

Table 1. Fatty acid composition and fatty acid heritability in total lipids extracted from lean beef.

Fatty acid	n	Fatty acid weight %	h^2	SE
14:0	794	2.81	0.39	0.21
14:1	794	0.64	0.11	0.15
16:0	794	26.28	0.40	0.21
16:1	794	3.35	0.54	0.24
18:0	794	12.79	0.27	0.19
18:1	794	41.05	0.33	0.20
18:2	794	7.46	0.23	0.18
20:3(n3) & 20:4	794	2.14	0.24	0.18
22:5	794	0.53	0.14	0.16
22:6	794	0.10	Did not converge	

n=number of animals, h^2 =heritability, SE=standard error

Table 2. Fatty acid composition and fatty acid heritability in triacylglycerols extracted from lean beef.

Fatty acid	n	Fatty acid weight %	h^2	SE
14:0	809	3.32	0.49	0.23
14:1	809	0.78	0.12	0.15
16:0	809	28.33	0.40	0.21
16:1	809	3.89	0.50	0.23
18:0	809	13.74	0.30	0.19
18:1	809	45.97	0.54	0.23
18:2	809	2.14	0.09	0.14

n=number of animals, h^2 =heritability, SE=standard error

Table 3. Fatty acid composition and fatty acid heritability in phospholipids extracted from lean beef.

Fatty acid	n	Fatty acid weight %	h^2	SE
14:0	795	0.89	Did not converge	
16:0	795	18.83	0.03	0.12
16:1	795	1.31	0.14	0.15
18:0	795	9.48	0.03	0.12
18:1	795	22.52	0.18	0.17
18:2	795	27.01	0.26	0.18
20:3(n3) & 20:4	795	10.15	0.20	0.17
22:5	795	2.40	0.30	0.19
22:6	795	0.32	0.06	0.13

n=number of animals, h^2 =heritability, SE=standard error

Table 4. Heritability estimates and standard errors of atherogenic index, desaturase indexes, and elongase indexes in phospholipid and triacylglycerol fractions as well as total lipids extracted from lean beef.

Index	Phospholipid		Triacylglycerol		Composite	
	h ²	SE	h ²	SE	h ²	SE
AI	Did not converge		0.55	0.24	0.45	0.22
16:1/16:0	0.12	0.15	0.38	0.21	0.44	0.22
18:1/18:0	0.09	0.14	0.26	0.18	0.30	0.19
X:1/x:0	0.12	0.15	0.36	0.20	0.37	0.21
16/14	0.09	0.14	Did not converge		0.10	0.14
18/16	0.02	0.12	0.35	0.20	0.34	0.20

n=number of animals, h²=heritability, SE=standard error

Table 5. Expected progeny differences of fatty acid index from total lipids extracted from lean beef.

Trait index	Extreme (+)	Extreme (-)
	EPD as % of average	EPD as % of average
Atherogenic index	8.5	5.8
16:1/16:0	6.9	6.9
18:1/18:0	4.3	5.8
X:1/x:0	4.0	3.9
16/14	4.6	4.4
18/16	6.9	3.9

Table 6. Genotype frequency of SCD1278.

Genotype	Alleles	Number of animals	Percentage (%)
VV	CC	115	67
VA	TC	57	33
Total		172	100

Table 7. Effect of SCD1278 on desaturase index.

Lipid	16:1/16:0		P-value	18:1/18:0		P-value	(16:1+18:1)/(16:0+18:0)		P-value
	VA	VV		VA	VV		VA	VV	
PL	0.063±0.003	0.068±0.002	0.13	2.30±0.07	2.36±0.05	0.43	0.82±0.03	0.84±0.02	0.50
TAG	0.145±0.003	0.139±0.002	0.02	3.21±0.07	3.34±0.05	0.09	1.19±0.02	1.21±0.01	0.34