTITIS.**



MASTITIS ANTIBIOTICS REFERENCE CHART 2016

ADMIN:	OAD LICENSE:	REGIME:	MILK WITHOLD (TWICE DAY MILKING)	MEAT WITHOLD:	PRICE inc GST:	PRICE PER COW:
INTRAMAM		3-6 SYRINGES 12 HOURLY	8MILKINGS/ 96HRS	28 DAYS	PER BOX OF 21 \$181.44	3:\$25.92 6:\$51.84
INTRAMAM		3-5 SYRINGES 12 HOURLY	3: 4 MILKINGS/ 48HRS 5: 8 MILKINGS/ 96HRS	3: 3 DAYS 5: 7 DAYS	PER BOX OF 24 \$238.32	3:\$29.79 5:\$49.65
INTRAMAM	YES	3-6 SYRINGES 24 HOURLY	9 MILKINGS/ 108HRS	10 DAYS	PER BOX OF 21 \$269.01	3:\$38.43 6:\$76.86
INTRAMAM	YES	3-5 SYRINGES 48 HOURLY OR 5 SYRINGES 24 HOURLY	48HRLY:7 MILKINGS/ 84HRS 24HRLY:8 MILKINGS/ 96HRS	3 DAYS	PER BOX OF 24 \$242.88	3:\$30.36 5:\$50.60
INTRAMAM	YES	3 SYRINGES 12 HOURLY	5 MILKINGS/ 60HRS	10 DAYS	PER BOX OF 24 \$327.36	\$40.92
INJECT		3-5 INJECTIONS 24 HOURLY	6 MILKINGS/ 72HRS	21 DAYS	PER 75ML BOTTLE \$50.25 (WILL TREAT 1 ANIMAL) BOX = 3	\$50.25
INJECT	YES	3 INJECTIONS 24 HOURLY OR 2 INJECTIONS 24 HOURLY	4 MILKINGS 48HRS	7 DAYS	PER 15G BOTTLE \$83.50 (WILL TREAT 1 ANIMAL) BOX = 6	\$83.50
INJECT	YES	1 INJECTION	11 MILKINGS/ 132HRS	10 DAYS	PER 30ML BOTTLE \$76.98 (WILL TREAT 1 ANIMAL) BOX = 3	\$76.98
INJECT (CONTAINS AN ANTI- INFLAMMATORY)		3 INJECTIONS 24 HOURLY	5 MILKINGS/ 60HRS	10 DAYS	PER 225ML BOTTLE \$183.08 (WILL TREAT 3 ANIMALS)	\$61.02

