Supplementary Materials

Supplementary Methods

Clinical labs

Blood and saliva samples were drawn from each subscriber every 189 days on average, and a battery of clinical chemistry measures was conducted using standard procedures. The clinical lab work contained many clinical analytes associated with biological health measures such as cardiometabolic health (including triglycerides, high-density lipoprotein (HDL), small low-density lipoprotein (LDL) particle number), diabetes (such as insulin, Hemoglobin A1c and fasting glucose), inflammation (such as TNF-alpha, interleukin 6, interleukin-8) and nutrition (including vitamin D (blood 25-dihydroxyvitamin D), copper and ferritin). Two vendors were used for clinical labs (Quest and LabCorp); their measurements are analyzed independently to account for vendor-specific effects. Measurements related to supplements commonly recommended by health coaches or derived from other analytes or age were dropped from the analysis in order to minimize confounding (for instance, individuals with worse clinical health metrics may be more inclined to take supplements). These dropped measures are detailed in **Supplemental Table 5**.

Metabolomics

Prior to processing, plasma was stored in a bio-storage facility at -80 C. Frozen plasma samples in anticoagulant Ethylenediaminetetraacetic acid (EDTA) were sent to Metabolon, Inc. to conduct metabolomics assays. Data were generated using the Metabolon HD4 discovery platform, a combination of ultra high-performance liquid chromatography (HPLC) tandem mass spectrometry (MS) and gas chromatography (GC) for identification of metabolites and fatty acids. Relative concentration values were reported for over 700 different metabolites, while the platform itself has the potential to measure up to 2200 unique metabolites though many remain unidentified. Existing metabolomics samples were run in several batches. Between four and sixteen previously generated pooled control samples were run with each batch and used for batch correction. ~1300 metabolomics samples were used in the analyses for this paper. KEGG pathway associations for each identified metabolite were provided by Metabolon. Measurements related to supplements commonly recommended by health coaches or derived from other analytes or age were identified in the Clinical Labs, and metabolites strongly correlated ($r^2 > .05$) with these measures were dropped from the analysis in order to minimize confounding (for instance, individuals with worse clinical health metrics may be more inclined to take supplements). These dropped measures are detailed in **Supplemental Table 5**.

Proteomics

Proteomics analysis was performed on EDTA-anticoagulated plasma extracted from whole blood using Olink's proximity extension assay panels, including Cardiovascular II (http://www.olink.com/products/cvd-iipanel/), Cardiovascular III (http://www.olink.com/products/cvd-iii-panel/), and Inflammation (http://www.olink.com/products/inflammation/); 92 proteins are measured on each panel. Prior to processing, plasma was stored in a bio-storage facility at -80 C. Existing proteomics samples were run in several batches. Two control samples were run with each batch. Batch correction was performed using median centering. 10 proteins were shared by at least 2 panels, providing another level of internal control.

Genomics

Whole genome sequencing was performed on 2806 participants. All whole genome sequencing was performed on DNA extracted from whole blood with library preparation using the Illumina TruSeq Nano Library prep kit and sequenced using Illumina technology (Illumina HiSeq X, PE-150, target 30X coverage) at a single CLIA-approved sequencing laboratory. Raw sequencing data were processed using a consistent bioinformatics pipeline, including BWA 0.7.12 for alignment to reference sequence hg19 and duplicate marking with biobam2 2.0.70. Variant calling was performed using GATK best practices for whole genome data with GATK 3.3.0, including indel local realignment followed by base quality recalibration. VCF files were produced by GATK HaplotypeCaller followed by GenotypeGVCFs. CNV calling from WGS data was performed using a bioinformatics pipeline on BAM files using CNVnator 0.3. Polygenic score computation and ancestry estimates were performed using the bioinformatics pipeline.

814 participants were genotyped using the Illumina Multi-Ethnic Global SNP Array at a single CLIA-approved lab. This array consisted of ~1.8 million variants. An additional ~38 million variants were imputed using the Haplotype Reference Consortium (HRC) panel as part of the bioinformatics pipeline. 56 individuals were missing genomic information; their genetic components were mean imputed.

Genetic ancestry was represented by principal components (PCs) 1-7 from an analysis of 107,280 linkage disequilibrium pruned autosomal SNPs with minor allele frequency > 5% using the combined PC-AiR(1) and PC-Relate(2) approach as described by Conomos et al. (3).

Lifestyle Information (Quantified self)

Health history and behavioral assessments were performed at baseline and then every 6 months to obtain self-reported data on health status, including (but not limited to): tobacco and alcohol consumption; past and/or current incidence of multiple health outcomes (including cancer, cardiovascular and metabolic diseases, infections, respiratory diseases, mental health issues such as depression and anxiety, and others), family history of health outcomes (maternal, paternal, and sibling); and self-reported use of prescription drugs and nutritional supplements.

Data processing

Proteomics, clinical labs, and metabolomics data were measured from the blood at the same blood draw for each participant. Analytes that were missing in more than 20% of the samples were removed from the analysis. Observations missing more than 10% of the remaining values were removed from the analysis. In order to minimize the effect of outliers, values greater than 3 standard deviations from the mean were iteratively shrunk to be within 3 standard deviations from the mean. Analytes that were calculated from other analytes, or were partially calculated using participant age (such as estimated Glomerular Filtration Rate), or were measures of values directly targeted by wellness coaching, were removed from the analysis (see Supplementary Table 5). Mean imputation was performed on the remaining missing data values. To account for variation in populations, the first 7 principal components (calculated using the method of Conomos, et al. (3) from each participant's genetic profile were added to each observation. All baseline ages were rounded to birth year, with age at observation being that rounded age plus the number of days in the wellness program at the time of the blood draw.

Demonstration of Equivalence of PCA KDM and reported analyte specific effect sizes

The Klemara-Doubal Algorithm estimates the m-dimensional vectors of slopes(k), intercepts (q), and standard deviations (s) of each element of the m-dimensional input vector (y), and uses these parameters to estimate biological age. In this study, the input vector (y) is a PCA transformation (the nxm matrix W) of the original data vector (x), as represented in equation (1.1). The Biological Age estimate (BA_E) from the y vector is computed by equation (1.2). Here we demonstrate that the summed effect sizes β for each original analyte in data vector x are equivalent to the originally estimated BA_E from the PCA transformed data equations (1.3-1.11).

$$y_i = \sum_{j=1\ldots n} W_{ij}^T x_j \tag{0.1}$$

$$BA_E = \frac{\sum_{i=1...m} (y_i - q_i) \frac{k_i}{s_i^2}}{\sum_{i=1...m} (\frac{k_i}{s_i})^2} \quad (0.2)$$

$$\text{let } a = \frac{\frac{k}{s^2}}{\sum_{i=1...m} (\frac{k_i}{s_i})^2}, \text{ for simplicity such that} \quad (0.3)$$

$$BA_E = \sum_{i=1...m} (y_i - q_i) a_i \quad (0.4)$$

$$BA_E = \sum_{i=1...m} (y_i a_i - q_i a_i) \quad (0.5)$$

$$BA_E = \sum_{i=1...m} y_i a_i - \sum_{i=1...m} q_i a_i \quad (0.6)$$

$$BA_E = \sum_{i=1...m} (\sum_{j=1...n} W_{ij}^T x_j) a_i - \sum_{i=1..m} q_i a_i \quad (0.7)$$

$$BA_E = \sum_{j=1...n} x_j \sum_{i=1...m} W_{ij}^T a_i - \sum_{i=1..m} q_i a_i \quad (0.8)$$

$$BA_E = \beta_0 + \sum_{j=1..n} \beta_j x_j, \text{ where} \quad (0.9)$$

$$\beta_j = \sum_{i=1...m} W_{ij}^T a_i \text{ and} \quad (0.10)$$

$$\beta_0 = -\sum_{i=1..m} q_i a_i \quad (0.11)$$

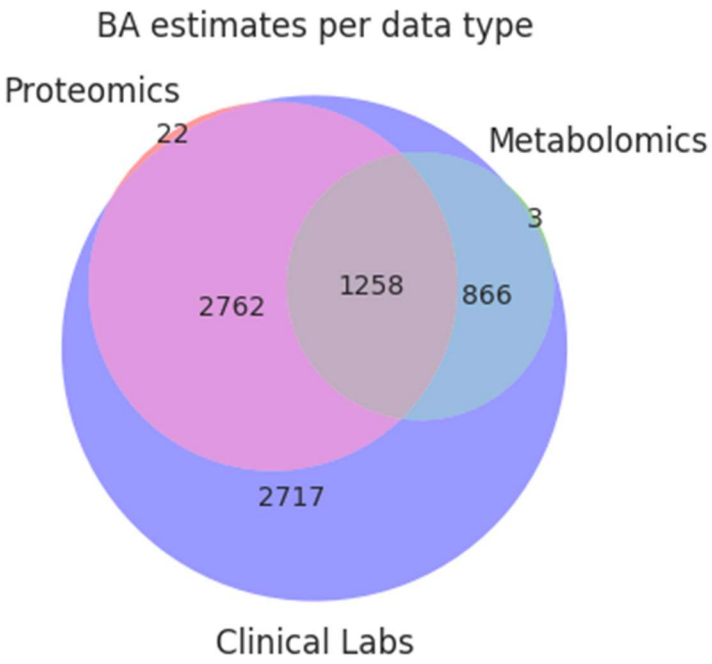
1. Conomos MP, Miller MB, Thornton TA. Robust inference of population structure for ancestry prediction and correction of stratification in the presence of relatedness. Genet Epidemiol. 2015;**39**:276-293.

2. Conomos MP, Reiner AP, Weir BS, Thornton TA. Model-free Estimation of Recent Genetic Relatedness. Am J Hum Genet. 2016;**98**:127-148.

3. Conomos MP, Laurie CA, Stilp AM, Gogarten SM, McHugh CP, Nelson SC*, et al.* Genetic Diversity and Association Studies in US Hispanic/Latino Populations: Applications in the Hispanic Community Health Study/Study of Latinos. Am J Hum Genet. 2016;**98**:165-184.

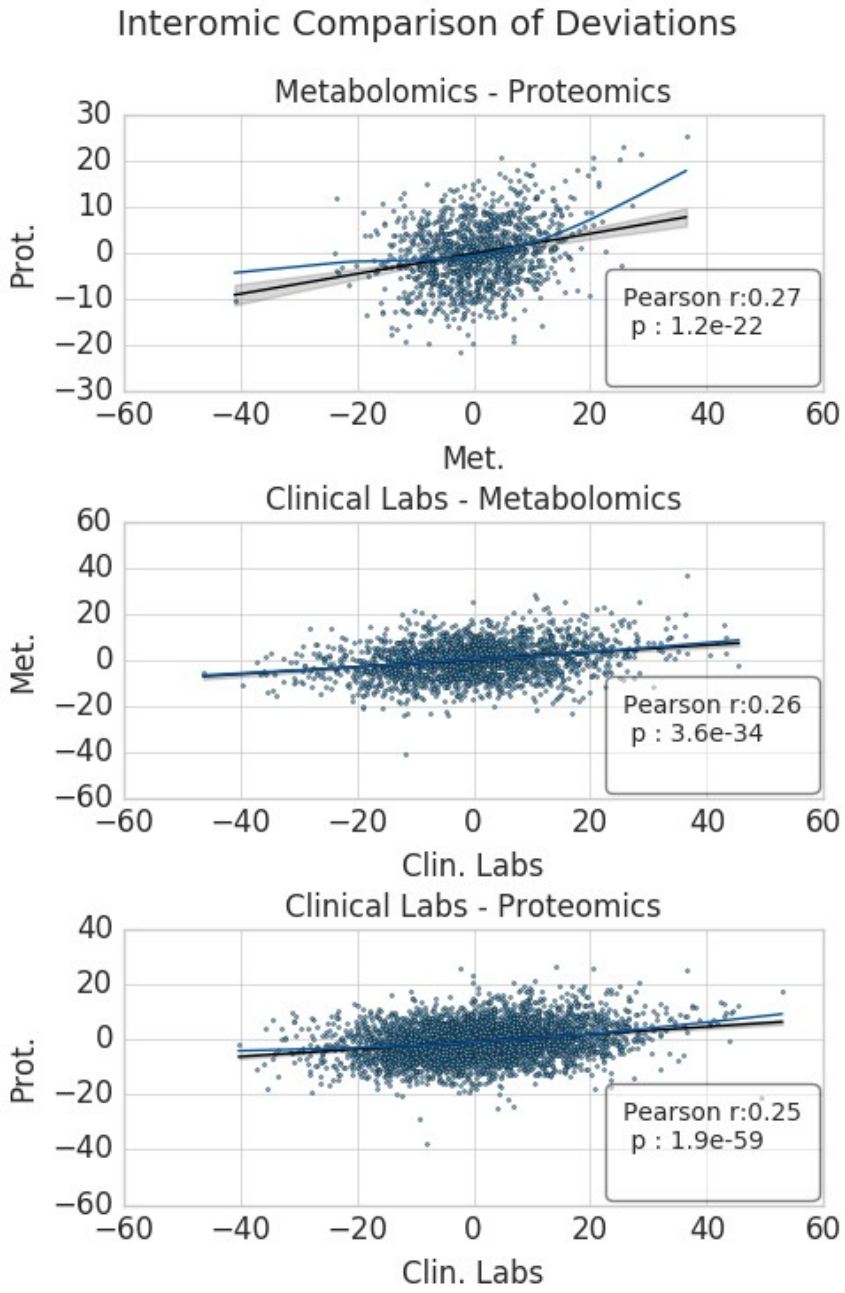
Supplementary Figures

Supplementary Figure 1 – BA estimates per data type



Venn diagram showing the number of observations per combination of data types.

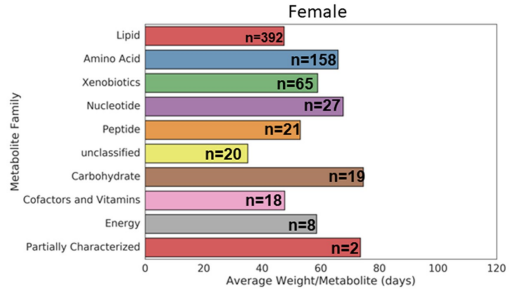
Supplementary Figure 2 –The concordance of ΔAge between data types.



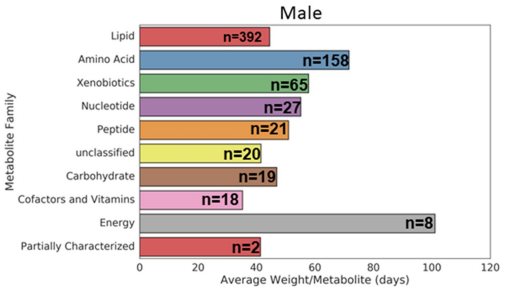
Each point is an observation with both data types present, with the ΔAges for each data type plotted to its corresponding axis. The Pearson r value and the p-value is reported for each comparison. The linear fit with a 95% confidence interval and LOWESS fit are shown.

Supplementary Figure 3 - Contribution of metabolite families and subfamilies to BA predictions for males and females, measured by average weight per metabolite in each group.

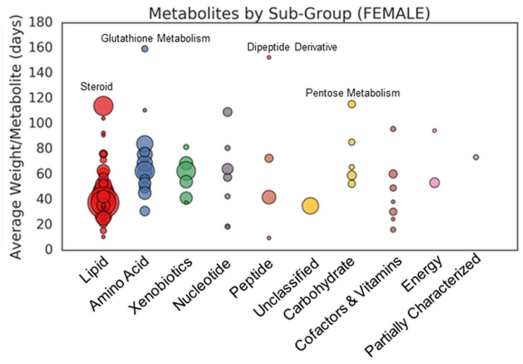
a)



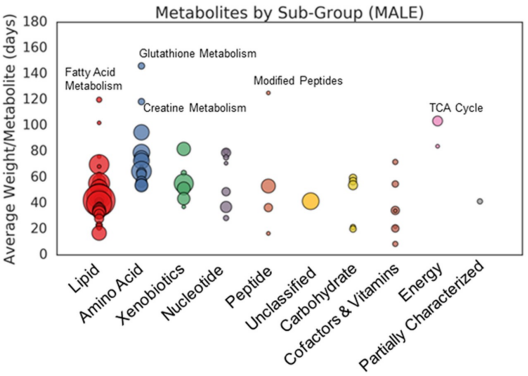
b)



c)



d)



Average weights are expressed in days, corresponding to the average change in BA (positive or negative) for 1 standard deviation change in metabolite concentration. a) & b) The average contribution of each metabolite family in predicting BA for males (a) and females (b). The absolute value of the mean β-coefficient for each metabolite obtained using the KD algorithm across the cross-validation procedure was summed within each metabolite family and divided by the total number of metabolites for that family. The number of metabolites in each family is noted. c) & d) The same analysis was performed as in figures a) and b), but at the level of metabolite subfamilies. The y-axis corresponds to the mean contribution (positive or negative) of each metabolite subfamily to the overall BA prediction. Each sub-family data point is further sized by the number of metabolites measured in that subfamily in our metabolomics panel.

Supplementary Tables

Supplementary Table 1. Baseline self-reported characteristics of the wellness program sample

Characteristic	Total N=3558	Women N=2087	Men N=1471	P-value
Past and/or current self-report of:				
Migraine, no. (%), n=3273	774 (23.6)	605	169	<0.001
High cholesterol, no. (%), n=3351	788 (23.5)	408	380	<0.001
Depression, no. (%), n=3312	750 (22.6)	550	200	<0.001
Gastroesophageal reflux disease, no. (%),	619 (19.0)	381	238	0.4
Hypertension, no. (%), n=3361	579 (17.2)	313	266	0.003
Asthma, no. (%), n=3389	559 (16.5)	370	189	<0.001
Lung infection, no. (%), n=3265	501 (15.3)	352	149	<0.001
Eczema, no. (%), n=3269	468 (14.3)	337	131	<0.001
Colon polyps, no. (%), n=3285	458 (13.9)	261	197	0.3
Osteoarthritis no. (%), n=3398	406 (11.9)	292	114 (8.3)	<0.001
Sleep apnea, no. (%), n=3295	392 (11.9)	179 (9.1)	213	<0.001
Leiomyoma (fibroids), no. (%), n=1960[b]	332 (10.2)	329	3 (2.3)	<0.001
Concussion, no. (%), n=3265	330 (10.1)	182 (9.4)	148	0.1
Irritable Bowel Syndrome, no. (%), n=3225	300 (9.3)	227	73 (5.7)	<0.001
Breast lump, no. (%), n=3239	299 (9.2)	290	9 (0.7)	<0.001
Endometriosis, no. (%), n=1945[b]	162 (8.3)[b]	162 (8.3)	NA	NA
Enlarged prostate, no. (%), n=1315[c]	100 (7.6)[c]	NA	100 (7.6)	NA
Kidney stones, no. (%), n=3239	193 (6.0)	94 (4.9)	99 (7.6)	0.002
Gallstones, no. (%), n=3228	186 (5.8)	158 (8.1)	28 (2.2)	<0.001
Cataracts, no. (%), n=3315	180 (5.4)	113 (5.7)	67 (5.0)	0.4
Psoriasis, no. (%), n=3249	154 (4.7)	90 (4.6)	64 (4.9)	0.8
Post-traumatic stress disorder, no. (%),	149 (4.6)	122 (6.3)	27 (2.1)	<0.001
Thyroid nodules, no. (%), n=3257	143 (4.4)	129 (6.6)	15 (1.1)	<0.001
Peptic ulcer, no. (%), n=3275	134 (4.1)	87 (4.5)	47 (3.6)	0.2
Diverticulosis, no. (%), n=3227	129 (4.0)	72 (3.7)	57 (4.4)	0.4
Type 2 Diabetes, no. (%), n=3309	125 (3.8)	78 (4.0)	47 (3.5)	0.6
Rheumatoid arthritis, no. (%), n=3390	100 (2.9)	61 (3.0)	39 (2.9)	0.9
Gout, no. (%), n=3233	90 (2.8)	24 (1.2)	66 (5.1)	<0.001
Chronic fatigue syndrome, no. (%), n=3237	78 (2.4)	65 (3.4)	19 (1.4)	0.001
Hyperthyroid, no. (%), n=3259	78 (2.4)	63 (3.2)	15 (1.1)	<0.001
Blood clots, no. (%), n=3213	70 (2.2)	41 (2.3)	29 (2.3)	0.9
Fibromyalgia, no. (%), n=3212	68 (2.1)	59 (3.1)	9 (0.7)	<0.001
Breast cancer, no. (%), n=3235	63 (1.9)	59 (3.0)	4 (0.3)	<0.001
Epilepsy, no. (%), n=3230	55 (1.7)	34 (1.8)	21 (1.6)	0.9
Coronary artery disease, no. (%), n=3280	50 (1.5)	19 (1.0)	31 (2.3)	0.003
Celiac disease, no. (%), n=3234	45 (1.4)	35 (1.8)	10 (0.8)	0.02
Bipolar disorder, no. (%), n=3381	38 (1.1)	15 (0.7)	23 (1.7)	0.07
Glaucoma, no. (%), n=3231	38 (1.1)	19 (1.0)	16 (1.2)	0.6
Graves disease, no. (%), n=3204	32 (1.0)	27 (1.4)	5 (0.4)	0.008
Heart attack, no. (%), n=3301	31 (0.9)	16 (0.8)	15 (1.1)	0.5

aObese defined as BM≥30

bEvaluated in women only

bEvaluated in women only

cEvaluated in men only

	Clinical Labs(Quest)	Clinical Labs	Clinical Labs(Labcorp)	Proteomics or Metabolomics or Clinical Labs[a]	Metabolomics	Proteomics
n Ind.	581	3553	3503	3558	1631	2162
n Obs.	783	7603	6820	7634	2133	4048
n Females	307	2083	2057	2087	968	1259
n Males	274	1470	1446	1471	663	903
MAE	8.15	8.04	8.03	5.54	4.81	4.39
RMSE	12.14	12.19	12.19	9.32	7.48	6.61
Pearson r of BA and CA	0.67	0.7	0.7	0.78	0.81	0.88
Pearson p of BA and CA[b]	1.32E-101	NA	NA	NA	NA	NA
Pearson r of delta BA and CA	-0.12	-0.03	-0.02	-0.06	-0.18	-0.10
Pearson p of delta BA and CA	7.27E-04	2.46E-03	4.16E-02	2.03E-08	2.63E-17	1.12E-09
Mean SD of repeated predictions(10x)	2.3	1	0.9	3.8	1.5	1
SD of SD of repeated predictions(10x)	0.84	0.58	0.32	3.66	0.44	0.31
Mean SD of personal longitudinal predictions	5.27	5.96	5.71	4.53	3.46	3.22
SD of SD of personal longitudinal predictions	4.17	3.87	3.87	3.19	2.70	2.17
Pearson r of delta age in personal longitudinal predictions	0.71	0.67	0.70	0.66	0.64	0.67

	Clinical Labs(Quest)	Clinical Labs	Clinical Labs(Labcorp)	Proteomics or Metabolomics or Clinical Labs[a]	Metabolomics	Proteomics
Mean days between longitudinal observations	116.8	190.4	199.4	190.1	197.2	166.9
Std days between longitudinal observations	20.0	65.9	65	65.6	44.1	51.3
Mean delta age	-0.59	-0.43	-0.42	-0.79	-0.12	-0.73
Std dev delta age	12.1	12.1	12.2	9.3	7.5	6.6

a – the “Overall predictions”

b – an NA represents a p-value less than machine precision, at least p<1E-200

Supplementary Table 3. Beta coefficients for stratified analyses by data type.

Stratified analyses[b]	ß Coefficient	Std. error	95% CI	Interaction p[c]
PROTEOMICS-DERIVED BA				
Gender				
Males (n=505)	0.762	0.255	0.263, 1.26	
Females (n=544)	0.271	0.249	-0.216, 0.759	0.163
Self-reported ethnicity				
White (n=839)	0.740	0.188	0.372, 1.107	
Non-white (n=145)	-0.509	0.616	-1.715, 0.697	0.059
Age at baseline, by decade				
18-29 years (n=67)	-0.239	0.865	-1.930, 1.460	
30-39 years (n=155)	-0.033	0.519	-1.05, 0.985	
40-49 years (n=295)	0.059	0.366	-0.658, 0.776	
50-59 years (n=292)	0.800	0.342	0.129, 1.47	
60-69 years (n=182)	1.12	0.362	0.414, 1.83	
70 years and over (n=58)	0.849	0.546	-0.221, 1.92	*NA*
Baseline BA prediction				
BA=5 years > CA (n=227)	-2.31	0.530	-3.347, -1.27	
BA=5 years < CA (n=242)	3.369	0.256	2.87, 3.871	
BA=10 years > CA (n=64)	-3.44	1.037	-5.477, -1.41	
BA=10 years < CA (n=68)	0.97	0.039	0.894, 1.05	*NA*
METABOLOMICS-DERIVED BA				
Gender				
Males (n=178)	0.352	0.680	-1.009, 1.658	
Females (n=273)	0.237	0.644	-1.025, 1.498	0.883
Self-reported ethnicity				
White (n=331)	0.23	0.531	-0.81, 1.269	
Non-white (n=120)	0.281	1.003	-1.684, 2.25	0.890
Age at baseline, by decade				
18-29 years (n=24)	-2.38	1.4	-5.13, 0.37	
30-39 years (n=85)	-0.669	1.399	-3.41, 2.07	
40-49 years (n=147)	1.68	0.763	0.185, 3.18	
50-59 years (n=140)	0.678	0.85	-0.987, 2.34	
60-69 years (n=47)	-0.496	1.07	-2.59, 1.59	
70 years and over (n=8)	-5.8	3.19	-12.1, 0.459	*NA*
Baseline BA prediction				
BA=5 years > CA (n=101)	-4.782	0.971	-6.68, -2.88	
BA=5 years < CA (n=113)	6.348	0.834	4.713, 7.984	
BA=10 years > CA (n=31)	-8	1.415	-10.776, -5.23	
BA=10 years < CA (n=46)	7.348	0.0491	0.845, 1.04	*NA*
CHEMISTRIES-DERIVED BA				
Gender				
Males (n=1327)	0.25	0.332	-0.401, 0.901	

Stratified analyses[b]	ß Coefficient	Std. error	95% CI	Interaction p[c]
Females (n=1881)	-0.75	0.257	-1.254, -0.246	0.021
Self-reported ethnicity				
White (n=2417)	-0.245	0.231	-0.697, 0.208	
Non-white (n=692)	-0.657	0.516	-1.668, 0.355	0.617
Age at baseline, by decade				
18-29 years (n=235)	-2.710	0.798	-4.27, -1.14	
30-39 years (n=622)	0.0355	0.454	-0.854, 0.926	
40-49 years (n=950)	0.024	0.387	-0.734, 0.782	
50-59 years (n=836)	0.161	0.422	-0.655, 0.987	
60-69 years (n=447)	-0.888	0.508	-1.880, 0.107	
70 years and over (n=118)	-0.316	0.791	-1.870, 1.230	*NA*
Baseline BA prediction				
BA=5 years > CA (n=1007)	-3.88	0.3855	-4.633, -3.12	
BA=5 years < CA (n=1111)	3.088	0.3678	2.287, 3.73	
BA=10 years > CA (n=615)	-4.93	0.452	-5.82, -4.05	
BA=10 years < CA (n=692)	0.983	0.024	0.936, 1.03	*NA*

*GEE Model: BA~time in wellness program + baseline CA; clustered by client ID, family=Gaussian, with an exchangeable correlation matrix; only individuals with at least two visits were included

bGEE Models, stratified by sex, ethnicity, age group, and baseline BA prediction: ΔAge (BA-CA) ~ time in wellness program + baseline CA; clustered by client ID, family=Gaussian, with an exchangeable correlation matrix; All models use BA predictions based on the “All analyte” data set

cInteraction models: ΔAge (BA-CA) ~ time in wellness program+ predictor variable + baseline CA + predictor variable x time in wellness program; clustered by client ID, family=Gaussian, with an exchangeable correlation matrix.

