Prepartal overfeeding alters the lipidomic profiles in the liver and the adipose tissue of transition dairy cows

Abstract

Introduction

Physiological adaptations in the energy metabolism of dairy cows during the periparturient period are partly mediated by insulin resistance (IR), which may subsequently induce metabolic disorders postpartum. The molecular mechanisms underlying IR in dairy cows are largely unknown.

Objective

This study aimed to find a novel insight into the molecular mechanisms underlying IR in dairy cows during the periparturient period by analyzing the effects of prepartal overfeeding on the lipidomic profiles in the liver and adipose tissue (AT).

Methods

Sixteen cows were allocated to controlled-energy and high-energy feeding groups. Lipidomic profiling was conducted on liver and adipose tissue samples collected at 8 d prior to the predicted parturition, and 1 d (only AT) and 9 d after the actual parturition.

Results

Five ceramides (Cers) were identified to be significantly increased by prepartal overfeeding in AT before parturition. Principal component-linear discriminant analysis showed that the differences in lipidomic profiles between the feeding groups were mainly characterized by phosphatidylcholines (PC), phosphatidylethanolamines (PE), lysophophosphatidylcholines (LysoPC), and lysophosphatidylethanolamines (LysoPE) in the liver, and by Cer, PE, and phosphatidylinositols (PI) in AT. Lipid class levels indicated that prepartal overfeeding elevated the concentration of PE, PI, LysoPC, LysoPE, and sphingomyelin (SM) in the liver, and increased the concentration of Cer in AT during the periparturient period.

Conclusion

Prepartal overfeeding significantly altered the concentrations of various sphingolipids, phospholipids, and lysophospholipids in the liver and AT of dairy cows during the periparturient period.

Key words: energy metabolism, molecular adaptation, altered lipid profiles, transition dairy cow, ceramides

1. Introduction

Dairy cows suffer from negative energy balance during early lactation, which results from a combination of the increasing glucose requirement in lactating mammary glands and insufficient dry matter intake (DMI) (Bertics et al. 1992). A series of physiological adaptions are mediated by insulin resistance (IR) to allocate the glucose, amino acids, and fatty acids to the tissue in demand in periparturient dairy cows (Bell and Bauman 1997). The development of IR induces augmented hepatic gluconeogenesis, hepatic glycogenolysis, protein mobilization from skeletal muscle, and lipolysis in the adipose tissue (AT) (De Koster and Opsomer 2013; Hayirli 2006). Although these alterations in the energy metabolism are usually physiological responses that affect the supply of the nutrients and energy that are increasingly required by the fetus and by the onset of lactation (Coppock 1985), the response also increases the risk of metabolic disorders in the postparturient cows (Ingvartsen 2006). These metabolic disorders include hepatic lipidosis and ketosis induced by the excessive mobilization of non-esterified fatty acids (NEFA) from the AT into the liver (Drackley et al. 1992; Reid 1980; Veenhuizen et al. 1991).

Prepartal nutritional strategies affect the postpartal health of dairy cows as the periparturient physiological adaptions are related to the change in energy balance that occurs near calving (Douglas et al. 2006). Prepartal oversupply of energy decreases lipogenesis and increases lipolysis in AT postpartum when adiposity of the cows is increased (Nielsen et al. 2010). As a result, exacerbated adipose mobilization was observed postpartum in overfed cows, characterized by higher NEFA levels compared to the cows fed according to the requirement (Rukkwamsuk et al. 1998). The NEFA delivered to the liver promote hepatic lipogenesis through the activation of peroxisome proliferator-activated receptor alpha (PPARα) (Ji et al. 2012; Khan et al. 2014). In addition, prepartal overfeeding decreases fatty acid oxidation capacity of the liver (Selim et al. 2014). The combination of these changes potentially lead to the accumulation of triglycerides in the liver (Drackley et al. 2005; Loor et al. 2006). These changes in lipid metabolism might be mediated by lower whole body insulin sensitivity caused by prepartal overfeeding (Holtenius et al. 2003).

The molecular mechanisms of IR have been studied extensively in humans and rodents (Chavez and Summers 2010; Erion and Shulman 2010; McArdle et al. 2013). It is widely accepted that IR is closely associated with obesity and induced by lipids (Kahn and Flier 2000). Specifically, ceramides and diacylglycerols are the two lipid classes that serve as potential triggers of IR in human and mice. Ceramides block phosphoinositide 3-kinase insulin signaling pathway by interfering the translocation of protein kinase B (Akt/PKB) (Chavez and Summers 2010). Diacylglycerols interfere the phosphorylation of insulin receptor substrate 1 and 2 (IRS1 and IRS2) through the activation of protein kinase C (PKC) (Erion and Shulman 2010). In addition, sphingomyelins, phosphatidylcholines, phosphatidylethanolamines, phosphatidylinositols, phosphatidylserines, lysophophosphatidylcholines, lysophosphatidylethanolamines, and cholesterol esters were identified as the biomarkers of IR as their concentrations were found to differ between healthy individuals and insulin-resistant individuals (Haus et al. 2009; Rauschert et al. 2016; Wallace et al. 2014). Moreover, some lipid subspecies were identified to be associated with alterations in nutritional intake levels and the obesity-related diseases (Eisinger et al. 2014a; Hanamatsu et al. 2014; Yetukuri et al. 2007).

In the past few years, lipidomic studies on plasma lipid compositions of periparturient dairy cows have revealed associations between the changes in lipid profiles and the physiological adaptations. Imhasly et al. (2014 and 2015) reported that the concentration of triglycerides, phosphatidylcholines, lysophophosphatidylcholines, and sphingomyelins

in the plasma of dairy cows changed significantly from 14 d prepartum to 28 d postpartum. The same authors identified that the concentrations of six phosphatidylcholine subspecies in the plasma were highly correlated with the occurrence of hepatic lipidosis (Imhasly et al. 2014). In addition, sphingolipids including ceramides, monohexosylceramides, and lactosylceramides, were found to be elevated in the plasma with the increased adiposity in cows (Rico et al. 2015).

Although analyses of gene expression in various tissues and lipidomic profiling of plasma have been conducted in the investigation of energy metabolism in dairy cows, the molecular mechanisms of IR during the periparturient period at tissue level has remained largely unknown. The main aim of the present study was to analyze the effects of prepartal overfeeding on the lipidomic profiles in the liver and in the AT in dairy cows. It was hypothesized that prepartal dietary energy level significantly affects the concentrations of hepatic and AT lipid subspecies that are potentially associated with IR.

2. Materials and Methods

2.1 Animals, diets, experimental design and sampling

Feeding experiment, feed composition, and the collection of biopsy samples were described in detail in Selim et al. (2014). The feeding experiment involved 16 *Finnish Ayrshire* dairy cows in a randomized complete block design. The cows were paired according to their parity, body weight, and body condition score. The members of each pair were randomly allocated to one of two dietary treatments groups at 44±5 days (mean±SD) prior to the actual parturition date, thus one individual of each pair received the controlled-energy treatment and its partner received the high-energy intake treatment. The grass silage-based dietary treatments were controlled-energy diet (CON; 100% of energy requirement of pregnant dairy cows) and initially an *ad libitum* high-energy diet (HIGH) for three weeks. The actual mean energy intake of the HIGH group was initially 142% of energy requirement of pregnant dairy cows during the first three weeks of the experimental feeding. During the last three weeks before the predicted parturition the energy allowance of the HIGH group was sequentially decreased in decrements of 5% on alternate days. The average metabolizable energy (ME) was 99 MJ/d in CON group and 141 MJ/d in HIGH group from week 6 prepartum to week 4 prepartum and 109 MJ/d in CON group and 128 MJ/d in HIGH group from week 3 prepartum to week 1 prepartum. The data on measurements of feed intake, dry mater intake, milk yield live weight, body condition score (BCS), blood concentrations of glucose, NEFA, beta-hydroxybutyrate, glucagon, and insulin during the periparturient period were previously published by Selim et al. (2014).

Subcutaneous AT samples were collected by biopsy 8 d before the predicted parturition (11±5 d in the actual operation) and 1 and 9 (±1) d postpartum (the three time points are represented as -8 d, 1 d, and 9 d in the following paragraphs in this paper). The liver biopsies were conducted immediately after the AT biopsies at -8 d and 9 d. Liver samples were successfully collected from 13 cows at -8 d and from 11 cows at 9 d. AT samples were successfully collected from 15 cows at -8 d, from 12 cows at 1 d, and from 13 cows at 9 d, respectively. The data of the liver samples of two cows were finally removed due to the health problems (sciatic nerve paralysis and prolonged inappetence) in these cows after the parturition.

2.2 Lipidomic profiling

The liver biopses were pulverized (homogenized) as frozen (fast freezed in dry ice for 1 min) by using a Covaris CryoPrep System (Woburn, Massachusetts, USA). The homogenates were transferred from TissueTubesTM into cryo tubes for further storage at -80°C. Typically, 5 mg aliquots of homogenized samples were weighed for lipidomics analyses. Homogenized tissue samples were spiked with an internal standard mixture (20 µl) consisting of lysophosphatidylcholine [LPC(17:0)], ceramide [Cer(d18:1/17:0)], phosphatidylcholine [PC(17:0/17:0)], phosphatidyl-ethanolamine [PE(17:0/17:0)] and triacylglycerol [TG(17:0/17:0/17:0], at concentration levels that varied from 1.08 to 2.12 µg. Sodium chloride solution (15 mM, 50µl) was added to the samples and lipids that were extracted with a mixture of chloroform and methanol (2:1, 400 µl) by using a Retsch Mixer Mill homogenizer (Retsch GmbH, Haan, Germany) at -20°C for 2 min (20 Hz, 2 grinding balls ø 3 mm). After 30-60 min extraction time at room temperature, the samples were centrifuged (Eppendorf 5804R) at 10620 g for 3 min. A 200 µl quantity was taken from the separated lower organic solvent layer and transferred into a vial insert and mixed with 10 µl of a standard mixture containing 3 labelled lipid species: L-α-lysophosphatidylcholine palmitoyl-D3 (methyl-D3), 1,2-dipalmitoyl-D6-3-sn-glycerophosphatidylcholine (dimethyl-D6) and tripalmitin-1,1,1-13C3 (concentration level 1.0 µg).

Lipidomic analyses were performed on a Waters Q-Tof Premier mass spectrometer combined with an Acquity Ultra Performance LC™ (UPLC) following the analytical procedure modified from Nygren et al. (2011). All solvents used were LC-MS grade, and the reference lipids were obtained from either Avanti Polar Lipids, Inc. (Alabama, USA) or Larodan Fine Chemicals (Solna, Sweden). Details of the analytical procedure were described in the supplementary material (Online Resource 1).

The lipidomics data were processed by using MZmine 2 software (mzmine.sourceforge.net) including alignment of peaks, peak integration, normalization, and peak identification. Lipids were identified using internal MS and MS-MS spectral library. Quantification of lipid subspecies was based on the peak heights of internal standards. All monoacyl lipids except cholesteryl esters, such as monoacylglycerols and monoacylglycerophospholipids, were normalized by using LPC(17:0), all diacyl lipids except ethanolamine phospholipids were normalized by using PC(17:0/17:0), all ceramides using Cer(d18:1/17:0), all diacyl ethanolamine phospholipids by using PE(17:0/17:0), and TGs and cholesteryl esters by using TG(17:0/17:0/17:0). Other molecular species (including unidentified species) were normalized by using LPC(17:0) for retention time < 300 s, PC(17:0/17:0) for retention time between 300 s and 410 s, and TG(17:0/17:0/17:0) for higher retention times.

In total, from the liver samples 296 and 1325 masses were detected in the positive electrospray ionization mode (ESI+) and negative electrospray ionization mode (ESI-), respectively, and from the AT samples 541 and 603 masses were detected in ESI+ and ESI-, respectively (Online Resource Table S1). The lipids were identified based on an internal spectral library and were classified into ceramides (Cers), hexosylceramides (HexCers), sphingomyelins (SMs), triacylglycerols (TGs), diacylglycerols (DGs), cholesteryl esters (ChoEs), lysophophosphatidylcholines (LysoPCs), lysophosphatidylethanolamines (LysoPEs), phosphatidylcholines (PCs), phosphatidylethanolamines (PEs), and phosphatidylinositols (PIs). However, a substantial proportion of the detected masses remained unknown.

2.3 Calculations and statistical analyses

2.3.1 Statistical analyses within time points and FDR-calculation

The statistical analyses were performed using SAS software (release 9.3; SAS Institute, Cary, NC). The concentrations of all detected masses were log2-transformed to normalize the data. Subsequently, Analysis of Variance (ANOVA) between the feeding groups were performed on each variable within each sampling time point by using the PROC MIXED procedure. The model included diet as a fixed effect and block as a random effect. The normalities of all data were tested using the UNIVARIATE procedure based on the residuals of the fitted model. The *P*-values obtained from PROC MIXED procedure were adjusted by the PROC MULTTEST procedure with the AFDR option for the false discovery rate (FDR) calculation (Benjamini and Hochberg 2000). After the FDR threshold calculation was performed, the lipid subspecies were sorted in ascending order using the adjusted *P*-values. The threshold for the FDR indicates the percentage of false positives among the variables with adjusted-*P* lower than the threshold. In the 4 dataset from liver and AT, the thresholds of adjusted *P*-values were not determined as fixed values, but as the *P*-value of the specific detected mass that produced less than one false positive.

2.3.2 Principal component analysis-linear discriminant analysis of identified lipids in the liver and AT

A principal component analysis-linear discriminant analysis model (PCA-LDA) described by Fearn (2008) was applied and the log2-transformed concentrations of all the identified lipid subspecies for both ESI+ and ESI- for the liver and AT as the input was used. This entailed PCA-LDA for 262 subspecies from the liver ESI+, 65 subspecies from the liver ESI-, 55 subspecies from the AT ESI+, and 53 subspecies from the AT ESI- datasets. The subjects in the liver dataset were divided into four groups according to the experimental design and designated: CON -8 d, CON 9 d, HIGH -8 d, and HIGH 9 d. The data of the AT dataset were divided into six groups: CON -8 d, CON 1 d, CON 9 d, HIGH -8 d, HIGH 1d, and HIGH 9 d. The PCA scores of all the variables were computed using the PROC PRINCOMP procedure in SAS and used as the input for LDA. The LDA process was iteratively repeated with increasing principal components as the input, starting from 2. The lowest number of principal components that contributed to 100% accurate classification in LDA were selected as the final input of LDA. The numbers of the principal components used in the LDA of the liver ESI+, the liver ESI-, AT ESI+, and AT ESI- were calculated to be 8, 10, 27, and 26, respectively. The LDA resulted in 3 PCA-LDA functions (PL functions) that accounted for 100% of the variation between the four groups in the two liver datasets and five PL functions that accounted for 100% of variation between six groups in the two AT datasets. The equation of these PL functions can be retrieved in the supplementary materials (Online Resource Table S2).

The PL loadings obtained from the analyses reflected the correlation between the variables and the PL functions. Larger PL loadings indicated greater contributions of the variables to the variation between groups. After PCA-LDA, the variables were ranked by their contribution to the variation between groups caused by diet or time effects according to their corresponding PCA-LDA loadings.

2.3.3 Repeated measures ANOVA for identified lipid subspecies and the total concentrations of lipid classes

The total concentration of each lipid class was only calculated for the ESI mode which gave a higher number of detected subspecies. The total concentrations of SMs, TGs, DGs, LysoPCs, LysoPEs, PCs, PEs, and PIs in the liver datasets were calculated from ESI+ detection, whereas the concentrations of Cers and HexCers were calculated from ESI- detection. The total concentrations of ChoEs, SMs, TGs, LysoPCs, and LysoPEs in the AT datasets were calculated from ESI+ detection, whereas those of Cers, HexCers, PCs, PEs, and PIs were calculated from the ESI- detection.

The concentrations of lipid subspecies and the total concentrations of lipid classes were log-2 transformed to normalize the data prior to the statistical analyses. The preliminary analysis of transformed data was conducted using PROC MIXED procedure with a model including diet as a fixed effect and block as a random effect. The normality of the residuals was checked using PROC UNIVARIATE procedure. The box-and-whisker plots were used to detect the residuals that were not normally distributed.using a model including diet as a fixed effect and block as a random effect. The box-and-whisker plots were composed for the residuals that were not normally distributed. All the observations showing residuals out of the whiskers range in plots could be considered as outliers. Then the normality of the residuals of these variables were repeatedly tested after the most deviated residual from the mean was removed until the normal distribution of the residuals was achieved. Among the total concentrations of the lipid classes, two Cer observations (one at 1 d and one at 9 d), one SM observation (at -8 d), and one PE observation (at 9 d) were removed from the AT data. The repeated-measures ANOVA were performed using the PROC MIXED procedure, in which the treatments, times, and their interactions were set as the fixed effects, block and the interaction between block and time were set as random effects, and the animal was set as within-subject effect. Three covariance structures were used in the analyses of variables in the AT dataset, including compound symmetry (CS), unstructured (UN), and spatial power law SP (POW). The structure that gave the smallest Bayesian information criterion (BIC) was eventually selected. In addition, the slice option of MIXED procedure in the SAS software was used to test the effect of diet within each time point. The P-values$\leq$0.05 were considered as statistically significant and 0.05<P<0.10 was considered as a tendency toward significance.

3. Results

3.1 Effect of prepartal overfeeding on lipid subspecies profiles

Only a few detected masses in the datasets exceeded the FDR threshold calculation (Online Resource Table S3-S6). Significant concentration differences between treatments were only found for seven detected masses at -8 d in AT ESI- dataset wherein 7 × 0.11529 (threshold, adjusted-P) produced less than 1 false positive (Table 1). Five out of the seven significant lipids were Cer subspecies, with one PE and one unknown subspecies being the rest.

3.2 Contribution of lipids to the distinctness between groups

The lipidomic profiles of the liver and the AT presented clear distinctness after PCA-LDA. The first 2 PL functions contributed to 99.17% of the distinctness between all groups in the two liver datasets (Online Resource Fig. S1A and S1B). The first three PL functions contributed to 86.18% and 90.93% of the separation between all groups in AT ESI+ dataset and AT ESI- dataset respectively (Online Resource Fig. S2A and S2B). The PL2 of both liver datasets differentiated between the two feeding groups, whereas PL1 differentiated the time points. The lipidomic profiles of the two feeding groups in the AT datasets were categorized according to PL1 in ESI+ and by PL2 in ESI-. The lipidomic profiles on different time points were categorically separated by different PLs in the two feeding groups, which indicated that the lipidomic profiles in the two feeding groups may change following different patterns across the periparturition period.

The plots of corresponding PL functions against the retention time of the lipids in MS provided an overview of the contribution of each lipid class made to the difference by diet effect in the PCA-LDA (Fig. 1). The distinctness between feeding groups in the liver ESI+ dataset resulted from changes in levels of phospholipids, lysophospholipids, Cers, and

SMs. In liver ESI- dataset, the separation between feeding groups was mainly resulted from phospholipids and Cers. The difference between the feeding groups in the two AT data sets was equally contributed to by the lipids. As the separation between time points was achieved by different PL in the two feeding groups, the analyses of PL loadings against retention time for the time effect were not processed in the AT datasets.

The PL loadings of lipids indicated an abundance of lipids, and in very small concentrations loadings of lipids were not likely to have made a considerable contribution to the distinctness of the overall lipidomic profiles. The top 20 lipids that contributed most to each profile were picked up after the lipids were ranked according to the absolute value of the corresponding PL loadings (Table 2 and 3). The ranking indicated that the separation between feeding groups was mainly caused by PCs, PEs, LysoPCs, and LysoPEs in the liver ESI+ dataset, whereas the separation between time points was mainly caused by PCs, PEs, and TGs. The changes in Cer and PE quantities were the main contributors for the differentiation between both feeding groups and time points in the liver ESI- dataset. The differentiation between feeding groups for the AT ESI+ dataset was mainly contributed to by TGs. In AT ESI- dataset, Cers, PEs, and PIs accounted for the differences between feeding groups.

The significant ANOVA effects of the lipid subspecies of diet revealed a considerable proportion of the lipids to be in the liver ($P<0.05$) (Online Resource Table S7). In contrast, only a few lipids displayed differences between feeding groups in AT ($P<0.05$), which suggest a marked similarity of the lipidomic profiles between the two feeding groups in AT. The combination of PCA-LDA and repeated measures ANOVA enabled the selection of the lipids based on both their statistical and biological significance. The lipids that showed significant diet or time effects in the iterative ANOVA and which were ranked in the top 20 lipids in PCA-LDA were identified as the subspecies that explained most of the variation between diets or time points (Online Resource Table S7). Consequently, 12 lipids were identified as having contributed most to the distinctness between the feeding groups in the liver ESI+ dataset, including 1 LysoPE, 1 TG, 2 LysoPCs, 4 PCs, and 4 PEs (Table 2). Six lipids were identified as having contributed most to the separation between feeding groups in the liver ESI- dataset, including 1 Cer, 1 PC, and 4 PEs (Table 2). Fourteen lipids were identified as having contributed most to the separation between time points in liver ESI+ dataset, and these comprised 1 DG, 1 Cer, 1 SM, 3 TGs, 4 PCs, and 4 PEs (Table 2). Fifteen lipids contributed most to the separation between time points in the liver ESI- dataset, included 1 Hex, 1 LysoPC, 3 PCs, 4 PEs, and 6 Cers (Table 2). Significant differences between feeding groups were observed in the AT but only one SM species in the top 20 lipids list of the ESI+ dataset was found and 3 Cer subspecies in the ESI- dataset were identified (Table 3).

3.3 Effects of prepartal overfeeding on the concentrations of lipid classes

The HIGH group displayed higher hepatic LysoPC, LysoPE, PE, PI, and SM concentrations ($P<0.05$) during the periparturient period than the CON group (Fig. 2). Concentrations of PCs and total lipids tended to be higher in the HIGH group in this period ($P<0.10$). It is noteworthy that the differences in the lipid concentrations between the two feeding regimes were mainly derived from the prepartum data. The HIGH group at -8 d had higher concentrations of LysoPC, PC, PI, SM, and total lipids ($P<0.05$) and tended to have higher PE concentrations compared to the CON group (Fig. 2). However, some of these differences diminished after parturition, and were characterized by only higher LysoPC and PE concentrations and a tendency towards higher SM concentration in the HIGH group compared to the CON group. The

concentrations of PI, DG, TG, and total lipids increased for both groups after parturition (P<0.05), whereas SM had a tendency to decrease across the time points (P=0.10) (Fig. 2).

Prepartal overfeeding only increased the concentration of Cer in the AT of the HIGH group during the whole periparturient period (P<0.05) (Fig. 3). Prepartal overfeeding at specific time points resulted in higher Cer and PI concentrations and tended to increase PC and PE at -8 d. Increased levels of Cer and decreased levels of SM were found in the HIGH group at 1 d. However, all the differences between groups had diminished by 9 d (Fig. 3). The concentrations of most lipid classes displayed no alteration when comparing both feeding groups during the periparturient period except that the concentrations of SM increased across time (P<0.05). In addition, significant interactions or tendencies of interaction between diet and time were found for SM (P<0.05), PC (P<0.05), PE (P<0.10) and PI (P<0.05) (Fig. 3). These interactions were presented as a delayed increase in SM concentrations in the HIGH group compared to the CON group, and decreases in the change of PC, PE, and PI levels between the two feeding groups (Fig. 3).

4. Discussion

The effects of prepartal overfeeding on the lipidomic profiles of dairy cows on lipid subspecies and lipid classes were analyzed by using three different approaches, including the ANOVA between groups within time points on all lipid subspecies, PCA-LDA, and the repeated measures ANOVA of the total concentrations of lipid classes. The strict FDR threshold calculation in the screening of individual lipids enabled the identification of the subspecies that were most affected by the prepartal overfeeding. Only a very small proportion of lipids finally passed the threshold, i.e., seven lipids in AT at -8 d. These lipids can be interpreted as the most sensitive subspecies to the prepartal overfeeding and may have roles in the development of IR. The majority of the lipids that exceeded the FDR threshold were ceramides, which contain long-chain fatty acids of at least 20 carbons. The significant change of Cer profile caused by prepartal overfeeding was also confirmed by the other analytical approaches because Cer lipids were found to be affected by the diet by the PCA-LDA of the AT dataset and there was also a significant difference in Cer profiles in AT between the two feeding groups determined by the class-based analysis. Moreover, the class-based analysis showed that the difference in Cer concentrations between the two feeding groups in AT diminished after parturition, which could be attributed to the termination of overfeeding in the HIGH group at parturition. The elevation in Cer (16:0), Cer (24:0) and total Cer concentrations were previously reported in the plasma of overweight dairy cows compared to lean dairy cows (Rico et al. 2015). It has been suggested that liver is the major source of plasma Cer (Lightle et al. 2003; Yamaguchi et al. 2004). Although the class-based analysis of the liver displayed no significant difference in the hepatic Cer concentrations between CON and HIGH groups during the periparturient period, a number of Cer subspecies did contribute to the difference between the two feeding groups in liver ESI- dataset as determined by PCA-LDA. The reason for the different outcomes between the two analyses for the liver data could be that only Cers containing specific fatty acids were significantly altered by the prepartal overfeeding.

Ceramides have been studied as potential triggers for IR in the human and the mouse, thus they have been identified as a biomarker for diabetes in the human (Lappas et al. 2015). The accumulation of ceramides were suggested to reduce the insulin-stimulated glucose transport in adipocyte cultures (Summers et al. 1998). The onset of insulin resistance in mice was found to be accompanied by increased local Cer concentration in the AT, when obesity was induced by a high-fat diet (Turner et al. 2013). On the other hand, the depletion of Cer *de novo* synthesis by a chemical inhibitor or the knockout

of synthetic enzymes effectively improved the insulin sensitivity in mice (Holland et al. 2007; Yang et al. 2009). Further, *in vitro* and *in vivo* studies on the molecular level have demonstrated that Cers prevented the translocation of protein kinase B (Akt/PKB) in phosphoinositide 3 kinase (PI3-K) of the insulin signaling pathway through the activation of either protein kinase C (PKC) or protein phosphatase 2 A (PP2A) in the muscle (Chavez et al. 2003; Fox et al. 2007). Based on the intravenous glucose tolerance test (IVGTT) performed on the following day of biopsies from the same cows in the present study, HIGH group showed a blunted suppression of plasma NEFA compared to CON group at -8 d, suggesting increased IR in AT caused by prepartal overfeeding at -8 d (Kokkonen et al. 2012). Therefore, the higher Cer concentrations in HIGH group corresponded to the results from IVGTT and may reflect greater magnitude of IR in AT of the HIGH group before parturition.

The concentration patterns of Cer in the AT found in the present study were similar for both feeding groups, which was characterized by an increase from -8 d to 1 d followed by a decrease to a lower level compared to that at -8 d. Dairy cows have increased IR during late pregnancy and early lactation (Bell and Bauman 1997). The decline in Cer concentrations in the AT may suggest decreased IR after the parturition. The change of Cers over the entire periparturient period reflected a potential transition in cellular processes, with parturition being a trigger for that transition.

As the most abundant complex sphingolipids in mammalian cells, SMs are synthesized by the transfer of a phosphocholine headgroup from PC to Cer, which yields another product DG at the same time (Gault et al. 2010). Conversely, SM can be hydrolyzed to Cers when the reaction is mediated by acid sphingomyelinase (Kitatani et al. 2008). Therefore, SM and Cer lipids are closely associated with each other through the biological conversion. The conversion between SM and Cer is regulated by various cellular stimuli. The evidence from *in vitro* studies suggest that the hydrolysis of SM to Cer was potentially promoted by oxidative stress (Gault et al. 2010), adipokine tumor necrosis factor alpha (TNF α) (Dbaibo et al. 2001), and by the inflammatory response that is induced by Toll-like receptor 4 (Holland et al. 2011). The concentrations of SM lipids in the liver were found to be higher in the HIGH group compared to CON group during the periparturient period, which suggest reduced SM hydrolyses. Previously, increased concentrations of SM subspecies were found in the serum of obese humans with lower insulin sensitivity (Hanamatsu et al. 2014). However, contrasting results were reported showing decreased SM concentrations in the liver of obese mice with hepatic steatosis (Yetukuri et al. 2007). It is noteworthy that the HIGH group did not have a decrease of hepatic Cer concentrations in response to the increase of SM species. Therefore, Cer lipids in the liver may be produced through multiple pathways, including *de novo* synthesis pathway and salvage pathways (Merrill 2011). The interaction between diet and time of SM in AT can be interpreted as a delay of increase in the HIGH group. Abuelo et al. (2015) demonstrated that oxidative stress is increased in dairy cows after calving, which potentially promotes the production of Cer species from SM. However, the concentrations of Cer lipids, decreased in both groups after parturition, which was in contrast to the change of SM concentrations across the time. This conflicting result suggests that production of Cers can be mediated by other pathways than SM hydrolysis or was dominantly mediated by other factors than oxidative stress.

Only a few LysoPC and LysoPE subspecies were identified in the liver and in the AT. However, the PCA-LDA results showed a small contribution of lysophospholipids to the difference in the hepatic lipidomic profiles between the two feeding groups. Although small, the total concentrations of LysoPC and LysoPE in the liver were significantly higher for the HIGH group from -8 d to 9 d. Previously, the lipidomic profiling of dairy cow plasma indicated that the concentration of 5 LysoPC subspecies, required for very-low-density lipoprotein (VLDL) secretion, decreased from two weeks

prepartum until parturition and then increased thereafter until four weeks postpartum (Imhasly et al. 2015). Their results indicate the potential roles of LysoPC in metabolic adaptation of dairy cows during the periparturient period. Therefore, the difference in lysophospholipid concentrations between CON and HIGH groups may indicate differences in the physiological adaptation during the periparturient period. Specific LysoPC subspecies in humans and mice were found to be associated with insulin resistance. Pietilainen et al. (2007) demonstrated that LysoPC concentration was higher in the serum of the obese twin compared to that in the serum of normal-weight twin. Kim et al. (2011) also reported that LysoPC concentration was higher in the plasma of overweight humans compared to that of their normal-weight counterparts. However, the opposite result was reported by Wallace et al. (2014): a finding that suggested humans with higher body mass indices (BMI) had lower plasma concentrations of LysoPC and LysoPE subspecies. Moreover, Wallace and colleagues (2014) also reported that plasma concentrations of these lipids were negatively correlated with homeostasis model assessment-estimated insulin resistance (HOMA-IR).

The phospholipids identified in the liver and in AT included PC, PE, and PI subspecies. These phospholipids are required for the secretion of hepatic TG as VLDL particles in the liver (Vernon 2005). They are also essential components of lipid droplets and thus their abundance may be related to the accumulation of TG. In addition, specific phospholipid subspecies were found to act as cell signaling messengers that regulate the action of PPARα (Chakravarthy et al. 2009). The concentrations of PC species in dairy cows decreased from two weeks prepartum until parturition and then increased until four weeks after calving (Imhasly et al. 2015). The same group reported in an earlier study that six PC subspecies may have significant roles in the variation of the plasma lipidomic profiles between healthy dairy cows and cows with a different degree of fat deposition in the hepatocytes (Imhasly et al. 2014). They stated the decrease of PC (36:3), PC (38:3), PC (36:4) and PC (36:2) and the increase of PC (30:2) and PC (32:2) in the plasma of the cows with hepatic lipidosis in comparison to the healthy cows. Among these PC subspecies, increased concentration of PC (32:2) in the HIGH group was observed in liver ESI+ dataset in the present study.

Much more profiling on phospholipids has been conducted in human and mice suffering from obesity and associated metabolic diseases. Eisinger and colleagues analyzed the lipidomic profiles in the liver of mice and found lower concentrations of total PC, saturated fatty acids (SFA) PC, monounsaturated fatty acids (MUFA) PE, and various PI subspecies in high-fat fed mice compared with control mice (Eisinger et al. 2014b). The PC and PE subspecies also decreased in animals with steatohepatitis when compared with healthy animals (Koteish and Diehl 2001). Specific PC and PE subspecies in humans were found to be potential predictor of type 2 diabetes in women with previous gestational diabetes mellitus (Lappas et al. 2015). The PCA-LDA revealed that phospholipids had significant contributions to the difference in hepatic and AT lipidomic profiles between the CON group and the HIGH group in our study. The increase or the tendency to increase in PC, PE, and PI concentrations in the liver caused by prepartal overfeeding were also identified in the class-based analyses. The rise of phospholipids in the liver of the HIGH group may suggest increased VLDL secretion from the liver during the periparturient period (Oikawa et al. 2010). Alternatively, it may indicate increased lipid deposition in the liver caused by the oversupply of energy based on the tendency for higher total lipid concentrations in the liver (Fig. 2). The phospholipid concentrations in the AT tended to be higher for the HIGH group on -8 d compared to that of the CON group. The significant interaction between diet and time in the class-based analyses indicated that the concentration of phospholipids changed and exhibited opposite patterns in the two groups. This interaction was supported by the results from PCA-LDA, as no single PL function was able to explain the separation of

lipidomic profiles by time in the both feeding groups. The different changing patterns of phospholipids across the time reflected the difference in the physiological adaptation in the two feeding groups.

The neutral lipids are the main components of the lipid deposition in mammals. The accumulation of TG has been observed in the liver of dairy cows with hepatic lipidosis in numerous earlier studies (Lubojacka et al. 2005; Murondoti et al. 2004). The concentration of TG in the liver in our study increased dramatically across the time points, which indicates that hepatic lipid accumulation after parturition was driven by the greater lipolysis in AT caused by the negative energy balance. As the DG is the intermediate in TG synthesis, the DG levels increased following a similar pattern after parturition. Moreover, the increase of lipid deposition in the liver was also reflected by the significant elevation of total lipid concentration after parturition. Moreover, the tendency towards higher total lipid concentration in HIGH group during the periparturient period may reflect higher risk to develop fatty liver in HIGH group compared to CON group.

Collectively, the lipidomic profiles revealed changes in various lipid classes during the periparturient period. The global lipidomic profiling in the present study was conducted using a conventional extraction method fitting to wide variety of lipid classes. However, specific lipids, including glycolipids and acidic phospholipids, may require further optimization of the extraction solvent and rations of solvents in the extraction,. Therefore, the identification of these lipid classes may have been restricted in the present study. Moreover, the incompleteness of the internal library limited the identification of lipids. However, the global profiling of the whole lipidome still provided novel insights of the influence of prepartal overfeeding on the lipid metabolism in periparturient dairy cows.

5. Conclusions

The dairy cows that received a high-energy diet from six weeks prepartum until parturition displayed altered lipidomic profiles in their livers and in their adipose tissue compared to the cows that received a controlled–energy diet. Prepartal overfeeding increased the concentrations of various phospholipids, lysophospholipids, and sphingomyelins in the liver during the periparturient period. The adipose tissue of the overfed cows had the higher concentrations of ceramides and displayed an opposite change of phospholipid profile after the parturition compared to the cows that received the controlled-energy diet. The increase of sphingomyelins in the liver and the increase of ceramides in the adipose tissue of the overfed cows potentially reflected the different magnitude of IR in the overfed cows compared to the cows in the controlled-energy diet. Therefore, the results of lipidomic profiling in this study provided a novel perspective on the molecular mechanisms underlying the insulin resistance in dairy cows during the periparturient period. Future studies should investigate the biosynthesis pathways of the lipids that were significantly influenced by prepartal energy level to understand further the mechanism of IR in dairy cows.

Compliance with ethical standards The experimental procedures were conducted under the protocols approved by the National Animal Ethics Committee in Finland.

Conflict of interest The authors declare that they have no conflict of interest.

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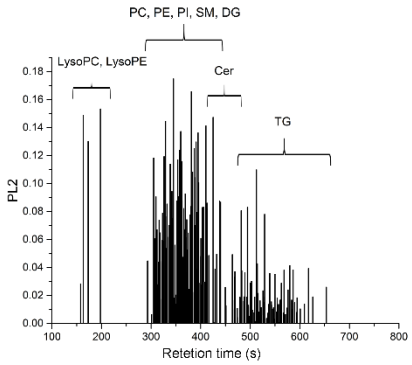
Fig. 1 Plots of PL function against retention time of identified lipid. (a) The second PL function (PL2) indicates the contribution of the variables to the diet effect in the liver positive electrospray ionization mode (ESI+) dataset. (b) The second PL function (PL2) indicates the contributions of the variables to the diet effect in the liver negative electrospray ionization mode (ESI-) dataset. (c) The first PL function (PL1) indicates the contribution of the variables to the diet effect in AT ESI+ dataset. (d) The second PL function (PL2) indicates the contribution of the variables to the diet effect in AT ESI- dataset. (e) The first PL function (PL1) indicated the contribution of the variables to the time effect in liver ESI+ dataset. (f) The first PL function (PL1) indicates the contribution of the variables to the time effect in the liver ESI- dataset. Abbreviations: Cer, ceramide. HexCer, hexosylceramide. SM, sphingomyelin. TG, triacylglycerol. DG, diacylglycerol, ChoE, cholesteryl ester, LysoPC, lysophophosphatidylcholine. LysoPE, lysophosphatidylethanolamine. PC, phosphatidylcholine. PE, phosphatidylethanolamine. PI, phosphatidylinositol.

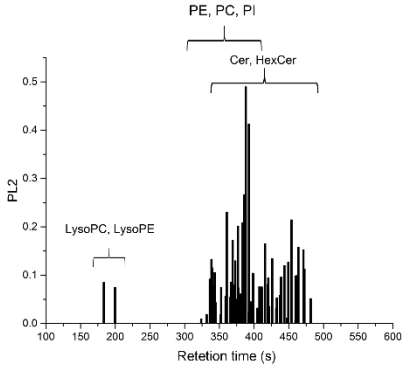
Fig. 2 Concentrations (µmol/L) of different lipid classes in the liver. The error bars represent the standard deviations calculated from non-transformed concentrations. Abbreviations: Cer, ceramides. HexCer, hexosylceramide. SM, sphingomyelin. TG, triacylglycerol. DG, diacylglycerol. ChoE, cholesteryl ester. LysoPC, lysophophosphatidylcholine. LysoPE, lysophosphatidylethanolamine. PC, phosphatidylcholine. PE, phosphatidylethanolamine. PI, phosphatidylinositol.

Fig. 3 Concentrations (µmol/L) of different lipid classes in the adipose tissue. The error bars represent the standard deviation calculated from non-transformed concentration. Cer, ceramide. HexCer, hexosylceramide. SM, sphingomyelin. TG, triacylglycerol. DG, diacylglycerol, ChoE, cholesteryl ester. LysoPC, lysophophosphatidylcholine. LysoPE, lysophosphatidylethanolamine. PC, phosphatidylcholine. PE, phosphatidylethanolamine. PI, phosphatidylinositol.

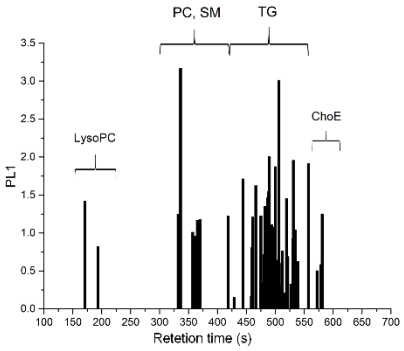
A) Liver ESI+



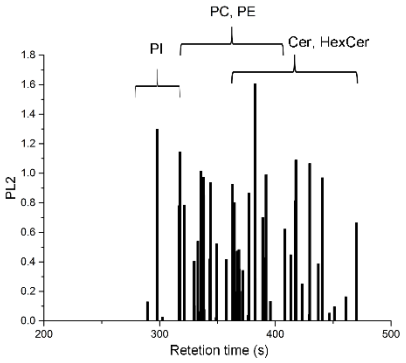
B) Liver ESI-



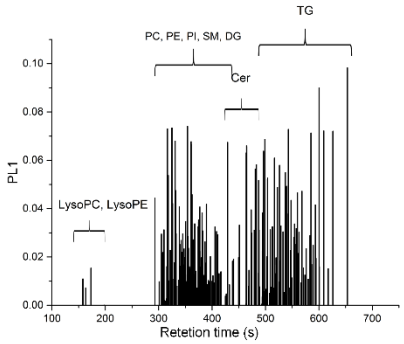
C) AT ESI+



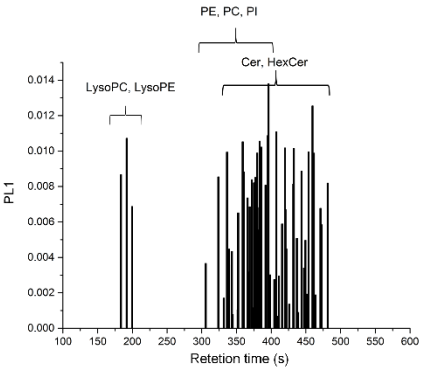
D) AT ESI-



E) Liver ESI+



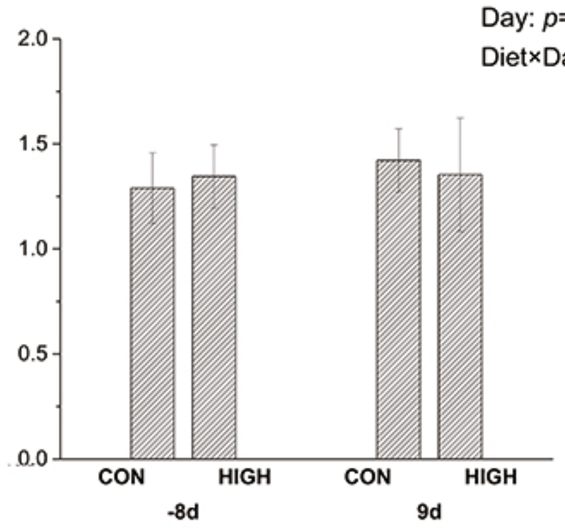
F) Liver ESI-



Concentration (μmol/g tissue)

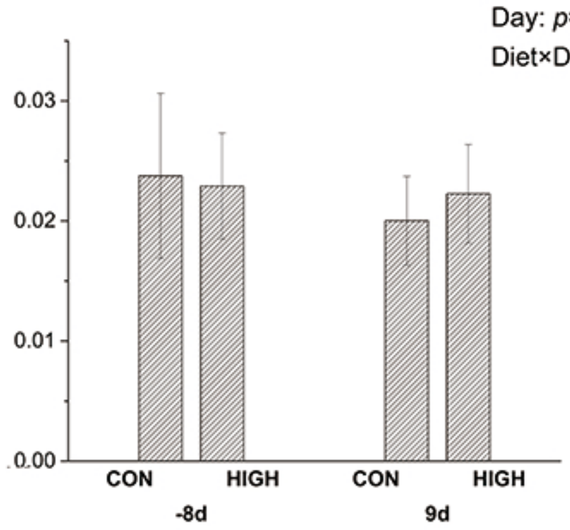
Cer

Diet: p=0.194
Day: p=0.923
Diet×Day: p=0.504



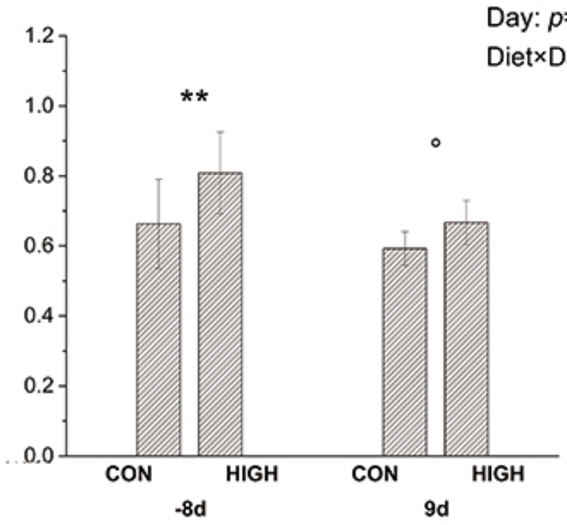
HexCer

Diet: p=0.500
Day: p=0.372
Diet×Day: p=0.520



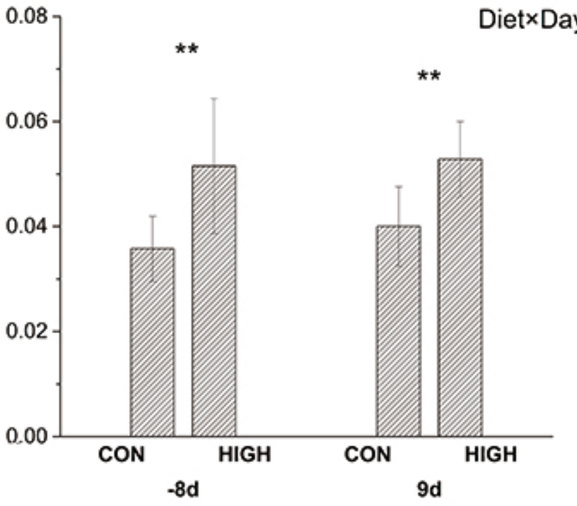
SM

Diet: p=0.005
Day: p=0.100
Diet×Day: p=0.444



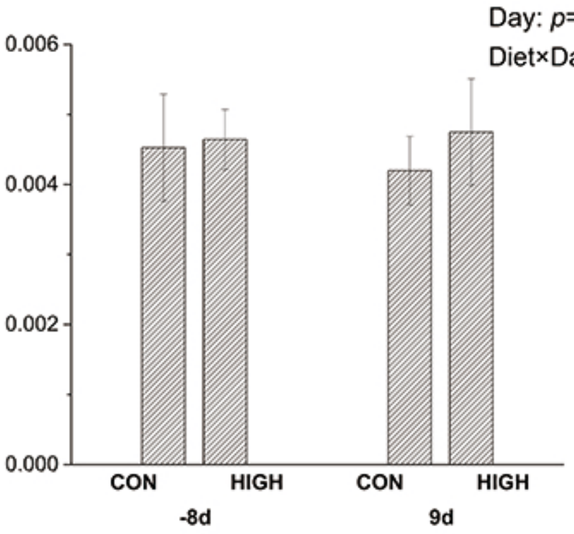
LysoPC

Diet: p=0.004
Day: p=0.287
Diet×Day: p=0.619



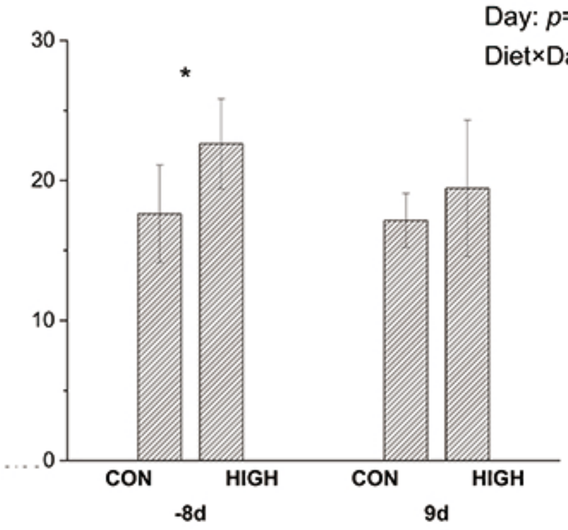
LysoPE

Diet: p=0.042
Day: p=0.698
Diet×Day: p=0.532



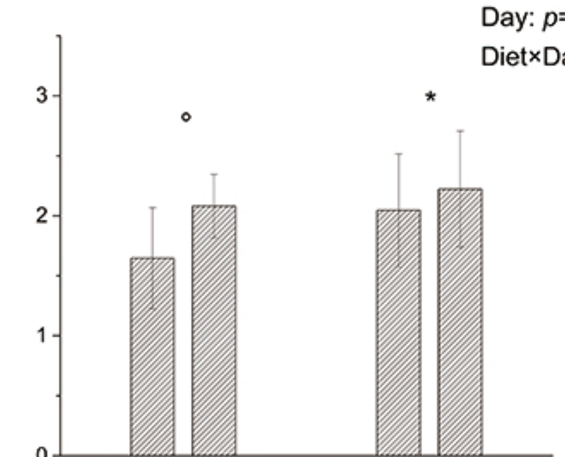
PC

Diet: p=0.069
Day: p=0.255
Diet×Day: p=0.271



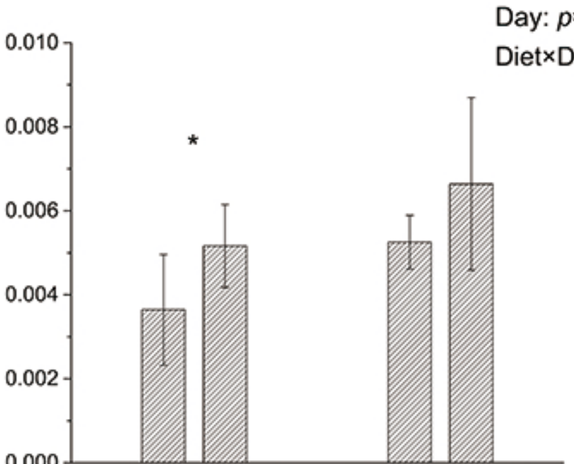
PE

Diet: p=0.026
Day: p=0.210
Diet×Day: p=0.367



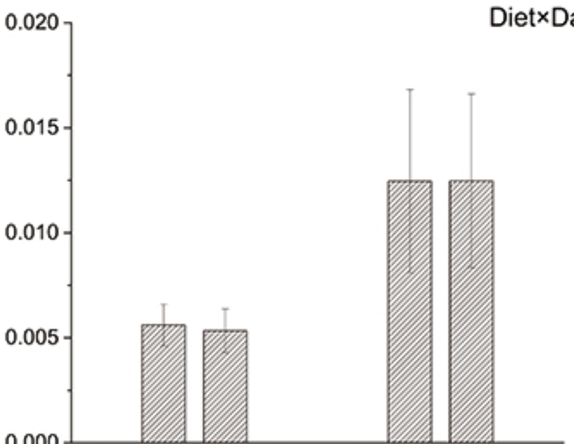
PI

Diet: p=0.030
Day: p=0.018
Diet×Day: p=0.426



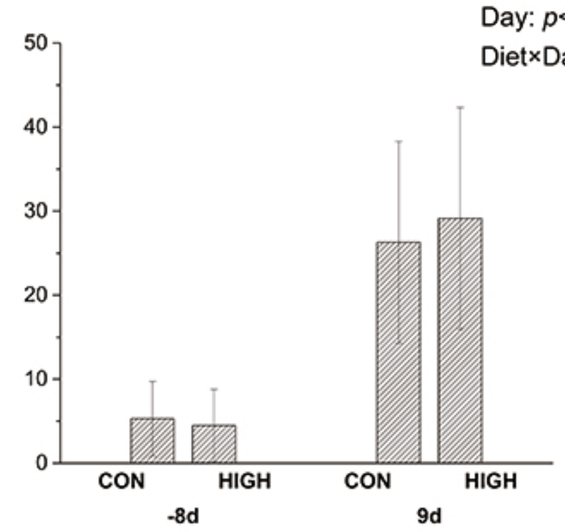
DG

Diet: p=0.933
Day: p=0.001
Diet×Day: p=0.695



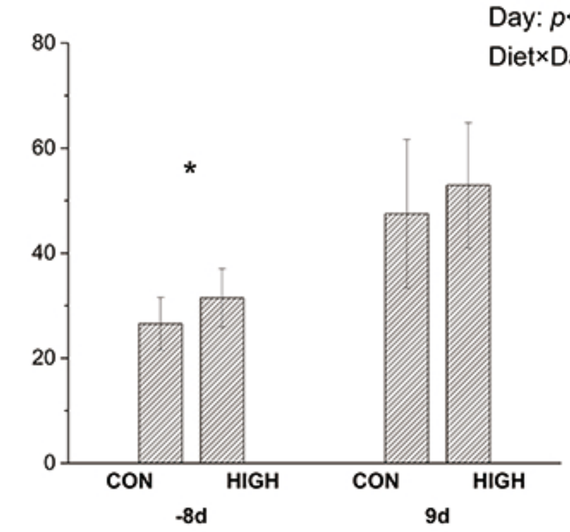
TG

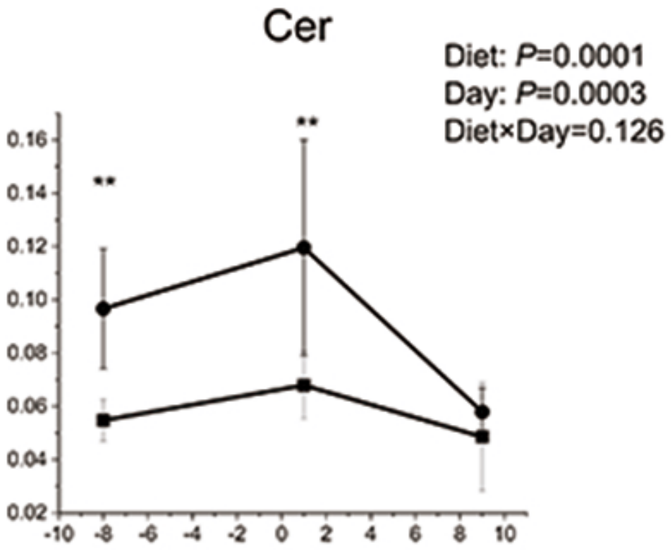
Diet: p=0.914
Day: p<0.00001
Diet×Day: p=0.733

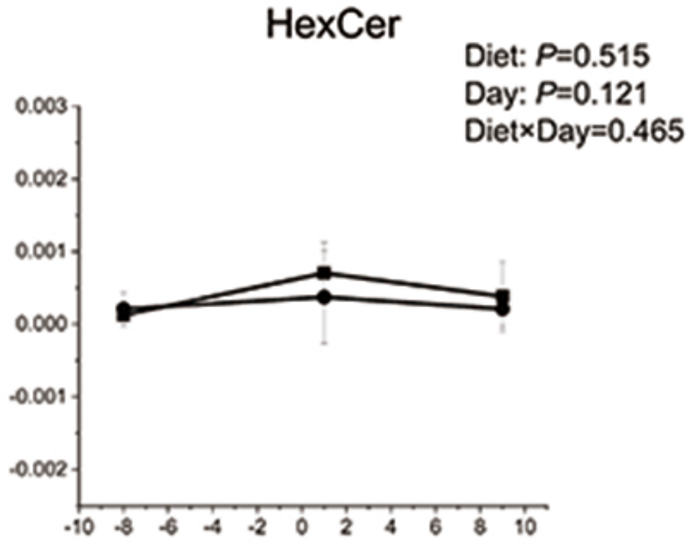


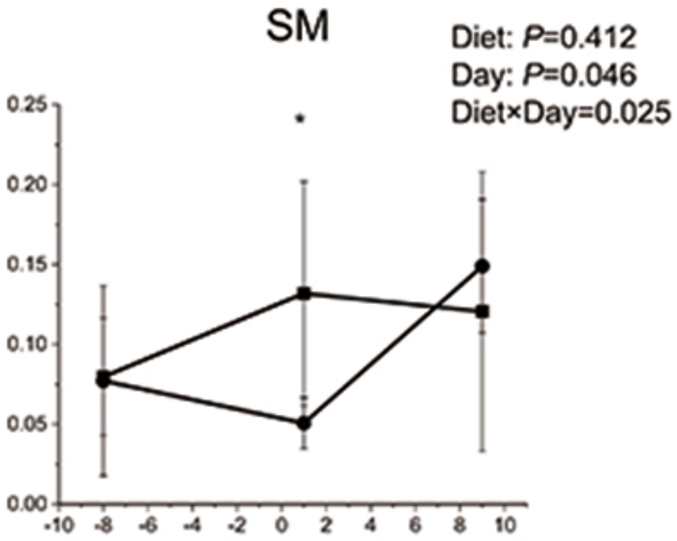
Total lipid

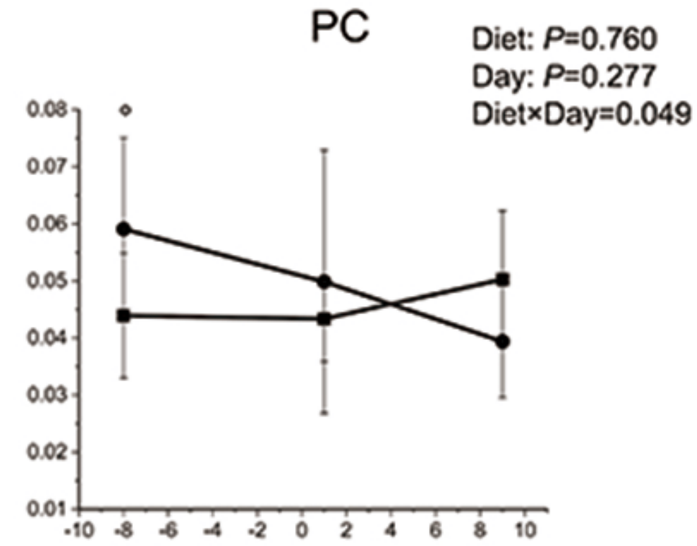
Diet: p=0.093
Day: p<0.00001
Diet×Day: p=0.736

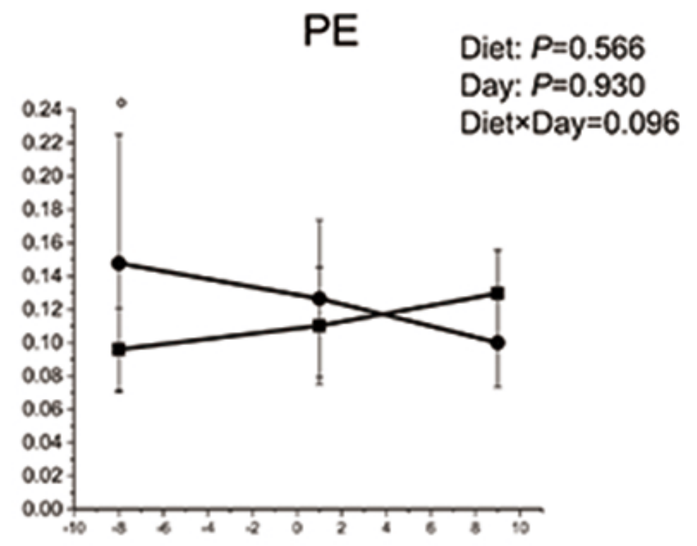




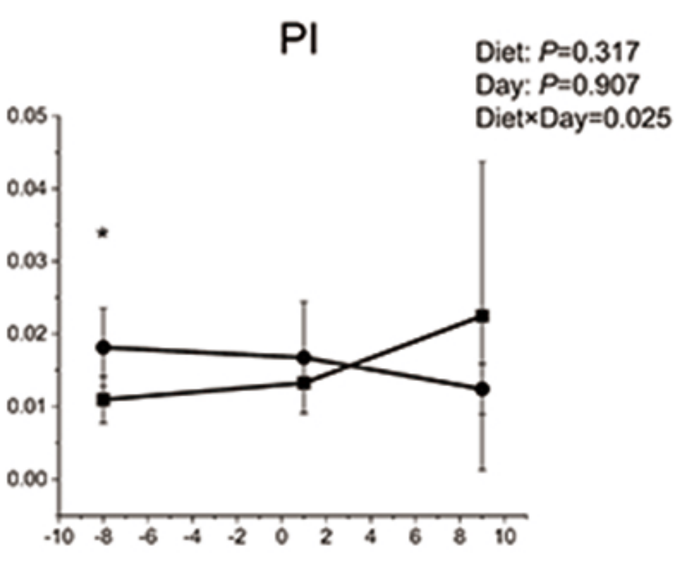


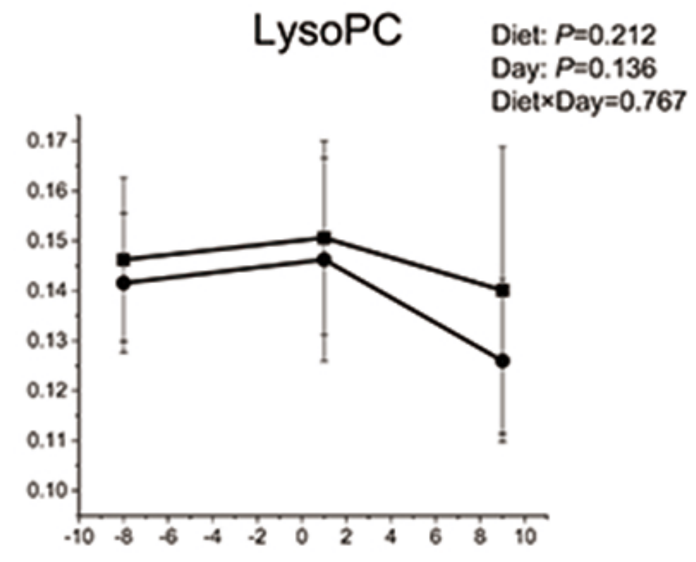


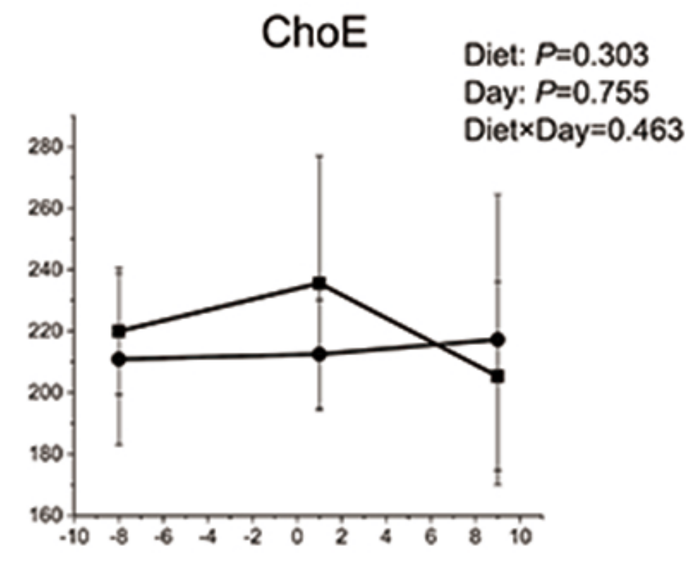


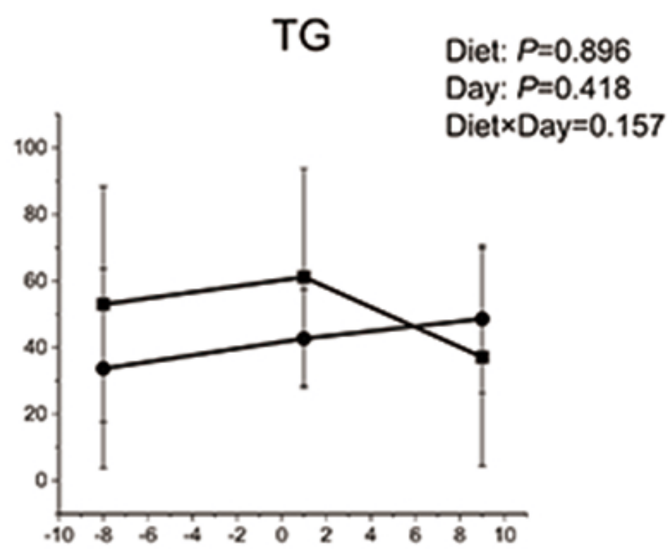


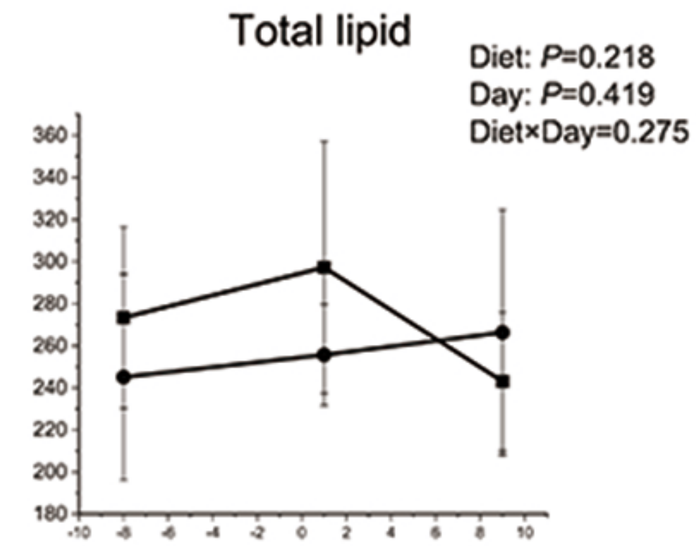
Concentration (μmol/g tissue)











Time relative to parturition (d)

Table 1 Lipids with significantly different concentrations between the two feeding groups. All lipid species were taken from adipose tissue (day -8) and they were measured using negative electrospray ionization mode (ESI-). The values in the table were log_2-transformed from the original concentrations (μmol/L).

