

SUPPORTING INFORMATION

Targeted metabolomics reveals metabolomic signatures correlating gastrointestinal tissue to plasma in a mouse total-body irradiation model.

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SUPPORTING INFORMATION FIGURES

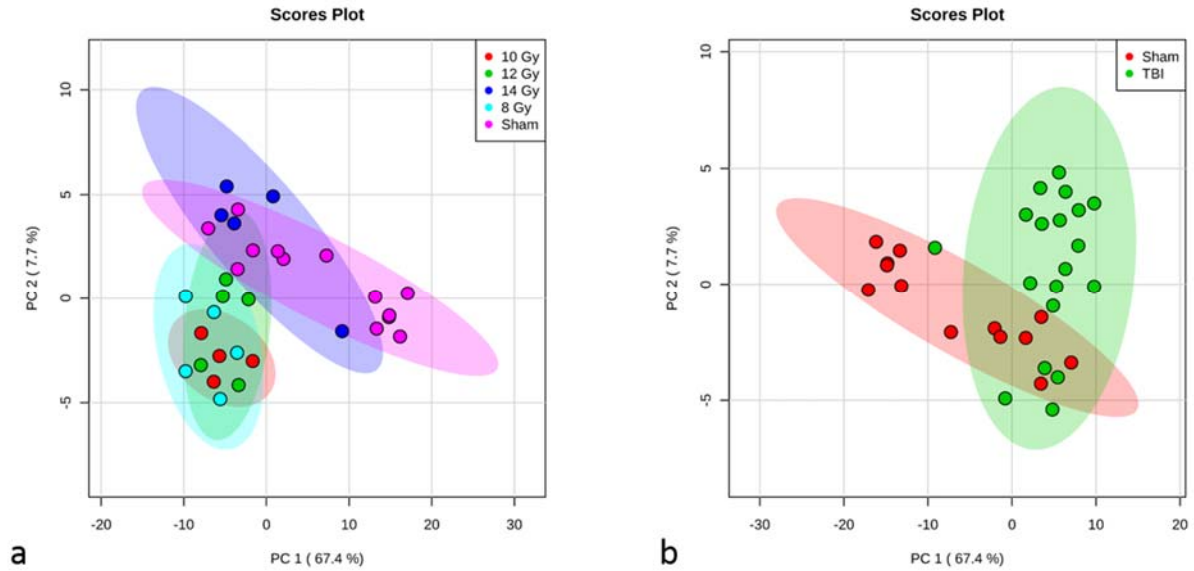


Figure S1. Day 1 jejenum metabolomics: (a) PCA plot comparing sham and individual TBI doses. (b) PCA plot comparing sham and combined TBI doses. For PCA plots, each point represents a data set from an individual animal. The 95% confidence intervals are indicated by elliptical shaded areas per group. Data were sum normalized, log transformed, and mean centered. PCA plots generated using MetaboAnalyst.

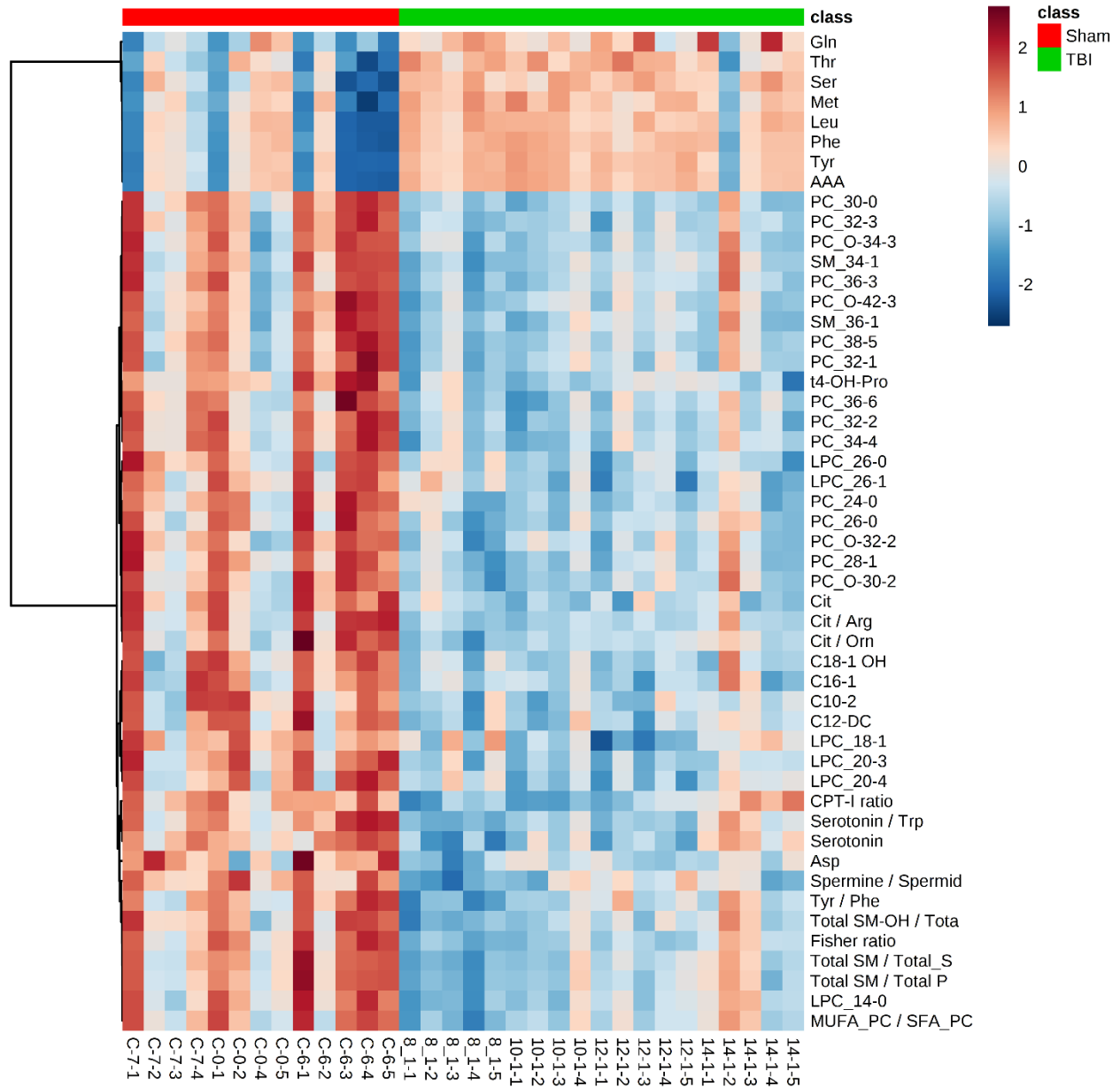


Figure S2. Day 1 jejenum metabolomics: heatmap representing top 50 most significant metabolites differentially expressed between sham and combined TBI doses. Significance was determined by t-test and heatmap was constructed with Pearson distance measuring, Ward clustering, and processed data (sum normalized, log transformed, and mean centered). Heatmap generated using MetaboAnalyst.

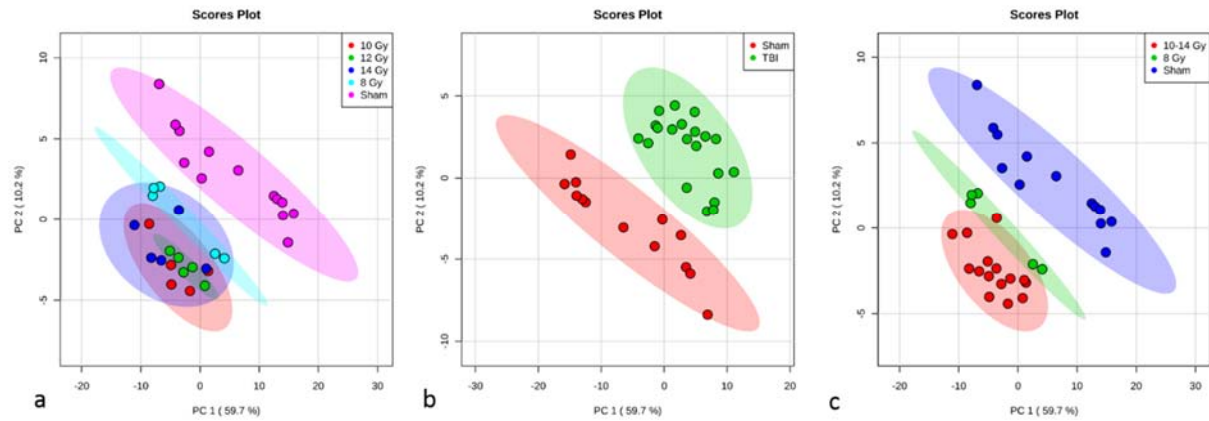


Figure S3. Day 3 jejenum metabolomics: (a) PCA plot comparing sham and individual TBI doses. (b) PCA plot comparing sham and combined TBI doses. (c) PCA plot comparing sham, 8 Gy, and 10-14 Gy TBI doses. For PCA plots, each point represents a data set from an individual animal. The 95% confidence intervals are indicated by elliptical shaded areas per group. Data were sum normalized, log transformed, and mean centered. PCA plots generated using MetaboAnalyst.

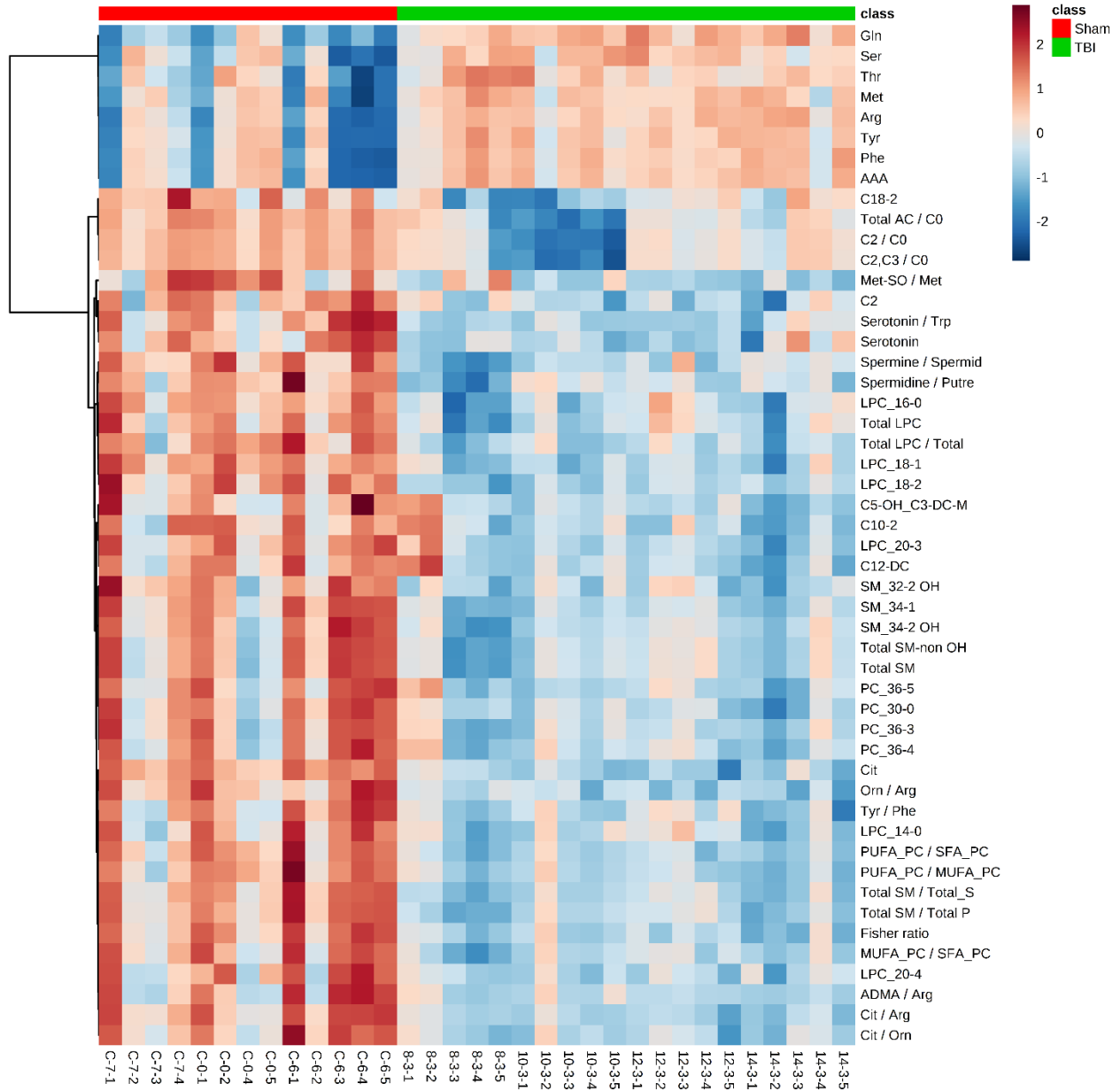


Figure S4. Day 3 jejunum metabolomics: heatmap representing top 50 most significant metabolites differentially expressed between sham and combined TBI doses. Significance was determined by t-test and heatmap was constructed with Pearson distance measuring, Ward clustering, and processed data (sum normalized, log transformed, and mean centered). Heatmap generated using MetaboAnalyst.

