



Newsletter 2017, Q1

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Checking on ewe nutrition prior to lambing

Nutrition of the pregnant ewe can have a major impact on ewe and lamb health, and thus future productivity in the flock for the coming year. With **75% of lamb growth occurring in the last 6 weeks of pregnancy**, getting it right at this stage is critical. Problems can result in twin-lamb disease, reduced lamb birthweight, lack of colostrum quantity and/or quality, and high levels of perinatal mortality. Worldwide overall **lamb mortality is reckoned to be averaging 15%**, although many farms are substantially higher than this, and the room for potential improvement is significant.

Blood sampling sheep in late pregnancy can give you a rapid and objective measure of nutritional management. Our experience is that the best time to sample pregnant ewes is the **last 3 weeks before the start of lambing**: sampling at further than 4 weeks off lambing means that the ewes have yet to fully reach the latter stages of pregnancy, and so can give an overly optimistic view of nutritional status. Sampling closer to lambing leaves little time to correct problems or make changes to the diet.

At least 5 ewes should be sampled in each management group: triplets, twins and gimmers/ewe lambs. Singletons can be sampled as well, which may be important for assessment of protein status if they are to have lambs set on at lambing, and so need to have a good milk supply. If the sheep have not been scanned or fed according to foetal number, then sampling **20 random sheep** is recommended. Ewes with known disease problems should not be sampled as they will not be representative. BCS and diet details are also important for interpretation.



We have recently looked back at our sheep blood test results from 2010-2016, when we analysed 18,050 individual sheep blood samples from 1,692 separate groups of sheep. The results showed that:

- 12% of individual sheep (and groups) had **poor energy status** prior to lambing.
- 14.6% of groups had low urea-N results indicating a **shortage of ERDP** in their diet.
- 6.9% of individual sheep had low albumin results **potentially indicating disease issues**.
- Less than 5% of groups had evidence of mineral or trace element deficiencies.

Our results indicate that energy and protein status remain the most common constraints in ewes during late pregnancy, and long-standing research has shown that this can affect ewe health, milk production and colostrum quality. Identifying and correcting such problems quickly is key to a successful lambing.

Feeding sheep in late pregnancy only gives you one chance to get things right, and it is critical to make sure that nutritional management is working as planned as lambing approaches. Blood sampling offers a quick and cheap service to check what the sheep think of their diet, and at **£120 for 20 sheep**, allows you to sample up to 4 separate management groups. More details and submission forms are available on the DHHPS website, or telephone the office.

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Optimising the milking routine

Every dairy farm is aiming for high cow throughputs, excellent milk quality (low herd somatic cell counts and low levels of clinical mastitis) and good teat condition. Striving for high cow throughput whilst maintaining milk quality and teat condition can be difficult. As with many situations, well intentioned compromises have to be made, and the same is often true for the milking routine.

Taking a close look at your current milking routine could pinpoint some key areas for review or change.

Milking speed versus milk quality

How long does one milking take? How many cows are getting milked, and how many people are working in the parlour? Some consider around 60 secs per cow per person in the parlour floor as a minimum time, otherwise some corners are likely to be getting cut.

It can be a useful exercise to look at how exactly time in the parlour is being spent. How long are cows taking to enter/exit for example?

	Time in secs
Loading of Cows	
Teat Preparation	
Cluster attachment/removal	(10 seconds)
Teat Disinfection	
Cows Exit	
Wash Standings	
Mastitis Treatments	
Miscellaneous	

How do your parlour timings compare?

Do cows flow readily into the parlour? Or is the person milking the cows spending valuable time leaving the parlour to load cows? Are backing gates in use? Backing gates **if used correctly** can be very useful in decreasing cow loading time. If cows are too tight for space in the collecting yard, their heads will be up which would indicate excessive use of backing gates.

To prevent any excessive delay on cow exit, 10 cows need around 15m² at the front of the parlour, otherwise cows are more likely to get backed up and slow overall milking time.

How clean are the cows' teats on entry to the milking parlour? Udder singeing and tail trimming can improve udder hygiene scores, and reduce mastitis risks. If cows are coming into the parlour with dirty udders, there are likely to be problems in the milking cow accommodation. For example are the cubicle beds either too short or too long? Or is the stocking density too tight in straw yards?

What teat preparation is carried out? Typically the better the teat preparation, the fewer bacteria present on the teat skin prior to cluster attachment. Is any pre-milking teat disinfection being carried out? Dip or spray? What is teat coverage like after application of teat disinfectant? If pre-milking disinfection is being performed, ensure a **minimum of 30 seconds contact time** to allow the product sufficient time to work.

Are all cows getting the same milking routine? The aim is for between **60-90 secs from first touching the cows' udder to cluster attachment**. Achieving cluster attachment within this time frame will reduce bi-modal milk letdown, and so reduce the risk of mastitis and high somatic cell counts.

