LOCATIM®

Farmer's Guide to Scour

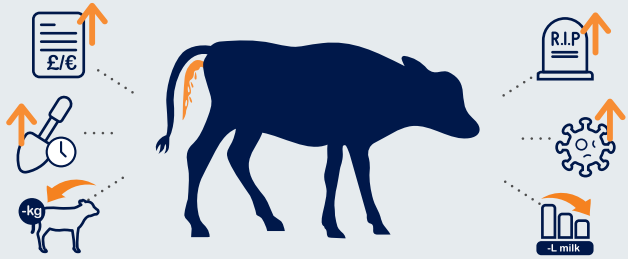


Forte Healthcare

Calf scour

Calf scour is a major problem for both dairy and beef farmers, with between 2% - 4% of the calf crop lost to scour annually (UK & IE).[1,2,3]

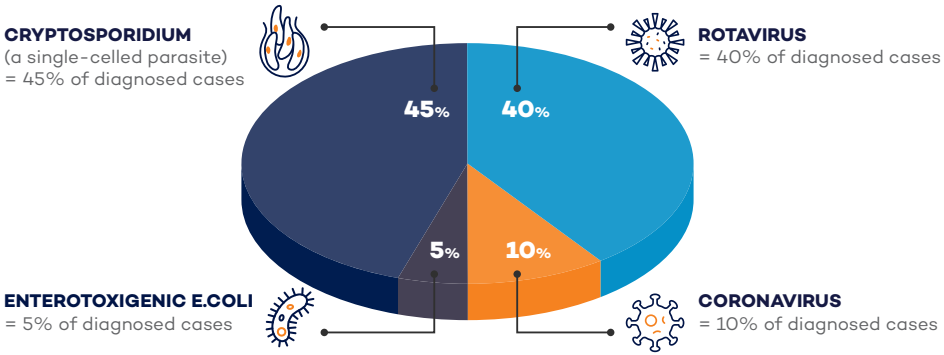
The true cost of scour



Cause of scour

Calf scour is an infectious disease caused by one or more scour causing pathogens (or "bugs"). However, the development of scour is multifactorial and many factors influence the calf's ability to defend itself against infection.

The most common scour causing pathogens are:



The three most important factors to consider when reducing the impact of scours are:

CAUSE | TREATMENT | PREVENTION

Process of infection



Adult cattle carry scour-causing pathogens in their faeces. They do not experience ill-effects as they have sufficient specific antibodies in their fully developed immune system.



Problems with calf scour occur when the calf's antibodies in its immune system are overwhelmed by the number of pathogens in the environment, causing infection.



Pathogens are ingested by the calf from contaminated material.



The pathogens rapidly multiply in the gut and attack the inner lining of the small intestine. Fluid is lost and milk digestion is impaired resulting in scour.





Pathogen challenge may overwhelm immune system.

Calf scour symptoms

DEHYDRATION:
Infected calves lose large volumes of fluid as they are unable to digest milk.

LETHARGY:
The calf will appear dull, slow to rise and will not stretch

WEIGHT LOSS:
Little or no appetite causing rapid weight loss.

Treatment of scour

Oral rehydration solution (ORS)

Early intervention is necessary to correct dehydration, replace lost energy, and prevent deterioration of the calf's body condition.

At the first sign of scour, the calf must be offered **2L of oral rehydration solution (ORS), such as Hydrafast, twice daily** in addition to milk. Previous recommendations involved restricting milk feeding to scouring calves, however, this has been proven to be extremely harmful, causing an increase in the calf's energy deficit.



HIGH-QUALITY ORS
(e.g. Hydrafast)

↓ CONTAIN ↓

ELECTROLYTES
(water absorption)

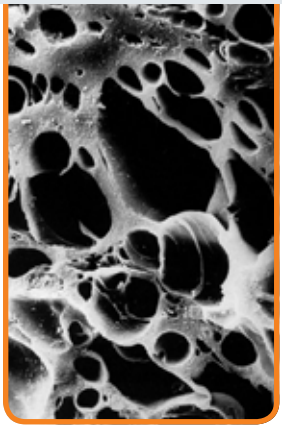
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ENERGY
(maintain bodyweight) (heat generation)

\+ \+

BUFFERS
(neutralise acid build-up)

In severe cases, the calf may deteriorate despite the use of an ORS. If this occurs, the calf must be treated with intravenous fluids by a vet. This veterinary intervention is essential if the calf collapses and is unable to stand, or has no suckle or feed reflex. In severe cases, the vet may administer additional medication they deem appropriate.



Activated charcoal

Activated charcoal has long been used in human and veterinary medicine to remove toxins and poisons from the body as it has absorptive properties due to the presence of micropores. Many of the common pathogens which cause neonatal scour (e.g. Rotavirus, E.coli) produce toxins.

