

compound	parent mass	m/z of observed major fragment ions (decreasing intensity order)
carnitine	162.11	60.08, 103.04
butyryl or isobutyryl carnitine	232.15	85.03, 173.08
octanoyl carnitine*	288.22	85.03, 229.15
myristic acid	229.22	57.07, 89.06, 71.09, 145.93
stearic acid	285.28	57.07, 71.09, 89.06, 85.10, 103.08
oleic acid	283.26	57.07, 69.07, 83.09, 97.10, 135.12, 265.26, 247.24
linoleic acid	281.25	69.07, 97.10, 83.09, 57.07, 263.24
palmitic acid	257.25	57.07, 71.09, 85.10, 89.06, 103.08
lysophosphocholine (16:0)	496.34	104.11, 184.07
lysophosphocholine (18:2)	522.35	104.11, 184.07
lysophosphocholine (18:0)	524.37	104.11, 184.08

Supplemental Table 1:

MS/MS data confirming metabolite identification. For each ion, the corresponding model compound was obtained, and the MS/MS patterns were compared. The observed major fragment ions occur in both the unknown and the test compound. *hexanoyl carnitine was used as a standard for this compound. The unknown conforms to canonical fragmentation pattern for an acyl-carnitine.

Gene	Primer	Sequence
PLA1A	forward	GAG GTG TGA TGA GGG ATG TG
	reverse	AGG GTG GCT CAT TAT GGA GA
	probe	AAG AGC TTT GCC TTT CTC CGT AGC AGT
PLA2G4C	forward	GCC TTC CTG TTC TTC ACT CC
	reverse	GTG ATT GGC CCT GTT AGG AT
	probe	TCA GCC ACA CAC TTC ATG AGT TCA CC
18S	forward	CGG CTA CCA CAT CCA AGG AA
	reverse	GCT GGA ATT ACC GCG GCT
	probe	TGC TGG CAC CAG ACT TGC CCT C
GAPDH	forward	GCA CCA CCA ACT GCT TAG CAC
	reverse	TCT TCT GGG TGG CAG TGA TG
	probe	TCG TGG AAG GAC TCA TGA CCA CAG TCC
TBP	forward	AAA GAC CAT TGC ACT TCG TG
	reverse	GGT TCG TGG CTC TCT TAT CC
	probe	TCC CAA GCG GTT TGC TGC AG

Supplemental Table 2:

Sequences of primers and probes used for quantitative real-time PCR. The probes were labeled at their 5' end with 6-FAM as the reporting dye, and at the 3' end with TAMRA as the quencher. The expression levels of the two genes of interest (PLA1A and PLA2G4C) were determined relative to the average of the three controls: 18S ribosomal RNA (18S), glyceraldehyde-3-phosphate dehydrogenase (GAPDH), and TATA-box binding protein (TBP).