

## Supplementary Information

### Fatty Acid Profile and Milk Cholesterol of Crossbred Holstein × Zebu Cows Fed on Whole Cottonseed

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**Table S1.** Proportions of concentrated ingredients, based on dry matter for lactating cows fed with different levels of cottonseed

Food	Level of cottonseed / % DM				
	0	6	12	18	24
Cottonseed	0.00	14.33	29.20	44.71	60.79
Corn	71.93	61.60	50.66	39.49	27.81
Soy	23.04	19.05	14.95	10.58	6.08
Mineral salt	2.11	2.15	2.19	2.24	2.28
Urea	1.69	1.72	1.75	1.79	1.82
Limestone	1.12	1.15	1.26	1.19	1.22
Phosphate	0.11	0.00	0.00	0.00	0.00

DM: dry matter.

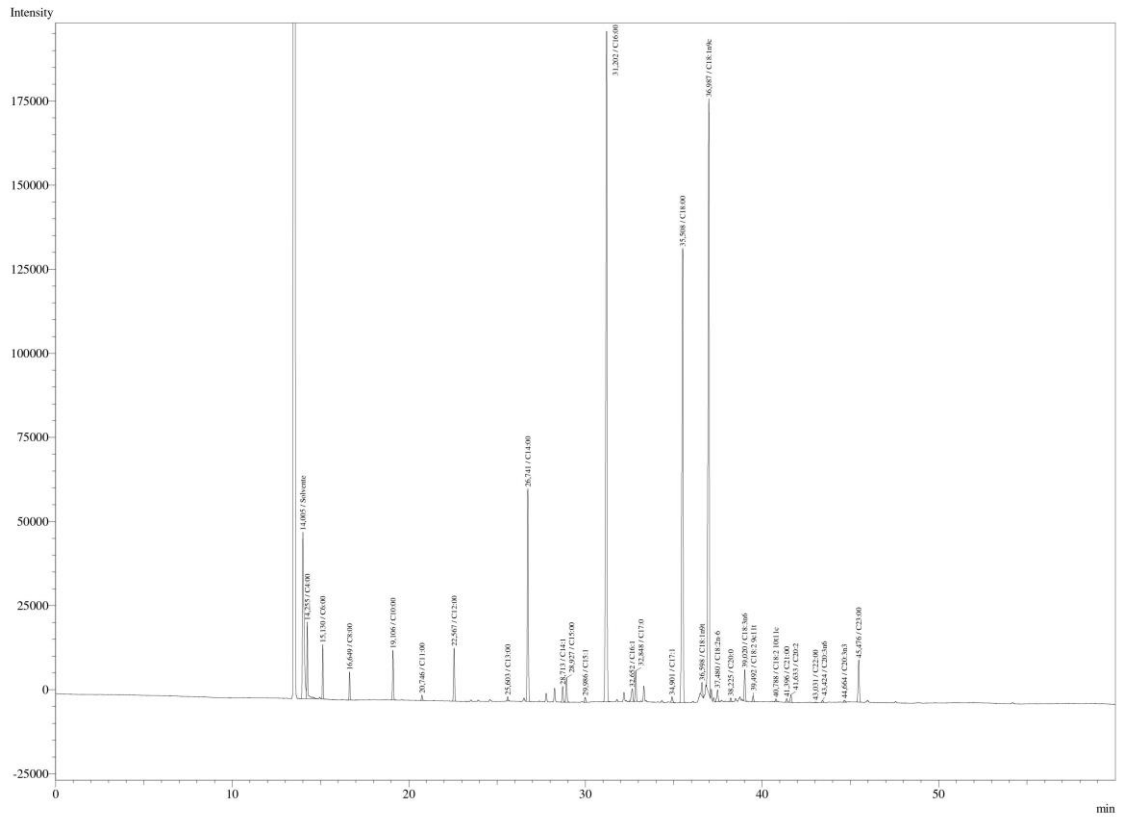
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**Table S2.** Lipid profile of the simulated grazing and the concentrate consumed

Fatty acid		Fatty acid / (mg g <sup>-1</sup> )					
		Forage	Level of cottonseed / % DM				
			0	6	12	18	24
Tridecanoic acid	13:0	0.38	0.20	0.20	0.20	0.17	0.26
Myristic	14:0	0.32	0.17	0.52	0.88	1.38	1.21
Palmitic	16:0	3.44	5.45	24.13	33.20	47.61	36.17
Palmitoleic	16:1	Nd	Nd	0.23	0.46	0.79	0.64
Margaric	17:0	Nd	Nd	0.04	0.08	0.13	0.11
Stearic	18:0	Nd	Nd	1.19	2.43	4.18	3.37
Vaccenic acid	18:1n-7t	Nd	Nd	0.06	0.11	0.19	0.16
Elaidic	18:1n-9t	1.62	1.67	11.22	18.47	29.09	23.13
Oleic	18:1n-9c	Nd	Nd	0.40	0.81	1.39	1.12
Gamma-linoleic	18:2n-6	2.14	5.73	28.56	23.58	20.54	9.50
γ-Linolenic acid	18:3n-6	3.14	12.66	64.22	83.03	115.25	83.19
Alpha-linolenic	18:3n-3	427.00	226.31	222.04	222.04	196.42	290.36
Heneicosylic acid	21:0	2.50	2.43	3.14	2.93	2.75	2.50
Dihomo-gamma-linolenic acid	20:3n-6	0.30	0.17	0.41	0.48	0.60	0.53
Eicosatrienoic acid	20:3n-3	1.51	0.80	0.79	0.79	0.79	0.79
		Total fatty acid / (mg g <sup>-1</sup> )					
ΣSFA <sup>a</sup>		6.64	8.25	28.03	37.29	52.04	40.25
ΣMFA <sup>b</sup>		1.62	1.67	11.91	19.85	31.46	25.05
ΣPUFA <sup>c</sup>		434.09	245.67	316.02	329.92	333.6	384.37

<sup>a</sup>Total saturated fatty acids:13:0; 14:0; 16:0; 17:0; 18:0; 21:0; <sup>b</sup>total monounsaturated fatty acids:16:0; 18:1n-7t; 18:1n-9t; 18:1n-9c; <sup>c</sup>total polyunsaturated fatty acids:18:2n-6; 18:3n-6; 18:3n-3; 20:3n-6; 20:3n-3.

DM: dry matter; Nd: not detected.



**Figure S1.** Gas chromatogram obtained for milk samples, the lipid profile.