Species	CON[a]	HIGH[b]	Adjusted-*P*[c]	Log2 fold
[d]Cer(d17:1/22:0)	-9.877	-8.39	0.002	1.41
Cer(d18:1/20:0)	-10.999	-9.443	0.003	1.44
Cer(d18:1/23:0)	-6.585	-5.617	0.047	0.96
Cer(d18:1/22:0)	-6.85	-5.737	0.055	1.11
[e]PE(18:0/20:0)	-9.004	-8.531	0.091	0.51
unknown	-10.292	-9.521	0.091	0.76
Cer(d18:1/23:1)	-8.329	-7.174	0.115	1.15

[a]CON, controlled-energy feeding group. [b]HIGH, high-energy feeding group. [c]Adjusted-*P*, *P*-value after false discovery rate control. [d]Cer, ceramide. [e]PE, phosphatidylethanolamine.

Table 2 Top 20 lipids that contributed to the separation between the lipidomic profiles of HIGH and CON groups or the separation between various time points in the liver datasets.

Rank	Liver ESI+ Diet (PL2)		Liver ESI- Diet (PL2)		Liver ESI+ Day (PL1)		Liver ESI- Day (PL1)	
	Lipid species	*P*-value	Lipid species	*P*-value	Lipid species	*P*-value	Lipid species	*P*-value
1	**PE(32:1)**	**0.0003** ↑	**PC(33:1)**	**0.0013** ↑	**PE(p16:0/22:6)**	**<0.0001** ↓	**PC(33:1)**	**0.0181** ↓
2	PE(p18:0/20:4)	0.0672	**PE(18:3/14:1)**	**<0.0001** ↑	TG(48:5)	0.8149	**LysoPC(18:0)**	**0.0442** ↑
3	**LysoPC(18:0)**	**0.0095** ↑	**PE(p16:0/18:1)**	**0.0022** ↑	PC(40:8)	0.1844	PE(18:3/14:1)	0.2539
4	**LysoPE(18:0)**	**0.0422** ↑	**PE(p16:0/18:2)**	**0.0052** ↑	**DG(33:5)**	**0.0055** ↑	**Cer(d18:1/23:0)**	**0.0175** ↑
5	**TG(48:5)**	**0.0164** ↓	Cer(d18:1/23:0)	0.3932	**PE(40:4e)**	**0.0002** ↑	**PE(p16:0/18:1)**	**0.0017** ↑
6	**PE(34:2e)**	**0.0021** ↑	PC(38:3)	0.4884	PE(36:2e)	0.7043	PE(p16:0/18:2)	0.0711
7	**PE(36:0)**	**0.0271** ↑	PC(36:2)	0.1808	**PC(38:6)**	**0.0313** ↑	**PC(38:3)**	**0.0050** ↓
8	**PC(32:2)**	**0.0020** ↑	Cer(d18:2/18:0)	0.9884	PE(36:0)	0.6548	**Cer(d18:2/26:0)**	**0.0001** ↓
9	PE(36:2e)	0.0878	**Cer(d18:2/24:1)**	**0.0182** ↑	TG(54:0)	0.3865	**Cer(d18:2/22:0)**	**0.0164** ↓
10	**LysoPC(16:0)**	**0.0084** ↑	Cer(d18:1/24:0)	0.9882	**PC(18:0/22:6)**	**0.0015** ↓	**Cer(d18:2/20:0)**	**0.0019** ↓
11	PE(38:3)	0.5425	Cer(d18:0/24:0)	0.5643	**SM(d18:1/16:0)**	**0.0402** ↓	**HexCer(d18:2/20:0)**	**<0.0001** ↓
12	**PC(34:2)**	**0.0106** ↑	HexCer(d18:1/22:0)	0.8815	**TG(45:0)**	**<0.0001** ↑	PE(36:3)	0.0837
13	PE(40:6)	0.6080	**PE(16:0/20:4)+ PE(18:2/18:2)**	**0.0069** ↑	**TG(51:5)**	**0.0015** ↑	Cer(d18:1/25:0)	0.0883
14	PC(37:5)	0.0672	PE(32:0)	0.6779	**PC(34:3)**	**0.0223** ↑	**Cer(d18:2/26:1)**	**0.0001** ↓
15	SM(d18:1/14:0)	0.1105	Cer(d18:1/26:0)	0.2129	**Cer(d18:2/23:0)**	**0.0232** ↓	**PE(36:2)**	**0.0077** ↑
16	**PC(32:2e)**	**0.0126** ↑	Cer(d18:1/22:0)	0.2392	**TG(47:3)**	**<0.0001** ↑	**PE(18:0/20:3)**	**0.0247** ↓
17	PE(36:5e)	0.2484	SM(d18:1/16:0)	0.9610	PE(38:2)	0.0681	PE(32:0)	0.1620
18	PC(38:4)	0.3370	Cer(d18:1/25:0)	0.4881	**PE(38:4)**	**0.0034** ↓	**PC(16:0/20:4)**	**0.0054** ↓
19	**PE(34:4e)**	**0.0026** ↑	PC(16:0/16:1)+ PC(14:0/18:1)[5]	0.1994	**PC(38:3)**	**0.0032** ↓	**PE(38:4)**	**0.0066** ↓
20	**PC(30:1)**	**0.0103** ↑	PE(18:1/18:0)	0.0745	**PE(40:2)+ PC(37:2)**[5]	**0.0002** ↓	**Cer(d17:1/22:0)**	**0.0435** ↑

[a]Abbreviations: ESI+, positive electrospray ionization mode in mass spectrometry. ESI-, negative electrospray ionization mode in mass spectrometry. Cer, ceramide. HexCer, hexosylceramide. SM, sphingomyelin. TG, triacylglycerol. DG, diacylglycerol. LysoPC, lysophophosphatidylcholine. LysoPE, lysophosphatidylethanolamine. PC, phosphatidylcholine. PE, phosphatidylethanolamine. PI, phosphatidylinositol. [b]*p*-values were obtained from repeated measures of ANOVA by the SAS software. [c]The bold text represents the species displaying significant diet or time effects in repeated measures ANOVA ($P<0.05$). [d]The arrows (↑ and ↓) indicates the increase or decrease of lipid concentrations in the HIGH group compared to the CON group or the increase or decrease of lipid concentrations across the time, respectively. [e]The ambiguous subspecies indicates that the lipidomic profiling gave two possible identifications of the lipid.

Table 3 Top 20 lipids that contributed to the differences between the lipidomic profiles of HIGH and CON groups or that between different time points in the AT datasets.

Rank	AT ESI+ Diet (PL1)		AT ESI- Diet (PL2)	
	Lipid species	*P*-value	Lipid species	*P*-value
1	PC(34:2)	0.2709	PE(36:3e)	0.2818
2	TG(56:5)	0.7784	PI(38:5)	0.3775
3	TG(58:7)	0.0843	PI(18:0/20:4)	0.298
4	TG(53:2)	0.903	**Cer(d18:1/20:0)**	**0.0243** ↑
5	TG(17:0/18:1/18:1)	0.6762	**Cer(d17:1/22:0)**	**0.0269** ↑
6	TG(56:5)	0.1568	PE(16:0/20:4)+ PE(18:2/18:2)	0.1147
7	**SM(d18:1/24:0)**	**0.0341** ↓	Cer(d18:1/18:0)	0.8897
8	TG(47:3)	0.2982	PE(18:0/18:2)	0.725
9	TG(52:4)	0.6726	**Cer(d18:1/22:0)**	**0.0173** ↑
10	TG(54:5)	0.1141	PE(36:3)	0.5619
11	TG(14:0/16:0/17:0)+ TG(14:0/18:0/15:0)	0.5382	Cer(d18:1/16:0)	0.3368
12	LysoPC(16:0)	0.3203	PE(18:0/20:3)	0.6399
13	TG(51:4)	0.6832	PE(36:2)	0.7443
14	ChoE(18:0) fragm	0.0934	Cer(d18:1/22:1)	0.0749
15	PC(32:1)	0.7274	PE(38:4)	0.6935
16	TG(50:4)	0.7212	PE(38:4)	0.8571
17	SM(d18:1/24:1)	0.6415	PI(40:5)	0.1339
18	TG(48:4)	0.8332	PE(38:4e)	0.1509
19	PC(38:3)	0.6716	Cer(d18:1/25:0)	0.5819
20	PC(36:2)	0.5518	PE(36:2e)	0.6256

[a]Abbreviations: ESI+, positive electrospray ionization mode in mass spectrometry. ESI-, negative electrospray ionization mode in mass spectrometry Cer, ceramide. SM, sphingomyelin. TG, triacylglycerol. ChoE, cholesteryl ester, LysoPC lysophophosphatidylcholine. PC, phosphatidylcholine. PE, phosphatidylethanolamine. PI, phosphatidylinositol. [b]*P*-values were obtained from repeated measures ANOVA in SAS. [c]The bold text represents the species that have significant diet or time effect in repeated measures ANOVA ($P<0.05$). [d]The arrows (↑ and ↓) indicate the increase or decrease of lipid concentrations in the HIGH group compared to the CON group or the increase or decrease of lipid concentrations across the time, respectively. [e]The ambiguous subspecies indicates that the lipidomic profiling gave two possible identifications of the lipid.

Prepartal overfeeding alters the lipidomic profiles associated with insulin resistance in the liver and the adipose tissue of transition dairy cows

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Online Resource 1 Lipidomics analyses (UPLC-QTof-ESI-MS)

Lipidomics runs were performed on a Waters Q-Tof Premier mass spectrometer fitted with an Acquity Ultra Performance LC™ (UPLC). The column (at 50°C) was an Acquity UPLC™ BEH C18 2.1 × 100 mm with 1.7 μm particles. The solvent system included ultrapure water (1% 1 M NH_4Ac, 0.1% HCOOH) and (B) acetonitrile/isopropanol (1:1, 1% 1M NH_4Ac, 0.1% HCOOH, LC-MS grade). The gradient started from 65% A / 35% B, reached 80% B in 2 min, 100% B in 7 min, and remained there for 7 min. The flow rate was 0.400 ml/min and the injected amount 2.0 μl (Acquity Sample Organizer, at 10°C). Reserpine and leucine enkephaline were used as lock spray reference compounds in ESI positive and negative ion modes, respectively.

The lipid profiling was carried out in either the ESI positive or ESI negative mode and the data (centroid) were collected at a mass range of m/z 300-1200 with scan duration of 0.2 sec. The cone and capillary voltages were 40 V and 3.1 kV, respectively. Source temperature was 120 ℃ and the desolvation gas flow and temperature 800 L/h and 270 °C, respectively. The peaks were measured by using the peak heights.

Online Resource Table S1

Number of masses detected in lipidomic profiling.

Class	Liver		Adipose tissue	
	ESI+	ESI-	ESI+	ESI-
Total detected masses	296	1325	541	603
Ceramide (Cer)	6	25	0	16
Hexosyl ceramide (HexCer)	0	6	0	1
Diacylglycerol (DG)	2	0	0	0
Phophosphatidylcholine (PC)	69	8	7	4
Phosphatidylethanolamine (PE)	54	21	0	26
Phosphatidylinositol (PI)	1	1	0	6
Sphingomyelin (SM)	9	1	3	1
Cholesteryl ester (CHoE)	0	0	3	0
Lysophophosphatidylcholine (LysoPC)	3	1	2	0
Lysophosphatidylethanolamine (Lyso PE)	1	1	0	0
Triacylglycerol (TG)	117	0	40	0
Unknown	34	1261	486	549

Abbreviations: ESI+, positive electrospray ionization mode in mass spectrometry. ESI-, negative electrospray ionization mode in mass spectrometry.

Online Resource Table S2
PCA-LDA loadings of lipid subspecies identified in lipidomic profiling.

Formula for principal component analysis-linear discriminant analysis (PCA-LDA) functions
$F(PL_n)=PL_{n,1}\cdot VAR_1+PL_{n,2}\cdot VAR_2+PL_{n,3}\cdot VAR_3+\cdots+PL_{n,m}\cdot VAR_m$
$F(PL_n)$=PCA-LDA function n, PL=PCA-LDA loading n, VAR=concentration of lipid,
m=total number of lipid subspecies, n=total number of PCA-LDA funcitons

a) Liver positive electrospray ionization mode (ESI+)

No.	Subspecies	PL1	PL2	PL3
1	Cer(d18:1/16:0)	-0.029	-0.067	-0.011
2	Cer(d18:1/18:0)	-0.038	-0.101	-0.029
3	Cer(d18:1/24:0)	-0.024	-0.049	0.002
4	Cer(d18:1/24:1)	-0.039	-0.087	0.020
5	Cer(d18:1/26:1)	-0.001	0.039	0.019
6	Cer(d18:2/23:0)	-0.051	-0.049	0.020
7	DG(33:5)	0.068	0.069	-0.015
8	DG(34:1)Na	0.022	0.030	-0.010
9	LysoPC(16:0)	-0.027	-0.130	-0.044
10	LysoPC(18:0)	-0.027	-0.153	-0.036
11	LysoPC(18:2)	0.023	-0.028	-0.042
12	LysoPE(18:0)	-0.023	-0.149	-0.025
13	PC(16:0/20:4)	-0.024	0.062	-0.007
14	PC(16:0/20:5)	0.017	-0.008	-0.046
15	PC(16:0/22:5)	-0.003	-0.064	-0.050
16	PC(16:1/20:4)	0.017	-0.045	0.006
17	PC(18:0/22:6)	-0.058	-0.014	-0.021
18	PC(18:1/20:4)	-0.034	-0.049	-0.047
19	PC(30:0)	0.000	-0.070	-0.024
20	PC(30:1)	0.018	-0.110	-0.027
21	PC(32:0)	0.029	0.010	0.018
22	PC(32:1)	0.035	-0.017	-0.038
23	PC(32:1)	-0.015	-0.104	0.001
24	PC(32:1e)	-0.019	-0.029	0.027
25	PC(32:2)	0.030	-0.091	-0.028
26	PC(32:2)	-0.009	-0.054	-0.018
27	PC(32:2)	0.027	-0.137	-0.046
28	PC(32:2e)	0.019	-0.118	-0.028
29	PC(33:2)	0.022	-0.041	-0.007
30	PC(34:1)	0.035	0.063	-0.026
31	PC(34:1e)	0.029	-0.006	0.012
32	PC(34:2)	0.032	0.028	0.001
33	PC(34:2)	0.018	-0.125	-0.035
34	PC(34:3)	-0.003	-0.065	-0.004
35	PC(34:3)	0.052	0.059	0.014
36	PC(34:4)	0.047	-0.006	0.004
37	PC(34:4)+PE(37:4)[a]	0.021	0.091	0.033
38	PC(34:4e)	0.037	0.020	0.011
39	PC(34:5)	-0.039	-0.074	0.005
40	PC(35:2)	0.017	-0.030	0.020
41	PC(36:1)	0.028	-0.007	-0.024
42	PC(36:2)	0.011	-0.018	0.016
43	PC(36:2)	0.038	0.026	0.022
44	PC(36:3)	-0.001	-0.009	0.019
45	PC(36:4)	-0.046	0.010	0.044
46	PC(36:4e)	0.045	0.084	0.003
47	PC(36:5)	-0.019	0.008	0.006

48	PC(36:6)	0.001	-0.079	-0.003
49	PC(36:6e)	0.029	-0.082	-0.088
50	PC(38:1)	0.000	0.051	0.013
51	PC(38:1)	0.012	-0.029	-0.012
52	PC(38:1)	-0.035	-0.049	-0.006
53	PC(38:3)	-0.047	-0.001	0.034
54	PC(38:3)	-0.031	0.065	0.031
55	PC(38:3)	-0.012	0.108	0.028
56	PC(38:4)	-0.046	0.005	0.026
57	PC(38:4)	0.010	0.116	0.011
58	PC(38:4e)	-0.046	-0.022	0.006
59	PC(38:5e)	0.034	0.039	0.007
60	PC(38:5e)	-0.011	0.005	0.001
61	PC(38:5e)	-0.018	-0.045	0.012
62	PC(38:6)	0.059	-0.028	-0.018
63	PC(38:6)	-0.024	0.018	-0.014
64	PC(38:6e)	-0.028	-0.057	0.015
65	PC(38:7e)	-0.044	0.010	0.040
66	PC(40:3)	-0.028	0.024	0.004
67	PC(40:3e)	0.041	0.080	0.006
68	PC(40:4)	0.000	-0.025	-0.039
69	PC(40:4)	-0.042	-0.025	-0.008
70	PC(40:4e)	0.021	-0.003	0.027
71	PC(40:5)	-0.017	0.008	-0.007
72	PC(40:5e)	0.015	0.044	0.005
73	PC(40:7)	0.006	-0.067	0.011
74	PC(40:7)	-0.007	0.059	0.025
75	PC(40:8)	0.069	0.047	0.003
76	PC(40:8e)	-0.005	0.017	0.021
77	PC(p16:0/20:4)	0.013	0.002	-0.019
78	PE(32:1)	0.012	-0.175	-0.010
79	PE(32:3e)	0.035	-0.076	0.000
80	PE(34:1)	0.035	0.027	-0.005
81	PE(34:2)	0.027	0.003	0.020
82	PE(34:2e)	0.028	-0.145	-0.045
83	PE(34:3e)	0.020	-0.088	0.003
84	PE(34:4e)	-0.005	-0.114	0.006
85	PE(36:0)	-0.014	-0.022	0.004
86	PE(36:0)	0.059	0.141	0.020
87	PE(36:1)	0.004	0.019	0.029
88	PE(36:1)	0.029	-0.002	-0.019
89	PE(36:1)	0.004	0.006	-0.006
90	PE(36:2)	0.020	0.005	0.025
91	PE(36:2e)	0.064	0.136	-0.025
92	PE(36:2e)	0.002	-0.006	0.018
93	PE(36:2e)	-0.010	-0.083	-0.001
94	PE(36:3)	0.002	-0.059	0.014
95	PE(36:3e)	-0.008	-0.018	0.051
96	PE(36:3e)	0.007	-0.070	0.012
97	PE(36:4)	0.034	0.091	0.028
98	PE(36:4e)	-0.028	-0.041	0.022
99	PE(36:5)	0.031	0.044	0.029
100	PE(36:5e)	-0.046	0.075	0.068
101	PE(36:5e)	0.027	0.117	0.019
102	PE(38:0)	-0.018	-0.026	0.004
103	PE(38:1)	-0.006	-0.026	0.005
104	PE(38:1)	-0.009	-0.028	-0.008

105	PE(38:1e)	0.024	0.048	0.022
106	PE(38:2)	0.022	-0.053	0.000
107	PE(38:2)	-0.048	0.092	0.053
108	PE(38:2)	-0.024	0.028	0.010
109	PE(38:3)	-0.014	0.130	0.058
110	PE(38:3)	-0.039	0.096	0.049
111	PE(38:3)	-0.043	0.059	0.043
112	PE(38:4)	0.015	0.093	0.026
113	PE(38:4)	-0.047	0.026	0.036
114	PE(38:5)	0.016	0.057	0.012
115	PE(38:5)	0.020	0.041	0.005
116	PE(38:5e)	-0.031	0.074	0.041
117	PE(38:6)	0.020	-0.009	0.046
118	PE(38:6e)	0.040	0.057	0.031
119	PE(38:6e)	-0.013	-0.088	0.024
120	PE(40.1)+PC(37:1)[a]	-0.039	-0.083	-0.013
121	PE(40:2)+PC(37:2)[a]	-0.047	-0.081	-0.008
122	PE(40:3)	0.008	0.061	0.014
123	PE(40:3)	-0.040	-0.005	0.029
124	PE(40:4)	-0.001	0.056	0.004
125	PE(40:4e)	0.066	0.039	0.020
126	PE(40:5)	-0.023	0.025	-0.007
127	PC(37:5)	-0.014	-0.119	-0.041
128	PE(40:6)	-0.034	-0.019	-0.038
129	PE(40:6)	0.015	-0.043	0.004
130	PE(40:6)	0.001	0.036	0.019
131	PE(40:6)	-0.015	0.124	0.019
132	PE(40:6e)	-0.029	0.078	0.010
133	PC(39:6)	0.026	0.085	0.018
134	PE(p16:0/22:6)	-0.084	-0.094	0.014
135	PE(p18:0/20:4)	-0.013	0.166	0.028
136	PI(38:5)	0.043	-0.044	-0.011
137	SM(d18:1/14:0)	-0.001	-0.118	-0.017
138	SM(d18:1/16:0)	-0.056	-0.051	0.023
139	SM(d18:1/16:1)	-0.046	-0.061	0.008
140	SM(d18:1/18:0)	-0.039	-0.074	0.019
141	SM(d18:1/20:0)	-0.022	-0.061	0.031
142	SM(d18:1/21:0)	-0.005	-0.082	0.036
143	SM(d18:1/23:0)	-0.029	-0.087	0.037
144	SM(d18:1/23:1)	-0.039	-0.086	0.029
145	SM(d18:1/24:1)	0.010	-0.074	-0.030
146	TG(14:0/16:0/16:0)+ TG(16:0/18:0/12:0)[a]	0.035	-0.008	-0.015
147	TG(14:0/16:0/17:0)+ TG(14:0/18:0/15:0)[a]	0.038	-0.019	-0.015
148	TG(14:0/16:0/17:0)+ TG(14:0/18:0/15:0)[a]	0.044	-0.006	-0.012
149	TG(16:0/16:0/16:0)+ TG(14:0/16:0/18:0)[a]	0.024	-0.007	-0.008
150	TG(16:0/18:1/18:1)	0.000	-0.030	-0.009
151	TG(16:0/18:1/20:1)+ TG(18:0/18:1/18:1)[a]	-0.028	-0.035	-0.003
152	TG(16:0/18:2/18:1)+ TG(16:1/18:1/18:1)[a]	0.014	-0.019	0.000
153	TG(17:1/18:1/18:2)	0.022	-0.029	0.000

154	TG(18:1/16:1/18:2)+ TG(18:2/18:2/16:0)[a]	0.022	-0.013	0.003
155	TG(18:1/18:1/18:1)	-0.008	-0.023	0.007
156	TG(18:1/18:1/22:1)+ TG(20:1/20:1/18:1)[a]	0.019	-0.038	0.001
157	TG(37:0)	0.015	0.019	0.010
158	TG(38:0)	-0.018	-0.026	0.016
159	TG(42:0)	0.028	-0.038	-0.009
160	TG(42:1)	0.028	-0.016	-0.011
161	TG(44:0)	0.040	-0.001	-0.016
162	TG(44:1)	0.039	-0.002	-0.007
163	TG(44:2)	0.035	-0.018	-0.006
164	TG(45:0)	0.054	0.002	-0.015
165	TG(46:1)	0.041	0.010	-0.008
166	TG(46:2)	0.035	-0.019	-0.006
167	TG(46:3)	0.009	0.001	0.022
168	TG(46:3)	0.044	-0.010	-0.002
169	TG(47:1)	0.045	0.010	-0.007
170	TG(47:2)	0.046	-0.003	-0.005
171	TG(47:3)	0.049	-0.001	-0.004
172	TG(48:1)	0.030	0.008	-0.004
173	TG(48:2)	0.032	-0.002	-0.002
174	TG(48:3)	0.041	-0.004	-0.001
175	TG(48:4)	0.039	-0.006	0.001
176	TG(48:5)	0.070	0.147	0.010
177	TG(49:0)	0.017	-0.003	-0.007
178	TG(49:0)	0.022	0.003	0.001
179	TG(49:1)	0.034	0.011	-0.002
180	TG(49:2)	0.036	0.005	0.001
181	TG(49:3)	0.042	-0.004	0.000
182	TG(49:4)	0.042	-0.011	-0.002
183	TG(50:0)	0.037	0.017	0.001
184	TG(50:0)	0.002	0.002	-0.008
185	TG(50:1)	0.038	0.000	-0.001
186	TG(50:1)	0.017	0.004	-0.012
187	TG(50:2)	-0.006	0.014	-0.006
188	TG(50:2)	0.037	0.007	0.000
189	TG(50:2)	0.022	-0.002	0.001
190	TG(50:3)	0.035	0.004	0.002
191	TG(50:6)	0.029	-0.013	0.012
192	TG(51:1)	0.021	-0.033	0.004
193	TG(51:1)	0.013	0.003	0.000
194	TG(51:1)	0.022	0.015	0.002
195	TG(51:2)	0.021	-0.001	0.002
196	TG(51:2)	0.029	0.016	-0.001
197	TG(51:3)	0.032	0.003	0.004
198	TG(51:4)	0.033	-0.016	0.000
199	TG(51:5)	0.053	0.030	-0.026
200	TG(51:5)	0.039	-0.004	0.006
201	TG(52:0)	-0.045	0.038	0.013
202	TG(52:0)	0.031	0.029	0.004
203	TG(52:1)	0.000	0.018	-0.005
204	TG(52:3)	0.012	0.017	-0.041
205	TG(52:5)	0.028	-0.006	0.006
206	TG(53:0)	-0.013	0.003	0.001
207	TG(53:0)	-0.039	0.010	0.018
208	TG(53:0)	0.029	0.024	0.012

209	TG(53:0)	-0.041	0.018	0.014
210	TG(53:1)	-0.019	-0.008	0.002
211	TG(53:1)	0.029	-0.011	0.001
212	TG(53:1)	-0.010	-0.001	-0.005
213	TG(53:3)	0.020	-0.018	0.004
214	TG(53:3)	0.016	-0.001	0.005
215	TG(53:5)	0.018	0.016	0.003
216	TG(53:5)	0.028	-0.019	0.005
217	TG(53:6)	0.000	-0.008	0.002
218	TG(54:0)	-0.058	0.039	0.023
219	TG(54:0)	0.023	0.015	0.003
220	TG(54:1)	-0.042	0.018	0.008
221	TG(54:1)	0.027	0.001	0.003
222	TG(54:2)	0.017	0.019	0.017
223	TG(54:2)	-0.006	-0.002	0.011
224	TG(54:4)	0.020	0.005	0.012
225	TG(54:5)	0.023	-0.005	0.008
226	TG(54:6)	0.025	-0.019	0.009
227	TG(54:9)	-0.003	-0.004	0.006
228	TG(55:1)	-0.003	-0.008	0.005
229	TG(55:1)	0.022	-0.006	0.015
230	TG(55:2)	0.027	-0.013	0.002
231	TG(55:2)	-0.009	-0.017	0.001
232	TG(55:3)	-0.003	-0.007	0.012
233	TG(55:4)	0.017	0.002	0.023
234	TG(55:5)	0.025	-0.022	0.002
235	TG(55:6)	0.028	-0.036	0.005
236	TG(56:0)	0.015	0.026	0.000
237	TG(56:1)	-0.007	0.011	0.014
238	TG(56:1)	0.006	0.014	0.009
239	TG(56:1)	0.023	0.017	0.013
240	TG(56:2)	-0.008	-0.007	0.012
241	TG(56:2)	0.029	0.008	0.006
242	TG(56:3)	0.000	0.013	0.027
243	TG(56:3)	-0.003	-0.010	0.018
244	TG(56:3)	0.002	-0.078	0.004
245	TG(56:4)	0.025	-0.002	0.008
246	TG(56:4)	-0.008	-0.015	0.029
247	TG(56:4)	0.002	-0.036	0.013
248	TG(56:5)	0.007	-0.022	0.010
249	TG(56:5)	-0.001	-0.008	0.024
250	TG(56:6)	0.016	-0.012	0.013
251	TG(56:7)	0.016	-0.037	0.011
252	TG(56:8)	0.014	-0.037	0.010
253	TG(57:1)	0.023	0.019	0.010
254	TG(57:2)	0.021	-0.010	-0.003
255	TG(57:3)	0.029	-0.014	0.003
256	TG(58:2)	0.024	0.005	0.005
257	TG(58:5)	0.001	-0.043	0.017
258	TG(58:5)	-0.043	-0.056	-0.011
259	TG(58:6)	-0.026	-0.110	0.001
260	TG(58:7)	-0.002	-0.083	0.012
261	TG(58:8)	-0.012	-0.081	0.016
262	TG(59:3)	0.000	-0.041	0.007

b) Liver negative electrospray ionization mode (ESI-)

VAR	Species	PL1	PL2	PL3
1	Cer(d17:1/22:0)	0.200	-0.053	-0.008
2	Cer(d18:1/23:1)	-0.177	0.031	-0.109
3	Cer(d18:0/16:0)	0.034	-0.074	0.090
4	Cer(d18:0/18:0)	-0.108	-0.032	-0.071
5	Cer(d18:0/23:0)	0.073	-0.099	-0.081
6	Cer(d18:0/24:0)	-0.034	-0.153	-0.032
7	Cer(d18:1/16:0)	0.089	0.086	0.071
8	Cer(d18:1/18:0)	-0.073	0.045	0.056
9	Cer(d18:1/19:0)	0.083	-0.004	-0.053
10	Cer(d18:1/20:0)	0.043	-0.094	-0.055
11	Cer(d18:1/22:0)	0.117	-0.120	-0.055
12	Cer(d18:1/23:0)	0.622	0.215	-0.124
13	Cer(d18:1/23:0)	0.239	0.004	-0.120
14	Cer(d18:1/24:0)	-0.139	-0.158	-0.096
15	Cer(d18:1/24:1)	0.175	0.096	-0.127
16	Cer(d18:1/25:0)	-0.271	-0.113	-0.158
17	Cer(d18:1/26:0)	-0.081	0.127	0.087
18	Cer(d18:2/26:0)	-0.356	-0.052	-0.021
19	Cer(d18:2/16:0)	-0.113	0.092	0.076
20	Cer(d18:2/18:0)	0.075	0.172	-0.021
21	Cer(d18:2/20:0)	-0.325	-0.040	-0.046
22	Cer(d18:2/22:0)	-0.328	-0.081	-0.039
23	Cer(d18:2/23:1)	-0.159	0.076	-0.035
24	Cer(d18:2/24:1)	0.074	0.165	-0.115
25	Cer(d18:1/25:1)	0.087	0.098	-0.057
26	Cer(d18:2/26:1)	-0.258	-0.009	-0.046
27	HexCer(d18:1/16:0)	-0.034	-0.043	0.058
28	HexCer(d18:1/22:0)	-0.145	-0.134	0.002
29	HexCer(d18:1/23:0)	0.093	-0.058	0.044
30	HexCer(d18:1/24:0)	-0.043	0.012	0.025
31	HexCer(d18:1/24:1)	-0.161	0.035	-0.059
32	HexCer(d18:2/20:0)	-0.317	-0.035	0.028
33	LysoPC(18:0)	0.644	0.085	0.290
34	LysoPE(18:0)	0.159	0.075	0.026
35	PC(16:0/16:1)+ PC(14:0/18:1)[a]	0.026	0.105	-0.071
36	PC(16:0/20:4)	-0.209	0.010	-0.078
37	PC(18:1/20:1)	-0.083	0.062	-0.051
38	PC(30:0)	0.115	0.019	0.031
39	PC(33:0)	-0.134	0.045	0.089
40	PC(33:1)	0.696	0.490	0.034
41	PC(36:2)	0.167	0.202	-0.018
42	PC(38:3)	-0.441	-0.208	0.035
43	PE(16:0/20:4)+ PE(18:2/18:2)[a]	-0.049	-0.133	0.049
44	PE(18:0/18:1)	0.046	0.055	0.038
45	PE(18:0/20:3)	-0.240	-0.061	0.036
46	PE(18:0/22:4)	-0.086	0.085	0.057
47	PE(18:1/18:0)	0.095	0.104	0.073
48	PE(32:0)	0.225	0.130	0.054
49	PE(34:1)	0.081	-0.080	0.079
50	PE(36:2)	0.248	0.050	-0.004
51	PE(36:2e)	0.064	0.076	-0.022
52	PE(36:3)	0.293	0.075	0.011
53	PE(36:3e)	0.134	-0.014	-0.064

54	PE(38:4)	-0.207	-0.056	0.041
55	PE(38:4e)	-0.156	-0.024	0.041
56	PE(38:5e)	-0.045	-0.043	0.061
57	PE(p16:0/18:1)	0.525	0.266	0.031
58	PE(p16:0/18:2)	0.487	0.230	0.026
59	PE(P-16:0/20:4)	0.011	0.018	0.071
60	PE(P-16:0/22:6)	-0.032	0.032	0.035
61	PI(40:6)	-0.047	0.000	0.140
62	SM(d18:1/16:0)	0.129	0.115	0.237
63	PE(18:3/14:1)	0.624	0.413	0.003
64	PE(18:2/16:1)	-0.056	0.001	-0.074
65	PE(22:5/18:0)	0.049	0.076	0.131

c) Adipose tissue positive electrospray ionization mode (ESI+)

VAR	Species	PL1	PL2	PL3	PL4	PL5
1	ChoE(14:0)	0.152	0.004	0.623	0.330	-0.829
2	ChoE(18:0)fragm	1.250	0.622	0.085	-0.125	0.046
3	ChoE(18:0)fragm	0.503	0.177	-0.602	0.986	0.788
4	LysoPC(16:0)	-1.418	-0.572	-0.601	-0.601	0.361
5	LysoPC(18:0)	-0.820	-0.282	0.805	0.296	-0.122
6	PC(32:0)	0.958	0.209	1.083	-0.292	-0.873
7	PC(32:1)	1.247	-1.561	-1.783	-0.154	0.494
8	PC(34:1)	0.113	0.964	0.285	0.484	-0.313
9	PC(34:2)	-3.166	-0.576	-0.765	0.874	-1.137
10	PC(36:2)	1.168	0.289	0.367	-1.097	-0.511
11	PC(38:3)	1.179	-0.417	0.285	-0.469	0.137
12	PC(38:4)	-1.010	-1.265	-0.175	0.759	0.058
13	SM(d18:1/16:0)	-0.677	2.407	0.167	0.081	0.050
14	SM(d18:1/24:0)	-1.712	-0.070	1.002	0.369	-0.114
15	SM(d18:1/24:1)	1.224	-0.052	-0.052	-1.252	1.425
16	TG(14:0/16:0/17:0)+ TG(14:0/18:0/15:0)[a]	1.453	1.225	-0.606	0.303	0.160
17	TG(14:0/16:0/17:0)+ TG(14:0/18:0/15:0)[a]	0.096	1.463	-0.670	0.638	0.535
18	TG(17:0/18:1/18:1)	-1.917	0.111	-0.711	0.737	0.423
19	TG(17:1/18:1/18:2)	1.109	0.204	0.588	-0.377	-0.669
20	TG(18:1/18:2/18:1)	0.193	-0.503	-0.412	0.262	-0.483
21	TG(44:1)	0.339	-0.611	0.282	-0.707	0.494
22	TG(45:0)	-0.767	1.079	-1.934	0.496	-0.380
23	TG(45:1)	-0.994	-0.170	-1.673	-0.044	0.026
24	TG(46:1)	-0.451	-0.152	-0.153	-0.025	0.511
25	TG(46:3)	-0.169	0.434	-0.224	0.154	0.732
26	TG(47:1)	-1.075	0.023	-0.431	0.342	-0.614
27	TG(47:2)	-0.647	0.252	0.250	-0.030	-0.907
28	TG(47:3)	1.623	0.339	1.701	-1.419	0.468
29	TG(48:1)	-0.605	0.836	0.647	0.604	0.015
30	TG(48:2)	-0.458	0.088	-0.339	0.476	-0.149
31	TG(48:4)	1.209	-0.650	1.091	-1.036	-0.262
32	TG(49:0)	0.623	-1.215	1.912	-0.637	-0.892
33	TG(49:2)	-0.527	-0.189	0.438	0.232	-1.411
34	TG(50:4)	1.224	-0.860	0.422	-0.648	-0.582
35	TG(50:5)	-0.811	-0.658	2.293	-0.752	0.304
36	TG(51:2)	-0.761	0.151	-0.377	0.758	-0.536
37	TG(51:2)	1.041	-0.050	-0.933	0.114	1.621
38	TG(51:4)	1.350	-0.079	-0.275	-0.582	-0.047

39	TG(52:2)	0.690	-0.083	0.119	0.091	0.364
40	TG(52:3)	0.642	-0.618	-0.375	0.160	-0.488
41	TG(52:4)	1.544	-0.757	0.016	-0.471	-0.333
42	TG(53:2)	-1.956	0.271	0.943	0.873	-1.266
43	TG(53:2)	-0.329	0.955	-0.758	1.137	0.011
44	TG(53:3)	0.927	0.126	-0.995	-0.293	0.409
45	TG(53:5)	-0.714	0.689	-0.619	0.841	1.342
46	TG(54:0)	0.584	-1.519	1.653	-1.479	1.497
47	TG(54:5)	-1.461	-0.618	-0.558	0.858	-0.657
48	TG(54:6)	-0.369	0.906	-1.346	0.908	-0.452
49	TG(55:4)	0.318	0.115	-0.032	0.086	-0.535
50	TG(55:5)	0.250	-1.474	1.568	-0.469	-0.353
51	TG(56:4)	0.214	-0.425	-0.926	0.220	1.479
52	TG(56:5)	-1.873	-0.105	0.425	-0.032	1.089
53	TG(56:5)	3.010	0.729	0.104	-0.506	0.565
54	TG(56:6)	0.679	2.207	-0.142	0.352	-0.844
55	TG(58:7)	-2.002	-0.405	-0.642	0.118	0.974

d) Adipose tissue negative electrospray ionization mode (ESI-)

VAR	Species	PL1	PL2	PL3	PL4	PL5
1	Cer(d17:1/22:0)	0.563	1.066	-0.130	-0.285	0.248
2	Cer(d18:1/23:1)	0.540	0.043	-0.096	-0.095	-0.369
3	Cer(d18:1/16:0)	1.966	-0.926	-0.601	0.100	0.354
4	Cer(d18:1/18:0)	1.146	-0.989	-0.710	0.250	0.378
5	Cer(d18:1/20:0)	-0.896	1.090	0.335	0.481	-0.475
6	Cer(d18:1/22:0)	2.735	-0.970	-1.148	0.442	0.415
7	Cer(d18:1/23:0)	0.840	-0.096	-0.551	0.624	0.196
8	Cer(d18:1/24:0)	-0.979	0.164	0.711	0.452	0.175
9	Cer(d18:1/24:1)	0.108	0.386	-0.632	-0.640	0.159
10	Cer(d18:1/25:0)	0.808	-0.665	0.825	-0.295	1.100
11	Cer(d18:2/16:0)	-2.019	0.539	0.274	-0.152	-0.798
12	Cer(d18:2/18:0)	-2.260	-0.057	0.827	-0.710	-0.194
13	Cer(d18:1/22:1)	-0.616	0.814	0.564	-0.080	-0.362
14	Cer(d18:2/24:1)	-1.693	0.448	-0.324	-0.554	-0.101
15	Cer(d18:2/25:0)	-0.228	0.052	0.461	-0.666	-0.122
16	HexCer(d18:1/22:0)	-0.474	0.250	0.010	0.419	0.740
17	PE(18:0/16:1)	1.290	0.063	-0.320	0.997	0.857
18	PE(18:0/18:2)	-1.062	0.973	1.076	0.358	0.261
19	PC(18:1/18:0)	1.292	-0.427	-0.213	0.155	0.427
20	PC(36:2)	0.340	-0.473	0.149	0.879	-0.280
21	PC(36:3)	0.687	0.206	0.573	0.288	0.151
22	PC(38:3)	0.009	-0.342	-0.447	-0.315	0.098
23	PE(16:0/20:4)+ PE(18:2/18:2)[a]	0.619	1.015	0.148	-0.314	0.651
24	PE(18:0/18:1)	0.576	-0.159	-0.004	-0.619	0.587
25	PE(18:0/20:3)	-0.051	-0.865	0.288	0.320	-0.871
26	PE(18:0/22:6)	-2.515	-0.018	0.839	-0.340	-0.862
27	PE(18:1/18:0)	-0.161	0.132	-0.964	0.281	-1.130
28	PE(34:1)	0.018	0.348	0.202	-0.066	0.144
29	PE(36:2)	-1.127	0.851	0.999	0.071	0.173
30	PE(36:2)	0.263	-0.200	-0.095	0.271	-1.328
31	PE(36:2e)	-0.455	0.622	0.280	-0.790	0.244
32	PE(36:3)	1.228	-0.937	-1.088	-0.469	0.471
33	PE(36:3e)	2.028	-1.605	-0.485	0.548	0.780
34	PE(36:5e)	-0.570	-0.419	0.519	-0.917	-0.080

35	PE(36:5e)	0.255	0.023	0.474	0.777	0.030
36	PE(38:4)	-0.275	0.522	-0.212	0.802	0.621
37	PE(38:4)	1.474	-0.784	0.117	-0.285	0.089
38	PE(38:4)	1.439	-0.404	-0.443	0.782	-0.145
39	PE(38:4)	0.230	-0.800	-0.115	-0.536	0.397
40	PE(38:4e)	-0.829	0.700	-0.414	-0.607	-0.455
41	PE(38:5e)	0.039	0.483	-0.285	-0.020	0.469
42	PE(38:5e)	0.601	-0.038	-0.812	0.100	-0.099
43	PE(p16:0/18:1)	-0.208	0.286	0.811	-0.156	-0.355
44	PE(p16:0/18:2)	-0.993	-0.417	0.146	0.425	-0.001
45	PI(18:0/20:4)	-1.280	1.146	-0.067	-0.696	0.789
46	PI(36:3)	-0.289	0.025	0.838	0.040	-0.918
47	PI(36:4)	-0.222	0.129	0.270	-0.011	0.069
48	PI(38:3)	0.669	0.076	-0.843	0.756	-0.199
49	PI(38:5)	1.439	-1.297	-0.539	0.515	0.446
50	PI(40:5)	0.048	0.780	0.584	-0.496	-0.658
51	SM(d18:1/16:0)	0.738	-0.111	-0.249	-0.886	0.164
52	PE(18:0/20:4)	-0.429	0.102	-0.526	0.021	-0.307
53	PE(18:0/20:0)	-1.506	-0.197	0.005	0.426	-0.641

[a]The ambiguous subspecies indicates that the lipidomic profiling gave two possible identifications of the lipid. [b]Abbreviations: Cer, ceramide. HexCer, hexosylceramide. SM, sphingomyelin. TG, triacylglycerol. DG, diacylglycerol. ChoE, cholesteryl ester. LysoPC, lysophophosphatidylcholine. LysoPE, lysophosphatidylethanolamine. PC, phosphatidylcholine. PE, phosphatidylethanolamine. PI, phosphatidylinositol.

Online Resource Table S3

Results from the analysis of variance between the control group (CON) and the high-energy feeding group (HIGH) within time points in liver positive electrospray ionization mode (ESI+) dataset. *P* -values were obtained from the analysis performed using MIXED procedure in SAS, with diet as the fixed effect and pair as the random effect. Adjusted-*p* values were obtained from *p* -values after false discovery rate control.

	-8d				9d			
Lipid subspecies	CON	HIGH	*p* -value	Adjusted-*p*	CON	HIGH	*p* -value	Adjusted-*p*
Cer(d18:1/16:0)	-4.691	-4.375	0.1182	0.9106	-4.834	-4.671	0.4952	0.9916
Cer(d18:1/18:0)	-7.015	-6.713	0.1157	0.6487	-7.416	-6.870	0.0447	0.5220
Cer(d18:1/24:0)	-3.208	-2.755	0.0311	0.7513	-3.125	-2.776	0.1694	0.8405
Cer(d18:1/24:1)	-6.086	-5.474	0.0314	0.7983	-6.020	-5.826	0.3005	0.9042
Cer(d18:1/26:1)	-7.265	-7.318	0.9071	0.5996	-7.596	-7.103	0.2653	0.8968
Cer(d18:2/23:0)	-5.894	-5.377	0.0349	0.9845	-6.284	-6.089	0.2794	0.8988
DG(33:5)	-7.883	-7.896	0.9264	0.8789	-7.434	-7.407	0.8579	0.9929
DG(34:1)	-9.806	-9.959	0.7641	0.9228	-7.439	-7.375	0.8926	0.9929
LysoPC(16:0)	-5.827	-5.552	0.0854	0.7015	-5.851	-5.539	0.0228	0.4306
LysoPC(18:0)	-6.143	-5.305	0.0077	0.9845	-5.827	-5.473	0.0943	0.7775
LysoPC(18:2)	-8.220	-8.138	0.7955	0.8179	-7.846	-7.052	0.0901	0.7648
LysoPE(18:0)	-7.804	-7.756	0.7024	0.7582	-7.905	-7.732	0.2072	0.8405
PC(16:0/20:4)	0.681	0.792	0.1723	0.4870	0.552	0.666	0.4574	0.9702
PC(16:0/20:5)	-0.018	0.309	0.1656	0.4870	0.092	0.229	0.5984	0.9929
PC(16:0/22:5)	1.122	1.421	0.2044	0.7341	0.795	0.992	0.5351	0.9929
PC(16:1/20:4)	-5.566	-4.863	0.0008	0.6078	-4.147	-4.005	0.6935	0.9929
PC(18:0/22:6)	-0.049	0.325	0.0181	0.4870	-0.743	-0.737	0.9849	0.9957
PC(18:1/20:4)	1.392	1.904	0.0154	0.4870	1.054	1.211	0.6451	0.9929
PC(30:0)	-6.131	-5.171	0.0795	0.4870	-6.856	-6.446	0.1909	0.8405
PC(30:1)	-9.482	-8.359	0.0483	0.4870	-9.476	-8.841	0.0809	0.7532
PC(32:0)	-4.338	-4.026	0.1667	0.5128	-4.432	-4.411	0.8795	0.9929
PC(32:1)	-3.377	-2.976	0.0204	0.4870	-2.698	-2.315	0.0202	0.8968
PC(32:1)	-6.593	-5.485	0.2199	0.4870	-6.438	-6.110	0.2270	0.4306
PC(32:1e)	-8.011	-7.619	0.0852	0.4870	-8.170	-8.168	0.9822	0.9957
PC(32:2)	-7.227	-6.262	0.0162	0.4870	-7.146	-6.663	0.0319	0.8968
PC(32:2)	-9.428	-8.178	0.0228	0.4870	-10.674	-9.933	0.2517	0.9284
PC(32:2)	-5.959	-5.123	0.1087	0.4870	-5.415	-4.841	0.3345	0.4306
PC(32:2e)	-7.343	-6.366	0.0207	0.4870	-6.626	-6.114	0.0114	0.4306
PC(33:2)	-6.182	-5.580	0.0669	0.4870	-6.199	-5.869	0.3422	0.9293
PC(34:1)	-0.215	-0.094	0.6272	0.4870	0.345	0.537	0.3745	0.9628
PC(34:1e)	-7.669	-7.383	0.1087	0.4870	-6.910	-6.917	0.9351	0.9957
PC(34:2)	-1.296	-1.124	0.0515	0.5455	-0.627	-0.446	0.0315	0.9929
PC(34:2)	-8.731	-7.876	0.2738	0.4900	-8.295	-7.795	0.5100	0.4306
PC(34:3)	-3.258	-2.468	0.0083	0.4870	-2.623	-2.143	0.1862	0.8405
PC(34:3)	-4.289	-3.996	0.3054	0.4870	-3.670	-3.346	0.2062	0.8405
PC(34:4)	-6.747	-6.193	0.1242	0.4870	-5.848	-5.321	0.1939	0.8405
PC(34:4)+PE(37:4)[a]	-7.350	-7.107	0.3745	0.4870	-6.916	-6.756	0.3018	0.9042
PC(34:4e)	-8.425	-8.364	0.5441	0.4870	-7.904	-7.914	0.9186	0.9957
PC(34:5)	-8.319	-7.351	0.0063	0.4870	-9.465	-9.107	0.4418	0.9702
PC(35:2)	-4.698	-4.145	0.0898	0.4870	-4.359	-4.159	0.2748	0.8968
PC(36:1)	0.243	0.630	0.1733	0.4870	0.577	0.859	0.0521	0.5729
PC(36:2)	-3.765	-3.345	0.1684	0.4870	-3.550	-3.184	0.0175	0.4306
PC(36:2)	-0.165	0.058	0.3541	0.4870	0.465	0.682	0.0812	0.7532
PC(36:3)	-1.045	-0.585	0.0583	0.4870	-0.743	-0.521	0.1896	0.8405
PC(36:4)	-2.655	-1.880	0.0593	0.4870	-3.012	-3.018	0.9906	0.9957
PC(36:4e)	-7.319	-7.392	0.6636	0.4870	-7.165	-6.986	0.0299	0.4306
PC(36:5)	-7.697	-7.120	0.0655	0.4870	-7.918	-7.770	0.6020	0.9929

PC(36:6)	-5.085	-4.194	0.0132	0.4870	-4.969	-4.575	0.0593	0.6294
PC(36:6e)	-6.311	-5.945	0.3500	0.4870	-5.889	-5.587	0.2661	0.8968
PC(37:1)	-3.503	-2.155	0.0969	0.4900	-4.357	-4.061	0.2721	0.8988
PC(37:2)	-3.190	-2.567	0.0359	0.5815	-3.473	-3.508	0.4717	0.9929
PC(37:5)	-3.892	-3.162	0.5145	0.4870	-4.263	-4.007	0.8912	0.9628
PC(38:1)	-6.705	-6.359	0.7211	0.4870	-7.047	-6.975	0.3243	0.9929
PC(38:1)	-4.429	-3.536	0.0668	0.4870	-5.035	-4.565	0.7466	0.8968
PC(38:1)	-7.226	-5.919	0.0719	0.4870	-8.056	-7.896	0.6115	0.9867
PC(38:3)	-3.275	-2.716	0.4851	0.4870	-4.343	-4.193	0.4162	0.9929
PC(38:3)	-0.547	-0.173	0.0371	0.4870	-0.938	-1.097	0.9505	0.9929
PC(38:3)	-3.744	-3.651	0.0319	0.4870	-4.345	-4.628	0.0286	0.9172
PC(38:4)	-0.647	-0.091	0.0794	0.4870	-1.616	-1.590	0.1486	0.9957
PC(38:4)	-0.954	-0.839	0.0794	0.6959	-1.063	-0.939	0.6488	0.9649
PC(38:4e)	-5.887	-4.967	0.2742	0.4870	-6.609	-6.280	0.7930	0.4306
PC(38:5e)	-7.631	-7.476	0.1428	0.4870	-6.884	-6.942	0.3521	0.9929
PC(38:5e)	-4.167	-3.640	0.0677	0.4870	-4.157	-4.058	0.6561	0.9929
PC(38:5e)	-8.410	-7.629	0.0427	0.6865	-8.687	-8.325	0.1804	0.8405
PC(38:6)	-4.445	-4.004	0.2748	0.4870	-3.971	-3.769	0.2020	0.9293
PC(38:6)	-3.440	-2.989	0.1756	0.6056	-3.404	-3.280	0.9801	0.9929
PC(38:6e)	-5.460	-4.695	0.1776	0.5775	-5.744	-5.524	0.6994	0.8405
PC(38:7e)	-6.845	-6.531	0.0277	0.8754	-7.193	-6.912	0.0847	0.8405
PC(39:6)	-6.946	-6.895	0.1059	0.5666	-7.125	-6.853	0.3057	0.8405
PC(40:3)	-7.769	-7.322	0.1736	0.4870	-9.107	-9.115	0.7267	0.9957
PC(40:3e)	-6.867	-6.637	0.0568	0.9724	-6.645	-6.681	0.4218	0.9929
PC(40:4)	-6.096	-5.499	0.1810	0.8078	-6.086	-5.818	0.8771	0.9042
PC(40:4)	-3.412	-2.563	0.1315	0.8549	-4.579	-4.110	0.0232	0.7626
PC(40:4e)	-7.182	-6.898	0.4365	0.9604	-7.131	-7.106	0.8813	0.9929
PC(40:5)	-0.269	0.323	0.0030	0.4870	-0.630	-0.405	0.7213	0.9649
PC(40:5e)	-8.027	-7.679	0.1867	0.4870	-7.878	-7.941	0.3062	0.9929
PC(40:7)	-7.734	-7.250	0.2648	0.4870	-7.910	-7.488	0.4131	0.4306
PC(40:7)	-5.797	-5.598	0.0130	0.8516	-5.851	-5.811	0.0353	0.9929
PC(40:8)	-7.426	-8.020	0.0213	0.8233	-7.474	-7.384	0.0120	0.9929
PC(40:8e)	-8.174	-7.627	0.7495	0.6752	-8.397	-8.194	0.4442	0.9042
PC(p16:0/20:4)	-0.709	-0.420	0.2060	0.6078	-0.534	-0.313	0.6877	0.9649
PE(32:1)	-7.229	-6.271	0.0150	0.9776	-7.041	-6.523	0.0270	0.4563
PE(32:3e)	-7.788	-6.954	0.0103	0.9724	-6.660	-6.213	0.0090	0.4306
PE(34:1)	-4.639	-4.513	0.0179	0.4910	-3.506	-3.301	0.0285	0.9702
PE(34:2)	-5.549	-5.240	0.0963	0.8864	-4.219	-4.106	0.3472	0.9929
PE(34:2e)	-7.989	-6.732	0.7965	0.4870	-7.527	-6.658	0.9628	0.4306
PE(34:3e)	-7.103	-6.102	0.1529	0.4900	-6.049	-5.599	0.1958	0.4306
PE(34:4e)	-8.533	-7.479	0.0812	0.4870	-8.246	-7.856	0.2536	0.4306
PE(36:0)	-5.459	-4.787	0.3903	0.4870	-6.298	-6.039	0.3157	0.9293
PE(36:0)	-8.167	-8.122	0.1311	0.8226	-8.103	-8.098	0.2709	0.9957
PE(36:1)	-5.553	-5.237	0.0653	0.8226	-4.720	-4.385	0.0081	0.9103
PE(36:1)	-3.928	-3.451	0.0774	0.4870	-3.817	-3.515	0.2715	0.8968
PE(36:1)	-3.300	-2.749	0.0150	0.7935	-2.751	-2.573	0.9421	0.8405
PE(36:2)	-2.938	-2.510	0.0350	0.4870	-1.833	-1.566	0.1542	0.8968
PE(36:2e)	-8.466	-9.000	0.0265	0.5780	-8.678	-8.696	0.0023	0.9957
PE(36:2e)	-8.982	-8.296	0.1612	0.7582	-8.512	-8.343	0.5545	0.4306
PE(36:2e)	-8.471	-7.694	0.6513	0.5815	-8.161	-7.770	0.8816	0.8968
PE(36:3)	-4.935	-4.358	0.0136	0.7423	-4.247	-3.911	0.6665	0.8405
PE(36:3e)	-7.043	-6.590	0.5717	0.4870	-6.440	-6.268	0.7771	0.9929
PE(36:3e)	-8.780	-8.019	0.1880	0.8731	-8.189	-7.791	0.4089	0.4306
PE(36:4)	-5.345	-5.445	0.2337	0.7983	-4.395	-4.352	0.4178	0.9929
PE(36:4e)	-8.708	-8.004	0.1471	0.6078	-8.857	-8.749	0.2059	0.9929