Supplementary Table 4 – Coefficient estimates for all data types for each data type

Data type	Variable Name	Female (Mean)	Female (SD)	Male (Mean)	Male (SD)
Clinical Chemistries (Labcorp)	intercept	47.05	0.09	47.67	0.11
Clinical Chemistries (Labcorp)	A/G RATIO	-0.01	0.08	-0.95	0.1
Clinical Chemistries (Labcorp)	ADIPONECTIN, SERUM	4	0.1	3.11	0.19
Clinical Chemistries (Labcorp)	ALAT (SGPT)	-0.02	0.1	-0.16	0.11
Clinical Chemistries (Labcorp)	ALBUMIN	-1.95	0.09	-4.14	0.13
Clinical Chemistries (Labcorp)	ALKALINE PHOSPHATASE	2.88	0.26	-0.3	0.19
Clinical Chemistries (Labcorp)	ASAT (SGOT)	0.67	0.15	0.6	0.13
Clinical Chemistries (Labcorp)	BILIRUBIN, TOTAL	0.48	0.14	1.51	0.2
Clinical Chemistries (Labcorp)	BUN/CREAT RATIO	2.1	0.09	1.91	0.11
Clinical Chemistries (Labcorp)	CARBON DIOXIDE (CO2)	2.88	0.13	0.58	0.17
Clinical Chemistries (Labcorp)	CHLORIDE	-0.27	0.09	1.17	0.11
Clinical Chemistries (Labcorp)	CHOLESTEROL, TOTAL	1.92	0.07	0.61	0.07
Clinical Chemistries (Labcorp)	CREATININE ENZ, SER	0.1	0.13	1.06	0.18
Clinical Chemistries (Labcorp)	CRP HIGH SENSITIVITY	-0.23	0.18	0.73	0.23
Clinical Chemistries (Labcorp)	EOSINOPHILS	0.58	0.07	0.35	0.08
Clinical Chemistries (Labcorp)	EOSINOPHILS ABSOLUTE	0.15	0.07	0.53	0.07
Clinical Chemistries (Labcorp)	GGT	0.25	0.17	0.27	0.14

Data type	Variable Name	Female (Mean)	Female (SD)	Male (Mean)	Male (SD)
Clinical Chemistries (Labcorp)	GLOBULIN	-0.8	0.06	-0.72	0.09
Clinical Chemistries (Labcorp)	GLUCOSE	2.77	0.1	3.91	0.15
Clinical Chemistries (Labcorp)	GLYCOHEMOGLOBIN A1C	3.91	0.12	3.69	0.14
Clinical Chemistries (Labcorp)	HDL CHOL DIRECT	1.6	0.07	1.04	0.08
Clinical Chemistries (Labcorp)	HDL PARTICLE NUMBER	1.24	0.1	1.07	0.14
Clinical Chemistries (Labcorp)	HEMATOCRIT	0.2	0.07	0.02	0.08
Clinical Chemistries (Labcorp)	HEMOGLOBIN	0.35	0.06	-0.07	0.07
Clinical Chemistries (Labcorp)	HOMA-IR	-0.58	0.09	0.22	0.13
Clinical Chemistries (Labcorp)	HOMOCYSTEINE, SERUM	2.37	0.24	2.13	0.17
Clinical Chemistries (Labcorp)	INSULIN	-1.16	0.1	-0.55	0.14
Clinical Chemistries (Labcorp)	LDL PARTICLE NUMBER	0.94	0.06	0.66	0.07
Clinical Chemistries (Labcorp)	LDL SMALL	0.62	0.07	1.04	0.08
Clinical Chemistries (Labcorp)	LDL-CHOL CALCULATION	1.04	0.07	0.01	0.08
Clinical Chemistries (Labcorp)	LDL_SIZE	-0.74	0.13	-1.47	0.12
Clinical Chemistries (Labcorp)	LPIR_SCORE	0.06	0.06	-0.08	0.06
Clinical Chemistries (Labcorp)	LYMPHOCYTES	-1.11	0.07	-1.73	0.09
Clinical Chemistries (Labcorp)	LYMPHOCYTES ABSOLUTE	-1.61	0.07	-1.41	0.1

Data type	Variable Name	Female (Mean)	Female (SD)	Male (Mean)	Male (SD)
Clinical Chemistries (Labcorp)	MCH	1.01	0.08	1.55	0.09
Clinical Chemistries (Labcorp)	MCHC	0.51	0.13	-0.32	0.15
Clinical Chemistries (Labcorp)	MCV	0.95	0.09	1.83	0.1
Clinical Chemistries (Labcorp)	MERCURY, BLOOD	1.34	0.21	2.06	0.21
Clinical Chemistries (Labcorp)	MONOCYTES	1.57	0.09	0.96	0.1
Clinical Chemistries (Labcorp)	MONOCYTES ABSOLUTE	0.55	0.07	0.71	0.1
Clinical Chemistries (Labcorp)	OXLDL	0.91	0.09	0.19	0.09
Clinical Chemistries (Labcorp)	PLATELET COUNT THOUSAND	-1.03	0.16	-1.24	0.25
Clinical Chemistries (Labcorp)	PROTEIN, TOTAL SERUM	-1.97	0.07	-3.24	0.11
Clinical Chemistries (Labcorp)	RDW	1.16	0.1	1.89	0.19
Clinical Chemistries (Labcorp)	RED CELL COUNT	-0.54	0.06	-1.21	0.07
Clinical Chemistries (Labcorp)	SODIUM	1.75	0.1	0.56	0.14
Clinical Chemistries (Labcorp)	TOTAL NEUTROPHILS	0.49	0.07	1.29	0.08
Clinical Chemistries (Labcorp)	TOTAL NEUTROPHILS AB	-0.41	0.06	0.6	0.08
Clinical Chemistries (Labcorp)	TRIGLYCERIDES	0.67	0.11	0.55	0.09
Clinical Chemistries (Labcorp)	Triglyceride HDL Ratio	0.12	0.09	0.18	0.08
Clinical Chemistries (Labcorp)	UREA NITROGEN	2.15	0.09	2.47	0.1

Data type	Variable Name	Female (Mean)	Female (SD)	Male (Mean)	Male (SD)
Clinical Chemistries (Labcorp)	URIC ACID	-0.16	0.14	-1.75	0.19
Clinical Chemistries (Labcorp)	V1	-0.66	0.18	-1.27	0.15
Clinical Chemistries (Labcorp)	V2	0.31	0.13	-0.25	0.13
Clinical Chemistries (Labcorp)	V3	0.1	0.1	-0.49	0.11
Clinical Chemistries (Labcorp)	V4	-0.35	0.13	-0.52	0.18
Clinical Chemistries (Labcorp)	V5	-0.69	0.18	0.07	0.19
Clinical Chemistries (Labcorp)	V6	0.35	0.13	0.56	0.17
Clinical Chemistries (Labcorp)	V7	0.04	0.13	0.2	0.15
Clinical Chemistries (Labcorp)	WHITE CELL COUNT	-0.79	0.06	0.07	0.09
Clinical Chemistries (Labcorp)	diastolic	0.98	0.1	0.65	0.11
Clinical Chemistries (Labcorp)	systolic	2.1	0.08	1.78	0.11
Clinical Chemistries (Quest)	intercept	51.46	0.19	52.24	0.26
Clinical Chemistries (Quest)	A/G RATIO	-0.32	0.21	-1.46	0.23
Clinical Chemistries (Quest)	ADIPONECTIN, SERUM	2.35	0.36	3.02	0.43
Clinical Chemistries (Quest)	ALAT (SGPT)	0.36	0.16	-0.61	0.23
Clinical Chemistries (Quest)	ALBUMIN	-1.46	0.23	-4.82	0.27
Clinical Chemistries (Quest)	ALKALINE PHOSPHATASE	2.14	0.34	1.01	0.42

Data type	Variable Name	Female (Mean)	Female (SD)	Male (Mean)	Male (SD)
Clinical Chemistries (Quest)	ARSENIC, BLOOD	0.35	0.21	1.45	0.49
Clinical Chemistries (Quest)	ASAT (SGOT)	0.88	0.21	0.35	0.27
Clinical Chemistries (Quest)	BILIRUBIN, DIRECT	-0.76	0.2	0.33	0.25
Clinical Chemistries (Quest)	BILIRUBIN, INDIRECT	0.46	0.16	0.27	0.22
Clinical Chemistries (Quest)	BILIRUBIN, TOTAL	0.19	0.13	0.31	0.2
Clinical Chemistries (Quest)	BUN/CREAT RATIO	2.05	0.16	2.04	0.26
Clinical Chemistries (Quest)	CARBON DIOXIDE (CO2)	1	0.3	0.42	0.39
Clinical Chemistries (Quest)	CHLORIDE	-0.64	0.17	1.49	0.27
Clinical Chemistries (Quest)	CHOLESTEROL, TOTAL	1.33	0.17	0.28	0.28
Clinical Chemistries (Quest)	CREATININE ENZ, SER	-0.69	0.31	0.27	0.32
Clinical Chemistries (Quest)	CRP HIGH SENSITIVITY	-0.28	0.36	1.63	0.51
Clinical Chemistries (Quest)	EOSINOPHILS	0.61	0.15	0.92	0.2
Clinical Chemistries (Quest)	EOSINOPHILS ABSOLUTE	0.4	0.14	0.9	0.19
Clinical Chemistries (Quest)	GGT	0.45	0.24	-0.47	0.37
Clinical Chemistries (Quest)	GLOBULIN	-0.45	0.16	-0.46	0.22
Clinical Chemistries (Quest)	GLUCOSE	1.72	0.27	1.91	0.36
Clinical Chemistries (Quest)	GLUTATHIONE, TOTAL	0.51	0.41	0.27	0.42

Data type	Variable Name	Female (Mean)	Female (SD)	Male (Mean)	Male (SD)
Clinical Chemistries (Quest)	GLYCOHEMOGLOBIN A1C	2.61	0.27	3.47	0.36
Clinical Chemistries (Quest)	HDL CHOL DIRECT	0.96	0.18	0.2	0.22
Clinical Chemistries (Quest)	HDL LARGE	-0.04	0.27	-0.86	0.47
Clinical Chemistries (Quest)	HEMATOCRIT	0.32	0.14	0.08	0.19
Clinical Chemistries (Quest)	HEMOGLOBIN	0.64	0.15	0.21	0.22
Clinical Chemistries (Quest)	HOMA-IR	0.17	0.15	0.37	0.16
Clinical Chemistries (Quest)	HOMOCYSTEINE, SERUM	2.06	0.34	0.72	0.39
Clinical Chemistries (Quest)	IL-8	1.62	0.29	1.39	0.47
Clinical Chemistries (Quest)	INSULIN	-0.1	0.17	-0.24	0.24
Clinical Chemistries (Quest)	LACTIC DEHYDROGENASE	1.25	0.28	2.08	0.4
Clinical Chemistries (Quest)	LDL MEDIUM	-0.78	0.16	-0.39	0.31
Clinical Chemistries (Quest)	LDL PARTICLE NUMBER	-0.33	0.2	-0.25	0.19
Clinical Chemistries (Quest)	LDL PEAK SIZE	-0.01	0.18	0.51	0.21
Clinical Chemistries (Quest)	LDL SMALL	-0.17	0.18	0.03	0.23
Clinical Chemistries (Quest)	LDL-CHOL CALCULATION	0.68	0.17	0.17	0.27
Clinical Chemistries (Quest)	LEAD, BLOOD	3.67	0.37	3.82	0.45
Clinical Chemistries (Quest)	LYMPHOCYTES	-0.55	0.12	-0.5	0.15

Data type	Variable Name	Female (Mean)	Female (SD)	Male (Mean)	Male (SD)
Clinical Chemistries (Quest)	LYMPHOCYTES ABSOLUTE	-0.99	0.15	-0.6	0.19
Clinical Chemistries (Quest)	MCH	0.58	0.16	0.95	0.24
Clinical Chemistries (Quest)	MCHC	1.24	0.24	0.74	0.36
Clinical Chemistries (Quest)	MCV	0.22	0.18	0.86	0.27
Clinical Chemistries (Quest)	MERCURY, BLOOD	-0.03	0.21	1.61	0.31
Clinical Chemistries (Quest)	MONOCYTES	1.25	0.16	-0.1	0.26
Clinical Chemistries (Quest)	MONOCYTES ABSOLUTE	0.92	0.16	-0.21	0.25
Clinical Chemistries (Quest)	MPV	-0.47	0.22	-0.3	0.36
Clinical Chemistries (Quest)	NEUTROPHIL, SEGS	0.1	0.1	0.17	0.12
Clinical Chemistries (Quest)	NEUTROPHILS ABSOLUTE	-0.16	0.09	0.02	0.12
Clinical Chemistries (Quest)	PAI-1 ANTIGEN, QNT	-0.87	0.29	-0.23	0.3
Clinical Chemistries (Quest)	PLATELET COUNT	-0.91	0.13	-0.48	0.2
Clinical Chemistries (Quest)	PLATELET COUNT THOUSAND	-0.91	0.13	-0.48	0.2
Clinical Chemistries (Quest)	PROTEIN, TOTAL SERUM	-1.26	0.16	-3.4	0.24
Clinical Chemistries (Quest)	QUICKI	0.07	0.16	-0.09	0.2
Clinical Chemistries (Quest)	RDW	-0.6	0.24	1.39	0.4
Clinical Chemistries (Quest)	RED CELL COUNT	-0.11	0.13	-0.81	0.21

Data type	Variable Name	Female (Mean)	Female (SD)	Male (Mean)	Male (SD)
Clinical Chemistries (Quest)	SODIUM	1.31	0.22	0.44	0.33
Clinical Chemistries (Quest)	TNF-ALPHA	1.14	0.24	-1.48	0.49
Clinical Chemistries (Quest)	TOTAL NEUTROPHILS	0.1	0.1	0.17	0.12
Clinical Chemistries (Quest)	TOTAL NEUTROPHILS AB	-0.16	0.09	0.02	0.12
Clinical Chemistries (Quest)	TRIGLYCERIDES	0.85	0.31	0.04	0.27
Clinical Chemistries (Quest)	Triglyceride HDL Ratio	0.29	0.18	-0.11	0.2
Clinical Chemistries (Quest)	UREA NITROGEN	1.56	0.16	2.01	0.21
Clinical Chemistries (Quest)	URIC ACID	0.73	0.32	-0.26	0.29
Clinical Chemistries (Quest)	V1	-0.85	0.23	-1.77	0.29
Clinical Chemistries (Quest)	V2	0.29	0.15	0.18	0.2
Clinical Chemistries (Quest)	V3	0.28	0.15	-0.33	0.22
Clinical Chemistries (Quest)	V4	-0.16	0.12	-0.56	0.23
Clinical Chemistries (Quest)	V5	-0.08	0.27	-0.66	0.49
Clinical Chemistries (Quest)	V6	0.36	0.31	-0.62	0.36
Clinical Chemistries (Quest)	V7	-0.43	0.35	1.21	0.36
Clinical Chemistries (Quest)	WHITE CELL COUNT	-0.38	0.1	0	0.16
Clinical Chemistries (Quest)	diastolic	0.83	0.25	-0.39	0.33

Data type	Variable Name	Female (Mean)	Female (SD)	Male (Mean)	Male (SD)
Clinical Chemistries (Quest)	systolic	1.2	0.2	2	0.26
Proteins	intercept	47.99	0.1	47.26	0.13
Proteins	CVD2_O00182	0.3	0.06	-0.07	0.09
Proteins	CVD2_O00220	-0.22	0.08	0.12	0.1
Proteins	CVD2_O00253	-2.08	0.08	-1.63	0.11
Proteins	CVD2_O14763	0.41	0.07	0.41	0.09
Proteins	CVD2_O14836	0.15	0.1	0.49	0.1
Proteins	CVD2_O43915	0.02	0.09	0.56	0.12
Proteins	CVD2_O94907	-0.02	0.03	-0.07	0.04
Proteins	CVD2_P00797	-0.37	0.07	0.11	0.1
Proteins	CVD2_P01127	-0.34	0.04	-0.16	0.05
Proteins	CVD2_P01241	-0.14	0.09	0.27	0.12
Proteins	CVD2_P01730	-0.2	0.1	-0.32	0.13
Proteins	CVD2_P01833	0.78	0.09	1.11	0.11
Proteins	CVD2_P02760	0.45	0.08	-0.03	0.08
Proteins	CVD2_P04179	-0.67	0.06	-0.92	0.09
Proteins	CVD2_P04792	0.22	0.08	-0.29	0.09
Proteins	CVD2_P05231	-0.11	0.06	0	0.06
Proteins	CVD2_P06858	0.05	0.1	0.24	0.1
Proteins	CVD2_P07204	0.06	0.06	-0.14	0.07
Proteins	CVD2_P07585	0.61	0.06	0.68	0.08
Proteins	CVD2_P07711	-0.02	0.09	0.61	0.11
Proteins	CVD2_P09237	0.31	0.09	0.31	0.1
Proteins	CVD2_P09341	-0.19	0.06	0.06	0.05
Proteins	CVD2_P09601	0.25	0.1	-0.07	0.11
Proteins	CVD2_P10147	0.16	0.05	0.25	0.06
Proteins	CVD2_P12104	-0.32	0.07	-0.52	0.1
Proteins	CVD2_P12931	-0.38	0.07	-0.1	0.06
Proteins	CVD2_P13726	0.77	0.05	0.54	0.06
Proteins	CVD2_P18510	-0.67	0.08	-0.67	0.07
Proteins	CVD2_P19883	0.26	0.09	0.18	0.11
Proteins	CVD2_P21583	-0.03	0.06	0.29	0.06
Proteins	CVD2_P21980	0.11	0.07	0.52	0.09
Proteins	CVD2_P22004	0.02	0.08	0.03	0.08
Proteins	CVD2_P25116	0.1	0.05	-0.17	0.05
Proteins	CVD2_P26022	-0.07	0.09	-0.21	0.11
Proteins	CVD2_P27352	0.32	0.1	0.04	0.1
Proteins	CVD2_P29965	0.02	0.04	-0.01	0.04
Proteins	CVD2_P31994	-0.45	0.09	0.19	0.08
Proteins	CVD2_P31997	-0.07	0.09	-0.16	0.1
Proteins	CVD2_P35318	0.33	0.06	0.73	0.07

Data type	Variable Name	Female (Mean)	Female (SD)	Male (Mean)	Male (SD)
Proteins	CVD2_P35442	-0.8	0.09	-0.42	0.11
Proteins	CVD2_P35475	-0.31	0.07	0.12	0.1
Proteins	CVD2_P39900	0.62	0.09	0.55	0.11
Proteins	CVD2_P40225	-0.05	0.06	-0.26	0.08
Proteins	CVD2_P41159	-0.36	0.06	-0.07	0.06
Proteins	CVD2_P47992	-0.45	0.1	-0.37	0.11
Proteins	CVD2_P49763	0.41	0.07	0.53	0.08
Proteins	CVD2_P51161	-0.17	0.09	0.18	0.12
Proteins	CVD2_P51888	1.48	0.09	0.95	0.1
Proteins	CVD2_P78380	0.6	0.06	0.05	0.07
Proteins	CVD2_Q02763	-0.51	0.1	-0.68	0.11
Proteins	CVD2_Q04760	-0.47	0.09	0.2	0.08
Proteins	CVD2_Q12866	0.13	0.08	0.77	0.11
Proteins	CVD2_Q13043	-0.04	0.05	0.26	0.06
Proteins	CVD2_Q13219	0.31	0.09	0.41	0.12
Proteins	CVD2_Q14005	0.65	0.09	-0.28	0.11
Proteins	CVD2_Q14116	-0.18	0.06	0.23	0.07
Proteins	CVD2_Q14242	-0.13	0.08	-0.48	0.12
Proteins	CVD2_Q15109	-0.78	0.1	-0.86	0.11
Proteins	CVD2_Q15389	-0.13	0.04	-0.02	0.06
Proteins	CVD2_Q16651	-0.44	0.09	-0.08	0.1
Proteins	CVD2_Q16698	-0.11	0.04	0.01	0.05
Proteins	CVD2_Q76LX8	-0.73	0.09	-0.26	0.1
Proteins	CVD2_Q8IW75	0.08	0.08	0.33	0.1
Proteins	CVD2_Q8IYS5	-0.5	0.1	-0.21	0.1
Proteins	CVD2_Q8NEV9_Q14213	-0.05	0.11	0.35	0.12
Proteins	CVD2_Q8TAD2	0.94	0.09	1.44	0.13
Proteins	CVD2_Q92583	-0.16	0.11	-0.51	0.1
Proteins	CVD2_Q96D42	1.84	0.1	1.67	0.1
Proteins	CVD2_Q96IQ7	0.22	0.11	0.05	0.12
Proteins	CVD2_Q99075	-0.11	0.05	-0.2	0.06
Proteins	CVD2_Q99523	0.24	0.06	0.29	0.08
Proteins	CVD2_Q99895	-0.33	0.1	-0.2	0.1
Proteins	CVD2_Q9BQ51	-0.28	0.1	-0.15	0.1
Proteins	CVD2_Q9BQR3	-0.31	0.1	-0.65	0.1
Proteins	CVD2_Q9BUD6	-0.98	0.08	0.14	0.08
Proteins	CVD2_Q9BWV1	-1.27	0.08	-1.13	0.09
Proteins	CVD2_Q9BYF1	0.14	0.08	-0.05	0.09
Proteins	CVD2_Q9GZV9	-0.09	0.05	-0.06	0.06
Proteins	CVD2_Q9HB29	0.74	0.1	0.09	0.11
Proteins	CVD2_Q9NSA1	0.26	0.05	0.11	0.05
Proteins	CVD2_Q9UEW3	0.57	0.08	-0.35	0.12
Proteins	CVD2_Q9UIB8	-0.12	0.06	-0.13	0.06

Data type	Variable Name	Female (Mean)	Female (SD)	Male (Mean)	Male (SD)
Proteins	CVD2_Q9UJM8	0.09	0.08	-0.41	0.12
Proteins	CVD2_Q9UK05	-0.06	0.07	-0.09	0.08
Proteins	CVD2_Q9UKP3	-0.06	0.04	0.28	0.06
Proteins	CVD2_Q9Y6K9	0.11	0.04	0.28	0.04
Proteins	CVD2_Q9Y6Q6	-0.16	0.07	-0.27	0.08
Proteins	CVD3_O00175	0.05	0.08	-0.05	0.1
Proteins	CVD3_O00300	0.2	0.06	0.38	0.06
Proteins	CVD3_O14798	0.31	0.1	0.43	0.1
Proteins	CVD3_O15467	-0.21	0.1	0.25	0.11
Proteins	CVD3_O75594	-0.25	0.11	-0.01	0.08
Proteins	CVD3_O95998	0.42	0.05	0.13	0.05
Proteins	CVD3_P00533	-0.4	0.07	-0.67	0.07
Proteins	CVD3_P00749	-0.33	0.07	-0.28	0.07
Proteins	CVD3_P00750	0.4	0.1	0.24	0.09
Proteins	CVD3_P01130	0.51	0.09	-0.04	0.1
Proteins	CVD3_P02144	0.78	0.1	0.79	0.1
Proteins	CVD3_P02452	-0.42	0.08	-1.3	0.09
Proteins	CVD3_P02786	-0.42	0.08	-0.03	0.12
Proteins	CVD3_P04080	0.22	0.07	0.25	0.08
Proteins	CVD3_P04085	-0.26	0.04	-0.04	0.04
Proteins	CVD3_P04275	0.01	0.1	0.11	0.1
Proteins	CVD3_P05107	-0.06	0.08	0.17	0.11
Proteins	CVD3_P05121	-0.25	0.05	-0.14	0.06
Proteins	CVD3_P05164	-0.56	0.09	-0.27	0.08
Proteins	CVD3_P07339	0.36	0.08	-0.05	0.09
Proteins	CVD3_P08253	-0.05	0.05	0.47	0.07
Proteins	CVD3_P08254	0.02	0.08	-0.22	0.08
Proteins	CVD3_P08833	0.05	0.08	0.25	0.08
Proteins	CVD3_P08887	0.32	0.09	0.5	0.12
Proteins	CVD3_P10451	0.04	0.09	-0.25	0.08
Proteins	CVD3_P10646	0.63	0.08	-0.03	0.12
Proteins	CVD3_P13500	-0.26	0.07	-0.25	0.07
Proteins	CVD3_P13598	-0.21	0.06	0.42	0.08
Proteins	CVD3_P13686	0.12	0.09	-0.59	0.1
Proteins	CVD3_P14778	0.24	0.09	0.49	0.08
Proteins	CVD3_P14780	-0.2	0.06	0.22	0.08
Proteins	CVD3_P15085	0.21	0.05	0.09	0.06
Proteins	CVD3_P15086	0.27	0.05	0.27	0.06
Proteins	CVD3_P15090	0.38	0.04	-0.35	0.08
Proteins	CVD3_P15144	-0.59	0.08	-0.81	0.08
Proteins	CVD3_P16109	-0.08	0.05	0	0.05
Proteins	CVD3_P16284	-0.06	0.06	0.03	0.06
Proteins	CVD3_P16422	0.31	0.07	0.2	0.1

