

FOOD INTAKE OF LACTATING DOES AND GROWTH OF THEIR KIDS WHEN FED
OATS WITH LUCERNE CHAFF OR UREA

B.A. MCGREGOR*, R.W. HODGE* and D. MITCHELL*

The rapid increase in farmed Angora, feral and Cashmere type goats has resulted in a demand for information on the performance of these animals fed Australian feedstuffs particularly during pregnancy, lactation and drought. To date there is very limited documentation on the intake of and growth response of goats fed Australian feeds. The intake of domesticated feral does and the growth of their Angora cross kids when fed oats with either lucerne chaff or urea was measured.

Twenty feral does aged 3½ to 6½ years with a mean post partum live weight of 45.7 ± 8.4 kg were housed twelve days before parturition. On the basis of liveweight does were randomly allocated to one of two treatment groups and fed ad libitum. Treatment OL was fed a diet of 68.6% oats and 30% lucerne chaff and treatment OU were fed oats with 1.4% urea. Crude protein (CP) content of OL was 11.1% and OU equivalent to 12.4%. Both treatments had a mineral supplement added at the rate of 1.5% and fresh water was freely available. After parturition does and their kids were housed in groups of 2 or 3 does of similar birth type. Does were weighed 24 hours post partum and does and kids were weighed each week for four weeks. Results are summarised in Table 1.

TABLE 1 Food intake and growth rate of the feral does and their Angora cross kids when fed oats and lucerne chaff (OL) or oats and urea (OU) diets (± SD)

Treatment	Birth type	N doe	Doe DMI* kg d ⁻¹	Kid ADG** g d ⁻¹	Kid ADG g/ kg doe DMI	Doe live weight change (kg)
OL	Twin	8	1.79(0.18)	171(16)	192(18)	-1.3(1.2)
	Single	2	1.49	187(15)†	126	-0.8(4.0)†
	Overall	10	1.71(0.21)	175(15)	175(37)	-1.2(1.0)
OU	Twin	5	1.38(0.82)	106(46)	152(4)	-2.6(6.0)
	Single	3	1.16	149(108)†	128	-4.5(3.2)†
	Overall	8	1.31(0.59)	118(41)	142(17)	-3.2(4.4)

* DMI - intake of ration on a dry matter basis ** Average daily liveweight gain
† - data means of individual values

Two does fed OU kidded very late and were excluded from the experiment. The data suggest that OL fed does ate more, their kids grew faster and more efficiently and the does lost less liveweight than does fed OU rations. Twin reared kids grew significantly faster ($P < 0.01$) on diet OL than OU but differences in doe DMI and doe liveweight change were not significant ($P > 0.05$). Twin reared kids grew more slowly than single kids but in terms of kid gain per unit of doe food intake twin kids grew more efficiently.

The results indicate the large variation found in food intake and growth of OU fed does. However does which consumed reasonable amount of OU reached levels of production close to OL. To improve the performance of OU fed animals a longer introductory feeding period may be necessary.

* Animal Research Institute, Department of Agriculture, Werribee, Vic. 3030.