Table 1. Weight percentage of fatty acids in strip loin steaks (m. *longissimus lumborum*) from beef backgrounded in two planes of nutrition and finished with forage and grain-based diets.

Fatty acid	Plane of nutrition[1]				Finishing diet[2]			
	Moderate	High	SEM[3]	*P*-value	FORAGE	GRAIN	SEM[3]	*P* - value
C4:0	1.19	1.48	0.38	0.44	0.97	1.70	0.38	0.07
C10:0	0.07	0.06	0.007	0.28	0.07[a]	0.06[b]	0.01	0.02
C12:0	0.08	0.07	0.009	0.19	0.08	0.07	0.01	0.34
C14:0	3.38	3.34	0.19	0.89	3.38	3.34	0.20	0.83
C14:1T n-5	0.17[a]	0.15[b]	0.01	0.04	0.22[a]	0.10[b]	0.01	<0.0001
C14:1 n-5	0.73	0.75	0.08	0.77	0.66	0.81	0.08	0.08
C15:0	0.53	0.50	0.03	0.28	0.56[a]	0.47[b]	0.03	0.003
C15:1 n-5	0.03	0.05	0.01	0.23	0.04	0.04	0.01	0.94
C16:0	14.34	14.07	0.32	0.43	14.88[a]	13.53[b]	0.32	0.001
C16:1T n-7	0.40	0.37	0.02	0.23	0.48[a]	0.29[b]	0.02	<0.0001
C16:1 n-7	4.33	4.51	0.17	0.31	4.10[b]	4.74[a]	0.17	0.001
C17:0	1.46	1.38	0.07	0.26	1.56[a]	1.27[b]	0.07	0.001
C17:1 n-7	0.96	0.97	0.05	0.80	0.91	1.02	0.05	0.07
C18:0	16.45	16.24	0.51	0.69	17.48[a]	15.21[b]	0.51	0.0002
C18:1TΔ n-6	0.11	0.28	0.10	0.11	0.10	0.29	0.10	0.09
C18:1TΔ n-9	1.2[a]	0.91[b]	0.13	0.04	1.35[a]	0.76[b]	0.13	0.0003
C18:1 n-9	47.15	47.57	0.72	0.57	46.17[b]	48.54[a]	0.72	0.004
C18:1Δ n-11	1.57	1.60	0.04	0.51	1.38[b]	1.79[a]	0.04	<0.0001
C18:2T n-6	0.15	0.14	0.008	0.56	0.16[a]	0.13[b]	0.01	0.005
C18:2 n-6	2.87	2.88	0.34	0.99	2.42[b]	3.33[a]	0.34	0.02
C20:1 n-12	0.11	0.10	0.006	0.097	0.13[a]	0.09[b]	0.01	<0.0001
C18:3 n-3	0.07	0.07	0.01	0.89	0.10[a]	0.05[b]	0.01	0.0003
18:2 CLA c9t11	0.16	0.16	0.01	0.81	0.15	0.17	0.01	0.11
18:2CLA t10c12	0.50	0.45	0.07	0.45	0.69[a]	0.26[b]	0.07	<0.0001
C20:2 n-6	0.07	0.05	0.01	0.11	0.06	0.06	0.01	0.69
C22:1 n-9	0.05	0.05	0.008	0.85	0.06[a]	0.04[b]	0.01	0.02
C20:3 n-6	0.18	0.18	0.03	0.90	0.17	0.20	0.03	0.21
C22:2 n-6	0.02	0.03	0.008	0.92	0.04[a]	0.01[b]	0.01	0.001
C20:4 n-6	0.81	0.76	0.16	0.75	0.70	0.88	0.16	0.27
C20:5 n-3	0.10	0.10	0.02	1.00	0.12	0.09	0.02	0.09
C22:4 n-6	0.14	0.09	0.05	0.28	0.08	0.15	0.05	0.11
C22:5 n-3	0.58	0.60	0.08	0.78	0.70[a]	0.48[b]	0.08	0.02
C22:6 n-3	0.07	0.06	0.02	0.63	0.06	0.07	0.02	0.90
Omega 3	0.75	0.76	0.12	0.91	0.87[a]	0.63[b]	0.12	0.05
Omega 6	5.02	5.02	0.55	0.99	4.56	5.48	0.55	0.11
n6:n3	7.22	7.73	0.95	0.60	5.41[b]	9.54[a]	0.95	0.0003
PUFA[4]	5.73	5.57	0.65	0.81	5.43	5.87	0.65	0.50
MUFA[5]	56.80	57.30	0.62	0.45	55.60[b]	58.49[a]	0.62	0.0002
SFA[6]	37.47	37.14	0.44	0.47	38.97[a]	35.64[b]	0.44	<0.0001
Total Trans	2.69	2.46	0.21	0.27	3.15[a]	1.99[b]	0.21	<0.0001
EPA/DPA/DHA[7]	0.75	0.76	0.12	0.91	0.87	0.63	0.12	0.05
EPA/DHA[8]	0.17	0.16	0.03	0.75	0.18	0.15	0.03	0.49
AI[9]	0.45	0.44	0.02	0.61	0.47[a]	0.42[b]	0.02	0.01
TI[10]	1.02	0.99	0.03	0.44	1.08[a]	0.94[b]	0.03	0.0001

h:H[11]	2.93	3.01	0.09	0.41	2.77[b]	3.17[a]	0.09	0.0003
HI[12]	2.26	2.31	0.09	0.56	2.17[b]	2.40[a]	0.09	0.02

[1]Moderate = Triticale (100% DM); High = Alfalfa (85% DM) and beardless wheat (15%DM)

[2]Moderate = Triticale (100% DM); High = Alfalfa (85% DM) and beardless wheat (15%DM)

[3]SEM = Standard Error of the Mean

[4]PUFA = Sum of Polyunsaturated Fatty Acid

[5]MUFA = Sum of Monounsaturated Fatty Acid

[6]SFA = Sum of Saturated Fatty Acid

[7]EPA/DPA/DHA = Sum of Eicosapentaenoic acid, Docosapentaenoic acid, and Docosahexaenoic acid

[8]EPA/DHA = Sum of Eicosapentaenoic acid and Docosahexaenoic acid

[9]AI = Atherogenic Index [C12:0 + (4*C14:0) + C16:0] / [n-6 PUFA + n-3 PUFA + MUFA]

[10]TI = Thrombogenic Index [C14:0 + C16:0 + C18:0] / [0.5*MUFA +0.5*n-6 PUFA +3*n-3 PUFA + (n-3 PUFA/n-6 PUFA)]

[11]h:H = Hypocholesterolemic / hypercholesterolemic; [C18:1 cis-9 + C18:2 n-6 + C20:4 n-6 + C18:3 n-3 + C20:5 n-3 + C22:5 n-3 + C22–6 n-3] / [C14:0 + C16:0]

[12]HI: Health index; [PUFA+MUFA] / [4× C14:0 + C16:0]

[a,b] Means with different superscripts are significant at $P \leq 0.05$