Table S1: Standardization of reading of volatile fatty acid profile in ruminal fluid.

	Acetic acid	Propionic acid	Butyric acid	Isovaleric acid
R^2	0.9998	0.9994	0.9998	0.9998
Equation	y = 0.0117x + 0.0129	y = 0.0203x + 0.0059	y = 0.0285x - 0.0019	y = 0.0371x - 0.0022
Linear range (mmol L^{-1})*	2.30 - 138.26	1.76 - 105.49	1.35 - 80.86	0.57 - 34.29
LOD (mmol L^{-1})	1.15	0.88	0.67	0.29
LOQ (mmol L^{-1})	2.30	1.76	1.35	0.57
Accuracy (%)	107.8	109.3	107.7	104.8
Repeatability (RSD)	5.67	2.70	2.48	2.55

* The linear range, LOD (limit of detection) and LOQ (limit os quantitation) were expressed in mmol of SFA for L of ruminal fluid

Table S2: Fatty acid profile in the total mixed ration (TMR) used in this experiment.

Fatty acid	TMR: control	TMR: treatment
C12:0 (Lauric)	0.08	0.07
C13:0 (Tridecanoic)	0.04	0.04
C14:0 (Myristic)	0.52	0.57
C15:0 (Pentadecanoic)	0.08	0.09
C16:0 (Palmitic)	26.4	29.1
C16:1 (Palmitoleic)	0.34	0.33
C17:0 (Heptadecanoic)	0.33	0.29
C18:0 (Stearic)	19.8	21.3
C18:1n9c (Oleic)	19.0	17.7
C18:2n6c (Linoleic)	27.7	25.3
C20:0 (Arachidic)	0.60	0.50
C20:1n9 (cis-11-Eicosenoic)	0.14	0.16
C18:3n3 (a-Linolenic)	3.51	3.12
C20:2 (cis-11,14-Eicosadienoic)	0.07	0.08
C22:0 (Behenic)	0.43	0.44
C22:1n9 (Erucic)	0.11	0.11
C20:4n6 (Arachidonic)	0.04	0.04
C24:0 (Lignoceric)	0.53	0.52
C24:1n9 (Nervonic)	0.07	0.06