PE(36:5)	-6.680	-6.502	0.0756	0.8078	-5.709	-5.635	0.0876	0.9929
PE(36:5e)	-8.570	-8.181	0.0705	0.4870	-8.809	-9.027	0.4096	0.9649
PE(36:5e)	-6.961	-6.776	0.2331	0.6932	-6.669	-6.581	0.1099	0.9649
PE(38:0)	-6.722	-6.070	0.0515	0.5567	-7.952	-7.641	0.0218	0.8405
PE(38:1)	-3.059	-2.177	0.1191	0.6865	-3.271	-2.854	0.3793	0.7648
PE(38:1)	-6.990	-6.049	0.0283	0.5423	-8.052	-7.677	0.7252	0.9649
PE(38:1e)	-8.010	-7.694	0.5932	0.6097	-7.493	-7.321	0.1466	0.8369
PE(38:2)	-9.163	-8.297	0.1845	0.6846	-8.470	-8.160	0.3393	0.4306
PE(38:2)	-6.728	-6.384	0.0664	0.4910	-7.027	-7.111	0.7453	0.9929
PE(38:2)	-7.513	-7.024	0.3954	0.9553	-8.102	-7.752	0.2550	0.9628
PE(38:3)	-6.928	-6.790	0.0837	0.8754	-7.172	-7.477	0.8755	0.8405
PE(38:3)	-3.932	-3.598	0.3317	0.5943	-4.320	-4.431	0.3075	0.9929
PE(38:3)	-7.784	-7.409	0.1115	0.8731	-8.305	-8.724	0.8506	0.9293
PE(38:4)	-1.819	-1.649	0.5267	0.8789	-1.581	-1.431	0.4554	0.8968
PE(38:4)	-4.871	-4.426	0.1199	0.5280	-5.677	-5.741	0.6703	0.9929
PE(38:5)	-7.028	-6.659	0.0349	0.4870	-6.695	-6.658	0.0240	0.9929
PE(38:5)	-4.672	-4.398	0.3971	0.7272	-4.161	-4.014	0.6096	0.9042
PE(38:5e)	-6.122	-5.990	0.0175	0.5815	-6.209	-6.076	0.2815	0.9702
PE(38:6)	-8.258	-7.759	0.0221	0.4870	-7.623	-7.489	0.8006	0.9929
PE(38:6e)	-8.695	-8.484	0.0518	0.4870	-8.341	-8.301	0.9687	0.9929
PE(38:6e)	-5.711	-5.059	0.9741	0.4870	-5.595	-5.257	0.9772	0.4306
PE(40:3)	-7.656	-7.645	0.3559	0.4870	-8.432	-8.444	0.7867	0.9957
PE(40:3)	-5.797	-5.074	0.6025	0.4870	-6.423	-6.436	0.9631	0.9957
PE(40:4)	-6.203	-5.917	0.1477	0.9776	-6.747	-6.818	0.1638	0.9929
PE(40:4e)	-8.218	-8.277	0.0387	0.4870	-7.855	-7.848	0.3773	0.9957
PE(40:5)	-8.727	-8.211	0.0922	0.4870	-9.418	-8.875	0.1008	0.8405
PE(40:6)	-2.711	-2.574	0.5026	0.4870	-2.510	-2.452	0.7467	0.9929
PE(40:6)	-3.926	-3.535	0.5483	0.8754	-3.450	-3.246	0.6628	0.7878
PE(40:6)	-8.136	-7.923	0.5741	0.8549	-7.608	-7.524	0.7954	0.9929
PE(40:6)	-5.734	-5.560	0.2078	0.7513	-5.662	-5.595	0.9782	0.9929
PE(40:6e)	-6.448	-6.232	0.8275	0.5525	-6.638	-6.642	0.1682	0.9957
PE(p16:0/22:6)	-5.106	-4.566	0.0202	0.4870	-5.663	-5.405	0.2651	0.8968
PE(p18:0/20:4)	-3.760	-3.845	0.5149	0.7198	-3.799	-4.120	0.0146	0.4306
PI(38:5)	-8.166	-7.618	0.0745	0.5943	-7.581	-7.287	0.1984	0.8405
SM(d18:1/14:0)	-6.261	-5.882	0.2271	0.7246	-6.284	-6.015	0.0969	0.7775
SM(d18:1/16:0)	-1.791	-1.520	0.0678	0.5282	-2.104	-1.910	0.2487	0.8968
SM(d18:1/16:1)	-6.975	-6.594	0.0359	0.5431	-7.273	-7.164	0.5265	0.9929
SM(d18:1/18:0)	-4.369	-4.152	0.0921	0.4870	-4.590	-4.470	0.1779	0.8405
SM(d18:1/20:0)	-5.928	-5.651	0.1445	0.4870	-5.702	-5.562	0.3014	0.9042
SM(d18:1/21:0)	-5.398	-4.994	0.1330	0.4870	-5.212	-4.963	0.1685	0.8405
SM(d18:1/23:0)	-2.658	-2.170	0.0070	0.6703	-2.517	-2.342	0.1922	0.8405
SM(d18:1/23:1)	-5.033	-4.651	0.0224	0.4900	-5.384	-5.168	0.0292	0.4306
SM(d18:1/24:1)	-4.051	-4.199	0.1353	0.4870	-4.416	-4.318	0.6293	0.9929
TG(14:0/16:0/16:0)+ TG(16:0/18:0/12:0)[a]	-3.498	-3.651	0.8021	0.4870	-0.639	-0.444	0.6194	0.9929
TG(14:0/16:0/17:0)+ TG(14:0/18:0/15:0)[a]	-5.647	-5.751	0.7767	0.4870	-2.964	-2.624	0.3528	0.9293
TG(14:0/16:0/17:0)+ TG(14:0/18:0/15:0)[a]	-5.124	-5.201	0.8118	0.4870	-2.431	-2.083	0.3536	0.9293
TG(16:0/16:0/16:0)+ TG(14:0/16:0/18:0)[a]	-2.732	-3.060	0.6556	0.4870	0.079	0.215	0.8070	0.9929
TG(16:0/18:1/18:1)	-0.638	-0.688	0.9556	0.4870	1.859	1.688	0.7769	0.9929
TG(16:0/18:1/20:1)+ TG(18:0/18:1/18:1)[a]	-1.955	-1.976	0.9832	0.4870	-0.592	-0.795	0.7717	0.9929

TG(16:0/18:2/18:1)+ TG(16:1/18:1/18:1)[a]	-2.451	-2.738	0.7578	0.4870	1.020	0.975	0.9394	0.9957
TG(17:1/18:1/18:2)	-7.380	-7.303	0.8452	0.4910	-4.137	-4.049	0.8766	0.9929
TG(18:1/16:1/18:2)+ TG(18:2/18:2/16:0)[a]	-4.114	-4.539	0.5108	0.5128	-0.471	-0.451	0.9756	0.9957
TG(18:1/18:1/18:1)	-2.671	-2.746	0.9250	0.8561	-0.526	-0.662	0.8580	0.9929
TG(18:1/18:1/22:1)+ TG(20:1/20:1/18:1)[a]	-10.295	-10.202	0.8279	0.5128	-7.965	-7.665	0.6693	0.9929
TG(37:0)	-7.163	-6.689	0.0847	0.7666	-6.994	-6.831	0.4445	0.9702
TG(38:0)	-8.541	-8.000	0.0603	0.4870	-8.463	-8.163	0.0745	0.7375
TG(42:0)	-9.176	-8.812	0.5825	0.4900	-7.014	-6.345	0.1935	0.8405
TG(42:1)	-9.947	-9.980	0.9676	0.4870	-7.481	-6.846	0.2405	0.8968
TG(44:0)	-6.701	-6.655	0.9417	0.4870	-3.878	-3.354	0.1961	0.8405
TG(44:1)	-7.135	-7.159	0.9703	0.6173	-3.947	-3.414	0.2488	0.8968
TG(44:2)	-9.759	-9.692	0.9084	0.4870	-6.579	-5.940	0.3751	0.9628
TG(45:0)	-7.647	-7.410	0.4650	0.4870	-4.725	-4.286	0.2094	0.8405
TG(46:1)	-4.718	-4.988	0.5975	0.4870	-1.396	-1.011	0.4566	0.9702
TG(46:2)	-6.932	-6.703	0.6904	0.4870	-3.161	-2.652	0.4225	0.9649
TG(46:3)	-8.671	-8.329	0.0733	0.4870	-8.367	-8.240	0.1917	0.8405
TG(46:3)	-9.634	-9.473	0.6123	0.4870	-5.852	-5.294	0.3883	0.9649
TG(47:1)	-6.377	-6.408	0.9320	0.4870	-2.729	-2.242	0.2565	0.8968
TG(47:2)	-7.950	-7.938	0.9657	0.4870	-4.188	-3.852	0.5161	0.9929
TG(47:3)	-10.378	-10.240	0.6066	0.4870	-6.559	-6.253	0.5163	0.9929
TG(48:1)	-2.804	-3.048	0.7252	0.4870	0.243	0.534	0.5232	0.9929
TG(48:2)	-4.424	-4.486	0.9116	0.4870	-0.735	-0.581	0.7642	0.9929
TG(48:3)	-7.020	-6.757	0.3554	0.5666	-2.643	-2.183	0.4221	0.9649
TG(48:4)	-8.790	-8.635	0.2294	0.8913	-5.073	-4.570	0.4751	0.9868
TG(48:5)	-6.221	-6.440	0.1241	0.7174	-6.340	-6.374	0.7922	0.9929
TG(49:0)	-6.388	-6.390	0.9673	0.4870	-4.081	-3.737	0.6883	0.9929
TG(49:0)	-6.199	-6.231	0.9980	0.4870	-3.520	-3.211	0.5360	0.9929
TG(49:1)	-4.874	-5.120	0.6951	0.4870	-1.130	-1.045	0.8861	0.9929
TG(49:2)	-6.255	-6.260	0.9888	0.4870	-2.274	-2.042	0.6827	0.9929
TG(49:3)	-8.124	-7.964	0.3795	0.7513	-4.291	-3.836	0.3911	0.9649
TG(49:4)	-9.849	-9.717	0.5848	0.4870	-6.542	-6.289	0.6209	0.9929
TG(50:0)	-6.553	-6.620	0.8316	0.4870	-3.990	-3.654	0.4481	0.9702
TG(50:0)	-3.670	-3.933	0.8139	0.4870	-1.765	-1.574	0.7632	0.9929
TG(50:1)	-8.658	-8.532	0.6959	0.4900	-5.630	-5.563	0.8314	0.9929
TG(50:1)	-1.310	-1.544	0.7946	0.4870	1.539	1.646	0.8396	0.9929
TG(50:2)	-6.271	-6.010	0.5042	0.4870	-7.542	-7.681	0.7980	0.9929
TG(50:2)	-7.289	-7.538	0.5786	0.4870	-3.268	-3.041	0.6693	0.9929
TG(50:2)	-2.636	-2.747	0.8849	0.5423	0.701	0.903	0.7350	0.9929
TG(50:3)	-4.886	-5.135	0.5686	0.4870	-1.037	-0.760	0.6312	0.9929
TG(50:6)	-11.043	-10.931	0.7472	0.4870	-7.686	-7.394	0.6832	0.9929
TG(51:1)	-6.097	-5.391	0.0901	0.6904	-5.339	-4.865	0.0252	0.4306
TG(51:1)	-5.037	-5.212	0.8700	0.4870	-2.015	-1.822	0.7990	0.9929
TG(51:1)	-5.304	-5.634	0.6817	0.8343	-2.156	-2.153	0.9957	0.9957
TG(51:2)	-4.953	-4.997	0.7535	0.4870	-1.377	-1.340	0.9779	0.9957
TG(51:2)	-9.246	-9.528	0.9529	0.5943	-5.185	-5.167	0.9590	0.9957
TG(51:3)	-6.868	-6.842	0.9550	0.4870	-2.775	-2.720	0.9270	0.9957
TG(51:4)	-8.497	-8.154	0.0851	0.4870	-4.485	-4.200	0.6394	0.9929
TG(51:5)	-8.946	-9.061	0.5752	0.4870	-8.277	-8.321	0.8053	0.9929
TG(51:5)	-10.413	-10.326	0.7752	0.4870	-6.858	-6.631	0.7007	0.9929
TG(52:0)	-4.440	-4.788	0.6287	0.4870	-4.046	-4.342	0.4828	0.9929
TG(52:0)	-5.473	-5.647	0.7964	0.8908	-2.499	-2.151	0.7220	0.9916

TG(52:1)	-1.801	-2.285	0.6863	0.4870	0.188	0.197	0.9892	0.9957
TG(52:3)	-7.311	-7.422	0.7429	0.4870	-6.900	-6.800	0.3992	0.9649
TG(52:5)	-7.400	-7.050	0.0024	0.4870	-2.984	-2.898	0.9081	0.9957
TG(53:0)	-9.331	-9.662	0.4221	0.4870	-7.656	-7.692	0.4515	0.9957
TG(53:0)	-8.717	-8.690	0.9222	0.4900	-8.284	-8.385	0.5628	0.9929
TG(53:0)	-8.423	-8.318	0.9807	0.4870	-6.336	-6.017	0.8893	0.9702
TG(53:0)	-9.119	-9.247	0.8093	0.4870	-8.626	-9.071	0.9589	0.9929
TG(53:1)	-6.828	-6.871	0.8434	0.4870	-5.274	-5.106	0.5354	0.9929
TG(53:1)	-8.195	-8.134	0.9234	0.4870	-4.776	-4.363	0.8860	0.9929
TG(53:1)	-6.925	-7.047	0.9756	0.4870	-5.063	-5.150	0.8200	0.9929
TG(53:3)	-10.641	-10.339	0.4587	0.4870	-7.300	-7.196	0.8722	0.9929
TG(53:3)	-6.484	-6.500	0.9818	0.4870	-3.486	-3.636	0.8218	0.9929
TG(53:5)	-8.452	-8.308	0.6339	0.9035	-7.736	-8.012	0.1310	0.8405
TG(53:5)	-9.352	-9.044	0.3270	0.4870	-5.874	-5.581	0.6627	0.9929
TG(53:6)	-4.531	-4.440	0.8473	0.8149	-3.116	-3.302	0.6619	0.9929
TG(54:0)	-6.476	-6.937	0.6552	0.4870	-6.826	-7.375	0.4256	0.9929
TG(54:0)	-6.599	-6.465	0.7404	0.4870	-4.033	-3.656	0.5624	0.9649
TG(54:1)	-3.810	-4.091	0.7060	0.6669	-3.044	-3.451	0.5647	0.9929
TG(54:1)	-6.086	-6.256	0.8425	0.4870	-2.841	-2.472	0.6378	0.9929
TG(54:2)	-8.339	-8.441	0.6707	0.4870	-6.704	-6.876	0.6641	0.9929
TG(54:2)	-5.676	-5.709	0.9711	0.4870	-3.480	-3.584	0.9017	0.9957
TG(54:4)	-7.731	-7.812	0.6594	0.9988	-4.751	-4.833	0.9073	0.9957
TG(54:5)	-6.665	-6.332	0.0538	0.6659	-2.406	-2.094	0.7352	0.9929
TG(54:6)	-8.327	-8.062	0.5589	0.9944	-4.258	-4.009	0.7410	0.9929
TG(54:9)	-5.358	-5.494	0.8852	0.4870	-3.236	-3.371	0.8399	0.9929
TG(55:1)	-9.322	-9.388	0.2419	0.4870	-7.581	-7.307	0.8444	0.9929
TG(55:1)	-9.536	-9.175	0.9535	0.5423	-7.228	-7.114	0.7333	0.9929
TG(55:2)	-10.731	-10.610	0.6958	0.4870	-7.481	-7.240	0.7481	0.9929
TG(55:2)	-8.303	-8.234	0.9476	0.4870	-6.571	-6.522	0.9344	0.9957
TG(55:3)	-8.350	-8.324	0.9650	0.9988	-6.957	-6.851	0.8356	0.9929
TG(55:4)	-9.311	-9.269	0.8511	0.4870	-7.552	-7.432	0.8135	0.9929
TG(55:5)	-9.858	-9.486	0.0774	0.6585	-6.828	-6.343	0.4879	0.9916
TG(55:6)	-10.491	-10.020	0.2217	0.7395	-7.059	-6.765	0.6810	0.9929
TG(56:0)	-10.425	-10.664	0.7298	0.4870	-8.557	-8.423	0.8866	0.9929
TG(56:1)	-9.593	-9.640	0.8854	0.4870	-8.373	-8.497	0.8385	0.9929
TG(56:1)	-9.064	-9.222	0.9479	0.4870	-6.688	-6.717	0.8242	0.9957
TG(56:1)	-7.892	-7.973	0.8803	0.4870	-5.329	-5.194	0.9751	0.9929
TG(56:2)	-7.842	-7.752	0.9523	0.4870	-6.426	-6.456	0.7860	0.9957
TG(56:2)	-8.368	-8.396	0.9153	0.4870	-5.437	-5.275	0.9623	0.9929
TG(56:3)	-8.257	-8.265	0.0007	0.4870	-7.266	-7.510	0.5492	0.9929
TG(56:3)	-8.174	-8.172	0.9777	0.4870	-6.478	-6.460	0.5954	0.9957
TG(56:3)	-9.087	-8.317	0.9980	0.4870	-7.418	-7.191	0.9765	0.9929
TG(56:4)	-8.770	-8.580	0.1131	0.5240	-6.018	-5.879	0.4504	0.9929
TG(56:4)	-6.984	-6.671	0.1231	0.4870	-6.066	-5.902	0.6664	0.9929
TG(56:4)	-9.616	-9.368	0.3841	0.4870	-8.460	-8.046	0.7935	0.9702
TG(56:5)	-7.157	-7.036	0.6039	0.4870	-5.385	-4.972	0.4975	0.9916
TG(56:5)	-7.238	-6.951	0.1578	0.4870	-5.708	-5.604	0.8339	0.9929
TG(56:6)	-6.762	-6.450	0.0524	0.4870	-3.873	-3.877	0.9952	0.9957
TG(56:7)	-8.882	-8.347	0.2148	0.4870	-5.729	-5.521	0.7647	0.9929
TG(56:8)	-10.153	-9.822	0.3461	0.4870	-7.438	-7.226	0.7593	0.9929
TG(57:1)	-10.772	-11.213	0.5843	0.4870	-8.323	-7.973	0.6981	0.9929
TG(57:2)	-10.144	-10.219	0.9311	0.4870	-6.828	-6.579	0.7898	0.9929
TG(57:3)	-10.970	-10.919	0.9368	0.4870	-8.307	-7.815	0.4696	0.9867
TG(58:2)	-10.634	-10.778	0.8169	0.4870	-8.077	-7.647	0.6374	0.9929
TG(58:5)	-9.232	-8.845	0.1368	0.4870	-8.061	-7.930	0.2044	0.9929

TG(58:5)	-8.810	-8.312	0.1881	0.4870	-8.789	-8.390	0.7572	0.8405
TG(58:6)	-7.700	-7.111	0.0735	0.4870	-7.218	-6.806	0.1708	0.8405
TG(58:7)	-8.027	-7.454	0.0558	0.4870	-7.125	-6.717	0.1401	0.8405
TG(58:8)	-9.620	-8.935	0.0924	0.4870	-8.249	-7.820	0.4110	0.9649
TG(59:3)	-11.200	-10.551	0.4624	0.5240	-8.525	-8.391	0.8801	0.9929
unknown	-7.494	-7.034	0.0366	0.9604	-7.648	-7.154	0.0122	0.5220
unknown	-7.954	-7.943	0.1501	0.4870	-6.519	-6.492	0.0090	0.9957
unknown	-6.673	-6.600	0.0050	0.4870	-5.532	-5.494	0.0426	0.9929
unknown	-5.294	-5.276	0.1289	0.4870	-5.079	-4.897	0.0457	0.6849
unknown	-8.000	-7.666	0.8901	0.4870	-7.479	-7.276	0.0669	0.9929
unknown	-8.597	-7.800	0.0836	0.4870	-8.321	-8.164	0.1757	0.9649
unknown	-9.058	-9.142	0.0602	0.5845	-8.269	-7.937	0.1499	0.9042
unknown	-7.770	-7.881	0.1173	0.4870	-6.854	-6.722	0.1197	0.9929
unknown	-7.631	-7.075	0.2129	0.5128	-6.926	-6.663	0.1365	0.9042
unknown	-5.347	-5.011	0.3996	0.4870	-4.378	-4.203	0.1351	0.9916
unknown	-5.684	-5.512	0.7206	0.4870	-5.189	-4.874	0.1408	0.8405
unknown	-5.657	-5.157	0.7442	0.4870	-5.223	-4.882	0.1585	0.4306
unknown	-8.610	-7.490	0.1448	0.4870	-9.078	-8.604	0.2311	0.8405
unknown	-8.147	-8.156	0.3697	0.4870	-7.690	-7.647	0.2335	0.9929
unknown	-5.996	-5.844	0.0349	0.4870	-5.621	-5.458	0.2966	0.9916
unknown	-7.472	-7.234	0.7521	0.4870	-6.986	-6.839	0.3008	0.8968
unknown	-4.712	-4.753	0.7149	0.4870	-4.511	-4.335	0.3150	0.8405
unknown	-7.722	-7.307	0.0774	0.4870	-8.346	-8.475	0.3243	0.9929
unknown	-6.789	-6.706	0.1701	0.4870	-6.363	-6.501	0.3274	0.9103
unknown	-6.824	-6.411	0.0274	0.4870	-7.270	-7.311	0.4239	0.9929
unknown	-7.436	-6.981	0.2204	0.4870	-7.497	-7.214	0.4917	0.8968
unknown	-8.840	-8.216	0.5929	0.7908	-7.931	-7.466	0.4966	0.4306
unknown	-8.837	-7.969	0.0345	0.4870	-7.860	-7.602	0.8447	0.5220
unknown	-6.929	-6.407	0.0347	0.5161	-7.109	-6.937	0.7981	0.9172
unknown	-4.182	-3.950	0.0427	0.5191	-3.466	-3.373	0.6979	0.9929
unknown	-8.063	-7.336	0.1706	0.4870	-8.623	-8.295	0.7460	0.8405
unknown	-8.169	-7.711	0.1822	0.9228	-7.787	-7.463	0.7141	0.8405
unknown	-5.630	-5.000	0.2374	0.4870	-6.506	-6.435	0.6175	0.9929
unknown	-4.442	-3.456	0.4413	0.8255	-5.423	-5.219	0.5378	0.9929
unknown	-7.929	-7.589	0.4543	0.4870	-10.632	-10.947	0.5370	0.9929
unknown	-7.842	-7.345	0.5610	0.4870	-8.245	-8.031	0.6670	0.9172
unknown	-8.067	-7.832	0.8664	0.4900	-7.509	-7.293	0.8886	0.8405
unknown	-8.132	-8.044	0.9684	0.8078	-7.716	-7.403	0.7206	0.8405
unknown	-8.515	-8.274	0.9690	0.4870	-10.266	-10.521	0.9389	0.9929

[a]The ambiguous subspecies indicates that the lipidomic profiling gave two possible identifications of the lipid. [b]Abbreviations: Cer, ceramide. SM, sphingomyelin. TG, triacylglycerol. DG, diacylglycerol. LysoPC, lysophophosphatidylcholine. LysoPE, lysophosphatidylethanolamine. PC, phosphatidylcholine. PE, phosphatidylethanolamine. PI, phosphatidylinositol.

Online Resource Table S4

Results from the analysis of variance between the control group (CON) and the high-energy feeding group (HIGH) within time points in liver negative electrospray ionization mode (ESI-) dataset. *P* -values were obtained from the analysis performed using MIXED procedure in SAS, with diet as the fixed effect and pair as the random effect. Adjusted-*p* values were obtained from *p* -values after false discovery rate control.

	-8d				9d			
Lipid subspecies	CON	HIGH	*p* -value	Adjusted-*p*	CON	HIGH	*p* -value	Adjusted-*p*
Cer(d17:1/22:0)	-4.557	-4.345	0.4093	0.7660	-4.170	-4.111	0.4387	0.7766
Cer(d18:1/23:1)	-4.046	-3.864	0.2118	0.6124	-4.303	-4.300	0.9782	0.9920
Cer(d18:0/16:0)	-7.126	-7.310	0.5277	0.8319	-6.710	-6.620	0.7984	0.9174
Cer(d18:0/18:0)	-9.253	-9.115	0.3444	0.7217	-9.102	-9.152	0.7774	0.9094
Cer(d18:0/23:0)	-7.199	-7.107	0.7302	0.8936	-6.123	-6.365	0.5505	0.8143
Cer(d18:0/24:0)	-6.907	-6.821	0.7229	0.8936	-6.131	-6.473	0.4314	0.7766
Cer(d18:1/16:0)	-3.432	-3.575	0.4802	0.8099	-3.748	-3.842	0.7270	0.8912
Cer(d18:1/18:0)	-4.582	-4.470	0.4437	0.7913	-5.057	-4.749	0.3498	0.7373
Cer(d18:1/19:0)	-7.442	-7.354	0.4464	0.7918	-7.560	-7.495	0.6083	0.8363
Cer(d18:1/20:0)	-5.773	-5.499	0.3928	0.7555	-5.433	-5.385	0.6217	0.8363
Cer(d18:1/22:0)	-2.737	-2.657	0.5607	0.8347	-2.468	-2.481	0.9167	0.9609
Cer(d18:1/23:0)	-2.077	-1.894	0.1116	0.5435	-1.758	-1.737	0.8667	0.9379
Cer(d18:1/24:0)	-1.848	-1.758	0.5652	0.8349	-1.618	-1.710	0.6359	0.8408
Cer(d18:1/24:1)	-3.756	-3.400	0.0402	0.4977	-3.658	-3.547	0.5549	0.8191
Cer(d18:1/25:0)	-3.808	-3.627	0.2225	0.6171	-3.869	-4.195	0.2417	0.6723
Cer(d18:1/26:0)	-3.477	-3.222	0.2691	0.6519	-4.805	-4.437	0.4508	0.7820
Cer(d18:2/26:0)	-6.217	-6.070	0.5876	0.8433	-7.412	-7.460	0.8873	0.9490
Cer(d18:2/16:0)	-7.020	-7.057	0.7704	0.9050	-7.812	-7.606	0.4651	0.7838
Cer(d18:2/18:0)	-9.002	-9.007	0.9845	0.9905	-9.789	-9.672	0.7038	0.8769
Cer(d18:2/20:0)	-10.068	-9.907	0.3263	0.7018	-10.583	-10.453	0.5183	0.7975
Cer(d18:2/22:0)	-5.498	-5.272	0.2632	0.6445	-5.844	-5.704	0.4783	0.7846
Cer(d18:2/23:1)	-8.184	-7.893	0.1763	0.5904	-9.273	-9.011	0.1045	0.5450
Cer(d18:2/24:1)	-6.884	-6.225	0.0414	0.4977	-7.198	-7.030	0.3590	0.7407
Cer(d18:1/25:1)	-5.308	-4.906	0.0492	0.4977	-5.462	-5.342	0.5099	0.7935
Cer(d18:2/26:01)	-10.620	-10.307	0.1936	0.5980	-11.634	-11.395	0.4653	0.7838
HexCer(d18:1/16:0)	-9.193	-9.841	0.0739	0.5174	-9.589	-9.764	0.6619	0.8550
HexCer(d18:1/22:0)	-7.516	-7.658	0.4627	0.7999	-7.518	-7.396	0.4897	0.7897
HexCer(d18:1/23:0)	-7.698	-7.590	0.5416	0.8347	-7.445	-7.253	0.1995	0.6305
HexCer(d18:1/24:0)	-7.173	-7.031	0.4526	0.7964	-7.468	-7.204	0.1564	0.5918
HexCer(d18:1/24:1)	-10.064	-9.887	0.4997	0.8203	-10.348	-10.322	0.9163	0.9609
HexCer(d18:2/20:0)	-8.585	-8.444	0.5070	0.8248	-10.849	-10.871	0.9663	0.9879
LysoPC(18:0)	-3.519	-3.564	0.6651	0.8674	-3.391	-3.329	0.5585	0.8217
LysoPE(18:0)	-5.455	-5.081	0.2380	0.6252	-4.810	-4.482	0.0596	0.4631
PC(16:0/16:1)+ PC(14:0/18:1)[a]	-6.415	-5.387	0.0823	0.5174	-6.565	-6.565	0.9997	0.9997
PC(16:0/20:4)	-6.087	-5.481	0.0880	0.5174	-6.656	-6.252	0.2499	0.6776
PC(18:1/20:1)	-5.222	-4.859	0.1999	0.6008	-5.540	-5.259	0.1562	0.5918
PC(30:0)	-6.412	-5.101	0.1312	0.5584	-5.928	-4.897	0.1230	0.5532
PC(33:0)	-6.035	-5.021	0.1309	0.5584	-6.993	-6.317	0.1308	0.5621
PC(33:1)	-8.015	-6.847	0.0231	0.4977	-8.439	-7.703	0.0583	0.4631
PC(36:2)	-7.495	-6.695	0.1567	0.5769	-8.359	-8.194	0.5325	0.8034
PC(38:3)	-6.784	-6.808	0.9491	0.9794	-7.736	-8.115	0.3175	0.7186
PE(16:0/20:4)+ PE(18:2/18:2)[a]	-3.624	-3.150	0.4035	0.7649	-2.828	-2.379	0.3920	0.7599
PE(18:0/18:1)	-2.834	-2.882	0.8025	0.9124	-2.693	-2.590	0.5960	0.8363
PE(18:0/20:3)	-2.389	-1.543	0.0635	0.4993	-2.758	-2.653	0.8143	0.9244
PE(18:0/22:4)	-5.128	-3.507	0.0441	0.4977	-5.955	-4.966	0.0602	0.4631
PE(18:1/18:0)	-0.975	-0.496	0.1117	0.5435	-0.793	-0.492	0.0505	0.4558
PE(32:0)	-9.387	-9.364	0.9001	0.9596	-9.669	-9.548	0.6237	0.8363
PE(34:1)	-2.012	-1.965	0.8976	0.9591	-1.239	-1.082	0.4674	0.7838

PE(36:2)	-0.973	-0.470	0.0696	0.5064	-0.270	0.013	0.3467	0.7373
PE(36:2e)	-5.916	-5.366	0.0364	0.4977	-5.584	-5.371	0.2498	0.6776
PE(36:3)	-3.582	-2.613	0.0376	0.4977	-2.808	-2.328	0.2596	0.6791
PE(36:3e)	-5.824	-5.000	0.0508	0.4977	-4.991	-4.740	0.6027	0.8363
PE(38:4)	-3.553	-2.508	0.0812	0.5174	-4.727	-4.354	0.6391	0.8413
PE(38:4e)	-7.914	-7.130	0.0606	0.4984	-8.225	-8.006	0.5991	0.8363
PE(38:5e)	-5.048	-4.193	0.2224	0.6171	-4.957	-4.444	0.4652	0.7838
PE(p16:0/18:1)	-4.797	-3.628	0.0070	0.4977	-3.938	-3.350	0.0170	0.4440
PE(p16:0/18:2)	-4.819	-3.422	0.0104	0.4977	-3.906	-3.236	0.0512	0.4558
PE(P-16:0/20:4)	-5.381	-4.431	0.1662	0.5796	-5.462	-4.675	0.1920	0.6292
PE(P-16:0/22:6)	-6.621	-5.022	0.0807	0.5174	-7.056	-5.759	0.2058	0.6337
PI(40:6)	-8.018	-7.084	0.1643	0.5796	-8.275	-7.161	0.0427	0.4440
SM(d18:1/16:0)	-4.863	-5.009	0.2205	0.6171	-5.248	-5.077	0.5332	0.8034
unknown	-8.008	-7.827	0.6279	0.8514	-8.237	-7.724	0.0780	0.5026
unknown	-7.755	-8.182	0.1452	0.5602	-7.952	-7.769	0.3526	0.7373
unknown	5.308	4.292	0.5909	0.8433	6.498	4.967	0.3370	0.7315
unknown	-7.734	-8.112	0.0553	0.4977	-8.130	-7.834	0.3508	0.7373
unknown	-7.066	-7.650	0.1269	0.5568	-7.696	-7.533	0.6205	0.8363
unknown	4.965	3.724	0.4122	0.7674	6.519	4.810	0.1661	0.5944
unknown	5.574	5.448	0.5703	0.8363	6.009	6.249	0.3469	0.7373
unknown	9.803	9.830	0.6039	0.8495	9.952	9.989	0.6044	0.8363
unknown	-5.538	-5.585	0.8346	0.9272	-5.609	-5.433	0.2497	0.6776
unknown	5.505	4.355	0.4983	0.8203	6.218	4.912	0.2857	0.6954
unknown	6.749	6.996	0.0332	0.4977	7.376	7.401	0.8942	0.9524
unknown	6.209	6.165	0.7478	0.9005	4.426	5.297	0.2536	0.6776
unknown	-7.434	-7.948	0.1143	0.5435	-7.693	-7.620	0.6494	0.8471
unknown	8.067	8.084	0.8886	0.9542	7.801	7.873	0.3441	0.7373
unknown	10.340	10.359	0.2952	0.6726	10.351	10.377	0.7321	0.8944
unknown	-7.883	-7.052	0.1015	0.5435	-8.558	-8.168	0.3064	0.7132
unknown	-8.267	-8.554	0.3061	0.6837	-7.990	-7.654	0.1181	0.5479
unknown	6.497	6.781	0.1405	0.5584	7.172	7.251	0.7877	0.9116
unknown	-8.024	-8.904	0.0689	0.5054	-8.404	-8.136	0.4710	0.7838
unknown	-7.527	-7.506	0.9422	0.9756	-7.960	-7.592	0.1530	0.5918
unknown	-8.271	-8.777	0.1023	0.5435	-8.383	-8.245	0.5020	0.7924
unknown	-6.567	-7.022	0.2023	0.6011	-6.917	-6.541	0.2661	0.6882
unknown	-7.102	-7.442	0.3212	0.6965	-8.395	-8.112	0.5028	0.7926
unknown	8.973	8.864	0.4616	0.7999	9.108	9.129	0.7697	0.9073
unknown	10.544	10.494	0.2587	0.6427	10.407	10.406	0.9871	0.9969
unknown	6.258	7.300	0.0020	0.4977	5.618	5.721	0.4724	0.7838
unknown	6.581	6.737	0.4545	0.7965	6.894	6.892	0.9930	0.9990
unknown	-8.182	-7.563	0.2420	0.6276	-8.717	-8.078	0.0788	0.5026
unknown	8.139	8.684	0.0335	0.4977	7.222	7.299	0.8741	0.9406
unknown	-7.689	-7.600	0.5325	0.8341	-7.724	-7.282	0.0313	0.4440
unknown	-6.813	-7.332	0.1051	0.5435	-6.803	-6.612	0.3509	0.7373
unknown	-8.839	-8.188	0.1946	0.5980	-8.620	-7.849	0.0239	0.4440
unknown	-7.074	-7.229	0.5774	0.8417	-7.100	-6.730	0.0702	0.4936
unknown	7.226	7.410	0.2623	0.6445	7.156	7.068	0.5428	0.8057
unknown	-7.298	-7.433	0.6848	0.8784	-7.253	-6.977	0.2900	0.7019
unknown	8.805	9.021	0.0484	0.4977	8.501	8.418	0.6744	0.8610
unknown	-4.538	-4.567	0.8092	0.9148	-4.483	-4.179	0.0691	0.4920
unknown	6.522	5.824	0.0139	0.4977	6.427	6.239	0.4587	0.7838
unknown	-6.867	-7.160	0.2596	0.6427	-7.209	-6.785	0.0737	0.4951
unknown	-8.418	-8.482	0.6824	0.8771	-8.354	-8.135	0.1418	0.5706
unknown	6.792	6.582	0.1033	0.5435	5.882	5.844	0.8910	0.9513
unknown	8.533	8.835	0.0516	0.4977	8.057	7.946	0.7040	0.8769
unknown	-8.555	-9.605	0.0622	0.4993	-8.472	-8.159	0.4577	0.7838
unknown	-7.942	-7.855	0.7988	0.9122	-7.902	-7.560	0.0312	0.4440

unknown	6.896	7.021	0.1866	0.5904	6.959	7.032	0.5310	0.8034
unknown	7.105	7.131	0.8029	0.9124	7.293	7.453	0.0363	0.4440
unknown	-5.356	-5.369	0.8945	0.9573	-5.234	-4.844	0.0171	0.4440
unknown	8.983	8.906	0.3936	0.7555	8.969	9.073	0.2756	0.6923
unknown	7.378	7.406	0.7726	0.9067	7.293	7.384	0.5021	0.7924
unknown	-6.910	-7.037	0.6614	0.8643	-7.000	-6.709	0.2054	0.6337
unknown	6.251	6.638	0.0750	0.5174	6.670	6.611	0.8339	0.9282
unknown	-8.441	-8.786	0.4587	0.7999	-8.764	-8.616	0.5916	0.8363
unknown	5.870	6.197	0.1569	0.5769	5.988	5.960	0.9247	0.9645
unknown	6.709	7.234	0.1788	0.5904	5.776	5.836	0.7822	0.9094
unknown	-7.614	-7.902	0.0689	0.5054	-7.350	-7.445	0.6003	0.8363
unknown	7.190	7.206	0.9333	0.9754	6.911	6.985	0.5062	0.7935
unknown	9.407	9.391	0.8379	0.9283	9.286	9.345	0.5987	0.8363
unknown	7.387	7.416	0.7184	0.8935	7.128	7.164	0.8511	0.9294
unknown	-8.663	-7.954	0.1217	0.5464	-9.141	-9.166	0.9215	0.9637
unknown	6.841	6.963	0.2265	0.6171	6.650	6.800	0.4369	0.7766
unknown	7.816	7.663	0.2961	0.6726	8.004	7.638	0.0069	0.4440
unknown	8.079	7.902	0.2331	0.6207	8.101	8.255	0.2026	0.6332
unknown	6.432	6.547	0.0815	0.5174	6.315	6.222	0.6433	0.8424
unknown	9.577	9.551	0.6593	0.8635	9.339	9.377	0.8305	0.9282
unknown	7.536	7.570	0.8349	0.9272	7.625	7.481	0.2294	0.6588
unknown	6.122	6.112	0.9447	0.9767	6.308	6.336	0.9131	0.9609
unknown	7.361	7.806	0.0316	0.4977	6.679	6.699	0.9558	0.9803
unknown	8.183	9.214	0.0073	0.4977	7.223	7.871	0.1364	0.5638
unknown	-7.969	-8.533	0.1303	0.5584	-8.025	-7.766	0.2807	0.6923
unknown	-9.423	-8.863	0.3044	0.6835	-9.245	-8.506	0.0166	0.4440
unknown	-7.976	-8.234	0.4307	0.7785	-8.119	-7.910	0.3318	0.7310
unknown	6.404	6.731	0.0663	0.5051	6.186	6.340	0.3257	0.7272
unknown	-8.207	-8.508	0.4143	0.7674	-8.241	-7.924	0.2788	0.6923
unknown	8.267	8.460	0.0126	0.4977	7.845	7.778	0.7780	0.9094
unknown	8.375	8.564	0.4872	0.8112	8.277	8.183	0.3844	0.7540
unknown	8.006	8.192	0.1948	0.5980	7.299	7.341	0.9206	0.9635
unknown	6.328	6.341	0.9308	0.9749	6.563	6.694	0.2819	0.6923
unknown	-7.587	-8.025	0.0348	0.4977	-7.315	-7.432	0.5631	0.8256
unknown	8.166	8.067	0.3945	0.7555	8.017	8.132	0.4032	0.7702
unknown	6.835	6.788	0.6507	0.8622	6.605	6.651	0.7562	0.9020
unknown	-7.956	-8.222	0.3578	0.7286	-8.232	-7.932	0.0434	0.4440
unknown	6.477	6.429	0.7568	0.9026	6.223	6.326	0.4521	0.7820
unknown	8.593	8.528	0.5953	0.8453	8.460	8.433	0.8671	0.9379
unknown	6.919	6.824	0.2408	0.6276	6.516	6.612	0.7075	0.8771
unknown	-8.741	-7.864	0.0471	0.4977	-8.242	-7.946	0.0988	0.5380
unknown	-6.938	-5.974	0.1867	0.5904	-6.707	-5.737	0.0479	0.4558
unknown	-5.175	-4.881	0.3195	0.6958	-4.708	-4.786	0.6305	0.8380
unknown	-6.868	-6.552	0.5280	0.8319	-6.110	-5.527	0.2356	0.6658
unknown	-7.873	-7.122	0.1476	0.5621	-7.946	-7.197	0.1603	0.5933
unknown	-5.228	-4.669	0.2562	0.6427	-5.044	-4.405	0.1511	0.5918
unknown	-3.954	-3.818	0.6284	0.8514	-3.695	-3.550	0.6198	0.8363
unknown	-5.394	-5.281	0.5894	0.8433	-5.194	-5.098	0.4929	0.7901
unknown	-6.936	-6.291	0.2508	0.6379	-7.041	-6.107	0.1146	0.5479
unknown	-7.273	-6.593	0.1038	0.5435	-7.560	-7.329	0.5013	0.7924
unknown	-4.648	-4.240	0.0712	0.5124	-4.727	-4.755	0.9166	0.9609
unknown	-5.976	-5.512	0.0765	0.5174	-6.101	-6.131	0.9239	0.9645
unknown	-7.518	-7.010	0.0319	0.4977	-7.599	-7.374	0.4664	0.7838
unknown	-7.792	-7.625	0.4417	0.7899	-7.401	-7.217	0.5001	0.7924
unknown	-7.870	-8.129	0.5554	0.8347	-8.299	-7.931	0.5927	0.8363
unknown	-5.669	-5.962	0.1836	0.5904	-5.606	-5.583	0.8363	0.9282
unknown	-4.831	-5.120	0.3643	0.7303	-5.260	-5.282	0.7074	0.8771

unknown	-6.172	-6.673	0.2219	0.6171	-6.665	-6.824	0.3780	0.7525
unknown	-7.199	-7.596	0.2172	0.6150	-7.214	-7.111	0.2569	0.6789
unknown	-7.025	-7.252	0.4762	0.8080	-7.340	-7.007	0.4445	0.7795
unknown	-8.400	-6.815	0.0409	0.4977	-8.799	-7.532	0.0711	0.4936
unknown	-7.896	-6.808	0.1370	0.5584	-8.005	-7.071	0.0792	0.5026
unknown	-8.075	-6.897	0.1196	0.5435	-7.789	-6.796	0.0369	0.4440
unknown	-8.337	-7.989	0.6692	0.8702	-8.289	-8.016	0.4373	0.7766
unknown	-4.759	-4.199	0.1577	0.5769	-4.657	-4.539	0.6181	0.8363
unknown	-7.381	-6.682	0.0412	0.4977	-7.819	-7.722	0.6030	0.8363
unknown	-9.209	-8.458	0.0376	0.4977	-9.683	-9.697	0.9342	0.9689
unknown	-5.709	-5.524	0.5626	0.8347	-5.739	-5.333	0.1965	0.6302
unknown	-7.575	-7.225	0.3632	0.7303	-7.543	-7.019	0.1715	0.5944
unknown	-7.334	-7.488	0.4434	0.7913	-7.553	-7.283	0.4928	0.7901
unknown	-6.450	-6.723	0.1740	0.5904	-6.569	-6.493	0.4996	0.7924
unknown	-7.071	-7.004	0.7998	0.9122	-7.309	-6.948	0.0334	0.4440
unknown	-8.359	-8.340	0.9458	0.9768	-8.386	-8.288	0.7497	0.9011
unknown	-7.159	-7.285	0.4449	0.7918	-7.020	-6.869	0.4306	0.7766
unknown	-8.210	-7.885	0.3480	0.7251	-7.385	-7.220	0.6685	0.8590
unknown	-6.783	-6.675	0.7849	0.9091	-6.253	-5.810	0.2118	0.6419
unknown	-4.891	-4.851	0.8535	0.9366	-5.066	-4.789	0.1237	0.5532
unknown	-8.226	-8.138	0.6111	0.8511	-8.245	-8.216	0.8967	0.9536
unknown	-6.614	-6.471	0.5627	0.8347	-6.778	-6.471	0.1502	0.5917
unknown	-5.261	-5.659	0.0175	0.4977	-5.463	-5.276	0.3594	0.7407
unknown	-7.249	-7.672	0.0911	0.5227	-7.271	-7.151	0.6384	0.8413
unknown	-6.976	-7.306	0.1194	0.5435	-7.066	-6.771	0.2984	0.7106
unknown	-8.385	-8.677	0.2532	0.6427	-8.837	-8.808	0.9083	0.9590
unknown	-5.036	-5.688	0.1488	0.5634	-5.606	-5.586	0.9367	0.9689
unknown	-2.318	-2.270	0.8098	0.9148	-2.519	-2.553	0.9148	0.9609
unknown	-7.971	-7.727	0.2388	0.6254	-7.694	-7.419	0.0944	0.5296
unknown	-6.633	-6.252	0.4140	0.7674	-6.987	-6.522	0.1837	0.6159
unknown	-6.383	-6.911	0.3882	0.7509	-6.508	-6.655	0.4835	0.7880
unknown	-8.668	-8.374	0.1865	0.5904	-8.307	-7.879	0.0262	0.4440
unknown	-5.369	-6.244	0.1752	0.5904	-6.629	-6.553	0.8660	0.9379
unknown	7.584	6.650	0.2043	0.6030	7.326	6.964	0.1635	0.5944
unknown	-7.738	-7.742	0.9935	0.9965	-6.708	-6.464	0.4243	0.7766
unknown	-5.586	-6.249	0.2583	0.6427	-6.090	-5.320	0.1482	0.5876
unknown	-7.217	-6.716	0.0626	0.4993	-6.910	-6.162	0.1624	0.5942
unknown	-7.401	-7.740	0.0638	0.4993	-7.510	-7.315	0.2465	0.6776
unknown	-7.171	-7.177	0.9668	0.9827	-7.078	-7.080	0.9939	0.9990
unknown	-6.131	-6.436	0.4863	0.8112	-5.928	-5.964	0.7457	0.8977
unknown	-7.648	-8.198	0.1980	0.6008	-7.739	-8.435	0.1131	0.5479
unknown	-8.253	-8.319	0.9378	0.9756	-6.902	-6.955	0.8120	0.9244
unknown	-8.138	-8.993	0.0675	0.5054	-9.375	-9.091	0.5089	0.7935
unknown	-6.976	-7.103	0.8746	0.9476	-5.824	-5.981	0.6771	0.8613
unknown	6.412	5.850	0.3971	0.7592	6.504	6.117	0.1943	0.6302
unknown	-5.805	-5.619	0.2542	0.6427	-5.604	-5.485	0.4614	0.7838
unknown	-7.553	-7.023	0.2484	0.6362	-7.389	-6.707	0.0537	0.4558
unknown	-7.395	-6.753	0.0583	0.4977	-6.502	-6.142	0.1042	0.5450
unknown	-2.431	-2.508	0.3395	0.7164	-2.470	-2.384	0.0285	0.4440
unknown	-5.226	-6.128	0.2729	0.6563	-6.802	-6.638	0.7989	0.9174
unknown	-6.758	-6.913	0.1360	0.5584	-6.800	-6.655	0.2538	0.6776
unknown	-7.673	-7.796	0.7818	0.9091	-7.304	-7.146	0.5094	0.7935
unknown	-7.952	-7.790	0.7180	0.8935	-7.027	-6.832	0.5922	0.8363
unknown	-7.986	-8.699	0.2603	0.6427	-8.340	-8.414	0.7343	0.8944
unknown	-7.477	-7.169	0.3753	0.7408	-6.747	-6.448	0.4186	0.7763
unknown	-7.254	-6.957	0.5338	0.8341	-6.483	-6.344	0.6845	0.8653
unknown	-5.573	-5.016	0.0173	0.4977	-5.272	-5.149	0.4925	0.7901

unknown	-3.607	-3.436	0.5669	0.8356	-3.362	-3.202	0.4730	0.7838
unknown	-5.210	-4.967	0.4631	0.7999	-4.982	-4.795	0.0963	0.5332
unknown	-7.201	-7.240	0.5541	0.8347	-7.166	-6.999	0.1139	0.5479
unknown	-5.992	-6.049	0.5142	0.8274	-6.009	-5.844	0.0456	0.4440
unknown	-4.964	-5.624	0.3849	0.7475	-5.259	-4.989	0.7541	0.9020
unknown	-6.469	-6.493	0.8620	0.9397	-6.306	-6.332	0.8347	0.9282
unknown	-2.539	-2.694	0.5625	0.8347	-2.775	-2.765	0.9489	0.9785
unknown	-4.700	-4.839	0.5373	0.8347	-4.768	-4.644	0.5266	0.8034
unknown	-6.402	-6.171	0.4147	0.7674	-6.475	-6.602	0.5012	0.7924
unknown	-7.167	-7.191	0.9415	0.9756	-7.008	-7.057	0.8074	0.9216
unknown	-7.811	-7.555	0.7238	0.8936	-7.717	-7.303	0.1689	0.5944
unknown	-7.255	-7.485	0.2278	0.6171	-7.409	-8.450	0.1317	0.5629
unknown	-8.153	-7.855	0.5110	0.8267	-8.098	-8.034	0.8405	0.9282
unknown	-4.621	-4.706	0.8090	0.9148	-4.521	-5.972	0.0758	0.4986
unknown	-6.588	-6.689	0.8199	0.9172	-6.487	-8.187	0.0859	0.5105
unknown	-4.926	-4.751	0.6469	0.8589	-4.598	-4.095	0.2263	0.6542
unknown	-6.864	-6.603	0.6105	0.8511	-6.318	-5.932	0.3115	0.7149
unknown	-5.913	-5.860	0.8524	0.9366	-6.687	-6.570	0.7163	0.8847
unknown	-5.373	-5.535	0.6376	0.8542	-5.460	-5.367	0.7979	0.9174
unknown	-7.645	-7.896	0.6173	0.8511	-7.862	-7.848	0.9751	0.9916
unknown	-2.734	-2.822	0.7452	0.9005	-2.874	-3.018	0.5368	0.8037
unknown	-6.087	-6.270	0.6522	0.8623	-5.248	-5.316	0.7999	0.9176
unknown	-6.875	-6.132	0.2138	0.6142	-6.386	-5.991	0.1373	0.5638
unknown	-7.294	-7.351	0.8016	0.9124	-7.446	-7.432	0.9336	0.9689
unknown	0.999	0.991	0.9614	0.9820	1.277	1.211	0.7219	0.8882
unknown	-5.332	-5.354	0.9595	0.9820	-4.668	-4.867	0.5681	0.8259
unknown	-6.049	-6.638	0.1587	0.5769	-6.114	-6.177	0.7216	0.8882
unknown	-4.103	-4.053	0.7508	0.9005	-3.696	-3.835	0.5359	0.8035
unknown	-6.069	-6.039	0.8546	0.9366	-5.734	-5.862	0.3798	0.7530
unknown	-8.113	-7.473	0.1768	0.5904	-8.342	-7.977	0.2387	0.6695
unknown	-5.658	-6.036	0.1676	0.5827	-5.862	-5.812	0.8574	0.9336
unknown	-7.426	-9.153	0.2256	0.6171	-6.411	-7.185	0.1192	0.5479
unknown	-2.831	-2.916	0.4800	0.8099	-2.730	-2.632	0.2028	0.6332
unknown	-8.906	-8.568	0.4618	0.7999	-7.874	-7.492	0.5137	0.7936
unknown	-6.912	-7.870	0.3580	0.7286	-7.018	-7.123	0.8949	0.9524
unknown	-8.077	-7.830	0.4702	0.8059	-8.344	-8.443	0.8160	0.9244
unknown	-5.016	-4.898	0.7383	0.8991	-4.786	-4.756	0.9420	0.9729
unknown	-7.157	-7.029	0.8153	0.9172	-6.910	-6.848	0.9133	0.9609
unknown	-4.140	-3.962	0.4880	0.8114	-4.495	-3.970	0.0640	0.4834
unknown	-5.319	-5.244	0.6910	0.8787	-5.297	-5.479	0.1065	0.5479
unknown	-9.116	-8.650	0.0374	0.4977	-9.273	-8.516	0.0265	0.4440
unknown	-7.622	-8.813	0.1917	0.5962	-7.282	-7.947	0.3947	0.7608
unknown	-8.256	-8.968	0.4297	0.7785	-8.010	-8.531	0.3673	0.7425
unknown	-8.148	-8.619	0.5712	0.8363	-7.926	-8.321	0.6000	0.8363
unknown	-5.767	-6.568	0.4712	0.8059	-5.602	-5.743	0.8505	0.9294
unknown	-9.245	-9.735	0.6168	0.8511	-9.176	-9.153	0.9704	0.9890
unknown	-6.478	-6.292	0.4806	0.8099	-6.370	-6.312	0.7819	0.9094
unknown	-8.039	-8.055	0.9531	0.9819	-7.278	-7.056	0.3692	0.7429
unknown	6.301	6.992	0.1172	0.5435	6.928	6.866	0.7963	0.9174
unknown	-9.193	-8.768	0.3649	0.7303	-7.472	-7.294	0.7829	0.9094
unknown	-8.142	-7.925	0.4944	0.8179	-8.041	-7.860	0.5299	0.8034
unknown	-7.141	-7.076	0.8937	0.9572	-5.815	-5.330	0.3072	0.7132
unknown	-4.308	-4.617	0.2783	0.6587	-4.173	-4.036	0.3064	0.7132
unknown	-8.621	-9.049	0.6889	0.8787	-9.066	-9.078	0.9874	0.9969
unknown	-6.495	-6.247	0.2176	0.6150	-6.692	-6.487	0.4290	0.7766
unknown	-7.304	-6.608	0.0052	0.4977	-7.585	-6.713	0.0276	0.4440
unknown	-4.425	-4.417	0.9756	0.9845	-4.518	-4.118	0.0864	0.5105

