



### February is all about Milk!

As ever, our industry finds itself having to counterbalance the environmental, health and far-fetched media slurs about milk and meat production even more than usual at the start of the year.

So alongside supporting #Februdairy on our social media, it seemed a brilliant time to discuss some of the aspects of milk that matter to us on farm – Colostrum, Milk Feeding and Milk Fever:



# #ColostrumIsG**4**Id

Despite a wide range of appearances, Colostrum is not all made equal. When we harvest Colostrum, it can look thick and a lovely yellow colour but both good and poor quality colostrum can look the same so we need to find a way to test it before using it.

Colostrum not only provides antibodies that form the main part of the acquired immune system but it is also high in fat and protein to support heat regulation and energy in the first few days of life.

## 3 Qs of Colostrum:

#### Quality

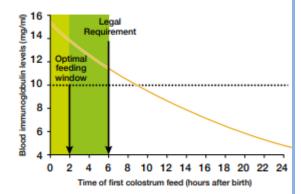
- 22% or above specific gravity equates to 50mg/ml of antibodies. This colostrum is considered good quality for feeding and to store in the freezer for up to 1 year
- Refractometers are a very simple way of testing quality and uses only a droplet on the slide and can be done anywhere on farm. Order one from us at the office
- 20%
  30 = 10
  25 = 25
  20 = 20
  15 = 15
  10 = 10
  5 = 50
  0 Brit %
- Hygiene is also very important as bacteria multiply at extremely high rates in colostrum and this directly impacts the absorption of antibodies. Make sure collection and feeding containers are immaculately clean and you have enough space to store colostrum in fridges and freezers

#### Quantity

- 4 litres of Colostrum or 10% of their bodyweight
- As new-borns are 60% efficient at absorbing antibodies, we need to allow for this when we feed colostrum. By feeding 10% of bodyweight we can still reach our target and provide good energy
- If colostrum on your farm consistently falls below 22% target or insufficient volume then speak to us about adjusting dry cow management to promote better colostrum production

## Quickly

- First feed within 2 hours of birth, legally within 6hrs
- A calf needs to suckle for 20 minutes continuously to get 4 litres colostrum in its first feed
- You can see from the graph that the absorption of antibodies starts to decline from birth. Milk antibody levels also start to decline from the point of calving as well, so early feeding is vital to protect calves



Newborn calves and lambs fed sufficient colostrum reduce their

risk of pneumonia and mortality by over half. It also provides other nutrients, including: vitamins A, D and E which increase the absorptive and digestive capacity of the gut; enzymes and proteins which suppress growth of certain bacteria. Having a simple system that is easy to follow in place means colostrum management will be a success so think about containers, cleaning facilities, fridges and freezers today.

#### Milk Fever - A Refresher!

Most farms rarely see a case of Milk Fever now through carefully managed dry cow rations and partial DCAB but when we do get cases they often tend to be refractory (get up and then crash again). Once cows have been down for extended periods of time they often develop secondary Downer Cow Syndrome. This results in long term muscle and nerve damage and frequently has a very poor outcome.

Prevention and causes: The analysis of all forages in advance of feeding to provide a low calcium and low potassium ration for a partial DCAB should reduce the number of cases. Heavy use of straw to increase DMI with correctly balanced dry cow rolls is a simple way to consistently feed dry cows throughout the year. Farms that feed calcium rich grass silages, continue to graze close-up dry cows or have an ageing herd increase the risk of cases. Sub clinical milk fever may be present on more farms than we think with strong links with retained foetal membranes/cleansings (RFM) and early lactation mastitis (poor teat sphincter closure).

Cows that are at high risk of Milk fever due to age, lameness, or on a known calcium rich ration can

be given oral calcium boluses to prevent milk fever and save hours of time managing a down cow. One bolus is given at the first signs of parturition and the second immediately after calving.



**<u>Treatment:</u>** Cows need an IV bolus of Calcium at 1g per 45kg bodyweight. Whilst a 400ml bottle of Calciject 5 (contains 11.9g calcium) was fine for a 535kg cow, most cows are now an average of 650-750kg bodyweight so we need double the volume. This needs to be administered through a new needle and flutter valve set over 10 – 15 minutes. To supplement this IV treatment, an oral bolus given into the rumen raises blood calcium for around 24 hours. As long as there is fluid in the rumen, the bolus will dissolve at the correct rate and be absorbed into the blood stream. Oral boluses should not be used prior to IV treatment to stop risk of aspiration – once the cow can swallow, an oral bolus can be administered safely. Another bolus can be given 12 hrs later if required. Regime:

- 2 x 400ml Calciject 5 into the vein
- Once swallow reflex returned 1 Oral bolus
   +/- bolus 12hrs later

Latest Research: We know now that the use of Calcium under the skin negatively impacts recovery. In some cows the calcium remains under the skin and can be seen over 48 hrs later – slow heart rate and poor peripheral circulation means it is not absorbed at all. If it is absorbed, then it reverses the Calcium demand from bone and cellular matrix by negatively feeding back to the Parathyroid Hormone system (PTH) that mobilises calcium from the skeleton. This is often why cows appear to relapse after initial IV treatment if they have not started eating considerable amounts of high calcium milker's ration by this point. It is a small change to stop under the skin Calcium but one that has been beneficial to outcomes.

**Vaccine Reminder** Don't forget to order Lepto vaccine and Huskvac oral vaccine early this month ahead of turnout! Orders are being taken now for first and second doses and boosters.

#### **Vet Tech Milestone!**

It is a full two years since Flick moved from her role in the office support team to developing the VetTech service on farm. The VetTech service is constantly growing and adapting to farm needs especially with an increased level of requirements from milk buyers and RedTractor schemes. Some of our newer services include:

- Parasite control planning planning parasite management and POM-VPS products
- Clover friendly flies a native species that reduces the population of nuisance flies
- Calf weighing services to monitor calf performance
- ROMS accredited Mobility Scoring a vital role for lameness management Speak to us about what VetTech services might be useful to your farm system





