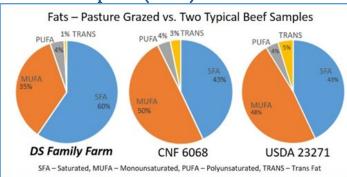

DS Family Farm Pasture Grazed Beef (grassfed) vs Two Typical Beef Samples Fatty Acid Analysis

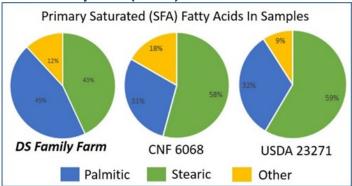
In 12/2015 we sent a rib steak from one of our fall harvested Pasture Grazed beef to Midwest Laboratories, Omaha NE, for fatty acid analysis. The steak was prepared & analyzed as a ribeye cut. When the report was final we searched out two "typical" beef samples from the Canada and USA Government nutrient databases with similar total fat content to compare our "pasture grazed beef" to "typical beef". The following results were reported and further explained in multiple blog posts (links provided at bottom of page).

Overall Fat Comparison (Chart 1)



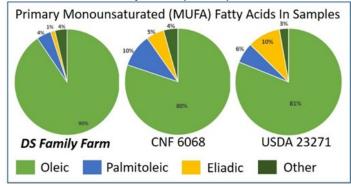
Our "Pasture Grazed", 100% grassfed beef reported a higher percentage of saturated fatty acids, lower monounsaturated fatty acids and lower trans fats. All three samples were the same for polyunsaturated fatty acids at 4%.

Saturated Fatty Acids (Chart 2)



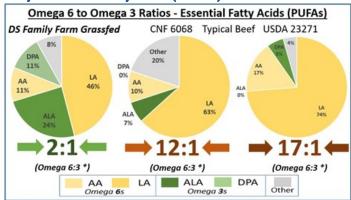
Looking specifically at the break down of Saturated fats (remember our sample was highest for SFA, Chart 1), our grassfed beef displays a higher percentage of Palmitic acid and lower percentage of Stearic acid when compared to both "typical" beef samples.

Monounsaturated Fatty Acids (Chart 3)



Reviewing the break down of Monounsaturated fats (our sample was lowest overall for MUFA, Chart 1), our grassfed beef is primarily Oleic acid while the typical beef had some other components making up 10% of their MUFA profile.

Polyunsaturated Fatty Acids (Chart 4)



When looking at the Polyunsaturated fats, our sample expresses the expected Grassfed makeup of these desirable

fats. Our beef Omega 6:3 ratio meets the dietary recommendation of around 2:1. Both "typical" samples from the Government databases express higher Omega 6:3 ratios that are "typical" for "grain fed" beef. Remember that PUFAs only made up 4% of the fats for all samples, see Chart 1.

PUFA	DS Family	CNF 6068	USDA 23271
LA n-6	0.17	0.19	0.25
ALA n-3	0.09	0.02	0
GLA n-6	0	0	0.014
20:2 n-6	0	0.01	0
20:3 n-6	0.01	0	0
AA n-6	0.04	0.03	0.056
EPA n-3	0.01	0	0.001
DPA n-3	0.04	0	0.018
DHA n-3	0	0	0
Other	0.01	0.05	0
	g/100g	g/100g	g/100g
Omega 6	0.22	0.23	0.32
Omega 3	0.14	0.02	0.019
Ratio	2	12	17

^{*} Omega 6:3 data

DS Family Farm Blog Posts:

Post #1 Grassfed vs Conventional Beef - Voodoo or The Difference Is Real?

Post #2 Grassfed Beef - Fat Analysis - Omega 6 to 3 Ratio

Post #3 Summary Laboratory Analysis Our Pasture Grazed Beef & CLA estimate

Mother Earth News - Pilot Grassfed Study 2015

DS Family Farm Blog Post 4:

Our Pasture Grazed Beef Compared to

All Farms in the 2015 Pilot Study