

A.

ANOVA table for total fat content

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
ID	16	1084.1613	67.76008	5.504272	0.0000002
Year	1	184.5367	184.53675	14.990248	0.0002401
State	1	402.6597	402.65966	32.708760	0.0000002
ID:Year	6	203.5058	33.91763	2.755190	0.0183759
Residuals	70	861.7317	12.31045	NA	NA

B.

ANOVA table for phenolics mg/kg

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
ID	16	499966344	31247896	27.964872	0.0000000
Year	1	4541820	4541820	4.064639	0.0475748
State	1	57077594	57077594	51.080801	0.0000000
ID:Year	6	52624361	8770727	7.849240	0.0000017
Residuals	71	79335271	1117398	NA	NA

C.

ANOVA table for oleic acid (C18:1)

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
ID	13	2221.6679761	170.8975366	44.8392616	0.0000000
Year	1	0.4472929	0.4472929	0.1173585	0.7329586
State	2	23.3702998	11.6851499	3.0658926	0.0530122
ID:Year	6	38.2948146	6.3824691	1.6746011	0.1403557
Residuals	69	262.9822527	3.8113370	NA	NA

D.

ANOVA table for alpha tocopherol

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
ID	20	1.391109e+06	69555.46699	19.6169500	0.0000000
Year	1	2.550000e-03	0.00255	0.0000007	0.9993252
State	1	4.325350e+04	43253.50325	12.1989234	0.0007401
ID:Year	6	4.184509e+04	6974.18151	1.9669506	0.0785191
Residuals	91	3.226571e+05	3545.68202	NA	NA

Supplementary Figure S2. ANOVA tables. **A.** Total fat content **B.** Phenolics **C.** Oleic acid **D.** alpha tocopherol