



February is all about Milk!

We have finally made it through January and whilst the weather isn't perfect, spring is coming and calving and lambing is upon us. #Februdairyis a great time to refresh our farm level management of colostrum for dairy and beef calves:

#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

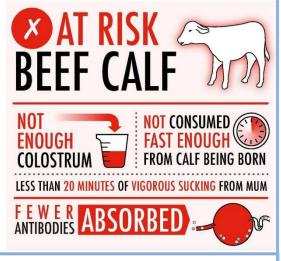
Hygiene is also very important as bacteria multiply at extremely high rates in colostrum and this
directly impacts the absorption of antibodies. Make sure collection and feeding containers are
immaculately clean and you have enough space to store colostrum in fridges and freezers – freezing
flat in zip lock bags then allows for maximum storage capacity

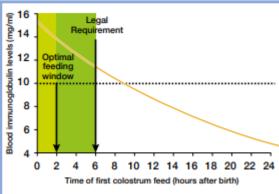
Quantity

- 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 for new born animals.
- If colostrum on your farm consistently falls below 22% target or there is 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 rapidly from birth. Milk antibody levels also start to decline from calving as well, so early feeding is vital to protect calves. This means that leaving the colostrum in the cow until ready to feed is not a good idea. As soon as she calves, milk production will dilute down antibodies and the antibodies degrade so harvest and feed as soon as you can within 6 hrs





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. As we head into spring and the peak calving window this is certainly when we find a lift in cases

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. There are feed supplements available such as X-Zelit that bind calcium in feeds that are higher in calcium making it a far less risky forage to feed which is an option if forages are tight.

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). If the prevalence of these diseases is

rising, we need to look backwards into the dry period and transition rather than at the fresh group for answers.

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. **Treatment:** 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 IV 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. If 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

<u>Latest Research:</u> 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

Reminder Beginners Lambing Course

There are a few spaces remaining on the Beginners lambing course – great for novice lambers or those wanting a refresher. **14**th **of February 2024 2 - 4.30pm, Hartpury University.** Call the office to book in.

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