

## No.3 Uterine Health

### In the third article in our series examining ways to improve dairy cow reproductive performance we look at the importance of ensuring good uterine health.

Not surprising, anything that affects the condition of the uterus will have an impact on a cow's ability to rebreed, and the objective must be to return the cow's reproductive tract to a normal state as quickly as possible after calving. If the uterus is not clean due either to infection or retained material from a previous calving, the cow will not come cycling. If she does still cycle her ability to conceive may be compromised.

Metritis and other post-calving infections are known to reduce conception rates by up to 20 percentage points as well as delaying the return of cows to normal cycling behaviour. Many cows displaying abnormal or short cycles are the result of the effect of post partum infections on egg development in the ovary.

### Retained foetal membranes

The failure to expel the placenta within 12 hours of calving is termed retained foetal membranes (RFM) and in dairy herds the incidence should not exceed 8%.

RFM is commonly associated with twins, abortions, large calves, milk fever and dystocia. However, the major cause of RFM is stress in the week prior to calving. Specific infections including leptospirosis and IBR can also cause RFM.

As the expulsion of the membranes requires strong muscle contractions, anything that affects muscle contractions can result in an increased incidence of RFM. Milk fever can be a contributory factor. The extra adrenaline associated with stress also causes reduced muscle contractions

Although it is often difficult to pinpoint an exact cause, prevention is the best approach to reducing the incidence of RFM.

To help prevent the major causes, aim to:

- Avoid stress, particularly due to social factors such as social separation and/or overcrowding
- Dry cows off in the condition they should calve down in and avoid long dry periods
- Avoid excess energy in transition diets as this will result in larger calves and increased risk of dystocia
- Keep calving areas clean
- Ensure good hygiene measures when assisting calvings
- Ensure adequate levels of selenium and vitamins A and D to encourage strong muscle contractions
- Feed the correct balance of calcium and phosphorus in the dry period.

### Metritis

Any infection of the uterus is likely to increase the risk of delayed onset of ovarian activity and a greater risk of ovarian degeneration, the most obvious manifestation of which is cystic ovaries. The target incidence of metritis in herds is 10-15% but in UK herds often exceeds 50%.



Cows and heifers are highly susceptible to infection at calving as the immune system is suppressed. Until an infection has been cleared, cows will fail to show full

capability to cycle normally and conceive in a desirable manner.

As the aim is to avoid infection, high standards of hygiene should be maintained around calving time. Calving boxes can become reservoirs of infection. Calf cows in straw yards with plenty of clean straw and avoid overcrowding.

Watch fresh calved cows closely and consider having a special fresh calved group. Cows should remain in this group until ready to enter the main herd. A daily temperature check is an excellent means of monitoring fresh cow health as the sooner an infection is spotted the less severe the consequences.

Nominally a rectal temperature in excess of 103°F (39.4°C) is a signal that the cow has an infection with which her immune system is failing to cope and she needs help. It can also indicate the presence of RFM. Reproductive tract infections are the most likely cause of a sick cow post calving.

Reproductive system infections such as metritis usually give a temperature in excess of 103°F, and are often associated with an increase in the volume of vaginal discharge which usually has a watery consistency. As bacteria numbers increase the discharge will become more watery, smellier and will have a darker brown consistency.

Treatment needs to be aggressive and sustained until temperature falls below the threshold as the quicker the reproductive tract is back in good condition the quicker the cow is likely to conceive again. Cows should not receive manual vaginal examinations at this stage and attempts made to forcibly remove any membranes present, insertion of pessaries or infusions carried out may in fact delay recovery as all these actions will depress the cow's immune system further and compromise future fertility.

Treatment will usually involve antibiotics but may include vitamin complexes and appetite stimulants. However prevention through good hygiene is the most effective control measure.

To register for your free copy of our Pregnancies Drive Profit guide, please call Genus ABS on 0870 900 1270 or email [cs@genusbreeding.co.uk](mailto:cs@genusbreeding.co.uk)