

# Farm Animal Practice News

Langford Vets 

 University of  
BRISTOL

Farmer  
Winter 2023/24

## Welcome to the Farm Animal Practice

This year's mild and wet (and occasionally flood-level wet) autumn brought its own unique challenges, be it getting the harvest in-between downpours, fending off the slug attacks on crops or just trying to navigate the roads on some days!

As ever, people seemed to work their way round the problems that the season threw at them and we were pleased that none of the vets got washed away in a flood, though myself and a car full of students did have to don our wellies and push a van out of a flooded road on one day; we all felt very virtuous and well prepared with our wellies and waterproofs to hand (even though I did discover the hole in my wellies at that point)!

Through the Autumn we have been kept busy with ongoing TBAS (TB advisory service) and AH&WP (animal health and welfare pathway) visits, as well as the usual upturn in TB testing at housing and of course a bit of Christmas - related socialising; it was good to see so many of you at our Christmas evening fundraiser. This raised £210 which was matched by Langford vets, totalling £420 for Dementia UK - thank you.

As we look forward through the winter months and the busier spring months ahead we are pleased that our new vet Liz has joined the team (see staff update), I'm sure some of you will have met her by now. We are also arranging our 2024 client events, in particular our practical lambing/unpacking day (also see later in the newsletter!), and so hope to see a number of you at those at least in the coming months.

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**Opening Hours:** Mon - Fri 8.30am - 5pm

**Telephone:** 01934 852 650  
**24 hour emergency cover**

**Email us:** farmpractice@langfordvets.co.uk

**Web:** langfordvets.co.uk/farm

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## Milk Powders - Part Two

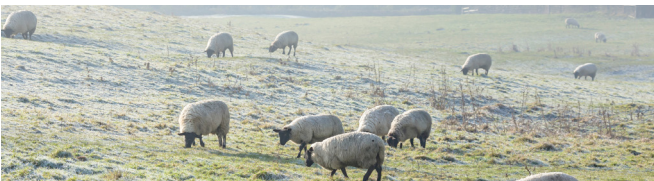
In the second part of our series on milk replacers, we will discuss how much milk to feed, when to wean and other factors to consider. If you missed the last article, it is available on our website in 2023's summer newsletter for farmers.



Firstly, how much milk should we be feeding? Calves should be fed 15-20% of their body weight as milk. Calves will range between 35-55kg when born depending on breed meaning just feeding 2L twice a day is unlikely to provide enough nutrition. These requirements will further increase as calves grow. Aiming for 3L twice a day is a good starting point. There is a very handy guide for how much milk powder you should be feeding calves found on the AHDB website based on the exact constituents of the milk powder you are using.

[www.ahdb.org.uk/calf-milk-replacer-energy-calculator](http://www.ahdb.org.uk/calf-milk-replacer-energy-calculator)

Lambs when born typically range between 4-6kg. We tend to feed any bottle lambs 1-1.5L a day split across several feeds. Traditionally, calves are fed twice a day whereas we feed lambs more frequently with 4-5 feeds per day. This differs partly due to the risk of bloat being higher in lambs, but also the different volumes required. Legally, calves that are younger than 4 weeks old must be fed more than once a day and lambs need to be fed milk until they are at least 4 weeks old.



Another factor to consider is the feed conversion ratio. Ruminants are most efficient in converting their energy into growth when they are young, and this can be up to 50% efficiency. This efficiency decreases as their rumen develops and they age. Therefore, it is best to try and maximise the growth rate when calves are younger as it is more efficient. So, it could be worth spending the extra money on milk powder

when they are young! How this milk powder should be fed is an on-farm decision about what is practical for you. Any system using a teat is preferable to buckets. This is because it mimics the more natural way calves and lambs would feed from the teat. When they suck on a teat, it results in the oesophageal groove forming. This is a channel that bypasses 3 of the 4 stomachs ruminants have. This takes it straight to the abomasum where the milk clot is formed, and it is digested.

