

## PASTURE CONSUMPTION BY GRAZING DAIRY COWS

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Cows normally have larger, more frequent meals during daylight hours than during the night (Dulphy et al. 1980).

The present study was undertaken on a commercial dairy farm near Camden during 1990. Lactating Friesian cows were strip-grazed on pastures comprising 20% white clover and 80% mixed sub-tropical grasses. Areas of pasture which were similar in area and composition were offered during the day and night periods, the latter being from 1630 to 0430 h. Pasture mass before and after grazing was estimated using an electronic probe which was calibrated each month. Nutrient content of pasture was analysed on 50 pooled sub-samples cut (100 cm<sup>2</sup>) to ground level before and after grazing. Metabolizable energy in dry matter (M/D) was estimated from digestibility in vitro and crude protein was analysed by an automatic Kjelfoss analyser.

Pasture available (Avail), residue (Res) and eaten in day and night paddocks is given in the table.

		Day			Night		
		Avail	Res	Eaten	Avail	Res	Eaten
DM (kg/ha)	Feb	3415	2686	729	3661	2168	1493
	Mar	3491	2542	949	3675	2369	1306
	Apr	6138	5605	533	5969	3565	2404
	May	4645	2612	2034	5283	3110	2173
M/D (MJ/kg)	Feb	9.16	8.04	11.90	8.93	7.65	10.10
	Mar	8.88	8.15	10.46	8.81	7.67	10.23
	Apr	8.10	7.28	11.51	7.84	6.66	8.87
	May	9.17	8.05	10.52	8.38	7.80	8.80
CP (g/kg)	Feb	126	117	140	125	111	137
	Mar	116	93	174	121	91	167
	Apr	135	108	276	130	95	172
	May	105	77	140	103	74	139

Within months, the amount of pasture available and its nutrient content, was similar in day and night paddocks. With the exception of May, a much higher proportion of the days grazing occurred at night, resulting in a greater proportion of pasture available being utilised (40 v 25%). The nutrient content of pasture eaten was markedly superior to that of pasture available, the difference being greater in day paddocks where percentage pasture utilisation was lower.

DULPHY, J.P., REMOND, B. and THERIEZ, M. (1980) In 'Digestive Physiology and Metabolism in Ruminants' eds. Y.Ruckebusch and P.Thivend. (Lancaster:MTP Press) p 103.

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