Table 3. Significant effects of early dietary ω6/ω3 ratio, ELS and LPS on lipid species

A) Diet effect on lipid species in CTL mice under basal conditions

Lipid species	p-value	Fold change	Direction
Diet effect in CTL mice (CTL-SAL: HRD versus LRD)			
CER(16:0)	0.030	0.299	high > low
CER(18:0)	0.011	0.225	high > low
DAG(16:0/18:1)	0.017	0.290	high > low
DAG(16:1/18:1)	0.046	0.321	high > low
FFA(18:1)	0.037	0.352	high > low
TAG46:1-FA14:1	0.007	1.113	high > low
TAG49:1-FA17:0	0.036	0.790	high > low
TAG49:3-FA16:1	0.029	0.936	high > low
TAG51:3-FA18:2	0.038	0.868	high > low
TAG53:1-FA16:0	0.042	0.396	high > low

B) ELS effect on lipid species in mice fed the HRD or LRD, under basal conditions

ELS effect in mice fed the HRD (HRD-SAL: CTL versus ELS)			
TAG52:1-FA16:1	0.035	0.947	CTL > ELS
TAG54:4-FA22:4	0.029	-0.336	ELS > CTL
ELS effect in mice fed the LRD (LRD-SAL: CTL versus ELS)			
TAG51:0-FA16:0	0.048	-0.257	ELS > CTL
TAG52:5-FA20:5	0.043	-0.724	ELS > CTL
TAG56:4-FA16:0	0.048	0.172	CTL > ELS
TAG56:4-FA18:1	0.022	0.301	CTL > ELS
TAG56:5-FA16:0	0.041	0.257	CTL > ELS
DAG(16:0/18:1)	0.024	-0.225	ELS > CTL
DAG(16:1/18:1)	0.049	-0.280	ELS > CTL
DAG(16:1/20:4)	0.011	-0.724	ELS > CTL
DAG(18:0/18:2)	0.001	-0.490	ELS > CTL
DAG(18:1/18:1)	0.043	-0.327	ELS > CTL
CE(22:5)	0.021	-0.370	ELS > CTL
PC(16:0/18:2)	0.043	-0.517	ELS > CTL

C) LPS effect on lipid species in CTL mice fed the HRD or LRD. * unique LPS induced effect per experimental group

LPS effect in CTL mice fed the HRD (CTL-HRD: SAL versus LPS)			
CER(16:0)*	0.031	0.296	sal > lps
CER(18:0)	0.024	0.355	sal > lps
CE(20:4)*	0.043	-0.404	lps > sal
DAG(16:0/18:2)	0.035	-0.271	lps > sal
DAG(16:0/20:5)	0.042	-0.777	lps > sal
HCER(20:0)	0.037	-0.303	lps > sal

HCER(22:0)	0.041	-0.268	lps > sal
LPC(18:1)	0.002	0.493	sal > lps
PC(16:0/18:2)	0.039	-0.242	lps > sal
TAG52:3-FA20:3	0.020	-0.279	lps > sal
TAG54:4-FA20:3	0.001	-0.365	lps > sal
TAG54:5-FA20:3	0.002	-1.145	lps > sal
LPS effect in CTL mice fed the LRD (CTL-LRD: SAL versus LPS)			
CER(18:0)	0.023	0.183	sal > lps
CE(18:0)*	0.002	0.608	sal > lps
DAG(16:0/18:2)	0.019	-0.836	lps > sal
DAG(16:0/20:5)	0.017	-0.948	lps > sal
DAG(16:1/20:4)*	0.011	-0.773	lps > sal
DAG(18:1/18:2)*	0.004	-0.517	lps > sal
PC(16:0/18:2)	0.001	-0.893	lps > sal
PC(18:0/18:2)*	0.004	-1.012	lps > sal
TAG42:0-FA16:0*	0.048	0.574	sal > lps
TAG48:0-FA14:0*	0.040	0.324	sal > lps
TAG48:0-FA16:0*	0.027	0.306	sal > lps
TAG48:1-FA14:0*	0.040	0.467	sal > lps
TAG48:1-FA16:0*	0.025	0.529	sal > lps
TAG48:1-FA18:1*	0.017	0.438	sal > lps
TAG48:2-FA16:0*	0.038	0.605	sal > lps
TAG50:0-FA16:0	0.014	0.324	sal > lps
TAG50:0-FA18:0*	0.008	0.265	sal > lps
TAG50:1-FA16:0*	0.028	0.409	sal > lps
TAG50:1-FA18:1*	0.035	0.349	sal > lps
TAG50:2-FA18:0*	0.044	0.862	sal > lps
TAG50:2-FA18:1*	0.037	0.515	sal > lps
TAG52:0-FA16:0*	0.003	0.307	sal > lps
TAG52:0-FA18:0	0.000	0.440	sal > lps
TAG52:1-FA18:0*	0.011	0.364	sal > lps
TAG52:1-FA18:1*	0.015	0.370	sal > lps
TAG54:4-FA20:3	0.040	-0.272	lps > sal
TAG54:5-FA22:4*	0.005	0.544	sal > lps
TAG56:3-FA18:0*	0.009	0.253	sal > lps
TAG56:4-FA18:0	0.016	0.328	sal > lps
TAG56:5-FA16:0*	0.046	0.227	sal > lps