unknown	-6.243	-6.201	0.9085	0.9646	-6.365	-5.975	0.0996	0.5380
unknown	-8.731	-9.397	0.5556	0.8347	-8.639	-9.014	0.7050	0.8771
unknown	8.360	8.313	0.9136	0.9677	8.679	8.425	0.5820	0.8339
unknown	5.881	5.861	0.9679	0.9827	6.156	5.853	0.5911	0.8363
unknown	9.871	9.693	0.2383	0.6252	9.970	9.745	0.1728	0.5944
unknown	-7.780	-7.683	0.7619	0.9044	-7.237	-7.072	0.2956	0.7057
unknown	8.441	8.323	0.7839	0.9091	8.547	8.575	0.9336	0.9689
unknown	-6.941	-8.318	0.2057	0.6030	-6.935	-7.857	0.3083	0.7132
unknown	8.397	8.707	0.3946	0.7555	9.267	9.025	0.4195	0.7763
unknown	-6.148	-5.818	0.4459	0.7918	-5.810	-5.473	0.4306	0.7766
unknown	-7.107	-6.441	0.0574	0.4977	-7.150	-6.685	0.0125	0.4440
unknown	-4.990	-4.590	0.2780	0.6587	-5.082	-4.825	0.1698	0.5944
unknown	-7.140	-6.627	0.2652	0.6470	-7.345	-7.048	0.1585	0.5926
unknown	-8.841	-9.597	0.5464	0.8347	-7.687	-7.920	0.5089	0.7935
unknown	-7.956	-8.521	0.5606	0.8347	-7.888	-8.439	0.3112	0.7149
unknown	-7.181	-7.715	0.6113	0.8511	-7.419	-7.647	0.7588	0.9020
unknown	-7.181	-7.715	0.6113	0.8511	-7.419	-7.647	0.7588	0.9020
unknown	10.499	10.888	0.2010	0.6009	11.280	10.940	0.1040	0.5450
unknown	-9.135	-8.307	0.0804	0.5174	-8.534	-8.537	0.9973	0.9990
unknown	-8.283	-9.219	0.3495	0.7260	-8.235	-8.998	0.4213	0.7766
unknown	9.323	9.561	0.5919	0.8433	10.391	10.222	0.4684	0.7838
unknown	7.058	7.403	0.5230	0.8300	8.399	8.193	0.5906	0.8363
unknown	-7.543	-6.939	0.1133	0.5435	-7.191	-6.603	0.0420	0.4440
unknown	-8.564	-8.245	0.5593	0.8347	-8.378	-7.768	0.2258	0.6542
unknown	-7.435	-6.596	0.0552	0.4977	-7.404	-6.473	0.0272	0.4440
unknown	-8.165	-7.343	0.0254	0.4977	-8.364	-7.955	0.0341	0.4440
unknown	-7.843	-7.118	0.0460	0.4977	-7.671	-7.182	0.1580	0.5926
unknown	9.796	9.852	0.3743	0.7408	9.860	9.560	0.0716	0.4936
unknown	8.437	8.737	0.1299	0.5584	8.306	8.098	0.1578	0.5926
unknown	-7.804	-8.464	0.5451	0.8347	-8.458	-8.920	0.5348	0.8035
unknown	12.526	12.792	0.1530	0.5726	13.218	12.924	0.2126	0.6419
unknown	-8.453	-9.364	0.3702	0.7376	-8.155	-8.914	0.3682	0.7429
unknown	-7.725	-8.469	0.4816	0.8099	-7.547	-7.386	0.8335	0.9282
unknown	10.072	10.491	0.0468	0.4977	11.169	10.846	0.4548	0.7829
unknown	8.034	8.504	0.0567	0.4977	9.280	8.838	0.2678	0.6884
unknown	8.322	8.711	0.1318	0.5584	8.523	8.451	0.6168	0.8363
unknown	-7.485	-7.089	0.3340	0.7132	-8.553	-8.385	0.3303	0.7310
unknown	-6.275	-5.276	0.0401	0.4977	-6.641	-5.645	0.0118	0.4440
unknown	-6.268	-5.491	0.0526	0.4977	-6.155	-5.569	0.0851	0.5105
unknown	11.033	11.230	0.4989	0.8203	10.876	10.659	0.1836	0.6159
unknown	-8.634	-9.547	0.3543	0.7286	-7.814	-7.718	0.8394	0.9282
unknown	-7.363	-7.811	0.6534	0.8623	-7.610	-8.098	0.3790	0.7530
unknown	-8.355	-9.022	0.4141	0.7674	-8.278	-8.848	0.4412	0.7768
unknown	13.407	13.759	0.0738	0.5174	14.165	13.958	0.4714	0.7838
unknown	-7.745	-9.520	0.1854	0.5904	-7.586	-8.520	0.4113	0.7754
unknown	-7.231	-8.395	0.3925	0.7555	-7.019	-8.113	0.1968	0.6302
unknown	-8.380	-9.625	0.2850	0.6648	-8.528	-9.451	0.2669	0.6882
unknown	-8.152	-9.179	0.3040	0.6835	-8.565	-9.169	0.3843	0.7540
unknown	8.661	8.457	0.5807	0.8433	9.249	9.067	0.6117	0.8363
unknown	8.407	8.608	0.6002	0.8478	9.564	9.069	0.0879	0.5130
unknown	9.748	9.967	0.2271	0.6171	10.188	10.005	0.2725	0.6908
unknown	7.189	7.475	0.1941	0.5980	7.746	7.550	0.4405	0.7766
unknown	-8.588	-7.486	0.0115	0.4977	-7.785	-7.085	0.0328	0.4440
unknown	-9.073	-9.568	0.6929	0.8787	-8.332	-8.545	0.7964	0.9174
unknown	-6.172	-7.077	0.6466	0.8589	-5.314	-5.501	0.8405	0.9282
unknown	-6.789	-6.046	0.0641	0.4993	-6.246	-5.378	0.0342	0.4440
unknown	8.844	9.604	0.0701	0.5076	8.689	8.626	0.8420	0.9282

unknown	-5.236	-4.473	0.0432	0.4977	-5.012	-4.603	0.1696	0.5944
unknown	-7.617	-6.651	0.0559	0.4977	-7.379	-6.900	0.2446	0.6774
unknown	11.252	11.733	0.1658	0.5796	11.601	11.737	0.6913	0.8700
unknown	-8.483	-9.501	0.3014	0.6791	-7.984	-8.588	0.4293	0.7766
unknown	-7.353	-8.041	0.5461	0.8347	-7.975	-8.756	0.3252	0.7272
unknown	6.955	6.719	0.6157	0.8511	7.082	6.788	0.4257	0.7766
unknown	13.752	13.941	0.2922	0.6709	14.332	13.899	0.1906	0.6261
unknown	-6.463	-7.576	0.3596	0.7286	-6.513	-6.936	0.7004	0.8740
unknown	8.676	9.045	0.1818	0.5904	8.693	8.520	0.3065	0.7132
unknown	9.693	9.581	0.7517	0.9005	10.501	10.311	0.6152	0.8363
unknown	8.762	9.019	0.3453	0.7217	9.644	8.973	0.0353	0.4440
unknown	7.694	7.942	0.3166	0.6958	8.116	7.995	0.5425	0.8057
unknown	10.661	10.901	0.2909	0.6709	11.157	11.008	0.2350	0.6658
unknown	8.394	8.805	0.2253	0.6171	9.175	8.921	0.2409	0.6719
unknown	-9.990	-8.669	0.0145	0.4977	-9.258	-8.419	0.0182	0.4440
unknown	-8.638	-7.406	0.0347	0.4977	-8.246	-7.146	0.0591	0.4631
unknown	8.417	8.385	0.8954	0.9576	8.584	8.474	0.5658	0.8256
unknown	-7.245	-6.199	0.0274	0.4977	-6.630	-5.650	0.0278	0.4440
unknown	-9.398	-7.606	0.0285	0.4977	-9.117	-7.875	0.0437	0.4440
unknown	9.194	9.275	0.5251	0.8319	9.145	9.119	0.8622	0.9364
unknown	-9.158	-8.444	0.3415	0.7194	-9.037	-9.141	0.7839	0.9094
unknown	-5.126	-4.289	0.0575	0.4977	-4.425	-3.482	0.0317	0.4440
unknown	8.648	9.201	0.0411	0.4977	8.469	8.478	0.9729	0.9902
unknown	-7.510	-6.337	0.0460	0.4977	-6.497	-5.294	0.0392	0.4440
unknown	-5.846	-5.572	0.3849	0.7475	-5.510	-5.069	0.0346	0.4440
unknown	-4.458	-3.681	0.0438	0.4977	-4.114	-3.738	0.0377	0.4440
unknown	-6.731	-5.762	0.0318	0.4977	-6.213	-5.834	0.1380	0.5638
unknown	9.515	9.909	0.1247	0.5506	9.744	9.841	0.4394	0.7766
unknown	7.789	7.852	0.8921	0.9564	8.719	8.613	0.8188	0.9258
unknown	11.209	11.482	0.2327	0.6207	11.520	10.865	0.0484	0.4558
unknown	12.689	12.971	0.0576	0.4977	13.036	12.603	0.1234	0.5532
unknown	-8.302	-9.477	0.2626	0.6445	-8.573	-9.340	0.3850	0.7540
unknown	-6.835	-8.052	0.3734	0.7407	-6.753	-7.912	0.1637	0.5944
unknown	9.244	9.665	0.2237	0.6171	9.675	9.397	0.3631	0.7407
unknown	10.337	10.240	0.7778	0.9091	11.080	10.874	0.6157	0.8363
unknown	10.783	11.085	0.1762	0.5904	11.079	10.730	0.1991	0.6305
unknown	9.237	9.154	0.7488	0.9005	8.157	8.204	0.9134	0.9609
unknown	8.182	8.086	0.8480	0.9356	8.979	8.979	0.9995	0.9997
unknown	6.795	7.259	0.2846	0.6648	7.292	6.971	0.3649	0.7407
unknown	-8.050	-8.554	0.3997	0.7599	-8.180	-8.306	0.7401	0.8948
unknown	-6.617	-7.505	0.5517	0.8347	-6.150	-6.603	0.6210	0.8363
unknown	-7.829	-7.748	0.7902	0.9100	-7.906	-7.804	0.5624	0.8256
unknown	9.208	9.450	0.3870	0.7497	9.716	9.653	0.7596	0.9020
unknown	10.909	11.187	0.2939	0.6726	11.185	11.133	0.8481	0.9294
unknown	8.752	8.998	0.3602	0.7286	9.053	8.746	0.1178	0.5479
unknown	-6.733	-5.207	0.0239	0.4977	-6.248	-5.122	0.0092	0.4440
unknown	-8.299	-6.995	0.0289	0.4977	-7.917	-6.947	0.0206	0.4440
unknown	-8.865	-7.517	0.0351	0.4977	-8.288	-7.443	0.0215	0.4440
unknown	9.542	9.580	0.8886	0.9542	9.889	9.780	0.6217	0.8363
unknown	-9.215	-7.482	0.0126	0.4977	-8.946	-7.510	0.0121	0.4440
unknown	7.488	7.810	0.4084	0.7660	7.230	7.361	0.7443	0.8975
unknown	-4.072	-2.745	0.0128	0.4977	-2.793	-2.212	0.0791	0.5026
unknown	-8.500	-7.044	0.0244	0.4977	-8.694	-7.540	0.0360	0.4440
unknown	10.322	10.447	0.2003	0.6008	10.363	10.283	0.4026	0.7702
unknown	-6.523	-5.077	0.0203	0.4977	-5.413	-4.904	0.2757	0.6923
unknown	-7.424	-7.285	0.6746	0.8727	-7.565	-7.058	0.0934	0.5296
unknown	-7.758	-8.277	0.7424	0.8999	-7.151	-7.409	0.7788	0.9094

unknown	-7.863	-8.909	0.5321	0.8341	-7.377	-7.814	0.5662	0.8256
unknown	-3.222	-2.364	0.0560	0.4977	-2.378	-1.774	0.0065	0.4440
unknown	-5.262	-5.047	0.4992	0.8203	-4.819	-4.642	0.2359	0.6658
unknown	-5.080	-5.162	0.6595	0.8635	-5.265	-5.021	0.2365	0.6662
unknown	-8.042	-7.957	0.6930	0.8787	-7.749	-7.655	0.6365	0.8408
unknown	-7.508	-6.728	0.0308	0.4977	-7.797	-7.422	0.1368	0.5638
unknown	-7.218	-6.656	0.0828	0.5174	-7.073	-6.837	0.1231	0.5532
unknown	9.220	9.603	0.0823	0.5174	7.991	7.591	0.4888	0.7897
unknown	11.581	11.880	0.2490	0.6362	10.271	10.614	0.3823	0.7540
unknown	-8.205	-8.690	0.6911	0.8787	-8.433	-8.752	0.6849	0.8653
unknown	7.413	7.884	0.0916	0.5232	7.817	7.806	0.9148	0.9609
unknown	8.445	8.376	0.8185	0.9172	8.822	8.402	0.1398	0.5669
unknown	9.268	9.107	0.5291	0.8321	7.942	8.254	0.4997	0.7924
unknown	-8.457	-7.487	0.0805	0.5174	-8.099	-7.187	0.0572	0.4631
unknown	-7.471	-6.455	0.0882	0.5174	-7.629	-6.612	0.0151	0.4440
unknown	-8.292	-6.641	0.0447	0.4977	-8.563	-7.341	0.0053	0.4440
unknown	8.462	8.558	0.6900	0.8787	8.404	8.380	0.8828	0.9449
unknown	8.352	8.423	0.6383	0.8542	8.864	8.525	0.0530	0.4558
unknown	-6.740	-5.245	0.0170	0.4977	-6.550	-5.477	0.0101	0.4440
unknown	-5.944	-4.382	0.0082	0.4977	-5.924	-4.887	0.0045	0.4440
unknown	-6.916	-5.610	0.0631	0.4993	-6.240	-5.282	0.0430	0.4440
unknown	9.161	9.601	0.0220	0.4977	9.627	9.481	0.5840	0.8359
unknown	10.218	10.195	0.9343	0.9754	10.416	10.255	0.4218	0.7766
unknown	6.828	7.464	0.0437	0.4977	6.907	6.888	0.9191	0.9627
unknown	-8.567	-6.497	0.0093	0.4977	-8.480	-7.249	0.0082	0.4440
unknown	8.062	7.929	0.7273	0.8936	8.226	8.108	0.7001	0.8740
unknown	7.981	8.529	0.0320	0.4977	8.480	8.041	0.3335	0.7310
unknown	-7.455	-7.771	0.8512	0.9366	-6.523	-6.648	0.8767	0.9406
unknown	-10.314	-10.423	0.9393	0.9756	-8.823	-9.171	0.6964	0.8732
unknown	-3.395	-2.006	0.0070	0.4977	-2.431	-1.666	0.0091	0.4440
unknown	-8.134	-6.431	0.0278	0.4977	-7.847	-6.708	0.0691	0.4920
unknown	7.550	7.886	0.0660	0.5051	7.252	7.406	0.5175	0.7975
unknown	11.089	11.206	0.3727	0.7407	10.924	10.963	0.8048	0.9201
unknown	-5.233	-4.714	0.1562	0.5769	-4.917	-4.423	0.0271	0.4440
unknown	8.773	8.963	0.2700	0.6524	8.440	8.559	0.5424	0.8057
unknown	-6.747	-6.710	0.8799	0.9486	-6.898	-6.544	0.2333	0.6658
unknown	-8.390	-8.892	0.7410	0.8999	-8.480	-8.998	0.5697	0.8262
unknown	-2.974	-1.989	0.0361	0.4977	-2.087	-1.294	0.0247	0.4440
unknown	-7.038	-6.453	0.0794	0.5174	-6.699	-6.214	0.0228	0.4440
unknown	-6.454	-5.364	0.0211	0.4977	-6.540	-6.293	0.3330	0.7310
unknown	9.072	9.434	0.1108	0.5435	8.023	7.641	0.3641	0.7407
unknown	-5.531	-5.784	0.3692	0.7367	-4.825	-4.788	0.8175	0.9252
unknown	-9.018	-7.747	0.1094	0.5435	-9.725	-8.112	0.0003	0.2240
unknown	-6.228	-5.657	0.1708	0.5892	-6.583	-6.528	0.8989	0.9541
unknown	9.573	9.938	0.1455	0.5602	8.955	9.041	0.7624	0.9029
unknown	7.276	7.696	0.2235	0.6171	6.618	6.514	0.7370	0.8944
unknown	-7.957	-6.840	0.1192	0.5435	-8.077	-7.139	0.0355	0.4440
unknown	-7.757	-6.604	0.1071	0.5435	-7.663	-6.724	0.0446	0.4440
unknown	8.630	8.755	0.7139	0.8917	8.825	8.302	0.1562	0.5918
unknown	-7.263	-5.762	0.0296	0.4977	-7.541	-6.455	0.0046	0.4440
unknown	-6.031	-5.016	0.1441	0.5602	-5.853	-5.144	0.1059	0.5479
unknown	-6.045	-5.124	0.1034	0.5435	-5.920	-5.439	0.3362	0.7310
unknown	-5.147	-3.766	0.0209	0.4977	-4.638	-3.844	0.0178	0.4440
unknown	-6.415	-7.337	0.2295	0.6180	-6.470	-6.756	0.6938	0.8724
unknown	-9.816	-9.154	0.4718	0.8059	-8.919	-9.658	0.1948	0.6302
unknown	-8.691	-9.806	0.2113	0.6124	-9.000	-9.303	0.7323	0.8944
unknown	-7.485	-6.569	0.0100	0.4977	-7.180	-6.760	0.1695	0.5944

unknown	8.816	9.122	0.1221	0.5464	8.718	8.753	0.8255	0.9282
unknown	-5.247	-4.691	0.1823	0.5904	-4.709	-4.234	0.0601	0.4631
unknown	-8.485	-7.047	0.0592	0.4977	-7.359	-7.876	0.4767	0.7840
unknown	-8.278	-8.678	0.7867	0.9093	-8.055	-8.595	0.4524	0.7820
unknown	-6.230	-5.639	0.0333	0.4977	-6.166	-5.638	0.1564	0.5918
unknown	-5.323	-4.692	0.0784	0.5174	-4.584	-4.270	0.1605	0.5933
unknown	-6.467	-6.307	0.4089	0.7660	-6.308	-6.065	0.2441	0.6774
unknown	-5.630	-5.487	0.5182	0.8297	-5.858	-5.728	0.2199	0.6419
unknown	-8.483	-9.077	0.6506	0.8622	-7.856	-8.002	0.8575	0.9336
unknown	-9.294	-9.607	0.8065	0.9142	-7.808	-8.412	0.5732	0.8282
unknown	-5.269	-5.045	0.5222	0.8300	-4.562	-4.375	0.3125	0.7157
unknown	-7.613	-6.995	0.0766	0.5174	-7.083	-6.537	0.0211	0.4440
unknown	-3.971	-4.583	0.0129	0.4977	-3.975	-4.011	0.8757	0.9406
unknown	7.747	8.095	0.2341	0.6212	7.707	7.586	0.6090	0.8363
unknown	-7.571	-7.519	0.8171	0.9172	-8.092	-7.601	0.1037	0.5450
unknown	-8.070	-7.680	0.0609	0.4984	-8.164	-7.765	0.0138	0.4440
unknown	-5.965	-6.855	0.0195	0.4977	-5.971	-6.121	0.6483	0.8471
unknown	-6.674	-6.477	0.5038	0.8231	-7.572	-7.479	0.8148	0.9244
unknown	-5.603	-4.970	0.2407	0.6276	-7.130	-6.934	0.7397	0.8948
unknown	-7.572	-7.365	0.2186	0.6162	-7.476	-7.253	0.0323	0.4440
unknown	7.515	7.992	0.1404	0.5584	7.461	7.324	0.6178	0.8363
unknown	9.064	9.294	0.4839	0.8099	7.000	7.568	0.3138	0.7163
unknown	-6.095	-4.696	0.1060	0.5435	-6.123	-4.743	0.0106	0.4440
unknown	10.651	11.119	0.0463	0.4977	10.928	10.807	0.6550	0.8510
unknown	6.294	6.451	0.6911	0.8787	4.181	5.403	0.1353	0.5638
unknown	-4.592	-3.349	0.0787	0.5174	-4.656	-3.521	0.0670	0.4876
unknown	-9.024	-7.403	0.0163	0.4977	-10.076	-9.126	0.1111	0.5479
unknown	12.730	13.027	0.1619	0.5769	13.235	13.077	0.4693	0.7838
unknown	-6.771	-5.339	0.0890	0.5195	-6.837	-5.556	0.0586	0.4631
unknown	-8.670	-7.465	0.0311	0.4977	-8.197	-7.168	0.0600	0.4631
unknown	-5.815	-4.625	0.0225	0.4977	-6.776	-5.920	0.0117	0.4440
unknown	-8.525	-6.843	0.0094	0.4977	-9.878	-8.918	0.0499	0.4558
unknown	-8.695	-8.189	0.4518	0.7960	-9.246	-8.325	0.1861	0.6161
unknown	-4.338	-3.783	0.2073	0.6047	-3.329	-2.621	0.1405	0.5673
unknown	-6.135	-5.780	0.4374	0.7863	-4.859	-4.510	0.4642	0.7838
unknown	-7.789	-6.297	0.0187	0.4977	-6.795	-5.769	0.0041	0.4440
unknown	-6.644	-5.495	0.0134	0.4977	-6.033	-5.558	0.1000	0.5380
unknown	9.494	9.689	0.3076	0.6837	8.404	8.401	0.9947	0.9990
unknown	-6.401	-5.654	0.2177	0.6150	-5.418	-4.698	0.1671	0.5944
unknown	-9.173	-9.674	0.6339	0.8542	-8.559	-9.039	0.4696	0.7838
unknown	-8.281	-8.938	0.6355	0.8542	-7.968	-8.480	0.5267	0.8034
unknown	-8.112	-8.811	0.6450	0.8589	-8.257	-9.199	0.2581	0.6791
unknown	-2.413	-2.386	0.9348	0.9754	-1.005	-0.885	0.6703	0.8591
unknown	-6.003	-5.310	0.0305	0.4977	-5.271	-4.826	0.0839	0.5105
unknown	-6.386	-5.224	0.0404	0.4977	-5.694	-4.969	0.0524	0.4558
unknown	-4.630	-4.952	0.2316	0.6207	-3.782	-3.670	0.7699	0.9073
unknown	-8.774	-7.854	0.0281	0.4977	-7.848	-7.276	0.0793	0.5026
unknown	-9.223	-7.770	0.0321	0.4977	-8.263	-7.510	0.0808	0.5026
unknown	-8.165	-8.851	0.5502	0.8347	-7.866	-8.290	0.6209	0.8363
unknown	-8.272	-8.667	0.7476	0.9005	-7.590	-7.860	0.7354	0.8944
unknown	-8.017	-8.730	0.5876	0.8433	-7.469	-7.624	0.8695	0.9390
unknown	-9.011	-9.108	0.9349	0.9754	-7.571	-8.029	0.6569	0.8519
unknown	-3.709	-3.563	0.5638	0.8347	-3.000	-2.572	0.3505	0.7373
unknown	-4.457	-4.868	0.0504	0.4977	-5.006	-4.941	0.8150	0.9244
unknown	-5.542	-5.336	0.5485	0.8347	-5.127	-5.054	0.8225	0.9277
unknown	-2.952	-2.848	0.8210	0.9172	-1.810	-1.626	0.5109	0.7935
unknown	-6.620	-7.302	0.0326	0.4977	-7.421	-7.467	0.8979	0.9541

unknown	-6.655	-5.058	0.0865	0.5174	-7.208	-5.877	0.0806	0.5026
unknown	-1.530	-1.682	0.3186	0.6958	-1.322	-1.249	0.3844	0.7540
unknown	5.272	6.110	0.1471	0.5621	6.798	5.452	0.1860	0.6161
unknown	-4.832	-3.633	0.1446	0.5602	-4.843	-3.780	0.0934	0.5296
unknown	-5.676	-4.091	0.0596	0.4977	-6.067	-4.907	0.0200	0.4440
unknown	6.969	7.055	0.7022	0.8843	6.293	6.141	0.5009	0.7924
unknown	9.067	9.589	0.0197	0.4977	9.108	9.178	0.7072	0.8771
unknown	6.497	6.687	0.4462	0.7918	6.772	6.510	0.1119	0.5479
unknown	-7.105	-5.573	0.1576	0.5769	-7.186	-5.968	0.1192	0.5479
unknown	-8.107	-6.189	0.0544	0.4977	-8.839	-7.368	0.0415	0.4440
unknown	-7.186	-6.364	0.0928	0.5277	-7.488	-7.106	0.4343	0.7766
unknown	-5.124	-4.088	0.1152	0.5435	-5.740	-4.969	0.1364	0.5638
unknown	10.433	10.775	0.0476	0.4977	10.933	10.501	0.1517	0.5918
unknown	10.591	10.833	0.1702	0.5888	10.606	10.248	0.2248	0.6528
unknown	8.852	9.216	0.0675	0.5054	7.837	8.037	0.5972	0.8363
unknown	8.276	8.318	0.7978	0.9122	6.823	7.456	0.2958	0.7057
unknown	-6.020	-4.983	0.1851	0.5904	-5.807	-5.090	0.2559	0.6789
unknown	-7.632	-6.106	0.1018	0.5435	-8.413	-7.453	0.1187	0.5479
unknown	-7.930	-8.391	0.5396	0.8347	-8.448	-8.787	0.6101	0.8363
unknown	-8.869	-7.943	0.2276	0.6171	-7.957	-8.528	0.2788	0.6923
unknown	-8.695	-9.241	0.6347	0.8542	-8.312	-9.059	0.4037	0.7702
unknown	-9.478	-9.890	0.7576	0.9027	-8.626	-9.155	0.4897	0.7897
unknown	-7.030	-6.039	0.0594	0.4977	-6.708	-6.095	0.1698	0.5944
unknown	-7.575	-7.173	0.1202	0.5435	-6.866	-6.441	0.1424	0.5712
unknown	-6.394	-5.560	0.1787	0.5904	-5.565	-5.135	0.4145	0.7763
unknown	-7.089	-5.949	0.0353	0.4977	-5.913	-5.519	0.3444	0.7373
unknown	-8.979	-9.567	0.6663	0.8681	-8.464	-9.638	0.1641	0.5944
unknown	-8.690	-9.263	0.6930	0.8787	-8.067	-8.958	0.3641	0.7407
unknown	-9.328	-9.704	0.7290	0.8936	-7.958	-8.449	0.6285	0.8380
unknown	-4.441	-3.884	0.1414	0.5593	-3.372	-3.226	0.7196	0.8871
unknown	-6.580	-6.435	0.6296	0.8521	-6.780	-6.578	0.5325	0.8034
unknown	-4.711	-5.057	0.1159	0.5435	-4.608	-4.531	0.5414	0.8057
unknown	-6.579	-5.861	0.1403	0.5584	-5.407	-5.032	0.3943	0.7608
unknown	8.280	8.984	0.0389	0.4977	8.927	9.028	0.7186	0.8867
unknown	-7.083	-6.186	0.1177	0.5435	-6.718	-6.264	0.4075	0.7728
unknown	-6.960	-7.398	0.1025	0.5435	-6.853	-6.852	0.9965	0.9990
unknown	-9.447	-10.366	0.3611	0.7293	-8.412	-9.333	0.2530	0.6776
unknown	-8.889	-9.399	0.7027	0.8843	-7.812	-8.219	0.6275	0.8380
unknown	-4.167	-4.178	0.9649	0.9827	-4.087	-3.935	0.5282	0.8034
unknown	-2.438	-1.920	0.2433	0.6296	-2.202	-1.955	0.3514	0.7373
unknown	10.514	9.806	0.0393	0.4977	10.741	10.304	0.0801	0.5026
unknown	-6.329	-6.439	0.7273	0.8936	-6.740	-6.727	0.9674	0.9879
unknown	-6.310	-6.308	0.9949	0.9972	-6.187	-6.061	0.7266	0.8912
unknown	-4.871	-4.658	0.4557	0.7971	-4.848	-4.756	0.5280	0.8034
unknown	8.400	7.484	0.0587	0.4977	8.689	8.207	0.1301	0.5621
unknown	-4.841	-2.950	0.0766	0.5174	-5.793	-3.729	0.0503	0.4558
unknown	-6.358	-5.955	0.2344	0.6212	-6.088	-6.064	0.9617	0.9840
unknown	-5.812	-5.512	0.4136	0.7674	-7.131	-6.824	0.3409	0.7362
unknown	7.647	7.647	0.9992	0.9999	7.625	7.587	0.8368	0.9282
unknown	-6.879	-5.138	0.0989	0.5435	-8.237	-5.635	0.0496	0.4558
unknown	-6.680	-6.607	0.8245	0.9204	-6.377	-6.001	0.1164	0.5479
unknown	-10.541	-10.129	0.4783	0.8099	-9.325	-8.578	0.1547	0.5918
unknown	-3.444	-1.500	0.0404	0.4977	-4.008	-2.256	0.0565	0.4631
unknown	8.642	8.909	0.1954	0.5980	7.692	7.399	0.4621	0.7838
unknown	-5.671	-4.192	0.0720	0.5159	-6.335	-4.869	0.0761	0.4986
unknown	-8.075	-8.672	0.4005	0.7604	-8.223	-8.405	0.6953	0.8726
unknown	-8.014	-7.496	0.3853	0.7475	-7.214	-6.163	0.1127	0.5479

unknown	-4.333	-3.728	0.3844	0.7475	-3.653	-2.968	0.2157	0.6419
unknown	-7.233	-6.355	0.1158	0.5435	-7.066	-6.669	0.3688	0.7429
unknown	-5.953	-4.886	0.1627	0.5769	-6.230	-5.088	0.1278	0.5583
unknown	11.244	11.520	0.1695	0.5878	10.125	10.281	0.7153	0.8843
unknown	6.796	6.698	0.5147	0.8274	6.919	6.676	0.3288	0.7305
unknown	7.149	7.129	0.9041	0.9615	5.645	6.474	0.1263	0.5575
unknown	-6.630	-5.571	0.1941	0.5980	-5.672	-4.815	0.1780	0.6073
unknown	-7.151	-6.693	0.3062	0.6837	-6.471	-5.557	0.1046	0.5450
unknown	-4.743	-3.951	0.1436	0.5602	-4.182	-3.576	0.2806	0.6923
unknown	-8.586	-7.210	0.0593	0.4977	-9.662	-8.464	0.0978	0.5348
unknown	8.455	8.080	0.1659	0.5796	7.494	7.931	0.3184	0.7192
unknown	-4.400	-4.387	0.9711	0.9833	-3.624	-3.247	0.4522	0.7820
unknown	-7.643	-8.196	0.4404	0.7899	-7.980	-8.300	0.6460	0.8451
unknown	-5.158	-5.209	0.8789	0.9486	-4.579	-4.106	0.0508	0.4558
unknown	-4.037	-3.671	0.1471	0.5621	-3.640	-3.146	0.3296	0.7310
unknown	-6.065	-5.475	0.0839	0.5174	-5.693	-5.100	0.0657	0.4834
unknown	-7.384	-7.484	0.7974	0.9122	-6.683	-6.198	0.0577	0.4631
unknown	-4.765	-3.888	0.0826	0.5174	-3.625	-3.226	0.3376	0.7317
unknown	-9.774	-10.452	0.4262	0.7757	-9.717	-9.610	0.9044	0.9571
unknown	-8.930	-9.228	0.8019	0.9124	-8.626	-8.932	0.6793	0.8618
unknown	-1.665	-1.115	0.1863	0.5904	-0.451	-0.150	0.4377	0.7766
unknown	-4.768	-4.735	0.8613	0.9397	-4.245	-3.945	0.3154	0.7175
unknown	-1.646	-1.151	0.2485	0.6362	-1.210	-0.931	0.2029	0.6332
unknown	-4.045	-4.063	0.9363	0.9756	-3.648	-3.572	0.7844	0.9094
unknown	-8.217	-7.862	0.0258	0.4977	-7.727	-7.644	0.4776	0.7846
unknown	-9.400	-9.709	0.4916	0.8142	-6.830	-7.216	0.4380	0.7766
unknown	-8.454	-9.029	0.6428	0.8569	-7.966	-8.525	0.4075	0.7728
unknown	-8.389	-9.264	0.5369	0.8347	-6.505	-6.973	0.6216	0.8363
unknown	-2.207	-2.319	0.6773	0.8730	-1.858	-2.330	0.0744	0.4957
unknown	7.779	7.855	0.6139	0.8511	7.710	7.635	0.6118	0.8363
unknown	-7.405	-5.722	0.1396	0.5584	-7.625	-6.318	0.2518	0.6776
unknown	-8.755	-8.271	0.4166	0.7691	-6.088	-6.193	0.8515	0.9294
unknown	-3.874	-3.663	0.4763	0.8080	-3.067	-2.830	0.4555	0.7829
unknown	-3.238	-3.435	0.2914	0.6709	-3.271	-3.300	0.8773	0.9406
unknown	5.059	5.602	0.3538	0.7286	6.427	4.441	0.1439	0.5757
unknown	-5.785	-5.434	0.3825	0.7475	-5.013	-4.945	0.7513	0.9011
unknown	-10.861	-10.618	0.5025	0.8229	-8.397	-8.653	0.6657	0.8573
unknown	-2.873	-1.293	0.0736	0.5174	-2.935	-1.683	0.1080	0.5479
unknown	-8.699	-7.199	0.1365	0.5584	-8.499	-7.399	0.2341	0.6658
unknown	-5.312	-3.983	0.0690	0.5054	-5.316	-4.326	0.1593	0.5926
unknown	-7.463	-6.473	0.1487	0.5634	-6.797	-6.164	0.4225	0.7766
unknown	6.771	6.894	0.7593	0.9038	4.489	5.791	0.1365	0.5638
unknown	-5.883	-5.027	0.2229	0.6171	-6.608	-5.573	0.1182	0.5479
unknown	-8.944	-8.966	0.9233	0.9705	-8.097	-8.025	0.8603	0.9360
unknown	-4.576	-3.828	0.2492	0.6362	-4.132	-3.463	0.1580	0.5926
unknown	-5.189	-4.734	0.2977	0.6729	-5.674	-5.551	0.7800	0.9094
unknown	-6.785	-5.886	0.2821	0.6628	-6.246	-5.481	0.2999	0.7120
unknown	-7.749	-7.082	0.2941	0.6726	-8.325	-8.441	0.8392	0.9282
unknown	-8.687	-8.515	0.5638	0.8347	-8.963	-8.578	0.2134	0.6419
unknown	-7.274	-6.453	0.2709	0.6526	-6.815	-6.301	0.3082	0.7132
unknown	-8.619	-9.327	0.6334	0.8542	-8.226	-8.692	0.5130	0.7935
unknown	-8.780	-9.311	0.7430	0.8999	-7.866	-8.188	0.6743	0.8610
unknown	-8.936	-9.368	0.7379	0.8991	-7.321	-8.210	0.3057	0.7132
unknown	-7.161	-6.550	0.1898	0.5932	-5.807	-5.320	0.1851	0.6159
unknown	-6.952	-6.166	0.1063	0.5435	-7.320	-7.276	0.9024	0.9559
unknown	-8.062	-8.683	0.6588	0.8635	-8.299	-8.947	0.5212	0.7986
unknown	-8.550	-9.292	0.6177	0.8511	-8.300	-9.508	0.1945	0.6302

unknown	-8.966	-9.718	0.5001	0.8203	-7.629	-8.273	0.2567	0.6789
unknown	-9.120	-10.080	0.3800	0.7462	-7.676	-8.868	0.1307	0.5621
unknown	-7.972	-9.536	0.2648	0.6470	-7.218	-8.332	0.2477	0.6776
unknown	-7.207	-7.653	0.7776	0.9091	-5.834	-6.206	0.6886	0.8683
unknown	-5.856	-5.308	0.1252	0.5509	-5.392	-5.287	0.7378	0.8945
unknown	-5.484	-5.250	0.4326	0.7798	-5.201	-5.148	0.6008	0.8363
unknown	-9.375	-9.958	0.6229	0.8511	-8.250	-8.602	0.7353	0.8944
unknown	9.776	9.930	0.4726	0.8059	10.256	10.188	0.6211	0.8363
unknown	-6.649	-7.434	0.5845	0.8433	-5.594	-6.630	0.2811	0.6923
unknown	-7.039	-7.730	0.6570	0.8635	-5.745	-7.077	0.2176	0.6419
unknown	-3.614	-3.311	0.4822	0.8099	-3.915	-3.601	0.1555	0.5918
unknown	9.685	10.287	0.0566	0.4977	9.807	9.774	0.8445	0.9290
unknown	-8.960	-9.868	0.5152	0.8274	-7.918	-9.032	0.2683	0.6884
unknown	-9.249	-10.011	0.5537	0.8347	-8.198	-9.677	0.2274	0.6546
unknown	-6.064	-5.347	0.1086	0.5435	-6.348	-5.915	0.1520	0.5918
unknown	-7.778	-8.264	0.1475	0.5621	-7.348	-7.396	0.8711	0.9400
unknown	-7.194	-7.235	0.7843	0.9091	-7.320	-7.237	0.6627	0.8552
unknown	9.506	9.525	0.7665	0.9044	8.521	9.031	0.2752	0.6923
unknown	7.128	7.183	0.3188	0.6958	6.693	6.810	0.7226	0.8884
unknown	7.114	7.247	0.0301	0.4977	6.792	6.798	0.9878	0.9969
unknown	6.702	6.872	0.1727	0.5904	6.924	6.750	0.0658	0.4834
unknown	-8.821	-7.568	0.1855	0.5904	-7.749	-6.928	0.2149	0.6419
unknown	-7.115	-6.424	0.0249	0.4977	-7.829	-7.454	0.3017	0.7120
unknown	-6.364	-6.087	0.2667	0.6484	-7.034	-6.810	0.0454	0.4440
unknown	-8.034	-7.330	0.0348	0.4977	-7.421	-7.639	0.5175	0.7975
unknown	-2.520	-2.715	0.2866	0.6661	-2.592	-2.661	0.7524	0.9015
unknown	8.037	8.121	0.0034	0.4977	7.561	7.785	0.4136	0.7763
unknown	7.944	8.004	0.5816	0.8433	7.987	7.962	0.4252	0.7766
unknown	-4.668	-3.678	0.1975	0.6008	-4.256	-2.913	0.0308	0.4440
unknown	-3.805	-2.766	0.2148	0.6142	-3.423	-2.716	0.3209	0.7218
unknown	-5.607	-4.405	0.0511	0.4977	-5.678	-4.609	0.0453	0.4440
unknown	-7.396	-8.350	0.5091	0.8252	-6.658	-7.065	0.6711	0.8594
unknown	-12.509	-15.462	0.1352	0.5584	-9.273	-9.298	0.9800	0.9928
unknown	-12.061	-13.358	0.5193	0.8300	-8.339	-8.298	0.9693	0.9888
unknown	-3.682	-3.153	0.3231	0.6973	-3.679	-2.956	0.0727	0.4936
unknown	-1.731	-0.733	0.1589	0.5769	-1.298	-0.513	0.1705	0.5944
unknown	-0.942	-0.030	0.1885	0.5932	-0.664	0.168	0.0681	0.4901
unknown	-4.338	-3.495	0.1653	0.5796	-3.889	-3.283	0.1609	0.5933
unknown	-3.530	-2.595	0.2018	0.6009	-3.392	-2.467	0.0710	0.4936
unknown	0.956	1.508	0.2796	0.6591	1.213	1.845	0.1144	0.5479
unknown	-5.000	-5.044	0.8818	0.9497	-5.103	-4.953	0.6182	0.8363
unknown	-4.483	-3.757	0.1280	0.5584	-5.071	-4.711	0.5525	0.8165
unknown	-6.255	-5.406	0.0909	0.5227	-7.039	-6.778	0.5807	0.8335
unknown	-4.614	-3.757	0.1151	0.5435	-5.386	-5.048	0.6026	0.8363
unknown	-8.400	-8.663	0.7040	0.8850	-7.950	-8.138	0.4091	0.7728
unknown	-4.256	-4.266	0.9726	0.9833	-3.826	-3.561	0.3239	0.7256
unknown	-1.595	-1.289	0.5502	0.8347	-1.966	-1.042	0.0141	0.4440
unknown	-5.544	-4.943	0.2787	0.6587	-5.436	-5.465	0.9457	0.9759
unknown	-6.468	-6.439	0.9450	0.9767	-5.885	-5.594	0.4294	0.7766
unknown	-4.355	-4.023	0.5002	0.8203	-4.335	-4.346	0.9760	0.9917
unknown	-3.422	-2.610	0.1405	0.5584	-3.729	-3.626	0.8226	0.9277
unknown	-8.707	-9.893	0.1759	0.5904	-8.852	-9.403	0.5873	0.8363
unknown	-7.467	-7.769	0.2225	0.6171	-6.794	-6.674	0.5684	0.8259
unknown	-8.269	-8.053	0.5355	0.8347	-6.828	-6.923	0.8270	0.9282
unknown	-9.306	-9.879	0.5925	0.8433	-8.172	-8.779	0.3721	0.7451
unknown	-8.296	-8.766	0.5225	0.8300	-6.945	-6.910	0.9067	0.9580
unknown	-8.389	-8.646	0.5577	0.8347	-7.277	-7.639	0.1475	0.5863

unknown	-0.851	-0.746	0.7130	0.8917	-0.671	-0.262	0.0378	0.4440
unknown	-4.332	-4.077	0.4692	0.8053	-5.876	-6.001	0.7761	0.9094
unknown	-6.763	-6.394	0.4682	0.8053	-9.249	-9.225	0.9721	0.9900
unknown	-3.448	-3.419	0.9222	0.9705	-3.307	-2.746	0.1022	0.5450
unknown	-9.429	-10.264	0.3073	0.6837	-9.158	-9.609	0.5495	0.8138
unknown	-8.100	-7.272	0.0481	0.4977	-8.108	-7.597	0.0229	0.4440
unknown	-7.963	-7.983	0.9613	0.9820	-5.891	-6.246	0.5208	0.7986
unknown	-7.927	-8.031	0.7027	0.8843	-7.376	-7.480	0.5986	0.8363
unknown	-1.844	-1.834	0.9686	0.9827	-1.697	-1.266	0.0379	0.4440
unknown	12.202	12.316	0.2848	0.6648	12.556	12.376	0.1096	0.5479
unknown	4.098	4.289	0.7843	0.9091	10.382	7.892	0.1107	0.5479
unknown	-7.616	-8.036	0.7829	0.9091	-6.806	-6.962	0.8408	0.9282
unknown	-7.669	-8.803	0.4242	0.7757	-5.749	-6.628	0.2935	0.7040
unknown	-8.770	-9.362	0.2747	0.6587	-7.601	-7.211	0.6759	0.8613
unknown	-7.798	-6.864	0.0046	0.4977	-7.494	-7.045	0.2201	0.6419
unknown	-0.270	-0.295	0.9288	0.9736	-0.176	0.106	0.0184	0.4440
unknown	11.305	11.565	0.3568	0.7286	11.577	11.604	0.7653	0.9046
unknown	-6.538	-6.515	0.9382	0.9756	-4.148	-4.293	0.8205	0.9269
unknown	-5.567	-4.817	0.1126	0.5435	-5.346	-4.816	0.1613	0.5933
unknown	-5.568	-6.184	0.7510	0.9005	-3.809	-4.238	0.6564	0.8519
unknown	-7.895	-8.922	0.4418	0.7899	-6.543	-7.322	0.2498	0.6776
unknown	7.747	7.902	0.5426	0.8347	7.280	7.229	0.5655	0.8256
unknown	8.815	9.671	0.0309	0.4977	8.639	8.746	0.3533	0.7373
unknown	7.172	7.513	0.1750	0.5904	7.817	7.724	0.5413	0.8057
unknown	-7.548	-6.917	0.0340	0.4977	-5.711	-5.630	0.8418	0.9282
unknown	-6.210	-5.701	0.2271	0.6171	-5.424	-5.219	0.4372	0.7766
unknown	-5.008	-4.707	0.4505	0.7949	-4.728	-4.318	0.1877	0.6198
unknown	-6.061	-5.976	0.6162	0.8511	-6.408	-6.304	0.4906	0.7901
unknown	-7.626	-7.073	0.2777	0.6587	-7.226	-6.689	0.2913	0.7025
unknown	-7.905	-8.468	0.0876	0.5174	-7.815	-7.899	0.6247	0.8363
unknown	-7.226	-6.856	0.3355	0.7135	-6.528	-6.673	0.6124	0.8363
unknown	-4.031	-2.909	0.2150	0.6142	-4.282	-3.469	0.2171	0.6419
unknown	6.912	7.409	0.0819	0.5174	7.613	7.572	0.8758	0.9406
unknown	-4.495	-4.163	0.4060	0.7658	-3.428	-2.843	0.0653	0.4834
unknown	-8.814	-8.875	0.9558	0.9819	-8.127	-8.081	0.9558	0.9803
unknown	-5.093	-4.019	0.0743	0.5174	-5.615	-4.999	0.1150	0.5479
unknown	-6.689	-5.618	0.0988	0.5435	-6.187	-5.380	0.2600	0.6791
unknown	-7.065	-7.653	0.7291	0.8936	-6.464	-6.194	0.8143	0.9244
unknown	-7.883	-8.086	0.8593	0.9394	-7.456	-7.808	0.6349	0.8408
unknown	-5.878	-5.759	0.7871	0.9093	-5.348	-5.367	0.9356	0.9689
unknown	-5.977	-5.818	0.7091	0.8880	-5.457	-5.565	0.3341	0.7310
unknown	-7.990	-6.876	0.0355	0.4977	-9.200	-8.676	0.6396	0.8413
unknown	-7.386	-6.123	0.0767	0.5174	-7.911	-7.497	0.6526	0.8497
unknown	-6.950	-5.878	0.1789	0.5904	-6.804	-5.900	0.2152	0.6419
unknown	-8.231	-8.211	0.9720	0.9833	-7.827	-7.562	0.3844	0.7540
unknown	-7.061	-7.430	0.6767	0.8730	-6.625	-7.060	0.3736	0.7461
unknown	-5.871	-6.093	0.7699	0.9050	-5.632	-6.068	0.3154	0.7175
unknown	-7.217	-7.597	0.7545	0.9015	-6.671	-7.231	0.3171	0.7186
unknown	-5.170	-4.630	0.0789	0.5174	-4.507	-3.900	0.0199	0.4440
unknown	-8.279	-8.583	0.7313	0.8939	-8.103	-8.578	0.3932	0.7608
unknown	7.713	7.657	0.6399	0.8547	8.061	8.016	0.8689	0.9390
unknown	9.758	9.888	0.5751	0.8392	9.654	9.612	0.6310	0.8380
unknown	6.445	7.292	0.2554	0.6427	8.046	7.782	0.7359	0.8944
unknown	-9.266	-9.817	0.6389	0.8542	-8.368	-9.044	0.4541	0.7829
unknown	-6.855	-7.505	0.1994	0.6008	-6.855	-6.063	0.3040	0.7132
unknown	-6.038	-6.639	0.0389	0.4977	-6.227	-6.145	0.7830	0.9094
unknown	-8.093	-8.616	0.6037	0.8495	-6.989	-7.855	0.3329	0.7310

unknown	-7.337	-7.002	0.6058	0.8495	-7.732	-7.346	0.1318	0.5629
unknown	-6.606	-6.161	0.1394	0.5584	-6.555	-6.326	0.1591	0.5926
unknown	-8.583	-10.338	0.1740	0.5904	-8.471	-8.710	0.7926	0.9160
unknown	-8.342	-8.868	0.1202	0.5435	-8.529	-8.350	0.6356	0.8408
unknown	-8.206	-9.533	0.3181	0.6958	-8.032	-8.844	0.5210	0.7986
unknown	-7.837	-8.167	0.2605	0.6427	-7.238	-7.183	0.7823	0.9094
unknown	12.507	12.663	0.4504	0.7949	12.820	12.842	0.8371	0.9282
unknown	-8.226	-8.723	0.5708	0.8363	-7.913	-8.430	0.5121	0.7935
unknown	-8.214	-8.520	0.5666	0.8356	-7.892	-8.517	0.1305	0.5621
unknown	-4.991	-4.950	0.7961	0.9122	-5.054	-4.919	0.3134	0.7163
unknown	-7.002	-6.071	0.0091	0.4977	-6.168	-5.649	0.0390	0.4440
unknown	-7.431	-9.148	0.3228	0.6973	-8.050	-7.145	0.4788	0.7846
unknown	-7.928	-7.065	0.0982	0.5435	-8.323	-8.012	0.1987	0.6305
unknown	-11.015	-12.878	0.2981	0.6729	-4.123	-3.381	0.1537	0.5918
unknown	-7.349	-7.200	0.4625	0.7999	-6.893	-6.930	0.8748	0.9406
unknown	7.328	7.554	0.4254	0.7757	8.421	8.378	0.8480	0.9294
unknown	-12.489	-14.430	0.1617	0.5769	-6.114	-5.289	0.2454	0.6776
unknown	-7.576	-7.973	0.6053	0.8495	-7.796	-8.526	0.2196	0.6419
unknown	-6.717	-5.674	0.2333	0.6207	-6.734	-5.821	0.2884	0.7006
unknown	-7.048	-6.137	0.0278	0.4977	-6.979	-6.452	0.1351	0.5638
unknown	7.041	7.031	0.8537	0.9366	6.601	6.838	0.3496	0.7373
unknown	6.940	6.978	0.6984	0.8830	6.197	6.753	0.1169	0.5479
unknown	6.991	6.972	0.7508	0.9005	6.704	6.869	0.3862	0.7547
unknown	5.500	5.562	0.5979	0.8472	6.505	6.704	0.6702	0.8591
unknown	6.398	6.369	0.7054	0.8859	7.046	6.839	0.0937	0.5296
unknown	-5.044	-5.130	0.6215	0.8511	-5.430	-5.242	0.3885	0.7575
unknown	6.963	7.342	0.0677	0.5054	7.300	7.254	0.5440	0.8066
unknown	-5.066	-4.479	0.3198	0.6958	-5.539	-4.709	0.1163	0.5479
unknown	-6.093	-5.588	0.3130	0.6923	-6.047	-5.269	0.0317	0.4440
unknown	-3.186	-2.604	0.0901	0.5227	-2.647	-2.234	0.2593	0.6791
unknown	-6.054	-5.028	0.2778	0.6587	-6.012	-5.266	0.3285	0.7305
unknown	-9.493	-9.763	0.7430	0.8999	-9.796	-9.626	0.8054	0.9201
unknown	-2.936	-2.247	0.2206	0.6171	-3.442	-2.662	0.0926	0.5296
unknown	-3.191	-2.449	0.2565	0.6427	-3.765	-2.813	0.0001	0.1476
unknown	-1.436	-0.232	0.1371	0.5584	-1.452	-0.532	0.1021	0.5450
unknown	-9.167	-7.693	0.1764	0.5904	-10.589	-9.733	0.1621	0.5942
unknown	-3.958	-2.846	0.1150	0.5435	-4.103	-3.325	0.0528	0.4558
unknown	-8.999	-8.103	0.0532	0.4977	-8.332	-8.246	0.6866	0.8666
unknown	-7.584	-7.384	0.6556	0.8635	-6.697	-6.188	0.2105	0.6408
unknown	-8.028	-7.836	0.7701	0.9050	-7.486	-7.589	0.7340	0.8944
unknown	-7.099	-7.116	0.9671	0.9827	-6.705	-5.793	0.0809	0.5026
unknown	-2.238	-1.881	0.3448	0.7217	-2.434	-1.964	0.0327	0.4440
unknown	-5.823	-4.824	0.1369	0.5584	-6.389	-5.257	0.1291	0.5621
unknown	-5.077	-4.510	0.0570	0.4977	-5.808	-5.446	0.2171	0.6419
unknown	-7.620	-7.274	0.1368	0.5584	-6.447	-6.718	0.4187	0.7763
unknown	-9.114	-9.377	0.8506	0.9366	-9.214	-9.841	0.4334	0.7766
unknown	-6.462	-6.098	0.6541	0.8623	-5.828	-5.703	0.8156	0.9244
unknown	-6.115	-6.486	0.3567	0.7286	-5.093	-5.097	0.9774	0.9920
unknown	-1.980	-1.650	0.2250	0.6171	-3.176	-3.015	0.6687	0.8590
unknown	-8.874	-8.540	0.6918	0.8787	-8.271	-8.166	0.8801	0.9428
unknown	-5.181	-4.650	0.1104	0.5435	-5.830	-5.502	0.4761	0.7840
unknown	7.361	7.757	0.1016	0.5435	8.059	8.057	0.9919	0.9990
unknown	-7.737	-7.624	0.7685	0.9050	-7.023	-7.374	0.3463	0.7373
unknown	-7.751	-7.352	0.4173	0.7691	-7.585	-6.474	0.0453	0.4440
unknown	-7.751	-7.352	0.4173	0.7691	-7.585	-6.474	0.0453	0.4440
unknown	10.715	10.667	0.8147	0.9172	10.844	10.714	0.1148	0.5479
unknown	1.892	2.464	0.6221	0.8511	9.221	5.188	0.0655	0.4834

unknown	8.688	8.568	0.7079	0.8880	8.898	8.730	0.0722	0.4936
unknown	-6.656	-6.820	0.8717	0.9453	-6.080	-5.922	0.7935	0.9160
unknown	-5.589	-5.795	0.9243	0.9705	-4.548	-4.240	0.7709	0.9073
unknown	-6.736	-6.831	0.9369	0.9756	-5.924	-6.710	0.3726	0.7451
unknown	-5.211	-5.199	0.9932	0.9965	-4.305	-4.295	0.9887	0.9970
unknown	-7.224	-7.173	0.9671	0.9827	-6.418	-6.957	0.4430	0.7788
unknown	-3.386	-3.607	0.4684	0.8053	-3.407	-3.421	0.9545	0.9803
unknown	-7.217	-8.038	0.6900	0.8787	-6.718	-6.266	0.7646	0.9046
unknown	-7.367	-7.278	0.9559	0.9819	-6.378	-6.504	0.8939	0.9524
unknown	-9.190	-9.303	0.9243	0.9705	-8.373	-8.929	0.4672	0.7838
unknown	-5.124	-5.076	0.8210	0.9172	-5.272	-4.943	0.0841	0.5105
unknown	12.399	12.526	0.5327	0.8341	12.679	12.536	0.0973	0.5347
unknown	5.080	5.234	0.8145	0.9172	8.344	6.455	0.0591	0.4631
unknown	9.554	9.630	0.5865	0.8433	9.599	9.659	0.5654	0.8256
unknown	-9.636	-9.867	0.8086	0.9148	-8.802	-9.255	0.5736	0.8282
unknown	-6.314	-5.918	0.5645	0.8347	-6.418	-6.280	0.7348	0.8944
unknown	-8.666	-9.570	0.6276	0.8514	-7.694	-8.089	0.5894	0.8363
unknown	-9.118	-10.626	0.2580	0.6427	-7.837	-8.579	0.2645	0.6881
unknown	-2.226	-2.462	0.1234	0.5486	-2.045	-2.096	0.7420	0.8963
unknown	-6.422	-5.961	0.5999	0.8478	-6.413	-6.669	0.6068	0.8363
unknown	6.602	6.641	0.8710	0.9453	6.962	6.844	0.0409	0.4440
unknown	-5.082	-5.213	0.5445	0.8347	-4.901	-4.964	0.6412	0.8422
unknown	-4.422	-3.371	0.0851	0.5174	-5.520	-5.848	0.4749	0.7840
unknown	-4.994	-4.417	0.1895	0.5932	-4.567	-4.145	0.3486	0.7373
unknown	-7.366	-7.311	0.8682	0.9445	-6.887	-7.287	0.2200	0.6419
unknown	7.287	7.461	0.2089	0.6070	7.877	7.811	0.6243	0.8363
unknown	-7.609	-5.516	0.1180	0.5435	-8.597	-8.021	0.1188	0.5479
unknown	-7.231	-6.799	0.5403	0.8347	-6.769	-6.381	0.4827	0.7880
unknown	-8.671	-9.436	0.5219	0.8300	-7.425	-8.302	0.4082	0.7728
unknown	-7.475	-8.772	0.5095	0.8252	-5.868	-6.764	0.3592	0.7407
unknown	-7.538	-8.941	0.5128	0.8274	-5.813	-6.756	0.3016	0.7120
unknown	-6.723	-6.034	0.1138	0.5435	-6.066	-5.404	0.1204	0.5479
unknown	9.826	10.561	0.0882	0.5174	9.006	8.914	0.8236	0.9278
unknown	-8.468	-9.215	0.5536	0.8347	-7.653	-8.130	0.6235	0.8363
unknown	-1.865	-1.632	0.4231	0.7757	-0.691	-0.566	0.7438	0.8975
unknown	-8.647	-9.020	0.7509	0.9005	-8.042	-8.480	0.6419	0.8422
unknown	-3.641	-3.579	0.8176	0.9172	-3.653	-3.388	0.3011	0.7120
unknown	-8.499	-9.126	0.5889	0.8433	-8.345	-8.544	0.8241	0.9278
unknown	-7.929	-6.351	0.0278	0.4977	-8.683	-8.090	0.2379	0.6686
unknown	-6.376	-6.153	0.4235	0.7757	-7.449	-7.319	0.6638	0.8558
unknown	-5.303	-4.910	0.3087	0.6852	-6.847	-6.602	0.5372	0.8037
unknown	7.388	7.298	0.5531	0.8347	7.260	6.911	0.0060	0.4440
unknown	-7.429	-7.802	0.0559	0.4977	-7.597	-7.469	0.3333	0.7310
unknown	-8.157	-8.134	0.9558	0.9819	-7.758	-7.265	0.0295	0.4440
unknown	-8.817	-8.075	0.4841	0.8099	-8.157	-8.166	0.9817	0.9937
unknown	-8.919	-8.498	0.4255	0.7757	-9.156	-9.087	0.8616	0.9364
unknown	-8.883	-7.888	0.1582	0.5769	-8.880	-8.710	0.7624	0.9029
unknown	5.787	6.502	0.0425	0.4977	6.822	6.588	0.4190	0.7763
unknown	-8.669	-9.944	0.4333	0.7800	-8.323	-8.141	0.7667	0.9055
unknown	-5.278	-5.365	0.7987	0.9122	-5.597	-5.285	0.2554	0.6789
unknown	-7.854	-8.344	0.6271	0.8514	-7.168	-7.804	0.4300	0.7766
unknown	-8.295	-8.838	0.5527	0.8347	-7.936	-8.567	0.4188	0.7763
unknown	-7.110	-6.978	0.6607	0.8642	-6.338	-6.143	0.4510	0.7820
unknown	-8.248	-7.558	0.0572	0.4977	-8.690	-8.619	0.8375	0.9282
unknown	-5.998	-6.215	0.2122	0.6124	-5.998	-5.909	0.6224	0.8363
unknown	8.782	9.213	0.1396	0.5584	9.209	9.286	0.7130	0.8823
unknown	-6.813	-5.907	0.0406	0.4977	-7.089	-6.397	0.0868	0.5106