Drinking from a bucket means milk enters the rumen making acidosis and bloat more likely. Automatic milk feeding systems can work well providing there is good hygiene and equipment is cleaned frequently along with good monitoring for disease. When to wean varies substantially between calves and lambs. Lambs are very prone to bloating that can be very painful and lead to sudden death. This means we abruptly wean them when they are at least 35 days old. Prior to weaning, lambs should be eating a minimum of 200g/day of creep feed. In calves, stepped weaning is best with gradual changes when around 2 months old. Aim for calves to have doubled their birth weight by the time they are weaned with a target daily growth rate of 0.8kg/day. Hopefully, you have found this useful and it has given you some food for thought. Join us for the last part of this series in the next quarter about feeding everything else other than milk.

## Staff Update



A huge welcome to our new vet Liz, who graduated from Bristol in 2021 and is very much looking forward to returning to the area to join the Farm Animal Practice. Since qualifying, she has spent 2 years working in farm practice with a diverse client base across Wiltshire and Hampshire, as well as some teaching within the RVC farm rotation. Outside of work, she enjoys walking her two rescue dogs, Remi and Bruno, and is a novice gardener.



## Colostrum - are they getting enough?

Cattle, sheep, goats and camelids all rely on passage of immunoglobulins through the first feeds after birth for immunity to the bugs they will come across in the first weeks of life. This is known as "passive transfer". The immunoglobulin created by the dam and passed to the offspring will be relevant for their surroundings; whatever viruses or bacteria may be present in the environment of the farm they are in.



Failure of passive transfer can lead to a higher incidence of neonatal disease in young animals; for example scour and pneumonia, and in worst cases septicaemia which could lead to death.

**It is useful to have a protocol in place to ensure all newborns receive enough colostrum. An easy way to remember the essentials is to follow the '5 Qs':**

- **Quantity:** A newborn needs to consume 10% of its bodyweight within 4-6 hours of birth; this equates to 4L of colostrum for a 40kg calf, 700ml for a 7kg cria, etc. This should be followed a further 5% in the 6-12 hours after birth. A calf needs to be suckling continuously for 20 minutes to achieve this. If you are unsure that they have drunk enough, provide extra fresh, frozen or powdered colostrum using a bottle or stomach tube.

- **Quality:** Only feed good quality colostrum, containing at least 50g/l of IgG. This can be measured in fresh colostrum using a colostrometer or a BRIX refractometer (BRIX readings should be >22). Poor quality colostrum should be disposed of and not fed or frozen. Powdered colostrum is a good alternative if no fresh is available, but the quality can vary greatly by brand - check which brand you are using with a vet, as it may be worth switching to an alternative product. Goat and alpaca specific powdered colostrum isn't available, but products suitable for sheep and cattle can be used.

- **Quickly:** Colostrum should be given as soon as possible after birth, ideally within 2 hours, so that

the animal is protected from infection. The gut can absorb the large molecules in colostrum for a short period after birth, but this soon starts to close. The best absorption is within the first 6 hours of life, with very little absorbed by 24 hours. The antibodies in colostrum fed after this time will still provide some local protection within the gut, but will not be absorbed into the animal's blood stream. The quality of the colostrum produced by the cow also decreases over time after birth.

- **sQueaky clean:** Ensure all equipment used to feed colostrum is cleaned after each use. Wash items using warm soapy water, but not hot water, as hot water can cause the proteins in the colostrum to stick to the inside of feeding tubes, etc. allowing bacteria to grow. Ensure colostrum is collected hygienically, whether feeding it immediately or freezing it - it is full of nutrients for the calf, which is also a great food source for bacteria... at room temperature, the number of bacteria in colostrum will double every 20 minutes! Fresh colostrum should be used within an hour, frozen colostrum can be kept for up to 12 months; defrost it in warm water to bring it up to 35-40°C, and never use boiling water or a microwave! Spare colostrum should be labelled with the dam ID, quality and date of collection before freezing. Raw colostrum from several dams should not be pooled as this is a risk for spreading Johne's disease.

