

**Table S1.** Baseline comparison of the analyzed metabolites between the groups

Metabolite	Group						<i>p</i> -value
	Sham			RIPC			
	Mean/ Median	SD/ Q1	Q3	Mean/ median	SD/ Q1	Q3	
Ala	392.47	91.42		385.53	89.88		0.715
Arg	114.26	29.25		120.41	35.37		0.365
Cit	35.85	8.24		34.20	9.77		0.384
Gln	811.96	132.49		836.51	186.13		0.470
Glu*	72.90	55.40	95.90	57.10	46.40	74.80	0.036
Gly*	240.00	189.00	286.00	247.00	202.00	288.00	0.885
His	91.83	19.36		94.65	18.72		0.479
Ile*	85.00	72.80	103.00	85.50	70.60	108.00	0.867
Leu*	180.00	147.00	203.00	168.00	144.00	205.00	0.680
Lys	251.85	62.25		271.04	70.97		0.171
Met	22.98	5.60		24.48	6.39		0.232
Orn	96.26	25.91		97.40	23.49		0.826
Phe*	70.50	63.70	83.30	72.10	65.80	78.30	0.697
Pro	204.74	49.65		206.58	63.30		0.877
Ser	134.02	34.93		133.09	31.36		0.893
Thr*	147.00	109.00	251.00	111.00	92.45	161.00	0.072
Trp*	64.90	54.30	76.40	66.00	53.90	74.40	0.885
Tyr	64.45	12.72		70.94	15.07		0.028
Val	266.49	53.09		265.51	71.65		0.941
ADMA	0.56	0.15		0.55	0.14		0.741
Creatinine*	105.00	81.30	151.00	108.00	76.40	143.00	0.640
Kynurenine*	0.04	0.03	0.05	0.04	0.03	0.05	0.353
Serotonine*	0.43	0.33	0.62	0.51	0.34	0.66	0.421
Spermine*	0.00	0.00	3.84	0.00	0.00	3.84	0.711
Taurine	107.03	29.92		105.62	32.00		0.827
Total DMA	1.12	0.29		1.06	0.29		0.330
lysoPCaC16:0*	117.00	78.00	238.00	104.00	77.30	235.00	0.895
lysoPCaC16:1*	3.49	2.35	6.29	3.29	2.44	6.29	0.935
lysoPCaC17:0*	2.11	1.40	3.99	1.85	1.22	4.47	0.678
lysoPCaC18:0	22.52	7.14		22.74	7.34		0.881
lysoPCaC18:1*	25.00	19.00	44.40	26.45	17.00	41.70	0.696
lysoPCaC18:2*	35.80	21.70	50.00	39.30	20.70	57.80	0.551
lysoPCaC20:3*	2.21	1.62	3.43	2.03	1.52	4.51	0.854
lysoPCaC20:4*	7.29	5.44	13.10	6.73	4.55	12.80	0.501
lysoPCaC26:1	0.63	0.40		0.74	0.57		0.360
PCaaC28:1*	2.59	2.12	3.05	2.77	2.05	3.26	0.618
PCaaC30:0*	3.04	2.51	4.01	3.03	2.78	3.69	0.864
PCaaC32:0*	11.00	7.98	15.30	12.30	7.36	17.10	0.806
PCaaC32:1*	13.60	8.05	21.10	13.60	9.15	22.20	0.815
PCaaC32:2	2.38	1.59		2.26	1.46		0.715
PCaaC32:3*	0.36	0.22	0.50	0.31	0.24	0.47	0.641
PCaaC34:1*	242.00	209.00	314.00	262.00	211.00	317.00	0.953
PCaaC34:2	338.43	129.76		345.13	129.30		0.805
PCaaC34:4*	0.98	0.48	1.58	0.81	0.51	1.25	0.614