unknown	-6.187	-5.687	0.1854	0.5904	-6.005	-5.685	0.4204	0.7763
unknown	8.239	8.527	0.2043	0.6030	8.134	8.200	0.8281	0.9282
unknown	8.313	8.692	0.1600	0.5769	8.385	8.340	0.6901	0.8693
unknown	-8.201	-7.921	0.6318	0.8542	-7.877	-7.226	0.2522	0.6776
unknown	-7.068	-7.557	0.7203	0.8936	-6.206	-7.074	0.3539	0.7373
unknown	-6.510	-7.328	0.5335	0.8341	-5.984	-6.705	0.4452	0.7798
unknown	-4.587	-4.375	0.5052	0.8234	-4.522	-4.312	0.2823	0.6923
unknown	-6.907	-6.434	0.2505	0.6379	-6.248	-5.328	0.0641	0.4834
unknown	-5.667	-5.667	0.9999	0.9999	-5.559	-5.226	0.0364	0.4440
unknown	9.222	8.630	0.0517	0.4977	9.476	9.052	0.0411	0.4440
unknown	8.859	8.917	0.8187	0.9172	9.545	9.527	0.9502	0.9789
unknown	-9.119	-9.945	0.5869	0.8433	-8.461	-9.313	0.3966	0.7621
unknown	-9.425	-9.934	0.7279	0.8936	-8.771	-9.872	0.4356	0.7766
unknown	-6.945	-6.690	0.5264	0.8319	-6.915	-6.695	0.3358	0.7310
unknown	9.465	9.668	0.3137	0.6928	9.291	9.184	0.5654	0.8256
unknown	-7.800	-8.604	0.5467	0.8347	-7.569	-8.793	0.2662	0.6882
unknown	-3.649	-3.200	0.1230	0.5486	-3.281	-2.665	0.1198	0.5479
unknown	-4.707	-4.515	0.5740	0.8392	-4.268	-3.876	0.0324	0.4440
unknown	7.360	7.343	0.9548	0.9819	7.723	7.884	0.4357	0.7766
unknown	-5.651	-5.035	0.1122	0.5435	-5.459	-5.138	0.2042	0.6332
unknown	-7.150	-6.925	0.6168	0.8511	-6.481	-6.011	0.0894	0.5194
unknown	-10.901	-11.128	0.7635	0.9044	-6.677	-5.732	0.1708	0.5944
unknown	-1.544	-1.485	0.7304	0.8936	-1.031	-0.867	0.4704	0.7838
unknown	-9.059	-8.090	0.0439	0.4977	-8.328	-7.439	0.0434	0.4440
unknown	7.856	7.588	0.4619	0.7999	7.931	7.997	0.7393	0.8948
unknown	-4.698	-4.427	0.1453	0.5602	-3.985	-3.839	0.5775	0.8319
unknown	-6.738	-6.907	0.4078	0.7660	-6.539	-6.404	0.2799	0.6923
unknown	7.488	7.681	0.3478	0.7251	7.526	7.612	0.5386	0.8048
unknown	-7.902	-7.771	0.8441	0.9332	-7.111	-6.603	0.2197	0.6419
unknown	-5.586	-4.833	0.1655	0.5796	-5.678	-5.039	0.1202	0.5479
unknown	-0.663	-0.848	0.4236	0.7757	-0.466	-0.304	0.3829	0.7540
unknown	-9.797	-8.917	0.0363	0.4977	-9.517	-9.441	0.8653	0.9379
unknown	-5.639	-5.662	0.9508	0.9804	-5.278	-4.749	0.1232	0.5532
unknown	-7.876	-6.858	0.1013	0.5435	-7.439	-5.647	0.0130	0.4440
unknown	-1.774	-0.559	0.1715	0.5901	-2.893	-1.256	0.0431	0.4440
unknown	-5.153	-5.127	0.7090	0.8880	-5.060	-4.815	0.1375	0.5638
unknown	-9.308	-8.509	0.2056	0.6030	-8.383	-8.031	0.4254	0.7766
unknown	-6.237	-6.171	0.7665	0.9044	-6.327	-5.981	0.1983	0.6305
unknown	-5.745	-5.660	0.7248	0.8936	-4.866	-4.414	0.2159	0.6419
unknown	-7.983	-7.954	0.9611	0.9820	-8.171	-8.011	0.5668	0.8256
unknown	6.861	6.694	0.7339	0.8955	6.509	6.353	0.7511	0.9011
unknown	-8.816	-8.918	0.7606	0.9038	-7.356	-7.268	0.8011	0.9176
unknown	-8.100	-7.361	0.0346	0.4977	-7.597	-7.571	0.8462	0.9290
unknown	-8.954	-9.378	0.7630	0.9044	-8.462	-8.979	0.6191	0.8363
unknown	-3.037	-3.293	0.2968	0.6726	-2.367	-2.130	0.1243	0.5542
unknown	-7.141	-6.685	0.6036	0.8495	-6.983	-6.745	0.6133	0.8363
unknown	7.281	7.485	0.3503	0.7264	6.831	7.034	0.4400	0.7766
unknown	-5.233	-5.245	0.9622	0.9820	-5.264	-5.152	0.6246	0.8363
unknown	-5.604	-4.387	0.0001	0.1153	-5.806	-5.642	0.4745	0.7840
unknown	3.402	2.383	0.2969	0.6726	6.953	3.308	0.0290	0.4440
unknown	-8.179	-6.419	0.0002	0.1153	-8.390	-8.227	0.6035	0.8363
unknown	-8.281	-8.937	0.6017	0.8490	-7.492	-8.056	0.5087	0.7935
unknown	-2.607	-2.530	0.7650	0.9044	-2.368	-2.094	0.0258	0.4440
unknown	-8.731	-9.242	0.7229	0.8936	-8.564	-8.981	0.5867	0.8363
unknown	-8.333	-8.794	0.7816	0.9091	-8.845	-9.443	0.5937	0.8363
unknown	8.857	8.776	0.8063	0.9142	9.445	9.525	0.8140	0.9244
unknown	-5.120	-5.137	0.9241	0.9705	-5.198	-4.860	0.0105	0.4440

unknown	-5.741	-4.947	0.0103	0.4977	-6.252	-5.799	0.2029	0.6332
unknown	-5.279	-4.484	0.1058	0.5435	-6.094	-5.632	0.2016	0.6332
unknown	9.031	9.155	0.4896	0.8119	8.854	8.661	0.2854	0.6954
unknown	-7.278	-7.688	0.7999	0.9122	-6.317	-6.718	0.7066	0.8771
unknown	-7.248	-8.149	0.5835	0.8433	-6.204	-7.192	0.3546	0.7373
unknown	-6.761	-6.565	0.4887	0.8115	-6.780	-6.638	0.6156	0.8363
unknown	-8.373	-9.091	0.6590	0.8635	-8.525	-9.377	0.4978	0.7924
unknown	7.463	7.481	0.9399	0.9756	7.584	7.686	0.5904	0.8363
unknown	-7.302	-7.665	0.2571	0.6427	-7.224	-7.159	0.8458	0.9290
unknown	-6.717	-6.017	0.0787	0.5174	-7.064	-6.983	0.7582	0.9020
unknown	-8.957	-9.103	0.9188	0.9705	-8.294	-8.620	0.7370	0.8944
unknown	-8.914	-9.545	0.7026	0.8843	-7.823	-8.417	0.6164	0.8363
unknown	-8.157	-8.870	0.6805	0.8762	-7.504	-7.940	0.6597	0.8538
unknown	-7.102	-8.075	0.5361	0.8347	-6.643	-7.402	0.4403	0.7766
unknown	-5.994	-6.374	0.8363	0.9280	-4.759	-5.599	0.4481	0.7820
unknown	-4.520	-4.194	0.2052	0.6030	-4.365	-4.140	0.2477	0.6776
unknown	-7.959	-8.594	0.7324	0.8944	-7.033	-7.946	0.5186	0.7975
unknown	-7.398	-7.225	0.4063	0.7658	-7.049	-6.815	0.4482	0.7820
unknown	-7.461	-7.225	0.3343	0.7132	-6.988	-6.913	0.7618	0.9029
unknown	-6.989	-6.526	0.2015	0.6009	-6.727	-6.475	0.4170	0.7763
unknown	-7.756	-7.404	0.1404	0.5584	-7.378	-7.063	0.0967	0.5335
unknown	-8.217	-9.245	0.4303	0.7785	-7.901	-8.794	0.4318	0.7766
unknown	8.024	8.020	0.9627	0.9820	6.860	7.549	0.1970	0.6302
unknown	8.264	8.251	0.8466	0.9348	7.228	7.797	0.2042	0.6332
unknown	7.829	7.868	0.6902	0.8787	7.384	7.695	0.3013	0.7120
unknown	10.366	10.481	0.5894	0.8433	10.849	10.840	0.9386	0.9701
unknown	7.501	7.481	0.7188	0.8935	7.958	7.538	0.1536	0.5918
unknown	7.644	7.624	0.9228	0.9705	7.863	7.967	0.3211	0.7218
unknown	-7.687	-7.407	0.6220	0.8511	-7.976	-7.356	0.0351	0.4440
unknown	-8.353	-9.262	0.4808	0.8099	-8.143	-9.039	0.3348	0.7310
unknown	-7.697	-8.346	0.6730	0.8720	-7.152	-8.057	0.3480	0.7373
unknown	-7.802	-8.514	0.5746	0.8392	-7.252	-8.281	0.1750	0.5998
unknown	-2.343	-2.040	0.3588	0.7286	-2.516	-2.348	0.2208	0.6425
unknown	-5.164	-5.159	0.9871	0.9916	-5.251	-5.393	0.5053	0.7935
unknown	-5.626	-5.458	0.6357	0.8542	-5.048	-4.816	0.2623	0.6836
unknown	-1.549	-0.558	0.0446	0.4977	-2.144	-0.948	0.0507	0.4558
unknown	7.979	8.026	0.8601	0.9395	8.760	8.749	0.9367	0.9689
unknown	-8.145	-8.036	0.8199	0.9172	-7.319	-6.982	0.2854	0.6954
unknown	-4.315	-3.481	0.0875	0.5174	-4.779	-3.967	0.0958	0.5332
unknown	-8.875	-9.519	0.6237	0.8511	-7.604	-8.127	0.6096	0.8363
unknown	-6.948	-6.691	0.3998	0.7599	-7.373	-6.773	0.0036	0.4440
unknown	-5.958	-5.474	0.1605	0.5769	-7.047	-6.823	0.4838	0.7880
unknown	-2.433	-2.725	0.5185	0.8297	-1.951	-1.508	0.0706	0.4936
unknown	7.632	7.748	0.2763	0.6587	7.916	7.739	0.1537	0.5918
unknown	-4.854	-4.971	0.7017	0.8843	-4.734	-4.712	0.8925	0.9522
unknown	-6.491	-6.503	0.9613	0.9820	-6.886	-6.658	0.4403	0.7766
unknown	-8.620	-7.926	0.1140	0.5435	-9.371	-8.879	0.2064	0.6341
unknown	6.952	6.869	0.8542	0.9366	6.872	5.931	0.3024	0.7125
unknown	7.581	8.073	0.1088	0.5435	8.260	8.129	0.6071	0.8363
unknown	-5.035	-4.858	0.6717	0.8717	-6.203	-5.728	0.0236	0.4440
unknown	-3.218	-2.690	0.3338	0.7132	-3.307	-2.515	0.0277	0.4440
unknown	-8.779	-8.152	0.2282	0.6171	-7.485	-7.038	0.4202	0.7763
unknown	7.094	7.285	0.3945	0.7555	6.499	6.560	0.8355	0.9282
unknown	-5.559	-5.083	0.2917	0.6709	-5.292	-5.101	0.4812	0.7875
unknown	7.079	7.906	0.0443	0.4977	6.605	6.860	0.3501	0.7373
unknown	-3.491	-2.930	0.1572	0.5769	-3.962	-3.648	0.3547	0.7373
unknown	-2.554	-2.257	0.3438	0.7217	-2.606	-2.078	0.1753	0.5998

unknown	7.434	7.269	0.6630	0.8655	7.130	7.132	0.9975	0.9990
unknown	-5.058	-5.189	0.5144	0.8274	-5.175	-4.931	0.3265	0.7278
unknown	-5.545	-5.079	0.2789	0.6587	-6.160	-5.963	0.6294	0.8380
unknown	-9.703	-9.806	0.8575	0.9382	-7.382	-7.210	0.7834	0.9094
unknown	-8.193	-8.864	0.6276	0.8514	-7.256	-7.778	0.4730	0.7838
unknown	-1.879	-1.500	0.1408	0.5584	-1.790	-1.416	0.0443	0.4440
unknown	-3.601	-3.616	0.9638	0.9824	-3.165	-2.709	0.2122	0.6419
unknown	-5.019	-4.717	0.1396	0.5584	-4.837	-4.482	0.0583	0.4631
unknown	-6.724	-7.350	0.0339	0.4977	-6.894	-6.895	0.9934	0.9990
unknown	-7.844	-7.617	0.5356	0.8347	-7.316	-7.116	0.4670	0.7838
unknown	-8.213	-7.572	0.3625	0.7303	-7.912	-6.661	0.0204	0.4440
unknown	-7.346	-8.841	0.3762	0.7408	-6.691	-7.682	0.3672	0.7425
unknown	-6.976	-6.643	0.6260	0.8514	-6.928	-6.150	0.1675	0.5944
unknown	-0.575	-0.496	0.5445	0.8347	-0.277	-0.019	0.0922	0.5296
unknown	-4.567	-3.217	0.2004	0.6008	-4.543	-4.277	0.2547	0.6786
unknown	-3.481	-3.408	0.6760	0.8730	-3.066	-2.935	0.3918	0.7599
unknown	12.766	12.832	0.7183	0.8935	13.169	13.084	0.3343	0.7310
unknown	-7.034	-8.381	0.4137	0.7674	-6.460	-7.431	0.3512	0.7373
unknown	-7.281	-8.434	0.4532	0.7964	-6.615	-7.284	0.4004	0.7671
unknown	-5.444	-4.894	0.3581	0.7286	-5.392	-4.596	0.0083	0.4440
unknown	-4.876	-4.566	0.5615	0.8347	-4.869	-4.057	0.0087	0.4440
unknown	-7.804	-8.729	0.5031	0.8229	-7.008	-7.606	0.4954	0.7921
unknown	0.009	0.236	0.2703	0.6524	0.159	0.426	0.0572	0.4631
unknown	-2.856	-2.344	0.0556	0.4977	-2.529	-2.289	0.1377	0.5638
unknown	-9.250	-10.035	0.5079	0.8248	-8.425	-8.793	0.6738	0.8610
unknown	8.856	9.095	0.3384	0.7151	9.698	9.628	0.6986	0.8740
unknown	-5.419	-5.198	0.4192	0.7714	-6.155	-6.110	0.9249	0.9645
unknown	-3.780	-3.494	0.4544	0.7965	-4.126	-3.746	0.1396	0.5669
unknown	-7.553	-8.439	0.6680	0.8694	-5.587	-6.283	0.2947	0.7056
unknown	7.754	7.985	0.3294	0.7071	8.599	8.554	0.8162	0.9244
unknown	-7.968	-7.561	0.3841	0.7475	-8.489	-7.973	0.1253	0.5563
unknown	-8.860	-8.309	0.2602	0.6427	-8.973	-8.102	0.2274	0.6546
unknown	8.067	8.097	0.7530	0.9012	8.110	8.049	0.5641	0.8256
unknown	-5.166	-5.138	0.9425	0.9756	-5.316	-5.494	0.5119	0.7935
unknown	-3.799	-3.794	0.9826	0.9893	-4.123	-3.965	0.4828	0.7880
unknown	-8.987	-9.726	0.6231	0.8511	-7.840	-8.524	0.3770	0.7518
unknown	-6.478	-5.470	0.0688	0.5054	-7.104	-6.300	0.0611	0.4676
unknown	-6.325	-6.228	0.8202	0.9172	-6.546	-6.493	0.8005	0.9176
unknown	-7.523	-6.519	0.1424	0.5602	-7.454	-6.394	0.0387	0.4440
unknown	-9.757	-9.257	0.7878	0.9093	-8.841	-9.715	0.5302	0.8034
unknown	-6.720	-6.522	0.5435	0.8347	-9.039	-9.585	0.4486	0.7820
unknown	-6.032	-5.428	0.2156	0.6142	-6.312	-5.639	0.0944	0.5296
unknown	-6.888	-5.634	0.0349	0.4977	-7.883	-7.269	0.2042	0.6332
unknown	7.075	7.741	0.0186	0.4977	6.458	6.313	0.4926	0.7901
unknown	-5.986	-5.592	0.1862	0.5904	-6.882	-6.755	0.6689	0.8590
unknown	8.098	7.884	0.5908	0.8433	7.467	7.556	0.8435	0.9290
unknown	-6.692	-6.356	0.5571	0.8347	-7.127	-6.406	0.0236	0.4440
unknown	-8.690	-8.859	0.9108	0.9654	-8.061	-8.427	0.6615	0.8550
unknown	-8.497	-8.767	0.8711	0.9453	-8.005	-8.425	0.6007	0.8363
unknown	-5.511	-5.298	0.6382	0.8542	-4.916	-4.380	0.1489	0.5884
unknown	10.587	10.702	0.6248	0.8514	10.550	10.508	0.4883	0.7897
unknown	-8.225	-8.595	0.7602	0.9038	-7.236	-7.928	0.4493	0.7820
unknown	-4.029	-3.077	0.0975	0.5435	-3.206	-1.929	0.0236	0.4440
unknown	13.301	13.463	0.3063	0.6837	13.721	13.730	0.8773	0.9406
unknown	-6.066	-5.160	0.0955	0.5406	-5.464	-4.560	0.0860	0.5105
unknown	-6.814	-7.602	0.5990	0.8478	-5.922	-6.286	0.6805	0.8621
unknown	-8.252	-10.534	0.3496	0.7260	-6.696	-8.672	0.1722	0.5944

unknown	-8.229	-9.997	0.3380	0.7151	-7.093	-8.674	0.1347	0.5638
unknown	-4.721	-3.751	0.0807	0.5174	-5.338	-4.956	0.1844	0.6159
unknown	-9.411	-10.470	0.5208	0.8300	-8.430	-8.961	0.6258	0.8369
unknown	-1.136	-0.768	0.2948	0.6726	-0.527	0.199	0.0062	0.4440
unknown	6.287	7.507	0.0597	0.4977	7.337	6.190	0.2663	0.6882
unknown	-7.422	-8.170	0.6177	0.8511	-6.807	-7.348	0.6494	0.8471
unknown	-6.176	-7.180	0.5859	0.8433	-5.445	-6.040	0.6399	0.8413
unknown	-6.300	-6.678	0.8208	0.9172	-5.421	-5.722	0.7930	0.9160
unknown	-8.459	-8.963	0.7140	0.8917	-8.058	-7.988	0.9359	0.9689
unknown	6.510	7.567	0.0660	0.5051	7.291	6.318	0.2794	0.6923
unknown	-8.464	-9.318	0.6226	0.8511	-7.667	-8.098	0.7532	0.9016
unknown	-0.324	-0.357	0.9192	0.9705	0.026	0.650	0.0169	0.4440
unknown	7.964	8.396	0.1380	0.5584	7.902	8.044	0.3357	0.7310
unknown	-5.422	-4.888	0.2829	0.6635	-5.247	-4.531	0.0223	0.4440
unknown	-5.135	-4.374	0.2330	0.6207	-5.347	-4.388	0.1179	0.5479
unknown	-6.615	-6.396	0.5884	0.8433	-7.617	-7.115	0.0066	0.4440
unknown	-2.463	-1.724	0.1793	0.5904	-2.846	-1.944	0.0123	0.4440
unknown	-2.109	-1.412	0.1628	0.5769	-2.460	-1.867	0.1273	0.5579
unknown	7.022	7.143	0.4088	0.7660	7.623	7.695	0.7112	0.8809
unknown	-7.511	-8.013	0.1017	0.5435	-7.439	-7.232	0.0873	0.5112
unknown	-1.327	-0.709	0.0615	0.4993	-2.466	-1.996	0.2357	0.6658
unknown	-1.498	-1.115	0.2802	0.6594	-1.691	-1.204	0.0130	0.4440
unknown	-10.210	-9.216	0.2456	0.6344	-9.914	-8.378	0.0487	0.4558
unknown	-7.422	-7.993	0.0630	0.4993	-7.485	-7.604	0.3960	0.7621
unknown	-3.518	-3.393	0.7513	0.9005	-4.306	-4.262	0.8752	0.9406
unknown	-1.042	-0.650	0.1620	0.5769	-1.841	-1.643	0.4760	0.7840
unknown	7.195	7.531	0.0874	0.5174	7.245	7.373	0.4981	0.7924
unknown	-4.128	-3.752	0.2126	0.6124	-5.052	-4.906	0.4285	0.7766
unknown	-6.399	-5.951	0.3732	0.7407	-5.956	-5.235	0.1128	0.5479
unknown	11.783	11.634	0.5918	0.8433	12.056	11.830	0.0584	0.4631
unknown	-6.745	-6.526	0.7905	0.9100	-6.727	-6.093	0.2857	0.6954
unknown	-6.982	-7.147	0.6159	0.8511	-6.811	-6.422	0.3547	0.7373
unknown	-8.393	-9.333	0.4873	0.8112	-8.062	-8.546	0.4504	0.7820
unknown	-4.415	-4.086	0.3360	0.7135	-6.582	-6.628	0.9287	0.9666
unknown	3.574	4.258	0.0841	0.5174	6.297	5.932	0.5121	0.7935
unknown	-7.069	-6.698	0.3843	0.7475	-10.409	-10.214	0.7874	0.9116
unknown	-7.207	-6.719	0.3115	0.6902	-6.217	-5.878	0.1040	0.5450
unknown	13.448	13.562	0.5599	0.8347	13.722	13.661	0.1727	0.5944
unknown	-8.243	-8.805	0.6425	0.8569	-7.766	-8.217	0.6240	0.8363
unknown	-5.781	-4.957	0.2863	0.6661	-6.285	-5.260	0.0167	0.4440
unknown	-8.065	-9.008	0.5270	0.8319	-6.284	-7.031	0.2715	0.6908
unknown	-7.303	-7.764	0.7836	0.9091	-6.178	-6.607	0.5689	0.8259
unknown	9.149	10.220	0.0105	0.4977	8.608	8.545	0.7458	0.8977
unknown	-6.001	-5.275	0.1177	0.5435	-6.837	-6.187	0.2729	0.6908
unknown	6.187	7.806	0.0132	0.4977	5.412	5.235	0.4859	0.7894
unknown	-5.082	-4.478	0.1850	0.5904	-4.595	-3.926	0.0783	0.5026
unknown	7.182	6.876	0.3581	0.7286	7.649	7.531	0.6357	0.8408
unknown	8.534	8.724	0.2570	0.6427	9.138	9.103	0.8416	0.9282
unknown	-7.564	-8.053	0.7296	0.8936	-6.897	-7.424	0.5751	0.8294
unknown	-5.607	-4.568	0.1094	0.5435	-6.338	-5.370	0.0319	0.4440
unknown	-6.297	-6.353	0.9780	0.9862	-4.184	-4.963	0.3436	0.7373
unknown	-6.219	-7.451	0.6107	0.8511	-4.335	-5.188	0.3711	0.7451
unknown	11.249	12.086	0.0592	0.4977	10.402	10.379	0.9595	0.9831
unknown	-8.462	-7.256	0.1454	0.5602	-9.423	-8.349	0.0520	0.4558
unknown	-8.287	-9.583	0.5270	0.8319	-6.301	-7.462	0.3407	0.7362
unknown	-4.454	-3.579	0.2550	0.6427	-5.173	-4.497	0.0853	0.5105
unknown	6.269	6.463	0.3594	0.7286	6.563	6.186	0.2892	0.7013

unknown	-7.246	-5.620	0.0905	0.5227	-7.951	-7.153	0.1256	0.5563
unknown	-8.213	-9.728	0.3145	0.6933	-8.029	-8.870	0.4153	0.7763
unknown	-7.833	-8.718	0.5181	0.8297	-7.344	-8.200	0.4949	0.7921
unknown	-7.213	-6.886	0.4408	0.7899	-7.614	-7.115	0.3048	0.7132
unknown	-9.022	-9.086	0.9706	0.9833	-8.139	-8.015	0.8645	0.9379
unknown	-6.919	-5.838	0.0878	0.5174	-7.769	-7.145	0.2051	0.6337
unknown	-6.491	-6.761	0.2152	0.6142	-7.063	-6.727	0.4075	0.7728
unknown	-8.487	-7.698	0.2279	0.6171	-7.967	-6.881	0.0400	0.4440
unknown	7.181	7.202	0.6192	0.8511	7.154	7.064	0.3865	0.7547
unknown	-4.942	-5.412	0.0414	0.4977	-4.946	-4.809	0.2695	0.6903
unknown	-2.873	-1.908	0.1185	0.5435	-2.387	-1.512	0.0232	0.4440
unknown	-8.327	-9.006	0.1242	0.5506	-7.867	-7.961	0.7709	0.9073
unknown	-1.816	-1.210	0.2966	0.6726	-2.395	-0.845	0.0731	0.4936
unknown	0.205	0.654	0.2370	0.6243	0.821	1.323	0.2672	0.6882
unknown	9.492	9.859	0.1330	0.5584	9.634	9.658	0.8498	0.9294
unknown	-2.473	-1.791	0.2044	0.6030	-1.548	-1.057	0.4612	0.7838
unknown	3.447	3.850	0.5144	0.8274	6.684	6.238	0.4885	0.7897
unknown	0.138	0.832	0.1029	0.5435	0.585	1.082	0.0846	0.5105
unknown	-2.076	-1.240	0.3994	0.7599	-0.857	-0.614	0.0415	0.4440
unknown	4.408	4.545	0.7848	0.9091	7.032	7.186	0.8348	0.9282
unknown	10.802	10.979	0.3208	0.6965	10.696	10.573	0.4591	0.7838
unknown	-2.721	-1.746	0.1098	0.5435	-2.199	-1.551	0.1368	0.5638
unknown	-4.134	-4.208	0.8870	0.9539	-3.565	-3.391	0.3093	0.7135
unknown	8.329	8.610	0.3353	0.7135	8.206	8.067	0.6990	0.8740
unknown	-7.800	-8.219	0.7649	0.9044	-7.356	-7.841	0.5981	0.8363
unknown	-7.893	-7.809	0.7832	0.9091	-8.209	-8.402	0.5046	0.7935
unknown	6.263	7.703	0.0252	0.4977	4.576	5.598	0.3720	0.7451
unknown	-2.067	-1.207	0.2160	0.6142	-2.453	-1.747	0.3537	0.7373
unknown	-7.408	-6.529	0.0509	0.4977	-7.298	-7.028	0.1822	0.6159
unknown	7.038	6.962	0.8373	0.9283	7.581	7.426	0.4852	0.7891
unknown	-4.617	-4.168	0.4063	0.7658	-5.287	-4.683	0.3165	0.7186
unknown	-8.916	-9.533	0.6591	0.8635	-7.875	-8.392	0.6181	0.8363
unknown	6.489	6.589	0.4268	0.7757	7.250	6.844	0.1663	0.5944
unknown	-9.335	-9.569	0.8521	0.9366	-8.598	-8.595	0.9972	0.9990
unknown	-8.173	-7.331	0.1335	0.5584	-8.015	-7.416	0.1267	0.5575
unknown	-5.953	-4.946	0.1348	0.5584	-6.425	-5.944	0.1942	0.6302
unknown	-8.514	-9.308	0.5631	0.8347	-7.922	-8.261	0.7731	0.9081
unknown	-7.664	-8.057	0.7953	0.9122	-6.871	-6.840	0.9785	0.9920
unknown	-8.085	-8.347	0.8624	0.9397	-7.241	-6.907	0.7595	0.9020
unknown	6.884	7.275	0.1194	0.5435	7.181	7.382	0.2813	0.6923
unknown	-3.536	-2.803	0.2766	0.6587	-4.351	-3.467	0.0931	0.5296
unknown	-4.648	-3.763	0.1206	0.5435	-5.100	-4.080	0.0454	0.4440
unknown	-6.671	-6.123	0.4498	0.7949	-6.995	-6.301	0.1960	0.6302
unknown	-9.328	-9.270	0.9621	0.9820	-8.497	-8.077	0.6769	0.8613
unknown	-8.015	-8.966	0.5619	0.8347	-6.835	-7.181	0.6826	0.8640
unknown	-8.736	-9.772	0.4589	0.7999	-8.485	-8.380	0.9131	0.9609
unknown	-8.924	-9.837	0.4665	0.8049	-8.472	-8.778	0.7334	0.8944
unknown	-6.821	-6.644	0.5707	0.8363	-6.804	-6.607	0.2807	0.6923
unknown	7.447	6.756	0.0343	0.4977	7.531	7.202	0.1474	0.5863
unknown	-1.222	-0.505	0.1617	0.5769	-1.842	-0.974	0.0338	0.4440
unknown	-7.639	-7.577	0.8770	0.9486	-7.797	-7.262	0.1400	0.5669
unknown	-7.041	-6.784	0.2685	0.6516	-7.004	-6.462	0.0831	0.5105
unknown	-3.942	-2.772	0.0464	0.4977	-5.316	-4.197	0.0061	0.4440
unknown	-6.306	-5.938	0.3626	0.7303	-8.521	-7.442	0.0960	0.5332
unknown	-6.425	-5.562	0.1854	0.5904	-8.691	-7.060	0.0076	0.4440
unknown	-8.272	-8.480	0.9099	0.9653	-7.644	-8.280	0.5310	0.8034
unknown	-7.946	-8.202	0.9017	0.9596	-6.874	-7.400	0.6369	0.8408

unknown	6.305	7.517	0.0041	0.4977	6.269	7.275	0.0408	0.4440
unknown	6.583	6.668	0.2631	0.6445	7.496	7.485	0.9677	0.9879
unknown	-8.093	-7.868	0.3218	0.6968	-8.108	-7.828	0.4071	0.7728
unknown	8.971	8.880	0.5807	0.8433	8.455	8.259	0.2922	0.7034
unknown	-6.960	-7.618	0.7862	0.9093	-6.820	-7.602	0.5130	0.7935
unknown	-7.433	-8.150	0.7254	0.8936	-6.953	-7.672	0.4977	0.7924
unknown	-9.393	-9.937	0.7513	0.9005	-8.659	-9.898	0.3625	0.7407
unknown	-6.782	-8.368	0.3530	0.7286	-6.538	-7.284	0.5321	0.8034
unknown	-9.338	-9.580	0.8776	0.9486	-10.035	-10.822	0.3905	0.7592
unknown	-8.651	-9.673	0.3519	0.7286	-8.583	-9.203	0.2748	0.6923
unknown	-6.577	-5.905	0.2367	0.6243	-6.880	-6.328	0.1164	0.5479
unknown	-8.597	-8.598	0.9973	0.9988	-7.681	-7.521	0.5093	0.7935
unknown	10.539	10.712	0.3298	0.7071	10.317	10.159	0.4118	0.7754
unknown	-6.937	-7.536	0.7669	0.9044	-6.595	-7.647	0.4308	0.7766
unknown	-6.880	-7.516	0.7559	0.9024	-6.560	-7.483	0.4591	0.7838
unknown	-5.311	-5.715	0.0520	0.4977	-5.381	-5.250	0.2476	0.6776
unknown	-9.168	-9.906	0.3569	0.7286	-9.199	-9.549	0.5565	0.8205
unknown	-7.203	-6.330	0.1626	0.5769	-8.375	-7.754	0.1789	0.6090
unknown	-8.051	-8.885	0.6237	0.8511	-7.717	-8.601	0.3615	0.7407
unknown	-8.631	-8.667	0.9201	0.9705	-7.486	-7.378	0.6772	0.8613
unknown	6.927	7.160	0.1791	0.5904	7.671	7.182	0.0820	0.5073
unknown	-5.891	-6.221	0.1849	0.5904	-5.536	-5.188	0.0799	0.5026
unknown	-8.957	-9.605	0.5940	0.8445	-8.186	-8.985	0.3618	0.7407
unknown	5.270	5.705	0.1615	0.5769	6.148	5.569	0.3189	0.7192
unknown	-5.425	-5.742	0.3375	0.7151	-5.370	-5.056	0.1666	0.5944
unknown	-8.202	-7.182	0.1500	0.5646	-8.605	-7.350	0.0655	0.4834
unknown	-8.343	-7.886	0.3074	0.6837	-6.930	-6.598	0.2531	0.6776
unknown	-2.146	-0.558	0.1074	0.5435	-2.293	-1.033	0.0724	0.4936
unknown	-7.322	-7.724	0.1129	0.5435	-7.818	-7.437	0.1970	0.6302
unknown	-4.729	-3.665	0.0648	0.5021	-5.025	-3.943	0.0334	0.4440
unknown	-4.701	-3.589	0.0487	0.4977	-5.186	-4.858	0.5271	0.8034
unknown	8.625	8.753	0.0959	0.5406	8.759	8.795	0.7239	0.8891
unknown	9.189	9.337	0.3427	0.7207	9.595	9.609	0.8890	0.9500
unknown	-5.268	-5.243	0.9205	0.9705	-5.526	-5.245	0.2183	0.6419
unknown	-6.475	-6.520	0.8346	0.9272	-6.565	-6.225	0.0446	0.4440
unknown	-9.988	-10.190	0.8649	0.9417	-8.884	-9.150	0.8048	0.9201
unknown	-9.026	-8.838	0.5591	0.8347	-8.615	-8.471	0.6057	0.8363
unknown	-8.598	-8.966	0.7959	0.9122	-7.699	-7.757	0.9508	0.9789
unknown	-5.626	-5.431	0.6050	0.8495	-6.434	-5.528	0.0318	0.4440
unknown	6.642	6.713	0.7774	0.9091	7.348	7.345	0.9851	0.9963
unknown	6.181	6.419	0.2912	0.6709	6.249	5.925	0.1905	0.6261
unknown	-7.464	-8.082	0.6831	0.8771	-6.466	-6.734	0.7718	0.9076
unknown	-9.236	-9.735	0.6536	0.8623	-8.279	-9.012	0.4435	0.7788
unknown	-7.285	-7.587	0.8718	0.9453	-6.086	-6.261	0.8455	0.9290
unknown	-6.600	-7.177	0.2489	0.6362	-6.520	-6.234	0.2763	0.6923
unknown	6.817	6.917	0.1310	0.5584	6.998	6.924	0.5354	0.8035
unknown	-7.573	-7.952	0.8038	0.9126	-6.962	-7.051	0.9302	0.9675
unknown	-8.204	-8.499	0.8798	0.9486	-7.297	-7.205	0.9259	0.9645
unknown	3.718	3.281	0.6381	0.8542	7.155	7.076	0.9057	0.9577
unknown	-8.130	-8.628	0.7439	0.9001	-7.890	-7.951	0.9523	0.9791
unknown	-8.913	-8.968	0.9736	0.9833	-8.503	-8.066	0.6543	0.8510
unknown	-6.309	-6.088	0.6337	0.8542	-6.461	-5.848	0.0534	0.4558
unknown	5.307	5.865	0.1289	0.5584	6.473	5.764	0.2706	0.6908
unknown	4.628	3.762	0.3802	0.7462	6.816	7.398	0.3086	0.7132
unknown	-5.819	-5.938	0.6199	0.8511	-6.020	-5.625	0.0661	0.4834
unknown	-6.596	-6.380	0.4042	0.7651	-7.329	-7.003	0.1833	0.6159
unknown	-5.527	-5.549	0.9016	0.9596	-5.666	-5.374	0.0577	0.4631

unknown	6.916	6.911	0.9811	0.9886	7.231	7.016	0.3239	0.7256
unknown	-7.612	-7.865	0.9051	0.9617	-7.211	-7.479	0.7737	0.9081
unknown	-7.797	-8.046	0.9011	0.9596	-7.386	-8.126	0.5885	0.8363
unknown	-6.846	-6.380	0.3172	0.6958	-7.794	-7.474	0.2478	0.6776
unknown	-4.398	-4.562	0.5047	0.8234	-4.673	-4.467	0.2392	0.6695
unknown	9.051	9.316	0.0133	0.4977	9.225	9.356	0.1805	0.6128
unknown	11.413	11.477	0.1113	0.5435	11.706	11.777	0.3626	0.7407
unknown	-7.751	-7.798	0.9259	0.9714	-8.076	-7.511	0.0084	0.4440
unknown	-3.604	-3.641	0.8445	0.9332	-3.673	-3.434	0.0745	0.4957
unknown	7.843	8.051	0.3153	0.6940	8.524	8.486	0.8560	0.9336
unknown	-7.954	-8.212	0.3851	0.7475	-8.602	-8.808	0.5879	0.8363
unknown	-7.757	-7.859	0.7977	0.9122	-8.707	-8.305	0.0726	0.4936
unknown	-8.319	-9.240	0.4687	0.8053	-7.626	-8.338	0.4147	0.7763
unknown	-8.275	-8.710	0.1523	0.5715	-8.290	-8.117	0.6286	0.8380
unknown	-7.159	-7.038	0.7672	0.9044	-7.340	-7.063	0.2906	0.7021
unknown	-8.460	-9.082	0.6703	0.8708	-8.050	-8.839	0.4538	0.7829
unknown	-6.135	-6.423	0.2920	0.6709	-6.410	-6.284	0.4238	0.7766
unknown	-8.898	-9.569	0.6151	0.8511	-8.671	-9.399	0.4123	0.7754
unknown	5.516	5.858	0.3757	0.7408	8.014	7.535	0.4203	0.7763
unknown	6.131	6.231	0.1185	0.5435	6.762	6.182	0.0422	0.4440
unknown	-8.794	-9.470	0.4738	0.8060	-8.658	-9.502	0.3653	0.7407
unknown	-8.176	-9.332	0.3249	0.7000	-7.814	-8.848	0.2411	0.6719
unknown	6.741	6.836	0.2466	0.6356	6.088	6.472	0.2096	0.6408
unknown	-8.605	-9.136	0.6939	0.8790	-8.281	-9.591	0.2189	0.6419
unknown	-7.787	-7.778	0.9733	0.9833	-8.264	-7.891	0.3113	0.7149
unknown	-8.540	-9.358	0.5893	0.8433	-8.426	-9.326	0.3833	0.7540
unknown	5.220	5.781	0.2000	0.6008	6.647	5.262	0.1172	0.5479
unknown	-7.221	-7.423	0.5596	0.8347	-7.561	-7.062	0.0470	0.4545
unknown	-7.312	-7.271	0.8322	0.9266	-8.209	-7.908	0.1653	0.5944
unknown	-9.138	-8.817	0.4832	0.8099	-8.532	-7.934	0.1729	0.5944
unknown	9.491	9.548	0.7847	0.9091	9.383	9.273	0.1159	0.5479
unknown	7.723	7.700	0.8823	0.9497	7.979	7.858	0.1335	0.5638
unknown	-7.542	-7.234	0.2321	0.6207	-7.819	-7.612	0.2930	0.7040
unknown	-7.125	-6.661	0.1888	0.5932	-6.880	-6.116	0.0195	0.4440
unknown	12.020	12.185	0.0755	0.5174	12.227	12.190	0.5709	0.8269
unknown	9.300	9.361	0.4852	0.8107	9.261	9.213	0.5971	0.8363
unknown	6.440	6.534	0.2662	0.6483	6.532	6.373	0.1678	0.5944
unknown	9.267	9.460	0.0603	0.4984	9.066	9.258	0.3652	0.7407
unknown	-6.682	-5.762	0.0869	0.5174	-7.399	-6.929	0.1688	0.5944
unknown	-5.617	-5.604	0.9577	0.9820	-5.123	-4.722	0.0431	0.4440
unknown	-9.351	-9.232	0.9328	0.9754	-9.329	-8.938	0.6591	0.8538
unknown	7.808	8.035	0.1823	0.5904	8.427	8.355	0.6994	0.8740
unknown	6.398	6.980	0.0501	0.4977	5.389	5.649	0.7514	0.9011
unknown	-5.112	-5.542	0.2295	0.6180	-5.084	-4.679	0.1351	0.5638
unknown	6.190	5.702	0.1010	0.5435	7.334	7.617	0.5715	0.8269
unknown	-7.036	-6.712	0.4726	0.8059	-7.376	-6.913	0.1118	0.5479
unknown	5.246	5.701	0.4974	0.8203	8.459	7.954	0.4331	0.7766
unknown	-9.058	-9.385	0.7904	0.9100	-7.908	-8.586	0.4885	0.7897
unknown	4.073	3.687	0.8268	0.9221	8.112	7.449	0.5355	0.8035
unknown	-6.142	-5.889	0.5959	0.8453	-7.003	-6.289	0.0238	0.4440
unknown	-5.374	-5.044	0.3680	0.7354	-5.721	-5.228	0.0755	0.4986
unknown	-9.412	-10.425	0.2557	0.6427	-8.797	-9.181	0.6795	0.8618
unknown	-7.509	-8.497	0.5707	0.8363	-6.376	-7.102	0.4649	0.7838
unknown	5.283	4.174	0.3977	0.7593	7.746	7.212	0.5334	0.8034
unknown	-8.731	-9.157	0.7185	0.8935	-8.237	-8.906	0.4682	0.7838
unknown	-7.616	-8.200	0.0835	0.5174	-7.596	-7.419	0.3948	0.7608
unknown	-4.435	-4.549	0.6928	0.8787	-4.796	-4.342	0.0414	0.4440

unknown	-4.639	-4.610	0.8997	0.9596	-5.651	-5.410	0.2102	0.6408
unknown	-8.726	-8.155	0.2417	0.6276	-8.461	-7.853	0.0205	0.4440
unknown	-8.744	-9.162	0.7536	0.9012	-8.258	-8.740	0.6298	0.8380
unknown	-8.630	-9.319	0.5817	0.8433	-8.099	-8.550	0.6426	0.8424
unknown	-9.536	-9.331	0.8308	0.9258	-8.659	-8.510	0.8353	0.9282
unknown	-7.479	-8.094	0.6751	0.8727	-6.731	-7.335	0.5789	0.8323
unknown	-4.516	-4.584	0.7807	0.9091	-5.600	-5.388	0.5042	0.7935
unknown	-5.679	-5.805	0.6733	0.8720	-6.400	-6.412	0.9600	0.9831
unknown	-8.082	-7.557	0.1967	0.6005	-8.237	-7.383	0.0856	0.5105
unknown	-7.013	-7.033	0.9403	0.9756	-6.980	-6.631	0.0679	0.4901
unknown	10.490	10.402	0.5546	0.8347	10.615	10.571	0.2513	0.6776
unknown	7.931	7.843	0.6969	0.8819	8.156	8.122	0.7976	0.9174
unknown	-6.957	-6.880	0.7936	0.9122	-9.959	-9.491	0.5400	0.8057
unknown	-7.201	-7.238	0.9208	0.9705	-6.989	-6.723	0.2721	0.6908
unknown	12.151	12.288	0.1595	0.5769	12.312	12.208	0.2520	0.6776
unknown	-6.144	-5.660	0.1951	0.5980	-7.017	-6.412	0.2585	0.6791
unknown	7.491	8.460	0.0075	0.4977	6.407	6.464	0.8487	0.9294
unknown	6.308	5.936	0.6459	0.8589	5.914	5.571	0.6953	0.8726
unknown	7.611	7.761	0.4257	0.7757	8.031	8.002	0.8269	0.9282
unknown	-7.519	-6.659	0.1431	0.5602	-8.032	-7.108	0.0379	0.4440
unknown	-8.674	-9.573	0.5633	0.8347	-7.264	-7.939	0.3892	0.7579
unknown	-8.637	-9.560	0.5537	0.8347	-7.323	-8.091	0.4091	0.7728
unknown	9.405	10.033	0.0407	0.4977	8.490	8.460	0.9525	0.9791
unknown	-8.342	-7.696	0.2420	0.6276	-9.137	-8.347	0.1067	0.5479
unknown	7.288	7.183	0.1853	0.5904	7.390	7.248	0.2085	0.6390
unknown	6.253	6.441	0.2067	0.6046	7.797	7.029	0.1558	0.5918
unknown	-7.099	-6.982	0.7247	0.8936	-7.511	-6.903	0.0338	0.4440
unknown	-5.707	-6.152	0.1087	0.5435	-5.694	-5.601	0.4645	0.7838
unknown	-6.293	-5.542	0.1745	0.5904	-6.045	-5.188	0.0097	0.4440
unknown	-5.707	-4.818	0.0573	0.4977	-5.503	-4.773	0.2714	0.6908
unknown	-4.239	-4.295	0.8555	0.9368	-4.147	-3.761	0.0520	0.4558
unknown	8.546	8.907	0.0879	0.5174	8.570	8.549	0.8384	0.9282
unknown	-7.183	-7.423	0.5074	0.8248	-7.220	-6.610	0.0193	0.4440
unknown	-4.404	-4.254	0.6236	0.8511	-4.253	-3.828	0.0518	0.4558
unknown	7.035	7.237	0.3600	0.7286	6.607	6.397	0.3986	0.7649
unknown	9.965	10.204	0.1308	0.5584	9.750	9.674	0.6785	0.8618
unknown	-7.541	-7.533	0.9867	0.9916	-7.365	-6.937	0.1848	0.6159
unknown	6.880	7.330	0.2216	0.6171	6.682	6.454	0.4605	0.7838
unknown	8.011	8.188	0.3888	0.7510	7.882	8.039	0.6510	0.8484
unknown	-8.083	-7.889	0.4607	0.7999	-7.994	-7.595	0.0551	0.4631
unknown	-6.749	-7.059	0.4137	0.7674	-7.696	-7.543	0.7563	0.9020
unknown	7.377	7.477	0.1891	0.5932	7.359	7.539	0.2159	0.6419
unknown	3.900	4.164	0.2076	0.6047	6.995	6.269	0.3612	0.7407
unknown	-8.966	-8.158	0.1497	0.5646	-8.689	-8.256	0.0998	0.5380
unknown	8.197	8.143	0.7408	0.8999	7.619	7.535	0.4548	0.4548
unknown	6.494	6.815	0.2349	0.6213	6.791	6.991	0.2596	0.6791
unknown	-6.477	-6.286	0.7302	0.8936	-7.491	-6.681	0.0490	0.4558
unknown	-7.410	-6.714	0.1991	0.6008	-7.885	-6.933	0.0368	0.4440
unknown	6.192	6.594	0.1292	0.5584	8.333	6.990	0.1195	0.5479
unknown	5.406	4.535	0.4825	0.8099	7.644	7.024	0.4750	0.7840
unknown	-7.303	-7.240	0.8434	0.9332	-7.221	-7.012	0.1941	0.6302
unknown	7.240	6.524	0.0359	0.4977	7.261	6.917	0.0347	0.4440
unknown	-4.514	-4.368	0.6518	0.8623	-4.990	-4.302	0.0089	0.4440
unknown	-11.297	-11.765	0.5451	0.8347	-8.400	-7.955	0.5789	0.8323
unknown	5.149	4.092	0.4305	0.7785	6.223	5.655	0.3535	0.7373
unknown	-6.450	-5.758	0.1377	0.5584	-7.789	-6.746	0.0048	0.4440
unknown	-9.232	-9.770	0.6831	0.8771	-8.153	-8.701	0.5576	0.8212

unknown	-7.750	-8.370	0.0861	0.5174	-8.081	-8.019	0.8416	0.9282
unknown	5.309	5.083	0.8790	0.9486	6.960	5.992	0.2310	0.6619
unknown	-7.824	-8.385	0.7218	0.8936	-6.703	-6.990	0.7565	0.9020
unknown	-9.002	-9.911	0.4560	0.7971	-8.585	-8.477	0.9000	0.9541
unknown	-7.815	-7.726	0.5202	0.8300	-7.701	-7.370	0.1069	0.5479
unknown	8.130	7.958	0.3647	0.7303	7.414	7.290	0.5811	0.8335
unknown	-9.339	-9.834	0.7407	0.8999	-9.531	-10.030	0.5327	0.8034
unknown	9.810	9.971	0.2892	0.6709	9.334	9.283	0.7836	0.9094
unknown	-7.250	-8.081	0.0424	0.4977	-7.572	-7.382	0.3799	0.7530
unknown	-8.703	-9.588	0.5685	0.8363	-8.985	-9.813	0.4559	0.7829
unknown	-9.343	-9.565	0.8902	0.9550	-8.965	-10.065	0.3078	0.7132
unknown	6.383	5.899	0.3753	0.7408	5.621	5.578	0.8995	0.9541
unknown	-6.975	-7.651	0.0547	0.4977	-6.782	-6.500	0.3638	0.7407
unknown	-6.942	-6.684	0.4491	0.7949	-6.833	-6.442	0.0282	0.4440
unknown	-6.574	-7.038	0.2786	0.6587	-6.592	-6.253	0.2340	0.6658
unknown	5.523	5.067	0.4738	0.8060	6.468	5.781	0.3602	0.7407
unknown	-6.435	-5.642	0.1791	0.5904	-6.988	-5.939	0.0054	0.4440
unknown	-8.445	-7.735	0.1143	0.5435	-8.833	-7.828	0.0253	0.4440
unknown	7.455	7.634	0.0502	0.4977	7.574	7.676	0.2789	0.6923
unknown	7.726	7.802	0.5294	0.8321	8.037	8.120	0.1986	0.6305
unknown	-6.896	-7.094	0.4325	0.7798	-7.166	-6.820	0.1842	0.6159
unknown	-7.784	-7.930	0.5887	0.8433	-7.859	-7.506	0.1190	0.5479

[a]The ambiguous subspecies indicates that the lipidomic profiling gave two possible identifications of the lipid. [b]Abbreviations: Cer, ceramide. HexCer, hexosylceramide. SM, sphingomyelin. LysoPC, lysophophosphatidylcholine. LysoPE, lysophosphatidylethanolamine. PC, phosphatidylcholine. PE, phosphatidylethanolamine. PI, phosphatidylinositol.

Online Resource Table S5

Results from the analysis of variance between the control group (CON) and the high-energy feeding group (HIGH) within time points in adipose tissue positive electrospray ionization mode (ESI+) dataset. *P* -values were obtained from the analysis performed using MIXED procedure in SAS, with diet as the fixed effect and pair as the random effect. Adjusted-*p* values were obtained from *p* -values after false discovery rate control.

	-8d				1d				9d			
Lipid subspecies	CON	HIGH	*p* -value	Adjusted-*p*	CON	HIGH	*p* -value	Adjusted-*p*	CON	HIGH	*p* -value	Adjusted-*p*
ChoE(14:0)	4.565	4.544	0.8680	0.9010	4.666	4.594	0.3060	0.8154	4.408	4.459	0.5440	0.6318
ChoE(18:0)	7.545	7.474	0.4980	0.6339	7.639	7.486	0.2990	0.8154	7.455	7.530	0.4980	0.5937
LysoPC(16:0)	-3.193	-3.226	0.6910	0.7868	-3.177	-3.182	0.9660	0.9774	-3.246	-3.433	0.0700	0.5288
LysoPC(18:0)	-4.799	-4.876	0.4460	0.5887	-4.685	-4.841	0.2880	0.8154	-4.907	-5.046	0.3800	0.5291
PC(32:0)	-3.760	-3.758	0.9750	0.9818	-3.497	-3.703	0.1980	0.8154	-3.671	-3.693	0.8840	0.9127
PC(32:1)	-7.208	-7.100	0.8230	0.8727	-6.782	-7.150	0.4120	0.8154	-6.673	-6.888	0.7570	0.8153
PC(34:1)	-4.609	-4.675	0.8860	0.9143	-3.921	-4.798	0.1530	0.8154	-3.786	-3.924	0.8720	0.9037
PC(34:2)	-6.340	-6.566	0.5670	0.6907	-5.731	-6.563	0.1500	0.8154	-5.310	-5.599	0.6720	0.7426
PC(36:2)	-6.008	-5.994	0.9710	0.9804	-5.161	-6.045	0.1790	0.8154	-5.221	-5.156	0.9290	0.9431
PC(38:3)	-7.066	-6.881	0.7220	0.8053	-6.464	-6.805	0.6050	0.8391	-7.073	-6.837	0.6030	0.6850
PC(38:4)	-7.171	-6.973	0.6430	0.7485	-6.746	-7.018	0.5900	0.8339	-7.382	-6.905	0.5070	0.5957
SM(d18:1/16:0)	-4.856	-5.315	0.2790	0.5110	-4.109	-5.534	0.0210	0.8154	-4.723	-3.958	0.2770	0.5288
SM(d18:1/24:0)	-5.114	-5.699	0.2780	0.5110	-4.745	-5.873	0.0090	0.8154	-4.949	-4.545	0.3420	0.5291
SM(d18:1/24:1)	-5.760	-6.045	0.6060	0.7216	-5.691	-6.585	0.0240	0.8154	-5.680	-4.806	0.1250	0.5288
TG(14:0/16:0/17:0)+ TG(14:0/18:0/15:0)[a]	-3.409	-3.613	0.4600	0.5931	-3.297	-3.193	0.7230	0.8935	-3.698	-3.094	0.1540	0.5288
TG(14:0/16:0/17:0)+ TG(14:0/18:0/15:0)[a]	-2.526	-2.942	0.2870	0.5110	-2.406	-2.320	0.8000	0.9305	-3.016	-2.283	0.2310	0.5288
TG(17:0/18:1/18:1)	-4.997	-6.207	0.0730	0.5110	-4.731	-5.096	0.3110	0.8154	-6.207	-5.126	0.3960	0.5291
TG(17:1/18:1/18:2)	-2.804	-3.763	0.1880	0.5110	-2.434	-3.167	0.1700	0.8154	-4.059	-2.901	0.3290	0.5288
TG(18:1/18:2/18:1)	0.603	-0.271	0.2070	0.5110	0.965	0.284	0.1480	0.8154	-0.323	0.462	0.4040	0.5307
TG(44:1)	-1.656	-2.333	0.3380	0.5293	-1.576	-1.408	0.6980	0.8844	-2.644	-1.407	0.2080	0.5288
TG(45:0)	-3.929	-4.305	0.2410	0.5110	-3.951	-3.693	0.1960	0.8154	-4.138	-3.726	0.3740	0.5291
TG(45:1)	-3.811	-4.494	0.2610	0.5110	-3.842	-3.491	0.3200	0.8154	-4.217	-3.726	0.5060	0.5957
TG(46:1)	0.487	-0.268	0.2720	0.5110	0.547	0.716	0.7010	0.8844	-0.665	0.689	0.1850	0.5288
TG(46:3)	-4.563	-5.638	0.2280	0.5110	-4.090	-4.763	0.4100	0.8154	-5.690	-4.637	0.3560	0.5291
TG(47:1)	-1.844	-2.510	0.2900	0.5110	-1.766	-1.474	0.3620	0.8154	-2.418	-1.679	0.3650	0.5291
TG(47:2)	-2.339	-3.092	0.2820	0.5110	-2.097	-2.304	0.6610	0.8614	-3.137	-2.279	0.3280	0.5288
TG(47:3)	-6.133	-6.986	0.2400	0.5110	-5.840	-6.503	0.3620	0.8154	-6.854	-6.343	0.5370	0.6244
TG(48:1)	1.959	1.226	0.2540	0.5110	2.143	2.177	0.9270	0.9664	0.846	2.139	0.1900	0.5288
TG(48:2)	1.892	1.151	0.2580	0.5110	2.168	1.999	0.6520	0.8614	0.676	2.012	0.2080	0.5288
TG(48:4)	-5.049	-5.916	0.2630	0.5110	-4.816	-5.201	0.5280	0.8240	-6.340	-5.086	0.2790	0.5288
TG(49:0)	-3.306	-3.833	0.3800	0.5441	-3.163	-3.068	0.7440	0.9067	-3.773	-3.244	0.4150	0.5374
TG(49:2)	-0.496	-1.240	0.3050	0.5110	-0.136	-0.342	0.5790	0.8317	-1.546	-0.392	0.2990	0.5288
TG(50:4)	-2.075	-2.981	0.2300	0.5110	-1.724	-2.204	0.4190	0.8154	-3.317	-2.130	0.3140	0.5288
TG(50:5)	-5.214	-6.052	0.0960	0.5110	-4.911	-5.740	0.1990	0.8154	-5.847	-5.608	0.7090	0.7698
TG(51:2)	1.095	0.240	0.2030	0.5110	1.397	1.210	0.4610	0.8202	-0.051	1.126	0.2980	0.5288
TG(51:2)	-3.427	-4.323	0.2130	0.5110	-3.212	-3.332	0.7480	0.9079	-4.572	-3.462	0.3450	0.5291
TG(51:4)	-4.308	-5.200	0.1780	0.5110	-4.009	-4.348	0.4920	0.8215	-5.399	-4.301	0.3220	0.5288
TG(52:2)	4.042	3.499	0.2530	0.5110	4.300	4.083	0.3820	0.8154	3.102	4.098	0.2510	0.5288
TG(52:3)	2.410	1.700	0.2640	0.5110	2.861	2.405	0.2760	0.8154	1.301	2.379	0.3090	0.5288
TG(52:4)	-0.317	-1.091	0.2560	0.5110	0.052	-0.314	0.4380	0.8154	-1.360	-0.362	0.3360	0.5288
TG(53:2)	0.476	-0.400	0.1970	0.5110	0.844	0.467	0.2120	0.8154	-0.586	0.534	0.3370	0.5288
TG(53:2)	0.147	-0.692	0.1890	0.5110	0.643	0.189	0.2020	0.8154	-0.840	0.098	0.3930	0.5291
TG(53:3)	-4.944	-6.061	0.1440	0.5110	-4.544	-5.217	0.1320	0.8154	-6.488	-5.074	0.3400	0.5291
TG(53:5)	-4.741	-5.385	0.0590	0.5110	-4.438	-5.005	0.2260	0.8154	-5.128	-5.064	0.9120	0.9340
TG(54:0)	-4.986	-5.829	0.1710	0.5110	-4.842	-5.128	0.6180	0.8492	-5.723	-4.991	0.4670	0.5671
TG(54:5)	-1.425	-2.424	0.1290	0.5110	-1.116	-1.691	0.2510	0.8154	-2.086	-1.769	0.6830	0.7470
TG(54:6)	-4.486	-5.439	0.1250	0.5110	-4.195	-4.689	0.4010	0.8154	-4.872	-4.755	0.8620	0.8966
TG(55:4)	-4.759	-5.682	0.1560	0.5110	-4.377	-4.856	0.2400	0.8154	-5.887	-4.928	0.3820	0.5291
TG(55:5)	-5.964	-6.471	0.1610	0.5110	-5.630	-6.172	0.2050	0.8154	-6.375	-6.131	0.6740	0.7431
TG(56:4)	-3.615	-4.831	0.1190	0.5110	-3.489	-3.921	0.3550	0.8154	-4.571	-4.084	0.5450	0.6318
TG(56:5)	-4.095	-5.111	0.0530	0.5110	-4.027	-4.530	0.1580	0.8154	-4.828	-4.487	0.5780	0.6615
TG(56:5)	-5.316	-5.752	0.1320	0.5110	-5.000	-5.350	0.3170	0.8154	-5.995	-5.149	0.2210	0.5288
TG(56:6)	-3.647	-4.754	0.0920	0.5110	-3.247	-3.905	0.1970	0.8154	-4.468	-3.725	0.4180	0.5391
TG(58:7)	-6.783	-8.301	0.0630	0.5110	-6.297	-7.312	0.2120	0.8154	-7.284	-7.143	0.8830	0.9127
unknown	-5.049	-5.200	0.2320	0.5110	-4.942	-5.385	0.2040	0.8154	-5.488	-5.154	0.0920	0.5288
unknown	-4.214	-4.272	0.5600	0.6854	-4.175	-4.254	0.5780	0.8317	-4.390	-4.448	0.2500	0.5288
unknown	-6.672	-7.149	0.1820	0.5110	-6.372	-6.751	0.1990	0.8154	-7.203	-6.810	0.4440	0.5572
unknown	-6.384	-6.858	0.1940	0.5110	-6.274	-6.602	0.3740	0.8154	-6.999	-6.359	0.1920	0.5288
unknown	-6.217	-6.661	0.2720	0.5110	-5.942	-6.307	0.0090	0.8154	-6.789	-6.083	0.2080	0.5288
unknown	-3.487	-3.429	0.5460	0.6722	-3.379	-3.456	0.4190	0.8154	-3.477	-3.606	0.2610	0.5288
unknown	-4.087	-4.248	0.1810	0.5110	-3.965	-4.122	0.3570	0.8154	-4.297	-4.334	0.6690	0.7414
unknown	-5.240	-5.344	0.4530	0.5920	-5.248	-5.427	0.1160	0.8154	-5.382	-5.505	0.4190	0.5403
unknown	-3.916	-4.025	0.4120	0.5667	-3.909	-3.960	0.6270	0.8537	-3.890	-4.163	0.0500	0.5288
unknown	-3.909	-3.941	0.8100	0.8667	-3.778	-3.836	0.6700	0.8614	-3.941	-3.912	0.7990	0.8478
unknown	-5.671	-5.794	0.2060	0.5110	-5.637	-5.626	0.9280	0.9664	-5.649	-5.774	0.4320	0.5495
unknown	-5.084	-5.077	0.9500	0.9665	-4.944	-5.038	0.3220	0.8154	-5.047	-5.183	0.2450	0.5288
unknown	-2.520	-2.557	0.7040	0.8002	-2.467	-2.591	0.2130	0.8154	-2.587	-2.646	0.4340	0.5510
unknown	-2.696	-2.743	0.7770	0.8443	-2.852	-2.841	0.9520	0.9744	-2.757	-3.011	0.0660	0.5288

