

## SUPPLEMENTARY MATERIAL

### PLASMA LIPID PROFILING IN A LARGE POPULATION BASED COHORT

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**Supplementary Table 1: Tandem mass spectrometry parameters for analysis of lipid species identified in human plasma**

Lipid species	Isotope monitored <sup>a</sup>	Retention Time <sup>b</sup>	Q1 <sup>c</sup>	Q3 <sup>d</sup>	Correction Factor
dhCer 8:0 (IS) <sup>e</sup>	[M+H] <sup>+</sup>	5.6	428.4	284.3	-
dhCer 16:0	[M+H] <sup>+</sup>	7.0	540.5	284.3	-
dhCer 18:0	[M+H] <sup>+</sup>	7.3	568.6	284.3	-
dhCer 20:0	[M+H] <sup>+</sup>	7.6	596.6	284.3	-
dhCer 22:0	[M+H] <sup>+</sup>	7.8	624.6	284.3	-
dhCer 24:0	[M+H] <sup>+</sup>	8.0	652.7	284.3	-
dhCer 24:1	[M+H] <sup>+</sup>	7.8	650.7	284.3	-
Cer 17:0 (IS) <sup>e</sup>	[M+H] <sup>+</sup>	7.1	552.5	264.3	-
Cer 16:0	[M+H] <sup>+</sup>	6.9	538.5	264.3	-
Cer 18:0	[M+H] <sup>+</sup>	7.2	566.6	264.3	-
Cer 20:0	[M+H] <sup>+</sup>	7.5	594.6	264.3	-
Cer 22:0	[M+H] <sup>+</sup>	7.7	622.6	264.3	-
Cer 24:0	[M+H] <sup>+</sup>	8.0	650.7	264.3	-
Cer 24:1	[M+H] <sup>+</sup>	7.7	648.6	264.3	-
MHC 16:0d3 (IS) <sup>e</sup>	[M+H] <sup>+</sup>	6.2	703.6	264.3	-
MHC 16:0	[M+H] <sup>+</sup>	6.2	700.6	264.3	-
MHC 18:0	[M+H] <sup>+</sup>	6.5	728.6	264.3	-
MHC 20:0	[M+H] <sup>+</sup>	6.8	756.6	264.3	-
MHC 22:0	[M+H] <sup>+</sup>	7.1	784.7	264.3	-
MHC 24:0	[M+H] <sup>+</sup>	7.4	812.7	264.3	-
MHC 24:1	[M+H] <sup>+</sup>	7.1	810.7	264.3	-
DHC 16:0d3 (IS) <sup>e</sup>	[M+H] <sup>+</sup>	5.9	865.6	264.3	-
DHC 16:0	[M+H] <sup>+</sup>	5.9	862.6	264.3	-
DHC 18:0	[M+H] <sup>+</sup>	6.2	890.7	264.3	-
DHC 20:0	[M+H] <sup>+</sup>	6.5	918.7	264.3	-
DHC 22:0	[M+H] <sup>+</sup>	6.8	946.7	264.3	-
DHC 24:0	[M+H] <sup>+</sup>	7.1	974.8	264.3	-
DHC 24:1	[M+H] <sup>+</sup>	6.8	972.7	264.3	-
THC 17:0 (IS) <sup>e</sup>	[M+H] <sup>+</sup>	5.9	1038.7	264.3	-
THC 16:0	[M+H] <sup>+</sup>	5.7	1024.7	264.3	-
THC 18:0	[M+H] <sup>+</sup>	6.0	1052.7	264.3	-
THC 20:0	[M+H] <sup>+</sup>	6.3	1080.7	264.3	-
THC 22:0	[M+H] <sup>+</sup>	6.6	1108.8	264.3	-
THC 24:0	[M+H] <sup>+</sup>	6.9	1136.8	264.3	-
THC 24:1	[M+H] <sup>+</sup>	6.6	1134.8	264.3	-
GM3 16:0	[M+H] <sup>+</sup>	4.8	1153.7	264.3	-
GM3 18:0	[M+H] <sup>+</sup>	5.1	1181.8	264.3	-
GM3 20:0	[M+H] <sup>+</sup>	5.5	1209.8	264.3	-
GM3 22:0	[M+H] <sup>+</sup>	5.8	1237.8	264.3	-
GM3 24:0	[M+H] <sup>+</sup>	6.1	1265.9	264.3	-
GM3 24:1	[M+H] <sup>+</sup>	5.8	1263.8	264.3	-
SM 12:0 (IS) <sup>e</sup>	[M+H] <sup>+</sup>	4.8	647.5	184.1	-

Lipid species	Isotope monitored <sup>a</sup>	Retention Time <sup>b</sup>	Q1 <sup>c</sup>	Q3 <sup>d</sup>	Correction Factor
SM 12:0 +1 (IS) <sup>e</sup>	[M+1+H] <sup>+</sup>	4.8	648.5	185.1	-
SM 12:0 +2 (IS) <sup>e</sup>	[M+2+H] <sup>+</sup>	4.8	649.5	186.1	-
SM 32:1	[M+1+H] <sup>+</sup>	5.2	676.6	185.1	-
SM 32:2	[M+H] <sup>+</sup>	4.9	673.5	184.1	-
SM 34:1	M+2+H] <sup>+</sup>	5.6	705.6	186.1	-
SM 34:2	[M+1+H] <sup>+</sup>	5.3	702.6	185.1	-
SM 34:3	[M+H] <sup>+</sup>	5.1	699.5	184.1	-
SM 36:1	[M+1+H] <sup>+</sup>	6.0	732.6	185.1	-
SM 36:2	[ <sup>13</sup> C+H] <sup>+</sup>	5.8	730.6	185.1	-
SM 36:3	[M+H] <sup>+</sup>	5.5	727.6	184.1	-
SM 38:1	[M+1+H] <sup>+</sup>	6.3	760.6	185.1	-
SM 38:2	[M+1+H] <sup>+</sup>	6.1	758.6	185.1	-
SM 42:1	[M+1+H] <sup>+</sup>	6.9	816.7	185.1	-
SM 31:1	[M+H] <sup>+</sup>	5.0	661.5	184.1	-
SM 33:1	[M+1+H] <sup>+</sup>	5.4	690.6	185.1	-
SM 35:1	[M+H] <sup>+</sup>	5.8	717.6	184.1	-
SM 35:2	[M+H] <sup>+</sup>	5.6	715.6	184.1	-
SM 37:2	[M+H] <sup>+</sup>	5.9	743.5	184.1	-
SM 39:1	[M+1+H] <sup>+</sup>	6.5	774.7	185.1	-
SM 41:1	[M+1+H] <sup>+</sup>	6.7	802.7	185.1	-
SM 41:2	[M+1+H] <sup>+</sup>	6.5	800.7	185.1	-
PC 13:0/13:0 (IS) <sup>e</sup>	[M+H] <sup>+</sup>	5.0	650.5	184.1	-
PC 13:0/13:0 +1 (IS) <sup>e</sup>	[M+1+H] <sup>+</sup>	5.0	651.5	185.1	-
PC 13:0/13:0 +2 (IS) <sup>e</sup>	[M+2+H] <sup>+</sup>	5.0	652.5	186.1	-
PC 28:0	[M+H] <sup>+</sup>	5.5	678.5	184.1	-
PC 29:0	[M+H] <sup>+</sup>	5.1	692.5	184.1	-
PC 30:0	[M+H] <sup>+</sup>	5.9	706.5	184.1	-
PC 31:0	[M+H] <sup>+</sup>	6.0	720.6	184.1	-
PC 32:0	[M+1+H] <sup>+</sup>	6.2	735.6	185.1	-
PC 33:0	[M+H] <sup>+</sup>	6.4	748.6	184.1	-
PC 33:1	[M+H] <sup>+</sup>	6.2	746.6	184.1	-
PC 33:2	[M+H] <sup>+</sup>	5.9	744.6	184.1	-
PC 33:3	[M+H] <sup>+</sup>	5.8	742.5	184.1	-
PC 34:0	[M+H] <sup>+</sup>	6.5	762.6	184.1	-
PC 34:1	[M+1+H] <sup>+</sup>	6.3	761.6	185.1	-
PC 34:2	[M+2+H] <sup>+</sup>	6.1	760.6	186.1	-
PC 34:3	[M+1+H] <sup>+</sup>	5.9	757.6	185.1	-
PC 34:4	[M+H] <sup>+</sup>	5.8	754.5	184.1	-
PC 34:5	[M+H] <sup>+</sup>	5.6	752.5	184.1	-
PC 35:0	[M+H] <sup>+</sup>	6.6	776.6	184.1	-
PC 35:2	[M+1+H] <sup>+</sup>	6.3	773.6	185.1	-
PC 35:3	[M+H] <sup>+</sup>	6.0	770.6	184.1	-
PC 35:4	[M+1+H] <sup>+</sup>	6.0	769.6	185.1	-
PC 35:5	[M+1+H] <sup>+</sup>	5.8	767.5	185.1	-
PC 36:2	[M+2+H] <sup>+</sup>	6.4	788.6	186.1	-

Lipid species	Isotope monitored <sup>a</sup>	Retention Time <sup>b</sup>	Q1 <sup>c</sup>	Q3 <sup>d</sup>	Correction Factor
PC 36:3	[M+1+H] <sup>+</sup>	6.2	785.6	185.1	-
PC 36:4a <sup>f</sup>	[M+2+H] <sup>+</sup>	6.0	784.6	186.1	-
PC 36:4b <sup>f</sup>	[M+2+H] <sup>+</sup>	6.1	784.6	186.1	-
PC 36:5	[M+1+H] <sup>+</sup>	6.0	781.6	185.1	-
PC 36:6	[M+H] <sup>+</sup>	5.8	778.5	184.1	-
PC 37:4	[M+1+H] <sup>+</sup>	6.3	797.6	185.1	-
PC 37:5	[M+1+H] <sup>+</sup>	6.1	795.6	185.1	-
PC 37:6	[M+H] <sup>+</sup>	6.0	792.6	184.1	-
PC 38:2	[M+1+H] <sup>+</sup>	6.7	815.6	185.1	-
PC 38:3	[M+1+H] <sup>+</sup>	6.5	813.6	185.1	-
PC 38:4	[M+2+H] <sup>+</sup>	6.5	812.6	186.1	-
PC 38:5	[M+1+H] <sup>+</sup>	6.2	809.6	185.1	-
PC 38:6a <sup>f</sup>	[M+1+H] <sup>+</sup>	6.0	807.6	185.1	-
PC 38:6b <sup>f</sup>	[M+1+H] <sup>+</sup>	6.1	807.6	185.1	-
PC 38:7	[M+H] <sup>+</sup>	5.9	804.6	184.1	-
PC 39:6	[M+H] <sup>+</sup>	6.3	820.6	184.1	-
PC 40:5	[M+1+H] <sup>+</sup>	6.5	837.6	185.1	-
PC 40:6	[M+1+H] <sup>+</sup>	6.4	835.6	185.1	-
PC 40:7	[M+1+H] <sup>+</sup>	6.2	833.6	185.1	-
PC(O-30:0)	[M+H] <sup>+</sup>	6.0	692.5	184.1	-
PC(O-32:0)	[M+H] <sup>+</sup>	6.4	720.6	184.1	-
PC(O-32:1)	[M+H] <sup>+</sup>	6.1	718.5	184.1	-
PC(O-32:2)	[M+H] <sup>+</sup>	5.9	716.6	184.1	-
PC(O-34:0)	[M+H] <sup>+</sup>	6.7	748.6	184.1	-
PC(O-34:1)	[M+H] <sup>+</sup>	6.4	746.6	184.1	-
PC(O-34:2)	[M+H] <sup>+</sup>	6.2	744.6	184.1	-
PC(O-34:4)	[M+H] <sup>+</sup>	6.0	740.6	184.1	-
PC(O-35:4)	[M+H] <sup>+</sup>	6.1	754.5	184.1	-
PC(O-36:0)	[M+H] <sup>+</sup>	6.9	776.6	184.1	-
PC(O-36:1)	[M+1+H] <sup>+</sup>	6.7	775.6	185.1	-
PC(O-36:2)	[M+1+H] <sup>+</sup>	6.5	773.6	185.1	-
PC(O-36:3)	[M+H] <sup>+</sup>	6.3	770.6	184.1	-
PC(O-36:4)	[M+1+H] <sup>+</sup>	6.3	769.6	185.1	-
PC(O-36:5)	[M+1+H] <sup>+</sup>	6.2	767.5	185.1	-
PC(O-38:4)	[M+1+H] <sup>+</sup>	6.6	797.6	185.1	-
PC(O-38:5)	[M+1+H] <sup>+</sup>	6.3	795.6	185.1	-
PC(O-40:7)	[M+H] <sup>+</sup>	6.3	818.6	184.1	-
PC(P-32:0)	[M+H] <sup>+</sup>	6.3	718.5	184.1	-
PC(P-32:1)	[M+H] <sup>+</sup>	6.1	716.6	184.1	-
PC(P-34:1)	[M+H] <sup>+</sup>	6.4	744.6	184.1	-
PC(P-34:2)	[M+H] <sup>+</sup>	6.2	742.5	184.1	-
PC(P-36:2)	[M+H] <sup>+</sup>	6.5	770.6	184.1	-
PC(P-36:5)	[M+H] <sup>+</sup>	6.0	764.6	184.1	-
PC(P-38:5)	[M+H] <sup>+</sup>	6.3	792.6	184.1	-
PC(P-40:5)	[M+H] <sup>+</sup>	6.5	820.6	184.1	-

Lipid species	Isotope monitored <sup>a</sup>	Retention Time <sup>b</sup>	Q1 <sup>c</sup>	Q3 <sup>d</sup>	Correction Factor
LPC 13:0 (IS) <sup>e</sup>	[M+H] <sup>+</sup>	0.8	454.3	184.1	-
LPC 13:0 +1 (IS) <sup>e</sup>	[M+1+H] <sup>+</sup>	0.8	455.3	185.1	-
LPC 14:0	[M+H] <sup>+</sup>	0.9	468.3	184.1	-
LPC 15:0	[M+H] <sup>+</sup>	1.3	482.3	184.1	-
LPC 16:0	[M+1+H] <sup>+</sup>	1.8	497.3	185.1	-
LPC 16:1	[M+H] <sup>+</sup>	1.2	494.3	184.1	-
LPC 17:0	[M+H] <sup>+</sup>	2.5	510.4	184.1	-
LPC 17:1	[M+H] <sup>+</sup>	1.6	508.3	184.1	-
LPC 18:0	[M+H] <sup>+</sup>	3.3	524.4	184.1	-
LPC 18:1	[M+H] <sup>+</sup>	2.2	522.4	184.1	-
LPC 18:2	[M+H] <sup>+</sup>	1.4	520.3	184.1	-
LPC 18:3	[M+H] <sup>+</sup>	1.1	518.3	184.1	-
LPC 20:0	[M+H] <sup>+</sup>	4.2	552.4	184.1	-
LPC 20:1	[M+H] <sup>+</sup>	3.6	550.4	184.1	-
LPC 20:2	[M+H] <sup>+</sup>	2.8	548.4	184.1	-
LPC 20:3	[M+H] <sup>+</sup>	1.9	546.4	184.1	-
LPC 20:4	[M+H] <sup>+</sup>	1.5	544.3	184.1	-
LPC 20:5	[M+H] <sup>+</sup>	1.1	542.3	184.1	-
LPC 22:0	[M+H] <sup>+</sup>	4.9	580.4	184.1	-
LPC 22:1	[M+H] <sup>+</sup>	4.3	578.4	184.1	-
LPC 22:6	[M+H] <sup>+</sup>	1.6	568.3	184.1	-
LPC 24:0	[M+H] <sup>+</sup>	5.3	608.5	184.1	-
LPC 26:0	[M+H] <sup>+</sup>	5.8	636.5	184.1	-
LPC(O-20:0)	[M+H] <sup>+</sup>	4.4	538.4	104.1	-
LPC(O-22:0)	[M+H] <sup>+</sup>	5.0	566.5	104.1	-
LPC(O-22:1)	[M+H] <sup>+</sup>	4.5	564.4	104.1	-
LPC(O-24:0)	[M+H] <sup>+</sup>	5.5	594.5	104.1	-
LPC(O-24:1)	[M+H] <sup>+</sup>	5.0	592.5	104.1	-
LPC(O-24:2)	[M+H] <sup>+</sup>	4.7	590.5	104.1	-
PE 17:0/17:0 (IS) <sup>e</sup>	[M+H] <sup>+</sup>	6.7	720.6	579.5	-
PE 32:1	[M+H] <sup>+</sup>	6.2	690.5	549.5	-
PE 34:1	[M+H] <sup>+</sup>	6.5	718.5	577.5	-
PE 34:2	[M+H] <sup>+</sup>	6.3	716.5	575.5	-
PE 34:3	[M+H] <sup>+</sup>	6.1	714.5	573.5	-
PE 35:1	[M+H] <sup>+</sup>	6.6	732.6	591.5	-
PE 35:2	[M+H] <sup>+</sup>	6.4	730.5	589.5	-
PE 36:1	[M+H] <sup>+</sup>	6.8	746.6	605.6	-
PE 36:2	[M+H] <sup>+</sup>	6.6	744.6	603.5	-
PE 36:3	[M+H] <sup>+</sup>	6.4	742.5	601.5	-
PE 36:4	[M+H] <sup>+</sup>	6.3	740.5	599.5	-
PE 36:5	[M+H] <sup>+</sup>	6.1	738.5	597.5	-
PE 38:3	[M+H] <sup>+</sup>	6.6	770.6	629.6	-
PE 38:4	[M+H] <sup>+</sup>	6.6	768.6	627.5	-
PE 38:5	[M+H] <sup>+</sup>	6.4	766.5	625.5	-
PE 38:6	[M+H] <sup>+</sup>	6.3	764.5	623.5	-