Data type	Variable Name	Female (Mean)	Female (SD)	Male (Mean)	Male (SD)
Proteins	CVD3_P16581	-0.18	0.08	-0.53	0.08
Proteins	CVD3_P17931	0.13	0.08	-0.04	0.1
Proteins	CVD3_P18065	1.08	0.06	0.89	0.06
Proteins	CVD3_P19438	0.13	0.04	0.14	0.05
Proteins	CVD3_P19957	-0.73	0.08	-0.39	0.12
Proteins	CVD3_P20160	0.02	0.08	0.11	0.1
Proteins	CVD3_P20333	-0.06	0.04	-0.12	0.04
Proteins	CVD3_P24158	-0.18	0.07	-0.11	0.08
Proteins	CVD3_P25445	0.39	0.07	0.29	0.08
Proteins	CVD3_P27930	-0.67	0.1	-0.93	0.11
Proteins	CVD3_P28799	-0.18	0.09	-0.36	0.1
Proteins	CVD3_P30530	-0.38	0.06	-0.86	0.07
Proteins	CVD3_P33151	-0.43	0.06	-0.36	0.07
Proteins	CVD3_P35247	0.12	0.08	-0.24	0.1
Proteins	CVD3_P36222	0.68	0.09	0.67	0.13
Proteins	CVD3_P36941	-0.31	0.05	-0.02	0.06
Proteins	CVD3_P42574	0.07	0.03	0.11	0.03
Proteins	CVD3_P54760	-0.44	0.07	0.07	0.07
Proteins	CVD3_P56470	0.05	0.06	-0.06	0.1
Proteins	CVD3_P78324	0.16	0.1	0.01	0.13
Proteins	CVD3_P80370	0.79	0.12	0.58	0.1
Proteins	CVD3_P98160	-0.43	0.05	-0.13	0.07
Proteins	CVD3_Q01638	-0.47	0.11	-0.5	0.11
Proteins	CVD3_Q03405	0.12	0.05	0.4	0.06
Proteins	CVD3_Q07654	-0.5	0.06	0.61	0.08
Proteins	CVD3_Q12860	0.21	0.07	0.16	0.08
Proteins	CVD3_Q13231	0.37	0.08	1.11	0.12
Proteins	CVD3_Q13740	0.05	0.05	0.16	0.06
Proteins	CVD3_Q13867	-0.18	0.07	-0.16	0.08
Proteins	CVD3_Q15166	0.13	0.08	-0.23	0.1
Proteins	CVD3_Q16270	0.38	0.06	0.33	0.06
Proteins	CVD3_Q16663	-0.38	0.1	-0.19	0.11
Proteins	CVD3_Q5T2D2	-0.32	0.07	-0.02	0.08
Proteins	CVD3_Q86VB7	0.23	0.09	0.08	0.08
Proteins	CVD3_Q8NBP7	0.24	0.09	0.42	0.11
Proteins	CVD3_Q92876	0.39	0.09	0.23	0.1
Proteins	CVD3_Q92956	-0.13	0.04	-0.04	0.05
Proteins	CVD3_Q96F46	-0.09	0.1	-0.3	0.1
Proteins	CVD3_Q96PL1	0.24	0.09	-0.29	0.1
Proteins	CVD3_Q99727	0.32	0.1	0.38	0.1
Proteins	CVD3_Q99969	0.22	0.05	0.16	0.07
Proteins	CVD3_Q99988	1.72	0.07	1.54	0.07
Proteins	CVD3_Q9H2A7	-0.06	0.07	-0.27	0.08

Data type	Variable Name	Female (Mean)	Female (SD)	Male (Mean)	Male (SD)
Proteins	CVD3_Q9HD89	-0.13	0.09	-0.18	0.1
Proteins	CVD3_Q9NPY3	-0.11	0.05	-0.16	0.06
Proteins	CVD3_Q9NQ76	-1.41	0.08	-1.46	0.08
Proteins	CVD3_Q9UBR2	0.33	0.06	0.44	0.1
Proteins	CVD3_Q9UM47	0.89	0.06	1.04	0.08
Proteins	CVD3_Q9Y275	-0.52	0.08	-0.69	0.12
Proteins	CVD3_Q9Y624	-0.08	0.05	0.01	0.05
Proteins	INF_O00300	0.25	0.06	0.24	0.06
Proteins	INF_O14625	0.07	0.11	-0.1	0.1
Proteins	INF_O14788	-0.05	0.08	-0.34	0.1
Proteins	INF_O15169	0.05	0.03	0.31	0.04
Proteins	INF_O15444	0.42	0.11	0.35	0.12
Proteins	INF_O43508	0.02	0.07	-0.44	0.09
Proteins	INF_O43557	0.05	0.06	-0.15	0.07
Proteins	INF_O95630	0.06	0.03	0.16	0.04
Proteins	INF_O95750	-0.05	0.08	-0.2	0.09
Proteins	INF_P00749	-0.14	0.07	-0.35	0.07
Proteins	INF_P00813	0.06	0.13	-0.68	0.1
Proteins	INF_P01135	-0.91	0.09	-0.26	0.08
Proteins	INF_P01137	-0.02	0.05	-0.05	0.07
Proteins	INF_P01138	-0.54	0.1	-0.87	0.12
Proteins	INF_P01374	-1.01	0.1	0.13	0.09
Proteins	INF_P02778	0.37	0.09	0.38	0.08
Proteins	INF_P03956	0.3	0.09	0.18	0.12
Proteins	INF_P05231	-0.07	0.05	0.09	0.07
Proteins	INF_P06127	-0.27	0.08	-0.68	0.07
Proteins	INF_P09238	-0.49	0.09	0.26	0.12
Proteins	INF_P09341	-0.17	0.07	0.05	0.05
Proteins	INF_P09603	-0.55	0.05	-0.11	0.07
Proteins	INF_P10145	0.02	0.11	0.12	0.08
Proteins	INF_P10147	0.38	0.05	0.25	0.07
Proteins	INF_P13232	0.09	0.06	-0.01	0.05
Proteins	INF_P13236	-0.06	0.08	0.05	0.09
Proteins	INF_P13500	-0.29	0.06	-0.33	0.06
Proteins	INF_P13725	-0.36	0.05	0.07	0.08
Proteins	INF_P14210	0.57	0.05	0.1	0.06
Proteins	INF_P15692	-0.04	0.07	0.12	0.08
Proteins	INF_P20783	-0.4	0.09	-0.69	0.08
Proteins	INF_P21583	0.11	0.06	0.37	0.07
Proteins	INF_P22301	-0.29	0.09	-0.44	0.11
Proteins	INF_P25942	0.15	0.04	0.12	0.06
Proteins	INF_P28325	0.32	0.08	0.31	0.1
Proteins	INF_P29460	-0.39	0.09	-0.48	0.13

Data type	Variable Name	Female (Mean)	Female (SD)	Male (Mean)	Male (SD)
Proteins	INF_P39905	0.5	0.1	0.46	0.12
Proteins	INF_P42702	0.12	0.06	-0.05	0.09
Proteins	INF_P42830	0.46	0.08	0.02	0.07
Proteins	INF_P49771	0.7	0.09	0.54	0.1
Proteins	INF_P50225	0.2	0.06	0.1	0.05
Proteins	INF_P50591	-0.06	0.08	-0.42	0.09
Proteins	INF_P51671	0.92	0.06	0.44	0.1
Proteins	INF_P55773	-0.28	0.1	-0.02	0.1
Proteins	INF_P78423	0.26	0.1	-0.08	0.09
Proteins	INF_P78556	-0.56	0.09	-1.03	0.12
Proteins	INF_P80075	0.43	0.1	-0.2	0.13
Proteins	INF_P80162	0.02	0.08	0.12	0.09
Proteins	INF_P80511	-0.23	0.09	0.06	0.11
Proteins	INF_Q07011	0.43	0.07	-0.16	0.07
Proteins	INF_Q07325	1.19	0.06	0.43	0.1
Proteins	INF_Q08334	-0.06	0.08	-0.01	0.08
Proteins	INF_Q13291	-0.38	0.09	-0.38	0.1
Proteins	INF_Q13478	-0.74	0.11	-0.17	0.1
Proteins	INF_Q13541	0	0.06	0.12	0.06
Proteins	INF_Q14116	-0.1	0.06	0.29	0.07
Proteins	INF_Q14790	0.55	0.08	0.08	0.1
Proteins	INF_Q8IXJ6	0	0.03	0.09	0.04
Proteins	INF_Q8NFT8	-0.24	0.07	-0.5	0.11
Proteins	INF_Q8WWJ7	-0.22	0.08	-0.1	0.09
Proteins	INF_Q99616	0.68	0.07	0.6	0.09
Proteins	INF_Q99731	0.24	0.1	-0.05	0.13
Proteins	INF_Q9BZW8	-0.14	0.06	-0.2	0.08
Proteins	INF_Q9GZV9	-0.01	0.05	0.04	0.07
Proteins	INF_Q9H5V8	1.4	0.07	1.17	0.09
Proteins	INF_Q9NRJ3	0.56	0.09	0.87	0.11
Proteins	INF_Q9NSA1	0.26	0.05	0.14	0.05
Proteins	INF_Q9NZQ7	-0.62	0.1	-0.54	0.1
Proteins	V1	-0.94	0.08	-1.32	0.1
Proteins	V2	-0.08	0.09	-0.53	0.09
Proteins	V3	0.14	0.07	-0.07	0.08
Proteins	V4	-0.35	0.09	-0.38	0.09
Proteins	V5	0.33	0.07	-0.18	0.1
Proteins	V6	-0.09	0.09	0.24	0.1
Proteins	V7	0.16	0.08	0.08	0.08
Metabolites	intercept	48.57	0.13	47.59	0.15
Metabolites	carnitine	0.23	0.06	-0.06	0.06
Metabolites	3-phenylpropionate (hydrocinnamate)	-0.11	0.07	-0.2	0.07
Metabolites	hippurate	0.07	0.06	0.15	0.07

Data type	Variable Name	Female (Mean)	Female (SD)	Male (Mean)	Male (SD)
Metabolites	3-methyl-2-oxovalerate	-0.48	0.06	-0.44	0.06
Metabolites	methionine sulfoxide	-0.01	0.07	-0.08	0.12
Metabolites	3-methylhistidine	0	0.05	0.03	0.06
Metabolites	5-hydroxylysine	-0.23	0.09	0.1	0.12
Metabolites	4-guanidinobutanoate	-0.14	0.11	-0.38	0.11
Metabolites	glucuronate	0.32	0.08	0.28	0.09
Metabolites	imidazole lactate	-0.17	0.07	-0.14	0.09
Metabolites	kynurenine	-0.08	0.06	-0.14	0.09
Metabolites	glycerophosphorylcholine (GPC)	-0.15	0.05	0.16	0.05
Metabolites	maltotriose	0.07	0.06	-0.27	0.09
Metabolites	N-acetylglutamate	0.39	0.09	0.09	0.09
Metabolites	ribitol	-0.03	0.09	-0.24	0.11
Metabolites	glycodeoxycholate	0.05	0.06	-0.01	0.06
Metabolites	theophylline	0	0.04	0.07	0.04
Metabolites	quinate	0.19	0.06	0.24	0.07
Metabolites	theobromine	-0.18	0.05	-0.12	0.06
Metabolites	gentisate	-0.12	0.09	-0.05	0.11
Metabolites	paraxanthine	-0.06	0.05	0	0.05
Metabolites	indolelactate	-0.13	0.06	-0.17	0.07
Metabolites	3-indoxyl sulfate	0.05	0.06	-0.27	0.07
Metabolites	gamma-glutamylphenylalanine	0.32	0.09	-0.05	0.08
Metabolites	1-palmityl-GPC (O-16:0)	-0.2	0.05	-0.14	0.04
Metabolites	1-stearoyl-2-arachidonoyl-GPI (18:0/20:4)	0.17	0.06	0.2	0.06
Metabolites	sphingosine 1-phosphate	-0.16	0.05	-0.16	0.07
Metabolites	1-stearoyl-2-oleoyl-GPS (18:0/18:1)	-0.23	0.06	-0.19	0.06
Metabolites	1-stearoyl-GPI (18:0)	0.24	0.05	0.2	0.06
Metabolites	1,2-dipalmitoyl-GPC (16:0/16:0)	-0.19	0.06	-0.14	0.07
Metabolites	1-myristoyl-2-palmitoyl-GPC (14:0/16:0)	0.16	0.04	0.04	0.04
Metabolites	alpha-hydroxyisocaproate	-0.51	0.06	-0.47	0.06
Metabolites	maleate	0.04	0.08	0.1	0.09
Metabolites	2-hydroxyoctanoate	0.08	0.09	-0.16	0.1
Metabolites	3-hydroxyoctanoate	-0.11	0.06	0.17	0.06
Metabolites	phenyllactate (PLA)	-0.25	0.06	-0.49	0.05
Metabolites	palmitoylcarnitine (C16)	0.18	0.05	-0.03	0.05
Metabolites	hexanoylcarnitine (C6)	0.03	0.04	-0.03	0.05
Metabolites	N-acetylaspartate (NAA)	0.2	0.06	-0.22	0.09
Metabolites	dehydroepiandrosterone sulfate (DHEA-S)	-0.58	0.04	-0.81	0.05
Metabolites	acetylcarnitine (C2)	0.08	0.04	0.02	0.04
Metabolites	cysteine s-sulfate	0.37	0.06	0.35	0.06
Metabolites	1-palmitoylglycerol (16:0)	-0.03	0.09	-0.42	0.11
Metabolites	3-hydroxymyristate	0.05	0.05	0.28	0.06
Metabolites	iminodiacetate (IDA)	-0.04	0.05	-0.01	0.07
Metabolites	1-oleoylglycerol (18:1)	0.23	0.08	0.16	0.08

Data type	Variable Name	Female (Mean)	Female (SD)	Male (Mean)	Male (SD)
Metabolites	3-methyl-2-oxobutyrate	-0.21	0.07	-0.27	0.07
Metabolites	homoarginine	-0.48	0.06	0.02	0.08
Metabolites	homocitrulline	0.3	0.09	0.03	0.09
Metabolites	3-hydroxydecanoate	-0.03	0.05	0.22	0.06
Metabolites	EDTA	0.09	0.08	0.37	0.09
Metabolites	ribonate	0.23	0.1	-0.49	0.09
Metabolites	indoleacetate	-0.31	0.09	-0.11	0.11
Metabolites	1-linoleoylglycerol (18:2)	-0.03	0.08	0.11	0.06
Metabolites	1-methylhistidine	0.09	0.06	0.07	0.08
Metabolites	butyrylcarnitine (C4)	-0.03	0.06	-0.07	0.07
Metabolites	isobutyrylcarnitine (C4)	0	0.06	0.03	0.08
Metabolites	androsterone sulfate	-0.31	0.04	-0.45	0.05
Metabolites	indolepropionate	-0.43	0.1	-0.07	0.09
Metabolites	trigonelline (N'-methylnicotinate)	0.1	0.08	0.19	0.09
Metabolites	dodecanedioate (C12-DC)	0.26	0.06	-0.03	0.05
Metabolites	N-acetyltyrosine	0	0.07	0.24	0.07
Metabolites	1,3-dimethylurate	0.06	0.06	0.34	0.05
Metabolites	3-methylxanthine	-0.11	0.05	-0.14	0.06
Metabolites	3-hydroxylaurate	0.11	0.04	0.24	0.06
Metabolites	gamma-glutamylvaline	0.4	0.07	0	0.06
Metabolites	pyroglutamylvaline	0.08	0.09	0	0.1
Metabolites	propionylglycine	-0.08	0.08	-0.35	0.1
Metabolites	propionylcarnitine (C3)	0.06	0.06	-0.21	0.08
Metabolites	pro-hydroxy-pro	-0.05	0.09	-0.56	0.1
Metabolites	3-hydroxy-2-ethylpropionate	-0.28	0.06	-0.05	0.06
Metabolites	docosadienoate (22:2n6)	-0.08	0.04	0.15	0.05
Metabolites	adrenate (22:4n6)	0.09	0.06	-0.08	0.08
Metabolites	10-undecenoate (11:1n1)	-0.14	0.07	-0.11	0.08
Metabolites	myristoleate (14:1n5)	-0.09	0.04	-0.18	0.04
Metabolites	1-methyl-4-imidazoleacetate	0.73	0.09	0.65	0.09
Metabolites	sebacate (C10-DC)	0.09	0.08	-0.29	0.08
Metabolites	5-dodecenoate (12:1n7)	-0.18	0.06	-0.13	0.05
Metabolites	octanoylcarnitine (C8)	-0.02	0.03	-0.01	0.04
Metabolites	decanoylcarnitine (C10)	0.02	0.04	0.05	0.05
Metabolites	N-acetylglutamine	0.02	0.06	0.09	0.08
Metabolites	N-acetyltryptophan	0.13	0.07	0.49	0.09
Metabolites	N-acetylphenylalanine	0.02	0.05	0.1	0.06
Metabolites	gamma-glutamyl-epsilon-lysine	-0.27	0.08	-0.06	0.09
Metabolites	1-palmitoyl-GPC (16:0)	-0.27	0.04	0.07	0.04
Metabolites	1-margaroyl-GPC (17:0)	-0.16	0.03	0.03	0.05
Metabolites	N-acetylarginine	0.33	0.05	0.02	0.06
Metabolites	piperine	0.05	0.05	-0.05	0.05
Metabolites	myristoylcarnitine (C14)	0.13	0.04	0.32	0.06

Data type	Variable Name	Female (Mean)	Female (SD)	Male (Mean)	Male (SD)
Metabolites	1-oleoyl-GPC (18:1)	0.04	0.03	-0.08	0.04
Metabolites	N-acetylthreonine	0.05	0.07	0.07	0.07
Metabolites	N-acetylisoleucine	0.14	0.09	-0.05	0.1
Metabolites	10-nonadecenoate (19:1n9)	-0.02	0.04	-0.07	0.04
Metabolites	10-heptadecenoate (17:1n7)	0.04	0.03	-0.09	0.04
Metabolites	epiandrosterone sulfate	-0.15	0.05	-0.05	0.05
Metabolites	N-acetylhistidine	0.31	0.09	0.08	0.1
Metabolites	gamma-glutamylglycine	-0.03	0.05	-0.28	0.06
Metabolites	gamma-glutamyltryptophan	-0.07	0.08	-0.33	0.1
Metabolites	stachydrine	0.19	0.05	0.39	0.07
Metabolites	alpha-hydroxyisovalerate	-0.01	0.07	-0.2	0.07
Metabolites	gamma-glutamylmethionine	-0.04	0.06	0.03	0.08
Metabolites	gamma-glutamylthreonine	-0.05	0.07	-0.06	0.07
Metabolites	p-cresol sulfate	0.2	0.05	0.27	0.07
Metabolites	erythronate*	-0.01	0.06	-0.17	0.09
Metabolites	eicosenoate (20:1)	0.13	0.04	0.04	0.05
Metabolites	linolenate [alpha or gamma; (18:3n3 or 6)]	0.04	0.04	-0.13	0.06
Metabolites	aconitate [cis or trans]	0.53	0.05	0.24	0.08
Metabolites	1-myristoyl-GPC (14:0)	-0.09	0.03	0.07	0.05
Metabolites	1-arachidoyl-GPC (20:0)	-0.1	0.06	0.25	0.07
Metabolites	stearoylcarnitine (C18)	0.44	0.05	0.16	0.05
Metabolites	laurylcarnitine (C12)	-0.1	0.05	0.1	0.05
Metabolites	isovalerylcarnitine (C5)	-0.09	0.08	-0.18	0.07
Metabolites	7-methylxanthine	-0.32	0.05	-0.16	0.06
Metabolites	1,7-dimethylurate	0.15	0.04	0.19	0.05
Metabolites	5-acetylamino-6-formylamino-3-methyluracil	-0.14	0.08	0.02	0.09
Metabolites	5-acetylamino-6-amino-3-methyluracil	-0.16	0.05	0.12	0.06
Metabolites	1-methylxanthine	-0.02	0.07	-0.06	0.07
Metabolites	N1-methylinosine	-0.2	0.06	0.12	0.08
Metabolites	N2,N2-dimethylguanosine	-0.11	0.05	0.18	0.06
Metabolites	N4-acetylcytidine	-0.2	0.08	0.17	0.08
Metabolites	N6-carbamoylthreonyladenosine	-0.04	0.06	0.16	0.06
Metabolites	orotidine	-0.01	0.08	-0.1	0.09
Metabolites	phenylacetylglutamine	0.3	0.05	0.07	0.06
Metabolites	4-hydroxyhippurate	-0.05	0.08	-0.23	0.09
Metabolites	5,6-dihydrouridine	-0.05	0.05	-0.19	0.08
Metabolites	3-(3-amino-3-carboxypropyl)uridine*	0.04	0.06	-0.22	0.08
Metabolites	1-arachidonylglycerol (20:4)	0.27	0.09	-0.1	0.08
Metabolites	5-methyluridine (ribothymidine)	-0.15	0.09	0.08	0.11
Metabolites	isovalerylglycine	0.09	0.07	0.28	0.11
Metabolites	7-methylguanine	-0.3	0.08	-0.06	0.07
Metabolites	1-stearoyl-GPE (18:0)	0.1	0.03	0.08	0.03

Data type	Variable Name	Female (Mean)	Female (SD)	Male (Mean)	Male (SD)
Metabolites	N1-Methyl-2-pyridone-5-carboxamide	0.03	0.06	0.21	0.07
Metabolites	gamma-glutamylisoleucine*	-0.02	0.06	0.08	0.06
Metabolites	oleoylcarnitine (C18:1)	0.32	0.03	0.11	0.04
Metabolites	2-methylbutyrylcarnitine (C5)	-0.18	0.07	-0.44	0.08
Metabolites	phenol sulfate	0.11	0.08	-0.04	0.11
Metabolites	1-palmitoleoyl-GPC (16:1)*	-0.11	0.05	-0.13	0.05
Metabolites	pyroglutamine*	-0.03	0.07	-0.51	0.08
Metabolites	2-hydroxy-3-methylvalerate	-0.16	0.06	-0.43	0.06
Metabolites	homostachydrine*	-0.3	0.09	-0.08	0.1
Metabolites	1-dihomo-linolenoyl-GPC (20:3n3 or 6)*	0.07	0.04	-0.08	0.06
Metabolites	2-oleoyl-GPC (18:1)*	0.03	0.04	-0.06	0.05
Metabolites	2-palmitoyl-GPC (16:0)*	-0.07	0.05	-0.04	0.06
Metabolites	2-myristoyl-GPC (14:0)*	0.01	0.05	0.15	0.06
Metabolites	1-palmitoyl-GPE (16:0)	0.22	0.04	0.17	0.06
Metabolites	1-oleoyl-GPE (18:1)	-0.1	0.04	-0.14	0.05
Metabolites	1-arachidonoyl-GPE (20:4n6)*	0.04	0.06	-0.14	0.06
Metabolites	N-acetylcitrulline	0.12	0.06	-0.14	0.07
Metabolites	2-hydroxypalmitate	0.01	0.05	0.21	0.06
Metabolites	docosapentaenoate (n6 DPA; 22:5n6)	-0.31	0.08	-0.16	0.08
Metabolites	isobutyrylglycine	0.27	0.06	-0.1	0.1
Metabolites	glutarylcarnitine (C5-DC)	0.14	0.1	-0.01	0.09
Metabolites	tiglylcarnitine (C5:1-DC)	0	0.07	-0.27	0.1
Metabolites	hydroquinone sulfate	-0.14	0.1	-0.15	0.09
Metabolites	catechol sulfate	0.11	0.06	-0.12	0.08
Metabolites	7-alpha-hydroxy-3-oxo-4-cholestenoate (7-Hoca)	0.14	0.08	-0.22	0.1
Metabolites	tetradecanedioate (C14-DC)	0.14	0.05	-0.02	0.06
Metabolites	hexadecanedioate (C16-DC)	0.18	0.05	0.16	0.05
Metabolites	glycerophosphoethanolamine	-0.05	0.05	0.03	0.05
Metabolites	ectoine	0.13	0.09	-0.17	0.1
Metabolites	2-oleoyl-GPE (18:1)*	-0.21	0.06	-0.17	0.07
Metabolites	2-palmitoyl-GPE (16:0)*	0.21	0.06	0.17	0.08
Metabolites	1-arachidonoyl-GPI (20:4)*	0.34	0.06	0.22	0.07
Metabolites	1-palmitoyl-GPI (16:0)	-0.02	0.05	0.27	0.07
Metabolites	glycolithocholate sulfate*	0.08	0.06	0.11	0.08
Metabolites	taurolithocholate 3-sulfate	-0.11	0.06	-0.03	0.08
Metabolites	deoxycarnitine	-0.38	0.08	0.13	0.1
Metabolites	1-ribosyl-imidazoleacetate*	0.24	0.08	0.14	0.07
Metabolites	2-arachidonoyl-GPE (20:4)*	0.25	0.07	-0.14	0.08
Metabolites	hexanoylglutamine	0.09	0.07	-0.31	0.08
Metabolites	N6-acetyllysine	-0.22	0.08	0.17	0.09
Metabolites	dihomo-linolenate (20:3n3 or n6)	-0.1	0.04	0.01	0.05
Metabolites	tryptophan betaine	-0.43	0.09	-0.21	0.09