PCaaC36:0*	2.21	1.65	2.77	1.99	1.52	2.70	0.268
PCaaC36:1	37.71	15.26		40.66	17.02		0.383
PCaaC36:2	188.63	60.04		196.90	62.22		0.518
PCaaC36:3	102.03	39.23		103.89	35.60		0.812
PCaaC36:4	165.60	64.69		160.29	60.36		0.685
PCaaC36:5*	27.80	16.60	39.80	22.95	16.85	36.85	0.800
PCaaC38:0	2.75	0.93		2.48	0.66		0.119
PCaaC38:3	39.95	13.38		40.40	12.81		0.869
PCaaC38:4*	90.80	66.90	107.00	81.60	66.50	119.00	0.885
PCaaC38:5	48.49	17.49		47.08	14.83		0.677
PCaaC38:6*	79.20	61.50	108.00	76.20	66.50	98.60	0.700
PCaaC40:4	2.56	0.65		2.66	0.83		0.540
PCaaC40:5	7.75	2.42		7.89	2.57		0.780
PCaaC40:6*	28.90	22.80	38.20	30.90	24.20	36.80	0.994
PCaaC42:4	0.17	0.04		0.16	0.04		0.267
PCaaC42:5	0.34	0.10		0.32	0.08		0.299
PCaaC42:6	0.53	0.17		0.58	0.15		0.221
PCaeC30:1*	0.45	0.32	0.57	0.37	0.26	0.65	0.737
PCaeC32:1*	1.93	1.54	2.94	2.03	1.44	2.93	0.861
PCaeC32:2*	0.56	0.44	0.77	0.59	0.43	0.75	1.000
PCaeC34:0*	1.06	0.85	1.46	1.04	0.87	1.36	0.978
PCaeC34:1	8.04	3.12		7.96	3.35		0.909
PCaeC34:2	7.21	2.93		7.23	2.97		0.979
PCaeC34:3*	3.73	2.64	5.44	3.65	2.31	5.91	0.815
PCaeC36:0	0.85	0.25		0.85	0.31		0.978
PCaeC36:1	6.76	2.52		6.56	2.32		0.701
PCaeC36:2	10.20	3.49		10.02	3.50		0.811
PCaeC36:3*	4.56	3.70	6.34	4.62	3.68	6.55	0.885
PCaeC36:4*	11.20	8.05	14.00	9.77	7.91	13.60	0.441
PCaeC36:5*	7.47	6.29	10.50	7.21	5.46	10.60	0.419
PCaeC38:0	1.74	0.71		1.68	0.59		0.650
PCaeC38:3	3.23	0.96		3.14	0.90		0.655
PCaeC38:4	9.51	2.43		9.03	2.02		0.316
PCaeC38:5	13.05	3.13		12.34	3.68		0.323
PCaeC38:6*	5.59	4.43	7.46	5.19	4.20	7.32	0.349
PCaeC40:1	1.23	0.35		1.33	0.42		0.268
PCaeC40:2*	1.70	1.44	1.93	1.59	1.43	1.97	0.584
PCaeC40:4*	1.86	1.61	2.22	1.65	1.52	1.97	0.104
PCaeC40:5	2.86	0.62		2.66	0.55		0.114
PCaeC40:6*	4.05	3.45	4.91	3.79	3.34	4.36	0.222
PCaeC42:4	0.70	0.19		0.67	0.19		0.483
PCaeC44:4*	0.40	0.30	0.46	0.32	0.26	0.45	0.649
PCaeC44:5*	1.37	1.06	1.80	1.29	1.09	1.66	0.499
PCaeC44:6	0.99	0.40		0.89	0.23		0.174
SM(OH)C14:1*	3.22	2.28	5.14	2.96	2.30	4.93	0.779
SM(OH)C16:1*	1.74	1.14	2.60	1.53	1.16	2.62	0.750
SM(OH)C22:1*	6.01	4.69	8.60	6.40	4.89	7.72	0.755
SM(OH)C22:2*	5.38	4.33	6.94	5.05	4.22	6.98	0.686
SM(OH)C24:1	0.70	0.29		0.69	0.19		0.744
SMC16:0*	66.50	41.80	94.00	71.00	36.70	90.90	0.594

