

Calculating supplementary feed amounts for cattle

Total daily requirements for various classes of cattle

Table 1. Steers and heifers (after weaning)

Live weight (kg)	Growth rate (kg/day)	Maximum daily dry matter (DM) intake		Metabolised energy (ME) requirement (MJ/day)	Minimum ME concentration of diet (MJ/kg DM)	Crude protein percentage of dietary dry matter %
		% of live weight	(kg)			
150	0	2.9	4.3	22	5.2*	8
	0.5	2.9	4.3	37	8.7	12
	1.0	2.9	4.3	50	11.6	13
200	0	2.8	5.5	26	4.8*	8
	0.5	2.8	5.5	44	8.0	11
	1.0	2.8	5.5	59	10.7	13
300	0	2.5	7.6	35	4.6*	8
	0.5	2.5	7.6	57	7.5	10
	1.0	2.5	7.6	76	10.0	13
400	0	2.4	9.4	45	4.8*	8
	0.5	2.4	9.4	71	7.6	9
	1.0	2.4	9.4	93	9.9	13
500	0	2.1	10.7	55	5.1*	7
	0.5	2.1	10.7	82	7.7	10
	1.0	2.1	10.7	108	10.1	12

* Cattle on these diets may not eat to full appetite because of the very poor quality (low ME values) of these particular diets.

Table 2. Cows dry, pregnant mature*

Live weight (kg)	Growth rate (kg/day)	Maximum daily dry matter (DM) intake		Metabolised energy (ME) requirement (MJ/day)	Minimum ME concentration of diet (MJ/kg DM)	Crude protein percentage of dietary dry matter %
		% of live weight	(kg)			
350	0	2.4	8.5	48-60	5.6-7.1	6
400	0	2.3	9.4	52-65	5.5-6.9	6
450	0	2.2	10.1	57-69	5.6-6.8	6
500	0	2.1	10.7	61-74	5.7-6.9	6
550	0	2.0	11.2	66-78	5.9-7.0	6

* Range of values for cows which are 6-9 months pregnant

Table 3. Cows with suckling calves up to four months old

Live Weight (kg)	Growth Rate (kg/day)	Maximum Daily dry matter (DM) intake		Metabolised energy (ME) requirement (MJ/day)	Minimum ME concentration of diet (MJ/kg DM)	Crude Protein percentage of dietary dry matter %
		% of live weight	(kg)			
350*	0	2.4	8.5	74	8.7	10
	0.5	2.4	8.5	91	10.7	11
400*	0	2.3	9.4	80	8.5	10
	0.5	2.3	9.4	97	10.3	11
450	0	2.2	10.1	85	8.4	10
500	0	2.1	10.7	90	8.4	10
550	0	2.0	11.2	95	8.4	10

* Young cows at these weights probably need to put on some weight after calving (for example, 0.5 kg/day) because they have not yet reached their adult weight and therefore need better feed than older cows.

Table 4. Bulls

Live Weight (kg)	Growth Rate (kg/day)	Maximum Daily dry matter (DM) intake		Metabolised energy (ME) requirement (MJ/day)	Minimum ME concentration of diet (MJ/kg DM)	Crude Protein percentage of dietary dry matter %
		% of live weight	(kg)			
400	1.0	2.4	9.4	93	9.9	13
500	0.5	2.1	10.7	82	7.7	11
	1.0	2.1	10.7	108	10.1	12
600	0	2.0	11.7	63	5.4	10
	0.5	2.0	11.7	95	8.1	11
	1.0	2.0	11.7	122	10.4	12
800	0	1.8	14.4	81	5.6	10
	0.5	1.8	14.4	117	8.1	10

More information:

Series of fact sheets for farmers to manage livestock and farm finances in dry times.

Landscape South Australia – Northern and Yorke | Dry times
<https://www.landscape.sa.gov.au/ny/land-and-coast/land-management/dry-times>

Drought Feeding and Management of Beef Cattle,
 a guide for farmers and land managers

Victorian Department of Primary Industries & MLA 2007
 (ISBN 978-1-741-99-0355-5 online)

<https://www.feedinglivestock.vic.gov.au/wp-content/uploads/2019/02/Beef-cattle-drought-feeding-guide.pdf>



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