Avoiding the pitfalls to give lambs the best start in life

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A great deal of care and effort goes into successfully rearing a healthy lamb from birth to slaughter. In order for this to happen as economically as possible, there are a number of potential pitfalls that must be avoided along the way. Since prevention is almost always cheaper than treatment, the wise man will focus on getting husbandry, nutrition and biosecurity sorted as a matter of urgency.

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The strength and viability of a new-born lamb will be determined by the health of the ewe during pregnancy. It is essential that the ewes nutrition (especially in the latter third of pregnancy) is carefully calculated to provide the adequate energy, protein and trace elements required to support the growing foetus and maintain the ewe in reasonable condition. Scanning ewes to enable managing singles and triplets in separate groups will not only help minimise twin lamb disease but also avoid the overfeeding of singles (and barreners).

Abortion in ewes

Several diseases that classically cause abortion in ewes are also capable of causing the birth of weak or still born lambs. One such disease would be borders disease, which classically is seen as 'hairy shaker' lambs. Advice should be sought from your vet if you see these for the first time, as it can quickly become endemic within a flock. Lambs born weak due to disease/malnutrition of the ewe will struggle right the way through to slaughter, so looking after your ewes pre lambing is essential.

At lambing time, husbandry practices are key to preventing disease outbreaks. Simple measures such as keeping pens clean and ensuring adequate colostrum intakes will all help to boost lamb immunity and reduce the inevitable disease challenge around them. Both watery mouth and navel ill are diseases associated with inadequate colostrum intake, poor hygiene and/or high stocking density.

A pint of colostrum in the first six hours of life and another pint within 18 hours of birth will get lambs to a good start.

The importance of early and adequate colostrum intake should never be underestimated. Every lamb should receive two pints (one litre) of colostrum in the first 18 hours. Half of this (one pint) should be in the first six hours of life, split between two feeds. All navels should be dipped in an iodine based solution as soon as possible after birth, and ideally again at 24-48 hours. Stress also causes a drop in immunity so docking, castration, vaccination and turn-out all at the same time should be avoided if possible.

After turnout, clostridial disease can be an issue on some farms, with pulpy kidney and lamb dysentery claiming a few lambs each year on many unvaccinated farms. Ewe vaccination with a combination clostridia/pasteurella vaccine four to six weeks prior to lambing will protect the ewe for 12 months and her lambs for 12 weeks from clostridial diseases and four weeks from pasteurella – but only if the lambs receive colostrum from the ewe! It is recommended that lambs be vaccinated from 12 weeks for continued protection.

Assuming all has gone well at lambing and a healthy lamb flock has been turned out, the two main problems seen in growing lambs are parasite burdens and nutritional deficits.

Souring lambs

Nematodirus battus is high on the list of suspects when it comes to scouring lambs, alongside high trichostrongyle counts and coccidia. Nematodirus has a direct lifecycle from one year's lamb crop to the next via weather resistant eggs that remain on the pasture over winter. Lambs should not be turned out onto pasture grazed by last year's lamb flock if possible and regular faecal worm egg counting should be performed to assess worm burden and monitor wormer efficacy. A free parasite forecast is available on the NADIS website (www.nadis.org.uk) and is well worth reading while you have lambs at pasture.

Coccidiosis is a significant disease that is often overlooked on smaller sheep units but is well worth considering when dealing with scouring lambs. It is usually seen in four to six-week-old lambs, often in groups of later lambs and particularly if stocking density is high or hygiene in the shed (or around feeders in the field) is poor. Coccidiosis is caused by two specific strains of eimeria species, which are parasites that live inside cells in the lamb's gut. They multiply within the lining of the gut and cause considerable damage to the intestine. This loss of gut lining causes a profuse diarrhoea and affected lambs will often look dull and anorexic, often with abdominal pain and straining. Severely affected cases may have secondary bacterial infection in the intestine and there may be blood in the diarrhoea.

Adult sheep are unaffected by coccidia, as immunity is strong, however they are the main reservoir of infection to lambs, shedding higher numbers of coccidial oocysts in their faeces around lambing. Early lambs will only be exposed to low numbers and will gain strong immunity by eight weeks, however coccidia numbers will multiply up, leaving large numbers on the ground for the naïve later-born lambs, which may succumb to disease.

Concurrent infection with nematodirus is often seen and may mean that only low levels of coccidia are needed to cause clinical disease. Treatment of severely affected lambs includes administering anti-coccidial drugs, injectable sulphonamides (off license) and fluid therapy as directed by your vet.

Coccidia are resistant to many commercial disinfectants, however there are several effective products available that clearly state suitability for use against coccidia. Prevention involves improving hygiene and reducing stocking density, as well as turning out later born lambs onto ground not previously grazed by early born lambs. Anti-coccidia (coccidiostat) medications are available that can be added to creep feed, however they will prevent any natural immunity building up, so that lambs will be fully susceptible as soon as medication is stopped.

Signs of trace element deficiencies

Cobalt
- Loss of appetite
- Slowed growth
- Watery eyes
- Anemia and anorexia in severe cases

Copper
- Loss of wool crimp
- Swayback in young lambs
- Slowed growth
- Anemia and fragile bones in severe cases

Selenium
- Stiff lamb disease (white muscle disease)
- Sudden death of young healthy lambs
- Slowed growth
- Increased numbers of barren ewes

Lambs suggesting signs of abdominal discomfort should be investigated.

Nutrition after turnout

Nutrition of ewes and lambs after turnout is just as important as worming protocols, and simply turning everything out onto 'lush' spring grass invariably doesn't quite cut it! Ewes must be supplemented with sufficient feed to sustain milk production for the growing lamb, whilst creep feed must be available in sufficient amounts to maximise growth rates.

After discounting parasites and under-nutrition as a cause of poor growth, looking at trace element deficiencies is the next step. The easiest way to do this is by blood sampling a representative group of 10 lambs from the flock to look at blood plasma values for copper, cobalt and selenium/vitamin E as a starting point. As well as hindering growth, trace element deficiencies can predispose lambs to secondary diseases.

Navels should iodine-dipped as soon as possible after birth and ideally again at 24-48 hours.

There are many ways of supplementing for trace elements, including boluses, licks, injectables and feed additives. It should be pointed out however that a great many farmers are spending huge sums of money on unnecessary supplements, touted by manufacturers as 'essential' and it is well worth knowing what trace elements are required (if any) before blanket supplementation. Boluses and injectable vitamins are the only way of guaranteeing correct dosages are administered if a deficiency is found. It is important to note that sheep (particularly Texels) are susceptible to copper toxicity and care should be taken not to overdose with copper supplements.

As well as the direct benefits of fewer lamb losses, ensuring lambs get off to a healthy start will pay dividends in the longer term. This can be seen as improved feed conversion of growing lambs, decreased time to slaughter weight and improved fertility of replacement ewe lambs, to name but a few. To fully assess the management practices and disease risk on your own farm it is important that you contact your own vet to devise a specific flock health plan, tailored to your own circumstances.