

FEEDING OATS SUPPLEMENTED WITH UREA TO EWES IN LATE PREGNANCY  
AND EARLY LACTATION

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The oat grain fed in Victoria during periods of drought can be of low protein content (8-9% crude protein) and supplementation with urea has increased voluntary food intake and liveweight gain of young lambs (unpublished]. It seemed possible that the production of pregnant and lactating ewes could also be limited if they were fed solely on low protein oats.

Three hundred mature Border Leicester X Merino ewes were mated to Dorset Horn rams in April 1976, During the first week of August, 1976 eighty of the ewes were selected on the basis of mating date, confined to 2 ha of pasture and offered 700 g of oats/h/d for 3 weeks. On 25.8.76 (4 weeks before lambing) they were allotted on the basis of liveweight to two groups and to one of 4 replicates each of 10 ewes. The replicates were placed in outside pens (20 m x 20 m) and group fed for a period of 8 weeks. Group 1 was fed oats (8.5% crude protein) and group 2 oats supplemented with urea (12% crude protein). The diets were offered ad libitum and supplemented with minerals and vitamins. Group intakes and individual liveweights were recorded weekly. Intakes for each replicate were calculated over 4 weeks during pregnancy and for either 2 or 3 weeks during lactation. The results are set out in Table 1.

TABLE 1: Liveweight of ewes and lambs fed oats or oats supplemented with urea (mean and standard error).

Ration	Intake/d of ewes (kg)		Liveweight of ewes (kg)		Liveweight of lambs (kg)†
	Preg.	Lact.	25.8.76	20.10.76	20.10.76
Oats	1.09 ±0.04	1.63 ±0.06	57.3 ±0.7	48.0 ±1.3	7.2 ±0.2
Oats + Urea	1.46 ±0.03	2.11 ±0.06	57.1 ±0.9	54.3 ±1.1	8.6 ±0.2

† Twin lambs only - 44 in Group 1, mean age 19±0.5d;  
39 in Group 2, mean age 20±0.6d.

Supplementation of oats with urea had no effect on birthweight or survival of the lambs but increased voluntary intake of the ewes during late pregnancy and early lactation. This was associated with a decrease in liveweight loss of the ewes and an increase in liveweight gain of twin but not single lambs. The increase in growth rate of twin lambs was due, presumably, to an increase in milk production of the ewes.

While, the nitrogen content of the oats fed in this study apparently restricted the voluntary intake of pregnant and lactating ewes, the increases in production achieved by supplementing with urea and feeding ad libitum would not justify the increased feed costs.

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