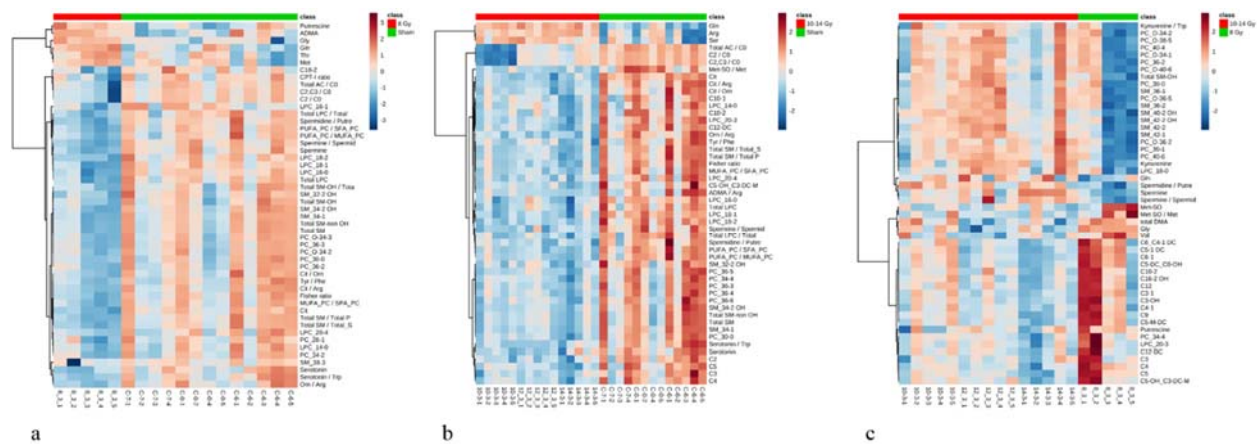


Figure S5. Day 3 jejunum metabolomics: heatmaps representing top 50 most significant metabolites differentially expressed between a) sham and 8 Gy, b) sham and 10-14 Gy, and c) 8 Gy and 10-14 Gy. Significance was determined by t-test and heatmap was constructed with Pearson distance measuring, Ward clustering, and processed data (sum normalized, log transformed, and mean centered). Heatmaps generated using MetaboAnalyst.

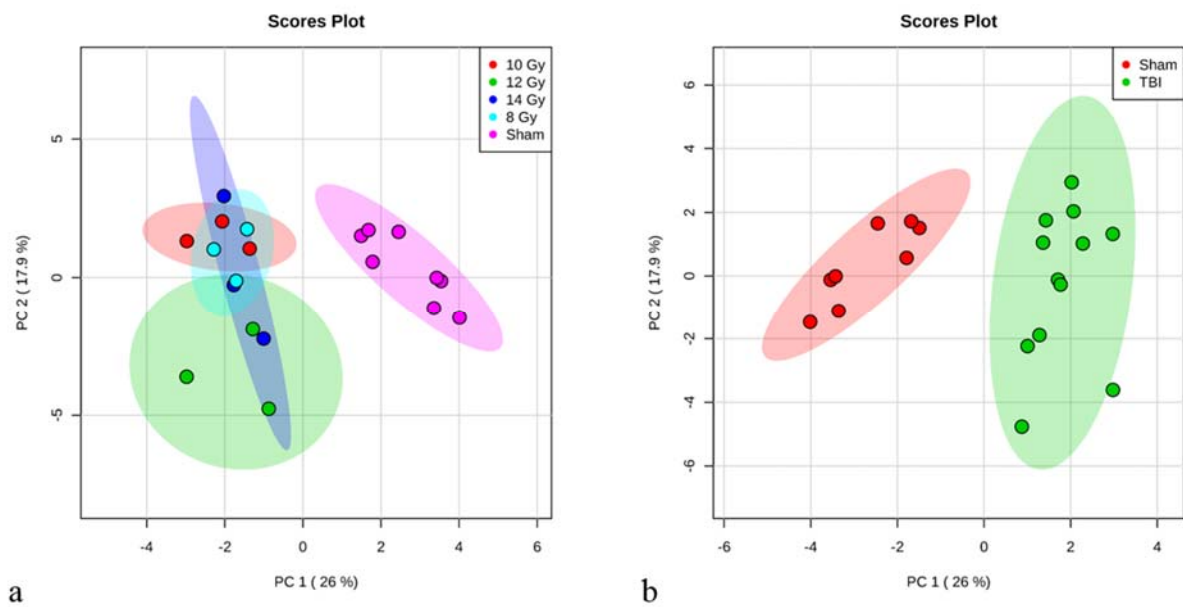


Figure S6. Day 1 plasma metabolomics: (a) PCA plot comparing sham and individual TBI doses. (b) PCA plot comparing sham and combined TBI doses. For PCA plots, each point represents a data set from an individual animal. The 95% confidence intervals are indicated by elliptical shaded areas per group. Data were sum normalized, log transformed, and mean centered. PCA plots generated using MetaboAnalyst.

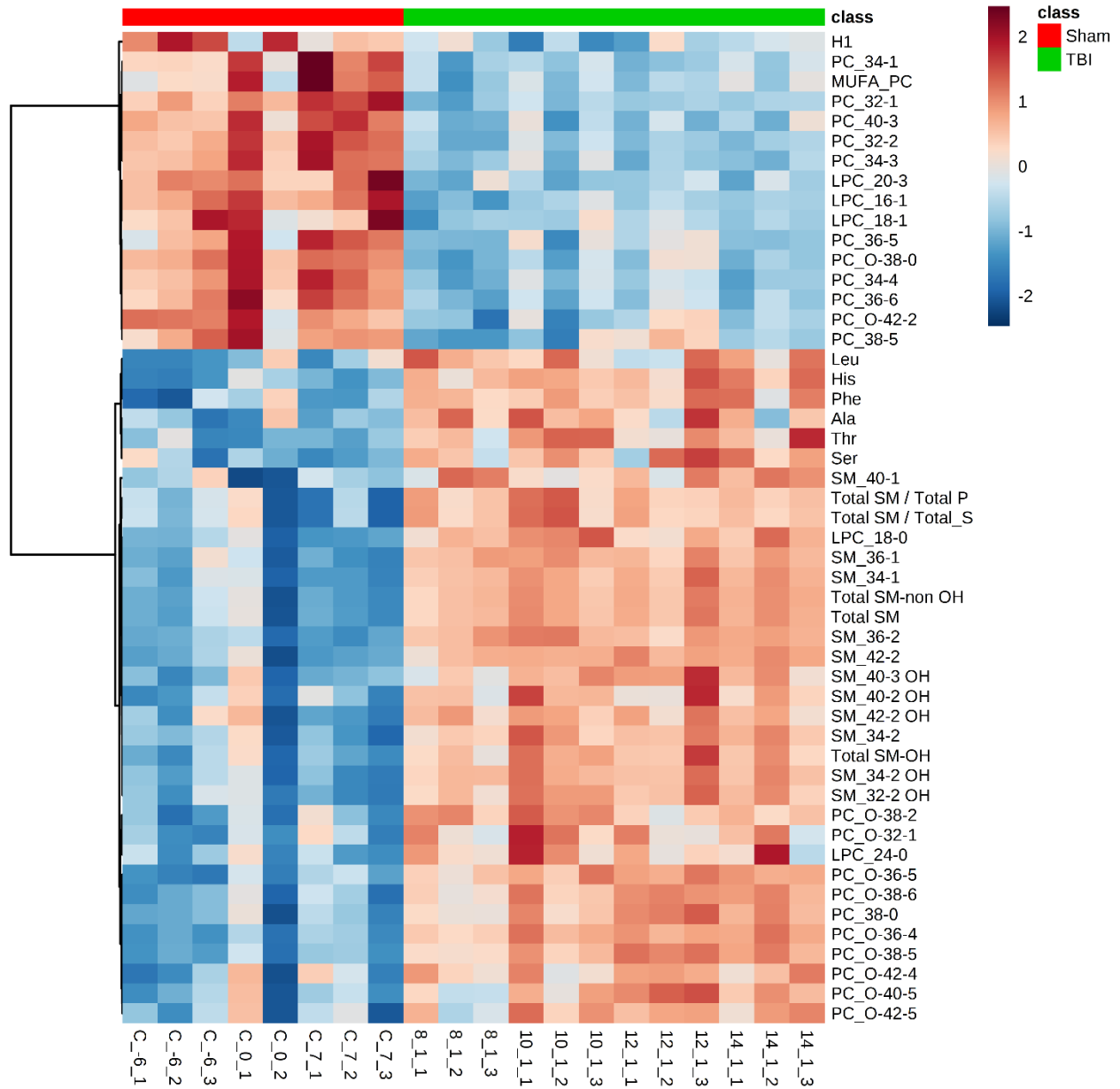


Figure S7. Day 1 plasma metabolomics: heatmap representing top 50 most significant metabolites differentially expressed between sham and combined TBI doses. Significance was determined by t-test and heatmap was constructed with Pearson distance measuring, Ward clustering, and processed data (sum normalized, log transformed, and mean centered). Heatmap generated using MetaboAnalyst.

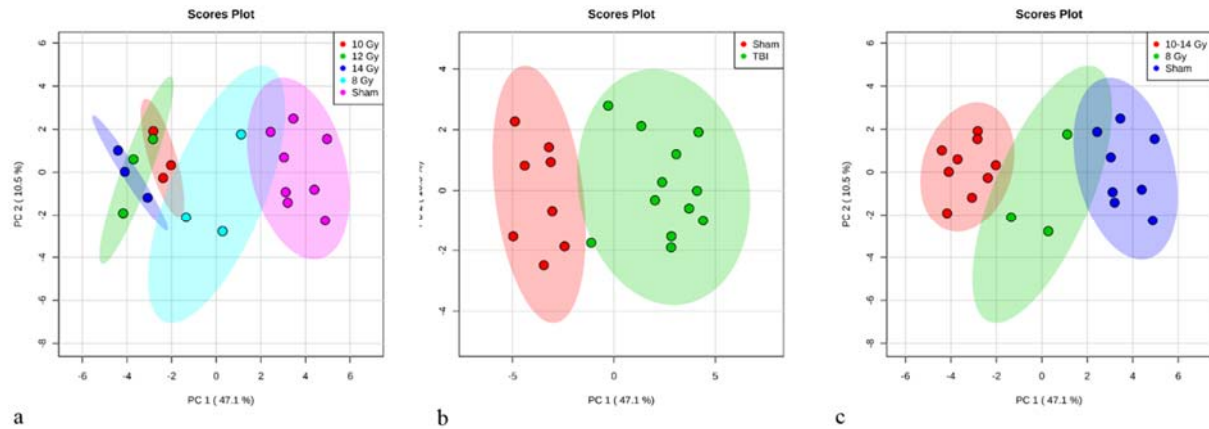


Figure S8. Day 3 plasma metabolomics: (a) PCA plot comparing sham and individual TBI doses. (b) PCA plot comparing sham and combined TBI doses. (c) PCA plot comparing sham, 8 Gy, and 10-14 Gy TBI doses. For PCA plots, each point represents a data set from an individual animal. The 95% confidence intervals are indicated by elliptical shaded areas per group. Data were sum normalized, log transformed, and mean centered. PCA plots generated using MetaboAnalyst.