Lipid species	Isotope monitored <sup>a</sup>	Retention Time <sup>b</sup>	Q1 <sup>c</sup>	Q3 <sup>d</sup>	Correction Factor
PE 40:5	[M+H] <sup>+</sup>	6.6	794.6	653.6	-
PE 40:6	[M+H] <sup>+</sup>	6.6	792.6	651.5	-
PE 40:7	[M+H] <sup>+</sup>	6.4	790.5	649.5	-
PE(O-34:1)	[M+H] <sup>+</sup>	6.6	704.6	563.5	-
PE(O-34:2)	[M+H] <sup>+</sup>	6.4	702.5	561.5	-
PE(O-36:2)	[M+H] <sup>+</sup>	6.7	730.5	589.5	-
PE(O-36:3)	[M+H] <sup>+</sup>	6.5	728.6	587.5	-
PE(O-36:4)	[M+H] <sup>+</sup>	6.4	726.5	585.5	-
PE(O-36:5)	[M+H] <sup>+</sup>	6.3	724.5	583.5	-
PE(O-38:4)	[M+H] <sup>+</sup>	6.7	754.6	613.6	-
PE(O-38:5)	[M+H] <sup>+</sup>	6.5	752.6	611.5	-
PE(O-38:6)	[M+H] <sup>+</sup>	6.5	750.5	609.5	-
PE(O-40:5)	[M+H] <sup>+</sup>	6.7	780.6	639.6	-
PE(O-40:6)	[M+H] <sup>+</sup>	6.7	778.5	637.5	-
PE(O-40:7)	[M+H] <sup>+</sup>	6.5	776.6	635.5	-
PE(P-34:1)	[M+H] <sup>+</sup>	6.6	702.5	561.5	-
PE(P-34:2)	[M+H] <sup>+</sup>	6.4	700.5	559.5	-
PE(P-36:1)	[M+H] <sup>+</sup>	6.8	730.5	589.5	-
PE(P-36:2)	[M+H] <sup>+</sup>	6.7	728.6	587.5	-
PE(P-36:4)	[M+H] <sup>+</sup>	6.4	724.5	583.5	-
PE(P-38:4)	[M+H] <sup>+</sup>	6.7	752.6	611.5	-
PE(P-38:6)	[M+H] <sup>+</sup>	6.4	748.5	607.5	-
PE(P-40:5)	[M+H] <sup>+</sup>	6.7	778.5	637.5	-
PE(P-40:6)	[M+H] <sup>+</sup>	6.7	776.6	635.5	-
LPE 16:0	[M+H] <sup>+</sup>	1.9	454.3	313.3	-
LPE 18:0	[M+H] <sup>+</sup>	3.6	482.3	341.3	-
LPE 18:1	[M+H] <sup>+</sup>	2.4	480.3	339.3	-
LPE 18:2	[M+H] <sup>+</sup>	1.7	478.3	337.3	-
LPE 20:4	[M+H] <sup>+</sup>	1.8	502.3	361.3	-
LPE 22:6	[M+H] <sup>+</sup>	1.8	526.3	385.3	-
PI 32:0	[M+NH <sub>4</sub> ] <sup>+</sup>	5.3	828.6	551.6	-
PI 32:1	[M+NH <sub>4</sub> ] <sup>+</sup>	5.1	826.5	549.5	-
PI 34:0	[M+NH <sub>4</sub> ] <sup>+</sup>	5.7	856.6	579.6	-
PI 34:1	[M+NH <sub>4</sub> ] <sup>+</sup>	5.4	854.6	577.6	-
PI 36:0	[M+NH <sub>4</sub> ] <sup>+</sup>	6.0	884.6	607.6	-
PI 36:1	[M+NH <sub>4</sub> ] <sup>+</sup>	5.8	882.6	605.6	-
PI 36:2	[M+NH <sub>4</sub> ] <sup>+</sup>	5.6	880.6	603.6	-
PI 36:3	[M+NH <sub>4</sub> ] <sup>+</sup>	5.4	878.6	601.6	-
PI 36:4	[M+NH <sub>4</sub> ] <sup>+</sup>	5.3	876.6	599.6	-
PI 38:2	[M+NH <sub>4</sub> ] <sup>+</sup>	5.9	908.6	631.6	-
PI 38:3	[M+NH <sub>4</sub> ] <sup>+</sup>	5.7	906.6	629.6	-
PI 38:4	[M+NH <sub>4</sub> ] <sup>+</sup>	5.6	904.6	627.6	-
PI 38:5	[M+NH <sub>4</sub> ] <sup>+</sup>	5.4	902.6	625.6	-
PI 38:6	[M+NH <sub>4</sub> ] <sup>+</sup>	5.3	900.6	623.6	-
PI 40:4	[M+NH <sub>4</sub> ] <sup>+</sup>	5.8	932.6	655.6	-

Lipid species	Isotope monitored <sup>a</sup>	Retention Time <sup>b</sup>	Q1 <sup>c</sup>	Q3 <sup>d</sup>	Correction Factor
PI 40:5	[M+NH <sub>4</sub> ] <sup>+</sup>	5.7	930.6	653.6	-
PI 40:6	[M+NH <sub>4</sub> ] <sup>+</sup>	5.6	928.6	651.6	-
PS 17:0/17:0 (IS) <sup>e</sup>	[M+H] <sup>+</sup>	5.7	764.5	579.5	-
PS 36:1	[M+H] <sup>+</sup>	5.8	790.6	605.6	-
PS 36:2	[M+H] <sup>+</sup>	5.6	788.5	603.5	-
PS 38:3	[M+H] <sup>+</sup>	5.7	814.6	629.6	-
PS 38:4	[M+H] <sup>+</sup>	5.6	812.5	627.5	-
PS 38:5	[M+H] <sup>+</sup>	5.4	810.5	625.5	-
PS 40:5	[M+H] <sup>+</sup>	5.8	838.6	653.6	-
PS 40:6	[M+H] <sup>+</sup>	5.6	836.5	651.5	-
PG 17:0/17:0 (IS) <sup>e</sup>	[M+NH <sub>4</sub> ] <sup>+</sup>	5.9	768.6	579.5	-
PG 34:1	[M+NH <sub>4</sub> ] <sup>+</sup>	5.7	766.6	577.5	-
PG 34:2	[M+NH <sub>4</sub> ] <sup>+</sup>	5.5	764.5	575.5	-
PG 36:1	[M+NH <sub>4</sub> ] <sup>+</sup>	6.0	794.6	605.6	-
PG 36:2	[M+NH <sub>4</sub> ] <sup>+</sup>	5.8	792.6	603.5	-
CE 18:0 d6 (IS) <sup>e</sup>	[M+NH <sub>4</sub> ] <sup>+</sup>	9.3	676.7	375.3	-
CE 18:0 d6 +1 (IS) <sup>e</sup>	[M+1+NH <sub>4</sub> ] <sup>+</sup>	9.3	677.7	376.3	-
CE 18:0 d6 +2 (IS) <sup>e</sup>	[M+2+NH <sub>4</sub> ] <sup>+</sup>	9.3	678.7	377.3	-
CE 14:0	[M+NH <sub>4</sub> ] <sup>+</sup>	9.1	614.6	369.3	0.49
CE 15:0	[M+NH <sub>4</sub> ] <sup>+</sup>	9.1	628.6	369.3	0.49
CE 16:0	[M+NH <sub>4</sub> ] <sup>+</sup>	9.2	642.6	369.3	0.50
CE 16:1	[M+NH <sub>4</sub> ] <sup>+</sup>	9.1	640.6	369.3	0.80
CE 16:2	[M+NH <sub>4</sub> ] <sup>+</sup>	8.9	638.6	369.3	2.18
CE 17:0	[M+NH <sub>4</sub> ] <sup>+</sup>	9.3	656.6	369.3	0.98
CE 17:1	[M+NH <sub>4</sub> ] <sup>+</sup>	9.2	654.6	369.3	1.58
CE 18:0	[M+NH <sub>4</sub> ] <sup>+</sup>	9.3	670.7	369.3	1.42
CE 18:1	[M+1+NH <sub>4</sub> ] <sup>+</sup>	9.2	669.6	370.3	2.31
CE 18:2	[M+2+NH <sub>4</sub> ] <sup>+</sup>	9.1	668.6	371.3	6.27
CE 18:3	[M+1+NH <sub>4</sub> ] <sup>+</sup>	9.0	665.6	370.3	6.27
CE 20:1	[M+NH <sub>4</sub> ] <sup>+</sup>	9.3	696.7	369.3	3.30
CE 20:2	[M+NH <sub>4</sub> ] <sup>+</sup>	9.2	694.7	369.3	8.97
CE 20:3	[M+NH <sub>4</sub> ] <sup>+</sup>	9.1	692.6	369.3	8.97
CE 20:4	[M+2+NH <sub>4</sub> ] <sup>+</sup>	9.0	692.6	371.3	8.97
CE 20:5	[M+2+NH <sub>4</sub> ] <sup>+</sup>	8.9	690.6	371.3	8.97
CE 22:0	[M+NH <sub>4</sub> ] <sup>+</sup>	9.5	726.7	369.3	2.75
CE 22:1	[M+NH <sub>4</sub> ] <sup>+</sup>	9.4	724.7	369.3	4.46
CE 22:4	[M+NH <sub>4</sub> ] <sup>+</sup>	9.1	718.7	369.3	12.12
CE 22:5	[M+NH <sub>4</sub> ] <sup>+</sup>	9.0	716.6	369.3	12.12
CE 22:6	[M+NH <sub>4</sub> ] <sup>+</sup>	8.9	716.6	371.3	12.12
CE 24:0	[M+NH <sub>4</sub> ] <sup>+</sup>	9.6	754.7	369.3	3.44
CE 24:1	[M+NH <sub>4</sub> ] <sup>+</sup>	9.5	752.7	369.3	5.58
CE 24:4	[M+NH <sub>4</sub> ] <sup>+</sup>	9.2	746.7	369.3	15.15
CE 24:5	[M+NH <sub>4</sub> ] <sup>+</sup>	9.1	744.7	369.3	15.15
CE 24:6	[M+NH <sub>4</sub> ] <sup>+</sup>	9.0	742.7	369.3	15.15
COH d7 (IS) <sup>e</sup>	[M+NH <sub>4</sub> ] <sup>+</sup>	6.5	411.4	376.3	-

Lipid species	Isotope monitored <sup>a</sup>	Retention Time <sup>b</sup>	Q1 <sup>c</sup>	Q3 <sup>d</sup>	Correction Factor
COH	[M+NH <sub>4</sub> ] <sup>+</sup>	6.5	404.4	369.3	-
DG 15:0/15:0 (IS) <sup>e</sup>	[M+NH <sub>4</sub> ] <sup>+</sup>	1.9	558.5	299.3	1.00
DG 14:0/16:0	[M+NH <sub>4</sub> ] <sup>+</sup>	1.9	558.5	313.3	0.50
DG 14:0/18:1	[M+NH <sub>4</sub> ] <sup>+</sup>	1.9	584.5	285.2	0.50
DG 14:0/18:2	[M+NH <sub>4</sub> ] <sup>+</sup>	1.8	582.5	285.2	0.50
DG 16:0/16:0	[M+NH <sub>4</sub> ] <sup>+</sup>	2.0	586.5	313.3	1.00
DG 16:0/18:0	[M+NH <sub>4</sub> ] <sup>+</sup>	2.1	614.6	341.3	0.50
DG 16:0/18:1	[M+NH <sub>4</sub> ] <sup>+</sup>	2.0	612.6	339.3	0.50
DG 16:0/18:2	[M+NH <sub>4</sub> ] <sup>+</sup>	1.9	610.5	313.3	0.50
DG 16:0/20:3	[M+NH <sub>4</sub> ] <sup>+</sup>	2.0	636.6	313.3	0.50
DG 16:0/20:4	[M+NH <sub>4</sub> ] <sup>+</sup>	1.9	634.5	313.3	0.50
DG 16:0/22:5	[M+NH <sub>4</sub> ] <sup>+</sup>	1.9	660.6	313.3	0.50
DG 16:0/22:6	[M+NH <sub>4</sub> ] <sup>+</sup>	1.8	658.5	313.3	0.50
DG 16:1/18:0	[M+NH <sub>4</sub> ] <sup>+</sup>	2.0	612.6	311.3	0.50
DG 16:1/18:1	[M+NH <sub>4</sub> ] <sup>+</sup>	1.9	610.5	339.3	0.50
DG 18:0/18:1	[M+NH <sub>4</sub> ] <sup>+</sup>	2.1	640.6	339.3	0.50
DG 18:0/18:2	[M+NH <sub>4</sub> ] <sup>+</sup>	2.0	638.6	341.3	0.50
DG 18:0/20:4	[M+NH <sub>4</sub> ] <sup>+</sup>	2.0	662.6	341.3	0.50
DG 18:1/18:1	[M+NH <sub>4</sub> ] <sup>+</sup>	2.0	638.6	339.3	1.00
DG 18:1/18:2	[M+NH <sub>4</sub> ] <sup>+</sup>	1.9	636.6	339.3	0.50
DG 18:1/18:3	[M+NH <sub>4</sub> ] <sup>+</sup>	1.8	634.5	339.3	0.50
DG 18:1/20:3	[M+NH <sub>4</sub> ] <sup>+</sup>	1.9	662.6	339.3	0.50
DG 18:1/20:4	[M+NH <sub>4</sub> ] <sup>+</sup>	1.9	660.6	339.3	0.50
DG 18:2/18:2	[M+NH <sub>4</sub> ] <sup>+</sup>	1.8	634.5	337.3	1.00
TG 17:0/17:0/17:0 (IS) <sup>e</sup>	[M+NH <sub>4</sub> ] <sup>+</sup>	4.5	866.8	579.5	1.00
TG 17:0/17:0/17:0 +1 (IS) <sup>e</sup>	[M+1+NH <sub>4</sub> ] <sup>+</sup>	4.5	867.8	580.5	1.00
TG 14:0/16:0/18:1	[M+NH <sub>4</sub> ] <sup>+</sup>	3.6	822.8	523.5	0.33
TG 14:0/16:0/18:2	[M+NH <sub>4</sub> ] <sup>+</sup>	3.3	820.8	547.5	0.33
TG 14:0/16:1/18:1	[M+NH <sub>4</sub> ] <sup>+</sup>	3.3	820.8	521.5	0.33
TG 14:0/16:1/18:2	[M+NH <sub>4</sub> ] <sup>+</sup>	3.0	818.8	521.5	0.33
TG 14:0/17:0/18:1	[M+NH <sub>4</sub> ] <sup>+</sup>	3.7	836.8	537.5	0.33
TG 14:0/18:0/18:1	[M+NH <sub>4</sub> ] <sup>+</sup>	3.9	850.8	605.6	0.33
TG 14:0/18:2/18:2	[M+NH <sub>4</sub> ] <sup>+</sup>	3.0	844.8	599.5	0.33
TG 14:1/16:0/18:1	[M+NH <sub>4</sub> ] <sup>+</sup>	3.3	820.8	577.6	0.33
TG 14:1/16:1/18:0	[M+NH <sub>4</sub> ] <sup>+</sup>	3.3	820.8	549.5	0.33
TG 14:1/18:0/18:2	[M+NH <sub>4</sub> ] <sup>+</sup>	3.3	846.8	603.6	0.33
TG 14:1/18:1/18:1	[M+NH <sub>4</sub> ] <sup>+</sup>	3.3	846.8	547.5	0.67
TG 15:0/16:0/18:1	[M+NH <sub>4</sub> ] <sup>+</sup>	3.7	836.8	577.5	0.33
TG 15:0/18:1/18:1	[M+NH <sub>4</sub> ] <sup>+</sup>	3.7	862.8	603.6	0.33
TG 16:0/16:0/16:0	[M+NH <sub>4</sub> ] <sup>+</sup>	3.9	824.8	551.5	1.00
TG 16:0/16:0/18:0	[M+NH <sub>4</sub> ] <sup>+</sup>	4.3	852.8	551.5	0.33
TG 16:0/16:0/18:1	[M+1+NH <sub>4</sub> ] <sup>+</sup>	3.9	851.8	552.5	0.33
TG 16:0/16:0/18:2	[M+NH <sub>4</sub> ] <sup>+</sup>	3.6	848.8	551.5	0.33
TG 16:0/16:1/17:0	[M+NH <sub>4</sub> ] <sup>+</sup>	3.7	836.8	563.5	0.33
TG 16:0/16:1/18:1	[M+1+NH <sub>4</sub> ] <sup>+</sup>	3.6	849.8	550.5	0.33



Lipid species	Isotope monitored <sup>a</sup>	Retention Time <sup>b</sup>	Q1 <sup>c</sup>	Q3 <sup>d</sup>	Correction Factor
TG 16:0/17:0/18:0	[M+NH <sub>4</sub> ] <sup>+</sup>	4.5	866.8	593.6	0.33
TG 16:0/17:0/18:1	[M+NH <sub>4</sub> ] <sup>+</sup>	4.0	864.8	565.5	0.33
TG 16:0/17:0/18:2	[M+NH <sub>4</sub> ] <sup>+</sup>	3.7	862.8	589.6	0.33
TG 16:0/18:0/18:1	[M+NH <sub>4</sub> ] <sup>+</sup>	4.3	878.8	577.5	0.33
TG 16:0/18:1/18:1	[M+1+NH <sub>4</sub> ] <sup>+</sup>	3.9	877.8	604.6	0.33
TG 16:0/18:1/18:2	[M+1+NH <sub>4</sub> ] <sup>+</sup>	3.6	875.8	578.6	0.33
TG 16:0/18:2/18:2	[M+NH <sub>4</sub> ] <sup>+</sup>	3.3	872.8	599.6	0.33
TG 16:1/16:1/16:1	[M+NH <sub>4</sub> ] <sup>+</sup>	3.0	818.8	547.5	1.00
TG 16:1/16:1/18:0	[M+NH <sub>4</sub> ] <sup>+</sup>	3.6	848.8	547.5	0.33
TG 16:1/16:1/18:1	[M+1+NH <sub>4</sub> ] <sup>+</sup>	3.3	847.8	576.6	0.67
TG 16:1/17:0/18:1	[M+NH <sub>4</sub> ] <sup>+</sup>	3.7	862.8	563.5	0.33
TG 16:1/18:1/18:1	[M+NH <sub>4</sub> ] <sup>+</sup>	3.5	874.8	603.6	0.33
TG 16:1/18:1/18:2	[M+NH <sub>4</sub> ] <sup>+</sup>	3.3	872.8	573.6	0.33
TG 17:0/18:1/18:1	[M+NH <sub>4</sub> ] <sup>+</sup>	4.0	890.8	603.6	0.33
TG 18:0/18:0/18:1	[M+NH <sub>4</sub> ] <sup>+</sup>	4.7	906.9	607.6	0.33
TG 18:0/18:1/18:1	[M+NH <sub>4</sub> ] <sup>+</sup>	4.2	904.9	603.6	0.33
TG 18:0/18:2/18:2	[M+NH <sub>4</sub> ] <sup>+</sup>	3.6	900.8	599.5	0.33
TG 18:1/18:1/18:1	[M+1+NH <sub>4</sub> ] <sup>+</sup>	3.8	903.9	604.6	0.33
TG 18:1/18:1/18:2	[M+NH <sub>4</sub> ] <sup>+</sup>	3.5	900.9	603.9	0.33
TG 18:1/18:1/20:4	[M+NH <sub>4</sub> ] <sup>+</sup>	3.4	924.9	603.6	0.33
TG 18:1/18:1/22:6	[M+NH <sub>4</sub> ] <sup>+</sup>	3.4	948.9	603.7	0.33
TG 18:1/18:2/18:2	[M+NH <sub>4</sub> ] <sup>+</sup>	3.3	898.9	599.6	0.33
TG 18:2/18:2/18:2	[M+NH <sub>4</sub> ] <sup>+</sup>	3.0	896.9	599.6	1.00
TG 18:2/18:2/20:4	[M+NH <sub>4</sub> ] <sup>+</sup>	3.0	920.9	599.6	0.33

<sup>a</sup> [M+1+H]<sup>+</sup> = naturally occurring isotopologue of 1 mass unit increase, [M+2+H]<sup>+</sup> = naturally occurring isotopologue of 2 mass unit increase, [M+1+NH<sub>4</sub>]<sup>+</sup> = naturally occurring ammonium adduct isotopologue of 1 mass unit increase.

<sup>b</sup> Units = minutes

<sup>c</sup> mass to charge value set for first quadrupole

<sup>d</sup> mass to charge value set for third quadrupole

<sup>e</sup> Denotes internal standard

<sup>f</sup> The designation of "a" and "b" refers to isomers that were chromatographically separated

Supplementary Table 2: Logistic regression of individual lipid species with sex and smoking status.