unknown	-4.829	-4.818	0.9310	0.9542	-4.712	-4.766	0.7400	0.9039	-4.659	-5.042	0.0390	0.5288
unknown	-5.782	-6.305	0.2310	0.5110	-5.430	-5.859	0.1660	0.8154	-6.481	-5.730	0.3310	0.5288
unknown	-6.244	-6.773	0.2530	0.5110	-5.825	-6.227	0.2620	0.8154	-6.903	-6.206	0.3190	0.5288
unknown	-6.984	-7.426	0.2820	0.5110	-6.755	-7.080	0.3780	0.8154	-7.673	-7.050	0.3950	0.5291
unknown	-1.079	-1.113	0.7690	0.8382	-0.967	-1.033	0.4850	0.8215	-1.090	-1.212	0.2980	0.5288
unknown	-2.972	-3.015	0.7350	0.8094	-2.821	-2.980	0.1930	0.8154	-3.086	-3.083	0.9770	0.9840
unknown	-2.960	-3.026	0.5300	0.6618	-2.876	-2.871	0.9550	0.9744	-2.906	-3.172	0.1070	0.5288
unknown	-4.362	-4.407	0.4560	0.5921	-4.299	-4.311	0.9260	0.9664	-4.347	-4.434	0.4680	0.5671
unknown	-3.372	-3.368	0.9610	0.9719	-3.259	-3.318	0.5010	0.8215	-3.367	-3.497	0.1600	0.5288
unknown	-4.942	-4.935	0.9490	0.9665	-4.845	-5.065	0.1300	0.8154	-5.120	-5.137	0.7640	0.8164
unknown	-2.689	-2.801	0.3170	0.5110	-2.605	-2.853	0.2740	0.8154	-2.969	-2.818	0.3010	0.5288
unknown	-3.433	-3.395	0.8330	0.8781	-3.400	-3.428	0.8810	0.9543	-3.349	-3.634	0.0940	0.5288
unknown	-3.425	-3.371	0.2270	0.5110	-3.331	-3.426	0.5100	0.8215	-3.527	-3.387	0.0540	0.5288
unknown	-3.259	-3.364	0.3020	0.5110	-3.219	-3.368	0.2900	0.8154	-3.371	-3.484	0.2230	0.5288
unknown	-4.739	-4.912	0.1770	0.5110	-4.764	-4.833	0.7000	0.8844	-4.825	-4.897	0.3920	0.5291
unknown	-5.711	-5.871	0.0910	0.5110	-5.616	-5.704	0.4940	0.8215	-5.642	-5.801	0.2740	0.5288
unknown	-5.388	-5.408	0.7310	0.8090	-5.317	-5.277	0.7880	0.9305	-5.307	-5.422	0.4090	0.5334
unknown	-4.688	-4.720	0.7290	0.8081	-4.583	-4.588	0.9620	0.9768	-4.685	-4.922	0.1010	0.5288
unknown	-3.540	-4.115	0.0440	0.5110	-3.403	-3.116	0.3560	0.8154	-3.966	-3.974	0.9840	0.9894
unknown	-3.856	-3.816	0.6810	0.7817	-3.627	-3.801	0.1110	0.8154	-3.859	-3.885	0.6820	0.7470
unknown	-4.947	-5.115	0.1220	0.5110	-4.985	-4.957	0.8030	0.9320	-5.053	-5.117	0.5040	0.5957
unknown	-3.624	-3.713	0.4150	0.5667	-3.480	-3.821	0.1070	0.8154	-3.910	-3.755	0.2940	0.5288
unknown	-0.476	-0.528	0.6430	0.7485	-0.420	-0.412	0.9360	0.9664	-0.414	-0.717	0.0280	0.5288
unknown	-4.465	-4.573	0.4230	0.5705	-4.558	-4.476	0.3830	0.8154	-4.450	-4.785	0.1030	0.5288
unknown	-4.821	-4.876	0.6170	0.7324	-4.869	-4.819	0.6630	0.8614	-4.903	-5.022	0.2240	0.5288
unknown	-3.916	-4.041	0.2260	0.5110	-3.900	-3.867	0.7990	0.9305	-3.830	-4.220	0.0140	0.5288
unknown	-4.110	-4.092	0.8000	0.8632	-4.013	-4.107	0.4770	0.8215	-4.205	-4.266	0.5510	0.6357
unknown	-4.276	-4.325	0.6910	0.7868	-4.230	-4.228	0.9850	0.9887	-4.328	-4.499	0.1850	0.5288
unknown	-6.570	-6.817	0.4610	0.5931	-6.544	-6.548	0.9890	0.9909	-6.960	-6.400	0.2170	0.5288
unknown	-2.394	-2.434	0.7070	0.8002	-2.268	-2.412	0.1460	0.8154	-2.432	-2.480	0.3910	0.5291
unknown	-4.396	-4.552	0.1440	0.5110	-4.328	-4.507	0.1550	0.8154	-4.506	-4.590	0.2190	0.5288
unknown	-4.577	-4.672	0.5560	0.6815	-4.412	-4.544	0.3250	0.8154	-4.605	-4.613	0.9390	0.9492
unknown	-4.964	-5.082	0.3920	0.5537	-4.874	-5.142	0.3120	0.8154	-5.261	-5.126	0.2760	0.5288
unknown	-2.164	-2.218	0.5450	0.6722	-2.055	-2.170	0.3680	0.8154	-2.204	-2.358	0.0170	0.5288
unknown	0.067	-0.017	0.3730	0.5400	0.189	0.048	0.2230	0.8154	0.049	-0.100	0.1420	0.5288
unknown	-6.515	-6.991	0.4640	0.5962	-6.428	-6.599	0.7210	0.8935	-7.251	-6.202	0.1500	0.5288
unknown	-6.398	-6.595	0.5390	0.6692	-6.282	-6.445	0.5260	0.8240	-6.732	-6.318	0.3010	0.5288
unknown	-4.842	-5.362	0.3160	0.5110	-4.819	-4.787	0.8800	0.9543	-5.413	-4.626	0.1960	0.5288
unknown	-5.410	-5.417	0.9200	0.9461	-5.285	-5.247	0.7540	0.9108	-5.333	-5.443	0.1450	0.5288
unknown	-2.858	-2.883	0.8130	0.8667	-2.764	-2.824	0.4430	0.8154	-2.886	-3.014	0.0860	0.5288
unknown	-2.603	-2.678	0.4400	0.5837	-2.467	-2.537	0.4290	0.8154	-2.622	-2.761	0.1700	0.5288
unknown	-5.552	-5.574	0.8030	0.8632	-5.413	-5.532	0.4010	0.8154	-5.713	-5.507	0.2600	0.5288
unknown	-1.445	-1.461	0.8200	0.8718	-1.344	-1.454	0.2300	0.8154	-1.493	-1.631	0.1650	0.5288
unknown	-4.407	-4.330	0.3570	0.5297	-4.193	-4.425	0.1050	0.8154	-4.407	-4.510	0.1230	0.5288
unknown	-5.561	-6.576	0.1810	0.5110	-5.547	-6.017	0.5230	0.8229	-6.751	-5.818	0.2850	0.5288
unknown	-4.440	-4.503	0.5970	0.7135	-4.287	-4.418	0.1240	0.8154	-4.516	-4.448	0.7180	0.7789
unknown	-2.106	-2.175	0.4210	0.5705	-1.978	-2.115	0.1270	0.8154	-2.168	-2.258	0.3190	0.5288
unknown	-3.634	-3.799	0.1910	0.5110	-3.644	-3.735	0.5730	0.8315	-3.798	-3.721	0.4610	0.5658
unknown	-5.496	-6.290	0.2560	0.5110	-5.257	-5.596	0.5370	0.8240	-6.308	-5.364	0.2830	0.5288
unknown	-5.549	-6.069	0.2960	0.5110	-5.387	-5.331	0.8450	0.9439	-6.357	-5.246	0.1770	0.5288
unknown	-3.021	-3.681	0.3100	0.5110	-2.759	-2.979	0.7000	0.8844	-4.102	-2.740	0.1730	0.5288
unknown	-0.799	-0.845	0.4210	0.5705	-0.706	-0.854	0.2680	0.8154	-0.884	-0.784	0.0340	0.5288
unknown	-2.076	-2.384	0.0830	0.5110	-2.093	-2.179	0.5600	0.8257	-2.409	-2.077	0.2270	0.5288
unknown	-4.285	-4.447	0.2550	0.5110	-4.231	-4.332	0.5480	0.8240	-4.537	-4.173	0.0670	0.5288
unknown	-4.615	-4.610	0.9600	0.9719	-4.525	-4.643	0.4320	0.8154	-4.680	-4.542	0.0700	0.5288
unknown	-5.749	-5.913	0.1920	0.5110	-5.767	-5.744	0.8630	0.9524	-6.017	-5.681	0.0960	0.5288
unknown	-2.306	-2.375	0.2740	0.5110	-2.265	-2.364	0.4370	0.8154	-2.382	-2.331	0.5350	0.6238
unknown	-5.915	-6.065	0.2940	0.5110	-5.801	-5.949	0.4060	0.8154	-6.003	-5.761	0.2570	0.5288
unknown	-4.543	-4.639	0.1030	0.5110	-4.520	-4.639	0.3620	0.8154	-4.648	-4.582	0.1940	0.5288
unknown	-3.126	-3.151	0.8140	0.8667	-3.027	-3.161	0.1250	0.8154	-3.146	-3.371	0.1680	0.5288
unknown	-3.870	-3.904	0.7770	0.8443	-3.764	-3.911	0.4370	0.8154	-3.997	-4.046	0.6420	0.7196
unknown	-3.654	-3.577	0.6280	0.7385	-3.632	-3.307	0.1740	0.8154	-3.335	-3.496	0.6350	0.7143
unknown	-5.494	-6.003	0.3870	0.5509	-5.119	-5.369	0.5000	0.8215	-6.190	-5.312	0.2520	0.5288
unknown	-5.651	-5.909	0.4030	0.5584	-5.496	-5.489	0.9780	0.9853	-5.811	-5.471	0.3580	0.5291
unknown	-4.445	-4.902	0.2400	0.5110	-4.492	-4.270	0.2890	0.8154	-4.831	-4.249	0.3100	0.5288
unknown	-1.997	-1.878	0.5870	0.7066	-1.688	-1.952	0.0140	0.8154	-1.919	-2.100	0.2360	0.5288
unknown	-5.083	-5.027	0.4370	0.5821	-4.895	-4.995	0.1510	0.8154	-4.932	-5.270	0.0420	0.5288
unknown	-2.201	-2.250	0.5930	0.7112	-2.102	-2.198	0.3700	0.8154	-2.231	-2.328	0.3700	0.5291
unknown	-4.790	-4.867	0.3590	0.5297	-4.753	-4.649	0.4990	0.8215	-4.739	-4.999	0.0180	0.5288
unknown	-4.378	-4.479	0.3770	0.5406	-4.375	-4.514	0.2860	0.8154	-4.643	-4.633	0.8670	0.9007
unknown	-5.579	-6.501	0.2350	0.5110	-5.247	-5.826	0.4650	0.8202	-6.882	-5.602	0.2820	0.5288
unknown	-2.540	-3.303	0.2860	0.5110	-2.231	-2.575	0.5210	0.8229	-3.897	-2.529	0.2160	0.5288
unknown	-5.805	-6.442	0.2160	0.5110	-5.376	-5.848	0.2900	0.8154	-6.903	-5.561	0.1740	0.5288
unknown	-2.332	-2.387	0.5240	0.6572	-2.350	-2.345	0.9570	0.9749	-2.365	-2.583	0.0930	0.5288
unknown	-4.830	-5.669	0.3060	0.5110	-4.531	-4.968	0.5410	0.8240	-5.806	-4.756	0.2840	0.5288
unknown	-4.527	-5.184	0.2510	0.5110	-4.285	-4.550	0.4990	0.8215	-5.060	-4.391	0.2990	0.5288
unknown	-2.081	-2.840	0.2950	0.5110	-1.802	-2.065	0.6080	0.8410	-3.161	-2.009	0.2400	0.5288

unknown	-0.515	-1.215	0.2420	0.5110	-0.275	-0.532	0.5700	0.8315	-1.791	-0.360	0.1890	0.5288
unknown	-3.395	-3.975	0.2270	0.5110	-3.258	-3.302	0.9320	0.9664	-4.256	-3.175	0.1860	0.5288
unknown	-5.450	-6.175	0.2430	0.5110	-5.188	-4.900	0.5580	0.8240	-6.700	-5.007	0.2250	0.5288
unknown	-4.010	-4.701	0.2550	0.5110	-3.835	-3.938	0.8420	0.9427	-4.871	-3.671	0.1780	0.5288
unknown	-0.785	-1.513	0.2190	0.5110	-0.754	-0.691	0.8550	0.9474	-1.812	-0.587	0.1940	0.5288
unknown	-4.235	-4.765	0.2230	0.5110	-4.258	-4.130	0.5800	0.8317	-4.671	-4.114	0.3190	0.5288
unknown	-5.749	-6.666	0.3140	0.5110	-5.042	-4.889	0.8160	0.9335	-7.164	-5.225	0.2100	0.5288
unknown	-5.693	-6.077	0.3380	0.5293	-5.649	-5.560	0.7350	0.8997	-6.151	-5.606	0.3160	0.5288
unknown	-3.010	-3.036	0.7810	0.8469	-2.938	-3.057	0.2310	0.8154	-3.073	-3.196	0.2270	0.5288
unknown	-5.142	-5.799	0.3340	0.5286	-4.847	-5.301	0.3710	0.8154	-6.217	-5.093	0.2680	0.5288
unknown	-4.548	-4.607	0.6530	0.7581	-4.421	-4.505	0.6280	0.8537	-4.631	-4.777	0.3200	0.5288
unknown	-4.988	-5.482	0.2660	0.5110	-4.751	-4.943	0.6380	0.8537	-5.208	-4.844	0.4670	0.5671
unknown	-3.310	-3.866	0.3120	0.5110	-2.938	-3.148	0.5150	0.8226	-4.017	-3.125	0.2990	0.5288
unknown	-5.927	-6.494	0.1760	0.5110	-5.748	-5.616	0.5900	0.8339	-6.309	-5.764	0.3750	0.5291
unknown	-3.047	-3.171	0.2480	0.5110	-2.997	-3.120	0.2950	0.8154	-3.111	-3.260	0.0560	0.5288
unknown	-4.290	-4.369	0.4720	0.6035	-4.131	-4.242	0.2700	0.8154	-4.393	-4.410	0.8490	0.8881
unknown	-5.924	-6.356	0.2680	0.5110	-5.804	-5.800	0.9750	0.9845	-6.318	-5.764	0.2200	0.5288
unknown	-4.292	-4.681	0.2530	0.5110	-4.061	-4.101	0.8740	0.9543	-4.481	-4.057	0.3970	0.5291
unknown	-2.968	-3.466	0.2690	0.5110	-2.869	-2.685	0.4930	0.8215	-3.561	-2.777	0.2660	0.5288
unknown	-5.282	-5.762	0.2040	0.5110	-5.160	-5.092	0.8100	0.9332	-5.711	-5.139	0.4110	0.5340
unknown	-4.295	-4.824	0.2500	0.5110	-4.267	-4.032	0.1660	0.8154	-4.824	-4.219	0.3800	0.5291
unknown	-7.292	-8.077	0.2840	0.5110	-6.838	-7.365	0.3970	0.8154	-8.188	-7.412	0.3820	0.5291
unknown	-4.337	-5.158	0.2800	0.5110	-4.070	-4.466	0.5100	0.8215	-5.830	-4.341	0.2240	0.5288
unknown	-0.493	-1.162	0.2870	0.5110	-0.189	-0.498	0.4610	0.8202	-1.800	-0.363	0.1960	0.5288
unknown	-3.840	-4.396	0.2370	0.5110	-3.583	-3.993	0.1990	0.8154	-4.814	-3.702	0.2200	0.5288
unknown	-2.590	-3.520	0.2200	0.5110	-2.095	-2.694	0.3910	0.8154	-3.785	-2.558	0.2880	0.5288
unknown	-4.719	-5.426	0.1820	0.5110	-4.343	-4.840	0.3900	0.8154	-5.145	-4.789	0.6090	0.6874
unknown	-5.537	-6.209	0.4020	0.5584	-5.503	-4.717	0.0100	0.8154	-7.082	-4.919	0.1730	0.5288
unknown	-3.326	-3.346	0.8430	0.8859	-3.271	-3.357	0.4030	0.8154	-3.406	-3.473	0.4020	0.5307
unknown	-3.855	-3.886	0.5820	0.7029	-3.788	-3.756	0.7270	0.8936	-3.822	-3.858	0.7210	0.7798
unknown	-2.471	-3.252	0.2390	0.5110	-2.214	-2.483	0.5620	0.8263	-3.717	-2.337	0.1920	0.5288
unknown	-3.189	-3.824	0.2400	0.5110	-2.947	-3.132	0.5700	0.8315	-3.731	-3.058	0.3400	0.5291
unknown	-2.306	-2.915	0.1970	0.5110	-2.085	-2.228	0.6710	0.8614	-3.221	-2.115	0.2010	0.5288
unknown	0.277	-0.419	0.2180	0.5110	0.495	0.519	0.9360	0.9664	-0.699	0.449	0.2400	0.5288
unknown	-5.077	-5.298	0.6320	0.7405	-5.076	-5.020	0.8980	0.9601	-6.368	-5.123	0.2350	0.5288
unknown	-4.622	-5.210	0.2740	0.5110	-4.367	-4.488	0.7040	0.8844	-5.090	-4.395	0.3210	0.5288
unknown	-1.022	-1.659	0.2510	0.5110	-0.781	-0.990	0.5840	0.8339	-2.062	-0.814	0.1780	0.5288
unknown	-1.626	-2.328	0.2410	0.5110	-1.342	-1.310	0.9330	0.9664	-2.402	-1.368	0.2100	0.5288
unknown	-2.835	-3.422	0.3090	0.5110	-2.790	-2.736	0.9060	0.9647	-3.838	-2.687	0.1890	0.5288
unknown	-3.820	-4.391	0.1950	0.5110	-3.727	-3.694	0.8830	0.9543	-4.420	-3.758	0.2680	0.5288
unknown	-0.388	-1.125	0.1930	0.5110	-0.176	-0.213	0.9000	0.9601	-1.464	-0.186	0.1690	0.5288
unknown	-2.835	-3.571	0.1930	0.5110	-2.493	-2.787	0.5880	0.8339	-3.707	-2.549	0.2100	0.5288
unknown	-5.286	-5.985	0.3740	0.5400	-4.685	-5.033	0.5360	0.8240	-6.416	-5.127	0.2750	0.5288
unknown	-5.293	-5.833	0.2420	0.5110	-5.164	-5.122	0.8820	0.9543	-5.656	-5.047	0.2630	0.5288
unknown	-2.127	-2.655	0.2310	0.5110	-1.377	-2.130	0.2200	0.8154	-2.877	-1.724	0.1570	0.5288
unknown	2.224	2.171	0.5510	0.6774	2.313	2.118	0.2260	0.8154	2.021	2.210	0.2300	0.5288
unknown	-4.274	-4.702	0.1710	0.5110	-4.204	-4.424	0.4270	0.8154	-4.282	-4.880	0.0790	0.5288
unknown	-2.208	-2.239	0.7500	0.8214	-2.087	-2.201	0.2400	0.8154	-2.211	-2.363	0.0090	0.5288
unknown	-3.805	-4.583	0.2470	0.5110	-3.423	-3.826	0.3750	0.8154	-4.832	-3.708	0.2800	0.5288
unknown	-5.907	-6.458	0.4380	0.5826	-5.300	-5.842	0.4330	0.8154	-6.437	-5.749	0.4240	0.5434
unknown	-6.373	-7.082	0.1860	0.5110	-6.074	-6.261	0.5530	0.8240	-6.850	-6.225	0.4120	0.5340
unknown	-1.442	-2.140	0.2570	0.5110	-1.213	-1.377	0.5530	0.8240	-2.577	-1.375	0.2780	0.5288
unknown	-5.081	-5.798	0.2360	0.5110	-4.774	-5.171	0.3380	0.8154	-6.028	-5.062	0.2550	0.5288
unknown	-3.294	-4.016	0.2410	0.5110	-3.014	-3.194	0.5450	0.8240	-4.100	-3.187	0.3020	0.5288
unknown	-4.206	-4.942	0.2250	0.5110	-3.995	-4.079	0.8110	0.9332	-5.034	-4.039	0.3250	0.5288
unknown	-5.284	-5.305	0.8400	0.8840	-5.288	-5.216	0.6010	0.8391	-5.376	-5.392	0.9160	0.9362
unknown	-4.004	-4.772	0.1170	0.5110	-3.851	-3.975	0.6550	0.8614	-4.730	-4.067	0.3660	0.5291
unknown	-3.476	-4.373	0.1740	0.5110	-3.190	-3.146	0.8940	0.9595	-3.881	-3.127	0.3820	0.5291
unknown	-3.143	-3.852	0.2210	0.5110	-2.949	-3.034	0.7970	0.9305	-3.881	-3.073	0.3550	0.5291
unknown	-5.641	-6.383	0.1010	0.5110	-5.354	-5.696	0.4320	0.8154	-6.166	-5.540	0.4070	0.5321
unknown	-6.490	-7.095	0.0540	0.5110	-6.209	-6.503	0.2340	0.8154	-6.770	-6.251	0.4050	0.5307
unknown	-4.713	-5.392	0.3120	0.5110	-4.417	-4.820	0.3170	0.8154	-5.505	-4.598	0.2680	0.5288
unknown	-6.660	-7.125	0.1790	0.5110	-6.421	-6.726	0.4410	0.8154	-7.322	-6.634	0.3440	0.5291
unknown	-3.140	-3.931	0.2160	0.5110	-2.972	-3.303	0.4050	0.8154	-4.389	-3.185	0.2370	0.5288
unknown	-5.252	-6.061	0.2550	0.5110	-4.846	-5.370	0.4210	0.8154	-6.250	-5.256	0.3150	0.5288
unknown	0.080	-0.542	0.2530	0.5110	0.544	0.019	0.2760	0.8154	-0.904	0.163	0.2810	0.5288
unknown	-3.706	-4.591	0.2590	0.5110	-3.188	-3.891	0.2720	0.8154	-4.836	-3.727	0.3160	0.5288
unknown	-1.553	-2.289	0.2890	0.5110	-1.073	-1.759	0.2590	0.8154	-2.693	-1.588	0.3180	0.5288
unknown	-3.107	-3.591	0.1570	0.5110	-2.692	-3.090	0.1690	0.8154	-3.828	-2.937	0.2720	0.5288
unknown	-5.009	-4.924	0.8580	0.8943	-4.567	-4.686	0.6490	0.8614	-7.041	-4.797	0.0910	0.5288
unknown	-6.714	-8.138	0.1580	0.5110	-6.320	-6.967	0.1810	0.8154	-7.919	-6.636	0.3820	0.5291
unknown	-1.677	-1.715	0.7160	0.8053	-1.609	-1.682	0.3650	0.8154	-1.679	-1.848	0.0590	0.5288
unknown	-5.836	-5.956	0.1320	0.5110	-5.723	-5.717	0.9360	0.9664	-5.797	-5.832	0.7800	0.8321
unknown	-1.265	-1.957	0.2550	0.5110	-1.093	-1.422	0.4360	0.8154	-2.615	-1.296	0.2100	0.5288
unknown	-3.924	-4.311	0.5190	0.6526	-4.030	-3.816	0.6030	0.8391	-5.034	-3.599	0.0970	0.5288
unknown	-2.090	-2.733	0.2680	0.5110	-1.834	-2.005	0.5030	0.8215	-3.061	-1.999	0.2710	0.5288
unknown	-0.738	-1.582	0.1660	0.5110	-0.508	-0.627	0.7740	0.9234	-1.844	-0.558	0.2200	0.5288

unknown	1.721	1.207	0.2060	0.5110	1.878	1.679	0.3770	0.8154	0.663	1.780	0.2190	0.5288
unknown	-5.303	-5.304	0.9990	0.9988	-4.784	-4.660	0.7220	0.8935	-6.606	-4.728	0.1380	0.5288
unknown	-5.278	-5.677	0.5160	0.6503	-5.361	-5.159	0.6390	0.8537	-6.405	-4.896	0.0770	0.5288
unknown	-5.313	-5.311	0.9880	0.9932	-5.167	-5.356	0.2010	0.8154	-5.276	-5.398	0.3280	0.5288
unknown	-1.596	-2.134	0.2190	0.5110	-1.193	-1.565	0.1810	0.8154	-2.724	-1.466	0.1710	0.5288
unknown	-3.196	-4.073	0.1400	0.5110	-3.350	-3.121	0.5040	0.8215	-4.120	-3.040	0.2360	0.5288
unknown	-1.112	-1.170	0.3740	0.5400	-1.053	-1.188	0.2970	0.8154	-1.226	-1.198	0.6330	0.7138
unknown	1.239	1.127	0.1410	0.5110	1.249	1.296	0.6500	0.8614	1.214	1.109	0.2850	0.5288
unknown	-2.241	-2.974	0.1970	0.5110	-1.932	-2.147	0.6980	0.8844	-3.049	-1.917	0.2000	0.5288
unknown	-0.680	-0.680	0.9980	0.9988	-0.540	-0.635	0.2230	0.8154	-0.642	-0.714	0.3970	0.5291
unknown	-3.663	-4.437	0.1460	0.5110	-3.372	-3.817	0.4780	0.8215	-4.365	-3.387	0.2810	0.5288
unknown	0.370	0.304	0.5080	0.6425	0.457	0.353	0.4600	0.8202	0.307	0.301	0.9370	0.9492
unknown	-4.587	-4.540	0.6130	0.7283	-4.406	-4.500	0.5330	0.8240	-4.607	-4.451	0.0270	0.5288
unknown	-3.532	-4.404	0.1200	0.5110	-3.605	-3.301	0.6010	0.8391	-4.567	-3.640	0.3180	0.5288
unknown	-3.514	-4.264	0.2030	0.5110	-3.262	-3.499	0.6710	0.8614	-4.360	-3.202	0.1820	0.5288
unknown	-4.882	-5.614	0.1440	0.5110	-4.605	-4.983	0.4950	0.8215	-5.611	-4.622	0.2600	0.5288
unknown	-5.639	-6.309	0.2030	0.5110	-5.268	-5.555	0.5850	0.8339	-6.215	-5.420	0.3550	0.5291
unknown	-5.729	-6.636	0.2090	0.5110	-5.539	-5.887	0.2950	0.8154	-6.798	-5.928	0.3880	0.5291
unknown	-2.445	-3.148	0.2500	0.5110	-1.983	-2.475	0.2010	0.8154	-3.524	-2.352	0.2820	0.5288
unknown	-4.465	-5.176	0.2950	0.5110	-3.892	-4.568	0.2370	0.8154	-5.500	-4.434	0.3280	0.5288
unknown	-6.208	-7.245	0.1280	0.5110	-5.878	-6.455	0.3080	0.8154	-7.290	-6.582	0.4630	0.5661
unknown	-4.681	-5.400	0.2090	0.5110	-4.255	-4.698	0.2470	0.8154	-5.690	-4.529	0.2820	0.5288
unknown	-3.916	-4.008	0.3530	0.5297	-3.781	-3.922	0.2960	0.8154	-3.951	-4.009	0.1220	0.5288
unknown	-3.735	-4.388	0.2340	0.5110	-3.382	-3.721	0.3910	0.8154	-4.692	-3.607	0.2760	0.5288
unknown	-2.370	-3.033	0.2970	0.5110	-1.995	-2.350	0.1260	0.8154	-3.373	-2.342	0.3330	0.5288
unknown	-2.170	-2.999	0.1800	0.5110	-1.856	-2.146	0.2420	0.8154	-3.249	-2.068	0.2770	0.5288
unknown	-4.911	-5.903	0.1270	0.5110	-4.565	-4.863	0.3350	0.8154	-5.840	-4.818	0.3510	0.5291
unknown	-4.801	-5.608	0.1760	0.5110	-4.475	-4.929	0.4370	0.8154	-5.728	-4.632	0.3370	0.5288
unknown	-3.614	-4.365	0.2430	0.5110	-3.147	-3.622	0.1230	0.8154	-4.400	-3.600	0.4050	0.5307
unknown	-5.134	-5.801	0.2250	0.5110	-4.831	-5.085	0.4270	0.8154	-6.143	-5.062	0.2730	0.5288
unknown	-4.950	-5.653	0.2810	0.5110	-4.589	-4.982	0.4200	0.8154	-5.605	-4.779	0.3940	0.5291
unknown	-5.053	-5.971	0.1340	0.5110	-4.613	-5.093	0.1750	0.8154	-5.851	-4.943	0.3600	0.5291
unknown	-6.173	-6.436	0.2020	0.5110	-5.949	-6.421	0.1270	0.8154	-6.572	-6.277	0.2650	0.5288
unknown	-5.134	-5.247	0.2610	0.5110	-5.075	-5.027	0.6340	0.8537	-5.435	-5.363	0.4560	0.5647
unknown	-6.195	-7.057	0.1390	0.5110	-6.030	-6.457	0.4700	0.8210	-6.998	-6.239	0.3680	0.5291
unknown	-3.756	-4.534	0.2450	0.5110	-3.400	-3.872	0.3060	0.8154	-4.634	-3.853	0.3750	0.5291
unknown	-1.726	-2.419	0.2370	0.5110	-1.444	-1.840	0.1590	0.8154	-2.709	-1.733	0.2700	0.5288
unknown	-5.987	-6.860	0.1830	0.5110	-5.689	-6.264	0.3030	0.8154	-6.715	-6.094	0.4390	0.5519
unknown	-4.429	-5.093	0.1510	0.5110	-4.270	-4.595	0.1800	0.8154	-5.232	-4.410	0.3100	0.5288
unknown	-7.355	-8.395	0.3530	0.5297	-6.631	-7.335	0.0530	0.8154	-8.192	-6.989	0.3660	0.5291
unknown	-2.539	-2.546	0.9310	0.9542	-2.462	-2.597	0.2330	0.8154	-2.555	-2.706	0.0000	0.1090
unknown	-0.772	-1.599	0.1110	0.5110	-0.532	-1.080	0.1240	0.8154	-1.896	-0.793	0.2880	0.5288
unknown	-3.246	-3.950	0.2490	0.5110	-2.736	-3.378	0.1730	0.8154	-4.015	-3.194	0.3780	0.5291
unknown	0.977	0.388	0.2330	0.5110	1.367	0.994	0.3120	0.8154	0.015	1.058	0.2590	0.5288
unknown	-1.104	-1.821	0.2790	0.5110	-0.618	-1.196	0.2100	0.8154	-2.127	-1.030	0.3210	0.5288
unknown	-3.030	-3.875	0.1970	0.5110	-2.615	-3.233	0.2090	0.8154	-4.220	-3.078	0.3030	0.5288
unknown	-1.604	-2.001	0.4270	0.5747	-1.262	-1.553	0.2650	0.8154	-2.514	-1.296	0.1930	0.5288
unknown	-4.036	-4.677	0.1230	0.5110	-3.715	-4.048	0.3590	0.8154	-5.045	-3.939	0.2210	0.5288
unknown	-5.742	-6.279	0.3360	0.5293	-5.890	-5.859	0.9220	0.9664	-6.672	-5.661	0.2010	0.5288
unknown	-4.182	-5.001	0.1330	0.5110	-3.880	-4.174	0.2390	0.8154	-5.012	-4.086	0.3230	0.5288
unknown	-0.637	-1.513	0.1550	0.5110	-0.448	-0.563	0.7750	0.9234	-1.774	-0.499	0.2290	0.5288
unknown	0.176	-0.683	0.1490	0.5110	0.503	0.030	0.1760	0.8154	-0.889	0.151	0.3350	0.5288
unknown	-2.031	-3.041	0.1140	0.5110	-1.762	-2.170	0.4750	0.8215	-2.911	-1.889	0.3710	0.5291
unknown	-5.587	-6.129	0.2110	0.5110	-5.390	-5.606	0.4560	0.8202	-6.167	-5.277	0.2660	0.5288
unknown	-1.234	-2.317	0.0870	0.5110	-1.020	-1.722	0.1710	0.8154	-2.476	-1.431	0.3610	0.5291
unknown	-2.457	-2.621	0.0570	0.5110	-2.432	-2.543	0.4640	0.8202	-2.659	-2.630	0.7850	0.8358
unknown	-3.280	-4.417	0.0480	0.5110	-3.191	-3.314	0.7900	0.9305	-4.622	-3.442	0.2550	0.5288
unknown	-5.683	-6.345	0.0630	0.5110	-5.362	-5.944	0.1700	0.8154	-6.431	-5.668	0.2920	0.5288
unknown	-4.627	-5.343	0.1910	0.5110	-4.363	-4.752	0.5430	0.8240	-5.323	-4.290	0.2690	0.5288
unknown	-5.822	-6.594	0.0470	0.5110	-5.599	-6.053	0.4280	0.8154	-6.142	-5.607	0.5240	0.6120
unknown	-5.458	-6.360	0.1710	0.5110	-5.492	-5.728	0.5560	0.8240	-6.482	-5.293	0.2430	0.5288
unknown	-4.764	-5.073	0.6760	0.7797	-4.901	-6.057	0.0550	0.8154	-4.515	-3.987	0.4810	0.5800
unknown	-6.991	-7.588	0.2090	0.5110	-6.603	-7.188	0.2440	0.8154	-7.896	-6.980	0.2780	0.5288
unknown	-5.584	-6.337	0.3420	0.5293	-5.162	-5.631	0.3180	0.8154	-6.399	-5.637	0.4570	0.5647
unknown	-6.803	-7.499	0.3460	0.5293	-6.476	-6.927	0.0650	0.8154	-7.451	-6.694	0.4350	0.5516
unknown	-5.354	-6.102	0.2650	0.5110	-5.060	-5.313	0.3250	0.8154	-6.374	-5.120	0.2380	0.5288
unknown	-5.888	-5.910	0.8840	0.9141	-5.651	-6.039	0.0970	0.8154	-6.208	-5.789	0.0350	0.5288
unknown	-5.827	-6.641	0.1760	0.5110	-5.651	-5.900	0.4160	0.8154	-6.644	-5.724	0.3710	0.5291
unknown	-1.240	-1.272	0.7390	0.8130	-1.164	-1.271	0.3670	0.8154	-1.276	-1.369	0.0950	0.5288
unknown	-4.705	-5.638	0.2310	0.5110	-4.397	-4.931	0.2130	0.8154	-5.765	-4.810	0.3450	0.5291
unknown	-6.899	-7.985	0.1320	0.5110	-6.821	-7.061	0.5460	0.8240	-7.869	-6.990	0.3710	0.5291
unknown	-6.924	-7.563	0.3060	0.5110	-6.731	-7.028	0.4720	0.8211	-7.645	-7.008	0.3880	0.5291
unknown	-6.148	-6.108	0.7070	0.8002	-5.898	-6.501	0.1120	0.8154	-6.578	-5.885	0.0770	0.5288
unknown	-5.828	-6.592	0.2460	0.5110	-5.381	-6.050	0.0350	0.8154	-6.330	-5.925	0.5740	0.6580
unknown	-5.907	-6.638	0.2200	0.5110	-5.661	-6.132	0.2320	0.8154	-6.674	-5.847	0.3900	0.5291
unknown	-5.709	-6.257	0.4330	0.5795	-5.412	-5.821	0.2320	0.8154	-6.427	-5.595	0.3720	0.5291
unknown	-5.619	-5.748	0.1440	0.5110	-5.396	-5.528	0.1180	0.8154	-5.647	-5.688	0.6850	0.7471

unknown	-4.576	-4.671	0.3100	0.5110	-4.521	-4.722	0.1760	0.8154	-4.744	-4.614	0.2650	0.5288
unknown	-4.941	-5.011	0.5940	0.7114	-4.868	-4.874	0.9670	0.9774	-5.013	-5.054	0.6510	0.7263
unknown	-3.385	-3.476	0.2980	0.5110	-3.380	-3.461	0.5500	0.8240	-3.488	-3.568	0.2610	0.5288
unknown	-1.133	-1.205	0.4490	0.5906	-1.060	-1.197	0.1430	0.8154	-1.195	-1.303	0.2390	0.5288
unknown	-2.498	-2.573	0.4580	0.5922	-2.434	-2.569	0.0440	0.8154	-2.572	-2.673	0.2680	0.5288
unknown	-5.077	-5.318	0.1110	0.5110	-5.146	-5.075	0.6970	0.8844	-5.187	-5.318	0.4490	0.5607
unknown	-2.108	-2.210	0.3050	0.5110	-2.057	-2.145	0.2800	0.8154	-2.139	-2.273	0.2130	0.5288
unknown	-4.932	-4.908	0.6880	0.7868	-4.825	-4.611	0.3060	0.8154	-4.490	-4.950	0.1440	0.5288
unknown	-4.263	-4.396	0.2660	0.5110	-4.174	-4.330	0.0330	0.8154	-4.347	-4.463	0.3260	0.5288
unknown	-5.661	-5.810	0.3730	0.5400	-5.527	-5.620	0.6110	0.8434	-5.649	-5.906	0.0750	0.5288
unknown	-3.315	-3.339	0.6770	0.7797	-3.209	-3.104	0.6180	0.8492	-3.037	-3.309	0.2100	0.5288
unknown	-2.693	-2.788	0.1100	0.5110	-2.596	-2.674	0.4400	0.8154	-2.780	-2.835	0.4920	0.5887
unknown	-5.687	-5.725	0.6250	0.7360	-5.552	-5.583	0.8180	0.9335	-5.719	-5.757	0.7580	0.8153
unknown	-1.636	-1.691	0.5780	0.6995	-1.532	-1.641	0.2540	0.8154	-1.679	-1.805	0.1320	0.5288
unknown	-4.735	-4.880	0.0300	0.5110	-4.653	-4.863	0.1140	0.8154	-4.978	-4.835	0.2000	0.5288
unknown	-5.803	-5.877	0.5080	0.6425	-5.819	-5.893	0.7190	0.8935	-6.020	-5.981	0.7070	0.7692
unknown	-6.250	-6.588	0.3570	0.5297	-6.424	-6.312	0.5310	0.8240	-6.602	-6.091	0.2230	0.5288
unknown	-6.055	-6.236	0.5280	0.6618	-5.990	-5.930	0.7700	0.9234	-6.177	-5.812	0.2360	0.5288
unknown	-1.816	-1.798	0.8270	0.8741	-1.674	-1.626	0.7100	0.8894	-1.561	-1.865	0.1860	0.5288
unknown	-3.220	-3.270	0.4320	0.5795	-3.099	-3.056	0.7900	0.9305	-3.015	-3.250	0.2360	0.5288
unknown	-4.867	-5.067	0.1830	0.5110	-4.812	-5.000	0.2380	0.8154	-5.137	-5.306	0.1990	0.5288
unknown	-2.313	-2.345	0.7230	0.8053	-2.215	-2.169	0.6720	0.8614	-2.218	-2.501	0.0770	0.5288
unknown	-5.168	-5.195	0.7880	0.8522	-5.127	-4.985	0.4610	0.8202	-4.971	-5.228	0.2070	0.5288
unknown	-5.117	-5.706	0.3930	0.5537	-5.295	-4.952	0.3310	0.8154	-6.019	-4.829	0.1930	0.5288
unknown	-4.000	-4.081	0.2000	0.5110	-3.858	-3.991	0.1660	0.8154	-4.045	-4.052	0.8940	0.9179
unknown	-4.509	-4.943	0.3580	0.5297	-4.452	-4.356	0.7290	0.8938	-5.050	-4.266	0.1610	0.5288
unknown	2.187	2.110	0.2230	0.5110	2.195	2.251	0.4990	0.8215	2.138	2.088	0.3830	0.5291
unknown	-5.042	-5.568	0.4050	0.5598	-5.043	-4.755	0.3380	0.8154	-5.723	-4.658	0.1650	0.5288
unknown	-5.775	-5.744	0.7250	0.8053	-5.737	-5.972	0.2160	0.8154	-6.152	-5.818	0.0300	0.5288
unknown	-3.575	-3.581	0.9450	0.9663	-3.398	-3.421	0.8360	0.9427	-3.417	-3.732	0.0650	0.5288
unknown	-2.767	-2.846	0.4440	0.5868	-2.679	-2.810	0.1590	0.8154	-2.784	-3.008	0.0250	0.5288
unknown	-5.840	-6.108	0.1720	0.5110	-5.753	-5.820	0.7150	0.8917	-6.119	-5.697	0.2250	0.5288
unknown	-5.911	-5.959	0.5420	0.6715	-5.784	-5.769	0.8930	0.9595	-5.988	-5.953	0.6780	0.7444
unknown	-5.765	-6.138	0.4540	0.5920	-5.502	-5.599	0.7950	0.9305	-6.323	-5.362	0.1420	0.5288
unknown	-3.845	-4.626	0.3490	0.5293	-3.510	-3.959	0.5180	0.8229	-5.125	-3.747	0.2250	0.5288
unknown	-4.629	-4.626	0.9600	0.9719	-4.565	-4.558	0.9410	0.9678	-4.667	-4.720	0.5480	0.6334
unknown	-6.849	-7.758	0.2180	0.5110	-6.589	-7.244	0.3980	0.8154	-7.796	-7.097	0.4240	0.5434
unknown	-2.466	-3.029	0.3280	0.5240	-2.406	-2.440	0.9440	0.9688	-3.299	-2.168	0.1330	0.5288
unknown	0.193	0.211	0.8570	0.8943	0.250	0.192	0.6350	0.8537	0.261	0.050	0.0240	0.5288
unknown	-5.209	-5.288	0.6340	0.7408	-5.008	-5.069	0.3710	0.8154	-5.205	-5.301	0.5120	0.6004
unknown	-3.947	-4.037	0.2640	0.5110	-3.952	-3.978	0.8200	0.9335	-4.105	-4.130	0.7250	0.7833
unknown	-3.402	-3.516	0.2610	0.5110	-3.306	-3.445	0.2720	0.8154	-3.450	-3.544	0.4030	0.5307
unknown	-3.145	-3.239	0.2530	0.5110	-3.083	-3.122	0.6990	0.8844	-3.172	-3.277	0.0790	0.5288
unknown	-5.707	-6.336	0.3460	0.5293	-5.431	-5.757	0.5140	0.8221	-6.156	-5.666	0.5130	0.6004
unknown	-5.112	-5.266	0.0800	0.5110	-5.036	-5.371	0.0870	0.8154	-5.420	-5.183	0.1130	0.5288
unknown	-4.566	-5.201	0.2420	0.5110	-4.379	-4.659	0.5880	0.8339	-5.600	-4.437	0.1760	0.5288
unknown	-5.649	-6.147	0.3440	0.5293	-5.253	-5.646	0.4520	0.8202	-6.458	-5.459	0.2110	0.5288
unknown	-3.656	-4.110	0.2150	0.5110	-3.517	-3.611	0.7600	0.9137	-4.576	-3.400	0.1040	0.5288
unknown	-3.240	-3.305	0.5880	0.7066	-3.214	-3.139	0.4240	0.8154	-3.199	-3.444	0.0670	0.5288
unknown	-4.778	-4.913	0.7250	0.8053	-4.326	-4.997	0.2600	0.8154	-4.439	-4.376	0.9210	0.9393
unknown	-0.090	-0.899	0.2580	0.5110	0.076	-0.129	0.7050	0.8844	-1.497	0.050	0.1890	0.5288
unknown	-4.586	-4.615	0.8250	0.8735	-4.524	-4.592	0.3290	0.8154	-4.684	-4.664	0.8120	0.8558
unknown	-0.559	-1.256	0.2460	0.5110	-0.460	-0.513	0.9130	0.9647	-1.508	-0.263	0.1220	0.5288
unknown	-3.825	-3.857	0.6820	0.7817	-3.696	-3.798	0.3250	0.8154	-3.946	-3.831	0.0710	0.5288
unknown	-5.521	-5.974	0.3020	0.5110	-5.662	-5.290	0.0700	0.8154	-6.011	-5.388	0.2320	0.5288
unknown	-6.134	-6.878	0.2620	0.5110	-5.850	-6.286	0.4830	0.8215	-7.550	-6.299	0.3140	0.5288
unknown	-5.505	-6.341	0.1670	0.5110	-5.240	-5.372	0.7260	0.8936	-6.801	-5.445	0.2570	0.5288
unknown	-5.311	-6.075	0.2040	0.5110	-4.876	-5.390	0.4230	0.8154	-6.184	-5.403	0.3830	0.5291
unknown	-4.236	-4.414	0.5360	0.6683	-4.186	-4.079	0.6620	0.8614	-4.532	-3.948	0.1390	0.5288
unknown	-2.911	-3.226	0.3130	0.5110	-2.700	-2.893	0.4940	0.8215	-3.790	-2.734	0.1390	0.5288
unknown	-2.693	-2.923	0.3970	0.5567	-2.569	-2.534	0.8860	0.9543	-3.537	-2.533	0.1150	0.5288
unknown	-3.817	-4.083	0.3600	0.5297	-3.778	-3.596	0.6050	0.8391	-4.465	-3.577	0.0570	0.5288
unknown	-0.832	-1.751	0.2720	0.5110	-0.244	-1.030	0.2930	0.8154	-2.252	-0.870	0.2950	0.5288
unknown	-0.482	-1.207	0.2540	0.5110	-0.315	-0.456	0.8130	0.9332	-1.443	-0.114	0.1280	0.5288
unknown	-4.454	-4.961	0.3930	0.5537	-4.090	-4.477	0.3350	0.8154	-5.096	-4.274	0.2070	0.5288
unknown	-6.036	-6.759	0.2110	0.5110	-5.793	-6.241	0.2840	0.8154	-6.684	-6.229	0.5570	0.6405
unknown	-4.356	-4.675	0.3650	0.5329	-4.352	-4.175	0.5200	0.8229	-4.996	-4.187	0.1520	0.5288
unknown	-4.633	-5.419	0.2110	0.5110	-4.272	-4.789	0.3070	0.8154	-5.788	-4.739	0.3360	0.5288
unknown	-2.092	-2.158	0.3450	0.5293	-1.991	-2.015	0.7930	0.9305	-2.075	-2.152	0.3840	0.5291
unknown	-4.067	-4.534	0.3760	0.5405	-3.717	-3.912	0.6340	0.8537	-5.654	-3.910	0.2310	0.5288
unknown	-5.143	-5.155	0.8470	0.8862	-5.021	-5.048	0.8050	0.9324	-5.061	-5.138	0.4510	0.5611
unknown	-2.896	-3.786	0.2590	0.5110	-2.400	-3.005	0.3300	0.8154	-3.848	-2.883	0.3830	0.5291
unknown	-0.512	-1.155	0.2630	0.5110	-0.318	-0.267	0.8680	0.9543	-1.452	-0.326	0.2640	0.5288
unknown	-6.056	-6.723	0.2300	0.5110	-5.633	-6.066	0.3290	0.8154	-7.258	-5.953	0.2240	0.5288
unknown	-1.361	-1.968	0.3150	0.5110	-1.085	-1.058	0.9310	0.9664	-2.191	-1.188	0.3010	0.5288
unknown	-3.040	-3.730	0.2550	0.5110	-2.897	-2.649	0.1560	0.8154	-4.043	-2.949	0.2610	0.5288
unknown	-2.460	-3.089	0.2430	0.5110	-2.238	-2.321	0.8400	0.9427	-3.164	-2.262	0.2930	0.5288

unknown	-3.320	-3.787	0.3310	0.5269	-2.886	-3.266	0.2770	0.8154	-4.326	-3.176	0.1900	0.5288
unknown	-5.866	-6.577	0.2300	0.5110	-5.814	-6.238	0.4700	0.8210	-6.711	-5.711	0.2270	0.5288
unknown	-2.055	-2.094	0.7530	0.8234	-1.804	-1.963	0.2490	0.8154	-2.786	-1.943	0.1220	0.5288
unknown	-2.133	-2.247	0.4100	0.5663	-1.907	-1.974	0.6650	0.8614	-2.737	-2.034	0.1190	0.5288
unknown	-5.491	-5.517	0.7420	0.8137	-5.340	-5.448	0.4280	0.8154	-5.525	-5.550	0.8510	0.8888
unknown	-5.608	-6.344	0.2030	0.5110	-5.430	-5.487	0.9090	0.9647	-6.385	-5.380	0.1690	0.5288
unknown	1.246	0.401	0.2380	0.5110	1.757	1.108	0.2260	0.8154	-0.056	1.215	0.2900	0.5288
unknown	-1.965	-1.858	0.4230	0.5705	-1.923	-2.007	0.5090	0.8215	-1.997	-2.047	0.7930	0.8433
unknown	2.687	2.113	0.2830	0.5110	2.986	2.771	0.4570	0.8202	1.700	2.828	0.2430	0.5288
unknown	2.727	2.035	0.2100	0.5110	2.956	2.856	0.7540	0.9108	1.666	2.907	0.1970	0.5288
unknown	2.012	1.233	0.1770	0.5110	2.159	2.107	0.8700	0.9543	0.931	2.129	0.2030	0.5288
unknown	-2.600	-2.679	0.4010	0.5584	-2.519	-2.524	0.9540	0.9744	-2.652	-2.652	0.9970	0.9966
unknown	-0.326	-1.062	0.1920	0.5110	-0.139	-0.325	0.7120	0.8896	-1.248	-0.035	0.1770	0.5288
unknown	-4.123	-4.680	0.3270	0.5226	-4.023	-4.107	0.8110	0.9332	-5.101	-3.897	0.1960	0.5288
unknown	-3.697	-3.729	0.6710	0.7756	-3.602	-3.627	0.7930	0.9305	-3.694	-3.689	0.8920	0.9179
unknown	-5.005	-5.565	0.3730	0.5400	-4.417	-5.005	0.2210	0.8154	-5.874	-4.899	0.2990	0.5288
unknown	-5.503	-6.001	0.3860	0.5509	-5.392	-5.361	0.9390	0.9675	-6.434	-5.203	0.2280	0.5288
unknown	-3.269	-3.582	0.4200	0.5705	-2.958	-3.203	0.4000	0.8154	-4.185	-3.108	0.1600	0.5288
unknown	-5.098	-5.547	0.3340	0.5286	-4.675	-5.052	0.2360	0.8154	-5.853	-4.834	0.2300	0.5288
unknown	-3.846	-4.090	0.4150	0.5667	-3.783	-3.586	0.5550	0.8240	-4.584	-3.635	0.1310	0.5288
unknown	-3.710	-4.307	0.3430	0.5293	-3.205	-3.767	0.1340	0.8154	-4.900	-3.623	0.2420	0.5288
unknown	-3.025	-3.589	0.2240	0.5110	-2.799	-3.015	0.1780	0.8154	-4.044	-2.926	0.2020	0.5288
unknown	-1.159	-2.006	0.2890	0.5110	-0.576	-1.212	0.2500	0.8154	-2.348	-1.097	0.3200	0.5288
unknown	-5.817	-6.696	0.1450	0.5110	-5.485	-5.767	0.5550	0.8240	-6.926	-5.637	0.2180	0.5288
unknown	-6.020	-6.082	0.2580	0.5110	-5.925	-5.935	0.9240	0.9664	-6.032	-6.206	0.0430	0.5288
unknown	-4.213	-5.031	0.2370	0.5110	-3.912	-4.144	0.4450	0.8154	-5.657	-4.164	0.2860	0.5288
unknown	-0.245	-1.099	0.2370	0.5110	0.068	-0.046	0.7910	0.9305	-1.343	-0.122	0.2950	0.5288
unknown	-0.314	-1.234	0.1930	0.5110	-0.128	-0.222	0.6480	0.8614	-1.365	-0.332	0.3660	0.5291
unknown	-4.633	-5.183	0.2180	0.5110	-4.357	-4.737	0.3330	0.8154	-5.829	-4.736	0.2190	0.5288
unknown	-1.106	-1.943	0.2700	0.5110	-0.651	-0.948	0.5410	0.8240	-2.068	-0.952	0.3320	0.5288
unknown	-2.346	-2.604	0.3610	0.5297	-2.075	-2.257	0.2380	0.8154	-3.262	-2.238	0.1630	0.5288
unknown	-4.832	-4.800	0.2910	0.5110	-4.676	-4.775	0.4430	0.8154	-4.952	-4.855	0.2280	0.5288
unknown	-2.092	-1.957	0.1040	0.5110	-1.934	-1.966	0.7980	0.9305	-2.468	-2.026	0.1620	0.5288
unknown	-6.332	-6.799	0.4520	0.5920	-6.487	-6.568	0.8490	0.9468	-7.848	-6.393	0.0610	0.5288
unknown	-2.710	-3.481	0.1640	0.5110	-2.371	-3.038	0.2320	0.8154	-3.512	-2.890	0.4740	0.5720
unknown	-1.994	-2.039	0.7160	0.8053	-1.821	-1.941	0.3850	0.8154	-2.488	-1.979	0.1210	0.5288
unknown	-5.839	-6.392	0.1740	0.5110	-5.585	-5.633	0.8380	0.9427	-6.464	-5.691	0.1320	0.5288
unknown	-6.558	-6.701	0.8060	0.8651	-6.828	-6.377	0.2970	0.8154	-7.809	-6.336	0.0690	0.5288
unknown	-3.171	-3.633	0.1850	0.5110	-2.969	-3.144	0.6620	0.8614	-3.892	-3.060	0.1580	0.5288
unknown	-1.912	-3.091	0.2260	0.5110	-1.413	-1.734	0.4080	0.8154	-2.727	-1.458	0.3450	0.5291
unknown	3.371	2.846	0.2560	0.5110	3.619	3.380	0.2850	0.8154	2.377	3.480	0.2160	0.5288
unknown	2.462	1.685	0.1950	0.5110	2.739	2.475	0.5570	0.8240	1.377	2.585	0.2520	0.5288
unknown	-1.320	-2.207	0.1280	0.5110	-1.093	-1.553	0.4690	0.8210	-2.188	-1.117	0.2890	0.5288
unknown	-3.941	-4.659	0.2630	0.5110	-3.824	-4.098	0.5970	0.8391	-4.898	-3.713	0.2830	0.5288
unknown	-4.023	-4.546	0.2950	0.5110	-3.591	-4.120	0.1050	0.8154	-5.035	-4.063	0.2700	0.5288
unknown	-4.918	-5.529	0.3490	0.5293	-4.666	-4.920	0.5770	0.8317	-5.797	-4.584	0.2690	0.5288
unknown	-2.509	-2.830	0.2280	0.5110	-2.292	-2.507	0.2630	0.8154	-3.414	-2.464	0.1720	0.5288
unknown	-5.223	-6.035	0.2160	0.5110	-4.665	-5.455	0.0660	0.8154	-6.002	-5.388	0.4560	0.5647
unknown	-3.451	-3.921	0.2520	0.5110	-3.258	-3.314	0.8300	0.9427	-4.322	-3.389	0.2350	0.5288
unknown	-3.740	-4.452	0.2250	0.5110	-3.258	-3.888	0.0940	0.8154	-4.642	-3.734	0.3320	0.5288
unknown	-1.993	-1.981	0.8660	0.9010	-1.884	-2.010	0.3140	0.8154	-2.077	-1.962	0.2720	0.5288
unknown	-0.028	-0.912	0.2210	0.5110	0.671	-0.131	0.1290	0.8154	-1.101	0.023	0.3620	0.5291
unknown	-7.119	-7.464	0.6220	0.7352	-6.855	-6.777	0.8730	0.9543	-8.326	-6.680	0.1320	0.5288
unknown	-5.123	-5.158	0.7200	0.8053	-4.906	-5.168	0.1580	0.8154	-5.313	-5.169	0.1880	0.5288
unknown	-5.317	-5.690	0.0890	0.5110	-5.057	-5.595	0.1020	0.8154	-5.732	-5.446	0.4990	0.5937
unknown	-0.367	-1.159	0.2180	0.5110	0.071	-0.513	0.1490	0.8154	-1.633	-0.374	0.2850	0.5288
unknown	-2.013	-2.938	0.1750	0.5110	-1.443	-2.167	0.1230	0.8154	-3.056	-2.158	0.4460	0.5587
unknown	-1.559	-2.563	0.1670	0.5110	-1.244	-1.563	0.5220	0.8229	-2.519	-1.461	0.3670	0.5291
unknown	-1.498	-2.517	0.1700	0.5110	-1.197	-1.567	0.3990	0.8154	-2.548	-1.449	0.3700	0.5291
unknown	-3.614	-4.108	0.1800	0.5110	-3.377	-3.853	0.1900	0.8154	-4.431	-3.749	0.2530	0.5288
unknown	-3.667	-3.835	0.2160	0.5110	-3.438	-3.704	0.1290	0.8154	-3.800	-3.529	0.4600	0.5658
unknown	-4.629	-5.213	0.1240	0.5110	-4.433	-4.798	0.3100	0.8154	-5.024	-4.542	0.4860	0.5845
unknown	-1.907	-1.999	0.6200	0.7337	-1.749	-1.840	0.2930	0.8154	-2.622	-1.779	0.0920	0.5288
unknown	-6.139	-6.774	0.3100	0.5110	-6.125	-6.058	0.8840	0.9543	-7.091	-6.156	0.2520	0.5288
unknown	-3.457	-3.994	0.2170	0.5110	-3.097	-3.384	0.1610	0.8154	-4.510	-3.315	0.1950	0.5288
unknown	-1.817	-1.670	0.3470	0.5293	-1.724	-1.799	0.6570	0.8614	-2.077	-1.806	0.2290	0.5288
unknown	-5.268	-5.727	0.4550	0.5920	-5.617	-5.194	0.1650	0.8154	-6.694	-5.278	0.1020	0.5288
unknown	-4.707	-5.512	0.1920	0.5110	-4.455	-4.884	0.4080	0.8154	-5.431	-4.894	0.4380	0.5518
unknown	-5.646	-5.719	0.3130	0.5110	-5.565	-5.590	0.8350	0.9427	-5.633	-5.717	0.4700	0.5691
unknown	-4.017	-3.796	0.3210	0.5151	-3.978	-3.988	0.9610	0.9768	-4.251	-4.028	0.4050	0.5307
unknown	-1.865	-2.052	0.1880	0.5110	-1.664	-1.856	0.3060	0.8154	-2.460	-1.821	0.1470	0.5288
unknown	-5.513	-5.620	0.8460	0.8862	-5.660	-5.609	0.9260	0.9664	-6.992	-5.203	0.0570	0.5288
unknown	-5.584	-5.767	0.0550	0.5110	-5.581	-5.560	0.8540	0.9474	-5.652	-5.682	0.8110	0.8558
unknown	-3.703	-4.394	0.1060	0.5110	-3.569	-3.883	0.5100	0.8215	-4.590	-3.582	0.1790	0.5288
unknown	3.006	2.264	0.2140	0.5110	3.458	2.893	0.1010	0.8154	1.958	3.026	0.3180	0.5288
unknown	2.954	2.218	0.1620	0.5110	3.230	2.883	0.2140	0.8154	1.895	3.085	0.2620	0.5288
unknown	-4.652	-5.278	0.1190	0.5110	-4.328	-4.970	0.1680	0.8154	-5.374	-4.190	0.3200	0.5288