Data type	Variable Name	Female (Mean)	Female (SD)	Male (Mean)	Male (SD)
Metabolites	4-vinylphenol sulfate	-0.07	0.07	-0.06	0.09
Metabolites	4-ethylphenylsulfate	-0.49	0.08	-0.16	0.1
Metabolites	thymol sulfate	0.07	0.09	0.16	0.12
Metabolites	1-oleoyl-GPI (18:1)	0.09	0.06	0.13	0.06
Metabolites	1-linoleoyl-GPI (18:2)*	0.08	0.06	0.07	0.07
Metabolites	dimethylarginine (SDMA + ADMA)	0.01	0.05	0.18	0.07
Metabolites	N-acetylserine	-0.19	0.07	0.02	0.07
Metabolites	1-stearoyl-2-oleoyl-GPE (18:0/18:1)	-0.2	0.05	-0.07	0.04
Metabolites	4-allylphenol sulfate	0.44	0.1	0.13	0.14
Metabolites	1-palmitoyl-2-linoleoyl-GPE (16:0/18:2)	-0.08	0.04	0.02	0.04
Metabolites	sphinganine-1-phosphate	-0.01	0.06	0.08	0.08
Metabolites	glycosyl-N-stearoyl-sphingosine (d18:1/18:0)	-0.17	0.08	0.74	0.08
Metabolites	succinylcarnitine (C4-DC)	0.69	0.09	0.2	0.09
Metabolites	bilirubin (E,E)*	0.09	0.06	0.16	0.07
Metabolites	bilirubin (E,Z or Z,E)*	0.04	0.05	-0.06	0.06
Metabolites	N-methylproline	0.13	0.06	0.35	0.07
Metabolites	5alpha-androstan-3beta,17beta-diol disulfate	0.15	0.05	0.31	0.08
Metabolites	5alpha-pregnan-3beta,20alpha-diol disulfate	-0.05	0.05	0.49	0.08
Metabolites	glycocholenate sulfate*	-0.19	0.06	-0.24	0.08
Metabolites	taurocholenate sulfate*	-0.17	0.06	-0.4	0.08
Metabolites	androstenediol (3beta,17beta) disulfate (1)	-0.02	0.06	0.06	0.06
Metabolites	pregnenediol disulfate (C21H34O8S2)*	-0.01	0.05	0.16	0.06
Metabolites	androstenediol (3beta,17beta) disulfate (2)	-0.24	0.05	-0.61	0.07
Metabolites	21-hydroxypregnenolone disulfate	-0.14	0.06	-0.25	0.06
Metabolites	5alpha-pregnan-3beta,20beta-diol monosulfate (1)	-0.06	0.04	-0.17	0.07
Metabolites	5alpha-pregnan-3beta,20alpha-diol monosulfate (2)	-0.04	0.04	0.08	0.06
Metabolites	5alpha-androstan-3alpha,17beta-diol monosulfate (1)	-0.04	0.06	-0.48	0.05
Metabolites	5alpha-androstan-3beta,17alpha-diol disulfate	0.16	0.1	0.56	0.09
Metabolites	5alpha-androstan-3beta,17beta-diol monosulfate (2)	0.11	0.08	-0.2	0.05
Metabolites	androstenediol (3alpha, 17alpha) monosulfate (2)	-0.52	0.06	-1.2	0.09
Metabolites	androstenediol (3alpha, 17alpha) monosulfate (3)	-0.39	0.06	-0.56	0.09
Metabolites	androstenediol (3beta,17beta) monosulfate (1)	-0.41	0.05	-0.71	0.06
Metabolites	androstenediol (3beta,17beta) monosulfate (2)	-0.11	0.07	-0.23	0.08
Metabolites	pregnenediol sulfate (C21H34O5S)*	-0.29	0.05	-0.42	0.05
Metabolites	2-hydroxyglutarate	-0.04	0.09	0.33	0.1

Data type	Variable Name	Female (Mean)	Female (SD)	Male (Mean)	Male (SD)
Metabolites	gamma-CEHC	-0.31	0.09	0.15	0.09
Metabolites	N-acetyl-beta-alanine	-0.38	0.07	-0.33	0.09
Metabolites	sphingomyelin (d18:1/18:1, d18:2/18:0)	0.24	0.05	-0.03	0.06
Metabolites	3-hydroxyhippurate	-0.16	0.08	0	0.09
Metabolites	16a-hydroxy DHEA 3-sulfate	-0.27	0.06	-0.29	0.06
Metabolites	pregnenolone sulfate	-0.23	0.06	-0.23	0.05
Metabolites	andro steroid monosulfate C19H28O6S (1)*	-0.19	0.07	-0.26	0.07
Metabolites	1-margaroyl-GPE (17:0)*	0.24	0.08	-0.12	0.08
Metabolites	1-pentadecanoyl-GPC (15:0)*	-0.17	0.04	-0.01	0.05
Metabolites	indole-3-carboxylate	-0.12	0.09	-0.45	0.1
Metabolites	13-HODE + 9-HODE	-0.16	0.08	-0.13	0.07
Metabolites	tridecenedioate (C13:1-DC)*	-0.24	0.06	0.03	0.07
Metabolites	4-cholesten-3-one	0.3	0.09	0.33	0.11
Metabolites	cinnamoylglycine	0.26	0.07	0.07	0.07
Metabolites	cis-4-decenoylcarnitine (C10:1)	-0.02	0.05	-0.03	0.05
Metabolites	(16 or 17)-methylstearate (a19:0 or i19:0)	-0.09	0.04	0.02	0.06
Metabolites	3-methylglutaconate	0.16	0.1	0.04	0.11
Metabolites	isoursodeoxycholate	-0.36	0.07	-0.19	0.08
Metabolites	hydantoin-5-propionate	-0.05	0.09	0.06	0.09
Metabolites	sulfate*	0	0.09	0.45	0.08
Metabolites	S-methylcysteine	0.16	0.05	0.13	0.07
Metabolites	androsterone glucuronide	-0.56	0.06	-0.61	0.08
Metabolites	argininate*	0	0.08	-0.02	0.1
Metabolites	2-oxoarginine*	0.03	0.07	-0.14	0.06
Metabolites	cis-4-decenoate (10:1n6)*	0.03	0.07	-0.11	0.07
Metabolites	1-(1-enyl-palmitoyl)-GPC (P-16:0)*	-0.15	0.03	-0.09	0.04
Metabolites	1-(1-enyl-oleoyl)-GPC (P-18:1)*	-0.21	0.06	-0.25	0.07
Metabolites	1-methyl-5-imidazoleacetate	-0.08	0.06	-0.16	0.07
Metabolites	glycoursodeoxycholate	-0.1	0.07	-0.19	0.07
Metabolites	S-methylcysteine sulfoxide	0.16	0.07	0.18	0.07
Metabolites	eicosanedioate (C20-DC)	-0.08	0.06	-0.24	0.06
Metabolites	docosadioate (C22-DC)	-0.08	0.08	-0.01	0.07
Metabolites	16-hydroxypalmitate	0.13	0.06	0.28	0.07
Metabolites	oleoyl-linoleoyl-glycerol (18:1/18:2) [1]	-0.09	0.04	-0.12	0.04
Metabolites	oleoyl-linoleoyl-glycerol (18:1/18:2) [2]	-0.04	0.03	-0.14	0.05
Metabolites	1-(1-enyl-palmitoyl)-GPE (P-16:0)*	0.04	0.04	-0.07	0.05
Metabolites	1-(1-enyl-stearoyl)-GPE (P-18:0)*	0.14	0.04	-0.03	0.04
Metabolites	N-oleoyltaurine	0.25	0.09	0.23	0.09
Metabolites	isoleucylglycine	0.32	0.08	-0.14	0.11
Metabolites	carboxyethyl-GABA	0.24	0.09	0.25	0.1
Metabolites	beta-citrylglutamate	0.3	0.09	-0.03	0.09
Metabolites	trimethylamine N-oxide	0.34	0.09	0.06	0.1
Metabolites	imidazole propionate	-0.1	0.1	0.1	0.11

Data type	Variable Name	Female (Mean)	Female (SD)	Male (Mean)	Male (SD)
Metabolites	pregnanediol-3-glucuronide	-0.21	0.04	0.16	0.06
Metabolites	phenylalanyltryptophan	0.08	0.09	0.12	0.11
Metabolites	N-palmitoylglycine	-0.42	0.06	-0.23	0.08
Metabolites	succinimide	0.13	0.09	0.07	0.09
Metabolites	2-stearoyl-GPE (18:0)*	0.37	0.07	-0.03	0.09
Metabolites	(R)-3-hydroxybutyrylcarnitine	-0.01	0.06	0.06	0.06
Metabolites	N-acetylcarnosine	-0.03	0.07	-0.46	0.09
Metabolites	margaroylcarnitine (C17)*	0.12	0.05	0.06	0.05
Metabolites	2-hydroxydecanoate	-0.14	0.1	0.07	0.1
Metabolites	4-methylcatechol sulfate	0.09	0.09	0.11	0.08
Metabolites	3-methyl catechol sulfate (1)	0.07	0.08	0.31	0.08
Metabolites	guaiacol sulfate	0.15	0.06	-0.1	0.07
Metabolites	2-piperidinone	-0.05	0.07	-0.1	0.08
Metabolites	N-acetyl-1-methylhistidine*	0.02	0.06	-0.05	0.06
Metabolites	2-aminophenol sulfate	-0.13	0.1	-0.09	0.08
Metabolites	sphingomyelin (d18:1/14:0, d16:1/16:0)*	0.26	0.05	0.31	0.05
Metabolites	6-oxopiperidine-2-carboxylate	0.01	0.08	0.07	0.1
Metabolites	S-allylcysteine	-0.22	0.07	-0.3	0.08
Metabolites	N-delta-acetylornithine	0.19	0.06	0.14	0.07
Metabolites	acisoga	-0.11	0.07	0.02	0.1
Metabolites	2-aminoheptanoate	-0.35	0.08	0.32	0.11
Metabolites	N2,N5-diacetylornithine	0.31	0.07	-0.02	0.07
Metabolites	1-linolenoyl-GPC (18:3)*	-0.15	0.05	-0.03	0.06
Metabolites	N-acetylalliin	-0.2	0.08	-0.39	0.09
Metabolites	1-(1-enyl-oleoyl)-GPE (P-18:1)*	0.02	0.03	-0.09	0.04
Metabolites	O-sulfo-L-tyrosine	0.2	0.08	0.11	0.1
Metabolites	etiocholanolone glucuronide	-0.73	0.07	-0.07	0.08
Metabolites	N-acetyltaurine	-0.21	0.09	0.01	0.1
Metabolites	1-linolenoyl-GPE (18:3)*	-0.23	0.07	-0.15	0.08
Metabolites	1-palmitoyl-GPG (16:0)*	-0.08	0.08	0.19	0.09
Metabolites	9-hydroxystearate	-0.31	0.06	-0.34	0.08
Metabolites	3-methylglutarylcarnitine (2)	0.08	0.08	0.54	0.09
Metabolites	sphingomyelin (d18:2/14:0, d18:1/14:1)*	0.2	0.06	0.02	0.05
Metabolites	sphingomyelin (d18:1/24:1, d18:2/24:0)*	-0.02	0.04	-0.01	0.05
Metabolites	octadecenedioylcarnitine (C18:1-DC)*	0.04	0.06	0.34	0.07
Metabolites	myristoleoylcarnitine (C14:1)*	0.11	0.05	0.09	0.05
Metabolites	N-formylphenylalanine	0.11	0.09	-0.2	0.11
Metabolites	cyclo(pro-val)	0.05	0.07	-0.13	0.08
Metabolites	4-hydroxychlorothalonil	0.09	0.09	-0.15	0.1
Metabolites	tyramine O-sulfate	-0.04	0.09	0.06	0.1
Metabolites	3-hydroxypyridine sulfate	0.16	0.06	0.31	0.06
Metabolites	arabonate/xylonate	0.53	0.08	0.38	0.08
Metabolites	methyl-4-hydroxybenzoate sulfate	0.17	0.09	0.33	0.12

Data type	Variable Name	Female (Mean)	Female (SD)	Male (Mean)	Male (SD)
Metabolites	vanillactate	0.26	0.08	0.19	0.08
Metabolites	p-cresol glucuronide*	0.29	0.08	0.28	0.08
Metabolites	6-hydroxyindole sulfate	0.01	0.05	-0.19	0.07
Metabolites	sphingomyelin (d18:1/20:0, d16:1/22:0)*	0.18	0.04	0.19	0.06
Metabolites	sphingomyelin (d18:1/20:2, d18:2/20:1, d16:1/22:2)*	-0.09	0.06	-0.17	0.07
Metabolites	behenoyl sphingomyelin (d18:1/22:0)*	0.06	0.05	-0.06	0.05
Metabolites	sphingomyelin (d18:1/22:2, d18:2/22:1, d16:1/24:2)*	-0.12	0.04	-0.22	0.05
Metabolites	lignoceroyl sphingomyelin (d18:1/24:0)	0.1	0.05	-0.3	0.06
Metabolites	dopamine 3-O-sulfate	0.1	0.08	0.23	0.1
Metabolites	3-hydroxyhexanoate	0.03	0.06	0.1	0.05
Metabolites	3beta-hydroxy-5-cholestenoate	-0.06	0.08	-0.38	0.08
Metabolites	C-glycosyltryptophan	0.23	0.08	0.03	0.08
Metabolites	arabitol/xylitol	0.28	0.06	0.45	0.09
Metabolites	N-acetylglucosamine/N-acetylgalactosamine	0.35	0.11	0.05	0.1
Metabolites	adipoylcarnitine (C6-DC)	-0.26	0.08	-0.08	0.09
Metabolites	nonanoylcarnitine (C9)	0	0.08	-0.2	0.09
Metabolites	glycochenodeoxycholate 3-sulfate	-0.07	0.08	-0.2	0.09
Metabolites	glycodeoxycholate 3-sulfate	-0.01	0.06	0.05	0.07
Metabolites	linoleoyl ethanolamide	-0.11	0.08	-0.04	0.08
Metabolites	1-(1-enyl-stearoyl)-2-oleoyl-GPE (P-18:0/18:1)	-0.02	0.06	-0.12	0.07
Metabolites	sphingomyelin (d18:1/17:0, d17:1/18:0, d19:1/16:0)	0.11	0.04	0.14	0.04
Metabolites	1-palmitoyl-2-stearoyl-GPC (16:0/18:0)	-0.08	0.06	-0.13	0.06
Metabolites	2-hydroxybutyrate/2-hydroxyisobutyrate	0.14	0.05	0.25	0.06
Metabolites	oleate/vaccenate (18:1)	0.06	0.03	-0.06	0.03
Metabolites	leucylphenylalanine/isoleucylphenylalanine	0.05	0.1	-0.29	0.1
Metabolites	tricosanoyl sphingomyelin (d18:1/23:0)*	0.18	0.04	-0.17	0.05
Metabolites	sphingomyelin (d18:2/23:0, d18:1/23:1, d17:1/24:1)*	0.23	0.04	0.07	0.05
Metabolites	sphingomyelin (d18:2/24:1, d18:1/24:2)*	-0.05	0.04	-0.16	0.05
Metabolites	1-stearoyl-2-linoleoyl-GPE (18:0/18:2)*	-0.12	0.03	-0.04	0.04
Metabolites	1-stearoyl-2-arachidonoyl-GPE (18:0/20:4)	-0.1	0.04	-0.05	0.05
Metabolites	1-palmitoyl-2-palmitoleoyl-GPC (16:0/16:1)*	0.19	0.04	-0.03	0.05
Metabolites	1-palmitoyl-2-arachidonoyl-GPE (16:0/20:4)*	-0.1	0.04	-0.09	0.05
Metabolites	1-palmitoyl-2-arachidonoyl-GPI (16:0/20:4)*	-0.07	0.06	-0.07	0.06
Metabolites	1-(1-enyl-palmitoyl)-2-arachidonoyl-GPE (P-16:0/20:4)*	0.04	0.05	-0.26	0.06
Metabolites	1-(1-enyl-palmitoyl)-2-oleoyl-GPE (P-16:0/18:1)*	-0.11	0.05	-0.24	0.05
Metabolites	sphingomyelin (d18:1/21:0, d17:1/22:0, d16:1/23:0)*	0.2	0.04	0.16	0.05

Data type	Variable Name	Female (Mean)	Female (SD)	Male (Mean)	Male (SD)
Metabolites	behenoyl dihydrosphingomyelin (d18:0/22:0)*	-0.17	0.05	-0.16	0.05
Metabolites	sphingomyelin (d18:0/18:0, d19:0/17:0)*	-0.16	0.04	-0.09	0.04
Metabolites	N-palmitoyl-sphinganine (d18:0/16:0)	-0.32	0.06	0.03	0.07
Metabolites	1-margaroyl-2-oleoyl-GPC (17:0/18:1)*	0.21	0.05	0.01	0.07
Metabolites	myristoyl dihydrosphingomyelin (d18:0/14:0)*	-0.2	0.05	0	0.05
Metabolites	1-stearoyl-2-dihomo-linolenoyl-GPC (18:0/20:3n3 or 6)*	0.16	0.04	0.01	0.05
Metabolites	palmitoyl-linoleoyl-glycerol (16:0/18:2) [1]*	-0.06	0.08	-0.13	0.06
Metabolites	palmitoyl-linoleoyl-glycerol (16:0/18:2) [2]*	-0.16	0.05	-0.08	0.05
Metabolites	1-palmitoyl-2-oleoyl-GPI (16:0/18:1)*	-0.42	0.05	-0.15	0.06
Metabolites	1-oleoyl-2-linoleoyl-GPE (18:1/18:2)*	-0.11	0.04	-0.19	0.06
Metabolites	1-arachidoyl-2-arachidonoyl-GPC (20:0/20:4)*	0.02	0.05	0.09	0.07
Metabolites	1-myristoyl-2-arachidonoyl-GPC (14:0/20:4)*	0.1	0.05	-0.04	0.05
Metabolites	1-oleoyl-2-dihomo-linolenoyl-GPC (18:1/20:3)*	0.06	0.07	-0.06	0.09
Metabolites	1-(1-enyl-palmitoyl)-2-palmitoleoyl-GPC (P-16:0/16:1)*	-0.16	0.06	-0.09	0.09
Metabolites	1-(1-enyl-palmitoyl)-2-myristoyl-GPC (P-16:0/14:0)*	-0.3	0.09	0.07	0.09
Metabolites	phosphatidylcholine (16:0/22:5n3, 18:1/20:4)*	0.07	0.09	0.11	0.1
Metabolites	1-stearoyl-2-oleoyl-GPI (18:0/18:1)*	-0.4	0.06	-0.06	0.07
Metabolites	1-stearoyl-2-dihomo-linolenoyl-GPI (18:0/20:3n3 or 6)*	0.16	0.05	0.14	0.06
Metabolites	1-palmitoyl-2-eicosapentaenoyl-GPE (16:0/20:5)*	0.27	0.08	0.08	0.09
Metabolites	1-stearoyl-2-dihomo-linolenoyl-GPE (18:0/20:3n3 or 6)*	-0.01	0.04	0.08	0.04
Metabolites	thioproline	0.32	0.09	0.13	0.08
Metabolites	palmitoylcholine	-0.02	0.04	-0.05	0.04
Metabolites	glycochenodeoxycholate glucuronide (1)	-0.06	0.07	-0.07	0.07
Metabolites	(S)-3-hydroxybutyrylcarnitine	0.18	0.08	0.27	0.07
Metabolites	glycosyl-N-palmitoyl-sphingosine (d18:1/16:0)	-0.3	0.08	-0.04	0.07
Metabolites	oleoylcholine	0.01	0.04	-0.07	0.04
Metabolites	arachidonoylcholine	0	0.04	-0.15	0.05
Metabolites	docosahexaenoylcholine	0.08	0.06	0.09	0.07
Metabolites	1-palmitoleoyl-2-linolenoyl-GPC (16:1/18:3)*	0.05	0.06	0.01	0.07
Metabolites	phosphatidylcholine (14:0/14:0, 16:0/12:0)	-0.1	0.05	0.02	0.07
Metabolites	phosphatidylcholine (15:0/18:1, 17:0/16:1, 16:0/17:1)*	0.16	0.04	-0.08	0.06
Metabolites	1-oleoyl-2-dihomo-linoleoyl-GPC (18:1/20:2)*	-0.12	0.09	-0.02	0.1
Metabolites	phosphatidylcholine (18:0/20:2, 20:0/18:2)*	0.1	0.05	0.34	0.06

Data type	Variable Name	Female (Mean)	Female (SD)	Male (Mean)	Male (SD)
Metabolites	1-(1-enyl-stearoyl)-2-dihomo-linolenoyl-GPE (P-18:0/20:3)*	0.36	0.06	0.12	0.07
Metabolites	hexadecadienoate (16:2n6)	0.12	0.06	0.04	0.06
Metabolites	palmitoleoylcarnitine (C16:1)*	0.3	0.04	0.42	0.04
Metabolites	4-hydroxyphenylacetylglutamine	0.14	0.1	0.3	0.09
Metabolites	2,3-dihydroxy-2-methylbutyrate	-0.1	0.1	-0.14	0.09
Metabolites	2'-O-methyluridine	0.34	0.11	0	0.12
Metabolites	gamma-glutamyl-alpha-lysine	0.09	0.06	-0.19	0.07
Metabolites	palmitoyl-oleoyl-glycerol (16:0/18:1) [1]*	-0.06	0.05	-0.02	0.05
Metabolites	palmitoyl-oleoyl-glycerol (16:0/18:1) [2]*	-0.11	0.04	-0.12	0.05
Metabolites	oleoyl-oleoyl-glycerol (18:1/18:1) [1]*	0.11	0.04	-0.06	0.04
Metabolites	oleoyl-oleoyl-glycerol (18:1/18:1) [2]*	0.11	0.04	-0.16	0.06
Metabolites	linoleoyl-arachidonoyl-glycerol (18:2/20:4) [1]*	0.1	0.05	-0.08	0.05
Metabolites	palmitoyl-arachidonoyl-glycerol (16:0/20:4) [2]*	-0.25	0.06	-0.12	0.08
Metabolites	linoleoyl-linolenoyl-glycerol (18:2/18:3) [2]*	0.07	0.07	-0.14	0.06
Metabolites	palmitoleoyl-linoleoyl-glycerol (16:1/18:2) [1]*	-0.03	0.05	-0.08	0.05
Metabolites	oleoyl-arachidonoyl-glycerol (18:1/20:4) [1]*	0.27	0.05	-0.05	0.06
Metabolites	oleoyl-arachidonoyl-glycerol (18:1/20:4) [2]*	0.27	0.05	-0.05	0.05
Metabolites	diacylglycerol (16:1/18:2 [2], 16:0/18:3 [1])*	-0.11	0.05	-0.03	0.05
Metabolites	stearoyl-arachidonoyl-glycerol (18:0/20:4) [1]*	0.11	0.06	-0.05	0.07
Metabolites	stearoyl-arachidonoyl-glycerol (18:0/20:4) [2]*	-0.09	0.08	-0.06	0.1
Metabolites	perfluorooctanesulfonate (PFOS)	0.78	0.09	0.91	0.09
Metabolites	1-stearoyl-2-docosapentaenoyl-GPE (18:0/22:5n6)*	-0.21	0.06	0.12	0.08
Metabolites	1-(1-enyl-stearoyl)-2-docosapentaenoyl-GPE (P-18:0/22:5n3)*	0.08	0.07	-0.02	0.08
Metabolites	palmitoyl-docosahexaenoyl-glycerol (16:0/22:6) [1]*	0.02	0.07	0.38	0.07
Metabolites	lactosyl-N-nervonoyl-sphingosine (d18:1/24:1)*	-0.03	0.07	-0.09	0.1
Metabolites	N-behenoyl-sphingadienine (d18:2/22:0)*	0.18	0.05	0.16	0.07
Metabolites	myristoyl-linoleoyl-glycerol (14:0/18:2) [1]*	0.14	0.06	-0.24	0.06
Metabolites	1-palmitoyl-2-(hydroxylinoleoyl)-GPC (16:0/18:2(OH))*	-0.37	0.08	0.2	0.08
Metabolites	ceramide (d16:1/24:1, d18:1/22:1)*	-0.08	0.06	0.18	0.07
Metabolites	ceramide (d18:1/14:0, d16:1/16:0)*	0.1	0.08	0.18	0.08
Metabolites	ceramide (d18:1/17:0, d17:1/18:0)*	-0.07	0.05	-0.01	0.07
Metabolites	ceramide (d18:2/24:1, d18:1/24:2)*	-0.03	0.04	0.09	0.05
Metabolites	glycosyl ceramide (d18:2/24:1, d18:1/24:2)*	-0.28	0.05	0.01	0.06
Metabolites	ceramide (d18:1/20:0, d16:1/22:0, d20:1/18:0)*	0.13	0.04	0.3	0.04
Metabolites	stearoylcholine*	-0.1	0.04	-0.08	0.04