Lipid	Sex			Smoking status		
	IQR Odds Ratio (95% CI) <sup>a</sup>	p-value <sup>b</sup>	% Difference <sup>c</sup>	IQR Odds Ratio (95% CI) <sup>d</sup>	p-value <sup>b</sup>	% Difference <sup>e</sup>
dhCer 16:0	0.79 (0.67-0.93)	<b>8.65E-03</b>	-10.5	0.91 (0.76-1.07)	4.04E-01	-6.3
dhCer 18:0	0.67 (0.56-0.81)	<b>8.99E-05</b>	-17.9	0.96 (0.79-1.16)	7.78E-01	-7.0
dhCer 20:0	0.79 (0.65-0.95)	<b>1.80E-02</b>	-10.8	0.97 (0.79-1.19)	8.62E-01	-4.4
dhCer 22:0	0.90 (0.75-1.07)	2.64E-01	-9.3	0.90 (0.74-1.10)	4.75E-01	-6.0
dhCer 24:0	1.00 (0.85-1.19)	9.76E-01	-5.2	0.94 (0.77-1.13)	6.53E-01	-4.0
dhCer 24:1	0.95 (0.80-1.11)	5.49E-01	-6.6	1.11 (0.93-1.32)	3.90E-01	1.5
Cer 16:0	1.14 (0.94-1.39)	2.11E-01	0.5	1.02 (0.83-1.27)	9.00E-01	0.0
Cer 18:0	0.87 (0.72-1.05)	1.74E-01	-7.3	1.05 (0.86-1.29)	7.34E-01	-1.5
Cer 20:0	0.98 (0.82-1.17)	8.15E-01	-2.7	1.02 (0.84-1.25)	9.00E-01	-0.7
Cer 22:0	1.32 (1.11-1.57)	<b>2.88E-03</b>	3.3	0.91 (0.75-1.10)	4.88E-01	-1.9
Cer 24:0	1.80 (1.50-2.16)	<b>6.63E-09</b>	10.3	0.88 (0.73-1.07)	3.55E-01	-0.4
Cer 24:1	1.47 (1.22-1.77)	<b>1.46E-04</b>	7.7	1.23 (1.00-1.50)	1.25E-01	5.4
MHC 16:0	0.82 (0.69-0.98)	<b>4.70E-02</b>	-3.1	1.07 (0.88-1.30)	6.52E-01	0.3
MHC 18:0	0.55 (0.46-0.66)	<b>2.03E-09</b>	-11.4	1.15 (0.95-1.38)	2.80E-01	-0.8
MHC 20:0	0.80 (0.67-0.95)	<b>1.43E-02</b>	-4.2	1.11 (0.92-1.33)	4.31E-01	0.8
MHC 22:0	1.00 (0.85-1.19)	9.64E-01	0.4	0.87 (0.72-1.05)	2.75E-01	-3.3
MHC 24:0	1.39 (1.16-1.65)	<b>5.84E-04</b>	9.4	1.01 (0.83-1.23)	9.50E-01	2.2
MHC 24:1	0.88 (0.74-1.05)	2.00E-01	0.7	1.22 (1.01-1.48)	1.05E-01	4.9
DHC 16:0	0.72 (0.60-0.87)	<b>1.15E-03</b>	-3.6	0.99 (0.81-1.22)	9.57E-01	-1.1
DHC 18:0	0.82 (0.69-0.97)	<b>3.31E-02</b>	-5.1	1.03 (0.86-1.24)	8.39E-01	-1.1
DHC 20:0	0.74 (0.62-0.89)	<b>2.07E-03</b>	-8.8	0.98 (0.81-1.18)	8.83E-01	-3.4
DHC 22:0	0.79 (0.67-0.93)	<b>7.39E-03</b>	-6.4	0.89 (0.74-1.07)	3.55E-01	-4.7
DHC 24:0	1.24 (1.05-1.47)	<b>1.72E-02</b>	5.6	1.01 (0.84-1.22)	9.50E-01	1.4
DHC 24:1	1.14 (0.96-1.35)	1.74E-01	6.0	1.13 (0.94-1.37)	3.38E-01	4.0
THC 16:0	0.60 (0.50-0.72)	<b>2.88E-07</b>	-6.1	1.10 (0.91-1.32)	4.95E-01	-0.3
THC 18:0	0.70 (0.59-0.84)	<b>1.83E-04</b>	-5.9	0.95 (0.79-1.14)	7.22E-01	-3.1
THC 20:0	0.55 (0.46-0.66)	<b>4.66E-09</b>	-12.3	1.13 (0.94-1.37)	3.48E-01	-0.7
THC 22:0	0.52 (0.43-0.64)	<b>1.99E-09</b>	-10.9	0.95 (0.77-1.16)	7.38E-01	-4.3
THC 24:0	0.86 (0.72-1.03)	1.23E-01	0.5	1.21 (1.00-1.47)	1.27E-01	3.9
THC 24:1	0.63 (0.52-0.76)	<b>1.12E-05</b>	-3.6	1.56 (1.28-1.89)	<b>2.48E-04</b>	8.1

Lipid	Sex			Smoking status		
	IQR Odds Ratio (95% CI) <sup>a</sup>	p-value <sup>b</sup>	% Difference <sup>c</sup>	IQR Odds Ratio (95% CI) <sup>d</sup>	p-value <sup>b</sup>	% Difference <sup>e</sup>
GM3 16:0	0.82 (0.68-0.98)	<b>4.45E-02</b>	-1.5	1.09 (0.90-1.32)	5.43E-01	0.7
GM3 18:0	2.57 (2.09-3.14)	<b>1.61E-17</b>	21.4	1.00 (0.82-1.23)	9.67E-01	5.0
GM3 20:0	0.99 (0.82-1.18)	8.96E-01	0.3	1.10 (0.90-1.33)	4.95E-01	1.2
GM3 22:0	1.43 (1.18-1.73)	<b>4.68E-04</b>	6.0	0.90 (0.73-1.11)	4.89E-01	-1.2
GM3 24:0	2.12 (1.75-2.58)	<b>1.52E-12</b>	20.8	1.04 (0.85-1.27)	8.21E-01	5.5
GM3 24:1	1.54 (1.28-1.85)	<b>1.30E-05</b>	14.2	1.34 (1.11-1.62)	<b>1.46E-02</b>	9.8
SM 31:1	0.47 (0.38-0.58)	<b>1.19E-11</b>	-15.6	0.62 (0.50-0.78)	<b>7.62E-04</b>	-12.0
SM 32:1	0.68 (0.57-0.82)	<b>1.20E-04</b>	-9.0	0.87 (0.71-1.07)	3.26E-01	-4.9
SM 32:2	0.10 (0.07-0.14)	<b>8.05E-36</b>	-30.2	0.74 (0.57-0.96)	7.32E-02	-11.9
SM 33:1	0.68 (0.57-0.81)	<b>7.26E-05</b>	-8.1	0.71 (0.58-0.87)	<b>8.07E-03</b>	-7.4
SM 34:1	0.72 (0.60-0.87)	<b>1.71E-03</b>	-3.1	1.01 (0.82-1.24)	9.57E-01	-0.7
SM 34:2	0.28 (0.22-0.36)	<b>1.24E-21</b>	-15.3	0.85 (0.67-1.07)	3.06E-01	-5.7
SM 34:3	0.27 (0.21-0.34)	<b>2.52E-23</b>	-23.8	0.54 (0.42-0.69)	<b>4.94E-05</b>	-15.7
SM 35:1	0.74 (0.62-0.88)	<b>1.54E-03</b>	-6.3	0.71 (0.58-0.87)	<b>8.29E-03</b>	-6.7
SM 35:2	0.43 (0.35-0.53)	<b>1.92E-14</b>	-16.2	0.56 (0.45-0.70)	<b>2.22E-05</b>	-13.1
SM 36:1	0.56 (0.46-0.68)	<b>7.71E-08</b>	-10.1	0.89 (0.73-1.10)	4.47E-01	-4.4
SM 36:2	0.30 (0.24-0.38)	<b>1.03E-20</b>	-18.7	0.69 (0.55-0.87)	<b>1.11E-02</b>	-9.9
SM 36:3	0.26 (0.20-0.34)	<b>4.45E-23</b>	-24.8	0.52 (0.41-0.67)	<b>2.17E-05</b>	-16.9
SM 37:2	0.33 (0.26-0.41)	<b>2.18E-19</b>	-21.3	0.59 (0.46-0.74)	<b>2.27E-04</b>	-14.4
SM 38:1	0.74 (0.61-0.89)	<b>2.14E-03</b>	-6.2	0.86 (0.70-1.05)	2.75E-01	-4.2
SM 38:2	0.35 (0.28-0.43)	<b>1.02E-18</b>	-15.1	0.87 (0.70-1.09)	3.72E-01	-5.5
SM 39:1	0.70 (0.57-0.85)	<b>6.48E-04</b>	-10.1	0.60 (0.48-0.76)	<b>2.89E-04</b>	-12.5
SM 41:1	0.78 (0.65-0.93)	<b>9.66E-03</b>	-7.2	0.62 (0.51-0.77)	<b>2.72E-04</b>	-9.6
SM 41:2	0.48 (0.40-0.58)	<b>1.60E-12</b>	-12.4	0.67 (0.54-0.81)	<b>1.26E-03</b>	-9.3
SM 42:1	1.39 (1.16-1.66)	<b>6.17E-04</b>	5.3	0.90 (0.74-1.09)	4.31E-01	-0.6
PC 28:0	0.99 (0.91-1.09)	9.06E-01	-0.7	1.04 (0.95-1.15)	5.72E-01	5.5
PC 29:0	0.53 (0.43-0.64)	<b>1.14E-09</b>	-15.0	0.63 (0.51-0.79)	<b>7.62E-04</b>	-12.6
PC 30:0	0.88 (0.74-1.06)	2.31E-01	-4.8	1.23 (1.01-1.50)	1.05E-01	4.2
PC 31:0	0.93 (0.79-1.10)	4.61E-01	-4.4	0.77 (0.63-0.94)	<b>3.92E-02</b>	-8.3
PC 32:0	1.10 (0.92-1.31)	3.62E-01	1.5	1.37 (1.13-1.66)	<b>1.05E-02</b>	4.2
PC 33:0	0.93 (0.79-1.11)	4.82E-01	-1.1	0.83 (0.68-1.01)	1.45E-01	-3.0
PC 33:1	0.92 (0.77-1.10)	4.27E-01	-1.6	1.07 (0.87-1.30)	6.76E-01	0.4

Lipid	Sex			Smoking status		
	IQR Odds Ratio (95% CI) <sup>a</sup>	p-value <sup>b</sup>	% Difference <sup>c</sup>	IQR Odds Ratio (95% CI) <sup>d</sup>	p-value <sup>b</sup>	% Difference <sup>e</sup>
PC 33:2	0.57 (0.47-0.68)	<b>2.52E-08</b>	-12.0	0.54 (0.44-0.67)	<b>1.28E-05</b>	-13.3
PC 33:3	0.57 (0.47-0.69)	<b>3.00E-08</b>	-16.5	0.70 (0.56-0.86)	<b>6.99E-03</b>	-13.9
PC 34:0	1.31 (1.09-1.56)	<b>6.35E-03</b>	3.6	0.94 (0.77-1.15)	6.88E-01	-0.1
PC 34:1	1.13 (0.93-1.37)	2.60E-01	2.1	1.64 (1.33-2.02)	<b>1.37E-04</b>	5.7
PC 34:2	0.83 (0.70-0.99)	6.02E-02	-1.9	1.16 (0.95-1.41)	2.75E-01	0.5
PC 34:3	0.53 (0.43-0.64)	<b>3.02E-09</b>	-10.7	0.97 (0.78-1.19)	8.37E-01	-4.1
PC 34:4	0.70 (0.59-0.84)	<b>2.78E-04</b>	-11.4	0.99 (0.82-1.21)	9.62E-01	-4.3
PC 34:5	0.98 (0.84-1.14)	8.24E-01	-4.3	1.01 (0.85-1.20)	9.51E-01	-1.4
PC 35:0	1.00 (0.84-1.20)	9.87E-01	-0.3	0.83 (0.68-1.01)	1.61E-01	-5.9
PC 35:2	0.86 (0.71-1.02)	1.18E-01	-2.7	0.66 (0.53-0.81)	<b>1.36E-03</b>	-7.2
PC 35:3	0.69 (0.58-0.82)	<b>9.03E-05</b>	-7.4	0.71 (0.58-0.87)	<b>8.37E-03</b>	-7.8
PC 35:4	0.78 (0.65-0.92)	<b>7.39E-03</b>	-10.3	0.64 (0.52-0.80)	<b>1.01E-03</b>	-13.7
PC 35:5	0.99 (0.86-1.14)	9.06E-01	-6.2	0.81 (0.67-0.98)	8.50E-02	-12.2
PC 36:2	0.92 (0.77-1.10)	4.14E-01	-0.7	1.13 (0.93-1.37)	3.60E-01	0.9
PC 36:3	0.77 (0.64-0.91)	<b>5.07E-03</b>	-3.0	0.96 (0.80-1.17)	8.21E-01	-1.3
PC 36:4a <sup>f</sup>	0.93 (0.78-1.10)	4.42E-01	-0.3	0.87 (0.71-1.06)	3.06E-01	-3.6
PC 36:4b <sup>f</sup>	1.09 (0.92-1.30)	3.75E-01	0.3	1.17 (0.97-1.42)	2.27E-01	2.5
PC 36:5	1.18 (1.00-1.39)	6.50E-02	3.2	1.03 (0.86-1.23)	8.25E-01	1.7
PC 36:6	0.76 (0.64-0.90)	<b>2.93E-03</b>	-11.5	0.86 (0.71-1.04)	2.62E-01	-8.5
PC 37:4	1.09 (0.92-1.29)	3.66E-01	0.4	0.69 (0.56-0.83)	<b>1.88E-03</b>	-7.2
PC 37:5	1.05 (0.89-1.24)	5.92E-01	-0.5	0.82 (0.68-0.99)	1.19E-01	-6.2
PC 37:6	0.67 (0.57-0.80)	<b>2.07E-05</b>	-13.5	0.63 (0.51-0.77)	<b>2.72E-04</b>	-15.9
PC 38:2	0.69 (0.58-0.83)	<b>1.77E-04</b>	-6.5	0.86 (0.71-1.05)	2.75E-01	-4.1
PC 38:3	1.06 (0.87-1.28)	6.11E-01	-1.3	1.02 (0.83-1.26)	9.21E-01	0.0
PC 38:4	1.15 (0.97-1.37)	1.31E-01	1.7	1.05 (0.87-1.27)	7.10E-01	1.4
PC 38:5	0.98 (0.82-1.17)	8.73E-01	-0.9	0.87 (0.71-1.06)	2.89E-01	-2.3
PC 38:6a <sup>f</sup>	1.06 (0.88-1.26)	5.94E-01	0.7	0.83 (0.68-1.02)	1.78E-01	-3.9
PC 38:6b <sup>f</sup>	0.90 (0.77-1.07)	2.79E-01	-2.8	0.88 (0.73-1.06)	3.12E-01	-3.3
PC 38:7	0.70 (0.59-0.84)	<b>1.94E-04</b>	-9.3	0.72 (0.59-0.88)	<b>1.11E-02</b>	-9.6
PC 39:6	0.93 (0.79-1.11)	4.82E-01	-2.4	0.67 (0.54-0.82)	<b>1.85E-03</b>	-9.8
PC 40:5	1.23 (1.02-1.47)	<b>3.93E-02</b>	3.0	1.02 (0.83-1.24)	9.24E-01	0.9
PC 40:6	0.94 (0.79-1.12)	5.49E-01	-3.1	0.88 (0.73-1.07)	3.55E-01	-3.5

Lipid	Sex			Smoking status		
	IQR Odds Ratio (95% CI) <sup>a</sup>	p-value <sup>b</sup>	% Difference <sup>c</sup>	IQR Odds Ratio (95% CI) <sup>d</sup>	p-value <sup>b</sup>	% Difference <sup>e</sup>
PC 40:7	0.68 (0.57-0.83)	<b>1.82E-04</b>	-7.9	0.62 (0.50-0.78)	<b>7.62E-04</b>	-10.3
PC(O-30:0)	0.79 (0.67-0.94)	<b>1.15E-02</b>	-4.6	0.82 (0.68-0.99)	1.11E-01	-5.4
PC(O-32:0)	0.80 (0.67-0.95)	<b>1.76E-02</b>	-2.5	0.86 (0.70-1.05)	2.67E-01	-2.6
PC(O-32:1)	0.59 (0.49-0.71)	<b>2.11E-07</b>	-8.1	1.17 (0.95-1.43)	2.74E-01	1.3
PC(O-32:2)	1.08 (0.94-1.23)	3.25E-01	4.9	1.02 (0.88-1.18)	9.00E-01	2.0
PC(O-34:0)	0.81 (0.68-0.97)	<b>3.64E-02</b>	-3.6	0.75 (0.61-0.92)	<b>3.06E-02</b>	-5.2
PC(O-34:1)	0.65 (0.54-0.78)	<b>1.11E-05</b>	-4.0	1.01 (0.83-1.23)	9.48E-01	-0.8
PC(O-34:2)	0.85 (0.72-1.00)	7.46E-02	-2.4	0.84 (0.70-1.01)	1.66E-01	-3.9
PC(O-34:4)	1.23 (1.05-1.44)	<b>1.62E-02</b>	6.5	0.81 (0.67-0.97)	7.89E-02	-4.7
PC(O-35:4)	1.49 (1.28-1.74)	<b>2.58E-06</b>	16.3	0.92 (0.78-1.09)	4.95E-01	0.6
PC(O-36:0)	0.87 (0.75-1.01)	8.67E-02	-4.8	0.90 (0.76-1.07)	4.03E-01	-3.9
PC(O-36:1)	0.88 (0.75-1.04)	1.70E-01	-1.6	0.93 (0.78-1.12)	6.29E-01	-1.9
PC(O-36:2)	0.70 (0.58-0.83)	<b>1.95E-04</b>	-5.6	0.75 (0.61-0.92)	<b>2.83E-02</b>	-6.5
PC(O-36:3)	0.86 (0.72-1.03)	1.23E-01	-2.8	0.70 (0.57-0.86)	<b>7.18E-03</b>	-5.7
PC(O-36:4)	1.40 (1.17-1.67)	<b>4.04E-04</b>	5.2	0.86 (0.71-1.05)	2.80E-01	-1.1
PC(O-36:5)	1.73 (1.44-2.06)	<b>2.81E-08</b>	11.3	0.86 (0.70-1.05)	2.67E-01	-0.5
PC(O-38:4)	1.38 (1.16-1.63)	<b>4.66E-04</b>	4.7	0.82 (0.68-1.00)	1.24E-01	-2.1
PC(O-38:5)	1.25 (1.05-1.49)	<b>1.95E-02</b>	3.0	0.74 (0.60-0.90)	<b>1.83E-02</b>	-3.6
PC(O-40:7)	0.69 (0.58-0.83)	<b>1.12E-04</b>	-8.3	0.63 (0.51-0.77)	<b>2.34E-04</b>	-10.0
PC(P-32:0)	1.07 (0.91-1.27)	4.59E-01	2.1	1.06 (0.88-1.27)	6.81E-01	1.9
PC(P-32:1)	0.76 (0.64-0.89)	<b>1.90E-03</b>	-3.3	1.36 (1.14-1.62)	<b>7.75E-03</b>	7.1
PC(P-34:1)	0.77 (0.65-0.92)	<b>7.43E-03</b>	-1.6	1.12 (0.92-1.35)	4.16E-01	1.9
PC(P-34:2)	1.17 (0.98-1.40)	1.08E-01	4.3	0.75 (0.60-0.92)	<b>3.06E-02</b>	-3.5
PC(P-36:2)	0.99 (0.82-1.19)	9.33E-01	1.4	0.74 (0.59-0.92)	<b>2.83E-02</b>	-6.0
PC(P-36:5)	1.45 (1.26-1.67)	<b>9.94E-07</b>	17.8	0.85 (0.73-0.99)	1.19E-01	-3.5
PC(P-38:5)	1.07 (0.90-1.27)	4.77E-01	-0.1	0.74 (0.60-0.90)	<b>1.51E-02</b>	-4.8
PC(P-40:5)	0.85 (0.72-1.01)	9.52E-02	-4.0	0.71 (0.58-0.87)	<b>7.75E-03</b>	-7.3
LPC 14:0	1.23 (1.04-1.45)	<b>2.21E-02</b>	6.3	1.04 (0.88-1.24)	7.78E-01	2.3
LPC 15:0	1.32 (1.11-1.56)	<b>2.55E-03</b>	5.7	0.56 (0.45-0.69)	<b>1.28E-05</b>	-9.8
LPC 16:0	1.29 (1.10-1.50)	<b>3.07E-03</b>	9.7	1.10 (0.92-1.31)	4.43E-01	4.9
LPC 16:1	1.33 (1.14-1.54)	<b>5.57E-04</b>	10.4	1.21 (1.05-1.40)	<b>4.22E-02</b>	8.4
LPC 17:0	1.33 (1.11-1.59)	<b>2.92E-03</b>	10.8	0.77 (0.63-0.95)	5.36E-02	-4.1