unknown	0.710	-0.296	0.1460	0.5110	1.030	0.673	0.5490	0.8240	-0.191	0.844	0.3760	0.5291
unknown	-2.017	-2.688	0.3080	0.5110	-1.800	-2.215	0.2710	0.8154	-3.172	-1.849	0.2510	0.5288
unknown	-4.254	-4.765	0.1320	0.5110	-4.068	-4.276	0.0430	0.8154	-4.357	-4.201	0.7610	0.8164
unknown	-5.184	-5.564	0.1480	0.5110	-5.157	-5.240	0.6700	0.8614	-5.195	-5.163	0.9220	0.9393
unknown	-3.491	-4.163	0.0980	0.5110	-3.173	-3.660	0.3710	0.8154	-3.728	-3.204	0.4960	0.5923
unknown	-3.642	-4.045	0.3170	0.5110	-3.163	-3.758	0.0700	0.8154	-4.482	-3.673	0.2750	0.5288
unknown	-3.765	-4.134	0.2530	0.5110	-3.396	-3.850	0.0760	0.8154	-4.618	-3.810	0.2550	0.5288
unknown	-3.320	-3.846	0.1870	0.5110	-2.956	-3.319	0.0660	0.8154	-4.346	-3.188	0.2040	0.5288
unknown	-6.929	-7.023	0.8700	0.9016	-6.981	-6.893	0.8620	0.9524	-8.632	-6.798	0.0710	0.5288
unknown	-4.554	-5.191	0.1870	0.5110	-4.187	-4.496	0.3850	0.8154	-5.396	-4.561	0.3130	0.5288
unknown	-4.142	-4.800	0.2150	0.5110	-3.694	-4.105	0.3720	0.8154	-4.964	-3.969	0.2670	0.5288
unknown	-4.875	-5.618	0.1400	0.5110	-4.457	-4.819	0.4600	0.8202	-5.569	-4.727	0.3250	0.5288
unknown	-5.764	-5.763	0.9920	0.9951	-5.449	-5.670	0.2070	0.8154	-5.814	-5.665	0.5860	0.6677
unknown	-5.409	-5.658	0.4550	0.5920	-5.235	-5.097	0.4550	0.8202	-6.025	-5.250	0.2280	0.5288
unknown	-5.925	-6.166	0.4370	0.5821	-5.787	-5.485	0.2400	0.8154	-6.389	-5.731	0.2730	0.5288
unknown	-2.644	-3.425	0.2490	0.5110	-2.076	-2.678	0.1690	0.8154	-3.585	-2.672	0.3890	0.5291
unknown	-5.168	-5.248	0.4020	0.5584	-5.305	-5.067	0.2950	0.8154	-5.368	-5.465	0.8200	0.8613
unknown	-2.485	-3.379	0.1950	0.5110	-2.230	-2.566	0.3400	0.8154	-3.572	-2.357	0.3110	0.5288
unknown	-5.938	-6.799	0.2310	0.5110	-5.497	-6.250	0.0700	0.8154	-6.736	-6.053	0.4610	0.5658
unknown	-4.610	-5.039	0.0640	0.5110	-4.454	-4.768	0.2030	0.8154	-5.072	-4.744	0.3750	0.5291
unknown	-4.933	-5.605	0.2130	0.5110	-4.689	-4.834	0.6020	0.8391	-5.613	-4.913	0.3960	0.5291
unknown	-4.431	-5.151	0.1560	0.5110	-4.281	-4.350	0.8410	0.9427	-4.746	-4.319	0.5820	0.6640
unknown	-4.997	-5.890	0.1290	0.5110	-4.944	-5.027	0.7460	0.9074	-5.269	-5.066	0.8020	0.8494
unknown	-3.082	-3.577	0.1860	0.5110	-2.838	-3.228	0.1580	0.8154	-3.708	-3.177	0.2690	0.5288
unknown	-5.747	-6.453	0.2240	0.5110	-5.339	-5.580	0.4900	0.8215	-5.961	-5.557	0.6360	0.7143
unknown	-6.510	-7.764	0.0610	0.5110	-5.959	-7.185	0.0950	0.8154	-7.048	-6.999	0.9450	0.9538
unknown	-5.943	-6.030	0.5770	0.6995	-5.810	-5.934	0.2860	0.8154	-5.972	-5.849	0.4500	0.5609
unknown	-5.255	-5.545	0.1220	0.5110	-5.120	-5.316	0.2260	0.8154	-5.767	-5.327	0.1980	0.5288
unknown	-1.716	-1.794	0.4690	0.6010	-1.592	-1.686	0.5130	0.8221	-2.313	-1.689	0.1350	0.5288
unknown	-5.518	-5.570	0.5650	0.6898	-5.443	-5.442	0.9910	0.9914	-5.556	-5.538	0.8150	0.8573
unknown	-1.624	-1.719	0.3610	0.5297	-1.487	-1.636	0.2560	0.8154	-2.226	-1.630	0.1460	0.5288
unknown	-6.527	-6.616	0.8020	0.8632	-6.727	-6.775	0.9130	0.9647	-7.569	-6.664	0.0950	0.5288
unknown	-4.864	-5.282	0.2940	0.5110	-4.651	-5.015	0.2970	0.8154	-5.818	-4.764	0.2080	0.5288
unknown	-2.417	-3.050	0.1060	0.5110	-2.155	-2.489	0.3110	0.8154	-3.323	-2.407	0.2320	0.5288
unknown	-5.766	-6.345	0.0870	0.5110	-5.487	-5.883	0.2810	0.8154	-6.139	-5.591	0.3710	0.5291
unknown	-4.667	-5.612	0.0580	0.5110	-4.472	-5.239	0.0690	0.8154	-5.459	-4.991	0.4290	0.5483
unknown	-5.389	-5.835	0.2180	0.5110	-5.015	-5.483	0.3760	0.8154	-5.737	-5.126	0.3780	0.5291
unknown	-1.373	-2.527	0.1930	0.5110	-0.986	-1.746	0.1380	0.8154	-2.439	-1.538	0.3970	0.5291
unknown	-6.280	-6.703	0.3480	0.5293	-6.016	-6.397	0.2250	0.8154	-6.890	-6.351	0.5030	0.5957
unknown	-2.134	-3.045	0.2100	0.5110	-1.916	-2.319	0.2470	0.8154	-3.070	-1.960	0.3040	0.5288
unknown	-2.997	-3.705	0.3060	0.5110	-2.501	-3.235	0.0350	0.8154	-3.968	-3.169	0.4310	0.5493
unknown	-4.354	-5.070	0.2870	0.5110	-4.067	-4.282	0.6320	0.8537	-4.642	-4.225	0.6480	0.7243
unknown	-3.676	-4.532	0.1660	0.5110	-3.485	-4.069	0.2630	0.8154	-4.540	-3.637	0.3810	0.5291
unknown	-5.846	-6.088	0.0860	0.5110	-5.751	-5.905	0.2790	0.8154	-5.893	-5.775	0.6070	0.6874
unknown	-6.392	-6.849	0.1320	0.5110	-5.980	-6.626	0.0720	0.8154	-7.776	-6.477	0.2150	0.5288
unknown	-5.269	-5.733	0.2760	0.5110	-4.905	-5.413	0.1180	0.8154	-6.097	-5.172	0.2600	0.5288
unknown	-5.896	-6.382	0.1990	0.5110	-5.734	-6.588	0.1890	0.8154	-6.249	-5.750	0.3040	0.5288
unknown	-4.732	-4.972	0.4150	0.5667	-4.528	-4.501	0.8700	0.9543	-5.293	-4.578	0.2530	0.5288
unknown	-5.164	-5.321	0.5750	0.6995	-4.947	-4.913	0.8540	0.9474	-5.699	-4.904	0.2310	0.5288
unknown	-5.730	-6.226	0.3920	0.5537	-5.291	-5.793	0.1730	0.8154	-6.274	-5.669	0.4670	0.5671
unknown	-4.579	-4.965	0.1820	0.5110	-4.412	-4.515	0.6250	0.8537	-5.340	-4.533	0.2540	0.5288
unknown	-5.204	-5.760	0.3430	0.5293	-4.842	-5.101	0.3760	0.8154	-5.598	-5.045	0.5040	0.5957
unknown	-6.203	-6.811	0.0570	0.5110	-6.101	-6.341	0.2140	0.8154	-6.818	-6.389	0.2930	0.5288
unknown	-5.935	-6.923	0.1150	0.5110	-5.784	-5.741	0.9000	0.9601	-6.235	-5.771	0.5740	0.6580
unknown	-6.624	-7.420	0.2300	0.5110	-6.241	-6.455	0.5730	0.8315	-7.238	-6.471	0.4010	0.5307
unknown	-6.025	-6.519	0.1920	0.5110	-5.957	-5.969	0.9130	0.9647	-6.077	-5.976	0.8340	0.8743
unknown	-5.739	-5.834	0.3940	0.5541	-5.549	-5.545	0.9800	0.9857	-6.253	-5.664	0.2070	0.5288
unknown	-6.212	-6.768	0.2180	0.5110	-5.895	-5.999	0.6360	0.8537	-6.890	-6.026	0.2360	0.5288
unknown	-4.341	-5.121	0.1940	0.5110	-3.933	-4.620	0.1150	0.8154	-5.329	-4.625	0.3360	0.5288
unknown	-6.281	-6.708	0.2910	0.5110	-5.957	-6.593	0.1380	0.8154	-6.979	-6.444	0.3100	0.5288
unknown	-5.093	-5.917	0.1580	0.5110	-4.952	-5.309	0.3340	0.8154	-5.938	-5.058	0.3040	0.5288
unknown	-5.695	-6.212	0.2870	0.5110	-5.500	-5.634	0.8170	0.9335	-7.036	-5.399	0.1840	0.5288
unknown	-5.660	-6.116	0.1530	0.5110	-5.401	-5.841	0.0770	0.8154	-6.280	-5.602	0.1680	0.5288
unknown	-6.097	-6.923	0.1280	0.5110	-5.829	-6.046	0.5660	0.8293	-6.232	-6.015	0.7640	0.8164
unknown	-5.523	-6.407	0.1970	0.5110	-5.524	-5.764	0.4840	0.8215	-6.075	-5.825	0.6730	0.7426
unknown	-6.031	-6.858	0.1760	0.5110	-6.060	-6.262	0.5000	0.8215	-6.586	-6.335	0.6770	0.7444
unknown	-5.106	-5.807	0.1930	0.5110	-5.104	-5.224	0.6690	0.8614	-5.451	-5.137	0.6550	0.7292
unknown	-6.270	-6.640	0.3540	0.5297	-6.073	-6.030	0.8420	0.9427	-6.141	-6.057	0.8920	0.9179
unknown	-5.535	-6.433	0.1760	0.5110	-5.331	-5.844	0.3800	0.8154	-6.234	-5.404	0.3860	0.5291
unknown	-6.552	-7.020	0.3420	0.5293	-6.592	-6.671	0.7560	0.9113	-6.805	-6.458	0.6080	0.6874
unknown	-6.249	-6.726	0.1660	0.5110	-5.976	-6.292	0.1060	0.8154	-6.834	-6.187	0.2600	0.5288
unknown	-6.046	-6.612	0.1690	0.5110	-5.791	-6.173	0.0210	0.8154	-7.111	-5.897	0.1590	0.5288
unknown	-6.110	-6.234	0.1890	0.5110	-6.033	-6.156	0.4630	0.8202	-6.154	-6.240	0.4370	0.5518
unknown	-4.938	-4.973	0.7340	0.8094	-4.884	-4.979	0.4850	0.8215	-5.214	-4.887	0.0420	0.5288
unknown	-4.971	-4.926	0.5370	0.6684	-4.862	-4.999	0.3840	0.8154	-5.131	-4.978	0.1990	0.5288
unknown	-5.062	-5.086	0.8140	0.8667	-4.970	-5.183	0.1900	0.8154	-5.237	-5.057	0.0560	0.5288
unknown	-5.813	-5.806	0.9180	0.9461	-5.641	-5.492	0.6210	0.8505	-5.291	-5.915	0.0990	0.5288

unknown	-4.736	-4.772	0.6640	0.7695	-4.688	-4.400	0.3650	0.8154	-4.238	-4.720	0.2150	0.5288
unknown	-5.135	-5.217	0.2640	0.5110	-5.071	-4.861	0.5300	0.8240	-4.671	-5.180	0.1830	0.5288
unknown	-4.816	-4.819	0.9500	0.9665	-4.726	-4.894	0.3200	0.8154	-4.820	-4.819	0.9890	0.9928
unknown	-5.099	-5.125	0.7200	0.8053	-5.062	-5.210	0.3560	0.8154	-5.178	-5.138	0.6660	0.7403
unknown	-6.107	-6.189	0.4860	0.6199	-5.943	-6.143	0.1460	0.8154	-6.125	-6.216	0.3280	0.5288
unknown	-4.956	-4.881	0.2680	0.5110	-4.809	-4.967	0.3800	0.8154	-5.158	-4.862	0.1840	0.5288
unknown	-4.915	-4.886	0.7090	0.8002	-4.696	-4.959	0.2270	0.8154	-4.951	-4.817	0.4910	0.5887
unknown	-4.805	-4.893	0.3560	0.5297	-4.769	-4.946	0.2510	0.8154	-5.140	-4.805	0.1600	0.5288
unknown	-0.125	-0.204	0.3560	0.5297	-0.102	-0.142	0.7720	0.9234	-0.253	-0.242	0.8590	0.8955
unknown	-3.625	-3.754	0.5080	0.6425	-3.657	-3.479	0.1320	0.8154	-3.779	-3.777	0.9950	0.9966

[a]The ambiguous subspecies indicates that the lipidomic profiling gave two possible identifications of the lipid. [b]Abbreviations: ChoE, cholesteryl ester. SM, sphingomyelin. TG, triacylglycerol. LysoPC, lysophophosphatidylcholine. PC, phosphatidylcholine.

Online Resource Table S6

Results from the analysis of variance between the control group (CON) and the high-energy feeding group (HIGH) within time points in adipose tissue negative electrospray ionization mode (ESI-) dataset. *P* -values were obtained from the analysis performed using MIXED procedure in SAS, with diet as the fixed effect and pair as the random effect. Adjusted-*p* values were obtained from *p* -values after false discovery rate control.

	-8d				1d				9d			
Lipid subspecies	CON	HIGH	*p* -value	Adjusted-*p*	CON	HIGH	*p* -value	Adjusted-*p*	CON	HIGH	*p* -value	Adjusted-*p*
Cer(d17:1/22:0)	-9.877	-8.390	<.0001	0.0017	-9.642	-8.984	0.1735	0.9350	-9.832	-9.636	0.6296	0.8091
Cer(d18:1/16:0)	-6.841	-6.438	0.2983	0.6093	-6.227	-6.017	0.6875	0.9368	-6.773	-6.635	0.8288	0.9103
Cer(d18:1/18:0)	-8.570	-8.354	0.5329	0.7826	-7.683	-7.378	0.6042	0.9350	-7.452	-8.097	0.1976	0.4721
Cer(d18:1/20:0)	-10.999	-9.443	<.0001	0.0028	-10.485	-9.606	0.2083	0.9350	-10.501	-10.347	0.7451	0.8690
Cer(d18:1/22:0)	-6.850	-5.737	0.0004	0.0553	-6.617	-6.162	0.3423	0.9350	-7.137	-6.879	0.5311	0.7413
Cer(d18:1/22:1)	-10.511	-9.604	0.0049	0.1659	-10.325	-9.517	0.2555	0.9350	-10.403	-10.245	0.7648	0.8835
Cer(d18:1/23:0)	-6.585	-5.617	0.0002	0.0473	-6.417	-6.175	0.4855	0.9350	-6.755	-6.681	0.8363	0.9153
Cer(d18:1/23:1)	-8.329	-7.174	0.0016	0.1153	-8.419	-7.836	0.3125	0.9350	-8.785	-8.458	0.3905	0.6413
Cer(d18:1/24:0)	-6.772	-6.345	0.0102	0.1949	-6.391	-6.303	0.8132	0.9665	-6.485	-6.726	0.5671	0.7685
Cer(d18:1/24:1)	-8.151	-7.345	0.0056	0.1705	-7.880	-7.272	0.2751	0.9350	-8.230	-7.993	0.5305	0.7413
Cer(d18:1/25:0)	-9.906	-9.705	0.2526	0.5708	-9.417	-9.816	0.2645	0.9350	-9.852	-9.900	0.8750	0.9333
Cer(d18:1/25:1)	-9.412	-8.968	0.0118	0.2113	-9.279	-9.320	0.9331	0.9848	-9.726	-9.625	0.7191	0.8519
Cer(d18:2/16:0)	-11.780	-11.319	0.1973	0.5141	-11.110	-10.270	0.3536	0.9350	-11.343	-11.072	0.7361	0.8636
Cer(d18:2/18:0)	-11.427	-11.305	0.6648	0.8350	-10.824	-10.235	0.4970	0.9350	-10.561	-10.913	0.5006	0.7238
Cer(d18:2/24:1)	-11.832	-11.393	0.2873	0.6073	-11.289	-10.621	0.3748	0.9350	-11.560	-11.487	0.9136	0.9466
HexCer(d18:1/22:0)	-13.722	-12.683	0.3554	0.6476	-11.298	-11.532	0.8664	0.9665	-11.319	-12.214	0.3211	0.5780
PC(18:1/18:0)	-5.392	-4.946	0.0418	0.3335	-5.425	-5.289	0.6980	0.9368	-5.184	-5.581	0.1988	0.4721
PC(36:2)	-6.832	-6.591	0.3588	0.6476	-6.614	-6.553	0.8282	0.9665	-6.214	-6.664	0.1686	0.4440
PC(36:3)	-7.928	-7.239	0.0036	0.1599	-8.110	-8.183	0.8414	0.9665	-8.028	-8.260	0.1105	0.4114
PC(38:3)	-7.630	-7.147	0.0367	0.3101	-7.483	-7.685	0.6794	0.9368	-8.038	-8.303	0.2427	0.5121
PE(16:0/20:4)+ PE(18:2/18:2)[a]	-9.802	-9.047	0.0039	0.1599	-9.908	-9.728	0.6193	0.9350	-9.676	-9.769	0.6201	0.8041
PE(18:0/16:1)	-8.315	-7.647	0.0298	0.2953	-8.217	-8.119	0.7979	0.9665	-7.673	-8.523	0.0881	0.3977
PE(18:0/18:1)	-6.634	-6.162	0.0938	0.4262	-6.485	-6.417	0.8176	0.9665	-5.805	-6.746	0.1483	0.4361
PE(18:0/18:2)	-7.633	-7.314	0.2361	0.5553	-7.436	-7.452	0.9440	0.9848	-6.593	-7.295	0.1074	0.4114
PE(18:0/20:0)	-9.004	-8.531	0.0009	0.0907	-9.006	-8.850	0.6893	0.9368	-8.575	-9.425	0.0498	0.3934
PE(18:0/20:3)	-8.791	-8.538	0.1116	0.4448	-8.703	-8.457	0.5988	0.9350	-8.595	-9.272	0.0766	0.3934
PE(18:0/20:4)	-8.816	-8.036	0.0025	0.1459	-8.749	-8.782	0.9330	0.9848	-8.605	-8.980	0.2360	0.5053
PE(18:0/22:6)	-9.995	-9.834	0.2268	0.5509	-10.044	-9.972	0.8079	0.9665	-9.565	-10.120	0.1375	0.4345
PE(18:1/18:0)	-7.543	-7.338	0.4245	0.7043	-7.314	-7.019	0.4512	0.9350	-6.703	-7.590	0.0800	0.3938
PE(34:1)	-7.977	-7.621	0.1718	0.4907	-7.695	-7.755	0.8495	0.9665	-7.241	-7.857	0.0926	0.4048
PE(36:2)	-8.571	-8.222	0.2071	0.5259	-8.206	-8.329	0.5738	0.9350	-7.472	-7.984	0.0716	0.3934
PE(36:2)	-8.022	-7.692	0.4400	0.7141	-7.707	-7.608	0.8394	0.9665	-7.172	-8.036	0.0843	0.3940
PE(36:2e)	-8.646	-7.527	0.0508	0.3484	-8.162	-8.354	0.6393	0.9368	-7.596	-8.425	0.2994	0.5694
PE(36:3)	-9.887	-9.808	0.8370	0.8868	-9.437	-9.422	0.9695	0.9876	-8.926	-9.704	0.1515	0.4361
PE(36:3e)	-9.337	-8.518	0.2930	0.6073	-8.547	-9.040	0.4468	0.9350	-8.023	-9.533	0.1341	0.4278
PE(36:5e)	-9.622	-9.167	0.1480	0.4668	-9.660	-9.886	0.5229	0.9350	-9.319	-9.866	0.2615	0.5276
PE(36:5e)	-6.370	-5.983	0.1397	0.4558	-6.159	-6.104	0.8382	0.9665	-5.661	-6.194	0.1840	0.4554
PE(38:4)	-11.184	-10.759	0.2486	0.5663	-10.987	-10.798	0.6962	0.9368	-10.589	-11.374	0.0175	0.3934
PE(38:4)	-10.939	-10.070	0.0035	0.1599	-11.357	-11.633	0.5373	0.9350	-11.414	-11.728	0.4127	0.6537
PE(38:4)	-9.609	-9.017	0.0160	0.2352	-9.539	-9.517	0.9447	0.9848	-9.344	-9.806	0.0822	0.3938
PE(38:4)	-7.210	-6.573	0.0035	0.1599	-7.047	-6.853	0.6839	0.9368	-6.524	-7.495	0.1328	0.4258
PE(38:4e)	-9.136	-8.261	0.0200	0.2588	-8.926	-8.532	0.3945	0.9350	-8.696	-8.372	0.2022	0.4774
PE(38:5e)	-9.747	-8.574	0.0140	0.2235	-9.492	-9.193	0.5034	0.9350	-9.171	-9.229	0.8136	0.9044
PE(38:5e)	-6.646	-6.152	0.1071	0.4392	-6.168	-5.988	0.5859	0.9350	-5.666	-6.220	0.2577	0.5276
PE(p16:0/18:1)	-7.348	-6.626	0.1309	0.4521	-7.219	-7.382	0.6600	0.9368	-6.600	-7.422	0.1808	0.4554
PE(p16:0/18:2)	-9.835	-9.501	0.3035	0.6168	-9.744	-9.604	0.7228	0.9486	-8.639	-9.663	0.2221	0.4934
PI(18:0/20:4)	-7.118	-6.378	0.0053	0.1693	-6.651	-6.427	0.5719	0.9350	-6.192	-6.721	0.2222	0.4934
PI(36:3)	-11.355	-10.437	0.0203	0.2588	-12.107	-12.025	0.8482	0.9665	-11.683	-12.118	0.1609	0.4367
PI(36:4)	-11.490	-10.311	0.0081	0.1837	-11.962	-11.535	0.2597	0.9350	-11.852	-11.726	0.4783	0.7061
PI(38:3)	-10.411	-10.072	0.1602	0.4768	-10.142	-10.066	0.8244	0.9665	-9.417	-10.581	0.0884	0.3977
PI(38:5)	-10.003	-9.110	0.0137	0.2235	-10.066	-9.768	0.5196	0.9350	-9.655	-10.216	0.3093	0.5752
PI(40:5)	-10.853	-9.854	0.0045	0.1659	-11.381	-10.616	0.1582	0.9350	-10.615	-11.219	0.4152	0.6537
SM(d18:1/16:0)	-8.518	-8.388	0.6049	0.8169	-7.889	-8.185	0.4568	0.9350	-7.335	-8.370	0.0533	0.3934
unknown	-6.636	-6.800	0.4451	0.7156	-6.337	-6.706	0.2277	0.9350	-6.405	-6.635	0.4554	0.6883
unknown	-5.729	-4.567	0.0669	0.3863	-5.793	-5.791	0.9983	0.9985	-6.170	-6.322	0.6900	0.8411
unknown	-6.402	-5.500	0.0854	0.4121	-6.773	-6.749	0.9690	0.9876	-7.066	-7.433	0.1045	0.4114
unknown	-6.695	-6.315	0.3539	0.6476	-6.034	-5.830	0.5785	0.9350	-6.476	-5.990	0.4569	0.6888
unknown	-5.770	-5.984	0.2840	0.6066	-5.765	-5.912	0.3668	0.9350	-6.091	-5.996	0.1102	0.4114
unknown	-6.156	-6.347	0.3649	0.6488	-5.378	-5.508	0.4326	0.9350	-5.865	-5.478	0.4052	0.6510
unknown	-5.497	-5.952	0.1684	0.4881	-4.017	-4.324	0.2331	0.9350	-4.970	-4.563	0.5364	0.7419
unknown	-6.062	-6.334	0.1815	0.5054	-6.054	-6.220	0.3914	0.9350	-6.359	-6.255	0.3402	0.5963
unknown	-10.213	-10.329	0.5273	0.7826	-10.302	-10.240	0.5493	0.9350	-10.278	-10.283	0.9756	0.9850
unknown	-10.211	-10.397	0.3855	0.6645	-10.430	-10.262	0.1057	0.9350	-10.486	-10.414	0.4610	0.6916
unknown	-9.462	-9.508	0.5761	0.8025	-9.435	-9.421	0.9002	0.9792	-9.750	-9.573	0.0789	0.3934
unknown	-6.906	-6.094	0.1065	0.4392	-7.281	-6.784	0.4036	0.9350	-7.316	-7.143	0.3597	0.6109
unknown	-10.117	-10.154	0.7216	0.8518	-10.094	-10.011	0.3577	0.9350	-10.278	-10.157	0.3662	0.6135

unknown	-10.073	-10.052	0.8381	0.8868	-10.092	-9.994	0.2609	0.9350	-10.162	-10.104	0.5767	0.7717
unknown	-4.161	-3.875	0.0773	0.4088	-3.981	-3.772	0.4493	0.9350	-3.977	-3.716	0.2140	0.4895
unknown	-7.620	-7.477	0.5331	0.7826	-7.338	-7.076	0.4826	0.9350	-7.328	-7.381	0.7294	0.8591
unknown	-7.101	-7.261	0.1939	0.5120	-7.172	-7.176	0.9760	0.9908	-7.320	-7.061	0.0651	0.3934
unknown	-6.117	-6.268	0.5684	0.8025	-5.855	-6.000	0.2325	0.9350	-6.403	-6.036	0.4022	0.6502
unknown	-6.360	-5.721	0.0906	0.4242	-6.117	-5.923	0.5807	0.9350	-6.170	-6.102	0.8634	0.9268
unknown	-6.168	-6.206	0.7065	0.8449	-6.154	-6.052	0.4513	0.9350	-6.188	-6.202	0.8838	0.9361
unknown	-6.806	-6.660	0.4733	0.7463	-6.293	-6.142	0.4763	0.9350	-6.410	-6.223	0.5118	0.7318
unknown	-6.151	-5.852	0.2390	0.5582	-6.425	-6.723	0.4289	0.9350	-7.070	-6.897	0.4534	0.6883
unknown	-9.612	-9.342	0.2135	0.5306	-9.642	-10.013	0.2008	0.9350	-10.141	-9.932	0.3648	0.6135
unknown	-10.108	-10.052	0.5186	0.7826	-10.137	-10.054	0.5818	0.9350	-10.256	-10.063	0.3542	0.6051
unknown	-10.086	-10.065	0.8577	0.8985	-10.190	-10.001	0.1749	0.9350	-10.258	-10.210	0.6333	0.8091
unknown	-10.054	-10.017	0.7409	0.8557	-10.066	-9.970	0.4533	0.9350	-10.329	-10.108	0.0587	0.3934
unknown	-4.039	-3.445	0.1238	0.4520	-3.829	-3.589	0.4335	0.9350	-4.065	-3.823	0.6238	0.8054
unknown	-4.421	-4.312	0.5720	0.8025	-3.788	-3.804	0.9257	0.9810	-4.090	-3.801	0.3855	0.6356
unknown	-7.045	-6.959	0.5835	0.8071	-6.770	-7.137	0.2640	0.9350	-7.546	-7.382	0.4354	0.6715
unknown	-7.948	-7.817	0.4776	0.7488	-8.065	-8.337	0.0016	0.4951	-8.475	-8.114	0.2979	0.5685
unknown	-10.592	-10.596	0.9890	0.9890	-10.655	-10.593	0.8072	0.9665	-10.809	-10.228	0.0490	0.3934
unknown	-10.213	-10.099	0.6232	0.8186	-10.322	-10.489	0.3707	0.9350	-10.477	-10.234	0.2616	0.5276
unknown	-6.533	-6.266	0.1796	0.5054	-7.264	-7.476	0.4830	0.9350	-7.835	-7.439	0.3413	0.5965
unknown	-9.219	-8.860	0.2866	0.6073	-10.327	-10.625	0.4770	0.9350	-10.879	-10.201	0.3301	0.5854
unknown	-9.922	-9.856	0.6018	0.8166	-9.938	-9.751	0.5432	0.9350	-11.117	-10.662	0.4905	0.7178
unknown	-10.100	-10.102	0.9947	0.9947	-10.149	-10.073	0.4622	0.9350	-10.201	-10.093	0.5353	0.7419
unknown	-10.165	-10.302	0.4787	0.7488	-10.267	-10.194	0.5452	0.9350	-10.199	-10.334	0.3947	0.6440
unknown	-10.146	-10.150	0.9862	0.9862	-10.173	-10.119	0.6132	0.9350	-10.265	-10.165	0.4889	0.7173
unknown	-10.254	-10.287	0.8166	0.8834	-10.301	-10.199	0.4218	0.9350	-10.327	-10.310	0.8997	0.9437
unknown	-10.066	-10.208	0.4842	0.7533	-10.182	-10.075	0.1314	0.9350	-10.527	-10.321	0.2363	0.5053
unknown	-10.590	-10.576	0.9565	0.9566	-10.320	-10.159	0.6693	0.9368	-11.519	-10.894	0.2882	0.5587
unknown	-5.610	-5.597	0.9520	0.9520	-5.409	-5.441	0.8834	0.9721	-5.399	-5.414	0.9022	0.9437
unknown	-8.020	-7.853	0.4527	0.7218	-8.666	-8.914	0.5473	0.9350	-9.209	-8.795	0.4518	0.6880
unknown	-9.808	-11.319	0.0987	0.4291	-10.585	-9.386	0.2596	0.9350	-10.758	-11.483	0.4550	0.6883
unknown	-6.453	-6.337	0.4347	0.7101	-6.265	-6.396	0.4296	0.9350	-6.377	-6.297	0.2255	0.4945
unknown	-8.862	-8.876	0.8284	0.8855	-8.916	-8.848	0.4858	0.9350	-9.197	-9.007	0.1438	0.4361
unknown	-8.931	-9.007	0.3754	0.6533	-9.023	-8.856	0.1256	0.9350	-9.093	-8.947	0.1843	0.4554
unknown	-9.310	-9.262	0.6214	0.8186	-9.284	-9.254	0.8282	0.9665	-9.036	-9.284	0.0824	0.3938
unknown	-8.317	-8.383	0.2949	0.6073	-8.306	-8.332	0.8157	0.9665	-8.317	-8.349	0.6964	0.8416
unknown	-8.941	-8.891	0.5215	0.7826	-8.978	-8.897	0.5101	0.9350	-9.323	-9.074	0.0092	0.3934
unknown	-8.867	-8.899	0.7353	0.8557	-8.953	-8.876	0.2781	0.9350	-8.974	-8.930	0.5827	0.7756
unknown	-10.290	-10.274	0.8846	0.9024	-10.311	-10.227	0.4173	0.9350	-10.262	-10.264	0.9879	0.9895
unknown	-10.392	-10.352	0.5279	0.7826	-10.259	-10.248	0.9156	0.9804	-10.324	-10.294	0.5775	0.7717
unknown	-10.239	-10.253	0.8263	0.8855	-10.289	-10.236	0.5545	0.9350	-10.558	-10.308	0.0459	0.3934
unknown	-10.175	-10.185	0.8641	0.8985	-10.254	-10.090	0.0951	0.9350	-10.452	-10.297	0.1890	0.4597
unknown	-10.178	-10.189	0.8891	0.9024	-10.285	-10.155	0.2169	0.9350	-10.478	-10.256	0.1259	0.4215
unknown	-9.877	-9.848	0.8729	0.8985	-9.994	-10.351	0.0015	0.4951	-10.632	-10.124	0.0954	0.4048
unknown	-9.276	-9.312	0.8881	0.9024	-9.675	-9.979	0.4855	0.9350	-10.304	-10.242	0.8460	0.9194
unknown	-9.766	-9.754	0.9515	0.9515	-9.878	-9.821	0.3179	0.9350	-9.765	-9.812	0.7756	0.8865
unknown	-9.216	-9.774	0.0766	0.4088	-8.933	-8.824	0.5562	0.9350	-8.974	-9.645	0.1089	0.4114
unknown	-10.755	-11.158	0.6914	0.8372	-10.992	-10.552	0.6618	0.9368	-10.952	-10.216	0.1286	0.4215
unknown	-8.082	-7.874	0.2435	0.5591	-8.837	-9.057	0.4461	0.9350	-9.362	-8.908	0.3091	0.5752
unknown	-5.610	-5.564	0.5892	0.8112	-5.576	-5.553	0.8638	0.9665	-5.572	-5.566	0.9535	0.9708
unknown	-3.676	-3.512	0.1766	0.5018	-3.650	-3.436	0.4241	0.9350	-3.473	-3.616	0.3768	0.6277
unknown	-9.455	-9.522	0.7371	0.8557	-9.587	-9.510	0.5273	0.9350	-9.500	-9.531	0.8639	0.9268
unknown	-3.926	-3.948	0.6284	0.8224	-3.934	-3.861	0.4116	0.9350	-3.967	-3.926	0.6168	0.8041
unknown	-10.655	-10.973	0.3539	0.6476	-10.417	-11.212	0.0143	0.9350	-11.599	-11.670	0.9046	0.9437
unknown	-9.199	-9.067	0.5211	0.7826	-9.800	-10.088	0.4931	0.9350	-10.346	-10.241	0.8051	0.8990
unknown	-10.485	-9.988	0.1365	0.4557	-10.275	-9.863	0.3296	0.9350	-10.241	-10.365	0.7886	0.8911
unknown	-6.443	-6.892	0.0520	0.3484	-6.381	-6.213	0.3444	0.9350	-6.532	-6.786	0.1468	0.4361
unknown	-5.541	-5.544	0.9856	0.9856	-5.721	-5.519	0.2898	0.9350	-5.506	-5.477	0.8081	0.9007
unknown	-9.191	-8.791	0.1383	0.4558	-9.198	-9.063	0.7243	0.9486	-9.852	-10.019	0.8909	0.9383
unknown	-7.164	-7.329	0.1850	0.5057	-7.178	-7.265	0.6811	0.9368	-7.134	-7.318	0.4485	0.6847
unknown	-10.167	-9.266	0.2788	0.6061	-9.927	-9.689	0.8134	0.9665	-8.751	-9.709	0.2490	0.5187
unknown	-4.203	-4.175	0.6957	0.8372	-4.200	-4.153	0.5885	0.9350	-4.251	-4.106	0.0723	0.3934
unknown	-9.794	-9.888	0.2419	0.5588	-9.959	-9.792	0.2143	0.9350	-10.139	-9.912	0.0684	0.3934
unknown	-9.950	-9.940	0.8988	0.9024	-9.990	-9.827	0.1766	0.9350	-10.227	-10.000	0.0724	0.3934
unknown	-9.868	-9.888	0.8160	0.8834	-9.963	-9.840	0.2521	0.9350	-10.100	-9.914	0.0337	0.3934
unknown	-7.175	-6.679	0.1603	0.4768	-6.914	-6.541	0.3414	0.9350	-7.221	-6.832	0.5029	0.7255
unknown	-9.381	-9.404	0.8833	0.9024	-9.477	-9.370	0.3391	0.9350	-9.602	-9.442	0.0521	0.3934
unknown	-4.115	-2.900	0.1457	0.4647	-3.771	-3.192	0.3981	0.9350	-4.184	-3.607	0.5354	0.7419
unknown	-8.443	-8.471	0.8137	0.8834	-8.499	-8.439	0.4962	0.9350	-8.433	-8.396	0.7415	0.8665
unknown	-9.605	-9.675	0.6162	0.8186	-9.732	-9.670	0.6497	0.9368	-9.704	-9.589	0.3032	0.5731
unknown	-3.846	-3.982	0.5030	0.7699	-3.888	-3.908	0.9074	0.9804	-3.758	-3.795	0.8230	0.9103
unknown	-5.398	-5.263	0.6860	0.8363	-5.027	-5.605	0.1212	0.9350	-5.412	-5.393	0.9641	0.9787
unknown	-8.730	-8.702	0.7109	0.8471	-8.661	-8.670	0.9235	0.9804	-8.938	-8.819	0.1163	0.4119
unknown	-9.814	-9.793	0.8072	0.8834	-9.820	-9.815	0.9550	0.9848	-9.816	-9.802	0.9122	0.9466

unknown	-9.564	-9.570	0.9539	0.9540	-9.591	-9.514	0.5361	0.9350	-9.529	-9.596	0.5646	0.7676
unknown	-10.464	-10.414	0.5927	0.8120	-10.423	-10.307	0.4961	0.9350	-10.349	-10.416	0.4586	0.6896
unknown	-9.692	-8.842	0.0826	0.4121	-9.985	-9.546	0.0149	0.9350	-9.932	-9.493	0.0526	0.3934
unknown	-9.146	-9.213	0.6228	0.8186	-9.262	-9.338	0.6269	0.9350	-9.336	-9.297	0.8404	0.9167
unknown	-8.201	-8.098	0.6849	0.8363	-8.269	-8.300	0.8819	0.9721	-8.979	-8.141	0.0240	0.3934
unknown	-9.109	-8.313	0.0198	0.2588	-8.831	-8.257	0.2932	0.9350	-9.185	-9.019	0.6940	0.8411
unknown	-9.694	-9.766	0.6375	0.8242	-9.863	-9.742	0.3727	0.9350	-9.773	-9.803	0.8540	0.9229
unknown	-10.255	-10.135	0.1343	0.4542	-10.281	-10.088	0.1335	0.9350	-10.631	-10.233	0.0195	0.3934
unknown	-10.288	-10.188	0.0965	0.4262	-10.299	-10.160	0.2139	0.9350	-10.670	-10.384	0.0112	0.3934
unknown	-8.078	-7.407	0.4662	0.7372	-6.213	-8.015	0.1774	0.9350	-6.866	-6.231	0.0880	0.3977
unknown	-10.471	-10.543	0.7716	0.8745	-10.605	-10.575	0.8685	0.9665	-10.575	-10.218	0.1891	0.4597
unknown	-10.558	-9.955	0.0331	0.2953	-10.822	-10.989	0.6860	0.9368	-10.301	-10.828	0.1561	0.4367
unknown	-10.101	-10.067	0.9009	0.9024	-10.014	-10.146	0.5687	0.9350	-10.241	-10.115	0.5166	0.7347
unknown	-5.286	-5.264	0.8177	0.8834	-5.125	-5.172	0.6588	0.9368	-5.277	-5.251	0.7475	0.8702
unknown	-10.898	-11.032	0.5375	0.7870	-10.996	-10.983	0.9489	0.9848	-11.004	-10.707	0.1172	0.4119
unknown	-10.793	-10.425	0.2331	0.5513	-10.782	-11.188	0.3688	0.9350	-10.410	-10.866	0.1832	0.4554
unknown	-10.873	-10.443	0.1315	0.4521	-10.910	-11.149	0.4392	0.9350	-10.515	-11.149	0.2278	0.4976
unknown	-9.901	-9.835	0.4632	0.7366	-9.899	-9.795	0.4327	0.9350	-10.034	-9.946	0.6237	0.8054
unknown	-9.786	-9.826	0.6469	0.8253	-9.993	-9.825	0.2849	0.9350	-10.248	-10.029	0.0083	0.3934
unknown	-9.784	-9.799	0.8655	0.8985	-9.929	-9.810	0.3605	0.9350	-10.167	-9.918	0.0245	0.3934
unknown	-9.903	-9.871	0.7489	0.8597	-9.908	-9.884	0.8268	0.9665	-10.034	-9.962	0.6764	0.8358
unknown	-9.624	-9.981	0.3319	0.6346	-9.281	-9.840	0.1981	0.9350	-9.260	-9.835	0.2625	0.5276
unknown	-10.303	-10.193	0.6937	0.8372	-10.156	-10.300	0.6188	0.9350	-9.799	-10.008	0.2669	0.5330
unknown	-10.607	-10.115	0.0835	0.4121	-10.870	-10.629	0.5632	0.9350	-10.920	-11.133	0.4163	0.6538
unknown	-10.186	-9.955	0.6957	0.8372	-10.143	-10.619	0.2941	0.9350	-9.724	-9.920	0.6525	0.8215
unknown	-10.993	-10.096	0.1936	0.5120	-10.861	-11.103	0.6683	0.9368	-10.112	-11.124	0.1656	0.4379
unknown	-5.649	-5.574	0.4023	0.6782	-5.604	-5.521	0.3171	0.9350	-5.669	-5.618	0.5565	0.7592
unknown	-8.452	-8.272	0.8127	0.8834	-8.635	-9.309	0.3308	0.9350	-8.014	-7.933	0.8846	0.9361
unknown	-10.636	-10.399	0.3090	0.6223	-10.615	-10.424	0.4658	0.9350	-10.264	-10.698	0.1163	0.4119
unknown	-10.177	-10.060	0.7630	0.8707	-10.222	-10.353	0.6020	0.9350	-10.105	-10.139	0.8860	0.9361
unknown	-11.589	-11.275	0.5089	0.7749	-11.203	-11.541	0.4908	0.9350	-10.573	-11.623	0.1586	0.4367
unknown	-10.571	-10.312	0.2498	0.5667	-10.668	-10.531	0.6640	0.9368	-10.256	-10.629	0.3191	0.5761
unknown	-11.165	-10.481	0.1907	0.5092	-11.091	-11.362	0.5725	0.9350	-10.871	-11.506	0.4040	0.6510
unknown	-9.724	-9.182	0.1694	0.4885	-9.514	-9.816	0.4620	0.9350	-9.173	-9.865	0.1802	0.4554
unknown	-9.473	-9.605	0.1307	0.4521	-9.672	-9.496	0.1384	0.9350	-9.604	-9.571	0.8021	0.8990
unknown	-9.546	-9.147	0.0664	0.3863	-9.616	-9.408	0.5115	0.9350	-9.043	-9.676	0.1246	0.4215
unknown	-8.703	-8.452	0.1456	0.4647	-8.567	-8.543	0.9140	0.9804	-8.185	-8.593	0.1463	0.4361
unknown	-7.494	-7.479	0.9008	0.9024	-7.490	-7.406	0.3232	0.9350	-7.383	-7.533	0.3269	0.5832
unknown	-6.938	-6.913	0.7544	0.8626	-7.015	-6.914	0.3849	0.9350	-7.176	-7.000	0.0287	0.3934
unknown	-8.557	-8.501	0.4429	0.7141	-8.515	-8.317	0.2157	0.9350	-8.579	-8.482	0.5048	0.7262
unknown	-8.545	-8.499	0.5764	0.8025	-8.622	-8.541	0.3427	0.9350	-8.509	-8.533	0.7870	0.8911
unknown	-7.448	-7.447	0.9759	0.9759	-7.325	-7.368	0.8539	0.9665	-7.653	-7.531	0.1388	0.4359
unknown	-10.052	-10.023	0.7748	0.8755	-10.107	-10.087	0.8700	0.9665	-9.995	-10.129	0.2127	0.4895
unknown	-8.640	-8.680	0.5259	0.7826	-8.739	-8.695	0.7385	0.9556	-8.642	-8.713	0.2770	0.5440
unknown	-9.057	-9.048	0.9049	0.9049	-9.138	-8.945	0.1714	0.9350	-9.118	-9.052	0.5767	0.7717
unknown	-9.388	-9.293	0.2956	0.6073	-9.271	-9.156	0.5029	0.9350	-9.154	-9.248	0.4223	0.6573
unknown	-6.643	-6.691	0.8025	0.8834	-6.735	-6.552	0.4008	0.9350	-7.003	-6.598	0.0179	0.3934
unknown	-9.887	-9.721	0.2904	0.6073	-9.791	-9.339	0.2392	0.9350	-9.732	-9.984	0.3150	0.5752
unknown	-9.235	-9.226	0.9145	0.9145	-9.125	-9.073	0.5862	0.9350	-9.168	-9.196	0.8478	0.9195
unknown	-8.108	-8.085	0.9005	0.9024	-8.581	-8.318	0.6070	0.9350	-7.640	-8.207	0.1019	0.4106
unknown	-8.111	-7.661	0.1664	0.4848	-7.904	-7.701	0.6120	0.9350	-7.317	-8.060	0.0788	0.3934
unknown	-10.064	-10.056	0.9366	0.9366	-10.122	-10.017	0.4170	0.9350	-10.484	-10.288	0.0454	0.3934
unknown	-10.061	-9.993	0.3728	0.6533	-10.042	-10.077	0.8073	0.9665	-10.275	-10.053	0.0425	0.3934
unknown	-7.234	-7.463	0.2755	0.6013	-7.660	-7.447	0.3657	0.9350	-8.080	-7.495	0.0458	0.3934
unknown	-9.482	-8.937	0.2088	0.5278	-9.151	-9.148	0.9939	0.9985	-8.462	-9.304	0.1552	0.4367
unknown	-7.118	-7.314	0.4004	0.6782	-7.667	-6.973	0.1686	0.9350	-7.373	-7.636	0.3182	0.5761
unknown	-9.075	-9.315	0.1615	0.4780	-9.163	-9.019	0.3887	0.9350	-9.395	-9.130	0.1220	0.4205
unknown	-6.148	-6.037	0.2466	0.5639	-6.069	-5.983	0.4298	0.9350	-6.121	-6.109	0.9218	0.9475
unknown	-9.313	-9.044	0.6744	0.8363	-9.305	-9.755	0.2800	0.9350	-8.484	-8.736	0.6506	0.8215
unknown	-9.344	-9.219	0.8481	0.8933	-9.500	-9.705	0.5181	0.9350	-8.900	-8.974	0.8865	0.9361
unknown	-10.385	-9.791	0.0100	0.1949	-10.488	-10.300	0.6792	0.9368	-9.780	-10.610	0.1517	0.4361
unknown	-10.722	-10.097	0.1894	0.5092	-10.379	-10.332	0.8931	0.9758	-9.790	-10.575	0.2412	0.5121
unknown	-8.735	-8.470	0.7365	0.8557	-8.853	-9.513	0.3164	0.9350	-8.291	-8.313	0.9677	0.9807
unknown	-9.401	-9.382	0.8337	0.8862	-9.432	-9.365	0.5964	0.9350	-9.739	-9.585	0.2076	0.4828
unknown	-10.060	-9.989	0.4031	0.6782	-10.204	-10.004	0.2108	0.9350	-10.205	-10.161	0.6199	0.8041
unknown	-9.927	-9.943	0.8705	0.8985	-9.952	-9.880	0.6041	0.9350	-10.174	-10.028	0.0255	0.3934
unknown	-10.157	-10.091	0.3627	0.6487	-10.113	-10.046	0.6121	0.9350	-10.325	-10.226	0.3336	0.5882
unknown	-10.132	-10.047	0.3520	0.6476	-10.070	-10.033	0.7268	0.9486	-10.504	-10.261	0.0062	0.3934
unknown	-9.998	-9.556	0.2334	0.5513	-9.681	-9.587	0.8391	0.9665	-9.330	-10.075	0.0434	0.3934
unknown	-9.654	-9.681	0.9063	0.9063	-9.781	-9.751	0.8569	0.9665	-10.194	-9.882	0.0140	0.3934
unknown	-7.722	-7.162	0.5775	0.8025	-5.765	-7.436	0.2115	0.9350	-6.390	-5.660	0.1525	0.4361
unknown	-9.840	-9.589	0.0983	0.4291	-9.750	-9.586	0.5150	0.9350	-9.497	-9.778	0.2896	0.5597
unknown	-7.935	-7.833	0.6858	0.8363	-7.821	-7.930	0.6918	0.9368	-7.664	-8.034	0.1906	0.4598
unknown	-9.997	-9.562	0.1422	0.4613	-10.050	-10.190	0.7307	0.9507	-10.096	-10.278	0.6026	0.7917

unknown	-10.775	-10.290	0.2831	0.6066	-10.984	-10.596	0.3610	0.9350	-11.907	-10.844	0.0463	0.3934
unknown	-12.014	-11.803	0.5925	0.8120	-11.536	-11.486	0.9408	0.9848	-10.721	-12.211	0.0495	0.3934
unknown	-9.166	-8.961	0.4291	0.7050	-9.000	-8.756	0.6140	0.9350	-8.289	-9.076	0.1089	0.4114
unknown	-10.158	-9.509	0.2279	0.5509	-10.131	-9.949	0.7419	0.9580	-11.502	-9.448	0.0436	0.3934
unknown	-10.127	-9.256	0.0808	0.4121	-9.769	-9.745	0.9597	0.9848	-9.160	-10.246	0.0988	0.4106
unknown	-11.598	-11.406	0.6341	0.8224	-11.433	-11.073	0.5906	0.9350	-10.225	-11.753	0.0705	0.3934
unknown	-10.319	-10.202	0.7114	0.8471	-9.675	-9.838	0.6805	0.9368	-9.294	-10.417	0.0218	0.3934
unknown	-5.784	-5.821	0.5717	0.8025	-5.881	-5.731	0.1795	0.9350	-5.895	-5.785	0.2447	0.5142
unknown	-8.637	-8.660	0.7815	0.8762	-8.720	-8.545	0.2013	0.9350	-8.740	-8.657	0.4470	0.6842
unknown	-10.246	-10.332	0.6838	0.8363	-10.234	-10.368	0.6240	0.9350	-10.248	-10.256	0.9753	0.9850
unknown	-8.474	-7.758	0.0626	0.3790	-7.972	-7.525	0.3555	0.9350	-7.375	-7.947	0.2143	0.4895
unknown	-7.271	-6.837	0.1312	0.4521	-6.897	-6.949	0.8794	0.9712	-6.359	-7.292	0.0592	0.3934
unknown	-4.229	-4.225	0.9711	0.9711	-4.479	-4.321	0.4588	0.9350	-4.293	-4.528	0.3435	0.5975
unknown	-10.935	-10.522	0.3574	0.6476	-10.360	-10.534	0.7316	0.9507	-9.534	-10.994	0.0495	0.3934
unknown	-3.517	-3.585	0.3372	0.6387	-3.561	-3.569	0.9498	0.9848	-3.529	-3.571	0.6884	0.8411
unknown	-6.049	-6.173	0.6158	0.8186	-6.037	-5.810	0.2598	0.9350	-5.975	-6.390	0.0829	0.3938
unknown	-7.664	-7.593	0.8695	0.8985	-7.606	-7.152	0.1036	0.9350	-7.491	-7.753	0.3446	0.5975
unknown	-5.366	-5.293	0.1583	0.4757	-5.406	-5.330	0.4918	0.9350	-5.375	-5.343	0.6946	0.8411
unknown	-10.005	-9.233	0.1398	0.4558	-9.290	-9.025	0.6168	0.9350	-8.736	-9.355	0.3064	0.5752
unknown	-10.444	-9.999	0.4653	0.7372	-10.755	-10.658	0.8049	0.9665	-10.061	-10.177	0.7959	0.8956
unknown	-10.152	-10.139	0.8866	0.9024	-10.240	-10.260	0.9185	0.9804	-10.037	-10.232	0.3493	0.5993
unknown	-14.239	-12.310	0.1144	0.4451	-12.379	-13.184	0.3215	0.9350	-13.076	-13.518	0.4684	0.6974
unknown	-10.943	-10.519	0.0776	0.4088	-10.790	-10.895	0.6428	0.9368	-10.551	-10.982	0.0400	0.3934
unknown	-10.331	-9.902	0.0439	0.3361	-10.416	-10.258	0.6736	0.9368	-10.095	-10.710	0.1654	0.4379
unknown	-10.720	-10.296	0.1264	0.4521	-10.648	-10.582	0.9042	0.9804	-10.422	-11.103	0.0955	0.4048
unknown	-8.309	-8.280	0.5600	0.7959	-8.414	-8.233	0.2186	0.9350	-8.256	-8.316	0.5770	0.7717
unknown	-8.097	-7.830	0.2804	0.6066	-8.082	-7.936	0.4004	0.9350	-8.041	-7.779	0.4448	0.6825
unknown	-8.162	-8.137	0.8043	0.8834	-7.970	-7.957	0.8659	0.9665	-8.209	-8.113	0.1720	0.4455
unknown	-8.860	-8.820	0.5134	0.7776	-8.908	-8.859	0.6957	0.9368	-8.798	-8.816	0.9036	0.9437
unknown	-9.986	-9.857	0.1999	0.5146	-9.971	-9.921	0.6758	0.9368	-10.559	-10.233	0.0340	0.3934
unknown	-9.518	-9.487	0.7980	0.8834	-9.541	-9.363	0.1400	0.9350	-9.741	-9.637	0.0112	0.3934
unknown	-9.850	-9.809	0.6633	0.8350	-9.757	-9.806	0.6991	0.9368	-10.293	-10.097	0.0149	0.3934
unknown	-8.899	-8.814	0.2625	0.5817	-8.873	-8.795	0.5982	0.9350	-8.872	-8.873	0.9857	0.9890
unknown	-8.702	-8.699	0.9828	0.9828	-8.759	-8.574	0.1723	0.9350	-8.744	-8.746	0.9829	0.9879
unknown	-7.602	-7.753	0.1990	0.5145	-7.559	-7.422	0.2990	0.9350	-7.676	-7.831	0.2744	0.5415
unknown	-6.987	-6.981	0.9495	0.9495	-7.037	-6.916	0.2821	0.9350	-7.192	-7.101	0.1129	0.4114
unknown	-9.579	-9.635	0.5575	0.7959	-9.676	-9.606	0.5820	0.9350	-9.631	-9.640	0.9193	0.9475
unknown	-6.405	-6.616	0.3947	0.6742	-6.285	-6.486	0.4819	0.9350	-6.258	-6.497	0.4300	0.6649
unknown	-10.362	-10.280	0.6224	0.8186	-10.402	-10.251	0.4315	0.9350	-10.503	-10.419	0.6026	0.7917
unknown	-9.713	-9.624	0.3159	0.6296	-9.656	-9.552	0.5383	0.9350	-9.694	-9.724	0.8277	0.9103
unknown	-7.977	-7.912	0.4522	0.7218	-8.007	-7.906	0.4558	0.9350	-8.081	-7.989	0.1506	0.4361
unknown	-8.532	-8.601	0.3735	0.6533	-8.525	-8.636	0.3698	0.9350	-8.723	-8.554	0.3140	0.5752
unknown	-9.911	-9.889	0.8700	0.8985	-9.927	-9.859	0.5007	0.9350	-9.926	-9.969	0.7154	0.8509
unknown	-9.693	-10.029	0.4213	0.7010	-9.319	-9.834	0.2005	0.9350	-9.320	-9.790	0.3333	0.5882
unknown	-11.598	-10.997	0.1100	0.4448	-11.420	-10.917	0.3528	0.9350	-10.828	-11.676	0.0417	0.3934
unknown	-10.421	-10.176	0.2925	0.6073	-10.338	-10.251	0.7507	0.9605	-10.121	-10.540	0.1630	0.4367
unknown	-9.402	-9.361	0.6528	0.8272	-9.382	-9.347	0.7534	0.9605	-9.521	-9.420	0.1431	0.4361
unknown	-9.540	-9.520	0.8121	0.8834	-9.605	-9.548	0.5560	0.9350	-9.864	-9.668	0.0585	0.3934
unknown	-9.916	-10.051	0.1390	0.4558	-9.999	-10.010	0.9383	0.9848	-10.154	-10.049	0.5132	0.7318
unknown	-10.330	-10.255	0.7722	0.8745	-10.163	-10.459	0.2795	0.9350	-9.863	-10.192	0.1881	0.4597
unknown	-9.512	-8.733	0.0067	0.1751	-9.494	-9.007	0.4024	0.9350	-8.895	-9.861	0.1126	0.4114
unknown	-9.016	-8.789	0.3607	0.6487	-8.658	-8.628	0.9403	0.9848	-8.468	-9.063	0.0782	0.3934
unknown	-9.290	-8.967	0.3062	0.6190	-9.405	-9.533	0.7640	0.9658	-10.573	-9.710	0.0557	0.3934
unknown	-10.767	-10.190	0.1515	0.4702	-10.191	-10.128	0.8932	0.9758	-9.484	-10.495	0.0606	0.3934
unknown	-8.147	-7.625	0.2597	0.5816	-8.235	-8.234	0.9976	0.9985	-9.721	-8.060	0.0508	0.3934
unknown	-8.619	-8.166	0.2958	0.6073	-8.792	-8.942	0.7994	0.9665	-10.104	-8.682	0.0592	0.3934
unknown	-6.411	-6.288	0.1816	0.5054	-6.317	-6.361	0.6279	0.9350	-6.454	-6.359	0.4006	0.6493
unknown	-8.095	-7.798	0.3580	0.6476	-7.771	-7.768	0.9916	0.9985	-7.432	-7.838	0.2245	0.4945
unknown	-7.911	-7.641	0.3173	0.6302	-7.635	-7.965	0.2499	0.9350	-7.467	-7.879	0.0487	0.3934
unknown	-7.510	-6.951	0.1345	0.4542	-7.945	-7.367	0.3365	0.9350	-9.483	-7.952	0.0266	0.3934
unknown	-6.718	-6.337	0.0526	0.3484	-6.776	-6.605	0.6202	0.9350	-6.486	-6.870	0.1825	0.4554
unknown	-10.235	-9.531	0.0416	0.3335	-10.170	-10.124	0.9187	0.9804	-9.886	-10.518	0.1850	0.4554
unknown	-7.676	-7.310	0.0333	0.2953	-7.687	-7.506	0.5861	0.9350	-7.448	-7.828	0.1633	0.4367
unknown	-10.546	-10.580	0.6844	0.8363	-10.472	-10.615	0.3396	0.9350	-10.611	-10.732	0.2200	0.4934
unknown	-8.941	-8.945	0.9620	0.9620	-9.019	-8.972	0.6779	0.9368	-9.041	-9.012	0.6324	0.8091
unknown	-9.186	-9.156	0.6572	0.8291	-9.145	-9.092	0.6314	0.9368	-9.456	-9.258	0.0226	0.3934
unknown	-9.686	-9.697	0.9050	0.9050	-9.748	-9.740	0.9603	0.9848	-9.845	-9.928	0.4719	0.7008
unknown	-9.193	-8.975	0.2604	0.5816	-9.188	-8.963	0.3694	0.9350	-9.251	-9.052	0.3185	0.5761
unknown	-10.044	-9.793	0.4993	0.7684	-9.512	-9.681	0.6958	0.9368	-9.037	-10.164	0.0825	0.3938
unknown	-10.024	-10.147	0.5528	0.7953	-10.262	-10.771	0.3627	0.9350	-10.720	-10.488	0.5134	0.7318
unknown	-9.803	-9.751	0.6078	0.8186	-9.874	-9.712	0.2391	0.9350	-10.033	-9.948	0.3640	0.6135
unknown	-10.840	-13.459	0.1241	0.4520	-12.270	-10.540	0.2968	0.9350	-13.473	-13.426	0.9422	0.9662
unknown	-10.346	-10.238	0.6330	0.8224	-9.970	-10.015	0.9013	0.9792	-9.674	-10.462	0.1133	0.4114
unknown	-10.732	-10.973	0.3276	0.6346	-10.688	-11.039	0.1832	0.9350	-11.130	-11.021	0.8217	0.9103