<b>SMC16:1*</b>	8.80	6.51	12.70	8.87	5.83	12.50	0.573
<b>SMC18:0*</b>	21.50	16.00	31.70	21.70	16.40	26.60	0.950
<b>SMC18:1*</b>	5.71	4.28	8.82	6.13	3.65	8.56	0.610
<b>SMC20:2*</b>	0.18	0.12	0.29	0.18	0.12	0.21	0.559
<b>SMC24:0</b>	11.17	4.21		11.18	3.54		0.993
<b>SMC24:1</b>	34.55	9.76		33.01	8.85		0.431
<b>SMC26:0*</b>	0.09	0.08	0.14	0.10	0.08	0.13	0.667
<b>SMC26:1</b>	0.30	0.11		0.31	0.11		0.841
<b>H1*</b>	4825.00	4245.00	5231.00	4505.00	4207.00	5013.00	0.128
<b>(C2+C3)/C0</b>	0.24	0.08		0.21	0.06		0.105
<b>AAA</b>	204.23	35.65		211.71	36.80		0.325
<b>ADMA/Arg*</b>	0.01	0.00	0.01	0.01	0.00	0.01	0.841
<b>BCAA</b>	532.19	96.74		537.89	143.34		0.825
<b>C2/C0*</b>	0.18	0.16	0.24	0.18	0.15	0.22	0.320
<b>Cit/Arg</b>	0.34	0.12		0.31	0.13		0.276
<b>Cit/Orn</b>	0.39	0.11		0.37	0.12		0.342
<b>Essential AA</b>	1087.47	208.40		1081.53	212.42		0.893
<b>Fisher ratio</b>	2.64	0.44		2.54	0.50		0.326
<b>Glucogenic AA*</b>	740.00	690.00	872.00	765.00	701.00	839.00	0.770
<b>Kynurenine/Trp</b>	0.04	0.02		0.04	0.01		0.654
<b>Nonessential AA</b>	2319.57	252.78		2346.04	338.07		0.671
<b>Orn/Arg*</b>	0.78	0.66	1.06	0.83	0.66	1.02	0.741
<b>Putrescine/Orn*</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.595
<b>Serotonin/Trp*</b>	0.01	0.01	0.01	0.01	0.01	0.01	0.391
<b>Total SM</b>	180.96	59.56		169.40	49.07		0.346
<b>Total SM-nonOH</b>	158.61	53.58		148.05	44.12		0.326
<b>Total SM-OH*</b>	17.40	13.30	23.80	15.80	13.40	23.70	0.898
<b>Total SM-OH/Total SM-nonOH</b>	0.12	0.03		0.12	0.02		0.542
<b>Tyr/Phe</b>	0.91	0.20		0.98	0.21		0.115

All metabolites are measured in  $\mu\text{mol/L}$ , except for metabolic ratios, which do not have a unit

\* Non-normal distribution (Kolmogorov-Smirnov's test). In the case of a non-normal distribution, median and quartiles (Q1, Q3) are provided. In the case of a normal distribution, mean and standard deviation (SD) are given. SD - standard deviation, Q1 - first quartile, Q3 - third quartile, Ala - Alanine, Arg - Arginine, Cit - Citrulline, Gln - Glutamine, Glu - Glutamic acid, Gly - Glycine, His - Histidine, Ile - Isoleucine, Leu - Leucine, Lys - Lysine, Met - Methionine, Orn - Ornithine, Phe - Phenylalanine, Pro - Proline, Ser - Serine, Thr - Threonine, Trp - Tryptophan, Tyr - Tyrosine, Val - Valine, ADMA - Asymmetric dimethylarginine, DMA - dimethylarginine, lysoPCa - lysoPhosphatidylcholine acyl, PCaa - Phosphatidylcholine diacyl, PCae - Phosphatidylcholine acyl-alkyl, SM(OH) - Hydroxysphingomyeline, SM - Sphingomyeline, H1 - hexose, C2 - Acetylcarnitine, C3 - Propionylcarnitine, C0 - Carnitine, AAA - Amino adipic acid, ADMA - asymmetric dimethylarginine, BCAA - Branched chain amino acids, AA - Amino acids, OH - hydroxy, nonOH - Nonhydroxy