Journal of Food and Nutrition Research, 2022, Vol. 10, No. 10, 642-654
Available online at http://pubs.sciepub.com/jfnr/10/10/2
Published by Science and Education Publishing
DOI:10.12691/jfnr-10-10-2

Profile of Lipids in Meat, Fat, and Egg of Siberian Sturgeon

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Received September 01, 2022; Revised October 02, 2022; Accepted October 10, 2022

Abstract Non-aqueous, lipophilic metabolites in the meat, fat, and eggs of a 4-year-old female Siberian sturgeon (*Acipenser baerii*) were analyzed. A total of 616 lipid molecular species were detected, and 373 were used for statistical analysis. The primary common metabolites among meat, fat, and egg were lysophosphatidylcholine (LPC) with fatty acid moieties of 18:1, 18:2, 20:5, and 22:6, and di-/tri-acylglycerolipids with fatty acid moieties of 16:0, 18:1, 18:2, and a few other unsaturated ones. The meat, fat, and egg tissues were separated according to their lipid composition by principal component analysis, and tissue-specific lipid biomarkers were detected by linear discriminant analysis. Representative biomarkers were lysoglycerophosphoserine with 22:6 fatty acid for meat, platelet-activating factor with 20:5 fatty acid for fat, and glycerophosphoethanolamine for eggs. The abundant LPC in this lipidomic study may be related to choline found in earlier aqueous metabolomic analysis using the same sturgeon. The coupling of lipidomics and aqueous metabolomics is thus suggested to be insightful and will help in the development of aquaculture for endangered sturgeons.

Keywords: *sturgeon, lipidome, lipidomics, glycerolipids, glycerophospholipids, choline, fatty acids, EPA, DHA*

Cite This Article: Takeshi Naganuma, "Profile of Lipids in Meat, Fat, and Egg of Siberian Sturgeon." *Journal of Food and Nutrition Research*, vol. 10, no. 10 (2022): 642-654. doi: 10.12691/jfnr-10-10-2.

1. Introduction

The Siberian sturgeon (*Acipenser baerii*) is a species of the family *Acipenseridae* and is widely distributed in lakes and river basins in Siberia and surrounding regions [1,2]. Its natural populations are extant, but declining in Russia and Kazakhstan, and possibly extant in Mongolia and extinct in China. It is listed as critically endangered in the IUCN Red List of Threatened Species [2]. Females and males mature at 11-22 and 9-19 years old, respectively, with an average generation length of 54.6 years [2], which makes starting artificial reproduction less feasible; however, once F1 is obtained, F2 and following generations are reproduced stably. Siberian sturgeons are among the most common species in aquaculture, accounting for approximately 40% of aquaculture production and >30% of legal caviar production [3]. Genetic/genomic approaches to facilitate faster growth and sexual maturation may be applied in aquaculture [4] but not in Siberian sturgeons due to their high and variable chromosome counts [5].

Metabolomics, an alternative omics approach, has recently been used in several studies. NMR-based metabolomics, or metabonomics, was used for a toxicological survey of the Persian sturgeon (*Acipenser persicus*) [6]. Metabolomics based on liquid chromatography/mass spectrometry (LC/MS) of the Chinese sturgeon (*Acipenser sinensis*) revealed that female ovarian development is associated with energetic metabolism [7]. Lipidomics (a subset of metabolomics) combined with transcriptomics on the F2 generation of female Chinese sturgeons showed that dietary arachidonic acid promotes steroid hormone synthesis in the ovary [8]. Lipidomics provides detailed datasets of whole lipid molecules, such as phospholipids and triacylglycerols with two and three fatty acid moieties, respectively, such as EPA (eicosapentaenoic acid, 20:5) and DHA (docosahexaenoic acid, 22:6) in the caviar of Atlantic sturgeon (*Acipenser sturio*) [9].

Omics on Siberian sturgeons (*Acipenser baerii*) have not been performed, although many dietary experiments have been conducted [10]. An earlier study was the first to report the profile of aqueous (non-lipid) metabolites of Siberian sturgeon meat, fat, and egg [11]. As a follow-up, this study reports lipidomic profiles of the same sturgeon tissue samples. Lipidomics and aqueous metabolomics will hint at the metabolomic features of sturgeons.

2. Materials and Methods

2.1. Siberian Sturgeon

The studied Siberian sturgeon (*Acipenser baerii*), a four-year-old 3.5-kg female, was the same individual reported for aqueous metabolites [11]. It was fed with dry pellets containing fishmeal, flour, soybean oilcake and corn gluten meal. The fish was dissected on site, and the tissue samples (meat, fat and egg) were kept frozen at -20°C to -70°C until analysis.

2.2. Lipids Extraction and Detection

Three sub-samples (n = 3) for each >200-mg tissue, that is, a total of nine subsamples (3×3), were excised on dry ice and shipped in dry ice to the laboratory of the BGI (formerly Beijing Genomics Institute), China, for lipidomic analysis of lipophilic metabolites [12]. The following procedures were performed at the BGI. The thawed sample (25 mg) was placed in 800 µL of precooled dichloromethane/methanol (3:1 v/v) and 10 µL of SPLASH Lipidomix Mass Spec Standard solution (Avanti Polar Lipids, Birmingham, Alabama, USA) with two small steel balls. The mixture was then ground, sonicated, and centrifuged. The supernatant (600 µL) was lyophilized and reconstituted with 200 µL of isopropanol/acetonitrile/water (2:1:1), vortexed, sonicated, and centrifuged for liquid chromatography-mass spectrometry (LC-MS/MS).

An LC-MS/MS system consisting of an ACQUITY UPLC System with 2D LC Technology (Waters, Milford, Massachusetts, USA) and a Q Exactive Hybrid Quadrupole-Orbitrap Mass Spectrometer (Thermo Fisher Scientific, Waltham, Massachusetts, USA) was used for lipid separation and detection. The MS scan was performed in the range of m/z 200–2000.

2.3. Data Processing and Statistical Analysis

LC-MS/MS data were processed using LipidSearch 4.1 (Thermo Fisher Scientific) for automated peak extraction and lipid identification [13]. Identification levels or accuracy grades were divided into four degrees: A, lipid categories and all fatty acid chains completely identified; B, category-specific ions and fatty acid fragment ions detected; C, class-specific ions or fatty acid fragment ions detected; and D, lipid structures such as dehydrated ions unrecognized. Lipids identified at levels A and B were processed for statistical analyses, whereas lipids identified at levels C and D were not used. Principal component analysis (PCA) and agglomerative hierarchical clustering were performed using XLSTAT software (Addinsoft, New York, USA). Tissue-specific biomarker lipids were specified using the linear discriminant analysis (LDA) effect size algorithm (LEfSe; http://huttenhower.sph.harvard.edu/galaxy/) [14].

2.4. Lipids Classification and Nomenclature

The detected lipid molecules were represented and abbreviated according to the systematics developed and updated by the LIPID MAPS consortium (https://www.lipidmaps.org) [15,16,17].

3. Results and Discussion

3.1. Lipidomic Profiles of Meat, Fat and Egg of a Siberian Sturgeon

A total of 616 lipid molecular species belonging to 26 classes under five categories were commonly identified in meat, fat, and egg tissues. The numbers of lipid molecular species identified at levels A, B, C, and D were 239, 134, 227, and 16, respectively. A- and B-level data were used for further analyses, but C and D were not. The distribution of the number of lipid molecules with identification levels is shown in Figure 1.

A total of 373 A- and B-level lipid molecules were commonly detected in meat, fat, and eggs of the studied Siberian sturgeons, and no tissue-specific lipid species were observed. Lipid populations of meat, fat, and eggs were distinctly separated on the PCA score plot, where PC1 and PC2 coordinates accounted for 58.92% and 22.10%, respectively, of the total variation in the dataset (Figure 2, left). Among the PCA-separated groups, eggs were distantly placed from the meat and fat, as shown in the dendrogram generated by agglomerative hierarchical clustering (Figure 2, right).

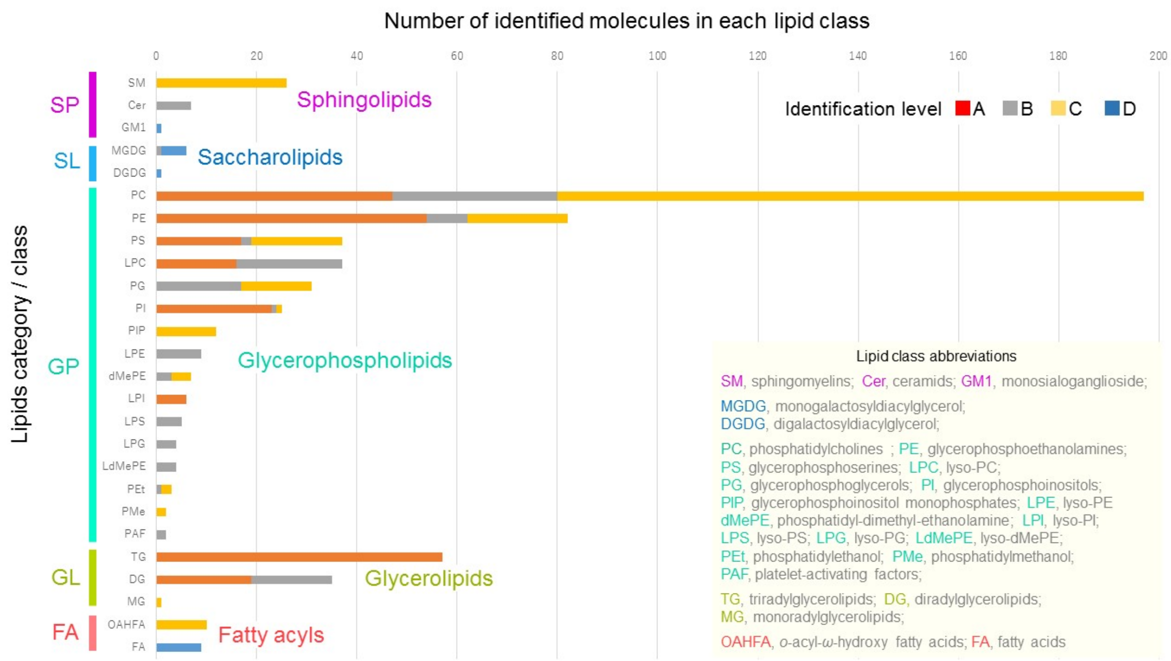

Figure 1. Numbers of lipid molecule species identified at levels A, B, C and D in meat, fat, and egg of a Siberian sturgeon. Data from levels A and B were processed for statistical analyses, while lipids identified at levels C and D were not used

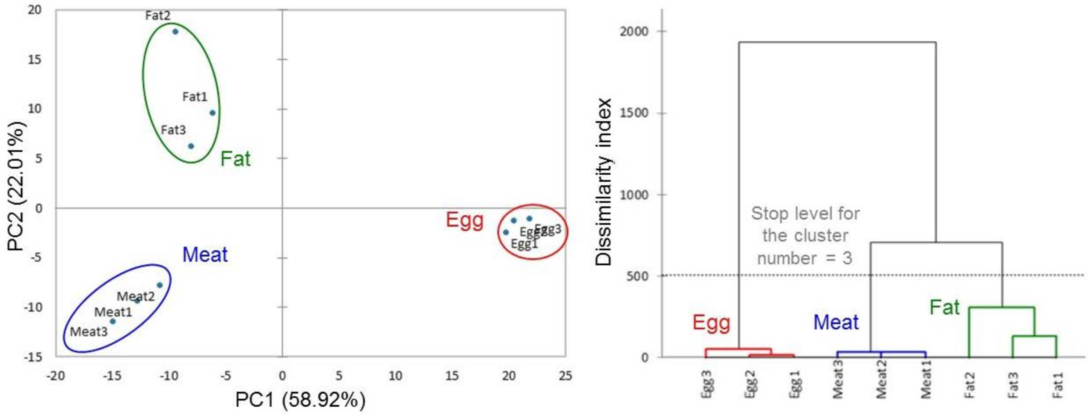

Figure 2. PCA plot (left) and dendrogram by agglomerative hierarchical clustering (right) on lipid compositions of meat, fat, and egg of a Siberian sturgeon. Meat, fat and egg were clustered separately

The separation of the PCA- and dendrogram-derived clusters was also contributed by such lipid molecular biomarkers, as detected by the linear discriminant analysis (LDA)-derived effect size algorithm (LEfSe) [14]. Tissue-specific lipid biomarkers with LDA scores >3.5 (Table 1) are shown in the LEfSe-generated cladogram (Figure 3).