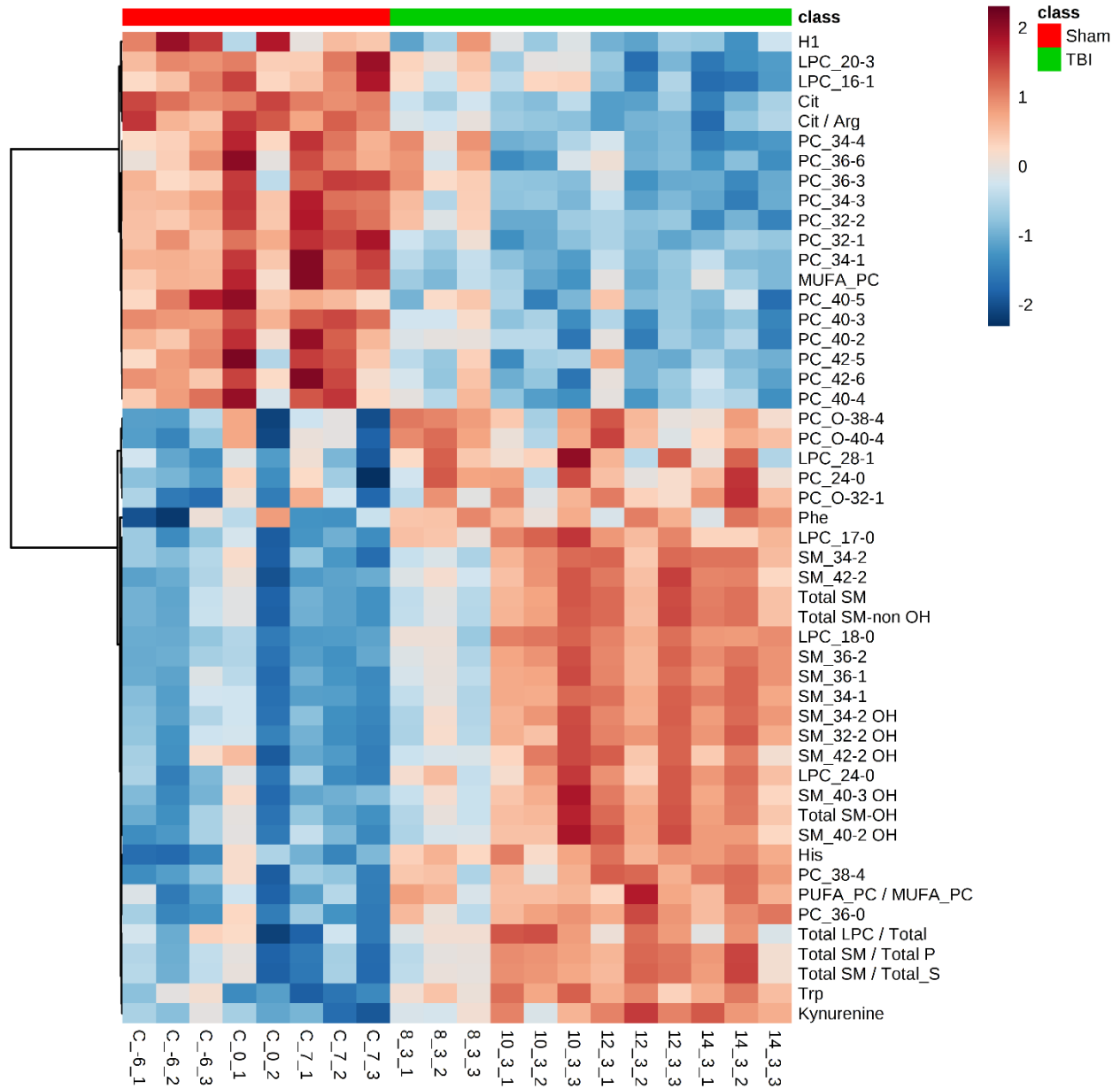


Figure S9. Day 3 plasma metabolomics: heatmap representing top 50 most significant metabolites differentially expressed between sham and combined TBI doses. Significance was determined by t-test and heatmap was constructed with Pearson distance measuring, Ward clustering, and processed data (sum normalized, log transformed, and mean centered). Heatmap generated using MetaboAnalyst.

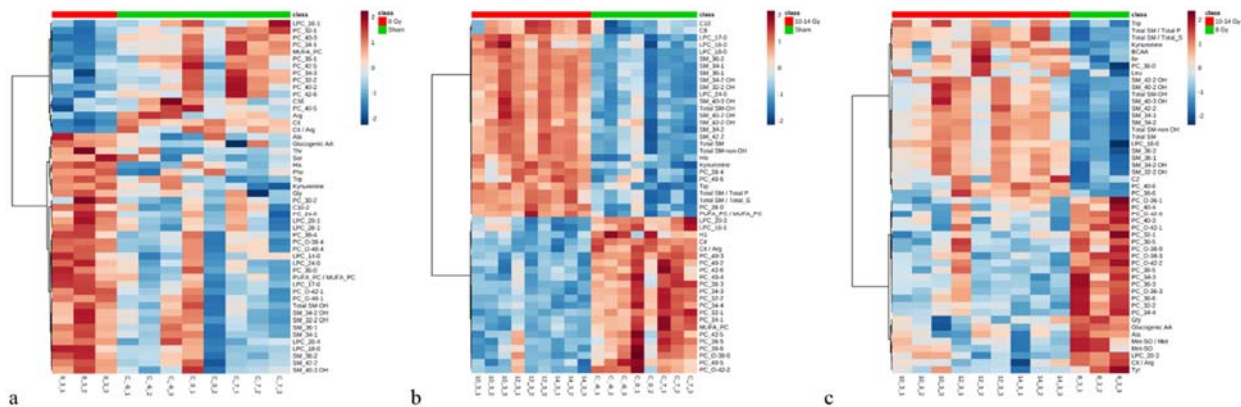


Figure S10. Day 3 plasma metabolomics: heatmaps representing top 50 most significant metabolites differentially expressed between a) sham and 8 Gy, b) sham and 10-14 Gy, and c) 8 Gy and 10-14 Gy. Significance was determined by t-test and heatmap was constructed with Pearson distance measuring, Ward clustering, and processed data (sum normalized, log transformed, and mean centered). Heatmaps generated using MetaboAnalyst.

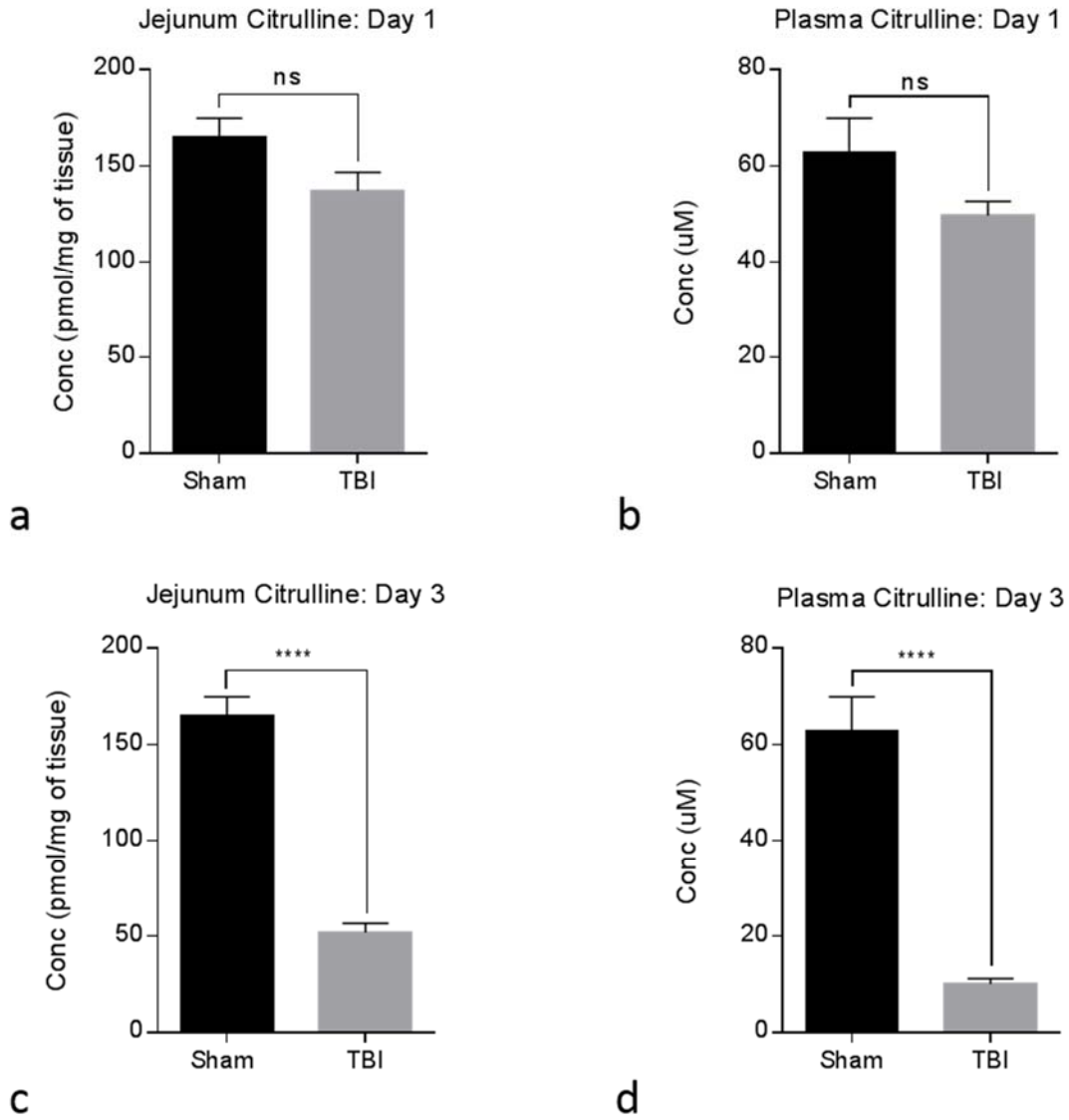


Figure S11. Day 1 and Day 3 jejunum tissue to plasma correlation for citrulline comparing sham to combined TBI doses: (a) jejunum citrulline day 1, (b) plasma citrulline day 1, (c) jejunum citrulline day 3, (d) plasma citrulline day 3. Bar graph data are mean \pm SEM, ns= nonsignificant, $p > 0.05$, $*p < 0.05$, $**p < 0.01$, $***p < 0.005$, $****p < 0.0001$.

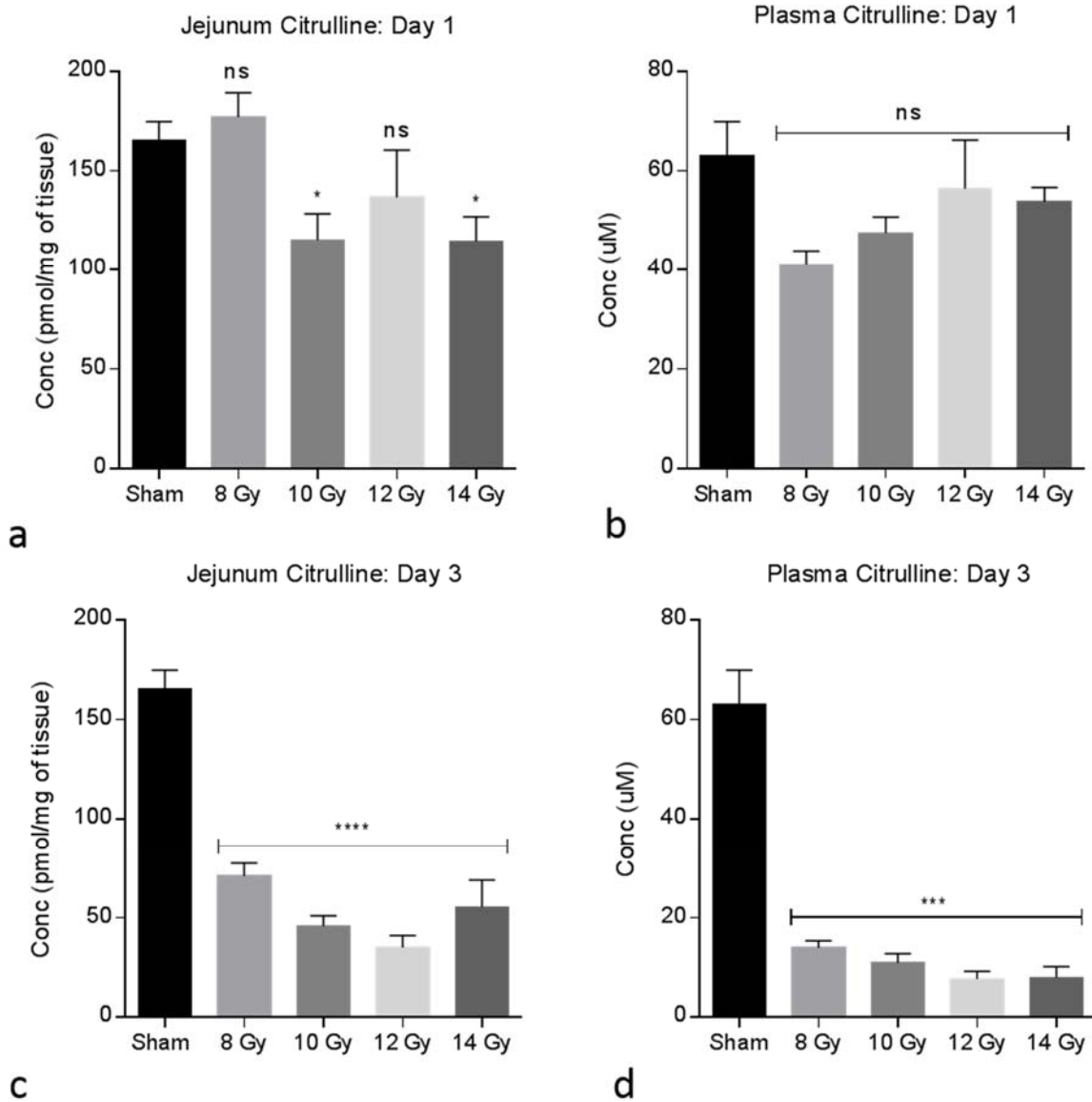


Figure S12. Day 1 and Day 3 jejunum tissue to plasma correlation for citrulline comparing sham to 8, 10, 12, and 14 Gy TBI doses: (a) jejunum citrulline day 1, (b) plasma citrulline day 1, (c) jejunum citrulline day 3, (d) plasma citrulline day 3. Bar graph data are mean \pm SEM, ns=nonsignificant, $p > 0.05$, $*p < 0.05$, $**p < 0.01$, $***p < 0.005$, $****p < 0.0001$.