D) LPS effect on lipid species in ELS mice fed the HRD or LRD. * unique LPS induced effect per experimental group

LPS effect in ELS mice fed the HRD (ELS-HRD: SAL versus LPS)			
CE(14:0)*	0.040	0.344	sal > lps
CE(16:0)	0.032	0.404	sal > lps
DAG(16:0/18:2)	0.019	-0.349	lps > sal
LPC(18:1)	0.016	0.397	sal > lps
SM(18:1)*	0.041	-0.496	lps > sal
PC(16:0/18:2)	0.001	-0.542	lps > sal
TAG52:1-FA16:1*	0.045	-0.883	lps > sal

TAG52:1-FA20:1	0.013	-0.301	lps > sal
TAG52:3-FA20:3	0.044	-0.309	lps > sal
TAG54:1-FA18:0*	0.033	0.247	sal > lps
TAG54:3-FA20:3	0.028	-0.164	lps > sal
TAG54:5-FA20:3	0.006	-0.988	lps > sal
TAG56:4-FA18:0	0.045	0.281	sal > lps
TAG56:4-FA22:4	0.009	0.501	sal > lps
TAG56:5-FA20:3	0.006	-0.580	lps > sal
LPS effect in ELS mice fed the LRD (ELS-LRD: SAL versus LPS)			
CE(16:0)	0.002	0.317	sal > lps
CER(18:0)	0.023	0.236	sal > lps
DAG(16:0/18:2)	0.033	-0.355	lps > sal
DAG(16:0/20:5)	0.003	-1.066	lps > sal
HCER(20:0)	0.012	-0.463	lps > sal
HCER(22:0)	0.021	-0.400	lps > sal
HCER(24:1)*	0.018	-0.335	lps > sal
LPC(18:1)	0.004	0.311	sal > lps
PC(16:0/18:2)	0.002	-0.260	lps > sal
TAG50:0-FA16:0	0.038	0.238	sal > lps
TAG51:0-FA16:0*	0.015	0.311	sal > lps
TAG51:0-FA18:0*	0.031	0.649	sal > lps
TAG52:0-FA18:0	0.003	0.353	sal > lps
TAG52:1-FA20:1	0.022	-0.243	lps > sal
TAG52:3-FA20:3	0.006	-0.355	lps > sal
TAG54:3-FA20:3	0.015	-0.189	lps > sal
TAG54:4-FA20:3	0.000	-0.467	lps > sal
TAG54:5-FA22:5*	0.002	0.337	sal > lps
TAG54:6-FA22:5*	0.024	-0.561	lps > sal
TAG56:4-FA18:0	0.041	0.222	sal > lps
TAG56:4-FA20:2*	0.038	-0.372	lps > sal
TAG56:4-FA22:4	0.003	0.130	sal > lps
TAG56:5-FA20:3	0.038	-0.218	lps > sal