Table 1. Lipid biomarkers of meat, fat, and egg of a Siberian sturgeon. Only the lipid biomarkers having LDA scores >3.5 are listed. The code “(rep)” of the lipid “LPC (18:4) (rep)”, for example, indicates that the fatty acid moiety “18:4” is repeated or duplicated, but the positions of carbon=carbon double bonds are not specified

Tissue	Lipid biomarker	LDA score	*p*-value
Meat	GP_LPS (22:6)	4.579	0.039
	GL_DG (18:1/18:1)	3.907	0.027
	GP_LPC (14:0)	3.585	0.027
Fat	GP_PAF	4.580	0.027
	GP_PAF (20.5)	4.571	0.027
	GP_LPS (22:6) (rep)	4.181	0.027
	GP_LPC (16:2)	3.811	0.027
	GP_LdMePE (20:5)	3.679	0.027
	GP_LPC (18:4) (rep)	3.671	0.027
	GP_LPC (22:6)	3.556	0.027
Egg	GP_PE	4.313	0.027
	GL_TG (18:1)(18:1)(18:3)	3.756	0.039
	GP_PC (18:1) (22:6)	3.558	0.027

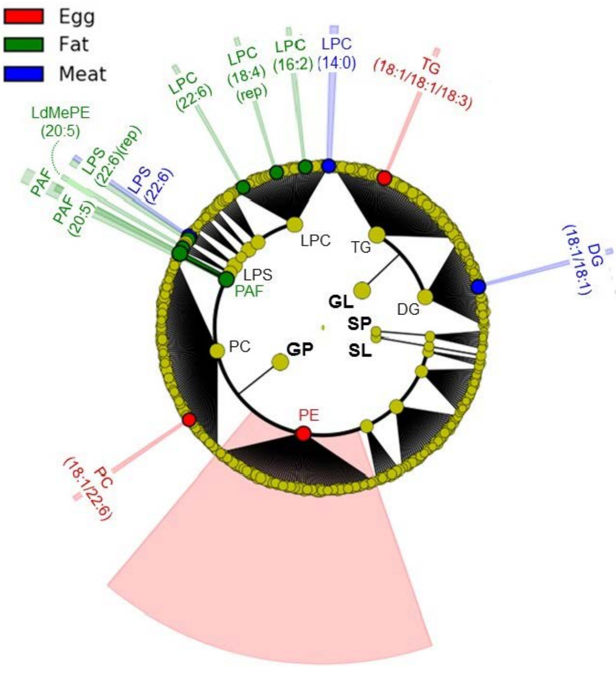

Figure 3. Cladogram showing the lipid biomarkers that contributed to the PCA separation of meat, fat, and egg of a Siberian sturgeon. The code “(rep)” of the lipid “LPC (18:4) (rep)”, for example, indicates that the fatty acid moiety “18:4” is repeated or duplicated, but the positions of carbon=carbon double bonds are not specified

Lipid biomarkers detected in meat were lysoglycerophosphoserines (LPS) and lysophosphatidylcholine (LPC) of the glycerophospholipids (GP) and diacylglycerolipids (DG) of the category glycerolipids (GL); GP_LPS, GL_DG, and GP_LPC were characterized by 22:6, 18:1, and 14:0 fatty acid moieties, respectively.

Seven biomarkers of the category GP were detected for fat. Platelet-activating factors (PAF) in general showed the highest LDA score, and PAF with the 20:5 fatty acid moiety was the second highest among the fat biomarkers. Other fatty acid moieties such as 22:6, 18:4, and 16:2 were also found.

The biomarkers for eggs were glycerophosphoethanolamines (PE) in general and specific phosphatidylcholines (PC) of the category GP as well as triacylglycerolipids (TG) of the category GL, with fatty acid moieties of 22:6, 18:3, and 18:1.

The LEfSe-detected lipid biomarkers were partly characterized by polyunsaturated fatty acid moieties such as 18:3, 18:4, 20:5, and 22:6, which would be regarded as 18:3 (n-3/n-6), 18:4 (n-3), 20:5 (n-3), and 22:6 (n-3), respectively; that is, alpha-linolenic acid (ALA/GLA), stearidonic acid (SDA), eicosapentaenoic acid (EPA), and docosahexaenoic acid (DHA), respectively, of human essential fatty acids, referring to previous studies on the fatty acid compositions of sturgeons [18-22].

3.2. Abundances of Major Lipid Molecules and Fatty Acid Moieties

Relative abundances, i.e., relative peak areas of individual molecules in gas chromatograms, of major lipid molecules are listed in Table 2; absolute concentration such as "μg/g tissue" was not determined by the non-targeted lipidomics in this study. The top 20 lipid molecules were dominated by the lipid categories_classes GP_LPC and GL_DG/TG, that is, lyso-phosphatidylcholines (LPC) of the category glycerophospholipids (GP) and di-/tri-acylglycerolipids (DG/TG) of the category glycerolipids (GL). The relative abundances of the 373 level-A and -B lipid molecules are listed in Table S1, in which GP_LPC and GL_DG/TG are dominant as well. An LPC, or a lyso-PC, is a phosphatidylcholine (PC) whose one of the two fatty acids is "lysed" or lost, possibly due to partial degradation (hydrolyzation) of a PC during storage, referring to the lipid class compositions of other fish roes in which PC overwhelms LPC [23]. The significant presence of choline in phospholipids suggests an essential role in lipid and betaine metabolism in the Siberian sturgeon lipidome.

In addition to the choline moiety in LPCs, moieties of 22:6 and 20:5 polyunsaturated fatty acids, or DHA and EPA, were detected in addition to mono- and di-unsaturated fatty acids 18:1 and 18:2, respectively.

Table 2. Relative abundances of significant lipid molecules in meat, fat, and egg of a Siberian sturgeon. The top 20 lipid molecules are listed in the order of relative abundance in meat. Relative abundances are based on peak areas of respective molecules in gas chromatograms. The highest relative abundance in each tissue is hatched. The code "(rep)" of the lipid "LPC (18:1) (rep)", for example, indicates that the fatty acid moiety "18:1" is repeated or duplicated, but the positions of carbon=carbon double bonds are not specified. All the relative abundances of the total 373 A- and B-level lipid molecules are listed in Table S1

Lipid molecules	Meat			Fat			Egg		
	Mean	±	SD	Mean	±	SD	Mean	±	SD
LPC(18:1)(rep)	7.8E+09	±	2.8E+09	4.2E+09	±	1.7E+09	1.7E+08	±	1.6E+07
LPC(22:6)(rep)	5.8E+09	±	8.4E+08	9.3E+09	±	2.2E+09	8.1E+08	±	6.2E+07
TG(16:0/18:1/18:2)	4.5E+09	±	5.7E+08	3.6E+09	±	1.0E+09	2.7E+09	±	5.9E+08
LPC(18:2)(rep)	3.6E+09	±	5.5E+08	3.9E+09	±	1.3E+09	2.1E+08	±	2.2E+07
TG(16:0/18:1/18:3)	3.9E+09	±	5.4E+08	3.2E+09	±	8.2E+08	1.9E+09	±	4.5E+08
DG(18:1/18:2)	3.6E+09	±	6.7E+08	2.9E+09	±	2.2E+08	2.3E+08	±	2.4E+07
DG(22:5/18:2)	1.0E+09	±	1.5E+09	1.2E+09	±	1.8E+09	1.3E+09	±	1.3E+08
TG(16:0/16:0/18:2)	3.2E+09	±	3.5E+08	2.6E+09	±	7.4E+08	1.3E+09	±	3.1E+08
DG(18:1/18:1)	3.0E+09	±	4.5E+08	2.2E+09	±	4.6E+07	5.1E+08	±	3.0E+07
TG(16:0/18:1/18:1)	3.0E+09	±	4.3E+08	2.3E+09	±	5.6E+08	2.1E+09	±	3.3E+08
TG(18:3/18:2/18:2)	3.0E+09	±	5.2E+08	2.9E+09	±	6.8E+08	1.4E+09	±	3.7E+08
DG(16:1/18:1)	2.8E+09	±	3.7E+08	2.0E+09	±	1.9E+08	6.7E+08	±	2.3E+08
LPC(20:5)(rep)	2.3E+09	±	3.5E+08	3.2E+09	±	1.0E+09	2.5E+08	±	1.7E+07
TG(16:0/16:1/18:2)	2.7E+09	±	3.6E+08	2.2E+09	±	6.0E+08	9.1E+08	±	2.3E+08
TG(18:1/18:2/20:5)	2.6E+09	±	6.3E+08	2.0E+09	±	1.7E+09	2.1E+09	±	5.4E+08
TG(16:1/18:2/18:2)	2.3E+09	±	4.0E+08	2.1E+09	±	4.2E+08	8.9E+08	±	2.3E+08
DG(18:2/18:2)	1.9E+09	±	5.2E+08	1.6E+09	±	1.0E+08	1.2E+08	±	1.4E+07
TG(16:0/18:1/20:3)	2.0E+09	±	3.2E+08	1.7E+09	±	5.2E+08	6.9E+08	±	9.3E+07
TG(18:1/18:2/18:3)	2.1E+09	±	5.4E+08	2.0E+09	±	5.2E+08	1.5E+09	±	3.8E+08
TG(18:1/18:1/18:3)	1.8E+09	±	3.1E+08	2.0E+09	±	2.7E+08	1.0E+09	±	2.4E+08
DG(16:0/18:1)	1.6E+09	±	2.6E+08	1.2E+09	±	5.1E+07	7.2E+08	±	3.4E+07

Regarding the glycerolipid DGs and TGs in Table 2, their fatty acid moieties consisted of saturated 16:0, mono/di-unsaturated 16:1, 18:1, and 18:2, polyunsaturated 18:3, 20:5, and 22:5 (DPA, docosapentaenoic acid). DHA (22:6) was not observed in the DGs or TGs (Table 2).

Focusing on EPA and DHA, the relative abundance of lipid molecules that contain EPA-/DHA-moieties in meat, fat, and eggs is shown in Table 3.

Table 3. Relative abundance (%) of lipid molecules that contain EPA and/or DHA as a moiety in meat, fat, and egg of a Siberian sturgeon

	Meat	Fat	Egg
Mean ± SD %	18.73 ±1.94	26.86 ± 2.52	24.26 ± 0.40

3.3. Lipidome and Aqueous Metabolome

A previous study reported that betaine (also known as N,N,N-trimethylglycine) and choline are aqueous biomarkers for the fat tissue of the same Siberian sturgeon individual analyzed in this study [11]. Betaine and choline are linked to folate-dependent one-carbon metabolism in humans [24]. They are reported to facilitate growth and lipid metabolism in Wuchang bream (Megalobrama amblycephala) [25] and thus are likely beneficial to the Siberian sturgeon. The abundance of lipid biomarkers of phosphatidylcholines (PC) and lysosphatidylcholine (LPC) in the studied sturgeon tissues (Table 1 and Table 2) may reflect their roles in storing choline as the central moiety of glycerophospholipids. The metabolic relationship among LPC, choline, and betaine may be presumed as follows:

PC/LPC (choline storage) → choline (oxidized to betaine) → betaine (as methyl-donor) →→→ folate-dependent one-carbon metabolism.

Simultaneous targeted metabolomics and lipidomics would provide more insights for dissecting metabolic pathways driven in sturgeons and improving the growth and maturation of sturgeons in aquaculture.

4. Conclusions

This study produced the first lipidomic profile of Siberian sturgeons. The major common lipid molecules in meat, fat, and egg tissues are lysophosphatidylcholines (LPC) and di/triacylglycerolipids (DG/TG). LPC may be a storage molecule-form of choline oxidized to betaine and further linked to critical metabolic pathways, as inferred from separate aqueous metabolome analysis. Aqueous metabolomics and lipidomics can generate more insightful datasets if combined systematically.

Acknowledgments

Part of this study was supported by JSPS KAKENHI Grant Number 21K05782. Mr. Kazuyoshi Fujimoto of the surgeon farm Hiroshima-tyozame and Ms. Akiko Koi kindly provided technical advice and assistance. I would like to thank Editage (www.editage.com) for English language editing.

Statement of Competing Interests

The author declares that there is no conflict of interest.

List of Abbreviations

DG, diacylglycerolipid
DHA, docosahexaenoic acid
DPA, docosapentaenoic acid
EPA, eicosapentaenoic acid
GL, glycerolipids
GP, glycerophospholipid
IUCN, International Union for Conservation of Nature
LC/MS, liquid chromatography/mass spectrometry
LDA, Linear discriminant analysis
LdMePE, lysophosphatidyl-dimethyl-ethanolamine
LEfSe, LDA Effect Size algorithm
LPC, lysophosphatidylcholine
LPS, lysoglyerophosphoserine
PAF, platelet-activating factor
PC, phosphatidylcholine
PCA, principal component analysis
PE, glycerophosphoethanolamine
TG, triacylglycerolipid

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Table S1. Relative abundances of the total 373 A- and B-level lipid molecules in meat, fat and egg of a Siberian sturgeon. Top 20 lipid molecules in meat are listed in the order of relative abundances in meat. The highest relative abundance in each tissue is yellow-colored. The code "(rep)" of the lipid "LPC (18:1) (rep)", for example, indicates that the fatty acid moiety "18:1" is repeated or duplicated but the positions of carbon=carbon double bonds are not specified