Lipid	Sex			Smoking status		
	IQR Odds Ratio (95% CI) <sup>a</sup>	p-value <sup>b</sup>	% Difference <sup>c</sup>	IQR Odds Ratio (95% CI) <sup>d</sup>	p-value <sup>b</sup>	% Difference <sup>e</sup>
LPC 17:1	1.81 (1.51-2.18)	<b>3.50E-09</b>	16.5	1.09 (0.90-1.31)	5.29E-01	5.7
LPC 18:0	1.69 (1.40-2.04)	<b>3.01E-07</b>	11.1	0.89 (0.72-1.10)	4.31E-01	1.0
LPC 18:1	1.63 (1.34-1.99)	<b>4.94E-06</b>	17.4	1.17 (0.96-1.44)	2.62E-01	8.4
LPC 18:2	2.76 (2.24-3.40)	<b>5.08E-19</b>	25.4	0.94 (0.77-1.15)	6.88E-01	4.7
LPC 18:3	1.82 (1.54-2.15)	<b>6.94E-11</b>	29.7	1.13 (0.96-1.33)	2.67E-01	12.0
LPC 20:0	1.70 (1.42-2.02)	<b>3.79E-08</b>	16.8	0.87 (0.71-1.05)	2.80E-01	1.4
LPC 20:1	1.52 (1.28-1.80)	<b>6.27E-06</b>	13.8	0.97 (0.80-1.16)	8.21E-01	3.3
LPC 20:2	1.29 (1.10-1.51)	<b>2.81E-03</b>	13.7	0.98 (0.83-1.16)	8.92E-01	3.1
LPC 20:3	2.34 (1.94-2.83)	<b>8.28E-17</b>	21.2	1.05 (0.87-1.26)	7.34E-01	6.0
LPC 20:4	2.66 (2.18-3.25)	<b>2.58E-19</b>	23.2	0.98 (0.80-1.20)	9.00E-01	5.0
LPC 20:5	2.01 (1.68-2.41)	<b>1.60E-12</b>	36.0	0.99 (0.84-1.16)	9.46E-01	8.2
LPC 22:0	1.66 (1.40-1.98)	<b>1.38E-07</b>	14.6	0.87 (0.72-1.05)	2.86E-01	0.8
LPC 22:1	1.57 (1.34-1.84)	<b>1.96E-07</b>	24.1	1.01 (0.89-1.16)	9.03E-01	6.8
LPC 22:6	1.49 (1.26-1.75)	<b>8.81E-06</b>	15.6	0.92 (0.76-1.10)	4.95E-01	0.4
LPC 24:0	1.58 (1.32-1.90)	<b>4.82E-06</b>	11.9	1.07 (0.88-1.30)	6.58E-01	4.7
LPC 26:0	0.94 (0.80-1.12)	5.52E-01	2.3	1.23 (1.02-1.48)	8.62E-02	5.9
LPC(O-20:0)	1.65 (1.36-2.01)	<b>2.33E-06</b>	13.4	0.85 (0.68-1.06)	2.75E-01	0.7
LPC(O-22:0)	1.65 (1.37-1.98)	<b>8.38E-07</b>	11.6	0.96 (0.79-1.17)	8.09E-01	2.5
LPC(O-22:1)	1.24 (1.03-1.49)	<b>2.98E-02</b>	11.4	1.07 (0.87-1.31)	6.58E-01	4.9
LPC(O-24:0)	1.39 (1.17-1.65)	<b>4.46E-04</b>	10.3	1.34 (1.12-1.61)	<b>1.11E-02</b>	8.9
LPC(O-24:1)	1.11 (0.94-1.30)	2.62E-01	8.7	1.32 (1.10-1.57)	<b>1.46E-02</b>	10.8
LPC(O-24:2)	1.09 (0.91-1.30)	3.82E-01	7.6	0.93 (0.76-1.13)	6.19E-01	0.6
PE 32:1	0.95 (0.85-1.07)	4.82E-01	-4.0	1.34 (1.15-1.56)	<b>2.27E-03</b>	23.5
PE 34:1	0.97 (0.82-1.14)	7.48E-01	-2.5	1.39 (1.17-1.65)	<b>1.88E-03</b>	11.7
PE 34:2	0.72 (0.60-0.87)	<b>1.15E-03</b>	-12.6	1.20 (0.99-1.45)	1.45E-01	1.2
PE 34:3	0.70 (0.59-0.83)	<b>8.99E-05</b>	-15.5	1.24 (1.05-1.46)	<b>4.22E-02</b>	4.4
PE 35:1	0.92 (0.77-1.09)	3.89E-01	-4.1	1.14 (0.95-1.38)	2.96E-01	1.6
PE 35:2	0.75 (0.63-0.89)	<b>1.81E-03</b>	-10.5	0.99 (0.82-1.19)	9.51E-01	-4.5
PE 36:1	1.19 (1.00-1.42)	6.54E-02	3.9	1.38 (1.15-1.66)	<b>6.99E-03</b>	10.8
PE 36:2	0.89 (0.74-1.07)	2.64E-01	-5.2	1.25 (1.03-1.51)	8.20E-02	3.7
PE 36:3	0.74 (0.62-0.88)	<b>1.21E-03</b>	-10.2	1.09 (0.90-1.30)	5.34E-01	-1.7
PE 36:4	0.79 (0.66-0.94)	<b>1.56E-02</b>	-8.3	1.36 (1.13-1.63)	<b>9.25E-03</b>	6.0

Lipid	Sex			Smoking status		
	IQR Odds Ratio (95% CI) <sup>a</sup>	p-value <sup>b</sup>	% Difference <sup>c</sup>	IQR Odds Ratio (95% CI) <sup>d</sup>	p-value <sup>b</sup>	% Difference <sup>e</sup>
PE 36:5	0.92 (0.79-1.08)	3.82E-01	-3.9	1.37 (1.15-1.62)	<b>3.75E-03</b>	13.1
PE 38:3	0.79 (0.65-0.96)	<b>2.92E-02</b>	-8.4	1.20 (0.98-1.48)	1.86E-01	1.3
PE 38:4	0.80 (0.66-0.97)	<b>3.57E-02</b>	-7.4	1.20 (0.98-1.47)	1.88E-01	1.1
PE 38:5	0.68 (0.56-0.81)	<b>8.17E-05</b>	-11.5	1.10 (0.91-1.34)	4.84E-01	-2.0
PE 38:6	0.64 (0.53-0.77)	<b>1.05E-05</b>	-17.6	1.09 (0.91-1.31)	4.95E-01	-3.5
PE 40:5	0.86 (0.75-1.00)	6.50E-02	-9.3	1.20 (1.04-1.39)	5.50E-02	5.0
PE 40:6	0.71 (0.59-0.85)	<b>5.72E-04</b>	-16.4	1.04 (0.86-1.27)	7.92E-01	-4.9
PE 40:7	0.59 (0.49-0.70)	<b>3.67E-08</b>	-22.5	0.91 (0.76-1.09)	4.85E-01	-11.3
PE(O-34:1)	0.88 (0.75-1.04)	1.77E-01	-2.9	0.96 (0.79-1.15)	7.55E-01	-2.5
PE(O-34:2)	0.69 (0.58-0.81)	<b>3.28E-05</b>	-10.8	0.95 (0.79-1.13)	6.88E-01	-4.5
PE(O-36:2)	0.69 (0.58-0.83)	<b>1.22E-04</b>	-8.0	0.93 (0.76-1.13)	6.19E-01	-4.2
PE(O-36:3)	0.63 (0.52-0.75)	<b>2.59E-06</b>	-12.1	0.86 (0.70-1.05)	2.74E-01	-7.2
PE(O-36:4)	0.86 (0.73-1.01)	9.67E-02	-5.2	0.93 (0.77-1.12)	5.80E-01	-3.6
PE(O-36:5)	1.06 (0.94-1.20)	3.70E-01	4.1	0.99 (0.86-1.14)	9.50E-01	1.0
PE(O-38:4)	0.84 (0.71-0.98)	<b>3.91E-02</b>	-6.6	0.96 (0.81-1.15)	8.09E-01	-2.8
PE(O-38:5)	0.87 (0.74-1.02)	1.23E-01	-5.0	0.92 (0.76-1.10)	5.14E-01	-4.0
PE(O-38:6)	1.18 (1.00-1.39)	7.19E-02	1.5	0.77 (0.63-0.94)	<b>3.82E-02</b>	-5.6
PE(O-40:5)	0.88 (0.74-1.05)	1.85E-01	-4.0	0.82 (0.68-1.01)	1.45E-01	-5.7
PE(O-40:6)	0.83 (0.70-1.00)	7.03E-02	-4.3	0.83 (0.67-1.02)	1.66E-01	-5.3
PE(O-40:7)	0.76 (0.64-0.90)	<b>2.28E-03</b>	-7.8	0.67 (0.55-0.82)	<b>1.36E-03</b>	-10.7
PE(P-34:1)	1.46 (1.23-1.73)	<b>6.22E-05</b>	9.2	0.93 (0.77-1.12)	6.11E-01	0.1
PE(P-34:2)	1.41 (1.19-1.68)	<b>2.03E-04</b>	8.4	0.75 (0.62-0.92)	<b>2.57E-02</b>	-5.5
PE(P-36:4)	1.52 (1.28-1.81)	<b>1.14E-05</b>	8.2	0.74 (0.60-0.91)	<b>2.30E-02</b>	-6.0
PE(P-38:6)	1.03 (0.87-1.22)	7.48E-01	-2.0	0.72 (0.59-0.88)	<b>1.02E-02</b>	-8.1
PE(P-36:1)	1.51 (1.27-1.79)	<b>1.18E-05</b>	12.2	0.93 (0.78-1.11)	5.93E-01	0.1
PE(P-36:2)	1.38 (1.17-1.62)	<b>3.02E-04</b>	8.6	0.83 (0.69-1.00)	1.25E-01	-3.2
PE(P-36:4)	1.52 (1.28-1.81)	<b>1.14E-05</b>	8.2	0.74 (0.60-0.91)	<b>2.30E-02</b>	-6.0
PE(P-40:5)	0.85 (0.70-1.02)	1.11E-01	-4.0	0.80 (0.65-0.99)	1.15E-01	-5.7
PE(P-40:6)	1.04 (0.89-1.22)	6.63E-01	-1.5	0.68 (0.55-0.83)	<b>1.85E-03</b>	-9.9
LPE 16:0	1.10 (0.94-1.28)	2.98E-01	5.0	1.23 (1.04-1.45)	5.36E-02	6.7
LPE 18:0	1.22 (1.03-1.45)	<b>3.44E-02</b>	6.0	1.10 (0.91-1.32)	4.93E-01	3.0
LPE 18:1	1.52 (1.30-1.77)	<b>9.32E-07</b>	19.7	1.26 (1.08-1.46)	<b>1.59E-02</b>	12.7

Lipid	Sex			Smoking status		
	IQR Odds Ratio (95% CI) <sup>a</sup>	p-value <sup>b</sup>	% Difference <sup>c</sup>	IQR Odds Ratio (95% CI) <sup>d</sup>	p-value <sup>b</sup>	% Difference <sup>e</sup>
LPE 18:2	1.13 (0.97-1.32)	1.54E-01	6.7	1.29 (1.10-1.51)	<b>1.20E-02</b>	9.3
LPE 20:4	1.50 (1.27-1.78)	<b>1.15E-05</b>	13.3	1.11 (0.92-1.33)	4.43E-01	5.3
LPE 22:6	0.94 (0.80-1.10)	4.82E-01	-1.1	0.94 (0.78-1.13)	6.44E-01	-2.7
PI 32:0	0.76 (0.65-0.88)	<b>5.72E-04</b>	-21.1	1.19 (1.03-1.37)	5.78E-02	4.4
PI 32:1	1.00 (0.87-1.14)	9.64E-01	-1.3	1.31 (1.13-1.51)	<b>3.03E-03</b>	22.5
PI 34:0	0.77 (0.67-0.89)	<b>4.95E-04</b>	-16.7	1.15 (1.01-1.32)	1.01E-01	2.4
PI 34:1	1.04 (0.89-1.22)	6.51E-01	2.5	1.45 (1.23-1.71)	<b>2.82E-04</b>	16.0
PI 36:0	0.99 (0.84-1.17)	9.46E-01	-1.0	1.26 (1.06-1.50)	<b>3.71E-02</b>	9.9
PI 36:1	1.05 (0.90-1.22)	6.10E-01	3.4	1.37 (1.16-1.61)	<b>1.92E-03</b>	10.8
PI 36:2	0.68 (0.57-0.81)	<b>6.22E-05</b>	-7.6	1.17 (0.97-1.41)	2.19E-01	0.6
PI 36:3	0.64 (0.54-0.76)	<b>2.49E-06</b>	-10.4	0.97 (0.80-1.17)	8.38E-01	-4.1
PI 36:4	0.84 (0.70-1.00)	7.19E-02	-6.6	1.08 (0.89-1.31)	5.86E-01	-0.2
PI 38:2	0.80 (0.69-0.94)	<b>9.24E-03</b>	-6.6	1.10 (0.94-1.30)	3.95E-01	0.6
PI 38:3	1.04 (0.88-1.24)	6.77E-01	-0.7	0.97 (0.80-1.18)	8.38E-01	-1.6
PI 38:4	1.03 (0.86-1.24)	7.87E-01	-0.9	0.93 (0.76-1.15)	6.60E-01	-1.9
PI 38:5	0.67 (0.56-0.80)	<b>2.33E-05</b>	-11.5	0.79 (0.65-0.96)	6.15E-02	-9.2
PI 38:6	0.74 (0.62-0.88)	<b>1.13E-03</b>	-7.2	1.16 (0.97-1.39)	2.19E-01	1.6
PI 40:4	1.14 (0.96-1.35)	1.74E-01	3.1	1.26 (1.05-1.52)	5.36E-02	6.0
PI 40:5	1.29 (1.08-1.52)	<b>6.58E-03</b>	5.7	1.24 (1.03-1.49)	7.25E-02	7.2
PI 40:6	0.84 (0.71-0.99)	5.08E-02	-4.1	1.23 (1.03-1.47)	7.18E-02	3.9
PS 36:1	0.75 (0.64-0.88)	<b>8.54E-04</b>	-17.5	0.90 (0.76-1.07)	3.87E-01	-10.5
PS 36:2	0.67 (0.56-0.80)	<b>3.93E-05</b>	-20.0	0.84 (0.69-1.02)	1.80E-01	-13.3
PS 38:3	0.77 (0.66-0.90)	<b>1.48E-03</b>	-17.6	0.87 (0.73-1.03)	2.14E-01	-13.4
PS 38:4	0.79 (0.68-0.92)	<b>3.52E-03</b>	-14.8	0.86 (0.72-1.02)	2.02E-01	-12.2
PS 38:5	0.66 (0.56-0.79)	<b>1.53E-05</b>	-21.6	0.78 (0.64-0.95)	5.50E-02	-17.2
PS 40:5	0.96 (0.84-1.09)	5.49E-01	-6.7	0.89 (0.76-1.04)	2.74E-01	-10.1
PS 40:6	0.86 (0.74-1.00)	7.46E-02	-8.5	0.95 (0.80-1.12)	6.81E-01	-5.1
PG 34:1	0.97 (0.83-1.15)	7.88E-01	-0.3	1.29 (1.08-1.54)	<b>2.34E-02</b>	8.4
PG 34:2	0.88 (0.75-1.02)	1.26E-01	-12.0	0.98 (0.82-1.16)	8.80E-01	-6.3
PG 36:1	1.56 (1.31-1.85)	<b>2.05E-06</b>	18.3	1.33 (1.12-1.57)	<b>7.92E-03</b>	17.0
PG 36:2	1.38 (1.16-1.64)	<b>5.71E-04</b>	9.1	1.10 (0.91-1.32)	4.89E-01	4.3
CE 14:0	1.47 (1.24-1.73)	<b>2.05E-05</b>	14.4	1.17 (0.99-1.38)	1.45E-01	10.0



Lipid	Sex			Smoking status		
	IQR Odds Ratio (95% CI) <sup>a</sup>	p-value <sup>b</sup>	% Difference <sup>c</sup>	IQR Odds Ratio (95% CI) <sup>d</sup>	p-value <sup>b</sup>	% Difference <sup>e</sup>
CE 15:0	1.20 (1.03-1.41)	<b>3.14E-02</b>	1.8	0.74 (0.61-0.89)	<b>1.27E-02</b>	-8.7
CE 16:0	1.28 (1.08-1.52)	<b>7.75E-03</b>	2.1	1.06 (0.88-1.27)	6.88E-01	1.2
CE 16:1	1.26 (1.07-1.48)	<b>8.46E-03</b>	11.2	1.50 (1.27-1.77)	<b>8.76E-05</b>	24.7
CE 16:2	1.22 (1.03-1.45)	<b>3.14E-02</b>	2.5	0.99 (0.82-1.20)	9.57E-01	-0.7
CE 17:0	1.46 (1.24-1.71)	<b>1.70E-05</b>	9.9	0.81 (0.68-0.97)	7.46E-02	-3.7
CE 17:1	1.22 (1.02-1.45)	<b>3.95E-02</b>	1.6	0.93 (0.76-1.13)	6.06E-01	-1.3
CE 18:0	1.51 (1.26-1.80)	<b>1.96E-05</b>	7.9	0.84 (0.69-1.02)	1.92E-01	-2.1
CE 18:1	1.47 (1.23-1.76)	<b>5.82E-05</b>	6.9	1.31 (1.09-1.58)	<b>2.30E-02</b>	6.2
CE 18:2	1.53 (1.31-1.79)	<b>6.59E-07</b>	7.9	1.12 (0.95-1.32)	3.38E-01	3.6
CE 18:3	1.35 (1.14-1.60)	<b>8.15E-04</b>	9.2	1.18 (0.99-1.41)	1.56E-01	8.0
CE 20:1	1.37 (1.16-1.61)	<b>4.31E-04</b>	10.1	0.93 (0.77-1.11)	5.80E-01	0.8
CE 20:2	0.97 (0.82-1.15)	7.91E-01	-1.5	0.87 (0.72-1.05)	2.75E-01	-3.2
CE 20:3	1.43 (1.19-1.72)	<b>3.40E-04</b>	5.6	1.19 (0.98-1.45)	1.76E-01	5.9
CE 20:4	1.41 (1.20-1.65)	<b>7.06E-05</b>	7.7	1.00 (0.84-1.19)	9.70E-01	1.0
CE 20:5	1.44 (1.24-1.67)	<b>5.92E-06</b>	17.5	0.97 (0.83-1.13)	8.13E-01	1.6
CE 22:0	1.67 (1.43-1.95)	<b>1.50E-09</b>	24.9	0.96 (0.82-1.11)	6.90E-01	2.8
CE 22:1	1.57 (1.34-1.83)	<b>1.45E-07</b>	20.8	0.98 (0.84-1.14)	8.61E-01	3.7
CE 22:4	1.48 (1.23-1.79)	<b>9.38E-05</b>	10.2	1.38 (1.13-1.69)	<b>1.02E-02</b>	10.2
CE 22:5	1.28 (1.07-1.54)	<b>1.07E-02</b>	5.2	1.17 (0.96-1.43)	2.32E-01	5.0
CE 22:6	1.15 (0.98-1.34)	1.21E-01	1.1	0.91 (0.76-1.09)	4.75E-01	-4.0
CE 24:0	1.81 (1.54-2.13)	<b>2.60E-11</b>	27.4	1.01 (0.87-1.18)	9.25E-01	6.2
CE 24:1	1.60 (1.36-1.89)	<b>2.08E-07</b>	18.6	1.18 (1.01-1.39)	1.17E-01	10.1
CE 24:4	1.10 (0.95-1.28)	2.57E-01	8.8	1.25 (1.05-1.47)	<b>4.12E-02</b>	10.7
CE 24:5	1.63 (1.39-1.92)	<b>4.15E-08</b>	19.4	1.09 (0.92-1.29)	4.89E-01	7.1
CE 24:6	1.29 (1.11-1.51)	<b>1.86E-03</b>	13.6	1.02 (0.87-1.20)	8.83E-01	3.1
COH	0.99 (0.83-1.18)	9.45E-01	-0.6	1.01 (0.83-1.23)	9.50E-01	-0.4
DG 14:0/16:0	1.30 (1.15-1.46)	<b>6.22E-05</b>	24.4	1.14 (1.01-1.28)	1.03E-01	18.7
DG 14:0/18:1	1.42 (1.23-1.65)	<b>8.14E-06</b>	24.1	1.13 (0.98-1.31)	2.09E-01	13.7
DG 16:0/16:0	1.35 (1.19-1.54)	<b>1.92E-05</b>	18.2	1.21 (1.06-1.37)	<b>2.46E-02</b>	19.3
DG 16:0/18:0	1.50 (1.30-1.72)	<b>2.08E-07</b>	25.2	1.20 (1.05-1.37)	<b>3.71E-02</b>	17.9
DG 16:0/18:1	1.54 (1.31-1.81)	<b>9.63E-07</b>	17.2	1.23 (1.04-1.44)	5.31E-02	13.5
DG 16:0/18:2	1.44 (1.22-1.69)	<b>3.93E-05</b>	11.5	1.06 (0.89-1.25)	6.70E-01	3.7