SUPPORTING INFORMATION TABLES

Jejunum

Day Post-IR

		Sham	1	3	Total # of Mice per dose
TBI Dose (Gy)	Control	13			13
	8		5	5	10
	10		4	5	9
	12		5	5	10
	14		5	5	10
	Total # of Mice				

a

Plasma

Day Post-IR

		Sham	1	3	Total # of Mice per dose
TBI Dose (Gy)	Control	8			8
	8		3	3	6
	10		3	3	6
	12		3	3	6
	14		3	3	6
	Total # of Mice				

b

Table S1. Tabular representation of the radiological doses, time points, and number of mice.

		Sham			8 Gy			10 Gy			12 Gy			14 Gy		
		Mean	SEM	N	Mean	SEM	N	Mean	SEM	N	Mean	SEM	N	Mean	SEM	N
1	C0	249.68	10.83	13	282.73	14.78	5	255.03	16.10	4	266.02	12.91	5	246.62	49.32	5
2	C10	0.71	0.05	13	1.04	0.11	5	0.63	0.04	4	0.57	0.04	5	0.58	0.01	5
3	C10-1	0.70	0.03	13	0.87	0.07	5	0.68	0.04	4	0.66	0.04	5	0.68	0.02	5
4	C10-2	0.46	0.02	13	0.56	0.04	5	0.42	0.02	4	0.44	0.04	5	0.42	0.03	5
5	C12	0.69	0.06	13	1.07	0.06	5	0.65	0.10	4	0.53	0.06	5	0.53	0.05	5
6	C12-DC	1.49	0.04	13	1.92	0.12	5	1.55	0.06	4	1.46	0.05	5	1.48	0.06	5
7	C12-1	0.64	0.02	13	0.84	0.04	5	0.68	0.04	4	0.68	0.04	5	0.64	0.02	5
8	C14	1.01	0.07	13	1.83	0.10	5	1.23	0.05	4	1.13	0.11	5	1.20	0.12	5
9	C14-1	0.26	0.02	13	0.36	0.02	5	0.27	0.02	4	0.22	0.02	5	0.23	0.01	5
10	C14-1 OH	0.32	0.03	13	0.47	0.02	5	0.34	0.03	4	0.28	0.03	5	0.26	0.02	5
11	C14-2	0.17	0.01	13	0.23	0.02	5	0.16	0.02	4	0.22	0.05	5	0.15	0.01	5
12	C14-2 OH	0.21	0.02	13	0.34	0.02	5	0.22	0.03	4	0.17	0.01	5	0.17	0.01	5
13	C16	2.25	0.18	13	2.77	0.07	5	2.54	0.14	4	2.13	0.21	5	2.60	0.35	5
14	C16-OH	0.60	0.05	13	0.70	0.05	5	0.52	0.02	4	0.46	0.03	5	0.56	0.17	5
15	C16-1	0.45	0.02	13	0.56	0.01	5	0.47	0.02	4	0.39	0.02	5	0.41	0.03	5
16	C16-1 OH	0.35	0.03	13	0.48	0.01	5	0.36	0.03	4	0.28	0.02	5	0.28	0.03	5
17	C16-2	0.23	0.02	13	0.34	0.02	5	0.26	0.03	4	0.21	0.03	5	0.21	0.02	5
18	C16-2 OH	0.25	0.02	13	0.32	0.01	5	0.25	0.02	4	0.21	0.01	5	0.21	0.02	5
19	C18	1.42	0.10	13	1.46	0.13	5	1.35	0.18	4	1.10	0.09	5	1.56	0.25	5
20	C18-1	1.01	0.10	13	1.29	0.15	5	1.71	0.46	4	0.92	0.13	5	1.02	0.10	5
21	C18-1 OH	0.53	0.03	13	0.57	0.03	5	0.43	0.02	4	0.40	0.02	5	0.43	0.06	5
22	C18-2	0.70	0.07	13	0.89	0.08	5	0.83	0.16	4	0.63	0.07	5	0.79	0.08	5
23	C2	52.64	4.03	13	44.01	4.06	5	53.01	3.98	4	56.51	4.30	5	76.45	11.92	5
24	C3	1.68	0.12	13	1.44	0.09	5	1.76	0.37	4	1.28	0.10	5	1.93	0.23	5
25	C3-DC_C4-OH	2.07	0.13	13	2.47	0.19	5	2.51	0.06	4	2.37	0.15	5	2.15	0.26	5
26	C3-OH	0.44	0.03	13	0.54	0.04	5	0.41	0.02	4	0.38	0.02	5	0.35	0.02	5
27	C3-1	0.34	0.04	13	0.54	0.03	5	0.33	0.03	4	0.26	0.03	5	0.25	0.02	5
28	C4	1.19	0.10	13	1.46	0.11	5	1.05	0.15	4	0.73	0.09	5	1.17	0.18	5
29	C4-1	0.29	0.02	13	0.44	0.03	5	0.29	0.01	4	0.26	0.02	5	0.22	0.01	5
30	C5	1.06	0.05	13	1.53	0.05	5	1.12	0.04	4	1.01	0.05	5	1.23	0.10	5
31	C5-DC_C6-OH	0.75	0.09	13	1.37	0.07	5	0.76	0.09	4	0.51	0.07	5	0.49	0.04	5
32	C5-M-DC	0.48	0.04	13	0.73	0.04	5	0.54	0.04	4	0.40	0.04	5	0.39	0.02	5
33	C5-OH_C3-DC-M	1.33	0.19	13	1.47	0.16	5	0.99	0.09	4	0.88	0.05	5	0.87	0.08	5
34	C5-1	0.32	0.02	13	0.44	0.03	5	0.32	0.02	4	0.29	0.02	5	0.32	0.03	5
35	C5-1 DC	0.91	0.14	13	1.83	0.08	5	0.79	0.15	4	0.39	0.06	5	0.38	0.06	5
36	C6_C4-1 DC	0.49	0.05	13	0.79	0.06	5	0.44	0.06	4	0.31	0.03	5	0.32	0.03	5
37	C6-1	0.35	0.04	13	0.60	0.04	5	0.30	0.03	4	0.24	0.03	5	0.20	0.02	5
38	C7-DC	0.31	0.03	13	0.53	0.03	5	0.38	0.03	4	0.35	0.04	5	0.33	0.01	5
39	C8	0.76	0.04	13	1.02	0.13	5	0.68	0.03	4	0.67	0.05	5	0.67	0.04	5
40	C9	0.34	0.03	13	0.56	0.05	5	0.32	0.03	4	0.25	0.02	5	0.25	0.02	5
41	Ala	4546.15	602.59	13	8664.00	486.56	5	6429.00	729.46	4	5629.20	528.17	5	5757.60	752.69	5
42	Arg	486.32	119.35	13	1615.20	234.45	5	1245.00	207.56	4	1130.40	68.53	5	813.24	169.97	5
43	Asn	419.82	84.21	13	1167.60	117.94	5	831.00	79.16	4	812.28	148.67	5	657.72	106.00	5
44	Asp	1390.62	120.84	13	1638.00	119.38	5	1578.00	133.56	4	1362.00	85.42	5	1314.00	86.18	5
45	Cit	165.18	9.75	13	177.12	12.35	5	115.35	13.02	4	136.68	23.78	5	114.72	12.19	5
46	Gln	826.48	133.87	13	2193.60	242.02	5	1513.50	160.76	4	1657.20	299.40	5	1666.80	418.37	5
47	Glu	3498.92	169.01	13	4321.20	241.46	5	4033.50	139.91	4	3861.60	84.31	5	5060.40	496.88	5
48	Gly	2814.92	247.64	13	6817.20	306.03	5	4408.50	563.87	4	4081.20	311.28	5	2724.00	349.42	5

49	His	224.12	41.24	13	703.92	147.69	5	464.85	70.71	4	414.24	54.92	5	393.72	78.52	5
50	Ile	558.83	117.46	13	1624.80	206.57	5	1338.00	170.29	4	1081.20	132.78	5	910.56	185.03	5
51	Leu	1058.54	229.30	13	3327.60	447.13	5	2547.00	314.16	4	2157.60	261.17	5	1923.60	399.12	5
52	Lys	574.85	113.52	13	1834.80	272.97	5	1291.50	168.77	4	1082.40	85.46	5	768.36	142.71	5
53	Met	344.03	67.12	13	1059.60	132.88	5	855.15	132.34	4	691.68	51.95	5	539.40	102.98	5
54	Orn	36.69	8.18	13	132.12	29.21	5	62.24	7.00	4	59.95	11.24	5	43.54	8.17	5
55	Phe	518.77	108.85	13	1594.80	169.68	5	1375.50	170.17	4	1123.20	91.40	5	902.40	179.08	5
56	Pro	808.25	144.52	13	2110.80	143.60	5	1452.00	113.87	4	1381.20	196.32	5	1267.20	258.52	5
57	Ser	1156.66	221.72	13	3174.00	350.67	5	2487.00	264.14	4	2398.80	230.55	5	2018.40	386.79	5
58	Thr	751.85	116.56	13	2163.60	224.57	5	1639.50	145.77	4	1640.40	106.84	5	1107.12	188.36	5
59	Trp	91.64	20.20	13	269.76	34.86	5	233.55	36.44	4	198.60	22.12	5	131.98	26.12	5
60	Tyr	438.69	90.97	13	1309.20	137.17	5	1144.50	160.24	4	1015.20	64.47	5	723.24	141.03	5
61	Val	757.34	139.28	13	2175.60	251.54	5	1618.50	188.43	4	1194.00	105.21	5	912.84	169.92	5
62	ADMA	2.88	0.18	13	8.28	0.29	5	7.56	1.05	4	5.43	0.40	5	4.44	0.29	5
63	Kynurenine	2.99	0.39	13	2.87	0.35	5	2.78	0.48	4	3.46	0.61	5	3.04	0.66	5
64	Met-SO	8.52	2.22	13	23.39	3.26	5	9.81	1.00	4	16.27	2.98	5	24.54	6.36	5
65	Putrescine	26.62	1.89	13	21.34	1.07	5	20.06	2.59	4	20.48	1.16	5	35.77	3.93	5
66	Serotonin	9.79	1.66	13	1.65	0.64	5	3.18	1.04	4	1.44	0.40	5	6.49	1.07	5
67	Spermidine	63.36	1.64	13	83.16	2.18	5	77.66	7.34	4	79.20	4.03	5	83.06	7.84	5
68	Spermine	5.98	0.36	13	6.14	0.59	5	6.17	0.87	4	7.43	0.51	5	5.86	0.65	5
69	t4-OH-Pro	22.32	2.29	13	15.82	2.61	5	10.28	1.34	4	15.22	1.49	5	10.19	1.89	5
70	total DMA	1.36	0.24	13	4.26	0.33	5	3.44	0.50	4	2.56	0.25	5	2.46	0.38	5
71	LPC_14-0	9.40	0.14	13	9.85	0.32	5	9.11	0.17	4	9.40	0.10	5	9.60	0.11	5
72	LPC_16-0	183.74	10.20	13	297.88	15.86	5	227.72	14.72	4	205.75	9.65	5	230.51	20.64	5
73	LPC_16-1	2.00	0.17	13	2.92	0.18	5	2.11	0.16	4	1.76	0.14	5	2.34	0.22	5
74	LPC_17-0	3.41	0.16	13	5.54	0.37	5	4.35	0.32	4	4.02	0.33	5	4.49	0.16	5
75	LPC_18-0	101.11	3.60	13	158.85	10.22	5	124.69	5.61	4	113.40	4.42	5	121.75	5.47	5
76	LPC_18-1	18.32	1.10	13	29.41	2.20	5	20.61	0.95	4	16.55	0.69	5	20.22	2.02	5
77	LPC_18-2	56.32	3.32	13	82.78	4.82	5	50.64	2.97	4	51.50	1.60	5	61.43	5.73	5
78	LPC_20-3	2.31	0.10	13	2.68	0.21	5	1.98	0.08	4	1.80	0.07	5	1.88	0.14	5
79	LPC_20-4	14.73	0.59	13	20.73	1.33	5	13.49	0.56	4	12.46	0.82	5	14.10	1.07	5
80	LPC_24-0	1.09	0.04	13	1.50	0.11	5	1.05	0.07	4	1.10	0.10	5	0.91	0.06	5
81	LPC_26-0	1.20	0.07	13	1.52	0.08	5	1.00	0.02	4	0.94	0.13	5	0.85	0.07	5
82	LPC_26-1	0.62	0.03	13	0.79	0.05	5	0.46	0.03	4	0.40	0.06	5	0.42	0.03	5
83	LPC_28-0	1.27	0.12	13	1.32	0.06	5	1.19	0.06	4	1.27	0.14	5	1.11	0.11	5
84	LPC_28-1	1.06	0.08	13	1.25	0.08	5	0.84	0.09	4	0.89	0.14	5	0.91	0.10	5
85	PC_24-0	0.80	0.04	13	0.84	0.11	5	0.60	0.03	4	0.56	0.06	5	0.54	0.03	5
86	PC_26-0	4.97	0.19	13	5.53	0.37	5	4.62	0.10	4	4.58	0.28	5	4.51	0.18	5
87	PC_28-1	1.60	0.07	13	1.66	0.13	5	1.34	0.03	4	1.39	0.13	5	1.34	0.12	5
88	PC_30-0	30.02	1.37	13	29.79	1.03	5	22.13	1.33	4	22.81	0.47	5	21.57	2.03	5
89	PC_30-2	0.47	0.05	13	0.61	0.07	5	0.35	0.08	4	0.34	0.15	5	0.12	0.02	5
90	PC_32-0	344.56	19.41	13	384.95	19.51	5	311.30	24.76	4	336.80	3.22	5	300.03	32.43	5
91	PC_32-1	54.36	3.05	13	57.23	2.97	5	52.69	2.44	4	50.33	2.21	5	45.87	3.13	5
92	PC_32-2	8.23	0.33	13	9.47	0.43	5	6.85	0.28	4	7.07	0.31	5	6.64	0.63	5
93	PC_32-3	1.04	0.05	13	1.01	0.04	5	0.86	0.02	4	0.81	0.07	5	0.80	0.07	5
94	PC_34-1	581.23	34.70	13	724.64	22.85	5	550.68	30.66	4	582.14	16.96	5	543.37	63.50	5
95	PC_34-2	1812.34	40.26	13	1575.01	111.42	5	1883.76	97.58	4	2010.87	58.15	5	1865.38	67.78	5
96	PC_34-3	88.38	4.23	13	119.26	6.44	5	84.30	4.13	4	97.57	6.52	5	96.77	10.02	5
97	PC_34-4	5.24	0.22	13	5.95	0.43	5	4.28	0.08	4	4.74	0.29	5	4.55	0.31	5
98	PC_36-0	8.41	0.42	13	8.42	0.74	5	8.10	0.32	4	9.22	0.53	5	8.96	0.89	5
99	PC_36-1	245.86	19.87	13	294.91	11.59	5	241.57	19.16	4	253.44	9.29	5	208.91	34.64	5