- **Quantify:** Make sure your animals are receiving enough antibodies by measuring the quality of the colostrum as described above, but we can also assess the immune status of the animals. This is done by collecting a blood sample between 24 hours & 7 days. We can do this testing quickly and easily in house - either by testing for total proteins, which gives a good approximation, or **we can test more accurately using our new IgG antibody analyser which is available for calves, crias and foals.**

Good colostrum management is essential in getting the right start for any animal and protecting the future of your herd or flock - which is why it is known as 'liquid gold'! Recent research has even shown that good levels of passive transfer in dairy calves can significantly improve their first lactation yield, and that the benefits continue to improve with increasing levels of antibodies, ie. it is worth ensuring that each animal receives as much colostrum as possible, and not just the minimum amount. Please speak to one of the vets about colostrum monitoring or to develop a colostrum protocol for your animals.

## BVD testing in youngstock

Bovine Viral Diarrhoea (BVD) is the most important viral cattle disease in the UK costing the industry between £14-36 million per year. The Red Tractor assurance scheme now requires all cattle owners to have a BVD testing and control plan in place.



Clinical signs may not always be present, so it is important to use screening tests such as bulk milk tank antibody or antigen tests which many farms may already have in place. Although this is a good surveillance test of an adult dairy herd, this is of course not applicable to beef herds and does not give any information about the exposure of youngstock, who may be the ones grazing further from home... or more likely to escape into a neighbour's field!

It is recommended to perform a yearly blood test on unvaccinated youngstock (aged 9-18 months) to monitor antibody levels, indicating whether the animals have been exposed to BVD in recent months. This test should not be performed earlier than 9 months as maternal antibodies (from the colostrum) can interfere with the results before this.

Spring/summer calving herds may want to consider testing their youngstock in the next few months (in order to have animals in the eligible age bracket) and you can apply for funding through the Animal Health and Welfare pathway's disease eradication and control program.

Farmers can apply for financial support to help with diagnostic testing, veterinary advice, vaccination, and management planning associated with BVD. Learn more at:

[www.gov.uk/government/publications/animal-health-and-welfare-pathway/animal-health-and-welfare-pathway#cattle-beef-and-dairy](https://www.gov.uk/government/publications/animal-health-and-welfare-pathway/animal-health-and-welfare-pathway#cattle-beef-and-dairy)

## Bluetongue

Ongoing outbreaks of Bluetongue in northern Europe and a number of isolated cases in the UK mean all livestock keepers should be aware of the clinical signs associated with this disease. Blue Tongue virus (BTV) is a notifiable viral disease that can affect cattle, sheep, camelids, goats and deer.

This disease is spread by biting midges and originally was only found in warmer climates especially across Europe. However, in recent times, these midges have been blown over the English Channel and several cases of BTV have been found in the UK in recent months.

It is important to note that transmission is not typically seen from direct contact with infected animals. Sheep are more likely to show more obvious clinical signs, however all species will present with ulcers in mouth and nose, discharge from eyes, drooling from mouth, swelling of lips, neck, head and coronary band. Other less specific signs maybe lethargy, redness of mouth, eyes, nose and skin above hoof, difficulty breathing, nasal discharge, fever and abortion.



Calves can be infected whilst within the womb and can be born small, weak, deformed or blind and can die within a few days of birth. The main prevention in the UK includes surveillance and culling of known cases. A BTV vaccination is available (covering the serotypes 1, 2, 4 and 8) but this does not cover serotype 3 which is one of the strains active in Europe currently.

If you have any concerns or queries about the disease or prevention, please contact the practice from a discussion with one of our vets.

## Practical Lambing & Alpaca Birthing Course

20 January 2024 - £126 inc VAT - 20% discount for young farmers

**Book online now:** [www.langfordvets.co.uk/events](http://www.langfordvets.co.uk/events)