Lipid	Sex			Smoking status		
	IQR Odds Ratio (95% CI) <sup>a</sup>	p-value <sup>b</sup>	% Difference <sup>c</sup>	IQR Odds Ratio (95% CI) <sup>d</sup>	p-value <sup>b</sup>	% Difference <sup>e</sup>
DG 16:0/20:3	1.60 (1.36-1.89)	<b>1.96E-07</b>	21.2	1.20 (1.02-1.41)	9.18E-02	13.7
DG 16:0/20:4	1.43 (1.23-1.65)	<b>7.25E-06</b>	18.3	1.13 (0.99-1.30)	1.78E-01	11.5
DG 16:0/22:5	1.62 (1.37-1.90)	<b>7.71E-08</b>	21.2	1.11 (0.94-1.30)	3.60E-01	8.3
DG 16:0/22:6	1.45 (1.25-1.67)	<b>2.66E-06</b>	22.1	0.99 (0.86-1.15)	9.51E-01	1.3
DG 16:1/18:0	1.33 (1.16-1.51)	<b>8.75E-05</b>	22.6	1.24 (1.09-1.40)	<b>8.48E-03</b>	24.6
DG 16:1/18:1	1.27 (1.09-1.48)	<b>3.73E-03</b>	10.4	1.25 (1.07-1.45)	<b>2.83E-02</b>	14.3
DG 18:0/18:1	1.51 (1.29-1.78)	<b>2.59E-06</b>	22.9	1.16 (1.02-1.32)	8.55E-02	14.7
DG 18:0/18:2	1.49 (1.26-1.76)	<b>1.18E-05</b>	17.4	1.06 (0.92-1.22)	5.94E-01	5.9
DG 18:0/20:4	1.51 (1.28-1.78)	<b>4.94E-06</b>	13.5	1.11 (0.95-1.31)	3.36E-01	6.5
DG 18:1/18:1	1.50 (1.28-1.75)	<b>2.59E-06</b>	16.8	1.16 (0.99-1.35)	1.60E-01	10.2
DG 18:1/18:2	1.40 (1.19-1.64)	<b>1.45E-04</b>	11.1	0.97 (0.82-1.16)	8.58E-01	0.0
DG 18:1/18:3	1.35 (1.17-1.55)	<b>9.33E-05</b>	14.9	1.01 (0.87-1.16)	9.57E-01	2.7
DG 18:1/20:3	1.53 (1.30-1.79)	<b>1.13E-06</b>	20.2	1.15 (1.00-1.34)	1.45E-01	11.7
DG 18:1/20:4	1.48 (1.26-1.73)	<b>6.67E-06</b>	15.5	1.08 (0.92-1.26)	4.95E-01	5.9
DG 18:2/18:2	1.21 (1.06-1.39)	<b>1.02E-02</b>	8.8	0.91 (0.78-1.06)	3.60E-01	-5.4
TG 14:0/16:0/18:1	1.39 (1.20-1.62)	<b>6.21E-05</b>	17.8	1.17 (1.00-1.37)	1.44E-01	13.4
TG 14:0/16:0/18:2	1.24 (1.08-1.43)	<b>5.46E-03</b>	11.5	1.17 (1.01-1.36)	9.66E-02	13.5
TG 14:0/16:1/18:1	1.20 (1.05-1.37)	<b>1.15E-02</b>	12.7	1.17 (1.02-1.34)	7.71E-02	15.5
TG 14:0/16:1/18:2	1.10 (0.97-1.24)	1.56E-01	5.1	1.04 (0.91-1.19)	7.09E-01	4.1
TG 14:0/17:0/18:1	1.38 (1.19-1.60)	<b>7.07E-05</b>	13.6	0.97 (0.82-1.15)	8.37E-01	0.2
TG 14:0/18:0/18:1	1.53 (1.32-1.77)	<b>1.76E-07</b>	31.6	1.16 (1.01-1.34)	1.17E-01	18.0
TG 14:0/18:2/18:2	1.24 (1.08-1.41)	<b>3.40E-03</b>	12.1	0.91 (0.78-1.06)	3.85E-01	-3.5
TG 14:1/16:0/18:1	1.25 (1.09-1.44)	<b>3.39E-03</b>	14.2	1.19 (1.04-1.37)	5.50E-02	16.3
TG 14:1/16:1/18:0	1.15 (1.01-1.31)	<b>4.31E-02</b>	11.9	1.23 (1.09-1.39)	<b>8.48E-03</b>	27.5
TG 14:1/18:0/18:2	1.28 (1.10-1.47)	<b>1.81E-03</b>	12.5	1.12 (0.97-1.29)	2.74E-01	9.2
TG 14:1/18:1/18:1	1.31 (1.12-1.54)	<b>1.45E-03</b>	10.3	1.09 (0.92-1.30)	4.76E-01	5.8
TG 15:0/16:0/18:1	1.37 (1.18-1.59)	<b>9.33E-05</b>	13.4	1.03 (0.87-1.22)	8.21E-01	3.3
TG 15:0/18:1/18:1	1.41 (1.22-1.64)	<b>1.98E-05</b>	13.2	0.89 (0.75-1.06)	3.55E-01	-2.5
TG 16:0/16:0/16:0	1.31 (1.16-1.49)	<b>6.69E-05</b>	22.8	1.18 (1.05-1.34)	<b>3.41E-02</b>	23.5
TG 16:0/16:0/18:0	1.50 (1.31-1.71)	<b>3.32E-08</b>	37.6	1.18 (1.04-1.34)	<b>4.35E-02</b>	24.5
TG 16:0/16:0/18:1	1.53 (1.30-1.81)	<b>2.59E-06</b>	15.0	1.29 (1.09-1.54)	<b>1.74E-02</b>	15.7
TG 16:0/16:0/18:2	1.44 (1.22-1.71)	<b>5.82E-05</b>	8.7	1.10 (0.91-1.32)	4.88E-01	4.2

Lipid	Sex			Smoking status		
	IQR Odds Ratio (95% CI) <sup>a</sup>	p-value <sup>b</sup>	% Difference <sup>c</sup>	IQR Odds Ratio (95% CI) <sup>d</sup>	p-value <sup>b</sup>	% Difference <sup>e</sup>
TG 16:0/16:1/17:0	1.37 (1.18-1.59)	<b>1.00E-04</b>	12.7	1.06 (0.90-1.25)	6.14E-01	5.2
TG 16:0/16:1/18:1	1.31 (1.12-1.53)	<b>1.82E-03</b>	9.5	1.31 (1.11-1.54)	<b>1.05E-02</b>	15.2
TG 16:0/17:0/18:0	1.31 (1.17-1.47)	<b>1.89E-05</b>	32.0	1.08 (0.97-1.22)	3.09E-01	15.7
TG 16:0/17:0/18:1	1.50 (1.29-1.75)	<b>1.42E-06</b>	17.8	1.07 (0.91-1.25)	5.80E-01	6.3
TG 16:0/17:0/18:2	1.42 (1.21-1.67)	<b>5.17E-05</b>	10.9	1.11 (0.93-1.32)	4.04E-01	6.2
TG 16:0/18:0/18:1	1.59 (1.37-1.84)	<b>7.48E-09</b>	29.9	1.20 (1.05-1.38)	<b>3.41E-02</b>	19.7
TG 16:0/18:1/18:1	1.62 (1.36-1.92)	<b>2.57E-07</b>	13.5	1.23 (1.03-1.47)	7.25E-02	10.1
TG 16:0/18:1/18:2	1.41 (1.20-1.67)	<b>1.42E-04</b>	7.5	0.97 (0.80-1.16)	8.35E-01	-0.2
TG 16:0/18:2/18:2	1.28 (1.10-1.50)	<b>2.53E-03</b>	7.3	0.89 (0.75-1.05)	3.12E-01	-4.5
TG 16:1/16:1/16:1	1.12 (0.97-1.29)	1.45E-01	6.7	1.18 (1.03-1.34)	6.16E-02	14.5
TG 16:1/16:1/18:0	1.43 (1.24-1.66)	<b>7.59E-06</b>	23.2	1.15 (1.00-1.33)	1.39E-01	14.3
TG 16:1/16:1/18:1	1.13 (0.96-1.32)	1.74E-01	1.5	1.20 (1.01-1.41)	9.99E-02	8.0
TG 16:1/17:0/18:1	1.40 (1.20-1.63)	<b>6.22E-05</b>	11.5	1.05 (0.88-1.24)	7.34E-01	3.9
TG 16:1/18:1/18:1	1.37 (1.16-1.61)	<b>3.52E-04</b>	10.7	1.19 (1.00-1.41)	1.31E-01	9.3
TG 16:1/18:1/18:2	1.30 (1.11-1.53)	<b>2.24E-03</b>	7.7	0.97 (0.82-1.16)	8.48E-01	0.3
TG 17:0/18:1/18:1	1.47 (1.26-1.70)	<b>2.78E-06</b>	18.0	1.19 (1.03-1.37)	6.07E-02	14.3
TG 18:0/18:0/18:1	1.35 (1.09-1.66)	<b>8.58E-03</b>	43.1	1.08 (1.00-1.17)	1.60E-01	25.3
TG 18:0/18:1/18:1	1.59 (1.30-1.95)	<b>2.94E-05</b>	28.0	1.17 (1.03-1.32)	5.14E-02	18.8
TG 18:0/18:2/18:2	1.27 (1.12-1.44)	<b>5.29E-04</b>	17.7	0.97 (0.85-1.10)	7.34E-01	2.1
TG 18:1/18:1/18:1	1.52 (1.31-1.75)	<b>2.02E-07</b>	19.7	1.16 (1.02-1.33)	8.55E-02	13.1
TG 18:1/18:1/18:2	1.45 (1.24-1.70)	<b>1.08E-05</b>	16.9	1.01 (0.86-1.18)	9.51E-01	4.2
TG 18:1/18:1/20:4	1.65 (1.38-1.96)	<b>2.08E-07</b>	13.8	1.07 (0.89-1.27)	6.40E-01	5.1
TG 18:1/18:1/22:6	1.69 (1.42-2.00)	<b>3.00E-08</b>	15.4	1.06 (0.89-1.26)	6.58E-01	5.4
TG 18:1/18:2/18:2	1.36 (1.18-1.56)	<b>6.13E-05</b>	15.9	0.95 (0.82-1.10)	6.50E-01	0.9
TG 18:2/18:2/18:2	1.27 (1.12-1.44)	<b>3.80E-04</b>	21.6	0.95 (0.84-1.08)	6.14E-01	0.9
TG 18:2/18:2/20:4	1.23 (1.08-1.39)	<b>2.53E-03</b>	20.5	1.07 (0.97-1.18)	3.07E-01	16.5

<sup>a</sup> Adjusted for age, BMI, SBP, 2hr post load glucose and smoking status.

<sup>b</sup> Benjamini & Hochberg corrected. Bold type indicates p<0.05.

<sup>c</sup> Male relative to female.

<sup>d</sup> Adjusted for sex, age, BMI, SBP and 2hr post load glucose.

<sup>e</sup> Smoking relative to non smoking

<sup>f</sup> The designation of "a" and "b" refers to 2 isomers that were able to be chromatographically separated.

Supplementary Table 3: Linear regression of lipid groups with age and, body mass index

Lipids	Age <sup>a</sup>		Body Mass Index <sup>b</sup>	
	$\beta$ coefficient (95% CI) <sup>c</sup>	p-value <sup>d</sup>	$\beta$ coefficient (95% CI) <sup>e</sup>	p-value <sup>d</sup>
dhCer 16:0	1.43 (0.62-2.23)	<b>2.18E-03</b>	0.85 (0.47-1.23)	<b>3.64E-05</b>
dhCer 18:0	0.12 (-0.85-1.09)	8.46E-01	2.21 (1.80-2.63)	<b>1.61E-22</b>
dhCer 20:0	0.59 (-0.48-1.67)	3.80E-01	1.74 (1.25-2.23)	<b>3.85E-11</b>
dhCer 22:0	0.16 (-0.87-1.19)	8.10E-01	2.06 (1.61-2.51)	<b>5.81E-17</b>
dhCer 24:0	0.43 (-0.57-1.44)	5.00E-01	1.54 (1.09-2.00)	<b>4.17E-10</b>
dhCer 24:1	1.25 (0.30-2.21)	<b>2.41E-02</b>	1.74 (1.31-2.17)	<b>9.67E-14</b>
Cer 16:0	4.64 (3.54-5.73)	<b>9.19E-14</b>	0.43 (-0.12-0.98)	1.70E-01
Cer 18:0	2.10 (1.02-3.17)	<b>7.69E-04</b>	1.89 (1.40-2.38)	<b>1.29E-12</b>
Cer 20:0	3.57 (2.52-4.61)	<b>1.25E-09</b>	0.72 (0.21-1.23)	<b>1.04E-02</b>
Cer 22:0	2.39 (1.37-3.41)	<b>4.57E-05</b>	0.47 (-0.02-0.96)	8.55E-02
Cer 24:0	2.83 (1.79-3.87)	<b>1.69E-06</b>	-0.24 (-0.74-0.27)	4.13E-01
Cer 24:1	4.37 (3.31-5.43)	<b>1.56E-13</b>	0.13 (-0.40-0.67)	6.77E-01
MHC 16:0	1.43 (0.37-2.49)	<b>1.93E-02</b>	0.39 (-0.11-0.89)	1.70E-01
MHC 18:0	2.05 (1.06-3.04)	<b>3.19E-04</b>	-0.50 (-0.97--0.03)	5.84E-02
MHC 20:0	2.30 (1.31-3.29)	<b>5.21E-05</b>	-0.47 (-0.94-0.01)	7.92E-02
MHC 22:0	1.37 (0.37-2.36)	<b>1.76E-02</b>	-0.61 (-1.08--0.14)	<b>1.85E-02</b>
MHC 24:0	1.78 (0.73-2.82)	<b>3.33E-03</b>	-0.78 (-1.28--0.29)	<b>4.12E-03</b>
MHC 24:1	1.71 (0.67-2.75)	<b>4.44E-03</b>	-0.80 (-1.29--0.31)	<b>3.09E-03</b>
DHC 16:0	0.54 (-0.55-1.64)	4.30E-01	-0.65 (-1.16--0.13)	<b>2.40E-02</b>
DHC 18:0	2.06 (1.07-3.05)	<b>3.05E-04</b>	0.38 (-0.09-0.86)	1.54E-01
DHC 20:0	1.02 (0.01-2.02)	8.55E-02	-0.09 (-0.57-0.39)	7.59E-01
DHC 22:0	1.08 (0.13-2.03)	5.37E-02	-0.40 (-0.85-0.04)	1.08E-01
DHC 24:0	1.73 (0.73-2.74)	<b>2.76E-03</b>	-0.76 (-1.24--0.28)	<b>3.72E-03</b>
DHC 24:1	1.66 (0.63-2.70)	<b>5.37E-03</b>	-1.15 (-1.63--0.66)	<b>1.24E-05</b>
THC 16:0	2.31 (1.30-3.32)	<b>6.99E-05</b>	-0.74 (-1.23--0.26)	<b>4.91E-03</b>
THC 18:0	2.93 (1.99-3.87)	<b>3.46E-08</b>	-0.91 (-1.36--0.45)	<b>2.40E-04</b>
THC 20:0	2.14 (1.14-3.14)	<b>2.02E-04</b>	-0.95 (-1.43--0.48)	<b>2.31E-04</b>
THC 22:0	2.00 (0.95-3.06)	<b>1.05E-03</b>	-1.66 (-2.15--1.18)	<b>2.01E-10</b>
THC 24:0	2.82 (1.81-3.84)	<b>1.26E-06</b>	-1.71 (-2.19--1.24)	<b>2.22E-11</b>
THC 24:1	4.15 (3.14-5.16)	<b>1.56E-13</b>	-1.51 (-2.00--1.02)	<b>1.26E-08</b>
GM3 16:0	2.42 (1.38-3.45)	<b>5.21E-05</b>	-0.96 (-1.46--0.47)	<b>3.62E-04</b>
GM3 18:0	1.69 (0.59-2.79)	<b>8.07E-03</b>	-0.75 (-1.28--0.23)	<b>9.08E-03</b>
GM3 20:0	2.87 (1.83-3.92)	<b>1.43E-06</b>	-0.79 (-1.29--0.28)	<b>4.46E-03</b>
GM3 22:0	2.04 (0.93-3.16)	<b>1.51E-03</b>	-0.94 (-1.46--0.41)	<b>1.12E-03</b>
GM3 24:0	1.94 (0.83-3.05)	<b>2.44E-03</b>	-2.29 (-2.78--1.79)	<b>1.17E-17</b>
GM3 24:1	3.21 (2.18-4.24)	<b>3.46E-08</b>	-1.68 (-2.16--1.20)	<b>1.28E-10</b>
SM 31:1	2.55 (1.45-3.64)	<b>5.21E-05</b>	0.52 (-0.01-1.05)	7.84E-02
SM 32:1	2.42 (1.37-3.48)	<b>6.97E-05</b>	1.24 (0.74-1.73)	<b>5.44E-06</b>
SM 32:2	3.44 (2.15-4.73)	<b>2.71E-06</b>	3.16 (2.59-3.72)	<b>1.75E-24</b>
SM 33:1	3.35 (2.34-4.36)	<b>4.07E-09</b>	0.44 (-0.05-0.94)	1.12E-01
SM 34:1	4.46 (3.39-5.52)	<b>1.22E-13</b>	-0.04 (-0.57-0.50)	9.17E-01
SM 34:2	4.76 (3.57-5.94)	<b>5.87E-13</b>	2.41 (1.85-2.97)	<b>1.65E-15</b>
SM 34:3	2.19 (1.04-3.34)	<b>9.74E-04</b>	1.29 (0.75-1.82)	<b>1.14E-05</b>