100	PC_36-2	1502.79	55.78	13	1556.89	73.27	5	1574.89	100.54	4	1702.90	28.92	5	1470.95	111.45	5
101	PC_36-3	628.50	29.10	13	718.56	23.98	5	588.03	27.54	4	624.01	22.87	5	590.94	54.14	5
102	PC_36-4	1196.86	45.86	13	1312.24	55.94	5	1134.79	61.98	4	1205.24	43.30	5	1159.40	92.79	5
103	PC_36-5	61.18	2.39	13	78.49	4.14	5	58.67	1.38	4	63.11	3.30	5	63.47	5.57	5
104	PC_36-6	1.92	0.11	13	2.36	0.11	5	1.65	0.08	4	1.81	0.09	5	1.75	0.16	5
105	PC_38-0	8.67	0.67	13	9.96	0.47	5	8.62	0.97	4	9.68	0.32	5	9.68	1.33	5
106	PC_38-1	4.29	0.31	13	4.93	0.40	5	4.64	0.38	4	5.62	0.30	5	4.61	0.61	5
107	PC_38-3	151.99	11.10	13	155.97	9.10	5	143.99	10.24	4	144.65	7.01	5	121.82	14.84	5
108	PC_38-4	741.41	45.39	13	749.77	41.42	5	694.90	43.61	4	725.10	28.75	5	643.20	62.17	5
109	PC_38-5	215.70	12.17	13	210.61	13.28	5	185.36	9.42	4	181.39	7.22	5	170.44	11.33	5
110	PC_38-6	254.25	13.31	13	281.91	12.83	5	242.46	12.63	4	256.37	11.27	5	234.96	19.24	5
111	PC_40-1	2.80	0.21	13	3.40	0.24	5	2.95	0.26	4	2.99	0.05	5	2.98	0.44	5
112	PC_40-2	6.17	0.61	13	7.36	0.57	5	6.03	0.60	4	6.60	0.22	5	5.16	0.91	5
113	PC_40-3	6.45	0.58	13	7.19	0.51	5	6.36	0.59	4	7.26	0.31	5	5.90	0.75	5
114	PC_40-4	32.06	2.46	13	36.81	2.71	5	31.01	1.94	4	34.37	1.08	5	29.13	3.84	5
115	PC_40-5	40.22	2.81	13	42.52	2.99	5	37.24	2.31	4	39.89	1.29	5	34.24	4.03	5
116	PC_40-6	121.79	9.22	13	129.81	6.25	5	123.19	8.88	4	127.71	4.88	5	109.38	12.73	5
117	PC_42-0	1.74	0.11	13	2.12	0.14	5	1.76	0.06	4	1.89	0.08	5	1.86	0.22	5
118	PC_42-1	1.18	0.11	13	1.61	0.12	5	1.32	0.16	4	1.36	0.06	5	1.14	0.21	5
119	PC_42-2	3.55	0.38	13	4.53	0.30	5	3.31	0.39	4	3.45	0.20	5	2.83	0.67	5
120	PC_42-4	4.62	0.45	13	5.42	0.35	5	4.45	0.44	4	4.72	0.19	5	3.96	0.70	5
121	PC_42-5	6.36	0.51	13	7.47	0.61	5	6.30	0.58	4	6.70	0.28	5	5.78	0.88	5
122	PC_42-6	4.91	0.35	13	5.61	0.36	5	4.61	0.41	4	4.88	0.21	5	4.26	0.50	5
123	PC_O-30-0	2.04	0.14	13	1.88	0.10	5	2.00	0.25	4	1.82	0.15	5	1.86	0.14	5
124	PC_O-30-1	0.82	0.20	13	1.32	0.25	5	0.36	0.13	4	0.31	0.18	5	0.24	0.08	5
125	PC_O-30-2	0.42	0.02	13	0.44	0.04	5	0.34	0.02	4	0.38	0.03	5	0.37	0.04	5
126	PC_O-32-1	8.41	0.46	13	9.99	0.30	5	8.11	0.52	4	8.10	0.31	5	7.33	0.67	5
127	PC_O-32-2	1.65	0.08	13	1.79	0.11	5	1.72	0.14	4	1.51	0.14	5	1.41	0.09	5
128	PC_O-34-0	13.58	1.05	13	17.12	1.36	5	12.82	0.86	4	14.47	0.47	5	12.76	1.65	5
129	PC_O-34-1	41.58	2.55	13	46.20	2.95	5	37.75	2.91	4	39.78	1.17	5	35.60	3.81	5
130	PC_O-34-2	35.12	1.94	13	44.76	2.00	5	34.50	2.64	4	36.72	1.92	5	35.22	3.41	5
131	PC_O-34-3	5.79	0.31	13	6.77	0.23	5	5.15	0.33	4	5.36	0.25	5	4.97	0.45	5
132	PC_O-36-0	8.07	0.78	13	11.17	0.93	5	9.38	0.70	4	10.64	0.52	5	9.63	1.92	5
133	PC_O-36-1	17.54	1.34	13	22.28	0.99	5	18.48	1.43	4	19.54	1.74	5	18.85	3.04	5
134	PC_O-36-2	81.14	5.76	13	104.80	4.61	5	91.85	5.82	4	101.50	8.20	5	87.07	11.33	5
135	PC_O-36-3	14.68	0.78	13	18.12	0.85	5	14.11	0.81	4	15.81	0.89	5	15.22	1.38	5
136	PC_O-36-4	38.68	2.16	13	47.58	2.85	5	37.94	3.18	4	41.62	1.69	5	39.34	3.87	5
137	PC_O-36-5	19.78	1.21	13	24.69	1.26	5	19.22	0.96	4	22.25	0.71	5	19.45	2.25	5
138	PC_O-38-0	13.11	0.83	13	16.27	1.10	5	13.28	0.79	4	14.58	0.74	5	13.93	1.47	5
139	PC_O-38-1	9.08	0.76	13	12.18	0.58	5	11.20	1.01	4	11.85	1.14	5	10.78	2.28	5
140	PC_O-38-2	64.16	5.53	13	97.31	6.32	5	96.08	9.76	4	108.76	12.93	5	92.55	18.86	5
141	PC_O-38-3	11.52	0.75	13	14.92	0.60	5	12.97	0.62	4	14.38	1.27	5	12.97	1.89	5
142	PC_O-38-4	40.73	2.74	13	50.28	2.87	5	43.53	3.04	4	45.30	2.86	5	41.87	4.79	5
143	PC_O-38-5	34.19	1.98	13	39.63	2.64	5	33.56	2.87	4	36.58	0.72	5	35.72	3.60	5
144	PC_O-38-6	14.83	0.93	13	17.89	0.81	5	14.68	0.96	4	16.60	0.53	5	15.16	1.73	5
145	PC_O-40-1	28.52	1.69	13	29.54	1.53	5	28.38	1.56	4	28.34	1.05	5	26.61	2.55	5
146	PC_O-40-2	5.38	0.44	13	6.69	0.46	5	5.71	0.49	4	6.15	0.30	5	5.43	0.93	5
147	PC_O-40-3	4.92	0.45	13	5.88	0.25	5	5.86	0.55	4	5.95	0.56	5	5.37	0.96	5
148	PC_O-40-4	23.90	1.95	13	32.70	2.13	5	31.08	2.07	4	32.79	3.05	5	28.39	4.26	5
149	PC_O-40-5	8.71	0.57	13	10.40	0.58	5	8.99	0.63	4	9.56	0.43	5	8.97	1.13	5
150	PC_O-40-6	9.23	0.62	13	11.39	0.60	5	10.45	0.81	4	11.25	0.58	5	10.46	1.20	5