Level	Molecule formula	Lipid molecule	Meat			Fat			Egg		
			Mean	±	SD	Mean	±	SD	Mean	±	SD
B	C26 H53 O7 N1 P1	LPC(18:1)(rep)	7.8E+09	±	2.8E+09	4.2E+09	±	1.7E+09	1.7E+08	±	1.6E+07
B	C30 H51 O7 N1 P1	LPC(22:6)(rep)	5.8E+09	±	8.4E+08	9.3E+09	±	2.2E+09	8.1E+08	±	6.2E+07
A	C55 H104 O6 N1	TG(16:0/18:1/18:2)	4.5E+09	±	5.7E+08	3.6E+09	±	1.0E+09	2.7E+09	±	5.9E+08
B	C26 H51 O7 N1 P1	LPC(18:2)(rep)	3.6E+09	±	5.5E+08	3.9E+09	±	1.3E+09	2.1E+08	±	2.2E+07
A	C55 H102 O6 N1	TG(16:0/18:1/18:3)	3.9E+09	±	5.4E+08	3.2E+09	±	8.2E+08	1.9E+09	±	4.5E+08
A	C39 H74 O5 N1	DG(18:1/18:2)	3.6E+09	±	6.7E+08	2.9E+09	±	2.2E+08	2.3E+08	±	2.4E+07
A	C43 H74 O5 N1	DG(22:5/18:2)	1.0E+09	±	1.5E+09	1.2E+09	±	1.8E+09	1.3E+09	±	1.3E+08
A	C53 H102 O6 N1	TG(16:0/16:0/18:2)	3.2E+09	±	3.5E+08	2.6E+09	±	7.4E+08	1.3E+09	±	3.1E+08
A	C39 H76 O5 N1	DG(18:1/18:1)	3.0E+09	±	4.5E+08	2.2E+09	±	4.6E+07	5.1E+08	±	3.0E+07
A	C55 H106 O6 N1	TG(16:0/18:1/18:1)	3.0E+09	±	4.3E+08	2.3E+09	±	5.6E+08	2.1E+09	±	3.3E+08
A	C57 H100 O6 N1	TG(18:3/18:2/18:2)	3.0E+09	±	5.2E+08	2.9E+09	±	6.8E+08	1.4E+09	±	3.7E+08
A	C37 H72 O5 N1	DG(16:1/18:1)	2.8E+09	±	3.7E+08	2.0E+09	±	1.9E+08	6.7E+08	±	2.3E+08
B	C28 H49 O7 N1 P1	LPC(20:5)(rep)	2.3E+09	±	3.5E+08	3.2E+09	±	1.0E+09	2.5E+08	±	1.7E+07
A	C53 H100 O6 N1	TG(16:0/16:1/18:2)	2.7E+09	±	3.6E+08	2.2E+09	±	6.0E+08	9.1E+08	±	2.3E+08
A	C59 H102 O6 N1	TG(18:1/18:2/20:5)	2.6E+09	±	6.3E+08	2.0E+09	±	1.7E+09	2.1E+09	±	5.4E+08
A	C55 H100 O6 N1	TG(16:1/18:2/18:2)	2.3E+09	±	4.0E+08	2.1E+09	±	4.2E+08	8.9E+08	±	2.3E+08
A	C39 H72 O5 N1	DG(18:2/18:2)	1.9E+09	±	5.2E+08	1.6E+09	±	1.0E+08	1.2E+08	±	1.4E+07
A	C57 H106 O6 N1	TG(16:0/18:1/20:3)	2.0E+09	±	3.2E+08	1.7E+09	±	5.2E+08	6.9E+08	±	9.3E+07
A	C57 H102 O6 N1	TG(18:1/18:2/18:3)	2.1E+09	±	5.4E+08	2.0E+09	±	5.2E+08	1.5E+09	±	3.8E+08
A	C57 H104 O6 N1	TG(18:1/18:1/18:3)	1.8E+09	±	3.1E+08	2.0E+09	±	2.7E+08	1.0E+09	±	2.4E+08
B	C37 H74 O5 N1	DG(16:0/18:1)	1.6E+09	±	2.6E+08	1.2E+09	±	5.1E+07	7.2E+08	±	3.4E+07
B	C24 H49 O7 N1 P1	LPC(16:1)(rep)	1.5E+09	±	2.7E+08	1.2E+09	±	4.8E+08	9.8E+07	±	6.2E+06
B	C28 H51 O7 N1 P1	LPC(20:4)(rep)	1.3E+09	±	2.9E+08	1.2E+09	±	2.8E+08	2.8E+08	±	2.3E+07
A	C53 H98 O6 N1	TG(16:1/16:1/18:2)	1.4E+09	±	1.6E+08	1.2E+09	±	2.6E+08	3.6E+08	±	9.5E+07
A	C57 H108 O6 N1	TG(18:1/18:1/18:1)	1.4E+09	±	2.5E+08	1.0E+09	±	2.6E+08	5.6E+08	±	6.6E+07
B	C24 H51 O7 N1 P1	LPC(16:0)(rep)	1.3E+09	±	2.1E+08	5.4E+08	±	1.4E+08	3.1E+08	±	1.1E+07

Level	Molecule formula	Lipid molecule	Meat			Fat			Egg		
			Mean	±	SD	Mean	±	SD	Mean	±	SD
A	C53 H104 O6 N1	TG(16:0/16:0/18:1)	1.0E+09	±	1.4E+08	8.4E+08	±	2.3E+08	2.0E+08	±	3.0E+07
A	C61 H104 O6 N1	TG(18:1/18:2/22:6)	7.3E+08	±	4.7E+08	4.5E+08	±	4.4E+08	5.6E+08	±	4.9E+08
A	C51 H98 O6 N1	TG(16:0/14:0/18:2)	1.0E+09	±	1.3E+08	8.2E+08	±	2.2E+08	2.4E+08	±	6.5E+07
A	C61 H106 O6 N1	TG(18:1/18:1/22:6)	1.1E+09	±	2.1E+08	9.8E+08	±	2.5E+08	9.9E+08	±	2.2E+08
A	C59 H104 O6 N1	TG(18:1/18:1/20:5)	1.8E+09	±	1.5E+09	1.2E+09	±	3.4E+08	4.6E+08	±	9.9E+07
B	C28 H53 O7 N1 P1	LPC(20:3)(rep)	7.8E+08	±	1.3E+08	7.0E+08	±	2.8E+08	7.1E+07	±	6.6E+06
B	C30 H53 O7 N1 P1	LPC(22:5)(rep)	5.3E+08	±	1.6E+08	1.3E+09	±	5.7E+08	5.0E+07	±	7.6E+06
B	C35 H70 O5 N1	DG(18:1/14:0)	6.8E+08	±	8.9E+07	4.9E+08	±	2.4E+07	1.1E+08	±	3.6E+06
A	C51 H100 O6 N1	TG(16:0/14:0/18:1)	6.0E+08	±	6.1E+07	5.4E+08	±	1.6E+08	1.0E+08	±	2.6E+07
A	C61 H108 O6 N1	TG(18:1/18:1/22:5)	4.6E+08	±	1.7E+08	1.8E+08	±	5.5E+07	1.6E+08	±	7.7E+07
B	C27 H45 O7 N1 P1	LPE(22:6)	4.7E+08	±	1.5E+07	1.0E+09	±	3.4E+08	6.6E+07	±	5.4E+06
A	C31 H51 O9 N1 P1	LPC(22:6)	4.7E+08	±	2.8E+07	9.0E+08	±	3.1E+08	7.5E+07	±	8.0E+06
B	C41 H72 O5 N1	DG(16:0/22:6)	6.0E+08	±	1.1E+08	1.1E+09	±	4.5E+08	8.0E+07	±	7.8E+06
A	C43 H76 O5 N1	DG(18:1/22:5)	5.4E+08	±	8.0E+07	4.3E+08	±	5.5E+07	8.2E+07	±	9.3E+06
B	C52 H107 O10 N1 P1	PG(30:0/16:0)	5.1E+08	±	6.8E+07	2.5E+08	±	2.6E+07	3.5E+07	±	6.3E+06
A	C59 H106 O6 N1	TG(16:0/18:1/22:5)	7.5E+08	±	4.6E+08	1.0E+09	±	3.1E+08	4.2E+08	±	1.4E+08
A	C43 H83 O10 N1 P1	PC(16:0/18:1)	4.0E+08	±	3.8E+07	3.7E+08	±	8.3E+07	4.7E+08	±	4.0E+07
A	C27 H53 O9 N1 P1	LPC(18:1)	3.7E+08	±	5.7E+07	5.0E+08	±	2.6E+08	1.9E+07	±	1.5E+06
A	C41 H78 O5 N1	DG(18:1/20:2)	3.8E+08	±	5.3E+07	2.9E+08	±	5.7E+06	2.6E+07	±	3.7E+06
B	C26 H49 O7 N1 P1	LPC(18:3)(rep)	3.5E+08	±	6.0E+07	4.5E+08	±	1.8E+08	3.4E+07	±	3.1E+06
A	C47 H82 O13 N0 P1	PI(18:0/20:4)	3.0E+08	±	2.7E+07	2.9E+08	±	6.9E+07	4.3E+08	±	4.9E+07
B	C49 H87 O13 N1 P1	PI(18:0/22:6)(rep)	3.3E+08	±	2.8E+07	3.6E+08	±	9.8E+07	2.7E+07	±	3.1E+06
B	C28 H55 O7 N1 P1	LPC(20:2)(rep)	2.4E+08	±	5.6E+07	3.4E+08	±	1.7E+08	1.5E+07	±	3.6E+06
A	C27 H51 O9 N1 P1	LPC(18:2)	2.9E+08	±	5.5E+07	3.6E+08	±	1.5E+08	1.9E+07	±	5.6E+05
B	C32 H55 O7 N1 P1	LPC(24:6)(rep)	2.8E+08	±	1.9E+07	5.5E+08	±	1.9E+08	1.6E+07	±	3.9E+06
B	C52 H105 O10 N1 P1	PG(28:0/18:1)	2.8E+08	±	2.6E+07	1.4E+08	±	1.3E+07	1.9E+07	±	1.1E+06
A	C54 H102 O6 N1	TG(16:1/17:1/18:1)	3.1E+08	±	3.8E+07	2.6E+08	±	7.3E+07	1.5E+08	±	3.5E+07
A	C41 H76 O5 N1	DG(20:2/18:2)	3.0E+08	±	3.8E+07	2.3E+08	±	2.4E+07	3.2E+07	±	3.3E+06
B	C41 H80 O5 N1	DG(20:1/18:1)	2.8E+08	±	4.1E+07	1.9E+08	±	1.1E+07	2.4E+07	±	1.4E+06
B	C26 H55 O6 N1 P1	LPC(18:0p)	1.9E+08	±	1.9E+07	5.8E+07	±	7.6E+06	3.3E+07	±	1.9E+06
B	C54 H109 O10 N1 P1	PG(30:0/18:1)	2.7E+08	±	4.8E+07	1.4E+08	±	2.0E+07	2.2E+07	±	9.2E+06
B	C26 H55 O7 N1 P1	LPC(18:0)(rep)	2.1E+08	±	2.0E+07	8.5E+07	±	8.2E+06	6.6E+07	±	2.4E+06
A	C57 H110 O6 N1	TG(16:0/18:1/20:1)	2.5E+08	±	4.5E+07	1.7E+08	±	5.5E+07	7.7E+07	±	1.0E+07
A	C54 H104 O6 N1	TG(16:0/17:1/18:1)	2.2E+08	±	2.0E+07	1.8E+08	±	5.1E+07	1.4E+08	±	1.9E+07
A	C58 H102 O6 N1	TG(18:1/17:1/20:5)	2.0E+08	±	6.5E+07	7.1E+07	±	1.1E+08	9.2E+07	±	7.7E+07
A	C38 H74 O5 N1	DG(17:1/18:1)	2.4E+08	±	4.7E+07	1.7E+08	±	9.1E+06	4.4E+07	±	2.9E+06
B	C24 H51 O6 N1 P1	LPC(16:0p)	1.9E+08	±	2.9E+07	2.1E+07	±	1.2E+07	5.7E+06	±	2.3E+05
A	C49 H82 O13 N0 P1	PI(18:0/22:6)	2.0E+08	±	1.3E+07	2.0E+08	±	6.6E+07	2.1E+07	±	1.8E+06
A	C56 H100 O6 N1	TG(16:0/18:1/19:5)	2.2E+08	±	3.9E+07	1.8E+08	±	2.8E+07	8.2E+07	±	2.1E+07
A	C29 H49 O9 N1 P1	LPC(20:5)	1.7E+08	±	2.2E+07	2.7E+08	±	9.7E+07	2.0E+07	±	2.1E+06
A	C63 H106 O6 N1	TG(18:0/20:4/22:6)	1.9E+08	±	3.6E+07	2.2E+08	±	5.5E+07	1.5E+08	±	3.6E+07
B	C22 H47 O6 N1 P1	LPC(14:0p)	1.7E+08	±	1.4E+07	2.6E+07	±	3.3E+06	4.3E+06	±	3.9E+05
A	C41 H74 O5 N1	DG(18:1/20:4)	2.0E+08	±	4.0E+07	1.8E+08	±	2.5E+07	1.3E+07	±	5.5E+06
A	C56 H104 O6 N1	TG(18:1/17:1/18:2)	2.0E+08	±	3.2E+07	1.7E+08	±	5.3E+07	9.1E+07	±	2.0E+07
B	C47 H87 O13 N1 P1	PI(18:0/20:4)(rep)	1.6E+08	±	2.5E+07	1.4E+08	±	3.0E+07	2.7E+08	±	1.5E+07
A	C54 H100 O6 N1	TG(16:1/17:1/18:2)	2.1E+08	±	3.6E+07	1.9E+08	±	6.7E+07	7.8E+07	±	2.1E+07
B	C39 H78 O5 N1	DG(16:0/20:1)	1.9E+08	±	3.0E+07	1.3E+08	±	2.7E+06	6.9E+07	±	8.2E+05
A	C59 H110 O6 N1	TG(20:1/18:1/18:2)	2.0E+08	±	3.6E+07	1.6E+08	±	4.1E+07	3.8E+07	±	2.5E+06
B	C24 H53 O6 N1 P1	LPC(16:0e)	1.4E+08	±	1.1E+07	4.1E+07	±	5.4E+06	1.3E+07	±	5.2E+05
B	C25 H51 O7 N1 P1	LPC(17:1)(rep)	1.6E+08	±	1.8E+07	1.9E+08	±	8.9E+07	1.6E+07	±	1.2E+06
A	C52 H100 O6 N1	TG(16:0/16:1/17:1)	1.8E+08	±	2.3E+07	1.6E+08	±	4.4E+07	5.7E+07	±	1.5E+07
A	C56 H102 O6 N1	TG(18:1/17:1/18:3)	1.8E+08	±	3.2E+07	1.6E+08	±	5.7E+07	7.2E+07	±	1.8E+07
B	C50 H103 O10 N1 P1	PG(28:0/16:0)	1.8E+08	±	3.8E+07	8.7E+07	±	6.5E+06	5.7E+06	±	1.1E+06
A	C42 H74 O5 N1	DG(18:1/21:5)	1.3E+08	±	5.6E+07	6.4E+07	±	8.3E+06	1.5E+07	±	1.1E+06
A	C45 H87 O10 N1 P1	PC(18:0/18:1)	1.3E+08	±	2.6E+06	1.1E+08	±	2.4E+07	2.0E+08	±	1.2E+07
A	C56 H106 O6 N1	TG(18:1/17:1/18:1)	1.4E+08	±	1.0E+07	1.3E+08	±	4.6E+07	9.4E+07	±	2.0E+07
A	C63 H108 O6 N1	TG(18:1/18:2/24:6)	1.5E+08	±	2.0E+07	1.2E+08	±	3.3E+07	8.0E+07	±	1.7E+07
A	C25 H51 O9 N1 P1	LPC(16:0)	1.3E+08	±	1.2E+07	5.8E+07	±	1.7E+07	3.6E+07	±	3.6E+06
A	C49 H96 O6 N1	TG(18:1/14:0/14:0)	1.4E+08	±	1.5E+07	1.2E+08	±	3.3E+07	1.8E+07	±	5.6E+06
B	C26 H53 O6 N1 P1	LPC(18:1p)	1.0E+08	±	1.4E+07	3.5E+07	±	3.0E+06	2.1E+06	±	9.2E+04
B	C45 H79 O8 N1 P1	PE(18:0/22:6)(rep)(rep)	1.4E+08	±	1.7E+07	9.9E+07	±	3.6E+07	5.6E+08	±	2.8E+07
A	C52 H98 O6 N1	TG(16:1/16:1/17:1)	1.4E+08	±	2.1E+07	1.1E+08	±	2.5E+07	3.1E+07	±	8.3E+06