Lipids	Age <sup>a</sup>		Body Mass Index <sup>b</sup>	
	$\beta$ coefficient (95% CI) <sup>c</sup>	p-value <sup>d</sup>	$\beta$ coefficient (95% CI) <sup>e</sup>	p-value <sup>d</sup>
SM 35:1	2.55 (1.53-3.56)	<b>1.22E-05</b>	0.29 (-0.21-0.78)	3.16E-01
SM 35:2	1.52 (0.44-2.60)	<b>1.49E-02</b>	0.94 (0.43-1.45)	<b>6.96E-04</b>
SM 36:1	1.17 (0.07-2.27)	7.05E-02	1.90 (1.40-2.39)	<b>1.80E-12</b>
SM 36:2	1.57 (0.42-2.72)	<b>1.79E-02</b>	1.95 (1.43-2.47)	<b>4.10E-12</b>
SM 36:3	0.28 (-0.90-1.46)	7.12E-01	1.22 (0.67-1.77)	<b>4.15E-05</b>
SM 37:2	1.56 (0.43-2.69)	<b>1.74E-02</b>	1.11 (0.58-1.64)	<b>1.25E-04</b>
SM 38:1	0.27 (-0.83-1.37)	7.10E-01	0.41 (-0.11-0.93)	1.60E-01
SM 38:2	2.03 (0.86-3.20)	<b>2.66E-03</b>	0.61 (0.05-1.17)	<b>4.98E-02</b>
SM 39:1	0.84 (-0.31-1.99)	2.30E-01	0.30 (-0.24-0.85)	3.42E-01
SM 41:1	1.58 (0.51-2.64)	<b>1.04E-02</b>	0.84 (0.34-1.35)	<b>2.03E-03</b>
SM 41:2	2.39 (1.36-3.41)	<b>5.21E-05</b>	0.01 (-0.48-0.51)	9.66E-01
SM 42:1	1.47 (0.41-2.53)	<b>1.67E-02</b>	0.26 (-0.25-0.76)	3.82E-01
PC 28:0	0.01 (-0.57-0.58)	9.87E-01	0.08 (-0.19-0.35)	6.10E-01
PC 29:0	1.60 (0.56-2.65)	<b>8.15E-03</b>	0.27 (-0.23-0.77)	3.50E-01
PC 30:0	0.88 (-0.22-1.98)	1.88E-01	0.82 (0.31-1.34)	<b>3.76E-03</b>
PC 31:0	0.91 (-0.11-1.93)	1.37E-01	0.52 (0.04-1.00)	5.41E-02
PC 32:0	2.09 (1.03-3.15)	<b>6.69E-04</b>	0.48 (-0.03-0.98)	9.62E-02
PC 33:0	1.42 (0.39-2.45)	<b>1.76E-02</b>	-0.49 (-0.98-0.00)	7.72E-02
PC 33:1	0.84 (-0.24-1.91)	1.99E-01	0.69 (0.18-1.20)	<b>1.41E-02</b>
PC 33:2	1.20 (0.15-2.26)	5.37E-02	-0.67 (-1.17--0.17)	<b>1.49E-02</b>
PC 33:3	1.18 (0.19-2.18)	<b>4.37E-02</b>	-0.53 (-1.01--0.06)	<b>4.28E-02</b>
PC 34:0	2.58 (1.52-3.64)	<b>2.40E-05</b>	-0.25 (-0.77-0.26)	3.94E-01
PC 34:1	1.02 (-0.13-2.17)	1.40E-01	0.67 (0.13-1.21)	<b>2.63E-02</b>
PC 34:2	-0.32 (-1.38-0.74)	6.56E-01	0.08 (-0.42-0.58)	7.91E-01
PC 34:3	0.73 (-0.36-1.83)	2.79E-01	-0.05 (-0.57-0.47)	8.90E-01
PC 34:4	0.26 (-0.78-1.31)	6.95E-01	0.45 (-0.04-0.94)	1.04E-01
PC 34:5	0.96 (0.03-1.89)	8.01E-02	0.54 (0.10-0.98)	<b>2.86E-02</b>
PC 35:0	1.33 (0.25-2.42)	<b>3.57E-02</b>	-0.26 (-0.77-0.26)	3.94E-01
PC 35:2	0.85 (-0.24-1.94)	1.94E-01	-1.66 (-2.16--1.16)	<b>5.46E-10</b>
PC 35:3	2.06 (1.04-3.07)	<b>4.25E-04</b>	-0.70 (-1.18--0.21)	<b>9.08E-03</b>
PC 35:4	0.78 (-0.23-1.80)	2.01E-01	0.12 (-0.36-0.61)	6.75E-01
PC 35:5	1.26 (0.39-2.13)	<b>1.26E-02</b>	0.36 (-0.06-0.77)	1.25E-01
PC 36:2	1.00 (-0.04-2.05)	1.07E-01	0.14 (-0.36-0.64)	6.44E-01
PC 36:3	0.78 (-0.26-1.81)	2.14E-01	0.23 (-0.26-0.72)	4.12E-01
PC 36:4a <sup>f</sup>	0.20 (-0.83-1.24)	7.62E-01	-1.61 (-2.08--1.15)	<b>1.89E-10</b>
PC 36:4b <sup>f</sup>	0.24 (-0.81-1.29)	7.28E-01	1.14 (0.65-1.62)	<b>1.62E-05</b>
PC 36:5	1.50 (0.52-2.49)	<b>8.37E-03</b>	0.85 (0.39-1.32)	<b>7.19E-04</b>
PC 36:6	1.23 (0.25-2.20)	<b>3.10E-02</b>	0.18 (-0.29-0.64)	5.17E-01
PC 37:4	0.35 (-0.66-1.37)	5.91E-01	-0.54 (-1.02--0.06)	<b>4.39E-02</b>
PC 37:5	1.84 (0.85-2.82)	<b>1.31E-03</b>	0.11 (-0.37-0.58)	7.11E-01
PC 37:6	1.85 (0.87-2.82)	<b>1.05E-03</b>	-0.70 (-1.17--0.24)	<b>5.65E-03</b>
PC 38:2	3.30 (2.28-4.32)	<b>1.10E-08</b>	-0.37 (-0.87-0.13)	1.85E-01
PC 38:3	2.53 (1.41-3.65)	<b>8.88E-05</b>	2.12 (1.61-2.63)	<b>1.78E-14</b>
PC 38:4	1.04 (0.01-2.08)	8.68E-02	1.03 (0.54-1.51)	<b>8.87E-05</b>

Lipids	Age <sup>a</sup>		Body Mass Index <sup>b</sup>	
	$\beta$ coefficient (95% CI) <sup>c</sup>	p-value <sup>d</sup>	$\beta$ coefficient (95% CI) <sup>e</sup>	p-value <sup>d</sup>
PC 38:5	1.72 (0.66-2.79)	<b>5.06E-03</b>	-0.07 (-0.58-0.44)	8.22E-01
PC 38:6a <sup>f</sup>	0.70 (-0.38-1.77)	2.96E-01	-0.68 (-1.19--0.17)	<b>1.49E-02</b>
PC 38:6b <sup>f</sup>	1.54 (0.55-2.52)	<b>6.83E-03</b>	-0.14 (-0.61-0.33)	6.29E-01
PC 38:7	1.80 (0.80-2.80)	<b>1.84E-03</b>	-0.74 (-1.21--0.26)	<b>4.75E-03</b>
PC 39:6	2.05 (1.03-3.08)	<b>4.85E-04</b>	-1.26 (-1.74--0.78)	<b>1.25E-06</b>
PC 40:5	2.71 (1.64-3.79)	<b>9.76E-06</b>	0.96 (0.45-1.48)	<b>5.47E-04</b>
PC 40:6	2.51 (1.50-3.52)	<b>1.51E-05</b>	0.92 (0.44-1.40)	<b>4.86E-04</b>
PC 40:7	2.35 (1.28-3.41)	<b>1.20E-04</b>	-1.22 (-1.72--0.72)	<b>7.64E-06</b>
PC(O-30:0)	-0.86 (-1.85-0.12)	1.46E-01	-0.15 (-0.61-0.32)	6.05E-01
PC(O-32:0)	-1.21 (-2.27--0.15)	5.33E-02	-0.01 (-0.52-0.49)	9.63E-01
PC(O-32:1)	-1.95 (-3.03--0.86)	<b>1.92E-03</b>	0.08 (-0.44-0.60)	8.17E-01
PC(O-32:2)	-0.31 (-1.14-0.53)	5.71E-01	-0.24 (-0.63-0.16)	3.02E-01
PC(O-34:0)	0.30 (-0.77-1.38)	6.67E-01	-0.47 (-0.97-0.04)	1.02E-01
PC(O-34:1)	0.29 (-0.75-1.33)	6.67E-01	-1.08 (-1.57--0.60)	<b>3.76E-05</b>
PC(O-34:2)	-1.06 (-2.04--0.09)	6.60E-02	-0.84 (-1.30--0.39)	<b>7.00E-04</b>
PC(O-34:4)	-0.33 (-1.30-0.64)	5.97E-01	0.16 (-0.30-0.62)	5.54E-01
PC(O-35:4)	-0.98 (-1.88--0.07)	6.93E-02	0.45 (0.02-0.88)	6.05E-02
PC(O-36:0)	0.52 (-0.37-1.41)	3.45E-01	-0.02 (-0.44-0.40)	9.45E-01
PC(O-36:1)	0.61 (-0.36-1.58)	3.12E-01	-0.72 (-1.18--0.26)	<b>4.24E-03</b>
PC(O-36:2)	-0.33 (-1.37-0.72)	6.35E-01	-1.66 (-2.14--1.19)	<b>8.76E-11</b>
PC(O-36:3)	-1.66 (-2.71--0.61)	<b>6.34E-03</b>	-0.23 (-0.73-0.27)	4.23E-01
PC(O-36:4)	-1.82 (-2.87--0.77)	<b>2.66E-03</b>	0.55 (0.05-1.05)	<b>4.99E-02</b>
PC(O-36:5)	-0.68 (-1.74-0.37)	2.96E-01	0.93 (0.44-1.43)	<b>5.32E-04</b>
PC(O-38:4)	-1.09 (-2.10--0.08)	6.84E-02	-0.18 (-0.66-0.30)	5.21E-01
PC(O-38:5)	-1.12 (-2.19--0.05)	7.41E-02	-0.17 (-0.67-0.34)	5.86E-01
PC(O-40:7)	1.05 (0.03-2.07)	7.96E-02	-0.08 (-0.56-0.41)	8.04E-01
PC(P-32:0)	0.84 (-0.18-1.85)	1.72E-01	0.37 (-0.11-0.85)	1.71E-01
PC(P-32:1)	0.99 (0.00-1.98)	8.87E-02	0.60 (0.13-1.07)	<b>2.02E-02</b>
PC(P-34:1)	2.19 (1.14-3.23)	<b>2.88E-04</b>	-0.95 (-1.45--0.46)	<b>4.23E-04</b>
PC(P-34:2)	-1.45 (-2.54--0.36)	<b>2.18E-02</b>	-0.96 (-1.47--0.44)	<b>6.08E-04</b>
PC(P-36:2)	-0.23 (-1.34-0.88)	7.56E-01	-1.57 (-2.08--1.06)	<b>1.17E-08</b>
PC(P-36:5)	-0.09 (-0.88-0.71)	8.55E-01	0.70 (0.32-1.07)	<b>5.63E-04</b>
PC(P-38:5)	-0.87 (-1.90-0.17)	1.64E-01	0.64 (0.15-1.13)	<b>1.79E-02</b>
PC(P-40:5)	0.64 (-0.39-1.67)	3.15E-01	-0.50 (-0.98--0.01)	6.75E-02
LPC 14:0	0.32 (-0.66-1.29)	6.22E-01	0.11 (-0.35-0.57)	6.95E-01
LPC 15:0	1.81 (0.79-2.84)	<b>2.26E-03</b>	-1.35 (-1.83--0.87)	<b>2.09E-07</b>
LPC 16:0	0.75 (-0.20-1.71)	1.91E-01	-0.60 (-1.05--0.15)	<b>1.62E-02</b>
LPC 16:1	0.36 (-0.49-1.20)	5.10E-01	-0.26 (-0.66-0.14)	2.53E-01
LPC 17:0	1.79 (0.72-2.87)	<b>3.85E-03</b>	-1.68 (-2.17--1.19)	<b>2.23E-10</b>
LPC 17:1	1.16 (0.12-2.20)	6.02E-02	-1.64 (-2.12--1.17)	<b>1.45E-10</b>
LPC 18:0	2.95 (1.86-4.05)	<b>2.10E-06</b>	-1.03 (-1.55--0.50)	<b>3.23E-04</b>
LPC 18:1	0.46 (-0.69-1.61)	5.33E-01	-1.79 (-2.31--1.27)	<b>1.93E-10</b>
LPC 18:2	-1.87 (-2.94--0.80)	<b>2.59E-03</b>	-2.65 (-3.11--2.19)	<b>1.05E-25</b>
LPC 18:3	-0.45 (-1.37-0.48)	4.42E-01	-1.01 (-1.44--0.58)	<b>1.38E-05</b>

Lipids	Age <sup>a</sup>		Body Mass Index <sup>b</sup>	
	$\beta$ coefficient (95% CI) <sup>c</sup>	p-value <sup>d</sup>	$\beta$ coefficient (95% CI) <sup>e</sup>	p-value <sup>d</sup>
LPC 20:0	3.17 (2.16-4.17)	<b>2.78E-08</b>	-2.41 (-2.85--1.96)	<b>4.91E-23</b>
LPC 20:1	3.49 (2.53-4.46)	<b>8.91E-11</b>	-2.35 (-2.78--1.92)	<b>2.33E-23</b>
LPC 20:2	1.43 (0.50-2.35)	<b>7.96E-03</b>	-1.65 (-2.07--1.23)	<b>4.83E-13</b>
LPC 20:3	-0.11 (-1.16-0.93)	8.55E-01	-0.21 (-0.70-0.28)	4.71E-01
LPC 20:4	-0.58 (-1.69-0.53)	4.06E-01	-1.03 (-1.55--0.51)	<b>2.49E-04</b>
LPC 20:5	0.47 (-0.41-1.35)	3.99E-01	-0.14 (-0.56-0.27)	5.66E-01
LPC 22:0	2.73 (1.74-3.71)	<b>1.42E-06</b>	-1.95 (-2.41--1.50)	<b>1.51E-15</b>
LPC 22:1	1.54 (0.79-2.29)	<b>3.78E-04</b>	-1.33 (-1.67--0.98)	<b>1.00E-12</b>
LPC 22:6	0.25 (-0.73-1.24)	6.94E-01	-1.11 (-1.57--0.65)	<b>7.60E-06</b>
LPC 24:0	3.81 (2.77-4.85)	<b>7.12E-11</b>	-1.85 (-2.34--1.36)	<b>3.82E-12</b>
LPC 26:0	2.23 (1.22-3.25)	<b>1.29E-04</b>	-1.81 (-2.27--1.34)	<b>8.52E-13</b>
LPC(O-20:0)	0.33 (-0.82-1.48)	6.67E-01	-2.48 (-2.98--1.98)	<b>6.39E-20</b>
LPC(O-22:0)	1.35 (0.27-2.42)	<b>3.25E-02</b>	-1.85 (-2.34--1.36)	<b>2.36E-12</b>
LPC(O-22:1)	-0.53 (-1.62-0.57)	4.44E-01	-2.36 (-2.84--1.88)	<b>1.24E-19</b>
LPC(O-24:0)	2.76 (1.75-3.77)	<b>1.49E-06</b>	-1.36 (-1.84--0.89)	<b>1.19E-07</b>
LPC(O-24:1)	0.63 (-0.36-1.62)	3.05E-01	-1.05 (-1.51--0.59)	<b>2.79E-05</b>
LPC(O-24:2)	-0.09 (-1.17-0.99)	8.87E-01	-2.40 (-2.87--1.94)	<b>2.86E-21</b>
PE 32:1	0.05 (-0.67-0.77)	9.03E-01	0.81 (0.47-1.14)	<b>8.40E-06</b>
PE 34:1	0.58 (-0.37-1.54)	3.27E-01	0.90 (0.45-1.35)	<b>2.32E-04</b>
PE 34:2	1.41 (0.38-2.45)	<b>1.80E-02</b>	0.57 (0.08-1.06)	<b>3.68E-02</b>
PE 34:3	0.98 (0.05-1.90)	7.23E-02	0.35 (-0.08-0.79)	1.54E-01
PE 35:1	1.12 (0.09-2.14)	6.58E-02	0.26 (-0.23-0.74)	3.58E-01
PE 35:2	1.74 (0.80-2.68)	<b>1.41E-03</b>	-0.25 (-0.70-0.21)	3.50E-01
PE 36:1	0.51 (-0.54-1.56)	4.44E-01	1.09 (0.60-1.58)	<b>4.03E-05</b>
PE 36:2	1.21 (0.14-2.27)	5.49E-02	0.59 (0.09-1.10)	<b>3.44E-02</b>
PE 36:3	0.81 (-0.16-1.78)	1.64E-01	-0.22 (-0.68-0.24)	4.05E-01
PE 36:4	1.27 (0.24-2.29)	<b>3.48E-02</b>	0.70 (0.22-1.19)	<b>8.45E-03</b>
PE 36:5	1.13 (0.16-2.09)	<b>4.74E-02</b>	0.62 (0.16-1.07)	<b>1.41E-02</b>
PE 38:3	2.16 (1.03-3.29)	<b>9.73E-04</b>	0.95 (0.41-1.49)	<b>1.12E-03</b>
PE 38:4	1.59 (0.48-2.71)	<b>1.38E-02</b>	0.58 (0.05-1.11)	<b>4.99E-02</b>
PE 38:5	1.41 (0.38-2.44)	<b>1.76E-02</b>	-0.05 (-0.54-0.44)	8.85E-01
PE 38:6	1.67 (0.70-2.63)	<b>2.66E-03</b>	0.19 (-0.27-0.66)	4.71E-01
PE 40:5	0.83 (0.00-1.66)	9.11E-02	0.51 (0.12-0.90)	<b>1.94E-02</b>
PE 40:6	1.63 (0.60-2.65)	<b>6.15E-03</b>	0.86 (0.37-1.34)	<b>1.12E-03</b>
PE 40:7	1.24 (0.38-2.09)	<b>1.26E-02</b>	-0.25 (-0.66-0.16)	2.91E-01
PE(O-34:1)	0.90 (-0.09-1.89)	1.29E-01	-0.56 (-1.03--0.09)	<b>3.08E-02</b>
PE(O-34:2)	0.26 (-0.68-1.21)	6.67E-01	-0.53 (-0.97--0.08)	<b>3.32E-02</b>
PE(O-36:2)	1.09 (0.06-2.11)	7.10E-02	-0.67 (-1.15--0.19)	<b>1.22E-02</b>
PE(O-36:3)	0.18 (-0.85-1.20)	7.94E-01	-0.31 (-0.80-0.17)	2.59E-01
PE(O-36:4)	-0.28 (-1.26-0.71)	6.67E-01	0.32 (-0.14-0.79)	2.21E-01
PE(O-36:5)	0.39 (-0.36-1.14)	4.13E-01	0.07 (-0.29-0.42)	7.58E-01
PE(O-38:4)	0.81 (-0.12-1.74)	1.47E-01	0.35 (-0.09-0.79)	1.60E-01
PE(O-38:5)	0.38 (-0.59-1.35)	5.41E-01	0.09 (-0.37-0.55)	7.62E-01
PE(O-38:6)	-0.28 (-1.28-0.72)	6.67E-01	0.31 (-0.17-0.78)	2.59E-01