unknown	-9.147	-9.564	0.1583	0.4757	-8.955	-9.826	0.0335	0.9350	-9.609	-9.664	0.9224	0.9475
unknown	-9.505	-9.567	0.6683	0.8363	-9.580	-9.500	0.4701	0.9350	-9.659	-9.533	0.3488	0.5993
unknown	-8.037	-7.259	0.0223	0.2663	-7.644	-7.417	0.5974	0.9350	-7.218	-7.898	0.2027	0.4774
unknown	-10.074	-10.062	0.9201	0.9201	-10.098	-9.986	0.4097	0.9350	-10.170	-10.091	0.2593	0.5276
unknown	-10.066	-10.045	0.8579	0.8985	-10.134	-10.069	0.5576	0.9350	-10.254	-10.238	0.7266	0.8585
unknown	-10.116	-10.186	0.4021	0.6782	-10.160	-10.150	0.9511	0.9848	-10.447	-10.346	0.4952	0.7195
unknown	-10.055	-10.023	0.8095	0.8834	-9.941	-10.020	0.7134	0.9458	-10.404	-10.127	0.1513	0.4361
unknown	-10.386	-10.410	0.8389	0.8868	-10.381	-10.291	0.4930	0.9350	-10.989	-10.537	0.0705	0.3934
unknown	-9.416	-9.561	0.3290	0.6346	-9.520	-9.611	0.7152	0.9458	-9.960	-9.649	0.4369	0.6721
unknown	-10.941	-10.806	0.5760	0.8025	-11.104	-10.731	0.4159	0.9350	-10.841	-11.633	0.0706	0.3934
unknown	-8.826	-7.644	0.0334	0.2953	-8.010	-8.208	0.5202	0.9350	-7.949	-8.519	0.1825	0.4554
unknown	-11.247	-10.950	0.3455	0.6476	-11.356	-11.044	0.4323	0.9350	-10.285	-11.259	0.2295	0.4977
unknown	-8.785	-8.090	0.0965	0.4262	-8.564	-8.769	0.6075	0.9350	-8.039	-8.823	0.1440	0.4361
unknown	-9.974	-9.626	0.1904	0.5092	-9.905	-10.001	0.6842	0.9368	-10.018	-10.059	0.5957	0.7870
unknown	-10.840	-10.608	0.4902	0.7584	-11.069	-11.020	0.8929	0.9758	-11.702	-11.041	0.0768	0.3934
unknown	-6.120	-6.160	0.7154	0.8502	-6.336	-6.158	0.1649	0.9350	-6.322	-6.261	0.3982	0.6472
unknown	-9.678	-9.545	0.8440	0.8905	-9.808	-10.073	0.4835	0.9350	-9.236	-9.266	0.9500	0.9708
unknown	-10.791	-10.948	0.7205	0.8518	-10.656	-11.517	0.0242	0.9350	-11.511	-11.487	0.9471	0.9696
unknown	-8.581	-8.476	0.6894	0.8372	-8.376	-8.924	0.0914	0.9350	-8.239	-8.737	0.0367	0.3934
unknown	-7.620	-7.469	0.3578	0.6476	-7.584	-7.411	0.0245	0.9350	-7.609	-7.555	0.5255	0.7413
unknown	-9.276	-9.536	0.3041	0.6168	-9.331	-9.850	0.1853	0.9350	-10.035	-9.808	0.7024	0.8455
unknown	-9.380	-9.539	0.5321	0.7826	-9.315	-9.853	0.1856	0.9350	-9.753	-9.848	0.6778	0.8358
unknown	-8.933	-8.899	0.7285	0.8551	-9.000	-8.978	0.8623	0.9665	-9.088	-9.039	0.5785	0.7717
unknown	-8.169	-7.992	0.5123	0.7776	-7.526	-7.783	0.5216	0.9350	-6.973	-7.900	0.0713	0.3934
unknown	-9.742	-9.812	0.5061	0.7727	-9.837	-9.802	0.8246	0.9665	-9.953	-9.738	0.0432	0.3934
unknown	-8.913	-8.981	0.4953	0.7643	-8.910	-9.046	0.4138	0.9350	-9.356	-9.161	0.4254	0.6594
unknown	-9.593	-9.586	0.9564	0.9564	-9.672	-9.553	0.3259	0.9350	-9.823	-9.641	0.0245	0.3934
unknown	-9.654	-9.681	0.7495	0.8597	-9.684	-9.681	0.9594	0.9848	-9.779	-9.799	0.8462	0.9194
unknown	-9.766	-9.702	0.5513	0.7953	-9.894	-9.679	0.1666	0.9350	-10.090	-9.967	0.0773	0.3934
unknown	-9.765	-9.699	0.6046	0.8169	-9.648	-9.748	0.4937	0.9350	-10.124	-9.862	0.2492	0.5187
unknown	-10.129	-10.172	0.7393	0.8557	-10.174	-10.132	0.7742	0.9665	-10.390	-10.124	0.0376	0.3934
unknown	-10.375	-9.763	0.0066	0.1751	-10.560	-10.559	0.9985	0.9985	-10.052	-10.629	0.1269	0.4215
unknown	-10.561	-10.066	0.0341	0.2964	-10.637	-10.473	0.6198	0.9350	-10.347	-10.734	0.3125	0.5752
unknown	-8.472	-8.152	0.2893	0.6073	-8.166	-7.765	0.4165	0.9350	-7.853	-8.637	0.1113	0.4114
unknown	-10.244	-10.141	0.8078	0.8834	-10.279	-10.702	0.3541	0.9350	-11.523	-10.954	0.0455	0.3934
unknown	-11.387	-10.748	0.1822	0.5054	-11.115	-10.793	0.6024	0.9350	-10.473	-11.789	0.0784	0.3934
unknown	-9.354	-8.762	0.0595	0.3750	-9.197	-9.289	0.8477	0.9665	-9.592	-9.687	0.7100	0.8495
unknown	-10.608	-10.066	0.0414	0.3335	-10.869	-11.173	0.4051	0.9350	-11.672	-11.712	0.8761	0.9333
unknown	-5.930	-5.539	0.3399	0.6417	-5.927	-6.263	0.4228	0.9350	-7.916	-7.036	0.1020	0.4106
unknown	-9.178	-8.363	0.1185	0.4495	-8.818	-9.435	0.3881	0.9350	-11.208	-9.265	0.1261	0.4215
unknown	-10.217	-9.977	0.3477	0.6476	-10.105	-10.186	0.7510	0.9605	-9.817	-10.264	0.1376	0.4345
unknown	-9.089	-8.610	0.0528	0.3484	-8.995	-9.144	0.7362	0.9547	-9.494	-9.790	0.1017	0.4106
unknown	-10.170	-10.237	0.5423	0.7900	-10.244	-10.180	0.5221	0.9350	-10.303	-10.198	0.5058	0.7262
unknown	-10.344	-10.363	0.8899	0.9024	-10.442	-10.398	0.7092	0.9458	-10.280	-10.431	0.4070	0.6510
unknown	-9.029	-8.699	0.5246	0.7826	-9.009	-9.206	0.4849	0.9350	-8.656	-8.815	0.6600	0.8240
unknown	-6.083	-5.373	0.0153	0.2344	-6.357	-5.827	0.3137	0.9350	-7.218	-6.095	0.0298	0.3934
unknown	-9.181	-7.929	0.0219	0.2663	-9.643	-8.721	0.2783	0.9350	-11.331	-9.265	0.0384	0.3934
unknown	-9.866	-9.246	0.4299	0.7050	-9.529	-10.066	0.0799	0.9350	-9.528	-9.870	0.3914	0.6413
unknown	-8.484	-7.740	0.1504	0.4702	-7.657	-8.143	0.4032	0.9350	-10.092	-8.542	0.0982	0.4106
unknown	-7.681	-7.947	0.1140	0.4451	-7.908	-7.777	0.5145	0.9350	-7.915	-7.838	0.6923	0.8411
unknown	-8.261	-8.064	0.5510	0.7953	-8.172	-8.508	0.1391	0.9350	-7.890	-8.192	0.1626	0.4367
unknown	-9.384	-9.266	0.7504	0.8597	-8.995	-9.262	0.3629	0.9350	-10.102	-9.338	0.0321	0.3934
unknown	-4.125	-4.223	0.2623	0.5817	-4.277	-4.201	0.4145	0.9350	-4.291	-4.284	0.8757	0.9333
unknown	-7.430	-7.541	0.6001	0.8163	-7.441	-7.263	0.2204	0.9350	-7.418	-7.294	0.1307	0.4215
unknown	-9.653	-9.985	0.2018	0.5170	-9.454	-10.142	0.0326	0.9350	-10.408	-10.286	0.7089	0.8495
unknown	-8.131	-8.465	0.5029	0.7699	-8.619	-9.469	0.1265	0.9350	-8.930	-8.723	0.7184	0.8519
unknown	-10.060	-9.886	0.3826	0.6615	-9.937	-10.181	0.2587	0.9350	-9.968	-10.059	0.5687	0.7689
unknown	-9.153	-9.124	0.8701	0.8985	-8.976	-8.941	0.8381	0.9665	-9.098	-9.065	0.8630	0.9268
unknown	-9.901	-9.389	0.0930	0.4262	-9.759	-9.462	0.5023	0.9350	-9.165	-9.826	0.1014	0.4106
unknown	-10.595	-10.183	0.3628	0.6487	-10.565	-10.624	0.8496	0.9665	-9.109	-10.084	0.4062	0.6510
unknown	-10.864	-10.449	0.0766	0.4088	-10.645	-10.495	0.6606	0.9368	-10.247	-10.767	0.1209	0.4205
unknown	-8.644	-8.842	0.3756	0.6533	-8.722	-9.157	0.1503	0.9350	-9.534	-9.086	0.5452	0.7524
unknown	-9.314	-9.498	0.6441	0.8253	-9.258	-9.860	0.1370	0.9350	-10.291	-9.711	0.4652	0.6944
unknown	-7.675	-7.281	0.0552	0.3603	-7.492	-7.427	0.8004	0.9665	-7.063	-7.634	0.1447	0.4361
unknown	-10.037	-10.269	0.6859	0.8363	-10.934	-10.313	0.4013	0.9350	-10.344	-10.530	0.1988	0.4721
unknown	-11.523	-10.432	0.1305	0.4521	-10.348	-10.560	0.5902	0.9350	-10.051	-11.041	0.2545	0.5238
unknown	-9.651	-9.759	0.6863	0.8363	-9.580	-10.109	0.2101	0.9350	-10.282	-9.997	0.6492	0.8215
unknown	-9.209	-8.849	0.0116	0.2113	-9.298	-8.945	0.1414	0.9350	-8.992	-9.080	0.7395	0.8659
unknown	-10.470	-10.070	0.0518	0.3484	-10.435	-10.407	0.9376	0.9848	-10.355	-11.239	0.0644	0.3934
unknown	-10.557	-9.902	0.3256	0.6346	-9.994	-10.390	0.5031	0.9350	-9.421	-10.673	0.1535	0.4366
unknown	-10.049	-9.738	0.3206	0.6323	-9.936	-10.344	0.1943	0.9350	-11.029	-10.230	0.1443	0.4361
unknown	-10.568	-10.341	0.6718	0.8363	-10.601	-10.685	0.7818	0.9665	-9.809	-9.987	0.7275	0.8585
unknown	-9.794	-8.829	0.0691	0.3888	-9.388	-9.567	0.6689	0.9368	-8.934	-9.712	0.2967	0.5681
unknown	-9.906	-9.694	0.7815	0.8762	-10.065	-10.606	0.4003	0.9350	-9.524	-9.495	0.9547	0.9708

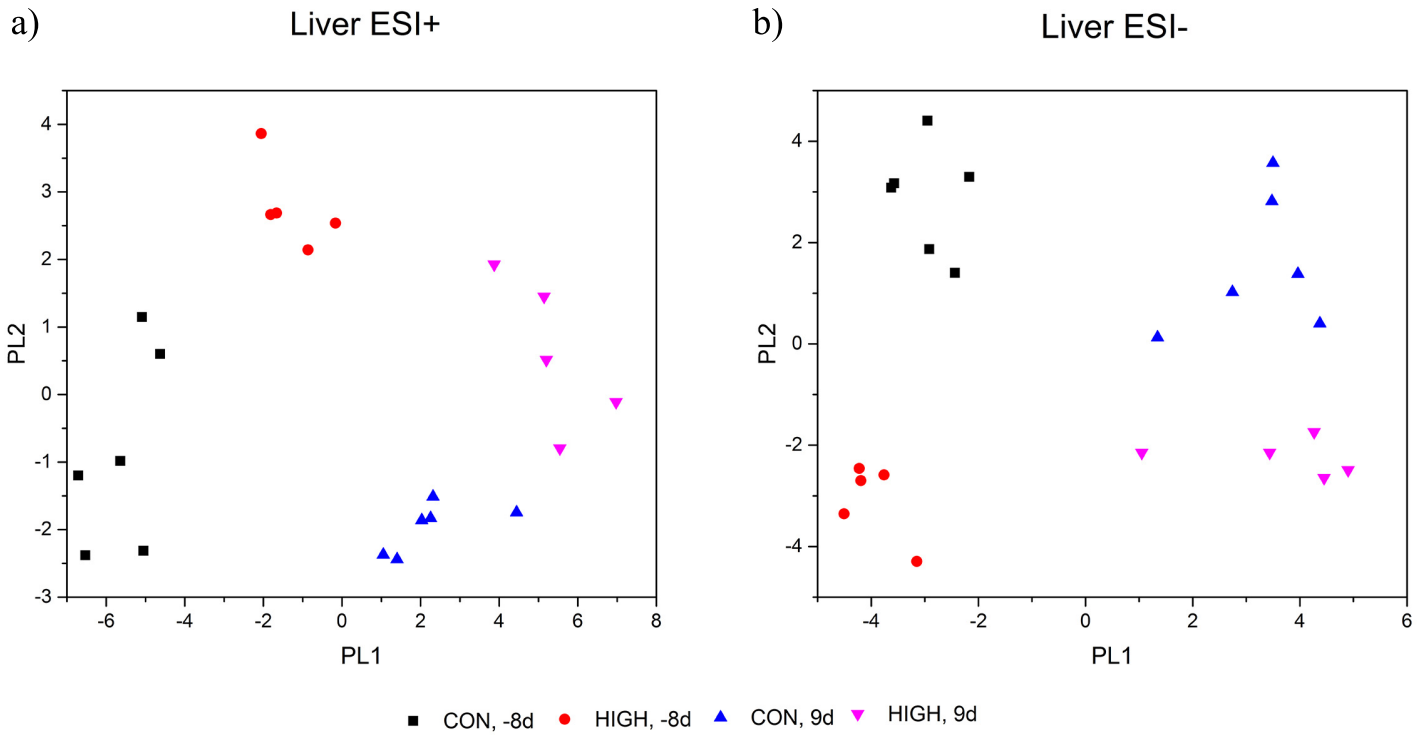
unknown	-12.079	-11.152	0.3503	0.6476	-11.376	-12.604	0.2120	0.9350	-12.570	-12.385	0.6562	0.8240
unknown	-9.192	-9.015	0.7797	0.8762	-9.050	-9.766	0.0432	0.9350	-10.343	-10.254	0.8916	0.9383
unknown	-9.983	-9.453	0.0333	0.2953	-10.520	-10.396	0.6280	0.9350	-9.863	-10.141	0.1637	0.4367
unknown	-8.216	-8.485	0.2392	0.5582	-8.288	-8.839	0.2598	0.9350	-9.538	-8.817	0.5486	0.7552
unknown	-11.509	-11.367	0.6473	0.8253	-11.361	-11.571	0.5563	0.9350	-10.080	-11.019	0.0512	0.3934
unknown	-8.920	-8.855	0.3735	0.6533	-8.957	-8.849	0.2417	0.9350	-9.124	-8.932	0.0598	0.3934
unknown	-10.295	-9.865	0.1711	0.4907	-9.891	-9.827	0.8511	0.9665	-9.748	-10.049	0.2157	0.4900
unknown	-11.395	-9.645	0.0100	0.1949	-11.671	-10.477	0.1287	0.9350	-12.876	-10.822	0.0288	0.3934
unknown	-9.178	-9.098	0.6499	0.8253	-9.113	-9.327	0.5048	0.9350	-9.057	-9.413	0.1903	0.4598
unknown	-10.364	-10.015	0.0826	0.4121	-10.007	-10.086	0.8336	0.9665	-9.752	-10.104	0.3375	0.5934
unknown	-5.686	-5.167	0.0594	0.3750	-5.496	-5.435	0.8351	0.9665	-4.933	-5.749	0.1254	0.4215
unknown	-8.627	-8.078	0.1542	0.4709	-8.252	-8.277	0.9588	0.9848	-7.975	-8.698	0.1024	0.4106
unknown	-10.051	-10.073	0.8203	0.8834	-10.107	-9.881	0.1196	0.9350	-10.104	-10.089	0.8800	0.9359
unknown	-9.256	-9.158	0.4355	0.7101	-9.302	-9.153	0.2460	0.9350	-9.397	-9.278	0.2495	0.5187
unknown	-9.275	-9.230	0.6424	0.8249	-9.308	-9.184	0.3384	0.9350	-9.409	-9.326	0.5533	0.7588
unknown	-9.325	-9.308	0.8230	0.8847	-9.331	-9.281	0.6685	0.9368	-9.676	-9.516	0.0145	0.3934
unknown	-7.455	-7.288	0.0909	0.4242	-7.221	-7.401	0.0170	0.9350	-7.310	-7.207	0.4975	0.7212
unknown	-7.285	-7.118	0.5977	0.8152	-7.135	-7.661	0.1824	0.9350	-8.147	-7.840	0.2826	0.5533
unknown	-9.172	-8.996	0.1131	0.4451	-8.940	-9.051	0.3253	0.9350	-8.977	-8.915	0.6796	0.8364
unknown	-11.642	-11.510	0.6570	0.8291	-10.941	-11.342	0.0883	0.9350	-10.741	-11.319	0.2538	0.5238
unknown	-8.088	-7.936	0.6498	0.8253	-7.951	-8.483	0.1187	0.9350	-9.455	-9.080	0.3075	0.5752
unknown	-9.852	-9.572	0.4041	0.6782	-9.639	-10.196	0.1519	0.9350	-10.883	-10.406	0.2254	0.4945
unknown	-6.816	-6.613	0.3826	0.6615	-6.726	-7.065	0.1803	0.9350	-8.309	-7.953	0.1526	0.4361
unknown	-6.595	-6.194	0.0959	0.4262	-6.611	-6.663	0.8785	0.9712	-8.040	-7.682	0.3088	0.5752
unknown	-9.710	-9.596	0.6420	0.8249	-9.429	-9.256	0.6649	0.9368	-8.882	-9.628	0.1037	0.4113
unknown	-7.394	-7.014	0.0835	0.4121	-7.359	-7.476	0.6965	0.9368	-8.236	-7.514	0.1608	0.4367
unknown	-9.201	-8.954	0.2717	0.5954	-9.063	-9.372	0.3133	0.9350	-10.198	-9.888	0.1717	0.4455
unknown	-9.018	-8.978	0.8516	0.8953	-8.876	-8.718	0.6973	0.9368	-8.255	-9.121	0.0741	0.3934
unknown	-15.867	-13.238	0.1979	0.5141	-11.106	-14.539	0.1379	0.9350	-16.079	-14.288	0.1633	0.4367
unknown	-10.212	-10.284	0.6903	0.8372	-10.036	-10.186	0.5124	0.9350	-10.032	-10.221	0.4948	0.7195
unknown	-8.621	-8.947	0.3965	0.6753	-8.448	-9.221	0.0302	0.9350	-9.500	-9.302	0.7744	0.8865
unknown	-10.895	-10.906	0.9888	0.9888	-10.669	-12.004	0.0251	0.9350	-12.008	-11.782	0.7842	0.8905
unknown	-5.387	-5.340	0.6851	0.8363	-5.359	-5.430	0.4856	0.9350	-5.391	-5.363	0.8614	0.9268
unknown	-9.919	-9.303	0.0449	0.3391	-9.460	-9.085	0.3697	0.9350	-8.952	-9.528	0.1842	0.4554
unknown	-8.687	-8.309	0.1328	0.4537	-8.388	-8.490	0.7819	0.9665	-7.955	-8.804	0.0575	0.3934
unknown	-6.122	-6.044	0.2692	0.5924	-6.140	-6.047	0.2540	0.9350	-6.208	-6.126	0.4936	0.7195
unknown	-7.681	-7.635	0.6728	0.8363	-7.749	-7.602	0.1922	0.9350	-7.673	-7.706	0.7763	0.8865
unknown	-9.143	-8.883	0.1286	0.4521	-9.152	-9.088	0.6343	0.9368	-8.989	-9.072	0.6189	0.8041
unknown	-8.396	-8.360	0.7348	0.8557	-8.408	-8.523	0.4893	0.9350	-8.558	-8.554	0.9785	0.9850
unknown	-8.386	-8.360	0.7993	0.8834	-8.406	-8.523	0.4813	0.9350	-8.558	-8.525	0.8282	0.9103
unknown	-6.898	-7.150	0.0583	0.3750	-6.944	-7.257	0.1824	0.9350	-7.483	-7.402	0.8144	0.9044
unknown	-9.695	-9.638	0.4782	0.7488	-9.721	-9.604	0.4458	0.9350	-9.165	-9.674	0.3681	0.6149
unknown	-9.258	-9.221	0.7724	0.8745	-9.335	-9.252	0.3322	0.9350	-9.502	-9.383	0.4136	0.6537
unknown	-10.629	-9.626	0.0074	0.1837	-10.173	-9.986	0.6705	0.9368	-9.778	-9.884	0.6430	0.8162
unknown	-7.585	-7.175	0.0434	0.3361	-7.361	-7.168	0.5080	0.9350	-7.018	-7.381	0.3031	0.5731
unknown	-7.806	-7.298	0.0479	0.3484	-7.709	-7.425	0.4092	0.9350	-7.478	-7.845	0.3952	0.6440
unknown	-10.104	-9.984	0.2843	0.6066	-10.141	-10.192	0.7627	0.9658	-9.981	-10.156	0.6585	0.8240
unknown	-9.846	-9.614	0.0758	0.4088	-9.851	-9.736	0.4294	0.9350	-9.425	-9.808	0.3820	0.6346
unknown	-8.190	-8.189	0.9925	0.9925	-8.149	-8.143	0.9559	0.9848	-8.168	-8.219	0.6881	0.8411
unknown	-9.180	-9.092	0.1873	0.5071	-9.192	-9.160	0.8337	0.9665	-9.245	-9.263	0.6316	0.8091
unknown	-9.815	-9.776	0.5408	0.7899	-9.955	-9.749	0.2556	0.9350	-9.895	-9.772	0.3111	0.5752
unknown	-8.810	-8.755	0.7260	0.8539	-8.891	-8.822	0.5621	0.9350	-8.804	-8.887	0.6523	0.8215
unknown	-8.779	-8.765	0.8734	0.8985	-8.699	-8.741	0.5948	0.9350	-8.979	-8.849	0.1102	0.4114
unknown	-10.484	-9.968	0.1050	0.4366	-10.086	-9.911	0.5821	0.9350	-9.710	-10.134	0.2226	0.4934
unknown	-10.060	-9.316	0.0249	0.2856	-9.927	-9.526	0.3526	0.9350	-9.886	-9.493	0.1065	0.4114
unknown	-9.937	-9.949	0.8973	0.9024	-9.780	-9.850	0.4130	0.9350	-10.091	-10.011	0.4186	0.6556
unknown	-10.980	-10.685	0.3302	0.6346	-11.287	-11.190	0.3791	0.9350	-10.488	-11.198	0.0943	0.4048
unknown	-10.297	-9.545	0.0269	0.2953	-10.294	-10.204	0.8439	0.9665	-9.860	-10.365	0.0960	0.4048
unknown	-9.992	-9.952	0.8306	0.8861	-10.013	-10.164	0.1675	0.9350	-10.566	-10.028	0.0043	0.3934
unknown	-10.012	-9.125	0.0025	0.1459	-10.502	-10.635	0.7519	0.9605	-10.439	-10.628	0.3232	0.5801
unknown	-7.491	-7.966	0.1526	0.4709	-7.424	-8.207	0.0423	0.9350	-8.147	-8.304	0.7594	0.8790
unknown	-9.566	-9.124	0.1362	0.4557	-9.066	-9.069	0.9942	0.9985	-8.312	-9.403	0.0463	0.3934
unknown	-8.275	-8.737	0.1308	0.4521	-8.182	-9.049	0.0349	0.9350	-9.330	-9.505	0.7583	0.8790
unknown	-7.987	-8.235	0.1868	0.5071	-7.918	-8.066	0.5560	0.9350	-7.712	-8.067	0.1729	0.4455
unknown	-10.098	-9.812	0.3651	0.6488	-9.959	-10.054	0.6279	0.9350	-9.736	-9.870	0.6661	0.8282
unknown	-11.079	-9.920	0.0173	0.2423	-11.439	-10.423	0.1947	0.9350	-12.340	-10.967	0.1175	0.4119
unknown	-9.953	-10.176	0.3126	0.6255	-10.027	-10.472	0.3749	0.9350	-10.669	-10.910	0.5965	0.7870
unknown	-10.436	-10.148	0.5485	0.7953	-10.142	-10.020	0.7561	0.9619	-9.500	-10.159	0.1984	0.4721
unknown	-6.806	-6.522	0.2694	0.5924	-6.586	-6.870	0.2424	0.9350	-6.443	-6.763	0.1604	0.4367
unknown	-11.161	-10.430	0.0220	0.2663	-11.091	-10.584	0.3210	0.9350	-10.719	-11.343	0.2315	0.5004
unknown	-10.928	-10.611	0.1538	0.4709	-10.594	-10.604	0.9675	0.9876	-10.427	-10.925	0.1432	0.4361
unknown	-8.161	-7.720	0.1636	0.4792	-8.066	-8.031	0.9398	0.9848	-7.969	-8.364	0.2850	0.5562
unknown	-9.576	-9.132	0.0876	0.4175	-9.962	-9.854	0.8588	0.9665	-10.402	-9.968	0.3292	0.5854
unknown	-10.200	-10.035	0.2834	0.6066	-10.081	-9.818	0.5406	0.9350	-9.993	-10.703	0.0500	0.3934

unknown	-10.765	-11.299	0.2174	0.5380	-10.456	-11.553	0.0331	0.9350	-11.836	-11.839	0.9967	0.9967
unknown	-10.932	-10.656	0.1222	0.4520	-10.731	-10.727	0.9904	0.9985	-10.559	-10.972	0.1553	0.4367
unknown	-8.750	-8.482	0.2129	0.5306	-8.766	-8.930	0.4761	0.9350	-8.802	-8.836	0.8534	0.9229
unknown	-7.146	-7.489	0.3516	0.6476	-7.011	-7.890	0.0271	0.9350	-8.368	-8.583	0.7091	0.8495
unknown	-9.341	-8.690	0.0362	0.3099	-8.980	-8.794	0.6225	0.9350	-8.630	-9.357	0.1111	0.4114
unknown	-7.349	-7.215	0.4428	0.7141	-7.188	-7.760	0.0712	0.9350	-7.071	-7.510	0.0549	0.3934
unknown	-8.632	-9.058	0.2279	0.5509	-8.477	-9.298	0.0536	0.9350	-9.049	-9.308	0.5749	0.7717
unknown	-9.464	-9.857	0.1206	0.4495	-9.525	-10.128	0.3464	0.9350	-10.051	-10.191	0.8005	0.8989
unknown	-10.333	-10.429	0.6136	0.8186	-10.209	-10.583	0.3163	0.9350	-10.786	-10.854	0.7738	0.8865
unknown	-10.090	-10.051	0.8320	0.8861	-10.205	-10.172	0.7817	0.9665	-10.153	-10.088	0.7742	0.8865
unknown	-10.422	-10.274	0.6305	0.8224	-10.514	-10.879	0.1860	0.9350	-9.651	-10.553	0.1817	0.4554
unknown	-10.049	-9.995	0.8659	0.8985	-9.640	-9.849	0.1869	0.9350	-8.440	-9.836	0.1456	0.4361
unknown	-10.656	-9.961	0.0731	0.4037	-10.414	-10.668	0.5009	0.9350	-9.995	-10.665	0.1724	0.4455
unknown	-9.560	-9.016	0.0935	0.4262	-9.686	-9.483	0.6415	0.9368	-9.815	-10.092	0.3458	0.5975
unknown	-10.213	-9.529	0.0512	0.3484	-10.177	-10.008	0.7149	0.9458	-9.738	-10.456	0.1848	0.4554
unknown	-8.934	-8.807	0.3283	0.6346	-8.903	-8.733	0.1817	0.9350	-9.069	-8.853	0.0640	0.3934
unknown	-8.045	-7.432	0.0274	0.2953	-8.029	-7.978	0.9153	0.9804	-8.454	-8.507	0.8653	0.9268
unknown	-9.351	-8.606	0.0155	0.2344	-9.786	-9.872	0.8539	0.9665	-10.071	-10.013	0.7753	0.8865
unknown	-10.567	-10.112	0.1013	0.4313	-10.336	-10.238	0.8175	0.9665	-10.413	-11.065	0.0185	0.3934
unknown	-11.053	-10.572	0.4123	0.6900	-10.705	-11.025	0.3215	0.9350	-10.450	-10.603	0.7325	0.8610
unknown	-8.490	-7.993	0.0169	0.2423	-8.358	-8.342	0.9721	0.9885	-8.336	-8.707	0.0522	0.3934
unknown	-7.567	-7.282	0.6136	0.8186	-7.638	-8.011	0.3128	0.9350	-7.303	-7.405	0.7835	0.8905
unknown	-11.838	-11.520	0.6813	0.8363	-12.115	-11.980	0.5203	0.9350	-11.238	-11.529	0.4083	0.6513
unknown	-10.754	-10.336	0.1479	0.4668	-10.929	-10.788	0.7780	0.9665	-10.291	-10.993	0.1220	0.4205
unknown	-8.374	-8.370	0.9683	0.9683	-8.408	-8.381	0.8101	0.9665	-8.363	-8.421	0.6422	0.8162
unknown	-9.448	-9.127	0.0622	0.3790	-9.456	-9.421	0.7657	0.9659	-9.429	-9.386	0.6593	0.8240
unknown	-6.502	-6.394	0.6988	0.8374	-6.485	-6.763	0.2324	0.9350	-6.318	-6.523	0.2608	0.5276
unknown	-10.091	-9.947	0.7988	0.8834	-10.076	-10.619	0.1075	0.9350	-9.757	-10.157	0.1297	0.4215
unknown	-11.141	-10.747	0.1822	0.5054	-10.785	-10.198	0.2636	0.9350	-10.535	-11.245	0.1519	0.4361
unknown	-9.528	-8.895	0.1115	0.4448	-10.073	-9.902	0.5560	0.9350	-10.300	-9.988	0.2968	0.5681
unknown	-10.295	-9.821	0.0320	0.2953	-10.369	-10.304	0.7252	0.9486	-10.451	-10.396	0.6911	0.8411
unknown	-9.911	-9.790	0.3328	0.6346	-9.914	-9.912	0.9909	0.9985	-9.957	-9.900	0.5546	0.7588
unknown	-8.883	-8.894	0.9181	0.9181	-8.872	-8.854	0.8384	0.9665	-9.011	-8.926	0.3155	0.5752
unknown	-9.655	-9.675	0.8660	0.8985	-9.745	-9.716	0.8110	0.9665	-9.715	-9.782	0.5930	0.7870
unknown	-10.431	-9.915	0.0951	0.4262	-10.916	-10.854	0.8129	0.9665	-11.607	-11.041	0.1523	0.4361
unknown	-6.505	-6.600	0.4284	0.7050	-6.709	-6.551	0.1136	0.9350	-6.933	-6.609	0.0073	0.3934
unknown	-6.374	-6.386	0.8989	0.9024	-6.513	-6.381	0.2451	0.9350	-6.586	-6.403	0.1157	0.4119
unknown	-10.049	-10.108	0.7446	0.8582	-10.104	-10.121	0.8880	0.9754	-10.333	-9.920	0.0657	0.3934
unknown	-10.860	-10.275	0.0329	0.2953	-11.273	-11.426	0.7608	0.9658	-10.760	-11.300	0.1506	0.4361
unknown	-9.743	-9.379	0.2313	0.5509	-9.841	-10.077	0.5577	0.9350	-9.897	-10.002	0.6676	0.8284
unknown	-11.191	-10.002	0.0198	0.2588	-10.202	-9.961	0.7150	0.9458	-9.500	-10.461	0.1302	0.4215
unknown	-9.936	-9.504	0.0493	0.3484	-9.766	-9.687	0.7684	0.9665	-9.333	-9.827	0.1306	0.4215
unknown	-8.442	-7.949	0.0880	0.4175	-8.301	-8.614	0.3741	0.9350	-8.021	-8.827	0.0324	0.3934
unknown	-10.579	-10.483	0.8201	0.8834	-10.410	-11.071	0.1219	0.9350	-10.359	-10.810	0.0442	0.3934
unknown	-9.542	-9.469	0.5771	0.8025	-9.610	-9.510	0.3885	0.9350	-9.533	-9.649	0.5283	0.7413
unknown	-14.312	-12.929	0.1170	0.4495	-12.413	-13.717	0.0759	0.9350	-13.696	-14.036	0.6050	0.7930
unknown	-9.462	-9.448	0.8906	0.9024	-9.495	-9.370	0.2499	0.9350	-9.605	-9.484	0.2678	0.5330
unknown	-9.696	-9.567	0.1148	0.4451	-9.707	-9.624	0.4715	0.9350	-9.985	-9.763	0.0362	0.3934
unknown	-11.090	-10.073	0.0300	0.2953	-10.740	-10.877	0.6142	0.9350	-10.295	-10.984	0.2876	0.5587
unknown	-9.874	-9.837	0.7900	0.8822	-9.894	-9.876	0.9000	0.9792	-9.870	-9.997	0.3568	0.6078
unknown	-10.056	-10.095	0.6092	0.8186	-10.166	-10.147	0.8720	0.9665	-10.491	-10.265	0.0017	0.3934
unknown	-10.282	-9.960	0.2305	0.5509	-10.251	-10.188	0.7012	0.9375	-10.657	-10.509	0.0766	0.3934
unknown	-10.367	-10.302	0.7394	0.8557	-10.365	-10.441	0.7265	0.9486	-10.887	-10.646	0.3858	0.6356
unknown	-11.210	-11.281	0.9079	0.9079	-11.600	-11.981	0.5123	0.9350	-11.009	-11.023	0.9778	0.9850
unknown	-9.960	-9.250	0.1020	0.4313	-10.118	-9.895	0.6669	0.9368	-10.061	-10.222	0.5550	0.7588
unknown	-10.132	-9.877	0.3128	0.6255	-9.899	-10.054	0.5665	0.9350	-9.238	-9.749	0.0696	0.3934
unknown	-10.020	-10.071	0.6400	0.8249	-10.064	-9.953	0.2019	0.9350	-10.287	-10.039	0.0619	0.3934
unknown	-11.795	-11.284	0.6216	0.8186	-11.470	-13.439	0.1326	0.9350	-11.046	-11.094	0.9042	0.9437
unknown	-10.182	-10.152	0.5528	0.7953	-10.338	-10.192	0.3573	0.9350	-10.419	-10.161	0.0657	0.3934
unknown	-8.322	-7.868	0.0627	0.3790	-8.301	-8.225	0.8226	0.9665	-7.758	-8.350	0.1592	0.4367
unknown	-6.923	-6.991	0.3916	0.6710	-7.066	-6.901	0.1698	0.9350	-7.044	-6.922	0.2675	0.5330
unknown	-10.569	-10.176	0.1258	0.4521	-11.093	-10.721	0.4089	0.9350	-12.824	-11.342	0.0622	0.3934
unknown	-9.933	-9.356	0.0506	0.3484	-10.467	-9.662	0.1765	0.9350	-12.075	-10.305	0.0436	0.3934
unknown	-9.634	-8.929	0.0130	0.2235	-10.169	-9.503	0.2552	0.9350	-11.984	-9.771	0.0452	0.3934
unknown	-9.941	-9.290	0.1190	0.4495	-10.784	-9.868	0.3000	0.9350	-12.552	-10.072	0.0352	0.3934
unknown	-10.607	-10.703	0.5550	0.7959	-10.462	-10.304	0.5898	0.9350	-10.050	-10.879	0.0718	0.3934
unknown	-10.470	-9.789	0.0289	0.2953	-10.870	-10.328	0.3384	0.9350	-12.747	-10.605	0.0507	0.3934
unknown	-10.666	-10.362	0.2962	0.6073	-10.428	-10.448	0.9508	0.9848	-10.041	-10.768	0.0467	0.3934
unknown	-8.063	-8.043	0.8280	0.8855	-8.145	-8.037	0.3227	0.9350	-8.192	-8.071	0.4762	0.7055
unknown	-10.550	-10.267	0.0673	0.3863	-10.565	-10.634	0.7449	0.9598	-10.282	-10.350	0.7131	0.8499
unknown	-10.044	-9.626	0.1628	0.4792	-10.034	-10.218	0.6737	0.9368	-10.316	-9.585	0.2090	0.4828
unknown	-9.540	-9.095	0.0433	0.3361	-9.279	-9.093	0.5338	0.9350	-8.965	-9.362	0.2162	0.4900
unknown	-10.397	-9.764	0.0139	0.2235	-10.347	-10.340	0.9848	0.9980	-10.171	-10.357	0.4129	0.6537
unknown	-10.544	-10.140	0.1203	0.4495	-10.824	-10.632	0.6968	0.9368	-12.254	-10.936	0.0743	0.3934

unknown	-10.130	-9.655	0.1025	0.4313	-10.364	-10.067	0.5727	0.9350	-11.638	-10.113	0.0650	0.3934
unknown	-10.292	-9.521	0.0011	0.0907	-10.420	-10.337	0.7949	0.9665	-10.328	-10.529	0.3157	0.5752
unknown	-9.725	-9.969	0.1848	0.5057	-9.714	-9.778	0.7914	0.9665	-9.635	-9.862	0.4144	0.6537
unknown	-8.926	-8.655	0.3527	0.6476	-8.742	-8.757	0.9641	0.9871	-8.468	-8.754	0.3455	0.5975
unknown	-7.887	-7.663	0.3680	0.6520	-7.689	-7.975	0.2638	0.9350	-7.496	-7.916	0.0595	0.3934
unknown	-7.435	-7.107	0.0635	0.3797	-7.512	-7.380	0.6886	0.9368	-7.309	-7.625	0.2530	0.5238
unknown	-10.987	-10.364	0.0232	0.2715	-11.254	-11.171	0.8702	0.9665	-12.707	-11.127	0.0270	0.3934
unknown	-8.711	-8.458	0.2046	0.5219	-9.497	-8.695	0.2132	0.9350	-9.626	-8.890	0.0298	0.3934
unknown	-8.282	-8.045	0.0311	0.2953	-8.383	-8.559	0.6414	0.9368	-9.259	-8.564	0.0871	0.3977
unknown	-9.620	-9.463	0.3341	0.6350	-9.860	-9.640	0.3251	0.9350	-9.822	-9.676	0.4229	0.6573
unknown	-8.220	-7.914	0.0850	0.4121	-8.401	-8.305	0.7879	0.9665	-9.407	-8.575	0.0722	0.3934
unknown	-9.047	-9.046	0.9924	0.9924	-9.220	-9.066	0.5269	0.9350	-9.810	-9.265	0.0163	0.3934
unknown	-10.052	-9.856	0.0627	0.3790	-10.227	-10.107	0.6725	0.9368	-10.566	-10.157	0.0749	0.3934
unknown	-8.579	-7.995	0.1205	0.4495	-8.537	-8.367	0.7472	0.9605	-9.588	-8.124	0.0219	0.3934
unknown	-8.014	-7.158	0.0083	0.1837	-8.157	-7.625	0.3325	0.9350	-9.319	-7.682	0.0256	0.3934
unknown	-8.761	-8.295	0.2301	0.5509	-9.073	-8.313	0.1731	0.9350	-10.566	-8.597	0.0112	0.3934
unknown	-9.893	-9.372	0.0656	0.3863	-9.757	-9.933	0.5510	0.9350	-9.681	-9.928	0.0897	0.4006
unknown	-11.054	-10.436	0.0481	0.3484	-10.779	-10.514	0.5226	0.9350	-10.352	-11.081	0.0835	0.3938
unknown	-8.059	-7.885	0.2946	0.6073	-8.004	-8.311	0.1372	0.9350	-7.838	-8.252	0.0652	0.3934
unknown	-8.690	-9.005	0.0853	0.4121	-9.074	-8.834	0.4016	0.9350	-9.419	-8.954	0.1615	0.4367
unknown	-9.946	-10.023	0.5788	0.8025	-10.080	-10.046	0.8148	0.9665	-9.907	-10.005	0.6649	0.8282
unknown	-9.998	-10.146	0.1508	0.4702	-10.040	-10.097	0.7174	0.9466	-10.024	-10.127	0.4629	0.6926
unknown	-8.793	-8.689	0.4477	0.7179	-8.804	-9.076	0.2911	0.9350	-8.606	-8.952	0.0836	0.3938
unknown	-10.920	-10.336	0.0085	0.1837	-10.748	-10.710	0.9208	0.9804	-10.879	-10.824	0.8347	0.9152
unknown	-10.938	-10.346	0.1029	0.4313	-10.768	-10.937	0.6256	0.9350	-10.390	-10.922	0.2748	0.5415
unknown	-9.651	-8.879	0.0327	0.2953	-9.705	-9.565	0.8301	0.9665	-11.260	-9.278	0.0567	0.3934
unknown	-10.229	-10.311	0.6347	0.8224	-10.439	-10.271	0.1489	0.9350	-10.680	-10.235	0.0858	0.3977
unknown	-9.185	-9.003	0.2300	0.5509	-9.260	-9.031	0.1094	0.9350	-9.233	-9.145	0.2920	0.5626
unknown	-10.005	-9.520	0.0685	0.3888	-10.141	-10.047	0.8579	0.9665	-10.468	-10.647	0.4789	0.7061
unknown	-9.548	-9.099	0.0086	0.1837	-9.487	-9.560	0.8719	0.9665	-10.047	-10.326	0.2720	0.5395
unknown	-10.294	-9.775	0.0316	0.2953	-10.165	-10.209	0.9075	0.9804	-10.073	-10.432	0.2593	0.5276
unknown	-8.512	-8.330	0.6851	0.8363	-8.642	-8.890	0.3174	0.9350	-8.356	-8.454	0.7892	0.8911
unknown	-7.760	-7.669	0.8056	0.8834	-7.694	-8.076	0.1648	0.9350	-7.450	-7.736	0.2418	0.5121
unknown	-8.491	-8.402	0.8066	0.8834	-8.399	-8.904	0.1256	0.9350	-8.257	-8.500	0.3253	0.5821
unknown	-10.180	-9.989	0.4279	0.7050	-10.381	-10.698	0.5124	0.9350	-11.982	-10.744	0.1028	0.4106
unknown	-8.925	-8.421	0.0849	0.4121	-9.275	-8.903	0.4497	0.9350	-10.898	-9.623	0.0525	0.3934
unknown	-8.177	-8.226	0.7215	0.8518	-8.379	-8.210	0.1542	0.9350	-8.593	-8.216	0.0587	0.3934
unknown	-6.947	-6.993	0.5979	0.8152	-7.128	-7.000	0.2778	0.9350	-7.221	-7.011	0.0917	0.4048
unknown	-9.697	-9.019	0.0063	0.1751	-9.258	-9.048	0.5879	0.9350	-8.954	-9.266	0.3850	0.6356
unknown	-10.735	-10.462	0.3882	0.6672	-10.744	-10.980	0.5253	0.9350	-11.165	-10.997	0.3498	0.5993
unknown	-10.417	-10.135	0.1944	0.5120	-10.228	-10.301	0.6771	0.9368	-10.037	-10.243	0.4809	0.7073
unknown	-10.841	-10.519	0.2109	0.5286	-10.820	-11.032	0.4971	0.9350	-10.496	-11.185	0.0329	0.3934
unknown	-10.311	-10.222	0.5616	0.7959	-10.230	-10.134	0.4214	0.9350	-10.280	-10.218	0.7025	0.8455
unknown	-11.786	-11.673	0.8795	0.9024	-11.796	-12.317	0.3719	0.9350	-11.358	-11.331	0.9529	0.9708
unknown	-10.276	-10.411	0.6974	0.8374	-10.004	-11.010	0.0324	0.9350	-10.874	-10.962	0.9109	0.9466
unknown	-11.312	-10.975	0.1563	0.4746	-11.272	-11.211	0.7950	0.9665	-10.486	-10.934	0.2064	0.4828
unknown	-10.291	-10.393	0.5323	0.7826	-10.314	-10.306	0.9235	0.9804	-10.666	-10.303	0.1141	0.4118
unknown	-9.609	-9.216	0.0416	0.3335	-9.683	-9.626	0.8656	0.9665	-9.379	-9.643	0.3653	0.6135
unknown	-8.165	-8.224	0.4883	0.7575	-8.379	-8.211	0.1679	0.9350	-8.347	-8.283	0.6292	0.8091
unknown	-8.647	-8.682	0.7869	0.8805	-8.713	-8.565	0.2527	0.9350	-8.949	-8.770	0.2429	0.5121
unknown	-10.016	-9.627	0.0332	0.2953	-9.809	-9.646	0.5941	0.9350	-9.593	-9.778	0.5277	0.7413
unknown	-10.850	-11.089	0.5893	0.8112	-10.654	-11.412	0.0247	0.9350	-11.865	-11.417	0.5182	0.7352
unknown	-10.460	-10.715	0.2558	0.5759	-10.560	-10.631	0.7890	0.9665	-10.394	-10.519	0.6747	0.8354
unknown	-9.165	-9.456	0.2096	0.5278	-9.304	-9.938	0.0737	0.9350	-9.978	-9.707	0.6348	0.8092
unknown	-10.011	-10.142	0.7670	0.8735	-9.874	-10.647	0.1202	0.9350	-11.469	-10.949	0.5336	0.7419
unknown	-10.150	-9.886	0.3551	0.6476	-10.042	-9.985	0.8470	0.9665	-9.759	-9.935	0.5295	0.7413
unknown	-9.148	-8.871	0.2424	0.5588	-8.976	-9.226	0.3006	0.9350	-8.787	-9.160	0.0726	0.3934
unknown	-8.674	-8.385	0.1111	0.4448	-8.864	-8.635	0.5263	0.9350	-8.544	-8.879	0.1694	0.4440
unknown	-9.332	-9.230	0.5285	0.7826	-9.248	-9.685	0.1279	0.9350	-9.082	-9.579	0.0519	0.3934
unknown	-10.125	-9.953	0.3309	0.6346	-9.962	-10.483	0.1358	0.9350	-9.857	-10.226	0.0699	0.3934
unknown	-9.769	-9.754	0.9160	0.9160	-9.828	-9.756	0.4733	0.9350	-9.819	-9.690	0.5280	0.7413
unknown	-10.932	-11.374	0.3755	0.6533	-10.738	-11.915	0.1056	0.9350	-12.197	-12.114	0.9170	0.9475
unknown	-8.841	-9.110	0.5572	0.7959	-8.660	-9.490	0.0197	0.9350	-10.391	-9.968	0.5652	0.7676
unknown	-9.872	-9.630	0.6155	0.8186	-9.849	-10.035	0.5582	0.9350	-9.508	-9.710	0.5939	0.7870
unknown	-7.736	-7.988	0.2209	0.5443	-7.813	-8.297	0.2581	0.9350	-8.458	-8.297	0.7961	0.8956
unknown	-8.986	-8.886	0.7797	0.8762	-8.903	-9.356	0.1202	0.9350	-8.694	-8.989	0.2286	0.4976
unknown	-9.668	-9.676	0.9846	0.9846	-9.549	-10.029	0.1271	0.9350	-9.363	-9.718	0.0774	0.3934
unknown	-10.370	-10.785	0.2412	0.5588	-10.323	-11.350	0.0046	0.9176	-11.959	-11.507	0.6128	0.8015
unknown	-9.196	-9.299	0.4423	0.7141	-9.386	-9.306	0.4876	0.9350	-9.674	-9.358	0.0353	0.3934
unknown	-7.866	-7.984	0.2251	0.5509	-8.043	-7.940	0.4642	0.9350	-8.109	-7.938	0.0756	0.3934
unknown	-9.793	-10.071	0.1848	0.5057	-9.599	-10.271	0.0915	0.9350	-10.307	-10.581	0.6858	0.8411
unknown	-11.205	-11.652	0.5615	0.7959	-11.070	-10.855	0.8215	0.9665	-11.857	-11.513	0.7586	0.8790
unknown	-10.645	-11.047	0.3265	0.6346	-10.363	-11.291	0.0115	0.9350	-11.716	-11.648	0.9133	0.9466
unknown	-7.040	-7.397	0.3273	0.6346	-6.949	-7.739	0.0421	0.9350	-8.457	-8.615	0.8048	0.8990

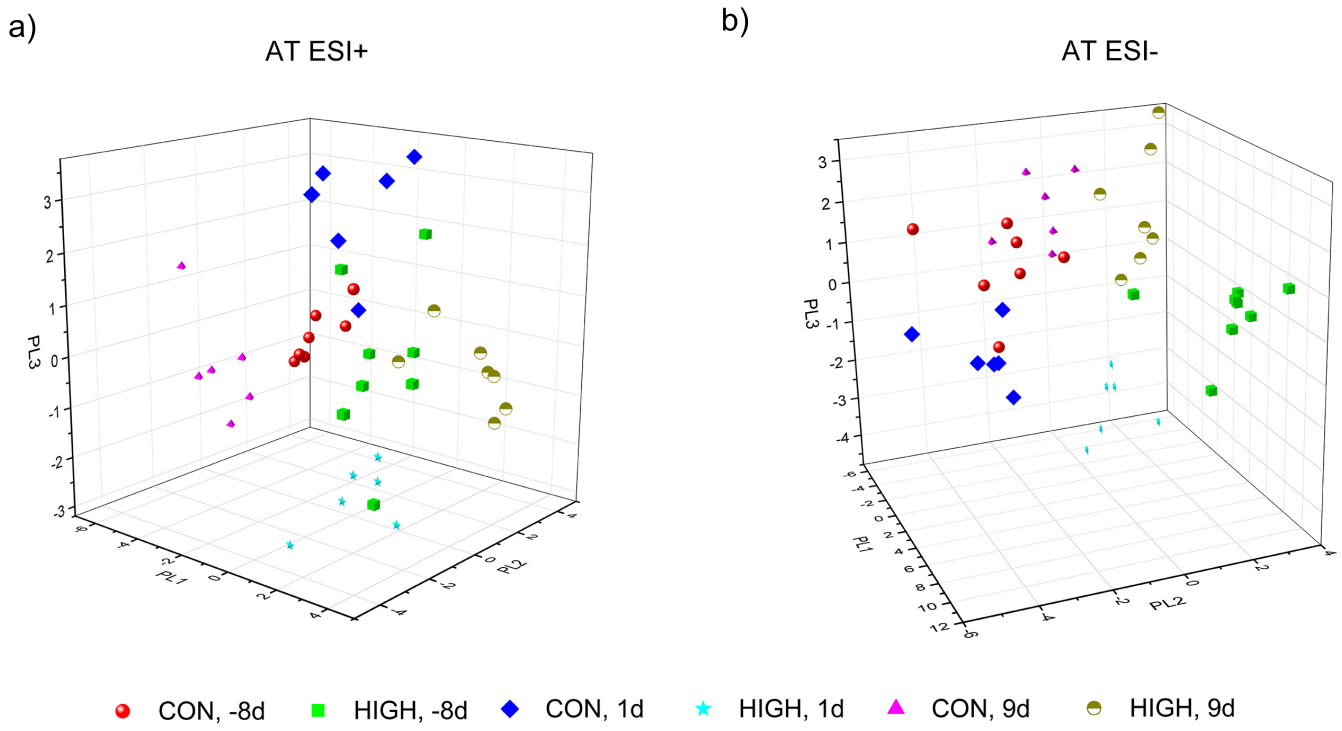
unknown	-9.280	-9.637	0.1434	0.4623	-9.549	-10.037	0.4343	0.9350	-10.345	-10.208	0.8248	0.9103
unknown	-8.956	-9.086	0.3203	0.6323	-9.148	-8.962	0.1862	0.9350	-9.119	-8.987	0.3154	0.5752
unknown	-10.872	-10.974	0.9087	0.9087	-10.237	-10.144	0.9155	0.9804	-10.842	-11.023	0.8407	0.9167
unknown	-9.668	-9.636	0.8050	0.8834	-9.765	-9.660	0.5259	0.9350	-9.944	-9.742	0.1067	0.4114
unknown	-10.903	-10.475	0.0792	0.4121	-10.666	-10.367	0.2985	0.9350	-10.283	-10.619	0.2221	0.4934
unknown	-9.782	-9.494	0.1971	0.5141	-9.552	-9.840	0.2403	0.9350	-9.388	-9.719	0.1228	0.4209
unknown	-9.515	-9.273	0.0996	0.4300	-9.724	-9.422	0.3187	0.9350	-9.508	-9.682	0.4224	0.6573
unknown	-9.898	-9.921	0.9052	0.9052	-9.930	-10.332	0.1569	0.9350	-9.665	-10.223	0.0300	0.3934
unknown	-10.601	-10.262	0.4167	0.6953	-10.684	-10.793	0.6392	0.9368	-10.225	-10.336	0.7126	0.8499
unknown	-9.694	-9.716	0.9456	0.9456	-9.632	-10.036	0.1616	0.9350	-9.396	-9.669	0.2066	0.4828
unknown	-10.329	-10.143	0.6324	0.8224	-10.304	-10.503	0.3658	0.9350	-9.942	-10.384	0.0950	0.4048
unknown	-10.248	-10.386	0.4814	0.7508	-10.543	-10.352	0.3168	0.9350	-10.702	-10.448	0.2325	0.5007
unknown	-8.973	-9.005	0.7400	0.8557	-9.108	-8.994	0.3690	0.9350	-9.215	-9.045	0.1283	0.4215
unknown	-9.692	-10.020	0.0048	0.1659	-9.976	-9.796	0.0955	0.9350	-9.956	-9.773	0.3652	0.6135
unknown	-10.407	-10.080	0.0488	0.3484	-10.490	-10.247	0.4020	0.9350	-10.299	-10.559	0.2182	0.4928
unknown	-6.935	-7.825	0.0721	0.4017	-6.023	-5.970	0.9141	0.9804	-6.695	-7.421	0.2087	0.4828
unknown	-10.657	-10.438	0.1244	0.4520	-10.456	-10.708	0.3308	0.9350	-10.240	-10.683	0.0927	0.4048
unknown	-10.885	-10.730	0.7227	0.8518	-10.981	-11.332	0.4032	0.9350	-10.863	-10.834	0.9217	0.9475

[a]The ambiguous subspecies indicates that the lipidomic profiling gave two possible identifications of the lipid. [b]Abbreviations: Cer, ceramide. HexCer, hexosylceramide. SM, sphingomyelin. PC, phosphatidylcholine. PE, phosphatidylethanolamine. PI, phosphatidylinositol.



Online Resource Fig. S1

Combined principal component and linear discriminant analysis on (a) liver positive electrospray ionization mode (ESI+) dataset and (b) liver negative electrospray ionization mode (ESI-) dataset. These analyses reveal that the identified lipids distinguished the liver samples collected from different feeding groups and different time points.



Online Resource Fig. S2

Combined principal component and linear discriminant analysis on (a) AT positive electrospray ionization mode (ESI+) dataset and (b) AT negative electrospray ionization mode (ESI-) dataset. These analyses reveal that the identified lipids distinguished the AT samples collected from different feeding groups and different time points.

Online Resource Table S7

Number of lipids that showed significant diet and time effects in repeated measures ANOVA.

Dataset and effect	Number of lipids with $p < 0.05$ in the dataset	Number of lipids with $p < 0.05$ among the 20 lipids that contribute most to the separation in PCA-LDA
Liver ESI+ Diet (PL2)	55	10
Liver ESI+ Day (PL1)	179	14
Liver ESI- Diet (PL2)	15	6
Liver ESI- Day (PL1)	36	15
AT ESI+ Diet (PL1)	1	1
AT ESI- Diet (PL2)	6	3

Abbreviations: PCA-LDA, principal component analysis-linear discriminant analysis. ESI+, positive electrospray ionization mode in mass spectrometry. ESI-, negative electrospray ionization mode in mass spectrometry. PL, PCA-LDA function. AT, adipose tissue.