Level	Molecule formula	Lipid molecule	Meat			Fat			Egg		
			Mean	±	SD	Mean	±	SD	Mean	±	SD
B	C56 H107 O10 N1 P1	PG(32:3/18:1)	1.3E+08	±	1.8E+07	7.7E+07	±	7.7E+06	3.4E+07	±	3.6E+06
A	C25 H49 O9 N1 P1	LPC(16:1)	1.1E+08	±	1.9E+07	1.0E+08	±	5.2E+07	8.8E+06	±	8.0E+05
A	C38 H72 O5 N1	DG(17:1/18:2)	1.2E+08	±	1.5E+07	9.4E+07	±	9.7E+06	1.8E+07	±	2.1E+06
A	C45 H77 O7 N1 P1	PE(18:1p/22:6)(rep)	8.9E+07	±	2.6E+07	9.3E+08	±	3.8E+08	3.9E+08	±	3.1E+07
A	C55 H108 O6 N1	TG(18:0/16:0/18:1)	1.2E+08	±	1.9E+07	8.2E+07	±	2.8E+07	3.0E+07	±	4.3E+06
A	C29 H51 O9 N1 P1	LPC(20:4)	1.0E+08	±	1.7E+07	1.0E+08	±	3.5E+07	2.5E+07	±	2.1E+06
A	C41 H79 O7 N1 P1	PE(18:1p/18:1)	7.9E+07	±	2.3E+07	3.0E+08	±	9.3E+07	8.8E+06	±	7.2E+05
A	C46 H77 O10 N1 P1	PS(18:0/22:6)	9.4E+07	±	1.8E+06	1.0E+08	±	1.2E+07	4.2E+07	±	2.6E+06
B	C45 H78 O5 N1	DG(20:1/22:6)	1.2E+08	±	2.3E+07	2.1E+08	±	2.1E+07	1.4E+07	±	1.3E+06
B	C28 H57 O7 N1 P1	LPC(20:1)(rep)	9.8E+07	±	1.3E+07	8.7E+07	±	4.5E+07	2.4E+06	±	3.0E+05
A	C60 H104 O6 N1	TG(18:1/17:1/22:6)	1.3E+08	±	3.3E+07	1.0E+08	±	2.5E+07	9.4E+07	±	7.2E+07
B	C23 H47 O7 N1 P1	LPC(15:1)	9.7E+07	±	1.7E+07	6.1E+07	±	8.2E+06	3.3E+07	±	1.3E+06
A	C58 H104 O6 N1	TG(16:0/18:1/21:5)	1.1E+08	±	2.1E+07	1.0E+08	±	2.9E+07	6.6E+07	±	1.5E+07
B	C25 H43 O7 N1 P1	LPE(20:5)	8.0E+07	±	6.7E+06	1.7E+08	±	7.3E+07	1.8E+07	±	1.3E+06
B	C25 H45 O7 N1 P1	LPE(20:4)	8.2E+07	±	4.5E+06	1.2E+08	±	3.0E+07	2.9E+07	±	2.8E+06
B	C25 H45 O7 N1 P1	LPC(17:4)	8.2E+07	±	4.5E+06	1.2E+08	±	3.0E+07	2.9E+07	±	2.8E+06
A	C59 H112 O6 N1	TG(20:1/18:1/18:1)	9.9E+07	±	2.1E+07	6.7E+07	±	2.2E+07	1.4E+07	±	1.5E+06
A	C61 H110 O6 N1	TG(24:5/16:0/18:1)	1.1E+08	±	4.3E+07	7.4E+07	±	1.2E+07	6.2E+07	±	3.4E+07
A	C52 H102 O6 N1	TG(16:0/16:0/17:1)	7.8E+07	±	5.4E+06	7.0E+07	±	2.2E+07	1.5E+07	±	1.1E+06
A	C60 H106 O6 N1	TG(17:0/18:1/22:6)	7.6E+07	±	3.0E+07	9.7E+07	±	2.8E+07	1.8E+07	±	3.7E+06
A	C63 H112 O6 N1	TG(20:1/18:1/22:5)	7.7E+07	±	6.4E+06	6.5E+07	±	1.8E+07	1.7E+07	±	5.6E+06
A	C59 H108 O6 N1	TG(18:1/18:1/20:3)	8.1E+07	±	1.3E+07	7.8E+07	±	2.1E+07	1.4E+08	±	8.6E+07
A	C43 H75 O7 N1 P1	PE(18:1p/20:5)(rep)	4.1E+07	±	3.4E+07	4.4E+07	±	4.5E+07	1.1E+07	±	2.6E+06
B	C31 H51 O10 N1 P1	PAF(20:5)	7.2E+07	±	1.2E+07	8.2E+06	±	2.3E+06	4.5E+05	±	4.4E+04
A	C43 H80 O13 N0 P1	PI(18:0/16:1)	6.7E+07	±	8.5E+05	7.0E+07	±	1.4E+07	2.3E+07	±	1.9E+06
A	C29 H53 O9 N1 P1	LPC(20:3)	6.4E+07	±	9.8E+06	5.5E+07	±	3.1E+07	6.3E+06	±	6.0E+05
A	C47 H80 O13 N0 P1	PI(18:1/20:4)	6.4E+07	±	4.5E+06	5.4E+07	±	5.4E+07	1.8E+08	±	1.7E+07
A	C36 H70 O5 N1	DG(17:1/16:1)	6.9E+07	±	7.3E+06	5.3E+07	±	6.5E+06	1.6E+07	±	6.5E+05
B	C43 H78 O5 N1	DG(18:1/22:4)	6.9E+07	±	7.2E+06	4.1E+07	±	2.8E+06	7.0E+06	±	1.0E+06
A	C47 H81 O10 N1 P1	PC(16:0/22:6)	6.4E+07	±	3.5E+06	4.8E+07	±	2.0E+07	4.3E+08	±	1.2E+07
B	C30 H55 O7 N1 P1	LPC(22:4)(rep)	6.8E+07	±	2.1E+07	7.0E+07	±	2.1E+07	8.8E+06	±	7.4E+05
B	C42 H82 O3 N1	Cer(d18:1/24:1)	5.6E+07	±	1.8E+06	3.8E+07	±	7.6E+06	1.4E+08	±	1.9E+07
A	C45 H76 O5 N1	DG(24:6/18:2)	6.7E+07	±	1.1E+07	7.8E+07	±	4.1E+06	6.3E+06	±	4.8E+05
B	C36 H72 O5 N1	DG(17:1/16:0)	7.1E+07	±	1.5E+07	6.5E+07	±	1.0E+07	2.0E+07	±	3.2E+06
B	C56 H105 O10 N1 P1	PG(32:3/18:2)	7.6E+07	±	2.7E+07	3.6E+07	±	2.6E+06	5.6E+06	±	1.2E+05
A	C56 H108 O6 N1	TG(17:0/18:1/18:1)	5.0E+07	±	2.6E+06	3.9E+07	±	1.1E+07	3.3E+07	±	3.2E+06
B	C22 H49 O6 N1 P1	LPC(14:0e)	4.9E+07	±	5.3E+06	9.3E+06	±	3.1E+05	1.2E+06	±	2.0E+04
B	C26 H47 O7 N1 P1	LPC(18:4)(rep)	1.8E+08	±	1.2E+08	8.5E+07	±	4.0E+07	4.1E+06	±	2.7E+05
B	C40 H76 O10 N0 P1	PG(16:0/18:1)	4.9E+07	±	2.9E+06	9.6E+06	±	1.5E+06	1.9E+06	±	1.4E+05
B	C58 H109 O10 N1 P1	PG(34:4/18:1)	6.3E+07	±	1.4E+07	3.4E+07	±	8.9E+06	1.9E+07	±	2.3E+06
B	C23 H45 O7 N1 P1	LPC(15:2)	4.6E+07	±	4.5E+06	5.2E+07	±	1.4E+07	5.2E+06	±	3.8E+05
B	C23 H45 O7 N1 P1	LPE(18:2)	4.9E+07	±	2.4E+06	4.4E+07	±	7.9E+06	5.2E+06	±	3.8E+05
B	C22 H47 O7 N1 P1	LPC(14:0)	5.1E+07	±	4.7E+06	4.6E+07	±	2.0E+07	2.6E+06	±	4.0E+05
B	C43 H75 O8 N1 P1	PE(18:1/20:5)(rep)	5.7E+07	±	1.1E+07	7.0E+07	±	1.1E+07	6.5E+07	±	6.7E+06
A	C65 H108 O6 N1	TG(18:0/22:5/22:6)	5.7E+07	±	1.3E+07	5.7E+07	±	1.1E+07	3.1E+07	±	1.6E+07
A	C45 H77 O8 N1 P1	PE(18:0/22:6)(rep)	5.0E+07	±	5.4E+06	4.0E+07	±	1.4E+07	1.6E+08	±	6.1E+06
A	C45 H75 O7 N1 P1	PE(18:1p/22:6)	3.9E+07	±	1.3E+07	3.5E+08	±	1.0E+08	1.7E+08	±	5.9E+06
B	C47 H81 O9 N1 P1	PC(16:0p/22:6)(rep)	4.2E+07	±	1.8E+06	3.8E+07	±	1.1E+07	7.7E+06	±	4.1E+05
A	C45 H80 O5 N1	DG(24:5/18:1)	5.1E+07	±	6.7E+06	5.1E+07	±	4.5E+06	5.7E+06	±	6.2E+05
B	C24 H46 O9 N0 P1	LPG(18:1)	3.6E+07	±	1.4E+07	7.4E+06	±	1.7E+06	7.4E+05	±	1.0E+05
A	C43 H82 O5 N1	DG(22:1/18:2)	4.4E+07	±	5.6E+06	3.8E+07	±	2.8E+06	2.3E+06	±	1.0E+05
B	C43 H84 O5 N1	DG(18:1/22:1)	4.6E+07	±	8.0E+06	3.8E+07	±	2.1E+06	3.3E+06	±	3.9E+05
B	C23 H49 O7 N1 P1	LPE(18:0)	3.6E+07	±	3.0E+06	1.2E+07	±	1.1E+06	2.4E+07	±	1.8E+06
A	C41 H79 O10 N1 P1	PC(16:0/16:1)	3.5E+07	±	5.8E+05	3.3E+07	±	5.4E+06	5.8E+07	±	1.6E+06
B	C47 H85 O13 N1 P1	PI(18:1/20:4)(rep)	3.3E+07	±	6.3E+05	1.6E+07	±	1.0E+07	1.2E+08	±	1.2E+07
A	C47 H84 O13 N0 P1	PI(18:0/20:3)	3.5E+07	±	6.2E+06	1.5E+07	±	7.3E+05	1.1E+07	±	7.1E+05
B	C38 H76 O5 N1	DG(17:0/18:1)	4.0E+07	±	7.9E+06	1.7E+07	±	6.8E+06	9.5E+06	±	5.4E+06
A	C35 H72 O5 N1	DG(16:0/16:0)	4.4E+07	±	1.2E+07	4.1E+07	±	5.0E+06	1.8E+07	±	2.1E+06
A	C31 H53 O9 N1 P1	LPC(22:5)	3.2E+07	±	5.0E+06	5.1E+07	±	2.2E+07	6.4E+06	±	1.8E+06
A	C39 H77 O7 N1 P1	PE(18:1p/16:0)	2.5E+07	±	6.6E+06	8.4E+07	±	2.8E+07	7.3E+06	±	5.6E+05
A	C40 H78 O5 N1	DG(17:1/20:1)	3.7E+07	±	5.8E+06	2.6E+07	±	1.5E+06	4.3E+06	±	4.4E+05
B	C29 H51 O7 N1 P1	LPC(21:5)	3.1E+07	±	4.2E+06	4.1E+07	±	1.2E+07	3.3E+06	±	6.6E+05

