All the latest news and advice from our expert team

Farm news

February 2024

Getting off to a good start: Colostrum for lambs

Lambs, like other ruminants, are born with no antibodies and rely on the passive transfer of antibodies from the ewe to the lamb via colostrum. This must take place within the first few hours of life, as the ability of the lamb to absorb these antibodies from the gut rapidly declines after birth.

Ingesting sufficient colostrum is vital to provide the lamb with essential immunoglobulins and to protect against clostridial and other diseases, depending on the ewe's vaccination status. If insufficient or no antibodies are absorbed, lambs are at a significantly increased risk of death and disease during the pre-weaning period.

Risk factors for partial passive transfer (insufficient antibodies absorbed) or failure of passive transfer (no antibodies absorbed) include:

• Assistance with colostrum feeding – not supplementing with enough colostrum
• Ewes not at target body condition
• Inadequate pre-lambing nutrition (protein and energy), which results in reduced colostrum yield and quality; it also reduces the mothering ability of the ewe. Blood sampling and body condition scoring ewes two to three weeks before lambing is useful to assess the adequacy of nutrition in late pregnancy.

How much?

Make sure lambs receive 200ml of colostrum within two hours of birth. In 24 hours, a newborn lamb must receive the equivalent of 200 ml/kg body weight in colostrum.

For example, a 5 kg lamb needs 1 litre of colostrum in the first day of life.

After six hours, the lamb's ability to absorb the immunoglobulins into its bloodstream has reduced, which is why it is important to get colostrum in quickly.

The primary immunoglobulin in colostrum is immunoglobulin G (IgG). Its concentration in milk decreases rapidly after parturition, at approximately 3.3 mg/ml per hour, diminishing to zero by about 23 hours post-lambing.

Colostrum quality can be tested using a Brix refractometer and should be 26.5% IgG for lambs.

Replacing colostrum

Artificial colostrum is designed as a supplement, not a replacement for ewes' colostrum and should only be used as a last resort.

If the dam's colostrum isn't available, the alternatives in order of preference are:

1. Colostrum from another ewe in the flock
2. Pooled cows' colostrum*
3. Artificial colostrum

*The colostrum of certain individual cows has been found to contain antibodies which cause sheep red blood cells to break down. Pooling the colostrum can reduce the risk.
If you farm cows as well as sheep, ideally use their colostrum as it will contain IgG to your farm-specific pathogens. If using colostrum from another herd, make sure the donor cows are healthy, screened for Johnes disease and vaccinated with a standard clostridial vaccine.

Storage, defrosting and heating of colostrum

Fresh colostrum must be used within one hour or stored in the fridge or freezer. Colostrum will keep in the fridge (4°C) for up to seven days and it can be frozen (-18 to -20°C) for six months.

Top tips:

• Harvest with clean hands or gloves and use clean containers. An udder pump like the Udderly EZ hand pump can make things much easier.
• Label containers with the date of collection.
• Store in small amounts for ease of defrosting (it cannot be refrozen).
• Defrost and heat in a warm water bath – using a microwave or boiling water will damage the antibodies.
• Do not heat above 40°C as temperatures above this will cause deterioration in the protein in the colostrum, destroying the antibodies.

This article is based on AHDB's 'Colostrum management for lambs' article.

A New Arrival!

Our vets George and Anca announced the safe arrival of their baby girl Olivia Maria on 17th January. We're absolutely delighted for them and send them huge congratulations!

Here's Olivia starting as she means to go on - surrounded by farm animals!

Breeding season is coming! Are you ready for it?

Francesco Leone DVM MRCVS

This month we would like to remind you about the importance of a fertile bull and the bull breeding soundness evaluation (BBSE).

What is the BBSE?

For the date performed, the BBSE provides information to assess a bull's breeding potential. Basically, a BBSE aims to identify whether or not an examined bull is able to produce an adequate number of normal spermatozoa and possess the ability to deposit these sperm into a cow.

For a bull to successfully breed cows he must be able to:

- maintain an appropriate body condition,
- identify females in oestrus,
- deliver fertile semen into their reproductive tract.