Data type	Variable Name	Female (Mean)	Female (SD)	Male (Mean)	Male (SD)
Metabolites	sphingomyelin (d18:0/20:0, d16:0/22:0)*	-0.16	0.05	-0.13	0.05
Metabolites	sphingomyelin (d18:1/19:0, d19:1/18:0)*	0.1	0.04	0.26	0.04
Metabolites	sphingomyelin (d18:2/21:0, d16:2/23:0)*	0.3	0.05	0.18	0.04
Metabolites	sphingomyelin (d18:2/23:1)*	0.03	0.04	-0.08	0.05
Metabolites	sphingomyelin (d18:1/25:0, d19:0/24:1, d20:1/23:0, d19:1/24:0)*	-0.06	0.06	-0.16	0.07
Metabolites	sphingomyelin (d17:2/16:0, d18:2/15:0)*	0.3	0.05	0.14	0.06
Metabolites	behenoylcarnitine (C22)*	0.13	0.07	0.09	0.06
Metabolites	arachidoylcarnitine (C20)*	0.71	0.07	0.52	0.06
Metabolites	cerotoylcarnitine (C26)*	0.13	0.06	-0.08	0.07
Metabolites	ximenoylcarnitine (C26:1)*	0.09	0.06	-0.03	0.08
Metabolites	arachidonoylcarnitine (C20:4)	0.09	0.06	-0.3	0.06
Metabolites	eicosenoylcarnitine (C20:1)*	0.56	0.06	0.47	0.05
Metabolites	dihomo-linoleoylcarnitine (C20:2)*	0.11	0.05	0.08	0.05
Metabolites	dihomo-linolenoylcarnitine (C20:3n3 or 6)*	-0.19	0.07	-0.15	0.07
Metabolites	docosahexaenoylcarnitine (C22:6)*	0.07	0.09	0.4	0.08
Metabolites	nervonoylcarnitine (C24:1)*	0.12	0.06	0.13	0.07
Metabolites	N,N,N-trimethyl-5-aminovalerate	0.48	0.08	0.03	0.09
Metabolites	cortolone glucuronide (1)	0.35	0.09	0.28	0.08
Metabolites	(N(1) + N(8))-acetylspermidine	-0.13	0.08	-0.16	0.1
Metabolites	5-dodecenoylcarnitine (C12:1)	-0.27	0.06	-0.26	0.07
Metabolites	trans-2-hexenoylglycine	0.39	0.08	-0.12	0.09
Metabolites	dodecenedioate (C12:1-DC)*	0.14	0.07	0.06	0.07
Metabolites	hexadecenedioate (C16:1-DC)*	0.07	0.05	-0.21	0.06
Metabolites	octadecenedioate (C18:1-DC)*	0.04	0.05	-0.05	0.06
Metabolites	octadecadienedioate (C18:2-DC)*	-0.18	0.08	0.02	0.09
Metabolites	N-acetyl-2-aminooctanoate*	-0.13	0.06	-0.16	0.07
Metabolites	hydroxyasparagine**	0.32	0.05	0.63	0.07
Metabolites	perfluorooctanoate (PFOA)	0.93	0.08	-0.06	0.12
Metabolites	glyco-beta-muricholate**	-0.37	0.08	-0.5	0.1
Metabolites	3-formylindole	-0.36	0.07	-0.28	0.1
Metabolites	pyroglutamylleucine*	-0.43	0.09	0.05	0.08
Metabolites	gamma-glutamylcitrulline*	-0.07	0.07	0.02	0.07
Metabolites	glycine conjugate of C10H12O2*	-0.09	0.09	-0.5	0.08
Metabolites	glycine conjugate of C10H14O2 (1)*	0.19	0.07	-0.04	0.07
Metabolites	tetradecadienoate (14:2)*	0.04	0.05	-0.07	0.05
Metabolites	3-amino-2-piperidone	0.49	0.08	0.4	0.09
Metabolites	N,N-dimethylalanine	-0.28	0.08	-0.26	0.13
Metabolites	6-bromotryptophan	-0.25	0.08	-0.36	0.1
Metabolites	1-carboxyethylphenylalanine	0.18	0.05	0.25	0.05
Metabolites	1-carboxyethylvaline	0.53	0.07	0.33	0.08
Metabolites	1-carboxyethylleucine	0.34	0.08	0.02	0.06
Metabolites	N-acetyl-isoputreanine	0.25	0.07	0.17	0.09

Data type	Variable Name	Female (Mean)	Female (SD)	Male (Mean)	Male (SD)
Metabolites	glucuronide of piperine metabolite C17H21NO3 (3)*	-0.11	0.05	0.02	0.06
Metabolites	glucuronide of piperine metabolite C17H21NO3 (4)*	0.1	0.05	-0.03	0.05
Metabolites	glucuronide of piperine metabolite C17H21NO3 (5)*	-0.01	0.06	0.02	0.06
Metabolites	sulfate of piperine metabolite C16H19NO3 (2)*	-0.07	0.04	0.18	0.06
Metabolites	sulfate of piperine metabolite C16H19NO3 (3)*	-0.03	0.05	0.06	0.06
Metabolites	sulfate of piperine metabolite C18H21NO3 (1)*	-0.18	0.07	-0.12	0.09
Metabolites	2-naphthol sulfate	-0.19	0.09	-0.12	0.11
Metabolites	4-ethylcatechol sulfate	-0.22	0.09	0.04	0.08
Metabolites	lithocholate sulfate (1)	0.3	0.1	0.24	0.12
Metabolites	2,3-dihydroxy-5-methylthio-4-pentenoate (DMTPA)*	0.24	0.04	0.41	0.05
Metabolites	branched-chain fatty acid 18:0 (2)**	0.06	0.09	-0.18	0.1
Metabolites	tetradecadienedioate (C14:2-DC)*	-0.15	0.07	-0.23	0.09
Metabolites	pregnenetriol disulfate*	0.01	0.06	-0.15	0.07
Metabolites	hydroxy-N6,N6,N6-trimethyllysine*	0.11	0.07	-0.01	0.09
Metabolites	metabolonic lactone sulfate	-0.01	0.08	0.12	0.08
Metabolites	trans-4-hydroxyproline	-0.67	0.09	-0.27	0.08
Metabolites	allantoin	-0.37	0.08	-0.34	0.09
Metabolites	xanthine	0.27	0.08	-0.11	0.09
Metabolites	5-oxoproline	0.29	0.08	0.24	0.09
Metabolites	picolinate	-0.03	0.09	0.03	0.1
Metabolites	sarcosine	-0.13	0.05	-0.01	0.08
Metabolites	pipecolate	-0.2	0.09	-0.24	0.1
Metabolites	phosphoethanolamine	-0.25	0.04	-0.2	0.04
Metabolites	N-acetylleucine	-0.05	0.06	0.14	0.07
Metabolites	N-acetylmethionine	-0.54	0.07	0.11	0.06
Metabolites	N-acetylvaline	0.18	0.07	0.34	0.06
Metabolites	erucate (22:1n9)	-0.02	0.07	0.15	0.07
Metabolites	bilirubin (Z,Z)	-0.02	0.05	-0.04	0.07
Metabolites	thyroxine	0.05	0.11	-0.22	0.09
Metabolites	gamma-glutamyltyrosine	0.45	0.06	0.41	0.07
Metabolites	3-hydroxyisobutyrate	-0.38	0.08	-0.24	0.08
Metabolites	N-acetylalanine	-0.05	0.05	0.01	0.06
Metabolites	vanillylmandelate (VMA)	1.15	0.08	0.99	0.09
Metabolites	4-acetamidobutanoate	0.53	0.07	0.19	0.07
Metabolites	3-aminoisobutyrate	-0.39	0.09	0.3	0.08
Metabolites	3-hydroxy-3-methylglutarate	0.11	0.09	0.09	0.1
Metabolites	citrate	0.51	0.07	0.41	0.07
Metabolites	2-aminobutyrate	0.08	0.05	0.15	0.08

Data type	Variable Name	Female (Mean)	Female (SD)	Male (Mean)	Male (SD)
Metabolites	urate	-0.28	0.06	-0.69	0.1
Metabolites	ursodeoxycholate	-0.01	0.06	-0.19	0.07
Metabolites	oleoyl ethanolamide	0.07	0.06	-0.02	0.07
Metabolites	gamma-glutamylglutamine	-0.28	0.06	0.08	0.07
Metabolites	4-hydroxyphenylpyruvate	0.12	0.07	0.08	0.11
Metabolites	N-acetylneuraminate	-0.07	0.1	0.12	0.07
Metabolites	creatine	0.25	0.06	0.24	0.07
Metabolites	cys-gly, oxidized	-0.54	0.07	-0.54	0.08
Metabolites	dihomo-linoleate (20:2n6)	-0.12	0.03	-0.02	0.04
Metabolites	gamma-glutamylhistidine	-0.01	0.08	-0.35	0.1
Metabolites	2-hydroxystearate	0.15	0.06	0.21	0.06
Metabolites	N1-methyladenosine	0.27	0.07	0.13	0.08
Metabolites	glycerol	-0.04	0.07	0.09	0.09
Metabolites	choline	-0.27	0.07	0.47	0.07
Metabolites	gamma-glutamylleucine	0	0.06	0.02	0.07
Metabolites	3-phosphoglycerate	0.1	0.08	0.18	0.08
Metabolites	3-methoxytyrosine	-0.36	0.08	-0.32	0.07
Metabolites	cholate	0.33	0.09	0.46	0.1
Metabolites	beta-hydroxyisovalerate	-0.29	0.09	-0.47	0.08
Metabolites	palmitoyl ethanolamide	-0.17	0.07	-0.16	0.07
Metabolites	N-palmitoyl-sphingosine (d18:1/16:0)	0.09	0.06	-0.11	0.06
Metabolites	1-palmitoyl-2-oleoyl-GPE (16:0/18:1)	-0.09	0.03	0.01	0.05
Metabolites	1-palmitoyl-2-linoleoyl-GPI (16:0/18:2)	-0.38	0.06	-0.22	0.06
Metabolites	stearoyl sphingomyelin (d18:1/18:0)	0.03	0.05	0.05	0.05
Metabolites	1-palmitoyl-2-oleoyl-GPC (16:0/18:1)	0.25	0.04	0.01	0.06
Metabolites	N-stearoyl-sphingosine (d18:1/18:0)*	-0.09	0.04	0.09	0.04
Metabolites	5,6-dihydrothymine	0.22	0.08	0.09	0.11
Metabolites	glycochenodeoxycholate	0.04	0.06	-0.16	0.06
Metabolites	taurochenodeoxycholate	0.01	0.05	-0.08	0.06
Metabolites	taurocholate	-0.03	0.07	0.08	0.08
Metabolites	taurodeoxycholate	-0.1	0.06	0.05	0.07
Metabolites	hypoxanthine	-0.03	0.08	-0.34	0.09
Metabolites	9,10-DiHOME	-0.33	0.09	-0.08	0.09
Metabolites	linoleate (18:2n6)	-0.02	0.03	-0.09	0.04
Metabolites	laurate (12:0)	0.03	0.06	-0.16	0.06
Metabolites	quinolinate	0.03	0.09	0.09	0.08
Metabolites	N6,N6,N6-trimethyllysine	-0.08	0.08	-0.09	0.08
Metabolites	N-acetylputrescine	-0.05	0.07	0.01	0.08
Metabolites	N-formylmethionine	0.36	0.06	0.26	0.06
Metabolites	S-adenosylhomocysteine (SAH)	0.23	0.07	-0.16	0.11
Metabolites	methylsuccinate	0.22	0.1	-0.07	0.09
Metabolites	ethylmalonate	-0.05	0.06	-0.03	0.06
Metabolites	adenosine 5'-monophosphate (AMP)	0.03	0.06	-0.21	0.06

Data type	Variable Name	Female (Mean)	Female (SD)	Male (Mean)	Male (SD)
Metabolites	5-methylthioadenosine (MTA)	-0.24	0.07	-0.12	0.08
Metabolites	arginine	-0.15	0.08	0.13	0.11
Metabolites	aspartate	-0.29	0.07	0.12	0.07
Metabolites	3-(4-hydroxyphenyl)lactate	0.06	0.06	0.18	0.06
Metabolites	phenylpyruvate	-0.54	0.08	-0.48	0.1
Metabolites	beta-alanine	-0.01	0.09	0.07	0.1
Metabolites	biliverdin	0.11	0.05	-0.04	0.06
Metabolites	succinate	0.22	0.09	-0.03	0.1
Metabolites	3-hydroxybutyrate (BHBA)	0.1	0.05	-0.06	0.05
Metabolites	cholesterol	0.25	0.09	0.12	0.11
Metabolites	choline phosphate	-0.33	0.07	-0.48	0.07
Metabolites	cortisone	0.08	0.08	0.09	0.09
Metabolites	creatinine	-0.59	0.06	-0.33	0.07
Metabolites	cysteinylglycine	-0.45	0.07	-0.69	0.08
Metabolites	cystine	0.73	0.08	0.33	0.08
Metabolites	sphingosine	-0.05	0.05	0.01	0.05
Metabolites	deoxycholate	-0.12	0.09	-0.01	0.09
Metabolites	sphinganine	0.08	0.05	0.18	0.05
Metabolites	fumarate	-0.27	0.06	0.04	0.07
Metabolites	gamma-glutamylglutamate	0.21	0.07	-0.06	0.09
Metabolites	gluconate	0.16	0.09	-0.34	0.07
Metabolites	glutarate (C5-DC)	-0.11	0.06	-0.24	0.08
Metabolites	glycine	-0.09	0.04	-0.17	0.07
Metabolites	glycocholate	0	0.04	-0.16	0.05
Metabolites	guanidinoacetate	0.14	0.07	0.02	0.08
Metabolites	S-1-pyrroline-5-carboxylate	0.28	0.09	-0.11	0.09
Metabolites	histidine	0.06	0.07	-0.15	0.08
Metabolites	cortisol	0.11	0.07	0.31	0.08
Metabolites	hypotaurine	0.23	0.09	0.34	0.09
Metabolites	inosine	-0.11	0.07	-0.26	0.07
Metabolites	myo-inositol	0.13	0.1	0.32	0.08
Metabolites	isoleucine	-0.3	0.05	-0.06	0.05
Metabolites	citrulline	0.36	0.08	0.47	0.1
Metabolites	leucine	-0.07	0.05	0.04	0.05
Metabolites	lysine	0.23	0.06	-0.02	0.08
Metabolites	malate	-0.05	0.06	-0.04	0.06
Metabolites	methionine	0.1	0.06	-0.12	0.06
Metabolites	palmitate (16:0)	-0.04	0.03	-0.01	0.03
Metabolites	nicotinamide	-0.32	0.05	0.01	0.07
Metabolites	stearate (18:0)	0.08	0.04	0	0.05
Metabolites	ornithine	0.46	0.05	0.29	0.08
Metabolites	orotate	-0.2	0.09	-0.05	0.11
Metabolites	palmitoleate (16:1n7)	-0.01	0.04	0	0.04

Data type	Variable Name	Female (Mean)	Female (SD)	Male (Mean)	Male (SD)
Metabolites	phenylalanine	0.24	0.06	-0.06	0.07
Metabolites	phosphate	-0.24	0.08	-0.29	0.08
Metabolites	proline	-0.21	0.08	-0.23	0.09
Metabolites	lactate	-0.01	0.07	0.02	0.07
Metabolites	pyridoxal	0.04	0.09	-0.08	0.1
Metabolites	retinol (Vitamin A)	0.11	0.07	0.07	0.08
Metabolites	spermidine	0.16	0.09	0.06	0.08
Metabolites	serine	-0.55	0.06	-0.22	0.07
Metabolites	serotonin	-0.59	0.09	0.08	0.08
Metabolites	taurine	0.07	0.05	-0.05	0.04
Metabolites	myristate (14:0)	-0.04	0.03	-0.12	0.04
Metabolites	urea	0.41	0.07	0.25	0.08
Metabolites	uridine	-0.07	0.08	0.1	0.07
Metabolites	trans-urocanate	-0.23	0.07	-0.05	0.08
Metabolites	1-methylnicotinamide	0.07	0.08	0.4	0.1
Metabolites	glutamate	0	0.06	0.1	0.06
Metabolites	glutamine	0.33	0.07	0.23	0.1
Metabolites	threonine	-0.27	0.07	0.2	0.06
Metabolites	tryptophan	-0.19	0.05	-0.29	0.06
Metabolites	valine	0.09	0.05	0.1	0.06
Metabolites	glucose	0.34	0.07	0.39	0.08
Metabolites	12,13-DiHOME	0.05	0.09	-0.18	0.1
Metabolites	alpha-ketobutyrate	-0.17	0.07	0.22	0.07
Metabolites	adenosine	0.25	0.09	-0.38	0.11
Metabolites	betaine	-0.23	0.07	0.23	0.09
Metabolites	cysteine	0.18	0.07	-0.26	0.06
Metabolites	mannose	0.05	0.07	0.34	0.08
Metabolites	dimethylglycine	-0.06	0.09	-0.12	0.11
Metabolites	alanine	0.06	0.07	0.31	0.07
Metabolites	tyrosine	0.09	0.06	0.51	0.08
Metabolites	pseudouridine	0.03	0.05	0.05	0.06
Metabolites	pyruvate	-0.16	0.05	0.05	0.07
Metabolites	uracil	0.09	0.09	-0.42	0.09
Metabolites	caffeine	0.06	0.06	-0.05	0.07
Metabolites	fructose	-0.12	0.09	-0.18	0.1
Metabolites	adenine	-0.09	0.08	-0.01	0.08
Metabolites	caprate (10:0)	0.12	0.05	-0.02	0.05
Metabolites	margarate (17:0)	0.07	0.03	-0.08	0.04
Metabolites	nonadecanoate (19:0)	0.07	0.04	-0.02	0.04
Metabolites	arachidate (20:0)	-0.05	0.07	-0.11	0.05
Metabolites	maltose	0.05	0.06	-0.18	0.07
Metabolites	asparagine	0	0.07	-0.15	0.08
Metabolites	N-stearoyl-sphinganine (d18:0/18:0)*	-0.32	0.06	0.06	0.05

Data type	Variable Name	Female (Mean)	Female (SD)	Male (Mean)	Male (SD)
Metabolites	alpha-ketoglutarate	0.08	0.08	0.16	0.07
Metabolites	caprylate (8:0)	-0.06	0.09	-0.02	0.11
Metabolites	kynurenate	-0.09	0.08	0.07	0.1
Metabolites	pentadecanoate (15:0)	0.01	0.04	-0.04	0.04
Metabolites	V1	-0.49	0.07	-0.5	0.08
Metabolites	V2	-0.12	0.08	-0.4	0.09
Metabolites	V3	-0.26	0.06	-0.31	0.09
Metabolites	V4	0	0.08	-0.3	0.1
Metabolites	V5	0.01	0.09	-0.12	0.1
Metabolites	V6	-0.26	0.1	-0.13	0.12
Metabolites	V7	0.24	0.08	0.47	0.11

The proteins are labeled with the Olink panel and the corresponding Uniprot ID as reported by Olink (formatted as <Olink panel>_<Uniprot>)

Supplemental Table 5 – Dropped values and their reason for exclusion

Modality	Vendor	Measurement	Reason for exclusion
Clinical Labs	Labcorp	ARSENIC, BLOOD	Missing values > 20%
Clinical Labs	Labcorp	leptin	Missing values > 20%
Clinical Labs	Labcorp	zinc_plasma_or_serum	Missing values > 20%
Clinical Labs	Labcorp	LARGE LDL PARTICLE NUMBER	Missing values > 20%
Clinical Labs	Labcorp	HDL PARTICLE PERCENTILE	Missing values > 20%
Clinical Labs	Labcorp	LARGE MED VLDL PARTICLE NUMBER	Missing values > 20%
Clinical Labs	Labcorp	IL-6	Missing values > 20%
Clinical Labs	Labcorp	IDL PARTICLE NUMBER	Missing values > 20%
Clinical Labs	Labcorp	PAI-1 ANTIGEN, QNT	Missing values > 20%
Clinical Labs	Labcorp	NEUTROPHIL, SEGS	Missing values > 20%
Clinical Labs	Labcorp	HDL LARGE	Missing values > 20%
Clinical Labs	Labcorp	LACTIC DEHYDROGENASE	Missing values > 20%
Clinical Labs	Labcorp	ZINC	Missing values > 20%
Clinical Labs	Labcorp	EPA/AA	Missing values > 20%
Clinical Labs	Labcorp	PLATELET COUNT	Missing values > 20%
Clinical Labs	Labcorp	IL-8	Missing values > 20%
Clinical Labs	Labcorp	SUPEROX DISMUT SOD	Missing values > 20%
Clinical Labs	Labcorp	HDL SIZE PERCENTILE	Missing values > 20%
Clinical Labs	Labcorp	LP_PLA2	Missing values > 20%
Clinical Labs	Labcorp	MANGANESE, SERUM	Missing values > 20%
Clinical Labs	Labcorp	MEDIUM HDL PARTICLE NUMBER	Missing values > 20%
Clinical Labs	Labcorp	MEDIUM VLDL PARTICLE NUMBER	Missing values > 20%
Clinical Labs	Labcorp	LARGE VLDL PARTICLE PERCENTILE	Missing values > 20%
Clinical Labs	Labcorp	NEUTROPHILS ABSOLUTE	Missing values > 20%
Clinical Labs	Labcorp	ANTIOXID CAP, TOTAL	Missing values > 20%
Clinical Labs	Labcorp	PHOSPHORUS INORGANIC	Missing values > 20%
Clinical Labs	Labcorp	VLDL SIZE PERCENTILE	Missing values > 20%
Clinical Labs	Labcorp	LPIR SCORE PERCENTILE	Missing values > 20%
Clinical Labs	Labcorp	SMALL VLDL PARTICLE NUMBER	Missing values > 20%
Clinical Labs	Labcorp	BILIRUBIN, INDIRECT	Missing values > 20%
Clinical Labs	Labcorp	LDL SIZE PERCENTILE	Missing values > 20%
Clinical Labs	Labcorp	LDL PEAK SIZE	Missing values > 20%
Clinical Labs	Labcorp	PROTEIN	Missing values > 20%
Clinical Labs	Labcorp	LARGE HDL PARTICLE PERCENTILE	Missing values > 20%
Clinical Labs	Labcorp	GLUTATHIONE, TOTAL	Missing values > 20%
Clinical Labs	Labcorp	SMALL LDL PARTICLE PERCENTILE	Missing values > 20%
Clinical Labs	Labcorp	LARGE MED HDL PARTICLE NUMBER	Missing values > 20%
Clinical Labs	Labcorp	VLDL PARTICLE NUMBER	Missing values > 20%
Clinical Labs	Labcorp	VLDL LDL PARTICLE NUMBER	Missing values > 20%
Clinical Labs	Labcorp	COPPER, RBC	Missing values > 20%
Clinical Labs	Labcorp	VITAMIN D3, 25-OH	Missing values > 20%
Clinical Labs	Labcorp	ZINC, RBC	Missing values > 20%

Modality	Vendor	Measurement	Reason for exclusion
Clinical Labs	Labcorp	SELENIUM, SERUM	Missing values > 20%
Clinical Labs	Labcorp	QUICKI	Missing values > 20%
Clinical Labs	Labcorp	METHYLMALONIC ACID	Missing values > 20%
Clinical Labs	Labcorp	TNF-ALPHA	Missing values > 20%
Clinical Labs	Labcorp	VLDL TRIGLYCERIDES	Missing values > 20%
Clinical Labs	Labcorp	FOLIC ACID, SERUM	Missing values > 20%
Clinical Labs	Labcorp	PFFA	Missing values > 20%
Clinical Labs	Labcorp	VITAMIN D2, 25-OH	Missing values > 20%
Clinical Labs	Labcorp	PROT AND PFFA CALC	Missing values > 20%
Clinical Labs	Labcorp	MPV	Missing values > 20%
Clinical Labs	Labcorp	BILIRUBIN, DIRECT	Missing values > 20%
Clinical Labs	Labcorp	SMALL HDL PARTICLE NUMBER	Missing values > 20%
Clinical Labs	Labcorp	LDL MEDIUM	Missing values > 20%
Clinical Labs	Labcorp	LEAD, BLOOD	Missing values > 20%
Clinical Labs	Labcorp	VITAMIN D, 25-OH TOT	Supplementation
Clinical Labs	Labcorp	IMMATURE GRANULOCYTES ABSOLUTE	Highly skewed distribution
Clinical Labs	Labcorp	OMEGA_3_TOTAL	Supplementation
Clinical Labs	Labcorp	OMEGA_6_TOTAL	Supplementation
Clinical Labs	Labcorp	POTASSIUM	Supplementation
Clinical Labs	Labcorp	FERRITIN	Supplementation
Clinical Labs	Labcorp	DHA	Supplementation
Clinical Labs	Labcorp	GFR, MDRD	Age derived
Clinical Labs	Labcorp	MAGNESIUM, SERUM	Supplementation
Clinical Labs	Labcorp	CALCIUM	Supplementation
Clinical Labs	Labcorp	IMMATURE GRANULOCYTES	Highly skewed distribution
Clinical Labs	Labcorp	LINOLEIC_ACID	Supplementation
Clinical Labs	Labcorp	DPA	Supplementation
Clinical Labs	Labcorp	BASOPHILS	Highly skewed distribution
Clinical Labs	Labcorp	OMEGA-3 INDEX	Supplementation
Clinical Labs	Labcorp	BASOPHILS ABSOLUTE	Highly skewed distribution
Clinical Labs	Labcorp	OMEGA-6/OMEGA-3 RATIO	Supplementation
Clinical Labs	Labcorp	GFR, MDRD, AFRICAN AM	Age derived
Clinical Labs	Labcorp	ARACHIDONIC ACID	Supplementation
Clinical Labs	Labcorp	EPA	Supplementation
Clinical Labs	Quest	leptin	Missing values > 20%
Clinical Labs	Quest	zinc_plasma_or_serum	Missing values > 20%
Clinical Labs	Quest	LARGE LDL PARTICLE NUMBER	Missing values > 20%
Clinical Labs	Quest	HDL PARTICLE PERCENTILE	Missing values > 20%
Clinical Labs	Quest	LP_PLA2	Missing values > 20%
Clinical Labs	Quest	MAGNESIUM, SERUM	Missing values > 20%
Clinical Labs	Quest	HDL PARTICLE NUMBER	Missing values > 20%
Clinical Labs	Quest	DPA	Missing values > 20%
Clinical Labs	Quest	IDL PARTICLE NUMBER	Missing values > 20%