Level	Molecule formula	Lipid molecule	Meat			Fat			Egg		
			Mean	±	SD	Mean	±	SD	Mean	±	SD
B	C40 H72 O5 N1	DG(16:0/21:5)	4.7E+07	±	1.6E+07	4.9E+07	±	5.0E+06	1.6E+07	±	1.2E+06
A	C47 H78 O13 N0 P1	PI(16:0/22:6)	3.5E+07	±	5.5E+06	6.9E+07	±	3.9E+07	4.3E+07	±	5.1E+06
A	C54 H106 O6 N1	TG(16:0/17:0/18:1)	2.9E+07	±	1.5E+06	2.2E+07	±	6.9E+06	5.8E+06	±	9.0E+05
A	C42 H79 O10 N1 P1	PS(18:0/18:1)	2.5E+07	±	2.9E+06	2.7E+07	±	7.7E+06	1.7E+06	±	2.5E+05
B	C27 H49 O7 N1 P1	LPC(19:4)	2.8E+07	±	3.0E+06	3.1E+07	±	1.1E+07	4.8E+05	±	8.1E+04
B	C43 H80 O5 N1	DG(18:3/22:1)	2.7E+07	±	2.3E+06	1.9E+07	±	1.2E+06	4.8E+06	±	5.6E+05
B	C25 H53 O7 N1 P1	LPC(17:0)	1.5E+07	±	1.0E+07	1.6E+07	±	3.8E+06	1.7E+06	±	1.2E+06
A	C27 H52 O12 N0 P1	LPI(18:0)	2.9E+07	±	5.7E+06	4.9E+06	±	8.9E+05	7.0E+06	±	1.1E+06
A	C45 H79 O7 N1 P1	PE(18:0p/22:6)(rep)	2.5E+07	±	3.7E+06	7.3E+07	±	1.3E+07	7.9E+07	±	4.9E+06
A	C67 H108 O6 N1	TG(20:1/22:6/22:6)	3.2E+07	±	6.1E+06	3.2E+07	±	7.7E+06	4.8E+07	±	1.3E+07
A	C63 H110 O6 N1	TG(20:1/18:1/22:6)	4.5E+07	±	2.4E+07	6.2E+07	±	1.9E+07	4.5E+07	±	3.6E+07
A	C58 H108 O6 N1	TG(19:1/18:1/18:2)	3.1E+07	±	5.9E+06	3.3E+07	±	9.3E+06	1.4E+07	±	1.4E+06
B	C43 H79 O8 N1 P1	PE(18:0/20:4)(rep)	2.9E+07	±	6.4E+06	5.7E+07	±	2.1E+07	3.5E+08	±	2.9E+07
B	C43 H79 O8 N1 P1	PC(18:1/17:3)	2.9E+07	±	6.4E+06	5.7E+07	±	2.1E+07	2.3E+08	±	1.9E+08
B	C47 H82 O5 N1	DG(22:1/22:6)	3.3E+07	±	8.4E+06	3.3E+07	±	5.6E+06	7.3E+06	±	8.6E+05
B	C24 H47 O7 N1 P1	LPC(16:2)	2.4E+07	±	6.1E+06	3.2E+07	±	1.5E+07	1.7E+06	±	1.3E+06
A	C45 H79 O10 N1 P1	PC(16:0/20:5)	2.3E+07	±	1.2E+05	2.7E+07	±	8.7E+06	2.8E+08	±	1.4E+07
B	C43 H77 O8 N1 P1	PE(18:1/20:4)(rep)	2.3E+07	±	4.5E+06	2.2E+07	±	6.1E+06	1.5E+08	±	2.0E+07
A	C45 H85 O10 N1 P1	PC(18:0/18:2)	2.3E+07	±	2.1E+06	3.3E+07	±	4.6E+06	1.0E+08	±	7.1E+06
A	C45 H75 O7 N1 P1	PE(18:2p/22:6)(rep)	2.1E+07	±	9.4E+06	2.5E+08	±	8.6E+07	2.2E+07	±	3.3E+06
B	C23 H47 O7 N1 P1	LPE(18:1)	2.3E+07	±	4.4E+06	3.7E+07	±	2.4E+07	3.3E+07	±	1.3E+06
B	C21 H45 O7 N1 P1	LPE(16:0)	2.2E+07	±	1.6E+06	1.3E+07	±	2.2E+06	1.5E+07	±	1.4E+06
A	C33 H55 O9 N1 P1	LPC(24:6)	2.0E+07	±	4.2E+06	4.0E+07	±	2.0E+07	1.2E+06	±	2.0E+05
B	C27 H47 O7 N1 P1	LPE(22:5)	2.1E+07	±	1.7E+06	4.2E+07	±	2.0E+07	3.6E+06	±	3.7E+05
A	C27 H55 O9 N1 P1	LPC(18:0)	2.1E+07	±	3.0E+06	8.1E+06	±	9.9E+05	6.9E+06	±	1.2E+06
A	C27 H49 O9 N1 P1	LPC(18:3)	2.3E+07	±	5.3E+06	3.5E+07	±	1.9E+07	2.7E+06	±	1.9E+05
A	C42 H77 O10 N1 P1	PS(18:0/18:2)	1.9E+07	±	1.8E+06	1.9E+07	±	4.6E+06	6.9E+05	±	1.1E+05
B	C43 H85 O9 N1 P1	PC(18:0p/16:0)	2.1E+07	±	3.1E+05	1.7E+07	±	3.3E+06	1.5E+07	±	1.0E+06
B	C49 H85 O9 N1 P1	PC(18:0p/22:6)	1.7E+07	±	4.2E+06	5.4E+07	±	1.5E+07	1.2E+08	±	1.5E+07
A	C47 H76 O5 N1	DG(22:4/22:6)	2.3E+07	±	2.8E+06	2.5E+07	±	9.4E+05	9.6E+06	±	9.5E+05
B	C43 H85 O9 N1 P1	PC(16:0e/18:1)	2.1E+07	±	4.8E+05	1.7E+07	±	3.6E+06	1.5E+07	±	6.8E+05
A	C29 H55 O9 N1 P1	LPC(20:2)	1.8E+07	±	2.1E+06	2.3E+07	±	9.4E+06	1.6E+06	±	3.8E+05
A	C43 H77 O7 N1 P1	PE(18:1p/20:4)(rep)	1.6E+07	±	3.6E+06	1.0E+08	±	1.5E+07	1.4E+08	±	6.6E+06
A	C49 H84 O13 N0 P1	PI(18:0/22:5)	1.9E+07	±	1.1E+06	1.8E+07	±	6.1E+06	6.2E+06	±	2.8E+05
B	C26 H51 O6 N1 P1	LPC(18:2p)	1.6E+07	±	1.9E+06	4.8E+06	±	8.0E+05	7.7E+05	±	6.4E+04
B	C47 H83 O13 N1 P1	PI(16:0/22:6)(rep)	2.0E+07	±	3.0E+06	1.1E+07	±	1.1E+07	2.1E+07	±	1.7E+06
A	C41 H81 O10 N1 P1	PC(16:0/16:0)	1.7E+07	±	4.1E+05	1.6E+07	±	2.5E+06	1.3E+07	±	1.9E+05
A	C61 H112 O6 N1	TG(18:1/18:1/22:3)	1.8E+07	±	1.4E+06	1.7E+07	±	4.1E+06	9.3E+06	±	6.6E+05
A	C43 H73 O8 N1 P1	PE(18:1/20:5)	1.9E+07	±	3.1E+06	6.8E+05	±	7.7E+04	3.6E+06	±	4.3E+06
A	C59 H114 O6 N1	TG(16:0/18:1/22:1)	1.8E+07	±	2.1E+06	1.1E+07	±	2.2E+06	2.5E+06	±	1.6E+05
B	C40 H73 O7 N1 P1	PE(18:1p/17:2)	1.8E+07	±	2.9E+06	1.4E+07	±	1.2E+05	3.1E+06	±	2.3E+04
A	C58 H110 O6 N1	TG(20:1/17:1/18:1)	1.8E+07	±	3.2E+06	1.2E+07	±	3.7E+06	4.4E+06	±	2.2E+05
B	C45 H81 O9 N1 P1	PC(16:0e/20:5)	1.2E+07	±	1.7E+06	1.4E+07	±	3.6E+06	1.8E+07	±	1.3E+06
A	C61 H114 O6 N1	TG(18:1/18:2/22:1)	1.8E+07	±	4.1E+06	1.3E+07	±	4.8E+06	1.7E+06	±	2.5E+05
A	C45 H79 O7 N1 P1	PE(18:1p/22:5)(rep)	1.0E+07	±	2.5E+06	2.7E+07	±	9.8E+06	1.7E+07	±	1.6E+06
B	C37 H76 O5 N1	DG(18:0/16:0)	1.5E+07	±	1.9E+06	1.4E+07	±	1.9E+06	1.6E+07	±	1.9E+06
B	C42 H78 O10 N0 P1	PG(16:0/20:2)	1.5E+07	±	3.1E+06	3.1E+06	±	1.9E+05	4.1E+05	±	1.6E+05
B	C25 H51 O7 N1 P1	LPE(20:1)	1.3E+07	±	1.7E+05	8.7E+06	±	2.1E+06	7.2E+06	±	8.7E+05
A	C26 H51 O9 N1 P1	LPC(17:1)	1.1E+07	±	1.0E+06	1.1E+07	±	4.1E+06	1.1E+06	±	2.0E+05
A	C45 H78 O13 N0 P1	PI(16:0/20:4)	1.4E+07	±	1.7E+06	2.1E+07	±	8.2E+06	9.3E+07	±	1.0E+07
B	C28 H45 O9 N1 P1	LPS(22:6)(rep)	1.2E+07	±	2.8E+06	3.8E+07	±	1.9E+07	1.8E+06	±	2.1E+05
B	C49 H83 O9 N1 P1	PC(18:1p/22:6)(rep)	1.0E+07	±	2.5E+06	2.9E+07	±	7.0E+06	8.5E+06	±	1.3E+05
A	C49 H83 O10 N1 P1	PC(18:1/22:6)	8.7E+06	±	2.6E+06	2.5E+07	±	3.7E+06	2.8E+08	±	4.1E+07
A	C45 H81 O10 N1 P1	PC(16:0/20:4)	1.2E+07	±	7.5E+05	1.2E+07	±	3.3E+06	1.8E+08	±	1.6E+07
A	C45 H84 O13 N0 P1	PI(18:0/18:1)	1.1E+07	±	3.8E+05	1.1E+07	±	2.7E+06	6.1E+05	±	4.7E+04
A	C47 H89 O10 N1 P1	PC(18:0/20:2)	9.8E+06	±	1.4E+06	1.2E+07	±	2.4E+06	3.3E+07	±	2.2E+06
B	C24 H49 O9 N1 P1	LPS(18:0)(rep)	1.0E+07	±	1.3E+05	4.1E+06	±	6.3E+05	9.7E+07	±	2.6E+06
A	C45 H77 O7 N1 P1	PE(18:0p/22:6)	1.0E+07	±	1.5E+06	2.2E+07	±	1.3E+07	3.3E+07	±	2.0E+06
A	C44 H73 O10 N1 P1	PS(16:0/22:6)	1.0E+07	±	5.5E+05	1.4E+07	±	1.9E+06	6.5E+06	±	5.9E+05
A	C45 H83 O10 N1 P1	PC(18:1/18:2)	9.3E+06	±	5.1E+05	1.5E+07	±	6.7E+06	6.3E+07	±	1.4E+06
A	C43 H77 O8 N1 P1	PE(18:0/20:4)	9.7E+06	±	7.5E+05	1.1E+07	±	9.8E+06	1.3E+08	±	8.7E+06
B	C43 H81 O8 N1 P1	PC(17:0/18:3)	8.1E+06	±	1.2E+06	8.8E+06	±	2.7E+06	2.5E+07	±	4.5E+05