151	PC_O-42-0	5.73	0.28	13	6.12	0.38	5	5.76	0.38	4	6.17	0.20	5	5.71	0.46	5
152	PC_O-42-1	6.40	0.42	13	6.56	0.48	5	5.62	0.56	4	5.92	0.26	5	5.55	0.61	5
153	PC_O-42-2	4.54	0.39	13	4.71	0.32	5	3.95	0.29	4	4.11	0.16	5	3.47	0.52	5
154	PC_O-42-3	7.48	0.54	13	7.00	0.56	5	6.96	0.42	4	6.43	0.45	5	5.84	0.45	5
155	PC_O-42-4	5.88	0.61	13	8.38	0.69	5	6.97	0.78	4	7.35	0.20	5	6.11	1.26	5
156	PC_O-42-5	7.34	0.49	13	9.41	0.63	5	8.11	0.51	4	8.25	0.23	5	8.03	1.08	5
157	PC_O-44-3	1.23	0.05	13	1.45	0.09	5	1.27	0.05	4	1.25	0.06	5	1.09	0.10	5
158	PC_O-44-4	2.27	0.24	13	3.16	0.21	5	2.51	0.30	4	2.63	0.12	5	2.10	0.47	5
159	PC_O-44-5	4.01	0.36	13	5.05	0.31	5	4.23	0.40	4	4.13	0.22	5	3.76	0.59	5
160	PC_O-44-6	3.12	0.29	13	4.10	0.29	5	3.29	0.23	4	3.27	0.10	5	3.11	0.60	5
161	SM_32-2 OH	21.30	1.29	13	23.99	1.22	5	21.37	0.69	4	23.87	1.50	5	22.25	1.99	5
162	SM_34-2 OH	9.37	0.53	13	10.02	0.58	5	8.49	0.19	4	8.88	0.34	5	8.56	0.66	5
163	SM_40-2 OH	12.77	1.42	13	14.69	1.53	5	11.38	1.45	4	11.05	0.70	5	9.44	2.37	5
164	SM_40-3 OH	4.14	0.36	13	4.50	0.39	5	4.41	0.19	4	4.59	0.22	5	4.21	0.57	5
165	SM_42-2 OH	1.79	0.18	13	2.14	0.18	5	1.76	0.21	4	1.69	0.13	5	1.59	0.26	5
166	SM_34-1	593.25	21.53	13	624.91	18.62	5	564.36	15.85	4	586.32	20.85	5	559.33	43.87	5
167	SM_34-2	7.61	0.28	13	7.76	0.18	5	6.69	0.22	4	7.44	0.16	5	7.39	0.51	5
168	SM_36-1	73.38	4.17	13	79.09	3.85	5	64.21	4.21	4	70.37	1.59	5	60.55	6.15	5
169	SM_36-2	5.08	0.26	13	5.07	0.30	5	4.45	0.25	4	5.10	0.18	5	4.66	0.34	5
170	SM_38-3	0.36	0.03	13	0.37	0.04	5	0.39	0.09	4	0.36	0.08	5	0.42	0.06	5
171	SM_42-1	40.50	4.10	13	49.63	3.95	5	41.57	4.40	4	44.60	1.92	5	36.68	8.06	5
172	SM_42-2	65.48	5.13	13	70.94	4.59	5	63.65	5.28	4	72.16	3.38	5	60.30	8.83	5
173	H1	2200.98	284.14	13	5550.05	814.34	5	2419.50	137.12	4	3938.38	487.53	5	2688.39	556.16	5
174	C2,C3 / CO	0.22	0.02	13	0.12	0.04	5	0.04	0.01	4	0.15	0.05	5	0.38	0.10	5
175	AAA	1049.10	218.81	13	3173.76	338.51	5	2753.55	359.22	4	2337.00	169.82	5	1757.62	342.08	5
176	ADMA / Arg	0.02	0.00	13	0.00	0.00	5	0.01	0.00	4	0.00	0.00	5	0.01	0.01	5
177	BCAA	2374.71	481.34	13	7128.00	900.65	5	5503.50	664.73	4	4432.80	466.55	5	3747.00	747.73	5
178	C2 / CO	0.22	0.02	13	0.11	0.04	5	0.04	0.01	4	0.14	0.05	5	0.37	0.09	5
179	Cit / Arg	1.13	0.30	13	0.12	0.02	5	0.10	0.01	4	0.12	0.02	5	0.24	0.13	5
180	Cit / Orn	10.54	3.18	13	1.53	0.24	5	1.89	0.19	4	2.31	0.17	5	2.93	0.51	5
181	CPT-I ratio	0.02	0.00	13	0.01	0.00	5	0.00	0.00	4	0.01	0.00	5	0.02	0.00	5
182	Essential AA	4655.84	893.72	13	14050.56	1686.02	5	10898.70	1243.25	4	9169.08	676.53	5	7196.26	1356.06	5
183	Fisher ratio	2.32	0.04	13	2.23	0.06	5	2.01	0.05	4	1.89	0.10	5	2.14	0.06	5
184	Glucogenic AA	8517.74	1040.16	13	18655.20	1098.57	5	13324.50	1229.79	4	12109.20	806.20	5	10500.00	1057.82	5
185	Kynurenine / Trp	0.10	0.03	13	0.01	0.00	5	0.01	0.00	4	0.02	0.00	5	0.04	0.02	5
186	Met-SO / Met	0.02	0.00	13	0.02	0.00	5	0.01	0.00	4	0.02	0.00	5	0.05	0.01	5
187	MUFA_PC	999.37	63.71	13	1211.51	43.11	5	960.44	57.61	4	1005.49	28.93	5	908.57	112.67	5
188	MUFA_PC / SFA_PC	2.25	0.05	13	2.46	0.03	5	2.41	0.04	4	2.32	0.04	5	2.31	0.04	5
189	Non essential AA	16812.83	1825.89	13	34023.96	2199.05	5	25764.44	2168.35	4	23939.95	1501.55	5	22554.58	2561.76	5
190	Orn / Arg	0.11	0.02	13	0.08	0.01	5	0.05	0.01	4	0.05	0.01	5	0.07	0.03	5
191	PUFA_PC	7346.66	266.60	13	7603.55	367.58	5	7332.26	400.39	4	7811.11	158.57	5	7125.16	496.89	5
192	PUFA_PC / MUFA_PC	7.55	0.28	13	6.27	0.14	5	7.65	0.16	4	7.78	0.12	5	8.01	0.35	5
193	PUFA_PC / SFA_PC	16.91	0.47	13	15.41	0.34	5	18.40	0.52	4	18.03	0.16	5	18.48	0.65	5
194	Putrescine / Orn	1.52	0.40	13	0.19	0.03	5	0.32	0.02	4	0.39	0.07	5	0.88	0.11	5
195	Serotonin / Trp	0.27	0.09	13	0.00	0.00	5	0.02	0.00	4	0.01	0.00	5	0.07	0.03	5
196	SFA_PC	441.69	24.47	13	494.17	24.80	5	400.35	29.47	4	433.22	6.13	5	391.03	42.31	5
197	Spermidine / Putrescine	2.49	0.14	13	3.94	0.24	5	3.95	0.29	4	3.92	0.30	5	2.37	0.20	5
198	Spermine / Spermidine	0.10	0.01	13	0.07	0.01	5	0.08	0.01	4	0.09	0.01	5	0.07	0.00	5
199	Total_PC,SM	9623.05	389.04	13	10202.70	458.28	5	9486.12	513.44	4	10086.40	207.16	5	9200.51	717.97	5
200	Total AA	21468.66	2685.70	13	48074.52	3858.62	5	36663.14	3391.69	4	33109.03	2172.09	5	29750.83	3898.88	5
201	Total AC / CO	0.31	0.02	13	0.21	0.05	5	0.11	0.01	4	0.21	0.06	5	0.47	0.11	5

202	Total AC-DC / Total AC	0.04	0.00	13	0.11	0.03	5	0.13	0.00	4	0.07	0.02	5	0.03	0.00	5
203	Total AC-OH / Total AC	0.04	0.00	13	0.05	0.00	5	0.06	0.00	4	0.04	0.01	5	0.03	0.01	5
204	Total LPC	396.59	16.45	13	617.01	33.53	5	459.23	23.63	4	421.25	16.65	5	470.51	34.38	5
205	Total LPC / Total PC	0.05	0.00	13	0.07	0.01	5	0.06	0.00	4	0.04	0.00	5	0.06	0.01	5
206	Total PC	8787.72	352.32	13	9309.23	429.69	5	8693.04	484.03	4	9249.83	188.77	5	8424.76	648.67	5
207	Total PC_diacyl	8182.16	313.26	13	8549.28	397.90	5	8034.93	448.24	4	8538.42	153.69	5	7782.47	571.27	5
208	Total PC_ether	605.56	39.48	13	759.95	35.79	5	658.11	42.48	4	711.42	42.98	5	642.29	82.55	5
209	Total SM	835.33	37.71	13	893.47	31.29	5	793.08	31.10	4	836.57	27.28	5	775.75	72.49	5
210	Total SM / Total_SM,PC	0.09	0.00	13	0.09	0.00	5	0.08	0.00	4	0.08	0.00	5	0.08	0.00	5
211	Total SM / Total PC	0.10	0.00	13	0.10	0.00	5	0.09	0.00	4	0.09	0.00	5	0.09	0.00	5
212	Total SM-non OH	785.96	34.48	13	838.15	28.90	5	745.67	28.61	4	786.49	25.83	5	729.69	66.82	5
213	Total SM-OH	49.37	3.49	13	55.33	3.44	5	47.41	2.49	4	50.07	2.45	5	46.05	5.79	5
214	Total SM-OH / Total SM-non OH	0.06	0.00	13	0.07	0.00	5	0.06	0.00	4	0.06	0.00	5	0.06	0.00	5
215	Tyr / Phe	0.85	0.02	13	0.82	0.02	5	0.83	0.02	4	0.91	0.04	5	0.82	0.04	5

Table S2. Day 1 jejunum metabolite concentrations. Values reported in pmol mg⁻¹ of tissue.

		Sham			8 Gy			10 Gy			12 Gy			14 Gy		
		Mean	SEM	N	Mean	SEM	N	Mean	SEM	N	Mean	SEM	N	Mean	SEM	N
1	C0	249.68	10.83	13	279.38	17.35	5	277.57	22.18	5	269.71	10.68	5	259.14	14.68	5
2	C10	0.71	0.05	13	1.15	0.20	5	0.85	0.17	5	0.68	0.04	5	0.61	0.03	5
3	C10-1	0.70	0.03	13	0.94	0.11	5	0.73	0.05	5	0.71	0.03	5	0.66	0.02	5
4	C10-2	0.46	0.02	13	0.60	0.06	5	0.44	0.03	5	0.42	0.04	5	0.40	0.01	5
5	C12	0.69	0.06	13	1.29	0.24	5	0.86	0.09	5	0.71	0.07	5	0.64	0.03	5
6	C12-DC	1.49	0.04	13	1.98	0.24	5	1.45	0.07	5	1.34	0.03	5	1.38	0.04	5
7	C12-1	0.64	0.02	13	0.89	0.11	5	0.71	0.04	5	0.68	0.02	5	0.66	0.02	5
8	C14	1.01	0.07	13	1.39	0.18	5	0.97	0.08	5	1.24	0.05	5	1.15	0.09	5
9	C14-1	0.26	0.02	13	0.44	0.08	5	0.27	0.03	5	0.30	0.02	5	0.31	0.03	5
10	C14-1 OH	0.32	0.03	13	0.53	0.09	5	0.35	0.03	5	0.36	0.04	5	0.33	0.02	5
11	C14-2	0.17	0.01	13	0.29	0.06	5	0.17	0.02	5	0.24	0.04	5	0.18	0.01	5
12	C14-2 OH	0.21	0.02	13	0.40	0.07	5	0.26	0.03	5	0.24	0.03	5	0.20	0.01	5
13	C16	2.25	0.18	13	2.40	0.20	5	2.21	0.18	5	2.83	0.12	5	2.70	0.34	5
14	C16-OH	0.60	0.05	13	0.83	0.15	5	0.59	0.05	5	0.59	0.06	5	0.46	0.03	5
15	C16-1	0.45	0.02	13	0.59	0.07	5	0.45	0.03	5	0.53	0.02	5	0.53	0.03	5
16	C16-1 OH	0.35	0.03	13	0.61	0.11	5	0.40	0.03	5	0.37	0.03	5	0.32	0.03	5
17	C16-2	0.23	0.02	13	0.42	0.11	5	0.23	0.02	5	0.24	0.02	5	0.25	0.02	5
18	C16-2 OH	0.25	0.02	13	0.39	0.06	5	0.28	0.03	5	0.22	0.02	5	0.22	0.01	5
19	C18	1.42	0.10	13	1.49	0.12	5	1.31	0.10	5	1.51	0.08	5	1.43	0.17	5
20	C18-1	1.01	0.10	13	1.07	0.07	5	1.00	0.13	5	1.46	0.14	5	1.62	0.24	5
21	C18-1 OH	0.53	0.03	13	0.62	0.07	5	0.50	0.06	5	0.52	0.02	5	0.47	0.03	5
22	C18-2	0.70	0.07	13	0.65	0.07	5	0.50	0.06	5	0.73	0.05	5	0.85	0.09	5
23	C2	52.64	4.03	13	55.22	4.71	5	42.49	4.57	5	43.85	3.60	5	48.93	5.00	5
24	C3	1.68	0.12	13	2.11	0.20	5	1.41	0.13	5	1.42	0.10	5	1.64	0.13	5
25	C3-DC_C4-OH	2.07	0.13	13	2.61	0.23	5	3.04	0.20	5	4.03	0.22	5	3.48	0.70	5
26	C3-OH	0.44	0.03	13	0.69	0.10	5	0.46	0.03	5	0.39	0.02	5	0.40	0.01	5
27	C3-1	0.34	0.04	13	0.65	0.11	5	0.40	0.04	5	0.30	0.02	5	0.31	0.02	5
28	C4	1.19	0.10	13	1.80	0.14	5	1.06	0.10	5	0.96	0.07	5	0.97	0.09	5
29	C4-1	0.29	0.02	13	0.50	0.07	5	0.34	0.03	5	0.30	0.02	5	0.30	0.02	5
30	C5	1.06	0.05	13	1.63	0.10	5	1.09	0.05	5	1.00	0.04	5	0.99	0.06	5
31	C5-DC_C6-OH	0.75	0.09	13	1.58	0.28	5	0.94	0.10	5	0.65	0.06	5	0.67	0.06	5
32	C5-M-DC	0.48	0.04	13	0.75	0.12	5	0.47	0.04	5	0.41	0.03	5	0.38	0.03	5
33	C5-OH_C3-DC-M	1.33	0.19	13	1.44	0.24	5	0.86	0.06	5	0.84	0.09	5	0.70	0.03	5
34	C5-1	0.32	0.02	13	0.49	0.07	5	0.32	0.03	5	0.35	0.03	5	0.31	0.01	5
35	C5-1 DC	0.91	0.14	13	2.17	0.44	5	1.06	0.13	5	0.53	0.09	5	0.47	0.05	5
36	C6_C4-1 DC	0.49	0.05	13	0.94	0.17	5	0.62	0.09	5	0.44	0.04	5	0.44	0.03	5
37	C6-1	0.35	0.04	13	0.68	0.12	5	0.41	0.04	5	0.28	0.02	5	0.26	0.02	5
38	C7-DC	0.31	0.03	13	0.64	0.11	5	0.46	0.07	5	0.62	0.12	5	0.49	0.06	5
39	C8	0.76	0.04	13	0.99	0.12	5	1.15	0.38	5	0.82	0.04	5	0.73	0.05	5
40	C9	0.34	0.03	13	0.68	0.13	5	0.37	0.03	5	0.32	0.03	5	0.27	0.01	5
41	Ala	4546.15	602.59	13	6679.20	947.08	5	5833.20	337.38	5	5910.00	318.15	5	7476.00	527.39	5
42	Arg	486.32	119.35	13	1278.48	247.48	5	1065.84	157.62	5	1142.40	143.03	5	1567.20	245.25	5
43	Asn	419.82	84.21	13	875.88	167.28	5	713.52	85.56	5	752.40	46.73	5	797.40	85.07	5
44	Asp	1390.62	120.84	13	1869.60	216.00	5	1754.40	135.47	5	1681.20	162.20	5	1988.40	274.98	5
45	Cit	165.18	9.75	13	71.03	6.61	5	45.86	5.14	5	35.06	6.12	5	55.49	13.64	5
46	Gln	826.48	133.87	13	1987.20	251.72	5	2048.40	181.10	5	2094.00	197.82	5	2418.00	276.46	5
47	Glu	3498.92	169.01	13	5184.00	388.04	5	4564.80	302.41	5	4833.60	275.99	5	5460.00	453.06	5
48	Gly	2814.92	247.64	13	4885.20	357.77	5	3764.40	322.15	5	2602.80	275.68	5	3721.20	489.94	5
49	His	224.12	41.24	13	428.64	73.87	5	262.56	30.58	5	339.12	16.26	5	512.52	190.84	5

