





Managing the nutrient demand of lactating ewes

Dr. Frank Campion, BETTER Farms Sheep Programme, Teagasc Animal and Bioscience Department

March signals the beginning of lambing for most mid-season lamb producers aiming to match lambing date to the onset of spring grass growth. After a relatively warm winter, current grass supplies are on target for most producers. However, since the end of February, the weather has changed for the worse making it very difficult to get ewes and lambs out to grass quickly after lambing and so reducing grass utilisation. Despite this, the aim is still to get ewes and lambs to grass as soon as possible (24 - 48hours after birth, weather permitting). Attention over the past couple of months has been on pre-lambing nutrition. However, early lactation sees the beginning of the highest nutrient demand on the ewe. At the same time as this increase in nutrient demands, ewes are generally experiencing significant dietary change by going from a conserved forage diet with concentrate supplementation to a diet of mainly grass.



Early lactation nutrition

The energy and protein from maximum feed intake is generally not sufficient to meet the nutrient requirements of the ewe during early lactation. Intake, which peaks at approximately six weeks after lambing, lags behind nutrient demand which is being driven by ewe milk production. Ewe milk production peaks at approximately 21 days after lambing for a twin rearing ewe and at 28 days for single rearing ewe. Therefore, body reserve mobilisation is an essential component of the early lactation energy supply of the ewe. Target ewe body condition score (BCS) at lambing time should be 3.0 or higher (scale 1= emaciated to 5 grossly overfat). This will allow the ewe to safely mobilise up to 0.5 of a BCS unit during early lactation to maintain milk production and lamb performance. Where ewes are lambing down in correct BCS, adequate supplies of good quality grazed grass will be sufficient to maintain ewe performance during lactation.

In a study where ewes were housed indoors and offered *ad-libitum* grazed grass from swards averaging a pre-grazing herbage mass of 2,600 kg DM/ha, concentrate supplementation of 0.5kg per day reduced grass intake without significantly increasing total dry matter intake. In the same study, lamb performance during early lactation was unaffected by concentrate supplementation in comparison to ewes receiving grass only. It is important to note that the intake figures for these ewes were lower than would be anticipated and reported previously for ewes grazing *in-situ*.



Grassland management for early spring grass

The Teagasc BETTER farms sheep programme currently has 12 flocks, with most lambing during early to mid-March. Managing grass for this spring began last October with the implementation of an autumn closing plan. Paddocks were grazed to a post-grazing sward height of approximately 4cm and closed in rotation starting with the most sheltered paddocks and paddocks closest to the yard. The aim was to close each paddock for at least 120 days prior to first spring grazing. This means that paddocks were being closed from late October onwards. This allowed grass to slowly accumulate during the late autumn, winter and early spring months. In late January and February, once ground conditions were firm and soil temperature (>6 °C) and weather allowed, nitrogen in the form of Urea or CAN (Calcium Ammonium Nitrate), was applied.

Average farm cover at the start of March across the flocks starting to lamb was more than 2,100kg DM/ha. Target average farm cover at lambing is 2100 - 2200 kg DM/ha putting the farms on target this year. Grass growth for one of the Teagasc BETTER sheep farms is ahead of where it was last year. Fertiliser will be applied again on these farms following the first grazing. Target post-grazing sward height for these farms is 3.5 - 4 cm. Target residency periods once the rotation is established and ewes and lambs are in there grazing groups will be three days. Temporary electric fencing will be used where necessary to manage paddock growth and residency periods.



Conclusions

Where weather conditions are exceptionally poor, or grass supplies are below target and/or ewes are in poor BCS then there is still a case for supplementing lactating ewes with concentrates. However, the aim for producers lambing down at this time of year should be to have adequate grass supplies available to maintain ewe performance and eliminate the need for concentrate supplementation. Grassland management at this time of year begins in the autumn and needs constant attention but will ultimately benefit the flock during the busy and most feed demanding time in spring.

For more information, see the updated Feeding the Ewe manual