Thus, a BBSE has to consist of thorough physical, reproductive tract, and semen examinations to establish if the examined animal is able to achieve that.

Why does the BBSE need to be performed?

It is true that few bulls are in fact completely sterile, but the percentage of subfertility can be up to 20 – 40% in groups of bulls. Also, studies have shown that young bulls under 15 months of age and bulls over 5 years are more prone to underperforming, and those can increase the number of barren cows or extend your calving period leading to heavy economic losses. The goal of the BBSE is to identify those bulls that are sub-fertile so they can be removed from the herd.

We want to ensure that a breeding bull is capable of getting at least 94% of 40-50 cycling cows in calf over a period of 9 weeks. 60-65% of those cows should calve within the first 3 weeks of the forthcoming calving season.

What we are trying to achieve?

Having a short calving pattern will allow you to achieve a uniform group of calves and increased weaning weights. Moreover, such a calving pattern will concentrate your labour costs associated with your calving season over a shorter period of time.

What is needed to perform the test?

- a crush that suits the bull's size and allows the vet to reach the genital area to inspect it safely and collect the semen,
- an access to mains electricity power in an undercover area where the vet will set-up a laboratory (possibly a room),
- enough number of staff members to safely move the bull.

Additional benefits

Once the test is complete, the vet will issue you a certificate if the bull passes. If you wish to sell the bull this can be used as proof to increase the sale value and certify the bull's fertility performance on that day.

Remember we are here to help you to achieve the best results for your farm!

Medicine Matters

Carolyn Baguley MA VetMB CertAVP(Cattle) MRCVS

Due to fluctuations in product availability or cost, we sometimes change our preferred supplier of a particular medicine, which means a change of brand name. We try and strike a balance between getting you the best price, and not making things too confusing with constant name changes!

Sometimes we keep calling the new product by the old name, and eventually the original product makes it back onto our shelf. This year we've switched our preferred brand of ketoprofen back to Ketofen from Ketodolor. I never stopped calling it Ketofen so I'm quite relieved.

Our flunixin brand, however, is currently Allevinix which has replaced Finadyne (for now, at least!).

Worming at lambing time (Chris Daykin BVSc MRCVS)

It has been commonplace to worm ewes around lambing, as the immunity of adult ewes to gut worms temporarily relaxes at this point. This decrease in immunity leads to more worm eggs being passed out in the faeces, contaminating pasture that is then grazed by lambs, leaving them at increased risk of parasitism later in the year. The 'periparturient rise' in worm egg output from the ewe typically starts around 2 weeks before lambing and lasts until around 6 weeks after lambing.

To suppress worm egg output from the ewes during this period, people have traditionally either used three treatments without persistent activity, or a single long acting moxidectin 2%*.

This strategy, however, can be highly selective for anthelmintic-resistant worms.

To prevent the build-up of anthelmintic resistance, we would advise that at least 10-20% of the flock – the strongest, fittest 10-20% - be left untreated at lambing, thus reducing selection pressure for resistant worms. Ewes with a lower body condition score, or those with a lower protein diet, are more likely to benefit from worming due to their lower immunity (we know that protein status in late pregnancy is correlated with worm egg output, and this can be monitored by pre-lambing bloods). In a strong flock where the ewes are all in good body condition, it might be that much more than 10-20% can safely be left untreated. Regular worm egg counting during this risk period for the ewes is a great way to If monitor the worm burden in your flock.

As underdosing is a major risk in anthelmintic resistance, we recommend dosing accordingly to the heaviest ewe. You can find out more about this, and other SCOPS principle, at scops.org.uk.

*If moxidectin 2% has been used, it must not be used again in the same year, including for treating scab.

Farm and Equine Centre
Markeaton Lane, Markeaton, Derby DE22 4NH
01332 294929

Alfreton 01773 304900
Allestree 01332 554422
Hilton 01283 732999
Langley Mill 01773 304914
Mickleover 01332 518585
Oakwood 01332 666500
Pride Veterinary Centre 01332 678333
Shelton Lock 01332 700321
Stapenhill 01283 568162
Stretton 01283 565333
Wollaton 01159 676586