50	Ile	558.83	117.46	13	1004.52	166.17	5	870.00	156.90	5	954.00	98.81	5	1128.72	153.38	5
51	Leu	1058.54	229.30	13	2126.40	463.25	5	1773.60	292.43	5	1742.40	181.55	5	2102.40	281.41	5
52	Lys	574.85	113.52	13	1191.60	209.11	5	1046.04	190.05	5	944.40	136.68	5	1539.60	248.52	5
53	Met	344.03	67.12	13	791.88	131.78	5	628.92	85.02	5	621.48	51.76	5	744.00	113.38	5
54	Orn	36.69	8.18	13	57.83	11.37	5	41.57	8.56	5	32.84	5.76	5	46.81	8.81	5
55	Phe	518.77	108.85	13	1154.40	210.86	5	1022.52	147.14	5	934.80	46.37	5	1299.60	193.38	5
56	Pro	808.25	144.52	13	1317.60	176.99	5	1132.80	144.06	5	961.20	60.34	5	1204.80	103.67	5
57	Ser	1156.66	221.72	13	2439.60	365.87	5	2442.00	342.78	5	2386.80	188.36	5	2184.00	191.13	5
58	Thr	751.85	116.56	13	1711.20	303.59	5	1424.40	195.17	5	1224.00	57.02	5	1506.00	109.47	5
59	Trp	91.64	20.20	13	202.92	37.07	5	164.04	31.03	5	178.44	11.57	5	209.16	30.98	5
60	Tyr	438.69	90.97	13	1011.12	196.11	5	840.96	140.71	5	847.20	73.03	5	1015.80	137.59	5
61	Val	757.34	139.28	13	1477.20	236.72	5	1084.80	154.25	5	870.00	57.83	5	1186.80	136.63	5
62	ADMA	2.88	0.18	13	6.09	0.41	5	5.87	0.21	5	4.13	0.36	5	4.17	0.60	5
63	Kynurenine	2.99	0.39	13	3.49	0.23	5	4.27	0.43	5	6.37	0.14	5	6.58	0.78	5
64	Met-SO	8.52	2.22	13	19.39	5.85	5	7.35	1.37	5	6.86	1.20	5	7.63	1.97	5
65	Putrescine	26.62	1.89	13	59.88	4.52	5	37.46	3.12	5	44.72	2.40	5	46.66	2.88	5
66	Serotonin	9.79	1.66	13	3.60	0.95	5	2.81	0.57	5	2.27	0.31	5	7.35	2.76	5
67	Spermidine	63.36	1.64	13	82.08	3.33	5	83.64	3.10	5	84.36	5.23	5	105.12	5.99	5
68	Spermine	5.98	0.36	13	4.78	0.17	5	6.08	0.29	5	6.57	0.72	5	10.61	0.84	5
69	t4-OH-Pro	22.32	2.29	13	34.02	4.03	5	28.82	2.84	5	14.87	1.79	5	25.20	2.31	5
70	total DMA	1.36	0.24	13	3.28	0.37	5	2.60	0.26	5	1.34	0.22	5	1.94	0.40	5
71	LPC_14-0	9.40	0.14	13	9.85	0.30	5	9.63	0.43	5	10.40	0.27	5	9.24	0.12	5
72	LPC_16-0	183.74	10.20	13	188.74	10.13	5	190.52	8.39	5	206.77	9.03	5	217.74	16.80	5
73	LPC_16-1	2.00	0.17	13	2.25	0.08	5	2.00	0.27	5	2.25	0.15	5	2.21	0.24	5
74	LPC_17-0	3.41	0.16	13	4.42	0.27	5	4.77	0.38	5	5.26	0.24	5	5.14	0.35	5
75	LPC_18-0	101.11	3.60	13	126.24	8.61	5	129.66	6.14	5	148.09	5.39	5	158.68	8.05	5
76	LPC_18-1	18.32	1.10	13	18.69	0.56	5	16.91	1.07	5	17.07	0.51	5	18.90	0.76	5
77	LPC_18-2	56.32	3.32	13	42.32	3.06	5	41.73	2.09	5	42.82	1.80	5	50.00	2.35	5
78	LPC_20-3	2.31	0.10	13	2.57	0.33	5	1.82	0.09	5	1.80	0.06	5	1.78	0.08	5
79	LPC_20-4	14.73	0.59	13	15.89	0.66	5	13.84	0.33	5	13.57	0.67	5	16.36	1.25	5
80	LPC_24-0	1.09	0.04	13	1.56	0.23	5	1.25	0.13	5	1.74	0.16	5	1.26	0.08	5
81	LPC_26-0	1.20	0.07	13	1.38	0.28	5	1.04	0.17	5	1.56	0.30	5	0.81	0.08	5
82	LPC_26-1	0.62	0.03	13	0.88	0.21	5	0.46	0.07	5	0.75	0.12	5	0.45	0.04	5
83	LPC_28-0	1.27	0.12	13	1.60	0.57	5	1.14	0.25	5	2.49	0.67	5	1.04	0.09	5
84	LPC_28-1	1.06	0.08	13	1.45	0.43	5	0.97	0.21	5	1.69	0.30	5	0.97	0.17	5
85	PC_24-0	0.80	0.04	13	0.84	0.11	5	0.67	0.08	5	1.00	0.18	5	0.58	0.02	5
86	PC_26-0	4.97	0.19	13	5.13	0.60	5	4.33	0.33	5	7.36	1.96	5	4.39	0.30	5
87	PC_28-1	1.60	0.07	13	1.61	0.26	5	1.19	0.13	5	1.77	0.29	5	1.49	0.27	5
88	PC_30-0	30.02	1.37	13	30.45	0.62	5	26.73	1.65	5	25.03	1.32	5	24.27	1.58	5
89	PC_30-2	0.47	0.05	13	0.54	0.09	5	0.29	0.05	5	0.35	0.05	5	0.42	0.22	5
90	PC_32-0	344.56	19.41	13	440.45	22.49	5	467.25	28.79	5	484.02	32.25	5	496.88	19.25	5
91	PC_32-1	54.36	3.05	13	95.13	6.80	5	83.01	6.41	5	85.96	2.53	5	86.88	4.88	5
92	PC_32-2	8.23	0.33	13	12.33	1.31	5	9.90	0.77	5	9.12	0.09	5	8.98	0.57	5
93	PC_32-3	1.04	0.05	13	1.41	0.20	5	1.16	0.12	5	1.21	0.07	5	1.10	0.09	5
94	PC_34-1	581.23	34.70	13	628.27	27.98	5	662.39	32.22	5	680.55	26.64	5	701.33	32.04	5
95	PC_34-2	1812.34	40.26	13	1890.48	137.46	5	1887.70	91.81	5	1811.58	75.03	5	1988.28	47.97	5
96	PC_34-3	88.38	4.23	13	102.92	5.57	5	91.65	6.08	5	94.76	2.20	5	98.70	3.46	5
97	PC_34-4	5.24	0.22	13	7.60	0.90	5	5.36	0.27	5	5.02	0.03	5	4.95	0.28	5
98	PC_36-0	8.41	0.42	13	12.51	1.52	5	11.14	0.48	5	13.27	1.61	5	10.24	0.37	5
99	PC_36-1	245.86	19.87	13	256.77	16.37	5	329.33	32.53	5	365.29	11.90	5	426.84	11.60	5
100	PC_36-2	1502.79	55.78	13	1538.85	93.12	5	1737.75	119.26	5	1752.85	49.05	5	1976.59	41.92	5

101	PC_36-3	628.50	29.10	13	610.20	35.19	5	596.30	29.69	5	568.47	11.44	5	628.93	18.52	5
102	PC_36-4	1196.86	45.86	13	1274.15	88.40	5	1166.34	29.57	5	1152.39	44.25	5	1181.96	64.01	5
103	PC_36-5	61.18	2.39	13	69.70	5.17	5	54.60	3.16	5	59.74	2.50	5	61.58	4.08	5
104	PC_36-6	1.92	0.11	13	2.60	0.40	5	1.80	0.13	5	1.88	0.09	5	1.81	0.09	5
105	PC_38-0	8.67	0.67	13	10.40	1.35	5	11.87	0.79	5	14.53	0.66	5	13.05	0.30	5
106	PC_38-1	4.29	0.31	13	6.71	0.26	5	7.45	0.57	5	8.29	0.69	5	7.00	0.52	5
107	PC_38-3	151.99	11.10	13	164.28	9.83	5	168.75	12.42	5	173.73	3.77	5	195.43	9.79	5
108	PC_38-4	741.41	45.39	13	820.43	45.27	5	860.03	51.96	5	900.14	25.20	5	981.39	50.82	5
109	PC_38-5	215.70	12.17	13	256.72	16.27	5	228.11	10.85	5	225.36	4.94	5	241.59	11.54	5
110	PC_38-6	254.25	13.31	13	303.32	19.62	5	284.34	15.22	5	305.62	11.48	5	304.40	16.73	5
111	PC_40-1	2.80	0.21	13	3.91	0.30	5	4.06	0.34	5	4.17	0.18	5	4.06	0.12	5
112	PC_40-2	6.17	0.61	13	7.98	0.45	5	7.85	0.60	5	7.83	0.12	5	7.54	0.24	5
113	PC_40-3	6.45	0.58	13	9.85	0.41	5	9.78	0.92	5	9.58	0.18	5	9.71	0.36	5
114	PC_40-4	32.06	2.46	13	37.85	1.80	5	42.37	2.58	5	44.97	1.50	5	46.29	2.04	5
115	PC_40-5	40.22	2.81	13	47.24	1.72	5	47.79	3.78	5	50.91	1.48	5	52.21	2.45	5
116	PC_40-6	121.79	9.22	13	147.12	9.11	5	177.37	18.01	5	210.23	2.88	5	234.38	10.07	5
117	PC_42-0	1.74	0.11	13	1.88	0.10	5	1.95	0.12	5	1.86	0.07	5	1.68	0.07	5
118	PC_42-1	1.18	0.11	13	1.71	0.12	5	1.68	0.14	5	1.75	0.05	5	1.63	0.07	5
119	PC_42-2	3.55	0.38	13	5.00	0.44	5	4.63	0.32	5	4.41	0.08	5	4.36	0.21	5
120	PC_42-4	4.62	0.45	13	6.01	0.26	5	6.21	0.36	5	6.31	0.19	5	6.31	0.17	5
121	PC_42-5	6.36	0.51	13	9.45	0.39	5	8.25	0.56	5	8.42	0.22	5	7.99	0.32	5
122	PC_42-6	4.91	0.35	13	6.75	0.33	5	6.14	0.46	5	6.39	0.21	5	6.30	0.24	5
123	PC_O-30-0	2.04	0.14	13	2.04	0.18	5	2.10	0.27	5	2.61	0.26	5	2.03	0.14	5
124	PC_O-30-1	0.82	0.20	13	0.83	0.27	5	0.41	0.17	5	0.63	0.06	5	0.12	0.08	5
125	PC_O-30-2	0.42	0.02	13	0.50	0.12	5	0.42	0.07	5	0.59	0.09	5	0.42	0.04	5
126	PC_O-32-1	8.41	0.46	13	9.83	0.84	5	10.78	0.65	5	12.26	0.70	5	11.81	0.60	5
127	PC_O-32-2	1.65	0.08	13	1.95	0.33	5	1.77	0.22	5	2.22	0.15	5	2.00	0.17	5
128	PC_O-34-0	13.58	1.05	13	19.11	0.96	5	18.50	0.89	5	18.56	0.83	5	19.73	0.86	5
129	PC_O-34-1	41.58	2.55	13	50.08	3.49	5	55.76	3.53	5	61.47	2.74	5	64.11	2.97	5
130	PC_O-34-2	35.12	1.94	13	33.60	2.37	5	36.41	1.77	5	38.43	1.12	5	41.09	1.96	5
131	PC_O-34-3	5.79	0.31	13	5.23	0.39	5	5.40	0.38	5	6.00	0.16	5	6.62	0.28	5
132	PC_O-36-0	8.07	0.78	13	14.58	1.39	5	11.89	1.09	5	12.15	1.05	5	10.60	0.47	5
133	PC_O-36-1	17.54	1.34	13	24.19	4.00	5	23.27	2.05	5	25.95	1.23	5	25.47	1.41	5
134	PC_O-36-2	81.14	5.76	13	88.54	6.67	5	108.71	9.04	5	112.36	5.95	5	138.42	7.96	5
135	PC_O-36-3	14.68	0.78	13	16.15	1.17	5	16.96	0.82	5	17.78	0.55	5	18.95	0.78	5
136	PC_O-36-4	38.68	2.16	13	41.36	2.49	5	42.20	1.93	5	43.73	3.05	5	45.27	2.12	5
137	PC_O-36-5	19.78	1.21	13	22.13	1.97	5	26.76	1.70	5	29.38	1.63	5	30.03	1.29	5
138	PC_O-38-0	13.11	0.83	13	18.54	1.29	5	15.04	0.99	5	15.63	0.28	5	14.54	0.51	5
139	PC_O-38-1	9.08	0.76	13	11.96	0.73	5	11.31	1.02	5	14.77	1.36	5	11.06	0.47	5
140	PC_O-38-2	64.16	5.53	13	69.15	4.78	5	74.71	6.15	5	76.83	4.32	5	80.87	3.55	5
141	PC_O-38-3	11.52	0.75	13	14.91	1.40	5	14.82	1.18	5	15.31	0.62	5	16.52	0.74	5
142	PC_O-38-4	40.73	2.74	13	48.45	3.10	5	49.90	2.63	5	49.77	1.79	5	53.88	3.54	5
143	PC_O-38-5	34.19	1.98	13	34.66	1.99	5	38.32	2.09	5	42.19	2.80	5	43.59	1.96	5
144	PC_O-38-6	14.83	0.93	13	16.91	1.75	5	17.74	1.25	5	20.72	1.06	5	20.26	0.72	5
145	PC_O-40-1	28.52	1.69	13	36.78	2.66	5	33.59	2.92	5	33.42	0.96	5	37.29	1.52	5
146	PC_O-40-2	5.38	0.44	13	7.10	0.42	5	6.72	0.49	5	6.45	0.16	5	6.33	0.27	5
147	PC_O-40-3	4.92	0.45	13	7.02	0.69	5	7.16	0.60	5	6.80	0.28	5	6.57	0.48	5
148	PC_O-40-4	23.90	1.95	13	29.14	1.51	5	30.57	1.61	5	30.13	1.16	5	31.05	1.96	5
149	PC_O-40-5	8.71	0.57	13	9.97	0.80	5	10.33	0.74	5	10.57	0.51	5	11.01	0.52	5
150	PC_O-40-6	9.23	0.62	13	11.37	0.90	5	12.77	1.12	5	14.20	0.52	5	14.96	0.85	5
151	PC_O-42-0	5.73	0.28	13	8.75	0.48	5	7.63	0.46	5	7.90	0.21	5	7.62	0.23	5

