

Importance of Colostrum for Lambs

Colostrum (beestings) is the first milk that is produced by ewes during late pregnancy. It has a number of very important functions including providing passive immunity to new born lambs through the antibodies it contains. If fed early enough these antibodies are absorbed into the blood supply of the new born lamb. This will enable the lamb to build a passive immune system which will wane over the following 3 – 12 weeks of life. (At this point vaccinations may be necessary for the lamb). Colostrum also acts as a laxative in cleaning out the digestive tract of the new born lamb and provides the lamb with the early nutrients required for life. Booster vaccinations (e.g. for clostridia diseases) are best given to the ewe in late pregnancy so that antibodies to these diseases are contained in the colostrum.

The target intake of colostrum for new born lambs is 5% of bodyweight every 6 hours for the first 24 hours giving a total of 20% of bodyweight in the first 24 hours. So for a 5kg lamb this will mean 4 feeds of 250ml colostrum which may be given by stomach tube. This can appear as a large quantity to administer to a young lamb but they will easily take it once they are that weight. The volume can be reduced accordingly for lighter new born lambs.

There are a number of options for supplying colostrum at lambing time. Ewe colostrum can be kept from ewes that have single lambs or have lost their lambs. This can be stored in the fridge and will keep for up to 6 weeks. Alternatively it can be frozen in which case it will keep for 6 months. If you know a friendly dairy farmer who can supply some bovine colostrum this is also a viable option. Ideally the cows whose colostrum is being used should have been vaccinated against clostridia diseases prior to calving though this is not always possible. Cow's colostrum is more dilute than that of sheep; therefore the feeding rate must be increased by 30%. It is recommended that colostrum from a number of cows should be pooled. Also herds that have Johnes disease should be avoided as this can be transmitted from cows to sheep via colostrum.

Finally there are colostrum substitutes – there are a number of commercially available ones available. Many of these products are made from whey and bovine milk based products and have no antibody content. The immunity passed on to the new born lamb is therefore very limited. Some products on the market contain a proportion of dried bovine colostrum. These may provide some protection against organisms such as Ecoli etc., but the protection afforded to lambs is likely to be very small if it occurs at all.

Care should be taken when thawing frozen colostrum. Do not heat above 40°C as temperatures above this will cause deterioration in the protein in the colostrum destroying the antibodies. Colostrum should be stored in small containers (200ml) and thawed by placing it in warm water.

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