

Effects of Meeting the Requirements in Energy and Protein, and of Systemic Inflammation on the Interval from Parturition to Conception in Dairy Cows

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Supplementary Online Material (SOM)

Supplementary Table S1. Analyzed chemical composition of dietary ingredients

Variables	Hay	Corn silage	Grass silage	Barley	Supplement ¹
Dry matter (DM) % unless otherwise stated					
DM (% of fresh matter)	88.6	30.8	32.0	87.1	92.8
Ash	11.4	4.9	13.1	3.3	16.0
CP	13.5	6.9	13.9	13.2	39.5
Ether extract	2.4	3.3	3.8	2.6	2.0
NDF	45.0	44.9	47.1	19.6	16.8
ADF	28.6	26.7	33.1	5.9	13.4
NFC ²	27.7	40.1	22.1	61.4	30.3
NE _L (MJ/kg DM)	5.40	6.26	5.65	7.52	6.77
uCP	12.3	12.7	12.6	15.8	23.2
RNB (g/kg DM)	0.74	-7.83	2.34	-4.16	26.29
Ca (g/kg DM)	7.6	1.6	8.7	1.5	26.9
P (g/kg DM)	3.3	2.4	3.8	3.8	13.9
Mg (g/kg DM)	3.7	1.3	3.6	1.3	7.5
K (g/kg DM)	20.9	11.3	24.1	5.2	17.9
Na (g/kg DM)	0.2	0.1	0.4	0.3	11.2
Mn (mg/kg DM)	132	23	151	17.9	112
Zn (mg/kg DM)	36.9	17.6	38.2	24.7	213.6
Cu (mg/kg DM)	10.2	4.7	11.6	2.8	31.7

crude protein (CP), neutral detergent fibre (NDF), acid detergent fibre (ADF), net energy of lactation (NE_L), utilizable CP at the duodenum (uCP), ruminal nitrogen balance (RNB, calculated as: CP/uCP × 6.25), calcium (Ca), phosphorus (P), magnesium (Mg), potassium (K), sodium (Na), manganese (Mn), zinc (Zn), copper (Cu)

¹contained 45.48% soybean meal, 45.48% rapeseed meal, 5.04% limestone, 2.00% salt and 2.00% mineral-vitamin supplement (provided per kg mineral-vitamin supplement: Ca 6%, P 12%, Mg 10%, Na 8%, Mn 1500 mg, Zn 5700 mg, Cu 800 mg, vitamin A 750 000 IU, vitamin D3 75 000 IU, vitamin E 3000 mg)

²NFC (non-fibre carbohydrates) = 100 – (% NDF + % CP + % ether extract + % ash)