Lipids	Age <sup>a</sup>		Body Mass Index <sup>b</sup>	
	$\beta$ coefficient (95% CI) <sup>c</sup>	p-value <sup>d</sup>	$\beta$ coefficient (95% CI) <sup>e</sup>	p-value <sup>d</sup>
PE(O-40:5)	1.12 (0.10-2.14)	6.47E-02	-0.27 (-0.76-0.22)	3.40E-01
PE(O-40:6)	0.85 (-0.23-1.93)	1.90E-01	-0.54 (-1.05--0.04)	5.54E-02
PE(O-40:7)	0.37 (-0.60-1.34)	5.53E-01	-0.54 (-1.00--0.09)	<b>3.19E-02</b>
PE(P-34:1)	0.47 (-0.56-1.50)	4.73E-01	0.32 (-0.16-0.81)	2.48E-01
PE(P-34:2)	0.43 (-0.61-1.47)	5.26E-01	0.22 (-0.27-0.71)	4.40E-01
PE(P-36:4)	-0.22 (-1.28-0.84)	7.56E-01	1.18 (0.69-1.68)	<b>9.92E-06</b>
PE(P-38:6)	0.37 (-0.66-1.39)	5.82E-01	0.43 (-0.05-0.92)	1.11E-01
PE(P-36:1)	0.97 (-0.03-1.96)	1.02E-01	0.05 (-0.42-0.52)	8.76E-01
PE(P-36:2)	0.47 (-0.51-1.44)	4.44E-01	-0.39 (-0.85-0.07)	1.27E-01
PE(P-38:4)	-0.19 (-1.24-0.87)	7.88E-01	0.67 (0.18-1.17)	<b>1.42E-02</b>
PE(P-40:5)	0.89 (-0.22-1.99)	1.83E-01	-0.50 (-1.02-0.02)	8.78E-02
PE(P-40:6)	0.49 (-0.48-1.46)	4.27E-01	-0.22 (-0.68-0.24)	4.06E-01
LPE 16:0	2.05 (1.12-2.98)	<b>1.20E-04</b>	-0.96 (-1.40--0.52)	<b>5.45E-05</b>
LPE 18:0	2.86 (1.85-3.86)	<b>6.08E-07</b>	-1.04 (-1.52--0.55)	<b>7.49E-05</b>
LPE 18:1	0.13 (-0.75-1.01)	8.15E-01	-0.99 (-1.39--0.58)	<b>8.19E-06</b>
LPE 18:2	1.65 (0.75-2.55)	<b>1.56E-03</b>	-0.76 (-1.18--0.33)	<b>1.18E-03</b>
LPE 20:4	0.27 (-0.76-1.30)	6.87E-01	-0.58 (-1.07--0.10)	<b>2.95E-02</b>
LPE 22:6	1.36 (0.38-2.34)	<b>1.65E-02</b>	-0.87 (-1.33--0.41)	<b>5.15E-04</b>
PI 32:0	-1.12 (-1.92--0.33)	<b>1.49E-02</b>	1.10 (0.73-1.47)	<b>3.08E-08</b>
PI 32:1	-0.32 (-1.12-0.48)	5.33E-01	1.29 (0.93-1.65)	<b>3.43E-11</b>
PI 34:0	-1.35 (-2.08--0.63)	<b>1.31E-03</b>	0.58 (0.24-0.93)	<b>2.00E-03</b>
PI 34:1	-0.12 (-1.03-0.80)	8.44E-01	1.10 (0.68-1.52)	<b>1.66E-06</b>
PI 36:0	-0.64 (-1.61-0.34)	2.93E-01	0.83 (0.37-1.28)	<b>8.78E-04</b>
PI 36:1	0.13 (-0.79-1.04)	8.26E-01	0.23 (-0.20-0.66)	3.61E-01
PI 36:2	0.77 (-0.24-1.78)	2.09E-01	-0.19 (-0.67-0.29)	5.07E-01
PI 36:3	1.53 (0.57-2.49)	<b>5.92E-03</b>	-0.36 (-0.82-0.09)	1.60E-01
PI 36:4	2.29 (1.26-3.32)	<b>1.15E-04</b>	1.30 (0.81-1.78)	<b>8.25E-07</b>
PI 38:2	1.59 (0.71-2.47)	<b>1.70E-03</b>	-0.50 (-0.92--0.08)	<b>3.07E-02</b>
PI 38:3	2.90 (1.89-3.91)	<b>5.18E-07</b>	0.47 (-0.02-0.96)	8.78E-02
PI 38:4	3.39 (2.29-4.48)	<b>3.75E-08</b>	0.49 (-0.04-1.03)	1.00E-01
PI 38:5	2.15 (1.20-3.10)	<b>8.77E-05</b>	-0.02 (-0.48-0.44)	9.45E-01
PI 38:6	1.23 (0.23-2.22)	<b>3.48E-02</b>	-0.08 (-0.55-0.39)	7.91E-01
PI 40:4	1.90 (0.86-2.93)	<b>1.51E-03</b>	0.56 (0.07-1.05)	<b>4.11E-02</b>
PI 40:5	1.67 (0.64-2.69)	<b>4.89E-03</b>	1.11 (0.63-1.59)	<b>1.82E-05</b>
PI 40:6	0.60 (-0.38-1.58)	3.23E-01	0.10 (-0.37-0.56)	7.40E-01
PS 36:1	-0.24 (-1.11-0.63)	6.70E-01	0.13 (-0.29-0.54)	6.09E-01
PS 36:2	-0.75 (-1.69-0.19)	1.88E-01	-0.01 (-0.45-0.44)	9.76E-01
PS 38:3	-0.72 (-1.53-0.08)	1.36E-01	0.01 (-0.37-0.40)	9.60E-01
PS 38:4	-0.32 (-1.16-0.52)	5.58E-01	-0.28 (-0.68-0.11)	2.09E-01
PS 38:5	-0.78 (-1.69-0.12)	1.48E-01	-0.32 (-0.75-0.11)	1.83E-01
PS 40:5	0.23 (-0.55-1.01)	6.56E-01	-0.03 (-0.40-0.34)	8.89E-01
PS 40:6	-0.61 (-1.48-0.27)	2.59E-01	-0.01 (-0.43-0.40)	9.61E-01
PG 34:1	1.27 (0.29-2.26)	<b>2.64E-02</b>	0.10 (-0.37-0.57)	7.41E-01
PG 34:2	0.13 (-0.79-1.05)	8.31E-01	0.40 (-0.04-0.83)	1.04E-01



Lipids	Age <sup>a</sup>		Body Mass Index <sup>b</sup>	
	$\beta$ coefficient (95% CI) <sup>c</sup>	p-value <sup>d</sup>	$\beta$ coefficient (95% CI) <sup>e</sup>	p-value <sup>d</sup>
PG 36:1	1.03 (0.08-1.99)	6.84E-02	1.06 (0.61-1.51)	<b>1.23E-05</b>
PG 36:2	1.11 (0.07-2.15)	7.05E-02	0.93 (0.45-1.42)	<b>4.59E-04</b>
CE 14:0	0.92 (-0.01-1.85)	9.31E-02	1.10 (0.67-1.53)	<b>2.68E-06</b>
CE 15:0	1.58 (0.63-2.52)	<b>3.97E-03</b>	0.85 (0.41-1.30)	<b>4.59E-04</b>
CE 16:0	1.89 (0.89-2.90)	<b>1.19E-03</b>	1.21 (0.74-1.68)	<b>2.40E-06</b>
CE 16:1	0.47 (-0.46-1.39)	4.30E-01	1.51 (1.09-1.93)	<b>3.23E-11</b>
CE 16:2	1.51 (0.48-2.54)	<b>1.13E-02</b>	1.51 (1.04-1.99)	<b>3.39E-09</b>
CE 17:0	0.90 (-0.05-1.86)	1.11E-01	0.03 (-0.42-0.49)	9.06E-01
CE 17:1	1.16 (0.11-2.22)	6.31E-02	0.90 (0.41-1.40)	<b>7.96E-04</b>
CE 18:0	1.57 (0.52-2.62)	<b>9.82E-03</b>	0.72 (0.23-1.22)	<b>8.19E-03</b>
CE 18:1	1.70 (0.66-2.75)	<b>4.87E-03</b>	0.97 (0.47-1.46)	<b>3.18E-04</b>
CE 18:2	0.96 (0.03-1.88)	8.02E-02	1.02 (0.59-1.45)	<b>1.41E-05</b>
CE 18:3	1.07 (0.07-2.07)	6.93E-02	1.34 (0.88-1.80)	<b>8.26E-08</b>
CE 20:1	1.16 (0.19-2.13)	<b>4.26E-02</b>	-1.13 (-1.58--0.68)	<b>4.65E-06</b>
CE 20:2	2.61 (1.63-3.58)	<b>2.71E-06</b>	0.41 (-0.07-0.88)	1.27E-01
CE 20:3	1.54 (0.45-2.64)	<b>1.50E-02</b>	2.50 (2.02-2.97)	<b>4.75E-22</b>
CE 20:4	1.26 (0.31-2.21)	<b>2.18E-02</b>	1.26 (0.82-1.70)	<b>1.09E-07</b>
CE 20:5	1.64 (0.79-2.48)	<b>8.47E-04</b>	1.03 (0.63-1.43)	<b>1.76E-06</b>
CE 22:0	1.25 (0.41-2.09)	<b>1.05E-02</b>	0.41 (0.01-0.81)	6.58E-02
CE 22:1	1.68 (0.85-2.50)	<b>4.19E-04</b>	-0.36 (-0.76-0.03)	1.02E-01
CE 22:4	0.89 (-0.23-2.02)	1.88E-01	1.22 (0.70-1.75)	<b>1.65E-05</b>
CE 22:5	1.69 (0.61-2.78)	<b>6.94E-03</b>	1.28 (0.77-1.79)	<b>3.49E-06</b>
CE 22:6	1.98 (1.03-2.93)	<b>3.15E-04</b>	0.81 (0.36-1.26)	<b>9.56E-04</b>
CE 24:0	1.31 (0.44-2.19)	<b>9.62E-03</b>	0.38 (-0.03-0.80)	1.02E-01
CE 24:1	2.02 (1.11-2.93)	<b>1.14E-04</b>	0.12 (-0.32-0.56)	6.58E-01
CE 24:4	-0.08 (-1.01-0.84)	8.83E-01	-0.79 (-1.23--0.36)	<b>7.43E-04</b>
CE 24:5	-0.56 (-1.51-0.39)	3.39E-01	0.19 (-0.26-0.64)	4.71E-01
CE 24:6	0.33 (-0.59-1.24)	5.84E-01	0.24 (-0.19-0.67)	3.43E-01
COH	2.79 (1.76-3.82)	<b>1.84E-06</b>	0.52 (0.02-1.01)	6.35E-02
DG 14:0/16:0	-0.08 (-0.77-0.62)	8.55E-01	0.77 (0.45-1.10)	<b>1.08E-05</b>
DG 14:0/18:1	0.42 (-0.42-1.26)	4.30E-01	0.82 (0.42-1.21)	<b>1.31E-04</b>
DG 16:0/16:0	-0.09 (-0.84-0.66)	8.44E-01	1.24 (0.90-1.58)	<b>1.24E-11</b>
DG 16:0/18:0	-0.16 (-0.95-0.63)	7.56E-01	1.07 (0.71-1.43)	<b>4.82E-08</b>
DG 16:0/18:1	0.56 (-0.36-1.49)	3.28E-01	1.47 (1.05-1.89)	<b>8.42E-11</b>
DG 16:0/18:2	0.71 (-0.24-1.65)	2.14E-01	1.01 (0.58-1.45)	<b>1.93E-05</b>
DG 16:0/20:3	0.61 (-0.31-1.53)	2.90E-01	1.32 (0.90-1.74)	<b>7.59E-09</b>
DG 16:0/20:4	0.24 (-0.57-1.05)	6.57E-01	1.18 (0.80-1.55)	<b>4.49E-09</b>
DG 16:0/22:5	0.59 (-0.32-1.50)	2.96E-01	0.95 (0.52-1.37)	<b>3.81E-05</b>
DG 16:0/22:6	0.54 (-0.25-1.34)	2.69E-01	0.71 (0.34-1.08)	<b>4.76E-04</b>
DG 16:1/18:0	0.03 (-0.71-0.77)	9.42E-01	1.07 (0.73-1.41)	<b>4.94E-09</b>
DG 16:1/18:1	0.74 (-0.16-1.64)	1.75E-01	1.32 (0.91-1.74)	<b>3.01E-09</b>
DG 18:0/18:1	0.39 (-0.39-1.17)	4.30E-01	0.91 (0.55-1.27)	<b>4.04E-06</b>
DG 18:0/18:2	0.47 (-0.34-1.29)	3.51E-01	0.62 (0.23-1.00)	<b>3.44E-03</b>
DG 18:0/20:4	0.75 (-0.16-1.65)	1.74E-01	0.87 (0.44-1.29)	<b>1.83E-04</b>

Lipids	Age <sup>a</sup>		Body Mass Index <sup>b</sup>	
	$\beta$ coefficient (95% CI) <sup>c</sup>	p-value <sup>d</sup>	$\beta$ coefficient (95% CI) <sup>e</sup>	p-value <sup>d</sup>
DG 18:1/18:1	1.27 (0.38-2.16)	<b>1.40E-02</b>	0.93 (0.51-1.35)	<b>4.02E-05</b>
DG 18:1/18:2	1.32 (0.38-2.26)	<b>1.59E-02</b>	0.40 (-0.05-0.85)	1.12E-01
DG 18:1/18:3	1.17 (0.35-1.98)	<b>1.38E-02</b>	0.23 (-0.16-0.62)	3.11E-01
DG 18:1/20:3	1.05 (0.20-1.90)	<b>3.50E-02</b>	0.57 (0.16-0.97)	<b>1.07E-02</b>
DG 18:1/20:4	0.93 (0.05-1.81)	7.40E-02	0.98 (0.57-1.39)	<b>1.08E-05</b>
DG 18:2/18:2	0.95 (0.14-1.76)	<b>4.74E-02</b>	-0.21 (-0.60-0.18)	3.50E-01
TG 14:0/16:0/18:1	0.32 (-0.58-1.23)	5.82E-01	1.23 (0.81-1.65)	<b>4.82E-08</b>
TG 14:0/16:0/18:2	0.07 (-0.76-0.91)	8.83E-01	1.15 (0.77-1.53)	<b>3.07E-08</b>
TG 14:0/16:1/18:1	0.67 (-0.11-1.45)	1.54E-01	0.76 (0.39-1.12)	<b>1.39E-04</b>
TG 14:0/16:1/18:2	0.70 (-0.02-1.43)	1.02E-01	0.47 (0.13-0.82)	<b>1.24E-02</b>
TG 14:0/17:0/18:1	0.44 (-0.45-1.34)	4.30E-01	1.10 (0.69-1.52)	<b>8.43E-07</b>
TG 14:0/18:0/18:1	0.10 (-0.74-0.94)	8.47E-01	0.87 (0.48-1.26)	<b>3.81E-05</b>
TG 14:0/18:2/18:2	1.25 (0.45-2.04)	<b>6.81E-03</b>	0.01 (-0.38-0.39)	9.78E-01
TG 14:1/16:0/18:1	0.17 (-0.65-0.99)	7.56E-01	1.04 (0.66-1.42)	<b>3.94E-07</b>
TG 14:1/16:1/18:0	0.03 (-0.65-0.70)	9.48E-01	0.94 (0.63-1.25)	<b>1.64E-08</b>
TG 14:1/18:0/18:2	1.02 (0.19-1.86)	<b>3.50E-02</b>	0.71 (0.32-1.10)	<b>8.07E-04</b>
TG 14:1/18:1/18:1	1.58 (0.63-2.52)	<b>3.85E-03</b>	0.83 (0.38-1.28)	<b>6.31E-04</b>
TG 15:0/16:0/18:1	0.31 (-0.59-1.20)	5.98E-01	1.24 (0.83-1.66)	<b>2.38E-08</b>
TG 15:0/18:1/18:1	1.64 (0.74-2.53)	<b>1.51E-03</b>	0.66 (0.23-1.08)	<b>4.91E-03</b>
TG 16:0/16:0/16:0	-0.43 (-1.15-0.29)	3.38E-01	1.22 (0.90-1.54)	<b>3.58E-12</b>
TG 16:0/16:0/18:0	-0.42 (-1.16-0.32)	3.63E-01	1.07 (0.73-1.40)	<b>5.30E-09</b>
TG 16:0/16:0/18:1	0.15 (-0.82-1.13)	8.10E-01	2.02 (1.60-2.45)	<b>2.85E-18</b>
TG 16:0/16:0/18:2	0.18 (-0.82-1.19)	7.82E-01	1.82 (1.37-2.27)	<b>8.15E-14</b>
TG 16:0/16:1/17:0	0.15 (-0.75-1.05)	7.96E-01	1.52 (1.11-1.92)	<b>4.10E-12</b>
TG 16:0/16:1/18:1	1.01 (0.07-1.96)	6.86E-02	1.63 (1.21-2.06)	<b>1.55E-12</b>
TG 16:0/17:0/18:0	-0.30 (-0.97-0.36)	4.73E-01	0.66 (0.35-0.97)	<b>8.07E-05</b>
TG 16:0/17:0/18:1	0.40 (-0.49-1.29)	4.73E-01	1.39 (0.99-1.79)	<b>1.71E-10</b>
TG 16:0/17:0/18:2	0.83 (-0.13-1.79)	1.48E-01	1.72 (1.29-2.15)	<b>2.73E-13</b>
TG 16:0/18:0/18:1	-0.05 (-0.85-0.74)	9.12E-01	1.28 (0.92-1.64)	<b>4.87E-11</b>
TG 16:0/18:1/18:1	1.59 (0.59-2.60)	<b>6.28E-03</b>	1.77 (1.31-2.22)	<b>9.38E-13</b>
TG 16:0/18:1/18:2	1.66 (0.67-2.65)	<b>3.85E-03</b>	0.99 (0.53-1.46)	<b>8.64E-05</b>
TG 16:0/18:2/18:2	1.31 (0.40-2.22)	<b>1.29E-02</b>	0.34 (-0.09-0.77)	1.66E-01
TG 16:1/16:1/16:1	0.49 (-0.28-1.27)	3.05E-01	0.85 (0.49-1.21)	<b>1.41E-05</b>
TG 16:1/16:1/18:0	0.00 (-0.82-0.82)	9.96E-01	0.85 (0.47-1.24)	<b>4.02E-05</b>
TG 16:1/16:1/18:1	0.97 (0.04-1.90)	7.46E-02	1.58 (1.16-2.00)	<b>3.82E-12</b>
TG 16:1/17:0/18:1	1.37 (0.44-2.31)	<b>1.14E-02</b>	1.24 (0.81-1.68)	<b>1.19E-07</b>
TG 16:1/18:1/18:1	2.26 (1.30-3.22)	<b>4.57E-05</b>	1.11 (0.65-1.56)	<b>7.26E-06</b>
TG 16:1/18:1/18:2	1.96 (1.01-2.91)	<b>3.27E-04</b>	0.61 (0.16-1.07)	<b>1.40E-02</b>
TG 17:0/18:1/18:1	0.74 (-0.09-1.57)	1.39E-01	0.95 (0.57-1.34)	<b>5.44E-06</b>
TG 18:0/18:0/18:1	-0.08 (-0.59-0.43)	8.10E-01	0.47 (0.23-0.70)	<b>2.97E-04</b>
TG 18:0/18:1/18:1	0.40 (-0.33-1.14)	3.82E-01	0.92 (0.58-1.26)	<b>7.43E-07</b>
TG 18:0/18:2/18:2	1.19 (0.54-1.83)	<b>1.48E-03</b>	0.23 (-0.08-0.54)	1.83E-01
TG 18:1/18:1/18:1	1.61 (0.83-2.39)	<b>3.30E-04</b>	0.70 (0.33-1.07)	<b>5.47E-04</b>
TG 18:1/18:1/18:2	1.43 (0.55-2.31)	<b>5.02E-03</b>	0.17 (-0.25-0.59)	4.99E-01