Level	Molecule formula	Lipid molecule	Meat			Fat			Egg		
			Mean	±	SD	Mean	±	SD	Mean	±	SD
B	C27 H55 O7 N1 P1	LPC(19:1)	8.7E+06	±	5.7E+05	1.3E+07	±	5.6E+06	3.8E+05	±	5.6E+04
A	C45 H82 O13 N0 P1	PI(18:1/18:1)	7.2E+06	±	1.9E+06	1.1E+07	±	3.7E+06	2.9E+06	±	2.2E+05
A	C46 H79 O10 N1 P1	PS(18:0/22:5)	9.4E+06	±	9.6E+05	1.3E+07	±	1.5E+06	5.1E+04	±	1.1E+04
B	C28 H43 O9 N1 P1	LPS(22:6)	8.1E+06	±	2.5E+06	3.0E+07	±	1.6E+07	1.2E+06	±	1.2E+05
A	C43 H81 O10 N1 P1	PC(16:1/18:1)	9.0E+06	±	1.2E+05	1.5E+07	±	2.7E+06	2.1E+07	±	1.6E+06
B	C28 H57 O6 N1 P1	LPC(20:1p)	8.6E+06	±	1.1E+06	3.2E+06	±	1.1E+06	5.3E+05	±	9.7E+04
B	C26 H48 O9 N0 P1	LPG(20:2)	7.8E+06	±	3.2E+06	1.7E+06	±	9.0E+05	4.7E+04	±	1.5E+04
A	C47 H83 O10 N1 P1	PC(18:1/20:4)	7.6E+06	±	1.1E+06	1.1E+07	±	4.3E+06	6.8E+07	±	9.3E+07
A	C41 H79 O8 N1 P1	PE(18:0/18:1)	8.9E+06	±	7.6E+05	1.8E+07	±	6.1E+06	8.7E+06	±	4.8E+05
A	C44 H77 O10 N1 P1	PS(18:0/20:4)	7.4E+06	±	1.1E+06	1.2E+07	±	3.2E+06	4.8E+06	±	7.2E+05
B	C24 H47 O9 N1 P1	LPS(18:0)	8.6E+06	±	2.3E+05	3.4E+06	±	6.0E+05	9.5E+07	±	7.7E+06
A	C29 H57 O9 N1 P1	LPC(20:1)	8.0E+06	±	5.4E+05	8.5E+06	±	5.0E+06	2.2E+05	±	5.1E+04
A	C40 H75 O10 N1 P1	PS(16:0/18:1)	7.3E+06	±	9.0E+05	8.3E+06	±	2.4E+06	9.4E+05	±	2.0E+05
B	C46 H81 O8 N1 P1	PC(16:0/22:6)(rep)	5.9E+06	±	2.6E+06	1.8E+07	±	7.6E+06	1.3E+08	±	1.4E+07
B	C45 H77 O9 N1 P1	PC(14:0p/22:6)	6.9E+06	±	1.3E+06	9.3E+06	±	2.2E+06	3.3E+06	±	2.7E+06
A	C41 H77 O7 N1 P1	PE(18:1p/18:2)	6.5E+06	±	1.8E+06	3.6E+07	±	1.2E+07	2.3E+06	±	6.1E+04
A	C43 H83 O7 N1 P1	PE(20:1p/18:1)	6.7E+06	±	1.7E+06	2.3E+07	±	9.0E+06	3.1E+05	±	4.9E+04
A	C61 H116 O6 N1	TG(18:1/18:1/22:1)	8.8E+06	±	1.2E+06	5.6E+06	±	1.4E+06	1.0E+06	±	5.0E+04
A	C41 H81 O7 N1 P1	PE(18:0p/18:1)	6.9E+06	±	9.7E+05	2.1E+07	±	1.0E+07	3.3E+05	±	4.1E+04
A	C43 H75 O7 N1 P1	PE(18:1p/20:4)	6.6E+06	±	1.7E+06	4.9E+07	±	8.7E+06	5.9E+07	±	5.0E+06
A	C47 H85 O10 N1 P1	PC(18:0/20:4)	6.8E+06	±	3.6E+05	7.5E+06	±	1.9E+06	7.8E+07	±	4.9E+06
B	C45 H83 O13 N1 P1	PI(16:0/20:4)(rep)	8.0E+06	±	9.2E+05	1.0E+07	±	3.3E+06	4.6E+07	±	5.1E+06
A	C44 H79 O10 N1 P1	PS(18:0/20:3)	5.9E+06	±	1.1E+06	6.8E+06	±	2.5E+06	4.9E+05	±	7.9E+05
B	C42 H80 O10 N0 P1	PG(16:0/20:1)	7.1E+06	±	5.4E+05	8.9E+06	±	3.3E+06	1.9E+06	±	2.0E+05
A	C57 H112 O6 N1	TG(16:0/16:0/22:1)	6.9E+06	±	4.1E+04	4.1E+06	±	4.5E+05	1.0E+06	±	2.0E+04
B	C43 H79 O8 N1 P1	PC(16:0/19:4)	6.4E+06	±	5.4E+05	9.4E+06	±	8.7E+05	1.2E+07	±	2.4E+06
A	C41 H75 O7 N1 P1	PE(16:0p/20:4)(rep)	5.8E+06	±	8.0E+05	2.2E+07	±	2.3E+06	8.6E+07	±	4.5E+06
A	C41 H73 O7 N1 P1	PE(16:0p/20:5)(rep)	7.8E+06	±	2.1E+06	2.6E+07	±	5.4E+06	3.5E+07	±	1.3E+06
B	C29 H47 O7 N1 P1	LdMePE(22:6)	6.1E+06	±	5.3E+05	1.2E+07	±	4.9E+06	9.8E+05	±	1.8E+05
A	C47 H82 O13 N0 P1	PI(18:1/20:3)	6.8E+06	±	6.7E+05	5.2E+06	±	1.8E+06	5.0E+06	±	8.1E+05
B	C25 H49 O7 N1 P1	LdMePE(18:1)	6.8E+06	±	1.4E+06	6.8E+06	±	2.5E+06	2.3E+05	±	5.8E+04
B	C41 H81 O9 N1 P1	PC(16:0p/16:0)	6.2E+06	±	2.3E+05	5.1E+06	±	6.9E+05	8.0E+06	±	2.9E+06
B	C41 H81 O9 N1 P1	PC(16:0e/16:1)	6.2E+06	±	1.2E+05	4.9E+06	±	7.0E+05	5.1E+06	±	3.7E+05
B	C42 H80 O3 N1	Cer(d18:1/24:2)	5.6E+06	±	3.5E+05	5.8E+06	±	1.8E+06	1.7E+07	±	1.6E+06
B	C47 H85 O9 N1 P1	PC(18:0p/20:4)	5.4E+06	±	5.1E+05	8.8E+06	±	2.2E+06	3.2E+07	±	3.4E+06
A	C39 H75 O8 N1 P1	PE(16:0/18:1)	5.7E+06	±	6.2E+05	1.4E+07	±	2.9E+06	6.8E+06	±	3.7E+05
B	C46 H78 O10 N0 P1	PG(18:0/22:6)	5.0E+06	±	7.6E+05	2.5E+06	±	1.7E+06	2.1E+05	±	3.0E+04
A	C45 H75 O8 N1 P1	PE(18:1/22:6)	5.3E+06	±	7.8E+05	2.5E+07	±	3.8E+06	2.5E+06	±	3.3E+04
A	C42 H81 O10 N1 P1	PC(15:0/18:1)	5.8E+06	±	1.7E+05	6.2E+06	±	1.3E+06	9.9E+06	±	5.2E+05
A	C39 H75 O7 N1 P1	PE(18:1p/16:1)	4.5E+06	±	9.8E+05	1.8E+07	±	6.7E+06	2.3E+06	±	9.7E+04
B	C30 H61 O7 N1 P1	LPC(22:1)	5.2E+06	±	1.7E+05	2.7E+06	±	4.3E+05	5.7E+05	±	6.1E+03
B	C24 H43 O9 N1 P1	LPS(18:2)	4.4E+06	±	6.0E+05	5.4E+06	±	1.7E+06	1.6E+04	±	7.5E+03
B	C47 H81 O9 N1 P1	PC(16:0p/22:6)	4.5E+06	±	6.0E+05	6.3E+06	±	4.9E+06	7.2E+06	±	2.1E+05
A	C40 H77 O7 N1 P1	PE(18:1p/17:1)	4.5E+06	±	6.9E+05	2.9E+07	±	1.6E+07	9.8E+05	±	1.1E+05
B	C39 H77 O9 N1 P1	PC(14:0p/16:0)	4.6E+06	±	3.5E+05	3.6E+06	±	9.4E+05	2.1E+06	±	1.6E+05
A	C45 H83 O10 N1 P1	PC(16:0/20:3)	5.3E+06	±	6.4E+05	3.0E+06	±	4.4E+05	3.1E+07	±	1.9E+06
B	C40 H74 O10 N0 P1	PG(16:0/18:2)	4.8E+06	±	5.0E+05	1.3E+06	±	4.1E+05	1.9E+05	±	4.4E+04
A	C29 H48 O12 N0 P1	LPI(20:4)	5.7E+06	±	1.4E+06	1.1E+07	±	7.8E+06	9.3E+05	±	1.2E+05
B	C44 H74 O10 N0 P1	PG(16:0/22:6)	4.8E+06	±	6.4E+05	1.2E+06	±	4.6E+05	3.2E+04	±	1.3E+04
B	C24 H45 O9 N1 P1	LPS(18:1)	4.2E+06	±	3.7E+05	4.6E+06	±	1.4E+06	1.7E+06	±	2.1E+05
B	C25 H47 O7 N1 P1	LdMePE(18:2)	4.4E+06	±	5.8E+05	4.4E+06	±	1.9E+06	3.5E+05	±	6.9E+04
B	C28 H44 O9 N0 P1	LPG(22:6)	4.0E+06	±	6.3E+05	1.8E+06	±	8.0E+04	1.8E+06	±	4.0E+05
B	C49 H86 O5 N1	DG(24:1/22:6)	5.9E+06	±	1.2E+06	6.0E+06	±	4.6E+05	4.1E+06	±	6.2E+05
B	C47 H79 O10 N1 P1	PS(19:0/22:6)	4.8E+06	±	2.9E+05	4.8E+06	±	4.4E+05	9.7E+05	±	5.9E+04
B	C41 H75 O8 N1 P1	PE(16:0/20:4)(rep)	5.3E+06	±	1.1E+06	1.4E+07	±	4.8E+06	6.0E+07	±	2.5E+06
B	C41 H81 O9 N1 P1	PC(16:0p/16:0)(rep)	4.1E+06	±	2.9E+05	4.0E+06	±	1.5E+06	1.8E+06	±	6.1E+04
B	C39 H80 O5 N1	DG(18:0/18:0)	4.1E+06	±	6.0E+05	3.6E+06	±	2.3E+05	5.3E+06	±	3.8E+05
B	C28 H59 O7 N1 P1	LPC(20:0)	4.5E+06	±	5.1E+05	2.4E+06	±	4.8E+05	1.3E+06	±	1.2E+05
A	C44 H81 O10 N1 P1	PS(20:1/18:1)	3.4E+06	±	6.7E+05	2.8E+06	±	4.2E+05	1.3E+05	±	4.9E+03
A	C31 H55 O9 N1 P1	LPC(22:4)	3.0E+06	±	2.4E+06	5.2E+06	±	2.1E+06	4.2E+05	±	1.5E+05
A	C45 H73 O7 N1 P1	PE(18:2p/22:6)	3.9E+06	±	2.0E+06	5.8E+07	±	1.4E+07	1.7E+07	±	1.3E+06
B	C43 H81 O7 N1 P1	PE(20:1p/18:1)(rep)	3.5E+06	±	9.4E+05	1.4E+07	±	4.1E+06	3.3E+05	±	3.2E+04

