



# Treatment of Scouring Calves

## Scours: prevention is much easier than cure.

*Studies show that 40-50% of calves do not receive enough colostrum within the first 12 hours of life.*

This makes them prone to diseases and affects their subsequent growth and production. Colostrum deprived calves also have a higher death rate than calves that receive good colostrum immunity. The timing of the first colostrum feed (within the first 6 to 12 hours of life) is vital. After this time, colostrum will not boost the calf's immunity. When the calf is more than 12 hours old, colostrum will still be an excellent, energy dense food and will provide some localised protection by preventing the 'bugs' attaching to the intestinal lining.

- Calves should be fed 10-15% of their bodyweight of high quality colostrum within six to twelve hours of birth to get enough protective antibodies. For a 40kg calf this is 4-6 litres of colostrum.
- First colostrum needs to be split into 2 feeds since the abomasal (calf stomach) capacity is only 1.5-2 litres Fresh "gold" colostrum is best. This will ensure the calf absorbs protective antibodies and is thus less susceptible to the 'bugs' that cause diarrhoea.



## Gold Standard Therapy

**No matter what the cause of scouring in your calf, the best treatment is fluid therapy. It is important to assess the calf to see if other treatments are also required.**

- Take a rectal temperature – if greater than 39.5°C, call the vet.
- Isolate sick calves to a 'sick pen' ideally in a different shed. If this is not possible ensure you have a solid partition between sick and healthy calves. This should be warm with deep (20cm), soft bedding. Feed and treat sick calves LAST to prevent spread of 'bugs' to healthy calves.
- Take a faecal sample **BEFORE** treatment, and store in a designated chilly bag or fridge.

**Remember to take great care with hygiene** - you cant take a faecal sample from the floor of the shed as it will be contaminated.

- The faecal sample can be sent to the laboratory and checked for viral, bacterial and/or parasitic causes so that you can identify your 'enemy' and work out the best course of treatment. In all cases fluid therapy must be the mainstay of treatment, whatever the cause of the scour.
- Always remember hygiene, as most causes of calf scours are contagious to humans

## Administering Fluid Therapy

All fluids should be warmed to blood temperature before they are given.

### IMPORTANT:

## HUMAN HEALTH RISK

Keep young children away from scouring calves – they can pick up the 'bugs'.

Be thorough about your own hygiene as most causes of calf scours are contagious to humans.

## Oral Electrolyte Products

The gold standard products on the market are:

- **Diarrest** - contains 344kcal of energy, 6.78g of Sodium, 2.41g of Potassium, and 7.29g of Chloride in each 2 L dose. It also contains rice flour and pregelatinised starch as additional energy sources.
  - **Rice flour** provides sustained energy absorption and rapid recovery. It slows intestinal passage so more water can be reabsorbed.
  - **Pre-gelatinised starch** improves the consistency of faeces within 24 hours. It also absorbs bacterial toxins which are removed with the undigested starch through the faeces.
- **Revive** is another product which has similar levels of energy and electrolyte per 2L dose. The difference between Revive and Diarrest is that Revive contains no pre-gelatinised starch.



*NB: Fresh water must be available ad-lib when these products are used, as they are very concentrated solutions.*



### Other good products on the market:

- **Diaproof K** - Although this product has only half the amount of energy and electrolytes as Diarrest, it contains rice flour and pre-gelatinised starch which helps energy absorption and improve faecal consistency.



### Feeding regime:

- 2 litres of milk in the morning
- 2 litres of electrolytes at lunch time
- 2 litres of milk in the afternoon
- Left with electrolytes adlib all night

It is extremely important to keep feeding milk or colostrum to your scouring calf. Electrolytes alone do not provide enough energy for liveweight maintenance, and you risk starving the calf which exacerbates the disease. Recent studies have shown that calves fed on a full milk ration and electrolytes can maintain their weight or even gain weight during an episode of scouring, and recover in as few as three days.

Where a scouring calf is too sick to feed, your vet clinic can show you how to pass a feeding tube so fluids can be delivered directly into the stomach. This method can be used until the calf is strong enough to resume suckling again.

### Prognosis

As long as you are proactive with your fluid therapy, 95% of calves will normally recover well from scouring.

- Less than 5% dehydrated - no signs of disease.
- 5 - 10% dehydrated - skin doughy, eyes sunken, not eating, reluctant to move.
- 10 - 12% dehydrated - changes more pronounced, the calf goes into shock, extremities are cold, recumbent.
- 12 - 15% dehydrated - Death

If the calf goes down and is too weak to suck, there are metabolic disturbances going on in the body. Unless you are going to opt for veterinary IV fluid treatment, the outlook is not good. When an animal reaches 10% dehydration, death is imminent unless IV fluid therapy is started promptly. There is little point prolonging the suffering of a severely dehydrated and scouring calf, at this stage unless you choose to call your vet, euthanasia may be the only option.