Modality	Vendor	Measurement	Reason for exclusion
Clinical Labs	Quest	HDL SIZE PERCENTILE	Missing values > 20%
Clinical Labs	Quest	LINOLEIC_ACID	Missing values > 20%
Clinical Labs	Quest	MEDIUM HDL PARTICLE NUMBER	Missing values > 20%
Clinical Labs	Quest	MEDIUM VLDL PARTICLE NUMBER	Missing values > 20%
Clinical Labs	Quest	LARGE VLDL PARTICLE PERCENTILE	Missing values > 20%
Clinical Labs	Quest	SMALL HDL PARTICLE NUMBER	Missing values > 20%
Clinical Labs	Quest	VLDL SIZE PERCENTILE	Missing values > 20%
Clinical Labs	Quest	LPIR SCORE PERCENTILE	Missing values > 20%
Clinical Labs	Quest	SMALL VLDL PARTICLE NUMBER	Missing values > 20%
Clinical Labs	Quest	VLDL PARTICLE NUMBER	Missing values > 20%
Clinical Labs	Quest	PROTEIN	Missing values > 20%
Clinical Labs	Quest	GFR, MDRD, AFRICAN AM	Missing values > 20%
Clinical Labs	Quest	LARGE HDL PARTICLE PERCENTILE	Missing values > 20%
Clinical Labs	Quest	SMALL LDL PARTICLE PERCENTILE	Missing values > 20%
Clinical Labs	Quest	LARGE MED HDL PARTICLE NUMBER	Missing values > 20%
Clinical Labs	Quest	LDL SIZE PERCENTILE	Missing values > 20%
Clinical Labs	Quest	VLDL LDL PARTICLE NUMBER	Missing values > 20%
Clinical Labs	Quest	IMMATURE GRANULOCYTES ABSOLUTE	Missing values > 20%
Clinical Labs	Quest	VLDL TRIGLYCERIDES	Missing values > 20%
Clinical Labs	Quest	IMMATURE GRANULOCYTES	Missing values > 20%
Clinical Labs	Quest	LPIR_SCORE	Missing values > 20%
Clinical Labs	Quest	OMEGA_3_TOTAL	Missing values > 20%
Clinical Labs	Quest	LDL_SIZE	Missing values > 20%
Clinical Labs	Quest	PFFA	Missing values > 20%
Clinical Labs	Quest	LARGE MED VLDL PARTICLE NUMBER	Missing values > 20%
Clinical Labs	Quest	PROT AND PFFA CALC	Missing values > 20%
Clinical Labs	Quest	OMEGA_6_TOTAL	Missing values > 20%
Clinical Labs	Quest	OXLDL	Missing values > 20%
Clinical Labs	Quest	IL-6	Highly skewed distribution
Clinical Labs	Quest	FERRITIN	Supplementation
Clinical Labs	Quest	GFR, MDRD	Age derived
Clinical Labs	Quest	CALCIUM	Supplementation
Clinical Labs	Quest	ZINC	Supplementation
Clinical Labs	Quest	EPA/AA	Supplementation
Clinical Labs	Quest	COPPER, RBC	Supplementation
Clinical Labs	Quest	BASOPHILS ABSOLUTE	Highly skewed distribution
Clinical Labs	Quest	OMEGA-6/OMEGA-3 RATIO	Supplementation
Clinical Labs	Quest	SUPEROX DISMUT SOD	Supplementation
Clinical Labs	Quest	ARACHIDONIC ACID	Supplementation
Clinical Labs	Quest	EPA	Supplementation
Clinical Labs	Quest	MANGANESE, SERUM	Supplementation
Clinical Labs	Quest	ANTIOXID CAP, TOTAL	Supplementation
Clinical Labs	Quest	POTASSIUM	Supplementation

Modality	Vendor	Measurement	Reason for exclusion
Clinical Labs	Quest	OMEGA-3 INDEX	Supplementation
Clinical Labs	Quest	DHA	Supplementation
Clinical Labs	Quest	METHYLMALONIC ACID	Supplementation
Clinical Labs	Quest	VITAMIN D3, 25-OH	Supplementation
Clinical Labs	Quest	ZINC, RBC	Supplementation
Clinical Labs	Quest	SELENIUM, SERUM	Supplementation
Clinical Labs	Quest	BASOPHILS	Highly skewed distribution
Clinical Labs	Quest	VITAMIN D, 25-OH TOT	Supplementation
Clinical Labs	Quest	FOLIC ACID, SERUM	Supplementation
Clinical Labs	Quest	VITAMIN D2, 25-OH	Supplementation
Proteomics	Olink	INF_P15018(LIF)	Missing values > 20%
Proteomics	Olink	INF_Q13261(IL15RA)	Missing values > 20%
Proteomics	Olink	INF_Q9UHF4(IL20RA)	Missing values > 20%
Proteomics	Olink	INF_Q8N6P7(IL22RA1)	Missing values > 20%
Proteomics	Olink	INF_Q16552(IL17A)	Missing values > 20%
Proteomics	Olink	CVD3_NT_pro_BNP(NT_pro_BNP)	Missing values > 20%
Proteomics	Olink	INF_Q5T4W7(ARTN)	Missing values > 20%
Proteomics	Olink	INF_P01579(IFNG)	Missing values > 20%
Proteomics	Olink	INF_P80098(CCL7)	Missing values > 20%
Proteomics	Olink	CVD2_P35218(CA5A)	Missing values > 20%
Proteomics	Olink	INF_P01375(TNF)	Missing values > 20%
Proteomics	Olink	INF_Q13651(IL10RA)	Missing values > 20%
Proteomics	Olink	CVD3_P01589(IL2RA)	Missing values > 20%
Proteomics	Olink	INF_Q13007(IL24)	Missing values > 20%
Proteomics	Olink	CVD2_Q9NQ25(SLAMF7)	Missing values > 20%
Proteomics	Olink	CVD2_P09874(PARP1)	Missing values > 20%
Proteomics	Olink	INF_P14784(IL2RB)	Missing values > 20%
Proteomics	Olink	INF_P01583(IL1A)	Missing values > 20%
Proteomics	Olink	INF_P05113(IL5)	Missing values > 20%
Proteomics	Olink	INF_P05112(IL4)	Missing values > 20%
Proteomics	Olink	INF_Q9NYY1(IL20)	Missing values > 20%
Proteomics	Olink	CVD3_Q9HCB6(SPON1)	Missing values > 20%
Proteomics	Olink	INF_P35225(IL13)	Missing values > 20%
Proteomics	Olink	CVD2_P24394(IL4R)	Missing values > 20%
Proteomics	Olink	INF_O95760(IL33)	Missing values > 20%
Proteomics	Olink	CVD2_P16860(NPPB)	Missing values > 20%
Proteomics	Olink	INF_Q969D9(TSLP)	Missing values > 20%
Proteomics	Olink	INF_Q9P0M4(IL17C)	Missing values > 20%
Proteomics	Olink	INF_Q8NF90(Q8NF90)	Missing values > 20%
Proteomics	Olink	INF_Q99748(NRTN)	Missing values > 20%
Proteomics	Olink	INF_P60568(IL2)	Missing values > 20%
Metabolomics	Metabolon	betonicine(HMDB29412)	Missing values > 20%
Metabolomics	Metabolon	2-methoxyacetaminophen glucuronide*(NA)	Missing values > 20%

Modality	Vendor	Measurement	Reason for exclusion
Metabolomics	Metabolon	propyl 4-hydroxybenzoate sulfate(NA)	Missing values > 20%
Metabolomics	Metabolon	S-carboxymethyl-L-cysteine(HMDB29415)	Missing values > 20%
Metabolomics	Metabolon	4-methylhexanoylglutamine(NA)	Missing values > 20%
Metabolomics	Metabolon	carboxyibuprofen(HMDB60564)	Missing values > 20%
Metabolomics	Metabolon	O-desmethylvenlafaxine(HMDB60532)	Missing values > 20%
Metabolomics	Metabolon	warfarin(HMDB01935)	Missing values > 20%
Metabolomics	Metabolon	hydroxypioglitazone (M-IV)(NA)	Missing values > 20%
Metabolomics	Metabolon	5alpha-androstan-3alpha,17beta-diol monosulfate (2)(NA)	Missing values > 20%
Metabolomics	Metabolon	corticosterone(HMDB01547)	Missing values > 20%
Metabolomics	Metabolon	5alpha-pregnan-3beta-ol,20-one sulfate(NA)	Missing values > 20%
Metabolomics	Metabolon	theanine(HMDB34365)	Missing values > 20%
Metabolomics	Metabolon	7-hydroxyindole sulfate(NA)	Missing values > 20%
Metabolomics	Metabolon	phenylacetylglutamate(HMDB59772)	Missing values > 20%
Metabolomics	Metabolon	3b-hydroxy-5-cholenoic acid(HMDB00308)	Missing values > 20%
Metabolomics	Metabolon	4-ethylphenol glucuronide(NA)	Missing values > 20%
Metabolomics	Metabolon	phosphatidylcholine (18:0/20:5, 16:0/22:5n6)*(NA)	Missing values > 20%
Metabolomics	Metabolon	cysteine-glutathione disulfide(HMDB00656)	Missing values > 20%
Metabolomics	Metabolon	estrone 3-sulfate(HMDB01425)	Missing values > 20%
Metabolomics	Metabolon	1-palmityl-GPE (O-16:0)*(NA)	Missing values > 20%
Metabolomics	Metabolon	hydrochlorothiazide(HMDB01928)	Missing values > 20%
Metabolomics	Metabolon	ranitidine(HMDB01930)	Missing values > 20%
Metabolomics	Metabolon	diphenhydramine(HMDB01927)	Missing values > 20%
Metabolomics	Metabolon	glycerol 3-phosphate(HMDB00126)	Missing values > 20%
Metabolomics	Metabolon	3-(N-acetyl-L-cystein-S-yl) acetaminophen(NA)	Missing values > 20%
Metabolomics	Metabolon	4-acetaminophen sulfate(HMDB59911)	Missing values > 20%
Metabolomics	Metabolon	isoleucylleucine/leucylisoleucine(NA)	Missing values > 20%
Metabolomics	Metabolon	alpha-CEHC sulfate(NA)	Missing values > 20%

Modality	Vendor	Measurement	Reason for exclusion
Metabolomics	Metabolon	N2-acetyllysine(HMDB00446)	Missing values > 20%
Metabolomics	Metabolon	S-methylmethionine(HMDB38670)	Missing values > 20%
Metabolomics	Metabolon	indolin-2-one(NA)	Missing values > 20%
Metabolomics	Metabolon	2-methoxyresorcinol sulfate(NA)	Missing values > 20%
Metabolomics	Metabolon	N-acetyl-3-methylhistidine*(NA)	Missing values > 20%
Metabolomics	Metabolon	3-hydroxystachydrine*(NA)	Missing values > 20%
Metabolomics	Metabolon	phenylalanylphenylalanine(NA)	Missing values > 20%
Metabolomics	Metabolon	pimeloylcarnitine/3-methyladipoylcarnitine (C7-DC)(NA)	Missing values > 20%
Metabolomics	Metabolon	isoleucylalanine(HMDB28900)	Missing values > 20%
Metabolomics	Metabolon	chiro-inositol(HMDB34220)	Missing values > 20%
Metabolomics	Metabolon	N-stearoyltaurine(NA)	Missing values > 20%
Metabolomics	Metabolon	1-oleoyl-GPG (18:1)*(NA)	Missing values > 20%
Metabolomics	Metabolon	2-hydroxyphenylacetate(HMDB00669)	Missing values > 20%
Metabolomics	Metabolon	cotinine(HMDB01046)	Missing values > 20%
Metabolomics	Metabolon	1-palmitoleoyl-2-eicosapentaenoyl-GPC (16:1/20:5)*(HMDB08017)	Missing values > 20%
Metabolomics	Metabolon	Fibrinopeptide B (1-13)**(NA)	Missing values > 20%
Metabolomics	Metabolon	pioglitazone(HMDB15264)	Missing values > 20%
Metabolomics	Metabolon	nicotinate ribonucleoside(HMDB06809)	Missing values > 20%
Metabolomics	Metabolon	valylglycine(HMDB29127)	Missing values > 20%
Metabolomics	Metabolon	gabapentin(HMDB05015)	Missing values > 20%
Metabolomics	Metabolon	venlafaxine(HMDB05016)	Missing values > 20%
Metabolomics	Metabolon	sertraline(HMDB05010)	Missing values > 20%
Metabolomics	Metabolon	norfluoxetine(HMDB60551)	Missing values > 20%
Metabolomics	Metabolon	4-hydroxyphenylacetate(HMDB00020)	Missing values > 20%
Metabolomics	Metabolon	pregnanolone/allopregnanolone sulfate(NA)	Missing values > 20%
Metabolomics	Metabolon	eugenol sulfate(NA)	Missing values > 20%
Metabolomics	Metabolon	5-hydroxymethyl-2-furoylcarnitine*(NA)	Missing values > 20%

Modality	Vendor	Measurement	Reason for exclusion
Metabolomics	Metabolon	3-ureidopropionate(HMDB00026)	Missing values > 20%
Metabolomics	Metabolon	tartarate(HMDB00956)	Missing values > 20%
Metabolomics	Metabolon	xanthosine(HMDB00299)	Missing values > 20%
Metabolomics	Metabolon	glucuronide of C10H18O2 (7)*(NA)	Missing values > 20%
Metabolomics	Metabolon	2-butenoylglycine(NA)	Missing values > 20%
Metabolomics	Metabolon	suberoylcarnitine (C8-DC)(NA)	Missing values > 20%
Metabolomics	Metabolon	testosterone sulfate(HMDB02833)	Missing values > 20%
Metabolomics	Metabolon	lamotrigine(HMDB14695,HMDB05043)	Missing values > 20%
Metabolomics	Metabolon	metoprolol acid metabolite*(NA)	Missing values > 20%
Metabolomics	Metabolon	campesterol(HMDB02869)	Missing values > 20%
Metabolomics	Metabolon	pyrraline(HMDB33143)	Missing values > 20%
Metabolomics	Metabolon	alpha-hydroxymetoprolol(HMDB60994)	Missing values > 20%
Metabolomics	Metabolon	tramadol(HMDB14339)	Missing values > 20%
Metabolomics	Metabolon	methylsuccinoylcarnitine(NA)	Missing values > 20%
Metabolomics	Metabolon	valylglutamate(NA)	Missing values > 20%
Metabolomics	Metabolon	trazadone(HMDB14794)	Missing values > 20%
Metabolomics	Metabolon	bradykinin(HMDB04246)	Missing values > 20%
Metabolomics	Metabolon	pyroglutamylglutamine(HMDB39229)	Missing values > 20%
Metabolomics	Metabolon	1-myristoylglycerol (14:0)(HMDB11561)	Missing values > 20%
Metabolomics	Metabolon	7-ketodeoxycholate(HMDB00391)	Missing values > 20%
Metabolomics	Metabolon	N4-acetylsulfamethoxazole*(HMDB13854)	Missing values > 20%
Metabolomics	Metabolon	N-acetyl-aspartyl-glutamate (NAAG)(HMDB01067)	Missing values > 20%
Metabolomics	Metabolon	17alpha-hydroxypregnenolone 3-sulfate(HMDB00416)	Missing values > 20%
Metabolomics	Metabolon	2,8-quinolinediol sulfate(NA)	Missing values > 20%
Metabolomics	Metabolon	equol sulfate(NA)	Missing values > 20%
Metabolomics	Metabolon	3-acetylphenol sulfate(NA)	Missing values > 20%
Metabolomics	Metabolon	ibuprofen acyl glucuronide(NA)	Missing values > 20%

Modality	Vendor	Measurement	Reason for exclusion
Metabolomics	Metabolon	metformin(HMDB01921)	Missing values > 20%
Metabolomics	Metabolon	5alpha-androstan-3alpha,17beta-diol disulfate(NA)	Missing values > 20%
Metabolomics	Metabolon	cytidine(HMDB00089)	Missing values > 20%
Metabolomics	Metabolon	xylose(HMDB00098)	Missing values > 20%
Metabolomics	Metabolon	lactose(HMDB00186)	Missing values > 20%
Metabolomics	Metabolon	N-palmitoylserine(NA)	Missing values > 20%
Metabolomics	Metabolon	arachidonoyl ethanolamide(HMDB04080)	Missing values > 20%
Metabolomics	Metabolon	11-ketoetiocholanolone glucuronide(NA)	Missing values > 20%
Metabolomics	Metabolon	ethyl glucuronide(HMDB10325)	Missing values > 20%
Metabolomics	Metabolon	N-acetyl-cadaverine(HMDB02284)	Missing values > 20%
Metabolomics	Metabolon	4-hydroxy-2-oxoglutaric acid(HMDB02070)	Missing values > 20%
Metabolomics	Metabolon	N-acetyl-S-allyl-L-cysteine(NA)	Missing values > 20%
Metabolomics	Metabolon	carnosine(HMDB00033)	Missing values > 20%
Metabolomics	Metabolon	dexlansoprazole(NA)	Missing values > 20%
Metabolomics	Metabolon	phenylalanylleucine(NA)	Missing values > 20%
Metabolomics	Metabolon	tryptophylleucine(HMDB29087)	Missing values > 20%
Metabolomics	Metabolon	3,4-methyleneheptanoylcarnitine(NA)	Missing values > 20%
Metabolomics	Metabolon	dihomo-linolenoyl-choline(NA)	Missing values > 20%
Metabolomics	Metabolon	caffeic acid sulfate(HMDB41708)	Missing values > 20%
Metabolomics	Metabolon	phenylacetylcarnitine(NA)	Missing values > 20%
Metabolomics	Metabolon	N-(2-furoyl)glycine(HMDB00439)	Missing values > 20%
Metabolomics	Metabolon	3-(3-hydroxyphenyl)propionate(HMDB00375)	Missing values > 20%
Metabolomics	Metabolon	leucylleucine(HMDB28933)	Missing values > 20%
Metabolomics	Metabolon	2-acetamidophenol sulfate(NA)	Missing values > 20%
Metabolomics	Metabolon	gamma-CEHC glucuronide*(NA)	Missing values > 20%
Metabolomics	Metabolon	pregabalin(NA)	Missing values > 20%
Metabolomics	Metabolon	L-urobilin(HMDB04159)	Missing values > 20%

Modality	Vendor	Measurement	Reason for exclusion
Metabolomics	Metabolon	docosapentaenoylcarnitine (C22:5n3)*(NA)	Missing values > 20%
Metabolomics	Metabolon	adrenoylcarnitine (C22:4)*(NA)	Missing values > 20%
Metabolomics	Metabolon	2-hydroxyadipate(HMDB00321)	Missing values > 20%
Metabolomics	Metabolon	metoprolol(HMDB01932)	Missing values > 20%
Metabolomics	Metabolon	cytosine(HMDB00630)	Missing values > 20%
Metabolomics	Metabolon	dihydrocaffeate sulfate (2)(NA)	Missing values > 20%
Metabolomics	Metabolon	3-(methylthio)acetaminophen sulfate*(NA)	Missing values > 20%
Metabolomics	Metabolon	suberate (C8-DC)(HMDB00893)	Missing values > 20%
Metabolomics	Metabolon	xanthurenate(HMDB00881)	Missing values > 20%
Metabolomics	Metabolon	phenylacetate(HMDB00209)	Missing values > 20%
Metabolomics	Metabolon	alliin(HMDB33592)	Missing values > 20%
Metabolomics	Metabolon	daidzein sulfate (2)(NA)	Missing values > 20%
Metabolomics	Metabolon	dopamine 4-sulfate(HMDB04148)	Missing values > 20%
Metabolomics	Metabolon	flavin adenine dinucleotide (FAD)(HMDB01248)	Missing values > 20%
Metabolomics	Metabolon	1-stearyl-GPC (O-18:0)*(HMDB11149)	Missing values > 20%
Metabolomics	Metabolon	adenosine 3',5'-cyclic monophosphate (cAMP)(HMDB00058)	Missing values > 20%
Metabolomics	Metabolon	5-hydroxyindoleacetate(HMDB00763)	Missing values > 20%
Metabolomics	Metabolon	hydroxybupropion(HMDB12235)	Missing values > 20%
Metabolomics	Metabolon	lanthionine(NA)	Missing values > 20%
Metabolomics	Metabolon	saccharin(HMDB29723)	Missing values > 20%
Metabolomics	Metabolon	N-alpha-acetylornithine(HMDB03357)	Missing values > 20%
Metabolomics	Metabolon	1-stearoyl-2-docosahexaenoyl-GPI (18:0/22:6)*(HMDB09821)	Missing values > 20%
Metabolomics	Metabolon	nicotinurate(HMDB03269)	Missing values > 20%
Metabolomics	Metabolon	2-methylmalonylcarnitine (C4-DC)(HMDB13133)	Missing values > 20%
Metabolomics	Metabolon	oxypurinol(HMDB00786)	Missing values > 20%
Metabolomics	Metabolon	hydroxycotinine(HMDB01390)	Missing values > 20%
Metabolomics	Metabolon	naproxen(HMDB01923)	Missing values > 20%

Modality	Vendor	Measurement	Reason for exclusion
Metabolomics	Metabolon	dihydroorotate(HMDB03349)	Missing values > 20%
Metabolomics	Metabolon	caproate (6:0)(HMDB00535)	Missing values > 20%
Metabolomics	Metabolon	4-acetamidophenol(HMDB01859)	Missing values > 20%
Metabolomics	Metabolon	cystathionine(HMDB00099)	Missing values > 20%
Metabolomics	Metabolon	dihydroferulate(NA)	Missing values > 20%
Metabolomics	Metabolon	prolylglycine(HMDB11178)	Missing values > 20%
Metabolomics	Metabolon	threonylalanine(HMDB29054)	Missing values > 20%
Metabolomics	Metabolon	21-hydroxypregnenolone monosulfate (1)(NA)	Missing values > 20%
Metabolomics	Metabolon	1-lignoceroyl-2-arachidonoyl-GPC (24:0/20:4)*(NA)	Missing values > 20%
Metabolomics	Metabolon	5alpha-androstan-3alpha,17alpha-diol monosulfate(NA)	Missing values > 20%
Metabolomics	Metabolon	galactonate(HMDB00565)	Missing values > 20%
Metabolomics	Metabolon	4-acetylphenol sulfate(NA)	Missing values > 20%
Metabolomics	Metabolon	2-aminoadipate(HMDB00510)	Missing values > 20%
Metabolomics	Metabolon	pyroglutamylalanine*(NA)	Missing values > 20%
Metabolomics	Metabolon	1-lignoceroyl-GPC (24:0)(HMDB10405)	Missing values > 20%
Metabolomics	Metabolon	1-(1-enyl-stearoyl)-GPC (P-18:0)*(HMDB13122)	Missing values > 20%
Metabolomics	Metabolon	3-methyl catechol sulfate (2)(NA)	Missing values > 20%
Metabolomics	Metabolon	1-nervonoyl-GPC (24:1n9)*(NA)	Missing values > 20%
Metabolomics	Metabolon	N-methyltaurine(NA)	Missing values > 20%
Metabolomics	Metabolon	17alpha-hydroxypregnanolone glucuronide(NA)	Missing values > 20%
Metabolomics	Metabolon	escitalopram(HMDB05028)	Missing values > 20%
Metabolomics	Metabolon	alpha-CEHC glucuronide*(NA)	Missing values > 20%
Metabolomics	Metabolon	cetirizine(HMDB05032)	Missing values > 20%
Metabolomics	Metabolon	2-oxindole-3-acetate(HMDB35514)	Missing values > 20%
Metabolomics	Metabolon	3,4-methyleneheptanoate(NA)	Missing values > 20%
Metabolomics	Metabolon	bradykinin, hydroxy-pro(3)(HMDB11728)	Missing values > 20%
Metabolomics	Metabolon	salicyluric glucuronide*(NA)	Missing values > 20%