Level	Molecule formula	Lipid molecule	Meat			Fat			Egg		
			Mean	±	SD	Mean	±	SD	Mean	±	SD
A	C46 H89 O10 N1 P1	PC(19:0/18:1)	4.0E+06	±	8.4E+04	1.6E+06	±	4.9E+05	3.2E+06	±	3.8E+05
B	C42 H83 O10 N1 P1	PC(16:0/17:0)	3.5E+06	±	4.3E+05	2.9E+06	±	5.3E+05	2.2E+06	±	1.5E+05
B	C43 H81 O8 N1 P1	PE(18:0/20:3)(rep)	4.0E+06	±	2.5E+05	1.4E+07	±	5.7E+06	2.9E+07	±	7.1E+06
A	C45 H79 O8 N1 P1	PE(18:0/22:5)	1.9E+06	±	1.8E+06	2.9E+06	±	8.7E+05	1.6E+07	±	1.9E+06
B	C43 H75 O7 N1 P1	PE(16:0e/22:6)	3.4E+06	±	4.5E+05	3.0E+06	±	5.7E+05	1.8E+06	±	6.5E+04
A	C41 H71 O7 N1 P1	PE(16:0p/20:5)	3.0E+06	±	8.0E+05	1.5E+07	±	6.0E+06	1.4E+07	±	6.5E+05
A	C45 H77 O7 N1 P1	PE(18:1p/22:5)	3.0E+06	±	6.6E+05	1.1E+07	±	9.8E+06	5.6E+06	±	3.3E+05
A	C27 H50 O12 N0 P1	LPI(18:1)	4.2E+06	±	6.4E+05	2.6E+06	±	1.5E+06	1.8E+06	±	2.1E+05
B	C43 H83 O9 N1 P1	PC(18:0p/16:1)	2.6E+06	±	1.3E+06	1.5E+06	±	1.1E+06	2.9E+06	±	1.4E+05
B	C22 H44 O9 N0 P1	LPG(16:0)	3.5E+06	±	8.6E+05	2.7E+05	±	1.6E+05	8.3E+05	±	2.2E+05
B	C43 H77 O9 N1 P1	PC(14:0e/20:5)	2.8E+06	±	6.5E+05	3.3E+06	±	7.9E+05	1.5E+06	±	1.2E+05
B	C43 H77 O9 N1 P1	PC(14:0p/20:4)	2.8E+06	±	6.5E+05	3.1E+06	±	8.3E+05	1.5E+06	±	7.7E+04
A	C39 H77 O10 N1 P1	PC(16:0/14:0)	2.5E+06	±	6.9E+05	1.8E+06	±	1.9E+05	9.1E+05	±	1.5E+05
B	C32 H65 O7 N1 P1	LPC(24:1)	3.5E+06	±	2.6E+05	2.2E+06	±	4.2E+05	2.3E+06	±	1.1E+05
A	C27 H47 O9 N1 P1	LPC(18:4)	3.8E+06	±	7.5E+05	6.4E+06	±	3.9E+06	3.2E+05	±	4.0E+04
A	C31 H48 O12 N0 P1	LPI(22:6)	3.4E+06	±	1.0E+06	1.4E+07	±	1.0E+07	2.5E+05	±	2.3E+04
B	C42 H76 O10 N0 P1	PG(18:1/18:2)	3.5E+06	±	4.8E+05	4.3E+05	±	2.2E+05	9.9E+04	±	1.7E+04
A	C44 H75 O10 N1 P1	PS(18:0/20:5)	3.2E+06	±	6.5E+04	4.7E+06	±	1.1E+06	2.7E+06	±	1.4E+05
A	C49 H85 O10 N1 P1	PC(18:0/22:6)	3.1E+06	±	2.7E+05	2.9E+06	±	1.7E+06	2.0E+07	±	6.4E+05
B	C41 H75 O7 N1 P1	PE(18:1p/18:2)(rep)	2.6E+06	±	6.9E+05	1.6E+07	±	4.1E+06	5.9E+05	±	2.1E+04
A	C51 H89 O10 N1 P1	PC(18:0/24:6)	3.5E+06	±	4.6E+05	4.9E+06	±	1.9E+06	2.1E+07	±	1.4E+06
B	C39 H79 O9 N1 P1	PC(14:0e/16:0)	2.7E+06	±	3.8E+05	2.3E+06	±	7.4E+05	5.0E+05	±	1.0E+04
B	C41 H83 O9 N1 P1	PC(16:0e/16:0)	3.3E+06	±	5.9E+05	3.1E+06	±	1.0E+06	7.8E+05	±	5.6E+04
A	C43 H71 O7 N1 P1	PE(18:2p/20:5)	1.5E+06	±	1.2E+06	4.6E+06	±	2.3E+06	9.3E+05	±	7.5E+04
A	C47 H87 O10 N1 P1	PC(18:0/20:3)	3.2E+06	±	2.4E+05	3.3E+06	±	8.2E+05	3.6E+07	±	5.8E+06
A	C46 H80 O13 N0 P1	PI(17:0/20:4)	2.9E+06	±	8.5E+04	3.1E+06	±	1.2E+06	4.1E+06	±	2.0E+05
A	C41 H73 O7 N1 P1	PE(16:0p/20:4)	2.4E+06	±	5.4E+05	9.1E+06	±	1.1E+06	2.6E+07	±	1.4E+06
A	C43 H85 O10 N1 P1	PC(18:0/16:0)	2.7E+06	±	2.6E+05	2.8E+06	±	5.8E+05	2.6E+06	±	1.3E+05
B	C43 H75 O9 N1 P1	PC(14:0p/20:5)	2.3E+06	±	4.0E+05	2.7E+06	±	7.9E+05	9.0E+05	±	1.5E+05
A	C45 H76 O13 N0 P1	PI(16:0/20:5)	3.0E+06	±	4.8E+05	7.9E+06	±	5.5E+06	6.6E+06	±	8.3E+05
A	C25 H48 O12 N0 P1	LPI(16:0)	3.6E+06	±	8.1E+05	1.8E+06	±	1.4E+06	1.2E+06	±	1.2E+05
B	C39 H73 O7 N1 P1	PE(18:1p/16:1)(rep)	2.1E+06	±	5.9E+05	9.3E+06	±	2.8E+06	9.0E+05	±	5.9E+04
B	C41 H73 O8 N1 P1	PE(16:0/20:5)(rep)	2.9E+06	±	2.4E+05	7.1E+06	±	2.0E+06	3.0E+07	±	3.5E+06
B	C41 H79 O9 N1 P1	PC(16:0p/16:1)	2.1E+06	±	1.8E+06	1.2E+06	±	9.5E+05	2.0E+06	±	1.3E+05
B	C27 H45 O7 N1 P1	LdMePE(20:5)	2.3E+06	±	2.4E+05	4.1E+06	±	1.7E+06	2.1E+05	±	8.9E+04
A	C43 H75 O8 N1 P1	PE(18:1/20:4)	2.8E+06	±	5.6E+05	6.5E+06	±	1.4E+06	4.1E+07	±	1.3E+06
A	C41 H77 O8 N1 P1	PE(18:0/18:2)	3.2E+06	±	1.2E+06	7.7E+06	±	3.4E+06	4.4E+06	±	1.9E+05
B	C48 H83 O10 N1 P1	PC(17:0/22:6)	2.2E+06	±	4.9E+05	5.8E+06	±	1.2E+06	3.4E+06	±	1.4E+05
B	C41 H77 O8 N1 P1	dMePE(16:1/18:1)	2.3E+06	±	2.2E+05	7.8E+06	±	3.5E+06	4.3E+06	±	2.2E+05
A	C40 H73 O10 N1 P1	PS(16:0/18:2)	2.0E+06	±	3.6E+05	2.4E+06	±	6.6E+05	1.3E+05	±	1.9E+04
A	C49 H87 O10 N1 P1	PC(18:0/22:5)	2.5E+06	±	1.9E+05	2.8E+06	±	7.0E+05	2.3E+07	±	1.6E+06
B	C43 H83 O9 N1 P1	PC(18:1p/16:0)	2.1E+06	±	2.4E+05	1.6E+06	±	3.2E+05	5.9E+05	±	2.3E+04
A	C43 H78 O13 N0 P1	PI(16:1/18:1)	2.7E+06	±	4.0E+05	6.2E+06	±	5.1E+06	3.2E+06	±	2.4E+06
B	C45 H87 O9 N1 P1	PC(18:0p/18:1)	2.4E+06	±	1.5E+05	2.4E+06	±	4.5E+05	6.5E+06	±	4.7E+05
A	C43 H79 O7 N1 P1	PE(18:0p/20:4)(rep)	1.7E+06	±	5.6E+05	1.1E+07	±	2.0E+06	1.8E+07	±	2.6E+06
A	C45 H80 O13 N0 P1	PI(16:0/20:3)(rep)	2.4E+06	±	2.8E+05	2.0E+06	±	7.0E+05	5.5E+06	±	5.2E+05
A	C46 H75 O10 N1 P1	PS(18:1/22:6)	2.2E+06	±	3.3E+05	9.1E+06	±	2.7E+06	1.5E+06	±	7.4E+04
A	C43 H77 O7 N1 P1	PE(18:0p/20:4)	2.6E+06	±	6.5E+05	1.4E+07	±	3.6E+06	2.0E+07	±	1.5E+07
A	C49 H81 O10 N1 P1	PC(18:2/22:6)	2.0E+06	±	2.1E+05	5.8E+06	±	1.6E+06	3.6E+07	±	2.7E+06
A	C45 H81 O8 N1 P1	PE(20:0/20:4)	2.3E+06	±	3.0E+05	2.2E+07	±	9.5E+06	1.8E+07	±	2.4E+06
A	C41 H77 O10 N1 P1	PC(16:1/16:1)	2.1E+06	±	4.8E+05	1.8E+06	±	1.9E+05	6.7E+06	±	2.1E+06
A	C49 H87 O10 N1 P1	PC(18:0/22:5)(rep)	2.3E+06	±	2.0E+05	2.0E+06	±	7.4E+05	2.2E+07	±	1.1E+06
A	C49 H80 O13 N0 P1	PI(18:1/22:6)	2.1E+06	±	9.1E+05	2.7E+07	±	2.2E+07	1.3E+07	±	1.5E+06
A	C41 H73 O8 N1 P1	PE(16:0/20:4)	2.2E+06	±	5.4E+05	5.6E+06	±	1.4E+06	2.3E+07	±	1.2E+06
A	C43 H77 O8 N1 P1	PE(18:1/20:3)	1.3E+06	±	6.6E+05	2.1E+06	±	4.4E+05	4.1E+06	±	2.0E+06
A	C43 H81 O8 N1 P1	PE(20:1/18:1)	1.9E+06	±	4.1E+05	7.5E+06	±	3.7E+06	2.7E+06	±	1.6E+05
A	C43 H79 O8 N1 P1	PE(18:0/20:3)	1.9E+06	±	1.6E+05	1.1E+07	±	2.9E+06	1.6E+07	±	1.7E+06
A	C47 H86 O13 N0 P1	PI(18:0/20:2)	2.1E+06	±	1.9E+05	2.1E+06	±	1.2E+06	5.8E+04	±	1.4E+04
A	C48 H84 O13 N0 P1	PI(19:0/20:4)	2.1E+06	±	1.4E+05	1.9E+06	±	2.2E+05	1.9E+06	±	1.4E+05
B	C46 H76 O10 N0 P1	PG(18:1/22:6)	1.7E+06	±	2.6E+05	1.4E+06	±	4.9E+05	2.2E+06	±	2.9E+05
B	C49 H85 O9 N1 P1	PC(18:0p/22:6)(rep)	1.8E+06	±	9.1E+04	1.7E+06	±	1.9E+05	2.8E+06	±	6.7E+05
B	C45 H79 O9 N1 P1	PC(16:0p/20:5)	1.6E+06	±	2.9E+05	2.7E+06	±	1.1E+06	1.9E+06	±	1.5E+05

