

Table S1. Basic diets composition and nutrition levels of mid-late lactation cows.

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Items	Content
Ingredients (%DM)	
Oat hay	2.6
Alfalfa hay	3.3
Alfalfa silage	8.3
Corn silage	41.0
Steam-flake corn	11.0
Corn grain	5.0
Fat powder	0.5
Rumen culture	0.3
Premix concentrate	2.3
Baking soda	0.4
Slow-release urea	0.3
Soybean meal	8.3
Soybean hulls	3.2
Dry distiller's grain protein extract	4.7
Spray corn husk	3.0
Cotton seed meal	3.0
Molasses	2.8
Chemical composition	
MEb, MJ/kg	6.5
Crude protein, % of DM	17
Either extract , % of DM	3.4
Neutral detergent fiber, % of DM	32.0
Acid detergent fiber, % of DM	21.0
Ca, % of DM	0.5
P, % of DM	0.35

Abbreviations: DM, dry matter; ME, metabolizable energy

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1 Formulated to contain (per kilogram of premix concentrate); 90 g of NaCl; 30 g of MgO₂; 30 mg of Se; 15 mg of Co; 385 mg of Cu; 60 mg of Fe; 1000 mg of Mn; 50 mg of I; 2600 mg of Zn; 730,000 IU of vitamin A; 1750,000 IU of vitamin D; 500 IU of vitamin E.

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2 Calculated based on Ministry of Agriculture of P. R. China recommendation^[1]

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[1] MOA (Ministry of Agriculture of P.R. China). 2004. Feeding Standard of beef Cattle (NY/T 815–2004). MOA, Beijing, China

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