The activated charcoal in **Charcovet Gel** absorbs gas and binds the liquid fraction of diarrhoea, helping the animal to produce a more normal stool.

This reduces bloating and cramping, improving demeanour and willingness to drink. Activated charcoal may be most useful in milder cases of scour where the calf is relatively bright.

Treatment of scour



Testing

Identify the pathogen: send a fresh stool sample (<24hrs since the calf has started scouring) for laboratory testing.

Husbandry

Good husbandry is the main factor of survival.

Keep the calf warm, dry and free from draughts. Use infrared heat lamps during colder weather.

Encourage the calf to stand to prevent cramps and encourage feeding.

The damaged gut will require time to heal.

Prevention of scour

Reducing the pathogen challenge

Implementing good and consistent on-farm hygiene protocols is essential to minimise the risk of infection.

Immaculate hygiene should be practiced in calving areas, rearing pens and creep areas to limit the number of pathogens.

The dam's dirty teats, tail, legs etc. may be covered in faeces and can present an infection risk. Removal of the dairy calf from the dam immediately after birth is essential to minimise the calf's exposure to pathogens.

In a scour outbreak, providing a new, clean rearing area where newborn calves can be taken and isolated immediately after birth is the best way to break the cycle of scour. This may include an indoor pen made from straw bales, clean calf igloos, or a polytunnel.



Prevention of scour

Maximising the calf's immune system

GOOD MANAGEMENT AND NUTRITION

A comfortable, warm, well-fed calf will have stronger immune system.

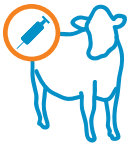


COLOSTRUM



Colostrum contains an abundance of antibodies against all diseases experienced by the dam in her life. While it is not guaranteed that all colostrum will contain enough of the specific antibodies against scour pathogens, serious attention to a thorough colostrum protocol for each calf is vital to protect against scour. Feeding transition milk will contain enough antibodies to extend this protection for an additional number of days.

VACCINATING AGAINST SCOUR



Dry cow vaccination against Rotavirus, Coronavirus and E.coli K99 aims to encourage the dam's production of more specific antibodies against scour. The dam's response to vaccination cannot be guaranteed in every case, but, at herd level, it is an excellent and cost-effective way to boost the antibody protection passed on to newborn calves. However, in severe pathogen challenged circumstances, even vaccinated herds can experience problems.

USE LOCATIM, A CONCENTRATED BOVINE LACTOSERUM



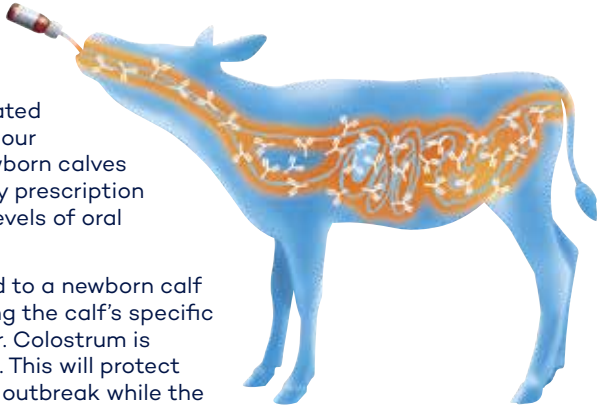






LOCATIM®

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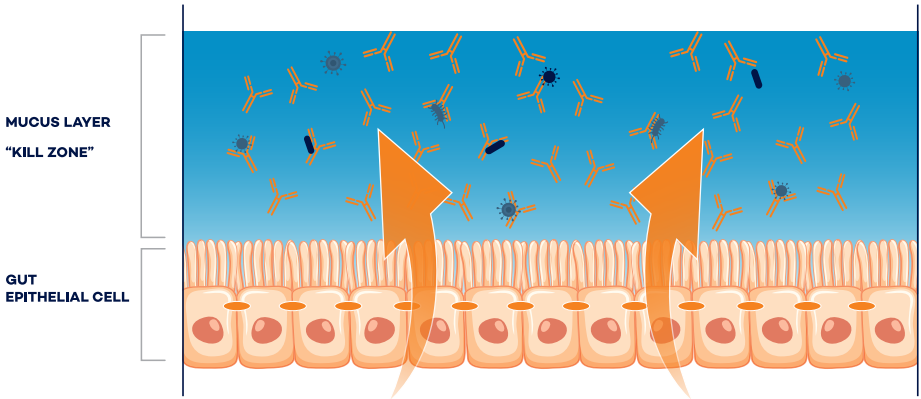


Locatim is a prescription medicine available from your veterinary surgeon, and is not an antibiotic. It is a highly concentrated sterile solution of specific calf scour antibodies proven to protect newborn calves against scour. Locatim is the only prescription medicine providing guaranteed levels of oral antibodies against calf scour.[4]

A 60 ml oral dose is administered to a newborn calf in the first 4 hours of life, boosting the calf's specific immune protection against scour. Colostrum is fed after Locatim administration. This will protect newborn calves in the face of an outbreak while the previously outlined measures take effect.

