

Farm First Newsletter January 2019

A Free and Simple Way to Keep New-born Lambs and Calves Alive

The first few hours of any new-born's life are the most important to ensure survival and will influence its long-term health and productivity. There are many products on the market claiming to "increase vigour" or "boost immunity" but we all have the gold standard product on our farm, that will fulfil all of these claims, and it doesn't cost a penny.... COLOSTRUM. Unfortunately, colostrum is often overlooked, yet it is the one thing we absolutely need to get right. New-born calves and lambs are born with NO immunity – therefore if they receive no colostrum then they have no antibodies to fight infections such as *E. coli* and pneumonia.

What is colostrum: Colostrum is the first milk produced after giving birth and it contains several important components including energy, laxatives, proteins, fat and vitamins. These ensure that the new-born has a source of energy and is able to absorb immunoglobulins across its gut safely.

Immunoglobulins (IgG, IgA and IgM) are maternal antibodies which are found in very high levels in colostrum. They are made by the mother when she has met diseases either naturally or by vaccination i.e. clostridial disease, rotavirus, *E. coli*. Immunoglobulins are able to cross from the new-born's gut directly into its blood stream for the first few hours of life, providing protection against the same diseases that the mother has experienced. Once the gut has "closed", at approximately 24 hours old the immunoglobulins can no longer cross.

Rules of colostrum feeding (The Qs)

Quantity To ensure new-borns receive enough maternal antibodies/immunoglobulins they require a certain amount of good quality colostrum. Both lambs and calves should get **10% of their bodyweight** i.e. 40kg calf needs 4 litres and a 4kg lamb needs 400ml of colostrum. A good way to check is to feel the sides of a calf before and after it has been tubed with 4 litres of colostrum, so that you know how "full" it feels for use as a guide in future. The same can be done with a lamb. If a mother doesn't have enough colostrum, frozen or artificial colostrum should be used to supplement it.

Studies have shown that if a calf has had an assisted birth it has a poorer suck reflex and is more likely to receive inadequate colostrum. Therefore, extra attention to colostrum management is required after an assisted birth, including after a c-section.

Quickly Colostrum should be fed as soon as possible after birth, certainly within 6 hours of birth. The required volume can be given in split feeds. The new born should suck the required amount, but if the calf or lamb refuses to suck the volume, then it should be given by a stomach tube. Please ask us for a demonstration on how to do this safely.

"Qu"early/Cleanly Colostrum must be given cleanly. Firstly, the calving/lambing pen this should be well bedded to reduce contamination. The teats should be wiped and dipped before the calf sucks and any equipment used to harvest colostrum should be washed and disinfected. Discard the first squirts of colostrum. A good rule of thumb is that if you aren't willing to drink out of the container yourself, why would you let a new-born with no immunity do so!!

Quality Poor quality colostrum will not provide the new-borns with the antibodies or nutrition that they need.

It is important to get the ewe's or cows nutrition right to ensure they produce good quality colostrum.

Monitoring Intakes We can blood test calves/lambs between 1-7 days old to check that they have absorbed adequate colostrum/antibodies using a refractometer (pic). It is a useful indicator of the success of colostrum feeding protocols. We regularly do this on many of our dairy farms and beef and sheep units would also benefit from this.

Suckler Cow Nutrition

With spring calving roughly three months away a key question for beef farmers right now is "what is the body condition scores of my pregnant cows and what is my planned feeding between now and calving going to do to that condition score?" The aim of the game is to avoid both fat cows with calving and calf viability problems and lean cows with potential problems for colostrum quality, milk supply and future fertility.

The table below shows metabolizable energy (ME) intake for a spring calver (650kg) eating ad lib, that is 1.5% of her live weight (9.75kg dry matter/day) at different silage qualities:

Silage ME (MJ/kgDM)	ME intake per day	Daily live weight gain (kg / day) excluding calf weight
10	97	+0.3
10.5	102	+0.42
10.8	105	+0.52

Some key take home messages from all of this are as follows

- All these cows are gaining weight if allowed to eat ad lib, good for a few very thin cows, but bad for the majority!
- One unit of body condition score is about 85kg for a cow of this size, therefore throughout a winter some cows could gain a whole-body condition score.
- Because of higher silage intake potential, cows fed restricted silage will finish it up earlier in the day, giving the appearance that they are not being fed enough, even though they are.
- Even when restricted silage is being fed, some dominant cows will eat more and closer to ad lib.
- First calved heifers are likely to be the shyest feeders, have the lowest feed intakes and actually the biggest feed requirements as they are still growing.
- This time of year is a good time to body condition score some spring calving cows to make sure they are still on target to calve down at a target score of 2-2.5.
- An excellent clip on body condition scoring produced by QMS can be found at the enclosed link: https://www.youtube.com/watch?v=i_vlJ39ZARs
- Do you need to re-group your cows and heifers based on parity and body condition score to ensure that the optimum body condition score at calving is achieved?
- If not done already it is essential to get this year's silages analysed to know what you are feeding and how much to feed.

Farming Connect Clinics

Are you doing all you can to make your business more efficient... more profitable...more prepared for the future? Why not tap into the support and guidance available through Farming Connects **FULLY FUNDED** on-farm clinics? You can apply to Farming Connect for FULLY FUNDED one-to-one on-farm clinics with us (value up to £250). Clinics will be allocated on a first come, first served basis this winter and can look at **Calf housing and calf health issues** or **Responsible and effective use of medicines**. This could look at parasite control, reducing or preventing any type of disease on your farm, or updating your health plan. In addition, sampling, testing and one-to-one feedback from us is available through the Farming Connect Animal Health voucher. You will be entitled to £150 towards the cost of analysis. For further information ring us or visit www.gov.wales/farmingconnect

Joke for January

A small boy came running out of the bathroom in tears. "What's the matter?" asked his father. "I dropped my toothbrush in the toilet "Okay, don't worry, but we'd better throw it out." So, the father fished the toothbrush out of the toilet and put it in the garbage. When he returned, the boy was holding another toothbrush. "Isn't that my toothbrush?" the father said. "Yes," said the boy, "and we'd better throw this one out too, because it fell in the toilet four days ago."