Modality	Vendor	Measurement	Reason for exclusion
Metabolomics	Metabolon	valylleucine(HMDB29131)	Missing values > 20%
Metabolomics	Metabolon	prolylalanine(HMDB29010)	Missing values > 20%
Metabolomics	Metabolon	acetoacetate(HMDB00060)	Missing values > 20%
Metabolomics	Metabolon	catechol glucuronide(NA)	Missing values > 20%
Metabolomics	Metabolon	sulfamethoxazole(HMDB15150)	Missing values > 20%
Metabolomics	Metabolon	glucuronide of C19H28O4 (2)*(NA)	Missing values > 20%
Metabolomics	Metabolon	1-linoleoyl-GPA (18:2)*(HMDB07856)	Missing values > 20%
Metabolomics	Metabolon	quinine(NA)	Missing values > 20%
Metabolomics	Metabolon	malonylcarnitine(HMDB02095)	Missing values > 20%
Metabolomics	Metabolon	hexanoylglycine(HMDB00701)	Missing values > 20%
Metabolomics	Metabolon	methyl indole-3-acetate(HMDB29738)	Missing values > 20%
Metabolomics	Metabolon	1-palmitoleoylglycerol (16:1)*(HMDB11565)	Missing values > 20%
Metabolomics	Metabolon	3-methylcytidine(NA)	Missing values > 20%
Metabolomics	Metabolon	glycocholate glucuronide (1)(NA)	Missing values > 20%
Metabolomics	Metabolon	mycophenolic acid(HMDB15159)	Missing values > 20%
Metabolomics	Metabolon	acesulfame(HMDB33585)	Missing values > 20%
Metabolomics	Metabolon	diacylglycerol (14:0/18:1, 16:0/16:1) [2]*(NA)	Missing values > 20%
Metabolomics	Metabolon	diacylglycerol (14:0/18:1, 16:0/16:1) [1]*(NA)	Missing values > 20%
Metabolomics	Metabolon	3-(3-hydroxyphenyl)propionate sulfate(NA)	Missing values > 20%
Metabolomics	Metabolon	4-hydroxycoumarin(NA)	Missing values > 20%
Metabolomics	Metabolon	3-(cystein-S-yl)acetaminophen*(NA)	Missing values > 20%
Metabolomics	Metabolon	glycolithocholate(HMDB00698)	Missing values > 20%
Metabolomics	Metabolon	5-hydroxyhexanoate(HMDB00525)	Missing values > 20%
Metabolomics	Metabolon	2-methoxyacetaminophen sulfate*(NA)	Missing values > 20%
Metabolomics	Metabolon	2-hydroxyacetaminophen sulfate*(NA)	Missing values > 20%
Metabolomics	Metabolon	erucoylcarnitine (C22:1)*(NA)	Missing values > 20%
Metabolomics	Metabolon	beta-guanidinopropanoate(HMDB13222)	Missing values > 20%

Modality	Vendor	Measurement	Reason for exclusion
Metabolomics	Metabolon	3-hydroxysebacate(HMDB00350)	Missing values > 20%
Metabolomics	Metabolon	benzoate(HMDB01870)	Missing values > 20%
Metabolomics	Metabolon	diltiazem(HMDB14487)	Missing values > 20%
Metabolomics	Metabolon	1,2,3-benzenetriol sulfate (1)(NA)	Missing values > 20%
Metabolomics	Metabolon	1,2,3-benzenetriol sulfate (2)(NA)	Missing values > 20%
Metabolomics	Metabolon	3-methoxycatechol sulfate (1)(NA)	Missing values > 20%
Metabolomics	Metabolon	o-cresol sulfate(NA)	Missing values > 20%
Metabolomics	Metabolon	N-acetylkynurenine (2)(NA)	Missing values > 20%
Metabolomics	Metabolon	4-hydroxyglutamate(HMDB01344)	Missing values > 20%
Metabolomics	Metabolon	5-(galactosylhydroxy)-L-lysine(NA)	Missing values > 20%
Metabolomics	Metabolon	cholic acid glucuronide(NA)	Missing values > 20%
Metabolomics	Metabolon	N6-succinyladenosine(HMDB00912)	Missing values > 20%
Metabolomics	Metabolon	1-palmitoyl-2-docosahexaenoyl-GPI (16:0/22:6)*(NA)	Missing values > 20%
Metabolomics	Metabolon	cyclo(ala-pro)(NA)	Missing values > 20%
Metabolomics	Metabolon	retinal(HMDB01358)	Missing values > 20%
Metabolomics	Metabolon	2-hydroxyibuprofen(HMDB60920)	Missing values > 20%
Metabolomics	Metabolon	glycohyocholate(NA)	Missing values > 20%
Metabolomics	Metabolon	bradykinin, des-arg(9)(HMDB04246)	Missing values > 20%
Metabolomics	Metabolon	2-methylcitrate/homocitrate(NA)	Missing values > 20%
Metabolomics	Metabolon	N-acetylglucosaminylasparagine(HMDB00489)	Missing values > 20%
Metabolomics	Metabolon	4-imidazoleacetate(HMDB02024)	Missing values > 20%
Metabolomics	Metabolon	gulonate*(HMDB03290)	Missing values > 20%
Metabolomics	Metabolon	1-dihomo-linolenylglycerol (20:3)(NA)	Missing values > 20%
Metabolomics	Metabolon	1,2-dilinoleoyl-GPE (18:2/18:2)*(HMDB09093)	Missing values > 20%
Metabolomics	Metabolon	homovanillate (HVA)(HMDB00118)	Missing values > 20%
Metabolomics	Metabolon	4-vinylguaiacol sulfate(NA)	Missing values > 20%
Metabolomics	Metabolon	1-oleoyl-2-arachidonoyl-GPE (18:1/20:4)*(HMDB09069)	Missing values > 20%

Modality	Vendor	Measurement	Reason for exclusion
Metabolomics	Metabolon	atenolol(HMDB01924)	Missing values > 20%
Metabolomics	Metabolon	omeprazole(HMDB01913)	Missing values > 20%
Metabolomics	Metabolon	isoeugenol sulfate(NA)	Missing values > 20%
Metabolomics	Metabolon	glutamate, gamma-methyl ester(HMDB61715)	Missing values > 20%
Metabolomics	Metabolon	2-linoleoylglycerol (18:2)(HMDB11538)	Missing values > 20%
Metabolomics	Metabolon	5alpha-pregnan-diol disulfate(NA)	Missing values > 20%
Metabolomics	Metabolon	indoleacetylglutamine(HMDB13240)	Missing values > 20%
Metabolomics	Metabolon	4-acetamidophenylglucuronide(HMDB10316)	Missing values > 20%
Metabolomics	Metabolon	valsartan(NA)	Missing values > 20%
Metabolomics	Metabolon	1-carboxyethylisoleucine(NA)	Missing values > 20%
Metabolomics	Metabolon	beta-sitosterol(HMDB00852)	Missing values > 20%
Metabolomics	Metabolon	levulinate (4-oxovalerate)(HMDB00720)	Missing values > 20%
Metabolomics	Metabolon	1-erucoyl-GPC (22:1)*(NA)	Missing values > 20%
Metabolomics	Metabolon	phenylalanylmethionine(NA)	Missing values > 20%
Metabolomics	Metabolon	2'-O-methylcytidine(NA)	Missing values > 20%
Metabolomics	Metabolon	gamma-glutamylalanine(HMDB29142)	Missing values > 20%
Metabolomics	Metabolon	1-(1-enyl-palmitoyl)-2-dihomo-linolenoyl-GPC (P-16:0/20:3)*(NA)	Missing values > 20%
Metabolomics	Metabolon	nicotinate(HMDB01488)	Missing values > 20%
Metabolomics	Metabolon	taurodeoxycholic acid 3-sulfate(NA)	Missing values > 20%
Metabolomics	Metabolon	3-methoxytyramine sulfate(NA)	Missing values > 20%
Metabolomics	Metabolon	1-stearoyl-2-adrenoyl-GPE (18:0/22:4)*(HMDB09009)	Missing values > 20%
Metabolomics	Metabolon	Fibrinopeptide A*(NA)	Missing values > 20%
Metabolomics	Metabolon	Fibrinopeptide A, des-ala(1)*(NA)	Missing values > 20%
Metabolomics	Metabolon	1-stearoyl-2-docosapentaenoyl-GPE (18:0/22:5n3)*(NA)	Missing values > 20%
Metabolomics	Metabolon	ibuprofen(HMDB01925)	Missing values > 20%
Metabolomics	Metabolon	doxycycline(NA)	Missing values > 20%
Metabolomics	Metabolon	2-stearoyl-GPI (18:0)*(NA)	Missing values > 20%

Modality	Vendor	Measurement	Reason for exclusion
Metabolomics	Metabolon	tigloylglycine(HMDB00959)	Missing values > 20%
Metabolomics	Metabolon	umbelliferone sulfate(NA)	Missing values > 20%
Metabolomics	Metabolon	methionylalanine(NA)	Missing values > 20%
Metabolomics	Metabolon	cyclo(pro-arg)*(NA)	Missing values > 20%
Metabolomics	Metabolon	glucuronide of C10H18O2 (1)*(NA)	Missing values > 20%
Metabolomics	Metabolon	palmitoleoyl-arachidonoyl-glycerol (16:1/20:4) [2]*(NA)	Missing values > 20%
Metabolomics	Metabolon	tauro-beta-muricholate(HMDB00932)	Missing values > 20%
Metabolomics	Metabolon	3,7-dimethylurate(HMDB01982)	Missing values > 20%
Metabolomics	Metabolon	1,3,7-trimethylurate(HMDB02123)	Missing values > 20%
Metabolomics	Metabolon	ferulic acid 4-sulfate(HMDB29200)	Missing values > 20%
Metabolomics	Metabolon	desmethylnaproxen sulfate(NA)	Missing values > 20%
Metabolomics	Metabolon	sucralose(HMDB31554)	Missing values > 20%
Metabolomics	Metabolon	levetiracetam(NA)	Missing values > 20%
Metabolomics	Metabolon	solanidine(HMDB03236)	Missing values > 20%
Metabolomics	Metabolon	1-palmitoleoyl-GPE (16:1)*(HMDB11474)	Missing values > 20%
Metabolomics	Metabolon	fluoxetine(NA)	Missing values > 20%
Metabolomics	Metabolon	benzoylcarnitine*(NA)	Missing values > 20%
Metabolomics	Metabolon	1-arachidonoyl-GPC (20:4n6)*	Correlated with ARACHIDONIC ACID @ r = 0.31
Metabolomics	Metabolon	2-arachidonoyl-GPC (20:4)*	Correlated with ARACHIDONIC ACID @ r = 0.27
Metabolomics	Metabolon	1-stearoyl-2-arachidonoyl-GPC (18:0/20:4)	Correlated with ARACHIDONIC ACID @ r = 0.34
Metabolomics	Metabolon	1-adrenoyl-GPC (22:4)*	Correlated with ARACHIDONIC ACID @ r = 0.27
Metabolomics	Metabolon	1-palmitoyl-2-arachidonoyl-GPC (16:0/20:4n6)	Correlated with ARACHIDONIC ACID @ r = 0.31
Metabolomics	Metabolon	1-(1-enyl-stearoyl)-2-arachidonoyl-GPC (P-18:0/20:4)	Correlated with ARACHIDONIC ACID @ r = 0.48
Metabolomics	Metabolon	1-(1-enyl-stearoyl)-2-arachidonoyl-GPE (P-18:0/20:4)*	Correlated with ARACHIDONIC ACID @ r = 0.31

Modality	Vendor	Measurement	Reason for exclusion
Metabolomics	Metabolon	1-(1-enyl-palmitoyl)-2-arachidonoyl-GPC (P-16:0/20:4)*	Correlated with ARACHIDONIC ACID @ r = 0.50
Metabolomics	Metabolon	1-stearyl-2-arachidonoyl-GPC (O-18:0/20:4)*	Correlated with ARACHIDONIC ACID @ r = 0.48
Metabolomics	Metabolon	1-palmityl-2-arachidonoyl-GPC (O-16:0/20:4)*	Correlated with ARACHIDONIC ACID @ r = 0.46
Metabolomics	Metabolon	1-pentadecanoyl-2-arachidonoyl-GPC (15:0/20:4)*	Correlated with ARACHIDONIC ACID @ r = 0.35
Metabolomics	Metabolon	1-margaroyl-2-arachidonoyl-GPC (17:0/20:4)*	Correlated with ARACHIDONIC ACID @ r = 0.52
Metabolomics	Metabolon	1-stearyl-2-docosapentaenoyl-GPC (O-18:0/22:5n3)*	Correlated with ARACHIDONIC ACID @ r = 0.30
Metabolomics	Metabolon	4-methyl-2-oxopentanoate	Correlated with CALCIUM @ r = 0.24
Metabolomics	Metabolon	docosahexaenoate (DHA; 22:6n3)	Correlated with DHA @ r = 0.56
Metabolomics	Metabolon	cysteine s-sulfate	Correlated with DHA @ r = 0.30
Metabolomics	Metabolon	oxalate (ethanedioate)	Correlated with DHA @ r = 0.31
Metabolomics	Metabolon	threonate	Correlated with DHA @ r = 0.36
Metabolomics	Metabolon	3-carboxy-4-methyl-5-propyl-2-furanpropanoate (CMPF)	Correlated with DHA @ r = 0.63
Metabolomics	Metabolon	1-docosahexaenoyl-GPC (22:6)*	Correlated with DHA @ r = 0.54
Metabolomics	Metabolon	beta-cryptoxanthin	Correlated with DHA @ r = 0.25
Metabolomics	Metabolon	1-docosahexaenoyl-GPE (22:6)*	Correlated with DHA @ r = 0.50
Metabolomics	Metabolon	ergothioneine	Correlated with DHA @ r = 0.35
Metabolomics	Metabolon	1-eicosapentaenoyl-GPE (20:5)*	Correlated with DHA @ r = 0.36
Metabolomics	Metabolon	1-eicosapentaenoyl-GPC (20:5)*	Correlated with DHA @ r = 0.42
Metabolomics	Metabolon	1-palmitoyl-2-docosahexaenoyl-GPC (16:0/22:6)	Correlated with DHA @ r = 0.58
Metabolomics	Metabolon	1-stearoyl-2-docosahexaenoyl-GPC (18:0/22:6)	Correlated with DHA @ r = 0.58
Metabolomics	Metabolon	1-(1-enyl-stearoyl)-2-oleoyl-GPC (P-18:0/18:1)	Correlated with DHA @ r = 0.27
Metabolomics	Metabolon	1-palmitoyl-2-eicosapentaenoyl-GPC (16:0/20:5)*	Correlated with DHA @ r = 0.37
Metabolomics	Metabolon	1-palmitoyl-2-docosahexaenoyl-GPE (16:0/22:6)*	Correlated with DHA @ r = 0.30
Metabolomics	Metabolon	1-stearoyl-2-docosahexaenoyl-GPE (18:0/22:6)*	Correlated with DHA @ r = 0.23

Modality	Vendor	Measurement	Reason for exclusion
Metabolomics	Metabolon	1-(1-enyl-palmitoyl)-2-docosahexaenoyl-GPE (P-16:0/22:6)*	Correlated with DHA @ r = 0.54
Metabolomics	Metabolon	1-(1-enyl-stearoyl)-2-docosahexaenoyl-GPE (P-18:0/22:6)*	Correlated with DHA @ r = 0.57
Metabolomics	Metabolon	1-(1-enyl-palmitoyl)-2-oleoyl-GPC (P-16:0/18:1)*	Correlated with DHA @ r = 0.32
Metabolomics	Metabolon	1-(1-enyl-palmitoyl)-2-docosahexaenoyl-GPC (P-16:0/22:6)*	Correlated with DHA @ r = 0.59
Metabolomics	Metabolon	1-(1-enyl-stearoyl)-2-docosahexaenoyl-GPC (P-18:0/22:6)*	Correlated with DHA @ r = 0.59
Metabolomics	Metabolon	1-palmityl-2-oleoyl-GPC (O-16:0/18:1)*	Correlated with DHA @ r = 0.25
Metabolomics	Metabolon	1-pentadecanoyl-2-docosahexaenoyl-GPC (15:0/22:6)*	Correlated with DHA @ r = 0.53
Metabolomics	Metabolon	1-margaroyl-2-docosahexaenoyl-GPC (17:0/22:6)*	Correlated with DHA @ r = 0.63
Metabolomics	Metabolon	1-oleoyl-2-docosahexaenoyl-GPC (18:1/22:6)*	Correlated with DHA @ r = 0.42
Metabolomics	Metabolon	1-linoleoyl-2-docosahexaenoyl-GPC (18:2/22:6)*	Correlated with DHA @ r = 0.34
Metabolomics	Metabolon	1-(1-enyl-stearoyl)-2-linoleoyl-GPC (P-18:0/18:2)*	Correlated with DHA @ r = 0.25
Metabolomics	Metabolon	1-myristoyl-2-docosahexaenoyl-GPC (14:0/22:6)*	Correlated with DHA @ r = 0.32
Metabolomics	Metabolon	1-(1-enyl-palmitoyl)-2-palmitoyl-GPC (P-16:0/16:0)*	Correlated with DHA @ r = 0.24
Metabolomics	Metabolon	1-(1-enyl-oleoyl)-2-docosahexaenoyl-GPE (P-18:1/22:6)*	Correlated with DHA @ r = 0.55
Metabolomics	Metabolon	perfluorooctanesulfonate (PFOS)	Correlated with DHA @ r = 0.24
Metabolomics	Metabolon	carotene diol (1)	Correlated with DHA @ r = 0.36
Metabolomics	Metabolon	carotene diol (2)	Correlated with DHA @ r = 0.32
Metabolomics	Metabolon	hydroxy-CMPF*	Correlated with DHA @ r = 0.66
Metabolomics	Metabolon	3-carboxy-4-methyl-5-pentyl-2-furanpropionate (3-CMPFP)**	Correlated with DHA @ r = 0.28
Metabolomics	Metabolon	branched chain 14:0 dicarboxylic acid**	Correlated with DHA @ r = 0.26
Metabolomics	Metabolon	glycerate	Correlated with DHA @ r = 0.24
Metabolomics	Metabolon	erucate (22:1n9)	Correlated with DHA @ r = 0.25
Metabolomics	Metabolon	3-carboxy-4-methyl-5-propyl-2-furanpropanoate (CMPF)	Correlated with DPA @ r = 0.30
Metabolomics	Metabolon	1-docosapentaenoyl-GPC (22:5n3)*	Correlated with DPA @ r = 0.35
Metabolomics	Metabolon	1-eicosapentaenoyl-GPE (20:5)*	Correlated with DPA @ r = 0.31
Metabolomics	Metabolon	1-eicosapentaenoyl-GPC (20:5)*	Correlated with DPA @ r = 0.36
Metabolomics	Metabolon	1-palmitoyl-2-eicosapentaenoyl-GPC (16:0/20:5)*	Correlated with DPA @ r = 0.27

Modality	Vendor	Measurement	Reason for exclusion
Metabolomics	Metabolon	1-stearoyl-2-docosapentaenoyl-GPC (18:0/22:5n3)*	Correlated with DPA @ r = 0.25
Metabolomics	Metabolon	hydroxy-CMPF*	Correlated with DPA @ r = 0.30
Metabolomics	Metabolon	docosahexaenoate (DHA; 22:6n3)	Correlated with EPA @ r = 0.50
Metabolomics	Metabolon	cysteine s-sulfate	Correlated with EPA @ r = 0.44
Metabolomics	Metabolon	oxalate (ethanedioate)	Correlated with EPA @ r = 0.31
Metabolomics	Metabolon	threonate	Correlated with EPA @ r = 0.38
Metabolomics	Metabolon	pyridoxate	Correlated with EPA @ r = 0.29
Metabolomics	Metabolon	3-carboxy-4-methyl-5-propyl-2-furanpropanoate (CMPF)	Correlated with EPA @ r = 0.62
Metabolomics	Metabolon	docosapentaenoate (n3 DPA; 22:5n3)	Correlated with EPA @ r = 0.29
Metabolomics	Metabolon	stearidonate (18:4n3)	Correlated with EPA @ r = 0.26
Metabolomics	Metabolon	1-oleoyl-GPC (18:1)	Correlated with EPA @ r = 0.26
Metabolomics	Metabolon	2-oleoyl-GPC (18:1)*	Correlated with EPA @ r = 0.25
Metabolomics	Metabolon	1-docosahexaenoyl-GPC (22:6)*	Correlated with EPA @ r = 0.48
Metabolomics	Metabolon	4-allylphenol sulfate	Correlated with EPA @ r = 0.24
Metabolomics	Metabolon	bilirubin (E,E)*	Correlated with EPA @ r = 0.22
Metabolomics	Metabolon	1-docosahexaenoyl-GPE (22:6)*	Correlated with EPA @ r = 0.48
Metabolomics	Metabolon	1-docosapentaenoyl-GPC (22:5n3)*	Correlated with EPA @ r = 0.31
Metabolomics	Metabolon	ergothioneine	Correlated with EPA @ r = 0.35
Metabolomics	Metabolon	2,3-dihydroxyisovalerate	Correlated with EPA @ r = 0.23
Metabolomics	Metabolon	trimethylamine N-oxide	Correlated with EPA @ r = 0.23
Metabolomics	Metabolon	1-eicosapentaenoyl-GPE (20:5)*	Correlated with EPA @ r = 0.63
Metabolomics	Metabolon	1-eicosapentaenoyl-GPC (20:5)*	Correlated with EPA @ r = 0.69
Metabolomics	Metabolon	1-eicosenoyl-GPC (20:1)*	Correlated with EPA @ r = 0.24
Metabolomics	Metabolon	methyl glucopyranoside (alpha + beta)	Correlated with EPA @ r = 0.23
Metabolomics	Metabolon	1-stearoyl-2-oleoyl-GPC (18:0/18:1)	Correlated with EPA @ r = 0.27
Metabolomics	Metabolon	1-palmitoyl-2-docosahexaenoyl-GPC (16:0/22:6)	Correlated with EPA @ r = 0.47
Metabolomics	Metabolon	1-stearoyl-2-docosahexaenoyl-GPC (18:0/22:6)	Correlated with EPA @ r = 0.48

Modality	Vendor	Measurement	Reason for exclusion
Metabolomics	Metabolon	1-(1-enyl-stearoyl)-2-oleoyl-GPC (P-18:0/18:1)	Correlated with EPA @ r = 0.27
Metabolomics	Metabolon	1-palmitoyl-2-eicosapentaenoyl-GPC (16:0/20:5)*	Correlated with EPA @ r = 0.68
Metabolomics	Metabolon	1-palmitoyl-2-docosahexaenoyl-GPE (16:0/22:6)*	Correlated with EPA @ r = 0.27
Metabolomics	Metabolon	1-(1-enyl-palmitoyl)-2-docosahexaenoyl-GPE (P-16:0/22:6)*	Correlated with EPA @ r = 0.40
Metabolomics	Metabolon	1-(1-enyl-stearoyl)-2-docosahexaenoyl-GPE (P-18:0/22:6)*	Correlated with EPA @ r = 0.44
Metabolomics	Metabolon	1-(1-enyl-palmitoyl)-2-oleoyl-GPC (P-16:0/18:1)*	Correlated with EPA @ r = 0.29
Metabolomics	Metabolon	1-(1-enyl-palmitoyl)-2-docosahexaenoyl-GPC (P-16:0/22:6)*	Correlated with EPA @ r = 0.48
Metabolomics	Metabolon	1-(1-enyl-stearoyl)-2-docosahexaenoyl-GPC (P-18:0/22:6)*	Correlated with EPA @ r = 0.43
Metabolomics	Metabolon	1-margaroyl-2-oleoyl-GPC (17:0/18:1)*	Correlated with EPA @ r = 0.24
Metabolomics	Metabolon	1-pentadecanoyl-2-docosahexaenoyl-GPC (15:0/22:6)*	Correlated with EPA @ r = 0.47
Metabolomics	Metabolon	1-margaroyl-2-docosahexaenoyl-GPC (17:0/22:6)*	Correlated with EPA @ r = 0.44
Metabolomics	Metabolon	1-oleoyl-2-docosahexaenoyl-GPC (18:1/22:6)*	Correlated with EPA @ r = 0.34
Metabolomics	Metabolon	1-linoleoyl-2-docosahexaenoyl-GPC (18:2/22:6)*	Correlated with EPA @ r = 0.42
Metabolomics	Metabolon	1-myristoyl-2-docosahexaenoyl-GPC (14:0/22:6)*	Correlated with EPA @ r = 0.45
Metabolomics	Metabolon	1-stearoyl-2-docosapentaenoyl-GPC (18:0/22:5n3)*	Correlated with EPA @ r = 0.34
Metabolomics	Metabolon	1-(1-enyl-oleoyl)-2-docosahexaenoyl-GPE (P-18:1/22:6)*	Correlated with EPA @ r = 0.42
Metabolomics	Metabolon	perfluorooctanesulfonate (PFOS)	Correlated with EPA @ r = 0.26
Metabolomics	Metabolon	ximenoylcarnitine (C26:1)*	Correlated with EPA @ r = 0.25
Metabolomics	Metabolon	eicosenoylcarnitine (C20:1)*	Correlated with EPA @ r = 0.25
Metabolomics	Metabolon	carotene diol (1)	Correlated with EPA @ r = 0.34
Metabolomics	Metabolon	carotene diol (2)	Correlated with EPA @ r = 0.23
Metabolomics	Metabolon	hydroxy-CMPF*	Correlated with EPA @ r = 0.59
Metabolomics	Metabolon	3-carboxy-4-methyl-5-pentyl-2-furanpropionate (3-CMPFP)**	Correlated with EPA @ r = 0.35
Metabolomics	Metabolon	perfluorooctanoate (PFOA)	Correlated with EPA @ r = 0.24
Metabolomics	Metabolon	branched chain 14:0 dicarboxylic acid**	Correlated with EPA @ r = 0.27
Metabolomics	Metabolon	5-oxoproline	Correlated with EPA @ r = 0.23
Metabolomics	Metabolon	pantothenate	Correlated with EPA @ r = 0.27