How does Locatim work?

When calves are born, they are vulnerable to disease as their immune system is weak.



Vaccination and colostrum provide the calf with protection against disease through passive transfer.

However, sometimes the environmental pathogen load surpasses this protection, and a scour outbreak occurs.

Locatim provides guaranteed protection to newborn calves in a pathogen-filled environment.

Once administered, Locatim antibodies are absorbed into the mucus layer of the calf's gut.

This forms a 'kill zone' that neutralises pathogens before they cause damage.

When to use LOCATIM®



Newborn calves in unvaccinated herds in the face of an outbreak.



Newborn calves in vaccinated herds where the vaccine protection is unable to protect the calf against the level of pathogens.



Individual calf where colostrum intake is insufficient

- **DAM HAS EXPERIENCED A DIFFICULT CALVING**
- **DAM HAS POOR COLOSTRUM PRODUCTION**



Valuable pedigree calves or replacement heifer calves to provide additional protection as a precaution.

Benefits of LOCATIM®

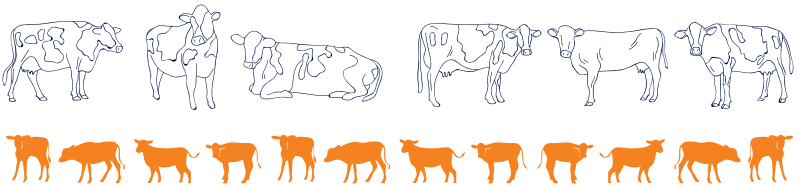
- **It is a biological bovine lactoserum, not an antibiotic.**
- **Provides newborn calves with a guaranteed concentration of protective antibodies against scour pathogens.**
- **Proven to reduce incidence and severity of scour in calves.**
- **The only prescription medicine available to protect calves in the face of a scour outbreak.**
- **Can be used until the cause of the scour outbreak is addressed e.g. calving pressures ease, vaccine regime is carried out.**
- **Can be used to provide valuable calves with additional protection against scour.**



Locatim Efficacy Study[4]

Nussbaum et al. 2022

Protocol



Calves from 489 unvaccinated cows across 35 herds.

246 calves got Locatim

243 calves got placebo

All then got normal colostrum regime

Results

65 cases of significant scour (13%)
Lab diagnostics showed typical pathogen profile

Locatim Group

21 cases of scour

No deaths



Placebo Group

44 cases of scour

4 deaths



2.6 higher risk of all calf scour in placebo group

Locatim case studies

"We got confirmation from the postmortem that it was E.coli K99 … causing us this horrendous scour. We used Locatim on every newborn calf for the next 10-14 days … as quickly as the scour came, it disappeared. Locatim really helped us get through the outbreak."



Lis Stephenson
DAIRY FARMER
CUMBRIA, ENGLAND



"Apart from the loss of performance, calves with scour are very, very expensive to treat. Locatim works very well and it reduces your overall antibiotic usage on farm which is the main thing we are trying to promote. I think Locatim is an excellent product; it's very simple to administer and it gives great results."

Nevin Smith,
LARGE ANIMAL VET AND BEEF FARMER
GARVAGH, CO. DERRY

"If you lose a calf, that's about €500 down the drain, even after all the time and effort to save them. Locatim is the option to sort out an outbreak there and then, so get that 60ml dose into your calf as soon as possible after birth. A top shelf treatment for a bottom end problem."



Paul Cummins
LARGE ANIMAL VET
BALLINROBE, CO. MAYO



Cut out the losses, ask your vet for LOCATIM® today!

For more information on Locatim check out our websites:
www.locatim.co.uk / www.locatim.ie

An educational service from the distributors of **Locatim®. Locatim** contains Bovine concentrated lactoserum containing specific immunoglobulin G antibodies against E. coli F5 (K99) adhesion ≥2.8* log /ml. IE: POM UK: POM-VPS. Advice on the use of this medicine must be sought from your veterinary surgeon. Further information available from the package leaflet, SPC or from Forte Healthcare Ltd.

References: **1.** Brickell, J. S., McGowan, M. M., Pfeiffer, D.U., Wathes, D.C. (2009) Animal, 3. pp. 1175–1182. **2.** Morrison, S., Scooley, G., Barley, J. (2013) Veterinary Ireland Journal, 3. pp. 264-268. **3.** Murray, B. (December 2010) The Milk Producer, pp 26-28. **4.** Nussbaum O et al. (2022) In: World Buiatrics Congress 2022 abstracts. Madrid, Spain 4th-8th September 2022. pp204-5.

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