

Table S1 Ingredient and chemical composition of the basal diet fed fistulated cows during the *in vitro* and in situ experiment (DM basis)

Ingredients	Amount (g/kg DM)	Ingredients	Amount (g/kg DM)
Whole corn silage	521	Limestone	4.87
Alfalfa	69.31	NaCl	2.58
Soybean meal	79.76	MgCl ₂	0.87
Corn	38.05	Choline	1.73
Flaked corn	86.78	Premix ¹	3.52
Extrusion soybean	9.76	Water	86.82
Soybean hull	23.14	Total	1000
Cottonseed	29.05	Nutrient levels ²	
Fatty powder	8.73	Dry matter (g/kg as-fed)	507
Yeast culture	3.24	OM (g/kg DM)	921
Detoxication agent	0.52	NEL (MJ/kg DM)	8.16
NaHCO ₃	6.43	CP (g/kg DM)	170
KHCO ₃	3.20	aNDF (g/kg DM)	310
CaHPO ₄	2.41	ADF (g/kg DM)	203

¹ Premix provided the following per kg of the total mixed ration: Mn 6 000 mg, Fe 4 800 mg, Zn 9 000 mg, Cu 2 600 mg, I 120 mg, Se 80 mg, Co 70 mg, VA 130 000 IU, VD3 36 000 IU, VE 465 IU.

² NEL: net energy for lactation. NEL was a calculated value, while the other values were measured.