Modality	Vendor	Measurement	Reason for exclusion
Metabolomics	Metabolon	glycerate	Correlated with EPA @ r = 0.25
Metabolomics	Metabolon	erucate (22:1n9)	Correlated with EPA @ r = 0.27
Metabolomics	Metabolon	alpha-tocopherol	Correlated with EPA @ r = 0.27
Metabolomics	Metabolon	1-linoleoyl-GPC (18:2)	Correlated with LINOLEIC_ACID @ r = 0.35
Metabolomics	Metabolon	2-linoleoyl-GPC (18:2)*	Correlated with LINOLEIC_ACID @ r = 0.29
Metabolomics	Metabolon	1-linoleoyl-GPE (18:2)*	Correlated with LINOLEIC_ACID @ r = 0.26
Metabolomics	Metabolon	palmitoyl sphingomyelin (d18:1/16:0)	Correlated with LINOLEIC_ACID @ r = 0.34
Metabolomics	Metabolon	sphingomyelin (d18:2/16:0, d18:1/16:1)*	Correlated with LINOLEIC_ACID @ r = 0.23
Metabolomics	Metabolon	1,2-dilinoleoyl-GPC (18:2/18:2)	Correlated with LINOLEIC_ACID @ r = 0.56
Metabolomics	Metabolon	palmitoyl dihydrosphingomyelin (d18:0/16:0)*	Correlated with LINOLEIC_ACID @ r = 0.25
Metabolomics	Metabolon	1-stearoyl-2-linoleoyl-GPC (18:0/18:2)*	Correlated with LINOLEIC_ACID @ r = 0.45
Metabolomics	Metabolon	1-stearoyl-2-linoleoyl-GPI (18:0/18:2)	Correlated with LINOLEIC_ACID @ r = 0.27
Metabolomics	Metabolon	1-(1-enyl-palmitoyl)-2-linoleoyl-GPC (P-16:0/18:2)*	Correlated with LINOLEIC_ACID @ r = 0.38
Metabolomics	Metabolon	1-palmityl-2-oleoyl-GPC (O-16:0/18:1)*	Correlated with LINOLEIC_ACID @ r = 0.23
Metabolomics	Metabolon	1-pentadecanoyl-2-linoleoyl-GPC (15:0/18:2)*	Correlated with LINOLEIC_ACID @ r = 0.32
Metabolomics	Metabolon	1-margaroyl-2-linoleoyl-GPC (17:0/18:2)*	Correlated with LINOLEIC_ACID @ r = 0.45
Metabolomics	Metabolon	1-(1-enyl-palmitoyl)-2-linoleoyl-GPE (P-16:0/18:2)*	Correlated with LINOLEIC_ACID @ r = 0.26
Metabolomics	Metabolon	1-palmityl-2-linoleoyl-GPC (O-16:0/18:2)*	Correlated with LINOLEIC_ACID @ r = 0.39
Metabolomics	Metabolon	1-(1-enyl-stearoyl)-2-linoleoyl-GPC (P-18:0/18:2)*	Correlated with LINOLEIC_ACID @ r = 0.32
Metabolomics	Metabolon	1-(1-enyl-stearoyl)-2-linoleoyl-GPE (P-18:0/18:2)*	Correlated with LINOLEIC_ACID @ r = 0.31
Metabolomics	Metabolon	1-linoleoyl-2-linolenoyl-GPC (18:2/18:3)*	Correlated with LINOLEIC_ACID @ r = 0.44
Metabolomics	Metabolon	glycosyl-N-behenoyl-sphingadienine (d18:2/22:0)*	Correlated with LINOLEIC_ACID @ r = 0.25
Metabolomics	Metabolon	linoleoylcholine*	Correlated with LINOLEIC_ACID @ r = 0.24
Metabolomics	Metabolon	sphingomyelin (d18:2/24:2)*	Correlated with LINOLEIC_ACID @ r = 0.24
Metabolomics	Metabolon	carotene diol (1)	Correlated with LINOLEIC_ACID @ r = 0.23
Metabolomics	Metabolon	carotene diol (2)	Correlated with LINOLEIC_ACID @ r = 0.25
Metabolomics	Metabolon	hydroxypalmitoyl sphingomyelin (d18:1/16:0(OH))**	Correlated with LINOLEIC_ACID @ r = 0.42

Modality	Vendor	Measurement	Reason for exclusion
Metabolomics	Metabolon	palmitoyl-sphingosine-phosphoethanolamine (d18:1/16:0)	Correlated with LINOLEIC_ACID @ r = 0.27
Metabolomics	Metabolon	1-palmitoyl-2-linoleoyl-GPC (16:0/18:2)	Correlated with LINOLEIC_ACID @ r = 0.29
Metabolomics	Metabolon	docosahexaenoate (DHA; 22:6n3)	Correlated with OMEGA-3 INDEX @ r = 0.53
Metabolomics	Metabolon	cysteine s-sulfate	Correlated with OMEGA-3 INDEX @ r = 0.37
Metabolomics	Metabolon	oxalate (ethanedioate)	Correlated with OMEGA-3 INDEX @ r = 0.31
Metabolomics	Metabolon	threonate	Correlated with OMEGA-3 INDEX @ r = 0.38
Metabolomics	Metabolon	pyridoxate	Correlated with OMEGA-3 INDEX @ r = 0.26
Metabolomics	Metabolon	3-carboxy-4-methyl-5-propyl-2-furanpropanoate (CMPF)	Correlated with OMEGA-3 INDEX @ r = 0.65
Metabolomics	Metabolon	docosapentaenoate (n3 DPA; 22:5n3)	Correlated with OMEGA-3 INDEX @ r = 0.23
Metabolomics	Metabolon	1-docosahexaenoyl-GPC (22:6)*	Correlated with OMEGA-3 INDEX @ r = 0.53
Metabolomics	Metabolon	1-docosahexaenoyl-GPE (22:6)*	Correlated with OMEGA-3 INDEX @ r = 0.49
Metabolomics	Metabolon	ergothioneine	Correlated with OMEGA-3 INDEX @ r = 0.36
Metabolomics	Metabolon	1-eicosapentaenoyl-GPE (20:5)*	Correlated with OMEGA-3 INDEX @ r = 0.47
Metabolomics	Metabolon	1-eicosapentaenoyl-GPC (20:5)*	Correlated with OMEGA-3 INDEX @ r = 0.54
Metabolomics	Metabolon	1-eicosenoyl-GPC (20:1)*	Correlated with OMEGA-3 INDEX @ r = 0.23
Metabolomics	Metabolon	methyl glucopyranoside (alpha + beta)	Correlated with OMEGA-3 INDEX @ r = 0.23
Metabolomics	Metabolon	1-palmitoyl-2-docosahexaenoyl-GPC (16:0/22:6)	Correlated with OMEGA-3 INDEX @ r = 0.54
Metabolomics	Metabolon	1-stearoyl-2-docosahexaenoyl-GPC (18:0/22:6)	Correlated with OMEGA-3 INDEX @ r = 0.55
Metabolomics	Metabolon	1-(1-enyl-stearoyl)-2-oleoyl-GPC (P-18:0/18:1)	Correlated with OMEGA-3 INDEX @ r = 0.28
Metabolomics	Metabolon	1-palmitoyl-2-eicosapentaenoyl-GPC (16:0/20:5)*	Correlated with OMEGA-3 INDEX @ r = 0.49
Metabolomics	Metabolon	1-palmitoyl-2-docosahexaenoyl-GPE (16:0/22:6)*	Correlated with OMEGA-3 INDEX @ r = 0.26
Metabolomics	Metabolon	1-(1-enyl-palmitoyl)-2-docosahexaenoyl-GPE (P-16:0/22:6)*	Correlated with OMEGA-3 INDEX @ r = 0.49
Metabolomics	Metabolon	1-(1-enyl-stearoyl)-2-docosahexaenoyl-GPE (P-18:0/22:6)*	Correlated with OMEGA-3 INDEX @ r = 0.53
Metabolomics	Metabolon	1-(1-enyl-palmitoyl)-2-oleoyl-GPC (P-16:0/18:1)*	Correlated with OMEGA-3 INDEX @ r = 0.33
Metabolomics	Metabolon	1-(1-enyl-palmitoyl)-2-docosahexaenoyl-GPC (P-16:0/22:6)*	Correlated with OMEGA-3 INDEX @ r = 0.56
Metabolomics	Metabolon	1-(1-enyl-stearoyl)-2-docosahexaenoyl-GPC (P-18:0/22:6)*	Correlated with OMEGA-3 INDEX @ r = 0.54
Metabolomics	Metabolon	1-palmityl-2-oleoyl-GPC (O-16:0/18:1)*	Correlated with OMEGA-3 INDEX @ r = 0.22

Modality	Vendor	Measurement	Reason for exclusion
Metabolomics	Metabolon	1-pentadecanoyl-2-docosahexaenoyl-GPC (15:0/22:6)*	Correlated with OMEGA-3 INDEX @ r = 0.51
Metabolomics	Metabolon	1-margaroyl-2-docosahexaenoyl-GPC (17:0/22:6)*	Correlated with OMEGA-3 INDEX @ r = 0.57
Metabolomics	Metabolon	1-oleoyl-2-docosahexaenoyl-GPC (18:1/22:6)*	Correlated with OMEGA-3 INDEX @ r = 0.38
Metabolomics	Metabolon	1-linoleoyl-2-docosahexaenoyl-GPC (18:2/22:6)*	Correlated with OMEGA-3 INDEX @ r = 0.36
Metabolomics	Metabolon	1-(1-enyl-stearoyl)-2-linoleoyl-GPC (P-18:0/18:2)*	Correlated with OMEGA-3 INDEX @ r = 0.23
Metabolomics	Metabolon	1-myristoyl-2-docosahexaenoyl-GPC (14:0/22:6)*	Correlated with OMEGA-3 INDEX @ r = 0.35
Metabolomics	Metabolon	1-(1-enyl-palmitoyl)-2-palmitoyl-GPC (P-16:0/16:0)*	Correlated with OMEGA-3 INDEX @ r = 0.24
Metabolomics	Metabolon	1-(1-enyl-oleoyl)-2-docosahexaenoyl-GPE (P-18:1/22:6)*	Correlated with OMEGA-3 INDEX @ r = 0.51
Metabolomics	Metabolon	perfluorooctanesulfonate (PFOS)	Correlated with OMEGA-3 INDEX @ r = 0.26
Metabolomics	Metabolon	eicosenoylcarnitine (C20:1)*	Correlated with OMEGA-3 INDEX @ r = 0.25
Metabolomics	Metabolon	carotene diol (1)	Correlated with OMEGA-3 INDEX @ r = 0.35
Metabolomics	Metabolon	carotene diol (2)	Correlated with OMEGA-3 INDEX @ r = 0.29
Metabolomics	Metabolon	hydroxy-CMPF*	Correlated with OMEGA-3 INDEX @ r = 0.66
Metabolomics	Metabolon	3-carboxy-4-methyl-5-pentyl-2-furanpropionate (3-CMPFP)**	Correlated with OMEGA-3 INDEX @ r = 0.31
Metabolomics	Metabolon	branched chain 14:0 dicarboxylic acid**	Correlated with OMEGA-3 INDEX @ r = 0.28
Metabolomics	Metabolon	pantothenate	Correlated with OMEGA-3 INDEX @ r = 0.24
Metabolomics	Metabolon	glycerate	Correlated with OMEGA-3 INDEX @ r = 0.24
Metabolomics	Metabolon	erucate (22:1n9)	Correlated with OMEGA-3 INDEX @ r = 0.27
Metabolomics	Metabolon	1-palmitoylglycerol (16:0)	Correlated with OMEGA-6/OMEGA-3 RATIO @ r = 0.24
Metabolomics	Metabolon	1-adrenoyl-GPC (22:4)*	Correlated with OMEGA-6/OMEGA-3 RATIO @ r = 0.35
Metabolomics	Metabolon	1-docosapentaenoyl-GPC (22:5n6)*	Correlated with OMEGA-6/OMEGA-3 RATIO @ r = 0.24
Metabolomics	Metabolon	1-myristoyl-2-linoleoyl-GPC (14:0/18:2)*	Correlated with OMEGA-6/OMEGA-3 RATIO @ r = 0.25
Metabolomics	Metabolon	1-stearoyl-2-docosapentaenoyl-GPC (18:0/22:5n6)*	Correlated with OMEGA-6/OMEGA-3 RATIO @ r = 0.35
Metabolomics	Metabolon	1-palmitoyl-2-adrenoyl-GPC (16:0/22:4)*	Correlated with OMEGA-6/OMEGA-3 RATIO @ r = 0.29

Modality	Vendor	Measurement	Reason for exclusion
Metabolomics	Metabolon	1-stearoyl-2-adrenoyl-GPC (18:0/22:4)*	Correlated with OMEGA-6/OMEGA-3 RATIO @ r = 0.30
Metabolomics	Metabolon	sphingomyelin (d18:2/18:1)*	Correlated with OMEGA-6/OMEGA-3 RATIO @ r = 0.29
Metabolomics	Metabolon	docosahexaenoate (DHA; 22:6n3)	Correlated with OMEGA_3_TOTAL @ r = 0.53
Metabolomics	Metabolon	cysteine s-sulfate	Correlated with OMEGA_3_TOTAL @ r = 0.37
Metabolomics	Metabolon	oxalate (ethanedioate)	Correlated with OMEGA_3_TOTAL @ r = 0.31
Metabolomics	Metabolon	threonate	Correlated with OMEGA_3_TOTAL @ r = 0.38
Metabolomics	Metabolon	pyridoxate	Correlated with OMEGA_3_TOTAL @ r = 0.26
Metabolomics	Metabolon	3-carboxy-4-methyl-5-propyl-2-furanpropanoate (CMPF)	Correlated with OMEGA_3_TOTAL @ r = 0.66
Metabolomics	Metabolon	docosapentaenoate (n3 DPA; 22:5n3)	Correlated with OMEGA_3_TOTAL @ r = 0.23
Metabolomics	Metabolon	1-docosahexaenoyl-GPC (22:6)*	Correlated with OMEGA_3_TOTAL @ r = 0.54
Metabolomics	Metabolon	1-docosahexaenoyl-GPE (22:6)*	Correlated with OMEGA_3_TOTAL @ r = 0.49
Metabolomics	Metabolon	ergothioneine	Correlated with OMEGA_3_TOTAL @ r = 0.36
Metabolomics	Metabolon	1-eicosapentaenoyl-GPE (20:5)*	Correlated with OMEGA_3_TOTAL @ r = 0.48
Metabolomics	Metabolon	1-eicosapentaenoyl-GPC (20:5)*	Correlated with OMEGA_3_TOTAL @ r = 0.54
Metabolomics	Metabolon	1-eicosenoyl-GPC (20:1)*	Correlated with OMEGA_3_TOTAL @ r = 0.23
Metabolomics	Metabolon	methyl glucopyranoside (alpha + beta)	Correlated with OMEGA_3_TOTAL @ r = 0.23
Metabolomics	Metabolon	1-palmitoyl-2-docosahexaenoyl-GPC (16:0/22:6)	Correlated with OMEGA_3_TOTAL @ r = 0.54
Metabolomics	Metabolon	1-stearoyl-2-docosahexaenoyl-GPC (18:0/22:6)	Correlated with OMEGA_3_TOTAL @ r = 0.55
Metabolomics	Metabolon	1-(1-enyl-stearoyl)-2-oleoyl-GPC (P-18:0/18:1)	Correlated with OMEGA_3_TOTAL @ r = 0.28
Metabolomics	Metabolon	1-palmitoyl-2-eicosapentaenoyl-GPC (16:0/20:5)*	Correlated with OMEGA_3_TOTAL @ r = 0.49
Metabolomics	Metabolon	1-palmitoyl-2-docosahexaenoyl-GPE (16:0/22:6)*	Correlated with OMEGA_3_TOTAL @ r = 0.26
Metabolomics	Metabolon	1-(1-enyl-palmitoyl)-2-docosahexaenoyl-GPE (P-16:0/22:6)*	Correlated with OMEGA_3_TOTAL @ r = 0.49
Metabolomics	Metabolon	1-(1-enyl-stearoyl)-2-docosahexaenoyl-GPE (P-18:0/22:6)*	Correlated with OMEGA_3_TOTAL @ r = 0.53
Metabolomics	Metabolon	1-(1-enyl-palmitoyl)-2-oleoyl-GPC (P-16:0/18:1)*	Correlated with OMEGA_3_TOTAL @ r = 0.33
Metabolomics	Metabolon	1-(1-enyl-palmitoyl)-2-docosahexaenoyl-GPC (P-16:0/22:6)*	Correlated with OMEGA_3_TOTAL @ r = 0.56
Metabolomics	Metabolon	1-(1-enyl-stearoyl)-2-docosahexaenoyl-GPC (P-18:0/22:6)*	Correlated with OMEGA_3_TOTAL @ r = 0.54

Modality	Vendor	Measurement	Reason for exclusion
Metabolomics	Metabolon	1-pentadecanoyl-2-docosahexaenoyl-GPC (15:0/22:6)*	Correlated with OMEGA_3_TOTAL @ r = 0.51
Metabolomics	Metabolon	1-margaroyl-2-docosahexaenoyl-GPC (17:0/22:6)*	Correlated with OMEGA_3_TOTAL @ r = 0.57
Metabolomics	Metabolon	1-oleoyl-2-docosahexaenoyl-GPC (18:1/22:6)*	Correlated with OMEGA_3_TOTAL @ r = 0.38
Metabolomics	Metabolon	1-linoleoyl-2-docosahexaenoyl-GPC (18:2/22:6)*	Correlated with OMEGA_3_TOTAL @ r = 0.36
Metabolomics	Metabolon	1-(1-enyl-stearoyl)-2-linoleoyl-GPC (P-18:0/18:2)*	Correlated with OMEGA_3_TOTAL @ r = 0.23
Metabolomics	Metabolon	1-myristoyl-2-docosahexaenoyl-GPC (14:0/22:6)*	Correlated with OMEGA_3_TOTAL @ r = 0.35
Metabolomics	Metabolon	1-(1-enyl-palmitoyl)-2-palmitoyl-GPC (P-16:0/16:0)*	Correlated with OMEGA_3_TOTAL @ r = 0.24
Metabolomics	Metabolon	1-(1-enyl-oleoyl)-2-docosahexaenoyl-GPE (P-18:1/22:6)*	Correlated with OMEGA_3_TOTAL @ r = 0.51
Metabolomics	Metabolon	perfluorooctanesulfonate (PFOS)	Correlated with OMEGA_3_TOTAL @ r = 0.26
Metabolomics	Metabolon	eicosenoylcarnitine (C20:1)*	Correlated with OMEGA_3_TOTAL @ r = 0.25
Metabolomics	Metabolon	carotene diol (1)	Correlated with OMEGA_3_TOTAL @ r = 0.35
Metabolomics	Metabolon	carotene diol (2)	Correlated with OMEGA_3_TOTAL @ r = 0.29
Metabolomics	Metabolon	hydroxy-CMPF*	Correlated with OMEGA_3_TOTAL @ r = 0.66
Metabolomics	Metabolon	3-carboxy-4-methyl-5-pentyl-2-furanpropionate (3-CMPFP)**	Correlated with OMEGA_3_TOTAL @ r = 0.31
Metabolomics	Metabolon	branched chain 14:0 dicarboxylic acid**	Correlated with OMEGA_3_TOTAL @ r = 0.28
Metabolomics	Metabolon	pantothenate	Correlated with OMEGA_3_TOTAL @ r = 0.24
Metabolomics	Metabolon	glycerate	Correlated with OMEGA_3_TOTAL @ r = 0.24
Metabolomics	Metabolon	erucate (22:1n9)	Correlated with OMEGA_3_TOTAL @ r = 0.27
Metabolomics	Metabolon	palmitoyl sphingomyelin (d18:1/16:0)	Correlated with OMEGA_6_TOTAL @ r = 0.23
Metabolomics	Metabolon	sphingomyelin (d18:2/16:0, d18:1/16:1)*	Correlated with OMEGA_6_TOTAL @ r = 0.25
Metabolomics	Metabolon	sphingomyelin (d18:1/20:1, d18:2/20:0)*	Correlated with OMEGA_6_TOTAL @ r = 0.23
Metabolomics	Metabolon	1,2-dilinoleoyl-GPC (18:2/18:2)	Correlated with OMEGA_6_TOTAL @ r = 0.31
Metabolomics	Metabolon	1-(1-enyl-stearoyl)-2-arachidonoyl-GPC (P-18:0/20:4)	Correlated with OMEGA_6_TOTAL @ r = 0.27
Metabolomics	Metabolon	1-(1-enyl-palmitoyl)-2-linoleoyl-GPC (P-16:0/18:2)*	Correlated with OMEGA_6_TOTAL @ r = 0.37
Metabolomics	Metabolon	1-stearyl-2-arachidonoyl-GPC (O-18:0/20:4)*	Correlated with OMEGA_6_TOTAL @ r = 0.30
Metabolomics	Metabolon	lactosyl-N-palmitoyl-sphingosine (d18:1/16:0)	Correlated with OMEGA_6_TOTAL @ r = 0.23
Metabolomics	Metabolon	1-(1-enyl-palmitoyl)-2-linoleoyl-GPE (P-16:0/18:2)*	Correlated with OMEGA_6_TOTAL @ r = 0.25

Modality	Vendor	Measurement	Reason for exclusion
Metabolomics	Metabolon	1-palmityl-2-linoleoyl-GPC (O-16:0/18:2)*	Correlated with OMEGA_6_TOTAL @ r = 0.36
Metabolomics	Metabolon	1-(1-enyl-stearoyl)-2-linoleoyl-GPC (P-18:0/18:2)*	Correlated with OMEGA_6_TOTAL @ r = 0.26
Metabolomics	Metabolon	1-palmityl-2-palmitoyl-GPC (O-16:0/16:0)*	Correlated with OMEGA_6_TOTAL @ r = 0.25
Metabolomics	Metabolon	1-stearyl-2-docosapentaenoyl-GPC (O-18:0/22:5n3)*	Correlated with OMEGA_6_TOTAL @ r = 0.24
Metabolomics	Metabolon	glycosyl ceramide (d18:2/24:1, d18:1/24:2)*	Correlated with OMEGA_6_TOTAL @ r = 0.23
Metabolomics	Metabolon	sphingomyelin (d18:2/18:1)*	Correlated with OMEGA_6_TOTAL @ r = 0.30
Metabolomics	Metabolon	sphingomyelin (d18:2/24:2)*	Correlated with OMEGA_6_TOTAL @ r = 0.33
Metabolomics	Metabolon	hydroxypalmitoyl sphingomyelin (d18:1/16:0(OH))**	Correlated with OMEGA_6_TOTAL @ r = 0.25
Metabolomics	Metabolon	docosahexaenoate (DHA; 22:6n3)	Correlated with VITAMIN D, 25-OH TOT @ r = 0.28
Metabolomics	Metabolon	cysteine s-sulfate	Correlated with VITAMIN D, 25-OH TOT @ r = 0.36
Metabolomics	Metabolon	oxalate (ethanedioate)	Correlated with VITAMIN D, 25-OH TOT @ r = 0.31
Metabolomics	Metabolon	threonate	Correlated with VITAMIN D, 25-OH TOT @ r = 0.31
Metabolomics	Metabolon	pyridoxate	Correlated with VITAMIN D, 25-OH TOT @ r = 0.29
Metabolomics	Metabolon	3-carboxy-4-methyl-5-propyl-2-furanpropanoate (CMPF)	Correlated with VITAMIN D, 25-OH TOT @ r = 0.31
Metabolomics	Metabolon	1-docosahexaenoyl-GPC (22:6)*	Correlated with VITAMIN D, 25-OH TOT @ r = 0.23
Metabolomics	Metabolon	1-docosahexaenoyl-GPE (22:6)*	Correlated with VITAMIN D, 25-OH TOT @ r = 0.26
Metabolomics	Metabolon	methionine sulfone	Correlated with VITAMIN D, 25-OH TOT @ r = 0.26
Metabolomics	Metabolon	1-palmitoyl-2-docosahexaenoyl-GPC (16:0/22:6)	Correlated with VITAMIN D, 25-OH TOT @ r = 0.23
Metabolomics	Metabolon	1-(1-enyl-stearoyl)-2-oleoyl-GPC (P-18:0/18:1)	Correlated with VITAMIN D, 25-OH TOT @ r = 0.23
Metabolomics	Metabolon	1-(1-enyl-stearoyl)-2-docosahexaenoyl-GPE (P-18:0/22:6)*	Correlated with VITAMIN D, 25-OH TOT @ r = 0.26
Metabolomics	Metabolon	1-(1-enyl-palmitoyl)-2-oleoyl-GPC (P-16:0/18:1)*	Correlated with VITAMIN D, 25-OH TOT @ r = 0.29
Metabolomics	Metabolon	1-(1-enyl-palmitoyl)-2-docosahexaenoyl-GPC (P-16:0/22:6)*	Correlated with VITAMIN D, 25-OH TOT @ r = 0.25
Metabolomics	Metabolon	1-(1-enyl-stearoyl)-2-docosahexaenoyl-GPC (P-18:0/22:6)*	Correlated with VITAMIN D, 25-OH TOT @ r = 0.28
Metabolomics	Metabolon	1-palmityl-2-oleoyl-GPC (O-16:0/18:1)*	Correlated with VITAMIN D, 25-OH TOT @ r = 0.24
Metabolomics	Metabolon	1-pentadecanoyl-2-docosahexaenoyl-GPC (15:0/22:6)*	Correlated with VITAMIN D, 25-OH TOT @ r = 0.26
Metabolomics	Metabolon	1-margaroyl-2-docosahexaenoyl-GPC (17:0/22:6)*	Correlated with VITAMIN D, 25-OH TOT @ r = 0.29
Metabolomics	Metabolon	1-oleoyl-2-docosahexaenoyl-GPC (18:1/22:6)*	Correlated with VITAMIN D, 25-OH TOT @ r = 0.26

Modality	Vendor	Measurement	Reason for exclusion
Metabolomics	Metabolon	1-(1-enyl-oleoyl)-2-docosahexaenoyl-GPE (P-18:1/22:6)*	Correlated with VITAMIN D, 25-OH TOT @ r = 0.27
Metabolomics	Metabolon	carotene diol (1)	Correlated with VITAMIN D, 25-OH TOT @ r = 0.23
Metabolomics	Metabolon	hydroxy-CMPF*	Correlated with VITAMIN D, 25-OH TOT @ r = 0.39
Metabolomics	Metabolon	pantothenate	Correlated with VITAMIN D, 25-OH TOT @ r = 0.34
Metabolomics	Metabolon	glycerate	Correlated with VITAMIN D, 25-OH TOT @ r = 0.24

Note: some measures may be marked for exclusion for multiple reasons