

# Calf Health Refresher

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**G**ood calf management requires a holistic approach to calf rearing including proper calf nutrition, appropriate housing, and good biosecurity measures.

## Within the first few hours of birth

The colostrum 123 rule: 'feed the first milk the cow produces, within 2 hours of birth and feed at least 3 litres', has seen a significant improvement in calf health. There is still room for further improvement by delivering good quality colostrum within the correct timeframe. Measure colostrum quality with a brix refractometer with a target of values of at least 22%. Antibody levels are highest when colostrum is collected immediately post calving (within 8 hours). Maximum absorption of the protective antibodies occurs within 2 hours of birth, reducing to 50% within 6 hours of birth. Collect and store colostrum hygienically to maximise antibody absorption. Gently reheat colostrum, to less than 50°C, to avoid destroying the antibodies.

A photograph showing a person wearing a blue glove milking a brown cow in a stable. The cow is positioned in a metal stall, and the person is using a milking machine. The background is dark, suggesting an indoor stable environment.

# 1

**USE COLOSTRUM FROM THE FIRST MILKING FOR THE FIRST FEED**

# 2

**GIVE COLOSTRUM WITHIN TWO HOURS FROM THE CALF'S BIRTH**

# 3

**GIVE AT LEAST THREE LITRES**

## Within the first few days

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Feed transition milk (milkings 2 – 6 after calving) for at least 2 days after feeding colostrum. Then feed whole milk or a good quality milk replacer, at 15% bodyweight, twice daily, for at least 4 weeks, following a consistent feeding schedule. Milk with antibiotic residues should not be fed to calves. Hygiene is important, as a calf's immune system is not fully developed, making them more susceptible to picking up infections. Feed calves in order of youngest to oldest and have a good system for cleaning feeding utensils, buckets, and stomach tubes or bottles. When the house is occupied, only dry disinfectants, such as lime should be used, as the use of water for cleaning increases the risk of disease transmission. A deep clean annually and application of a DAFM- approved disinfectant is an essential part of the hygiene routine. Visitors should not be allowed access to calf rearing areas and sick calves should be isolated.

## Within the first few weeks of life

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Have clean water, concentrate and straw (for eating), available from the first week of life for proper rumen development, growth rates and to prepare calves for a smooth weaning transition. Keeping too many calves in a house increases the risk of spreading disease. Adequate ventilation, but without draughts, is key. Using Yorkshire boarding as side sheeting is preferable to space boarding or vented sheeting. It provides draught free air into the shed without allowing in the rain. Farms with pneumonia problems, where an issue with the environment is suspected, should get advice on ways of improving ventilation.

## Identify and treat sick calves early

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The approach to treatment and control of scour is largely the same regardless of the cause. When a calf has scour, remove it from the group to prevent spread of infection. The fluids that are lost due to scour must be replaced to prevent dehydration. At the first signs of scour, additional good quality oral electrolytes mixed with the correct volume of water should be given, separately from milk feeds e.g. at lunch time and late in the evening. Scouring calves should still receive normal amounts of milk, if willing to drink, as it will not worsen the scour and is necessary to maintain body condition. Depending on the cause of scour, some additional treatments may be necessary under veterinary advice.

Preventing pneumonia by managing calves correctly is preferable to treating outbreaks. Early diagnosis is crucial to achieve a successful outcome. Early signs include dullness, increased respiratory rate, coughing, discharge from eyes and nose and high temp (over 39.5°C). A treatment protocol should be discussed with your own vet based on clinical examination and previous farm history. Vaccination is helpful to improve immunity to certain diseases and in the fight against antimicrobial resistance. Vaccines help in reducing disease severity, if administered correctly to animals able to respond appropriately to the vaccine.