**Cryptosporidiosis in calves**

Cryptosporidiosis is one of the most common causes of calf scour in the UK. It is caused by a parasite called Cryptosporidium and is usually seen in young calves less than six weeks old. Symptoms include diarrhoea, dehydration, loss of appetite, fever and abdominal pain. There are four species of the Cryptosporidium parasite which infect cattle, however Cryptosporidium parvum (C.parvum) is the most common species detected in calves less than six weeks of age. This species of Cryptosporidium can also infect humans.

Calves become infected with Cryptosporidium when they ingest C.parvum oocytes (eggs). These oocytes reside in the environment in bedding, pasture, soil and drinking water. They are very infectious, with only ten oocytes required to cause disease in susceptible calves. Considering an infected calf can spread billions of eggs, it is easy to see why the disease spreads so quickly on farm.

It is not only young calves with clinical signs of the disease, such as diarrhoea, that are shedding these oocytes into the environment. Infected calves at six to seven weeks of age may show no clinical signs of infection even though they can still produce oocytes. Adult cattle can also act as potential reservoirs for the C. parvum parasite, they can also shed oocytes but do not necessarily show any symptoms of the disease.

Currently there is no vaccine available and treatment options are limited. It is important calves suffering from the disease are isolated and remain so for at least one week after the scouring has stopped. This should prevent the spread of eggs to other animals. Rehydration of calves is key for survival, therefore feeding one to two litres of oral electrolytes two to four times a day is recommended. Halocur® is the only product licensed in the UK for treatment of calves. This drug does not cure the disease but should help to reduce the clinical signs and egg shedding. It is important to note this drug cannot be used on dehydrated animals and can be toxic if overdosed.

Incidences of cryptosporidiosis can be reduced on farm through good hygiene and animal management. It is important to ensure all dried faeces and other muck is removed from floors, walls and ceilings and that they are washed with an effective disinfectant. Other preventative measures include ensuring that cattle are regularly bedded down so that exposure to faeces is minimised, and that feed and water troughs are raised at least 0.75m off the ground to minimise contamination.

Newborn calves should receive at least three litres or 10% bodyweight of colostrum within two hours of birth, this will ensure the calf has a strong immune system to fight disease. Avoid overcrowding and mixing of calves of different ages, particularly those that are a few weeks older that are likely to be shedding the disease. Finally, if cryptosporidiosis is a regular occurrence on your farm each year, Halocur® can be administered for the first 7 days of life as a preventative treatment.

**AHDB Beef & Lamb recently hosted a teleconference with Sarah Thomson from the Moredun Research Institute on Cryptosporidiosis in calves and a recording of it can be found on the AHDB Beef & Lamb YouTube channel**, **Beef & Lamb TV**

**Sources:**