Lipids	Age <sup>a</sup>		Body Mass Index <sup>b</sup>	
	$\beta$ coefficient (95% CI) <sup>c</sup>	p-value <sup>d</sup>	$\beta$ coefficient (95% CI) <sup>e</sup>	p-value <sup>d</sup>
TG 18:1/18:1/20:4	1.84 (0.85-2.83)	<b>1.33E-03</b>	1.15 (0.68-1.61)	<b>5.55E-06</b>
TG 18:1/18:1/22:6	1.70 (0.74-2.66)	<b>2.17E-03</b>	1.18 (0.73-1.62)	<b>1.36E-06</b>
TG 18:1/18:2/18:2	1.62 (0.82-2.42)	<b>4.34E-04</b>	-0.20 (-0.59-0.18)	3.65E-01
TG 18:2/18:2/18:2	1.11 (0.40-1.81)	<b>6.77E-03</b>	-0.41 (-0.74--0.07)	<b>2.90E-02</b>
TG 18:2/18:2/20:4	0.30 (-0.22-0.82)	3.51E-01	0.02 (-0.23-0.27)	9.06E-01

<sup>a</sup> units = years

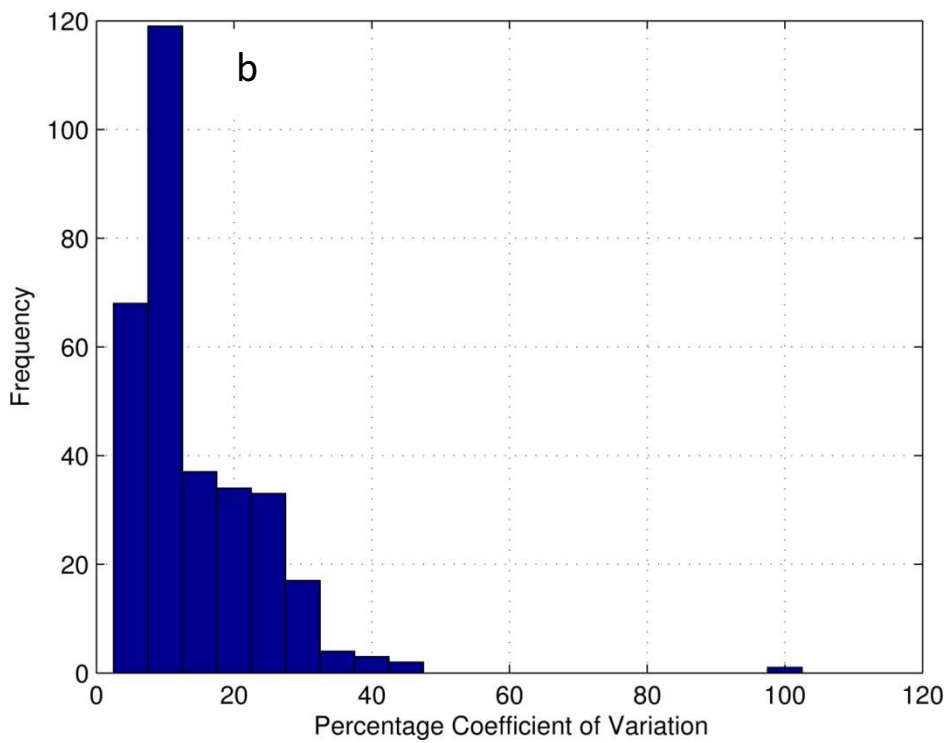
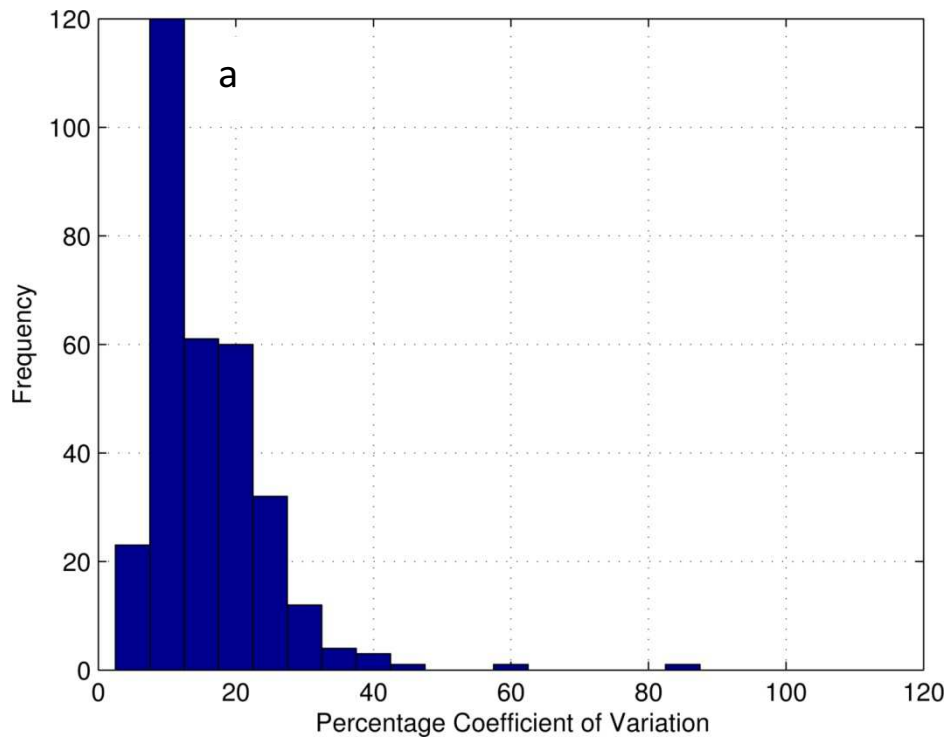
<sup>b</sup> units = kg/m<sup>2</sup>

<sup>c</sup> Adjusted for sex, BMI, SBP, 2hr post load glucose and smoking status.

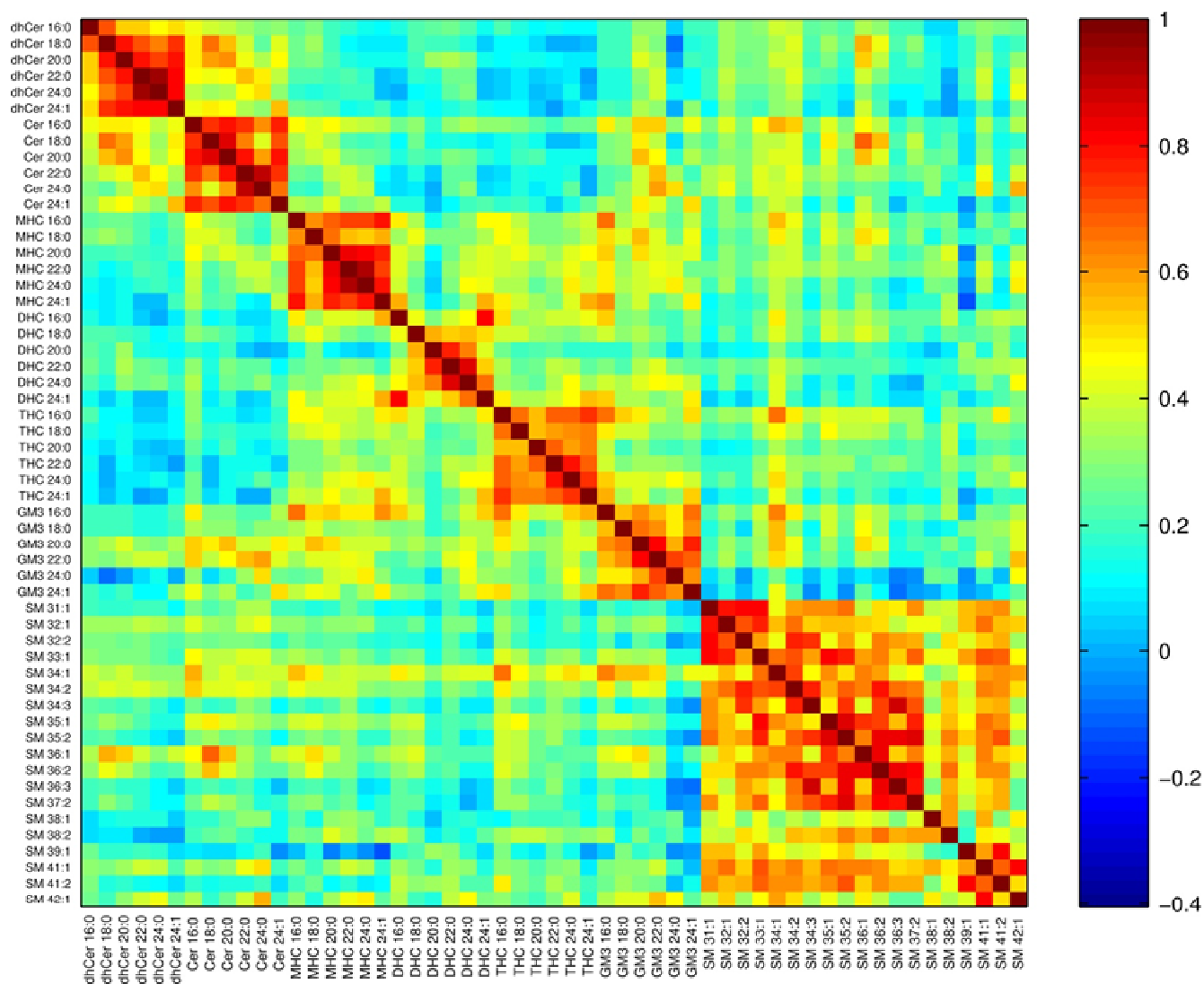
<sup>d</sup> Benjamini & Hochberg corrected. Bold type indicates p<0.05.

<sup>e</sup> Adjusted for sex, age, SBP, 2hr post load glucose and smoking status.

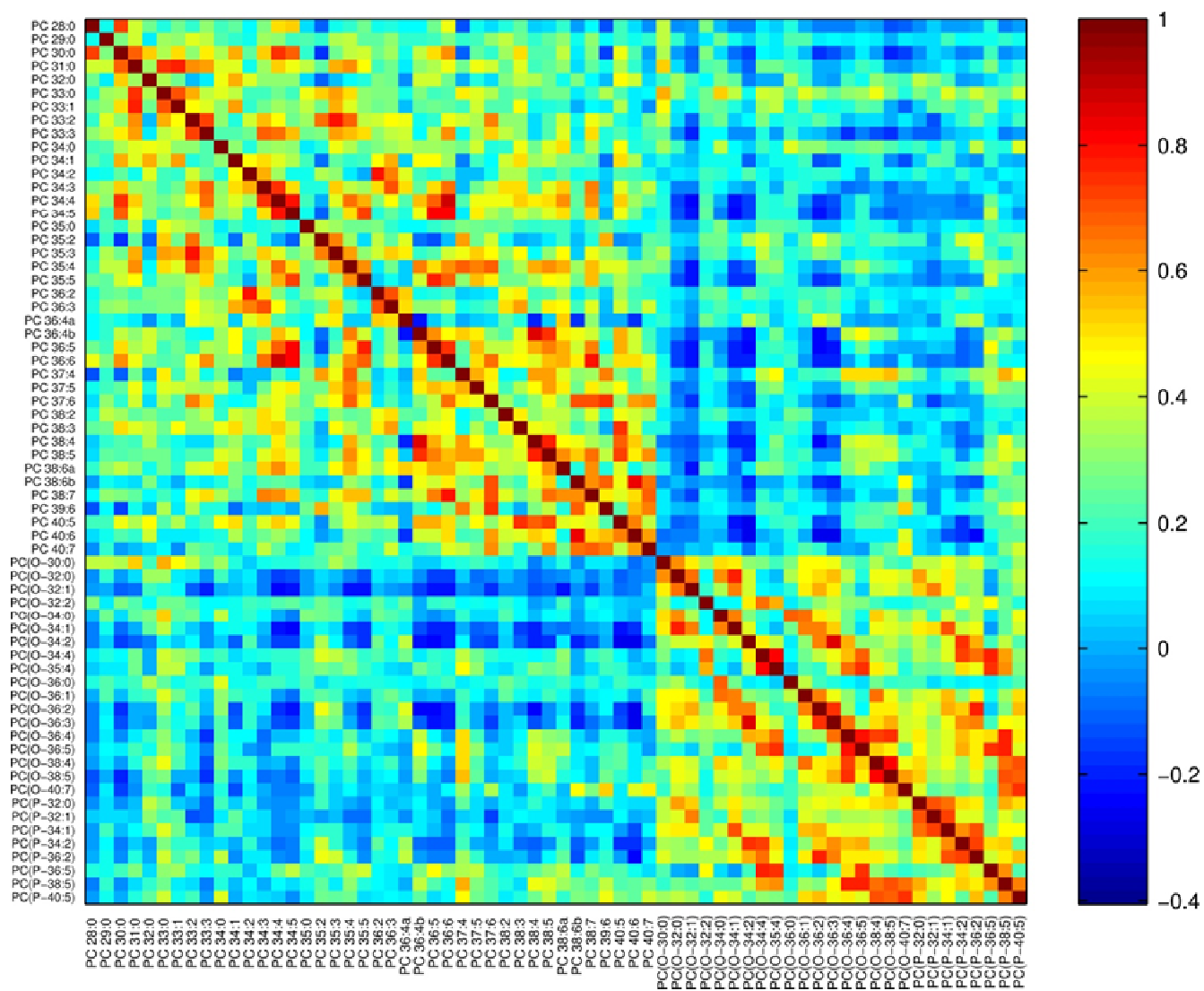
<sup>f</sup> The designation of "a" and "b" refers to 2 isomers that were able to be chromatographically separated



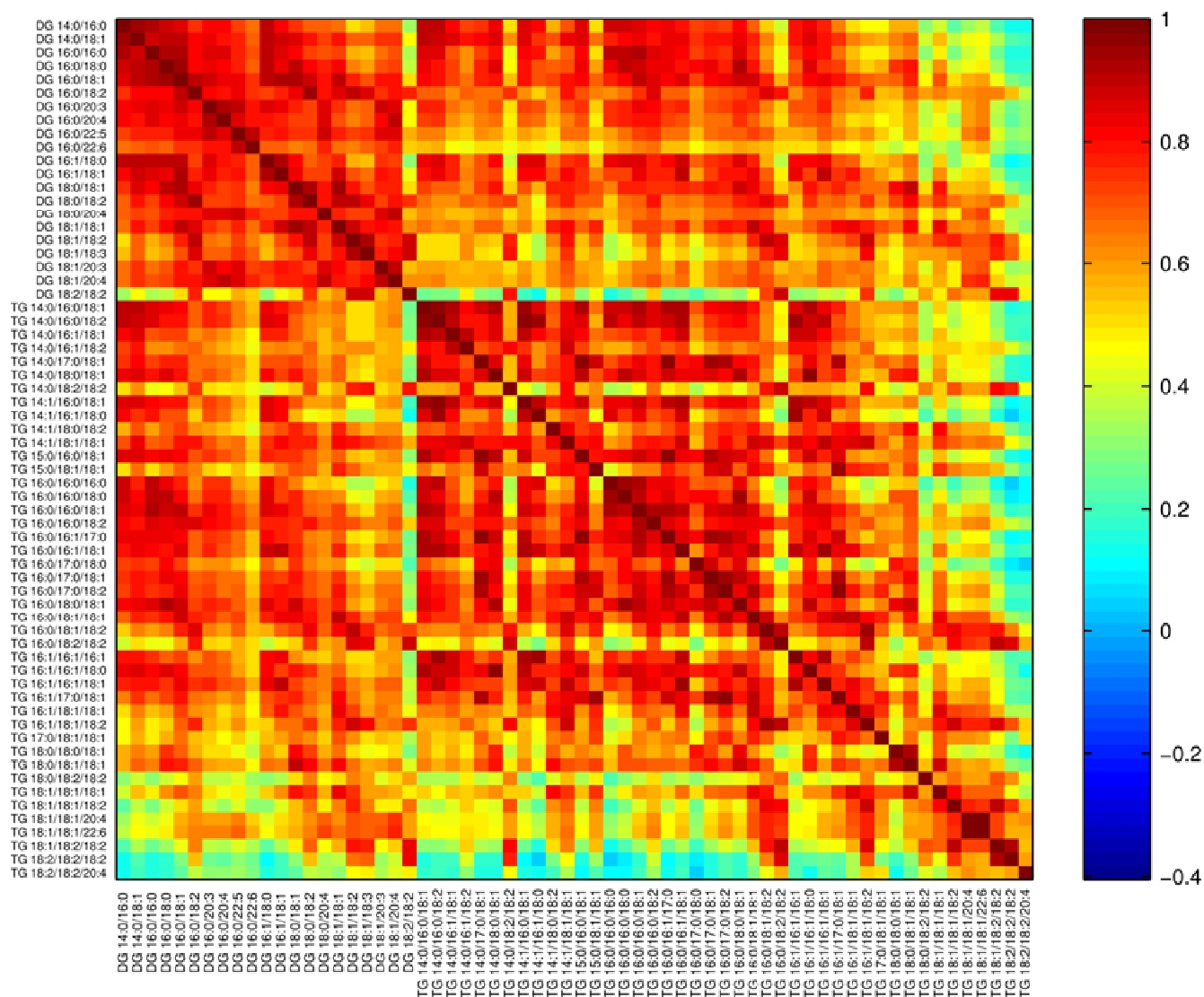
**Supplementary Figure 1.** (a) Intra-run variation; histogram of average %CVs for 312 lipid species over 4 runs. (b) Assay variation; histogram of %CVs for 312 lipid species based on 63 plasma quality control samples over the entire analysis.



**Supplementary Figure 2.** Pearson's correlations were calculated between all pairs of lipid species. The correlation coefficients are plotted in a heat map. The color scale illustrates the magnitude and direction of correlation between lipid species. Correlation coefficients less than -0.063 or greater than 0.063 were significant ( $p < 0.05$ ).



**Supplementary Figure 3.** Pearson's correlations were calculated between all pairs of lipid species. The correlation coefficients are plotted in a heat map. The color scale illustrates the magnitude and direction of correlation between lipid species. Correlation coefficients less than -0.063 or greater than 0.063 were significant ( $p < 0.05$ ).



**Supplementary Figure 4.** Pearson's correlations were calculated between all pairs of lipid species. The correlation coefficients are plotted in a heat map. The color scale illustrates the magnitude and direction of correlation between lipid species. Correlation coefficients less than -0.063 or greater than 0.063 were significant ( $p < 0.05$ ).