Level	Molecule formula	Lipid molecule	Meat			Fat			Egg		
			Mean	±	SD	Mean	±	SD	Mean	±	SD
B	C45 H75 O8 N1 P1	PE(18:2/22:6)(rep)	1.9E+06	±	2.3E+05	9.9E+06	±	2.2E+06	9.6E+06	±	3.4E+05
A	C48 H79 O10 N1 P1	PS(20:1/22:6)	1.7E+06	±	1.3E+05	3.9E+06	±	2.9E+05	4.7E+05	±	1.7E+04
B	C44 H71 O12	MGDG(16:3/18:3)	1.6E+06	±	2.4E+05	3.3E+05	±	5.8E+04	4.1E+05	±	1.7E+05
A	C48 H83 O10 N1 P1	PC(17:0/22:6)(rep)(rep)	1.7E+06	±	7.3E+04	1.4E+06	±	2.9E+05	1.4E+07	±	4.6E+05
B	C48 H85 O10 N1 P1	PC(16:0/23:5)	1.7E+06	±	1.4E+05	2.9E+06	±	4.5E+05	2.9E+06	±	1.2E+05
B	C43 H79 O7 N1 P1	PE(18:1p/20:2)	1.4E+06	±	5.3E+05	9.4E+06	±	4.6E+06	1.8E+06	±	2.7E+05
B	C42 H72 O10 N0 P1	PG(16:0/20:5)	1.6E+06	±	2.5E+05	4.8E+05	±	1.9E+05	1.2E+04	±	8.7E+03
A	C46 H79 O8 N1 P1	PE(19:0/22:6)	2.0E+06	±	4.9E+05	2.0E+06	±	6.0E+05	7.3E+06	±	5.5E+05
B	C40 H80 O3 N1	Cer(d18:1/22:0)	1.7E+06	±	3.3E+05	1.7E+06	±	1.7E+05	3.6E+07	±	5.2E+06
A	C48 H80 O13 N0 P1	PI(17:0/22:6)	1.8E+06	±	2.0E+05	3.5E+06	±	1.7E+06	1.2E+06	±	1.9E+05
B	C49 H83 O9 N1 P1	PC(18:1p/22:6)	1.3E+06	±	4.1E+05	5.6E+06	±	1.9E+06	5.5E+06	±	2.5E+05
A	C39 H73 O8 N1 P1	PE(16:0/18:2)	1.9E+06	±	5.6E+05	4.5E+06	±	9.9E+05	3.6E+06	±	8.0E+05
A	C43 H79 O10 N1 P1	PC(16:0/18:3)	1.5E+06	±	1.9E+05	3.0E+06	±	8.5E+05	4.3E+06	±	5.5E+05
B	C42 H84 O3 N1	Cer(d18:1/24:0)	1.6E+06	±	5.4E+05	1.6E+06	±	1.2E+05	9.4E+06	±	1.3E+06
B	C41 H79 O8 N1 P1	dMePE(16:0/18:1)	1.4E+06	±	1.1E+05	1.4E+06	±	3.2E+05	1.7E+06	±	8.6E+04
A	C43 H73 O7 N1 P1	PE(18:1p/20:5)	1.1E+06	±	2.7E+05	6.1E+06	±	1.0E+06	3.6E+06	±	1.6E+05
B	C43 H77 O8 N1 P1	PC(17:4/18:1)	4.4E+06	±	2.7E+06	4.4E+06	±	7.1E+06	1.5E+08	±	6.4E+06
A	C41 H75 O8 N1 P1	PE(18:1/18:2)	1.3E+06	±	8.9E+04	4.0E+06	±	1.1E+06	4.5E+06	±	3.2E+05
A	C45 H77 O10 N1 P1	PC(16:1/20:5)	1.2E+06	±	5.8E+04	2.8E+06	±	6.0E+05	4.5E+06	±	9.2E+05
B	C49 H81 O9 N1 P1	PC(18:2p/22:6)	9.5E+05	±	3.2E+05	3.9E+06	±	1.2E+06	4.1E+05	±	4.1E+04
A	C47 H81 O8 N1 P1	PE(20:0/22:6)	1.3E+06	±	3.1E+05	3.7E+06	±	1.5E+06	7.5E+06	±	2.6E+06
A	C50 H87 O10 N1 P1	PC(19:0/22:6)	1.3E+06	±	1.4E+05	1.3E+06	±	4.8E+05	9.6E+06	±	6.1E+05
B	C44 H76 O10 N0 P1	PG(18:0/20:5)	1.1E+06	±	2.6E+05	7.3E+05	±	2.5E+05	5.6E+04	±	8.8E+03
A	C41 H71 O8 N1 P1	PE(16:0/20:5)	1.2E+06	±	1.1E+05	3.4E+06	±	1.0E+06	1.3E+07	±	8.9E+05
A	C46 H77 O10 N1 P1	PS(18:1/22:5)	1.1E+06	±	4.4E+05	2.0E+06	±	9.1E+05	5.6E+05	±	4.9E+04
A	C49 H93 O10 N1 P1	PC(18:1/22:1)	8.7E+05	±	3.4E+05	1.2E+06	±	3.2E+05	1.8E+06	±	1.2E+05
A	C42 H73 O10 N1 P1	PS(16:0/20:4)	7.5E+05	±	2.8E+05	1.5E+06	±	5.2E+05	6.1E+05	±	5.1E+04
A	C49 H91 O10 N1 P1	PC(20:1/20:2)	1.0E+06	±	7.7E+04	8.8E+05	±	2.1E+05	3.0E+06	±	1.2E+04
A	C47 H79 O7 N1 P1	PE(20:1p/22:6)	9.3E+05	±	2.5E+05	7.5E+06	±	1.8E+06	4.2E+06	±	4.2E+05
A	C47 H79 O10 N1 P1	PC(20:5/18:2)	9.9E+05	±	5.7E+04	2.8E+06	±	6.8E+05	1.2E+07	±	2.0E+06
A	C43 H71 O8 N1 P1	PE(20:5/18:2)	1.3E+06	±	8.2E+05	8.5E+05	±	2.1E+05	8.7E+05	±	2.6E+05
B	C49 H87 O9 N1 P1	PC(18:0p/22:5)	9.3E+05	±	2.2E+05	2.6E+06	±	1.1E+06	1.9E+06	±	2.1E+05
A	C45 H75 O10 N1 P1	PS(17:0/22:6)	1.1E+06	±	9.7E+04	1.4E+06	±	1.8E+05	3.4E+05	±	2.2E+04
B	C49 H85 O13 N1 P1	PI(18:1/22:6)(rep)	1.1E+06	±	5.7E+05	1.3E+07	±	8.8E+06	7.2E+06	±	7.7E+05
A	C29 H46 O12 N0 P1	LPI(20:5)	1.1E+06	±	3.7E+05	4.2E+06	±	3.4E+06	3.3E+04	±	8.2E+03
A	C45 H73 O8 N1 P1	PE(18:2/22:6)	8.5E+05	±	1.4E+05	4.0E+06	±	1.0E+06	4.2E+06	±	2.1E+05
A	C49 H82 O13 N0 P1	PI(18:1/22:5)	1.1E+06	±	4.4E+05	2.4E+06	±	1.8E+06	1.1E+06	±	3.3E+05
B	C22 H43 O9 N1 P1	LPS(16:0)	8.7E+05	±	2.6E+04	2.3E+05	±	6.0E+04	1.0E+07	±	1.1E+06
B	C36 H72 O3 N1	Cer(d18:1/18:0)	8.7E+05	±	1.6E+05	3.1E+05	±	9.4E+04	1.0E+07	±	1.3E+06
B	C47 H83 O10 N1 P1	PAF(36:5)	7.9E+05	±	6.6E+04	7.9E+05	±	1.5E+05	7.6E+05	±	6.1E+04
B	C45 H79 O7 N1 P1	PE(18:0p/22:5)(rep)	7.7E+05	±	3.5E+05	4.6E+06	±	1.8E+06	1.3E+06	±	1.6E+05
A	C41 H71 O7 N1 P1	PE(14:0p/22:6)	8.4E+05	±	3.1E+05	4.7E+06	±	1.7E+06	2.6E+06	±	8.1E+04
A	C47 H79 O8 N1 P1	PE(20:1/22:6)	6.3E+05	±	2.1E+05	2.3E+06	±	2.0E+05	3.4E+07	±	1.4E+06
A	C47 H85 O10 N1 P1	PC(18:1/20:3)	6.1E+05	±	1.4E+05	9.6E+05	±	7.9E+04	2.1E+07	±	8.3E+05
A	C48 H81 O10 N1 P1	PC(17:1/22:6)	6.9E+05	±	1.2E+05	1.6E+06	±	4.2E+05	1.6E+07	±	1.8E+06
A	C43 H73 O7 N1 P1	PE(18:2p/20:5)(rep)	6.4E+05	±	3.7E+05	9.3E+06	±	4.7E+06	2.0E+06	±	1.8E+05
A	C45 H77 O8 N1 P1	PE(18:0/22:6)	6.2E+05	±	1.6E+05	1.2E+06	±	2.8E+05	9.8E+06	±	6.5E+05
B	C47 H79 O9 N1 P1	PC(16:1p/22:6)	6.1E+05	±	1.6E+05	1.9E+06	±	5.3E+05	1.1E+06	±	2.5E+04
B	C44 H86 O3 N1	Cer(d18:1/26:1)	8.0E+05	±	9.8E+04	5.1E+05	±	7.0E+04	4.3E+06	±	3.7E+05
B	C22 H45 O9 N1 P1	LPS(16:0)(rep)	5.9E+05	±	8.8E+04	1.5E+05	±	4.8E+04	1.1E+07	±	1.8E+06
A	C45 H80 O13 N0 P1	PI(16:0/20:3)	8.2E+05	±	1.2E+05	3.3E+06	±	2.3E+06	1.5E+06	±	1.3E+05
A	C49 H85 O10 N1 P1	PC(18:1/22:5)	5.6E+05	±	1.2E+05	1.6E+06	±	3.7E+05	1.5E+07	±	1.1E+06
B	C49 H87 O9 N1 P1	PC(18:0e/22:6)	6.6E+05	±	6.0E+04	8.7E+05	±	6.2E+04	6.9E+06	±	3.5E+05
B	C24 H48 O9 N1 P1 Na1	LPS(18:0)(rep)(rep)	7.4E+05	±	6.7E+04	4.6E+05	±	3.3E+05	1.5E+06	±	3.9E+05
A	C49 H77 O8 N1 P1	PE(24:6/20:4)	6.1E+05	±	2.3E+04	5.8E+05	±	4.5E+05	1.6E+06	±	8.0E+05
A	C51 H97 O10 N1 P1	PC(18:1/24:1)	8.6E+05	±	2.4E+05	6.6E+05	±	1.2E+05	4.8E+05	±	3.8E+04
A	C47 H81 O7 N1 P1	PE(20:1p/22:6)(rep)	4.5E+05	±	1.7E+05	1.5E+07	±	3.9E+06	8.3E+06	±	1.4E+06
A	C53 H81 O10 N1 P1	PC(22:6/22:6)	5.3E+05	±	2.1E+05	4.0E+06	±	1.3E+06	9.9E+06	±	1.4E+06
A	C42 H79 O10 N1 P1	PC(15:0/18:2)	4.0E+05	±	1.1E+05	1.2E+06	±	8.7E+04	3.3E+06	±	1.8E+05
B	C41 H69 O7 N1 P1	PE(14:0p/22:6)(rep)	5.6E+05	±	7.6E+04	2.7E+06	±	9.1E+05	1.3E+06	±	5.6E+04
A	C46 H78 O13 N0 P1	PI(17:0/20:5)	5.2E+05	±	4.5E+04	1.1E+06	±	5.6E+05	7.4E+05	±	6.8E+04
B	C45 H75 O7 N1 P1	PE(18:2p/22:5)	3.7E+05	±	1.6E+05	3.4E+06	±	8.6E+05	1.4E+06	±	6.8E+04

Level	Molecule formula	Lipid molecule	Meat			Fat			Egg		
			Mean	±	SD	Mean	±	SD	Mean	±	SD
B	C41 H75 O8 N1 P1	PE(16:0/20:3)	3.1E+05	±	7.0E+04	5.0E+05	±	6.1E+04	1.3E+06	±	6.6E+04
B	C45 H81 O13 N1 P1	PI(16:0/20:5)(rep)	3.3E+05	±	1.4E+05	3.4E+06	±	2.1E+06	6.2E+06	±	4.2E+05
B	C45 H79 O7 N1 P1	PE(18:0p/22:5)	2.8E+05	±	8.5E+04	1.6E+06	±	1.1E+06	3.9E+05	±	3.6E+04
A	C46 H81 O10 N1 P1	PC(17:0/20:5)	3.2E+05	±	3.0E+04	4.1E+05	±	8.7E+04	7.0E+06	±	3.4E+05
A	C49 H79 O10 N1 P1	PC(18:3/22:6)	3.3E+05	±	2.5E+04	1.0E+06	±	2.9E+05	4.2E+06	±	3.0E+06
B	C41 H75 O7 N1 P1	PE(16:0p/20:3)	2.8E+05	±	8.3E+04	1.4E+06	±	2.2E+05	3.8E+06	±	2.8E+05
A	C49 H89 O10 N1 P1	PC(18:0/22:4)	4.4E+05	±	1.3E+05	6.3E+05	±	1.8E+05	6.2E+06	±	4.3E+05
A	C48 H83 O10 N1 P1	PC(17:0/22:6)(rep)	2.1E+05	±	1.4E+05	3.0E+05	±	2.2E+05	8.2E+05	±	7.5E+04
B	C54 H85 O10 N1 P1	PC(22:6/23:5)	3.1E+05	±	1.1E+05	1.9E+06	±	2.7E+05	1.7E+06	±	2.6E+05
B	C50 H85 O10 N1 P1	PC(18:2/23:5)	3.1E+05	±	2.8E+04	8.3E+05	±	6.4E+04	3.0E+05	±	4.4E+04
A	C48 H87 O10 N1 P1	PC(19:0/20:4)	4.0E+05	±	1.4E+05	5.1E+05	±	1.8E+05	3.5E+06	±	5.1E+05
A	C48 H82 O13 N0 P1	PI(19:1/20:4)	3.0E+05	±	2.3E+04	5.7E+05	±	2.1E+05	1.6E+06	±	3.1E+05
B	C41 H73 O7 N1 P1	PE(18:2p/18:2)	2.6E+05	±	7.1E+04	8.4E+05	±	1.5E+05	2.8E+05	±	6.1E+04
B	C49 H75 O8 N1 P1	PE(22:5/22:6)	2.7E+05	±	9.4E+04	3.9E+06	±	1.2E+06	2.0E+06	±	1.6E+05
B	C47 H73 O8 N1 P1	PE(20:5/22:6)(rep)	2.6E+05	±	1.3E+05	4.1E+06	±	9.3E+05	2.6E+06	±	2.6E+05
B	C42 H71 O10 N1 P1	PS(16:0/20:5)	2.1E+05	±	4.7E+04	6.0E+05	±	1.0E+05	3.1E+05	±	5.0E+04
B	C38 H76 O3 N1	Cer(d18:1/20:0)	1.9E+05	±	3.4E+04	3.5E+05	±	1.2E+05	2.2E+07	±	1.7E+06
A	C41 H77 O10 N1 P1	PC(16:0/16:2)	1.7E+05	±	4.7E+04	2.6E+05	±	9.4E+04	3.8E+06	±	1.8E+05
A	C53 H83 O10 N1 P1	PC(22:5/22:6)	1.9E+05	±	6.4E+04	1.4E+06	±	5.2E+05	2.9E+06	±	1.9E+06
B	C47 H75 O8 N1 P1	PE(20:4/22:6)(rep)	2.1E+05	±	2.7E+04	2.3E+06	±	4.5E+05	5.2E+06	±	6.5E+05
A	C49 H73 O8 N1 P1	PE(22:6/22:6)	1.0E+05	±	7.8E+04	3.7E+06	±	8.9E+05	3.2E+06	±	2.0E+05
B	C39 H74 O8 N0 P1	PEt(16:0/18:1)	1.6E+05	±	4.0E+04	2.4E+06	±	8.4E+05	5.3E+04	±	3.5E+04
A	C47 H87 O10 N1 P1	PC(18:1/20:2)	2.1E+05	±	9.1E+04	2.1E+06	±	1.7E+06	2.3E+07	±	2.8E+06
A	C47 H71 O8 N1 P1	PE(20:5/22:6)	1.2E+05	±	8.4E+03	1.8E+06	±	4.8E+05	1.1E+06	±	1.7E+05
A	C52 H77 O10 N1 P1	PS(24:6/22:6)	1.1E+05	±	7.2E+04	1.9E+06	±	8.8E+05	1.2E+05	±	9.9E+04
A	C47 H77 O8 N1 P1	PE(20:2/22:6)	7.9E+04	±	2.2E+04	5.1E+05	±	3.1E+04	9.8E+06	±	7.4E+05
A	C47 H83 O8 N1 P1	PE(22:1/20:4)	9.4E+04	±	2.4E+04	3.9E+05	±	1.6E+05	1.7E+06	±	1.4E+05
A	C44 H77 O8 N1 P1	PE(19:0/20:5)	1.0E+05	±	3.5E+04	2.3E+05	±	1.0E+05	2.1E+06	±	1.2E+05
A	C49 H83 O8 N1 P1	PE(22:1/22:6)	6.0E+04	±	4.1E+04	2.7E+05	±	6.3E+04	2.9E+06	±	3.2E+05
A	C47 H73 O8 N1 P1	PE(20:4/22:6)	7.7E+04	±	3.1E+04	2.1E+06	±	1.8E+06	2.1E+06	±	1.1E+05
A	C43 H75 O10 N1 P1	PC(14:0/20:5)	8.9E+04	±	1.8E+04	1.1E+05	±	1.5E+04	6.8E+05	±	9.2E+04
A	C43 H77 O10 N1 P1	PC(18:4/16:0)	6.9E+04	±	1.1E+04	2.2E+05	±	9.2E+04	3.4E+06	±	4.8E+06
A	C51 H84 O13 N0 P1	PI(20:1/22:6)	7.2E+04	±	3.3E+04	7.3E+05	±	4.8E+05	1.2E+06	±	1.2E+05
A	C48 H85 O10 N1 P1	PC(19:0/20:5)	5.9E+04	±	4.6E+03	3.1E+05	±	1.2E+05	1.6E+06	±	1.3E+05
A	C50 H85 O10 N1 P1	PC(19:1/22:6)	2.4E+04	±	1.0E+04	1.4E+05	±	7.2E+04	6.2E+06	±	4.5E+05
A	C46 H77 O8 N1 P1	PE(19:1/22:6)	9.6E+04	±	1.3E+05	1.1E+05	±	6.0E+04	4.0E+06	±	2.5E+05
B	C45 H77 O8 N1 P1	dMePE(16:0/22:6)	2.2E+05	±	2.9E+05	8.2E+04	±	2.8E+04	7.5E+05	±	6.3E+05
A	C47 H75 O8 N1 P1	PE(20:3/22:6)	1.1E+04	±	7.2E+03	3.7E+05	±	2.9E+05	9.6E+05	±	2.1E+05
A	C44 H79 O8 N1 P1	PE(19:0/20:4)	1.2E+04	±	4.7E+03	1.7E+05	±	2.8E+04	2.5E+06	±	2.4E+05