152	PC_O-42-1	6.40	0.42	13	9.46	0.55	5	8.25	0.50	5	8.64	0.33	5	8.76	0.31	5
153	PC_O-42-2	4.54	0.39	13	6.44	0.37	5	5.54	0.35	5	4.83	0.17	5	4.90	0.18	5
154	PC_O-42-3	7.48	0.54	13	10.24	0.70	5	8.94	0.69	5	8.36	0.10	5	8.41	0.42	5
155	PC_O-42-4	5.88	0.61	13	6.72	0.35	5	6.86	0.52	5	6.09	0.19	5	6.18	0.27	5
156	PC_O-42-5	7.34	0.49	13	7.95	0.45	5	7.74	0.50	5	7.89	0.19	5	7.80	0.28	5
157	PC_O-44-3	1.23	0.05	13	1.90	0.07	5	1.83	0.16	5	1.84	0.09	5	1.73	0.08	5
158	PC_O-44-4	2.27	0.24	13	3.31	0.34	5	3.16	0.14	5	2.73	0.04	5	2.69	0.06	5
159	PC_O-44-5	4.01	0.36	13	5.04	0.31	5	4.58	0.27	5	3.99	0.14	5	3.82	0.14	5
160	PC_O-44-6	3.12	0.29	13	3.61	0.24	5	3.13	0.14	5	2.82	0.15	5	2.74	0.13	5
161	SM_32-2 OH	21.30	1.29	13	20.23	2.11	5	19.20	1.20	5	19.65	1.65	5	19.53	1.79	5
162	SM_34-2 OH	9.37	0.53	13	7.02	0.71	5	7.34	0.35	5	8.10	0.31	5	8.63	0.40	5
163	SM_40-2 OH	12.77	1.42	13	12.71	1.11	5	20.38	1.54	5	20.78	0.96	5	20.68	1.33	5
164	SM_40-3 OH	4.14	0.36	13	5.14	0.81	5	5.51	0.48	5	6.59	0.31	5	6.30	0.30	5
165	SM_42-2 OH	1.79	0.18	13	1.88	0.20	5	2.51	0.22	5	2.85	0.11	5	2.74	0.07	5
166	SM_34-1	593.25	21.53	13	457.26	28.61	5	444.49	19.50	5	463.83	28.72	5	477.44	20.33	5
167	SM_34-2	7.61	0.28	13	9.50	0.80	5	8.94	0.64	5	9.48	0.69	5	9.11	0.48	5
168	SM_36-1	73.38	4.17	13	71.19	6.19	5	83.83	4.67	5	94.92	7.67	5	93.64	4.07	5
169	SM_36-2	5.08	0.26	13	5.49	0.57	5	6.66	0.49	5	7.74	0.49	5	7.54	0.41	5
170	SM_38-3	0.36	0.03	13	0.28	0.08	5	0.41	0.05	5	0.33	0.11	5	0.44	0.03	5
171	SM_42-1	40.50	4.10	13	45.33	3.50	5	62.92	4.62	5	74.01	3.22	5	72.99	3.03	5
172	SM_42-2	65.48	5.13	13	70.42	3.94	5	96.37	6.57	5	111.43	7.66	5	109.12	2.95	5
173	H1	2200.98	284.14	13	3712.28	269.52	5	2794.88	181.13	5	2984.65	274.20	5	3063.02	244.74	5
174	C2,C3 / C0	0.22	0.02	13	0.16	0.03	5	0.03	0.01	5	0.17	0.01	5	0.20	0.02	5
175	AAA	1049.10	218.81	13	2368.44	441.99	5	2027.52	313.90	5	1960.44	121.70	5	2524.56	354.64	5
176	ADMA / Arg	0.02	0.00	13	0.00	0.00	5	0.00	0.00	5	0.00	0.00	5	0.00	0.00	5
177	BCAA	2374.71	481.34	13	4608.12	865.48	5	3728.40	598.46	5	3566.40	328.54	5	4417.92	562.94	5
178	C2 / C0	0.22	0.02	13	0.16	0.03	5	0.03	0.00	5	0.16	0.02	5	0.19	0.02	5
179	Cit / Arg	1.13	0.30	13	0.07	0.02	5	0.05	0.02	5	0.03	0.01	5	0.04	0.01	5
180	Cit / Orn	10.54	3.18	13	1.56	0.43	5	1.45	0.52	5	1.26	0.32	5	1.34	0.37	5
181	CPT-I ratio	0.02	0.00	13	0.01	0.00	5	0.00	0.00	5	0.02	0.00	5	0.02	0.00	5
182	Essential AA	4655.84	893.72	13	9660.12	1733.07	5	8014.32	1223.03	5	7469.52	567.33	5	9716.28	1185.93	5
183	Fisher ratio	2.32	0.04	13	1.94	0.05	5	1.85	0.07	5	1.81	0.09	5	1.79	0.10	5
184	Glucogenic AA	8517.74	1040.16	13	14004.00	1636.83	5	12039.60	904.06	5	10899.60	540.19	5	13381.20	905.37	5
185	Kynurenine / Trp	0.10	0.03	13	0.02	0.01	5	0.03	0.01	5	0.04	0.00	5	0.04	0.01	5
186	Met-SO / Met	0.02	0.00	13	0.02	0.01	5	0.01	0.00	5	0.01	0.00	5	0.01	0.00	5
187	MUFA_PC	999.37	63.71	13	1130.53	61.19	5	1225.03	80.62	5	1296.63	30.17	5	1380.84	50.92	5
188	MUFA_PC / SFA_PC	2.25	0.05	13	2.00	0.02	5	2.11	0.01	5	2.16	0.08	5	2.28	0.04	5
189	Non essential AA	16812.83	1825.89	13	28085.38	3115.78	5	24510.31	1614.46	5	23618.63	1227.93	5	28447.62	2191.24	5
190	Orn / Arg	0.11	0.02	13	0.05	0.00	5	0.04	0.01	5	0.03	0.00	5	0.03	0.00	5
191	PUFA_PC	7346.66	266.60	13	7835.59	489.10	5	7947.64	417.74	5	7972.96	219.81	5	8656.92	295.25	5
192	PUFA_PC / MUFA_PC	7.55	0.28	13	6.92	0.09	5	6.52	0.14	5	6.15	0.11	5	6.27	0.03	5
193	PUFA_PC / SFA_PC	16.91	0.47	13	13.85	0.18	5	13.76	0.24	5	13.32	0.55	5	14.31	0.27	5
194	Putrescine / Orn	1.52	0.40	13	1.29	0.37	5	1.19	0.39	5	1.49	0.20	5	1.18	0.25	5
195	Serotonin / Trp	0.27	0.09	13	0.02	0.00	5	0.02	0.00	5	0.01	0.00	5	0.04	0.01	5
196	SFA_PC	441.69	24.47	13	564.68	30.18	5	579.11	35.02	5	603.93	35.54	5	605.61	21.82	5
197	Spermidine / Putrescine	2.49	0.14	13	1.39	0.08	5	2.28	0.16	5	1.89	0.09	5	2.29	0.21	5
198	Spermine / Spermidine	0.10	0.01	13	0.06	0.00	5	0.07	0.00	5	0.08	0.01	5	0.10	0.01	5
199	Total_PC,SM	9623.05	389.04	13	10237.61	619.97	5	10510.81	566.45	5	10694.46	306.35	5	11472.33	391.75	5
200	Total AA	21468.66	2685.70	13	37745.50	4794.84	5	32524.63	2777.19	5	31088.15	1778.08	5	38163.90	3357.04	5
201	Total AC / C0	0.31	0.02	13	0.27	0.04	5	0.09	0.01	5	0.26	0.02	5	0.29	0.03	5
202	Total AC-DC / Total AC	0.04	0.00	13	0.08	0.01	5	0.14	0.01	5	0.05	0.00	5	0.04	0.00	5

203	Total AC-OH / Total AC	0.04	0.00	13	0.05	0.00	5	0.07	0.00	5	0.05	0.00	5	0.04	0.00	5
204	Total LPC	396.59	16.45	13	417.84	21.63	5	415.73	16.19	5	456.27	15.30	5	484.58	27.54	5
205	Total LPC / Total PC	0.05	0.00	13	0.04	0.00	5	0.04	0.00	5	0.04	0.00	5	0.05	0.00	5
206	Total PC	8787.72	352.32	13	9530.80	579.14	5	9751.79	529.66	5	9873.52	268.63	5	10643.37	365.06	5
207	Total PC_diacyl	8182.16	313.26	13	8821.28	531.89	5	9009.78	482.56	5	9097.50	251.06	5	9824.12	331.19	5
208	Total PC_ether	605.56	39.48	13	709.52	47.48	5	742.01	47.73	5	776.02	21.85	5	819.25	37.08	5
209	Total SM	835.33	37.71	13	706.81	44.60	5	759.02	37.53	5	820.94	49.48	5	828.96	31.27	5
210	Total SM / Total_SM,PC	0.09	0.00	13	0.07	0.00	5	0.07	0.00	5	0.08	0.00	5	0.07	0.00	5
211	Total SM / Total PC	0.10	0.00	13	0.07	0.00	5	0.08	0.00	5	0.08	0.00	5	0.08	0.00	5
212	Total SM-non OH	785.96	34.48	13	659.83	41.41	5	704.07	34.94	5	762.96	47.09	5	771.07	29.10	5
213	Total SM-OH	49.37	3.49	13	46.98	3.80	5	54.95	2.93	5	57.98	2.83	5	57.88	2.41	5
214	Total SM-OH / Total SM-non OH	0.06	0.00	13	0.07	0.00	5	0.08	0.00	5	0.08	0.00	5	0.07	0.00	5
215	Tyr / Phe	0.85	0.02	13	0.87	0.02	5	0.81	0.04	5	0.90	0.05	5	0.79	0.04	5

Table S3. Day 3 jejunum metabolite concentrations. Values reported in pmol mg⁻¹ of tissue.

		Sham			8 Gy			10 Gy			12 Gy			14 Gy		
		Mean	SEM	N	Mean	SEM	N	Mean	SEM	N	Mean	SEM	N	Mean	SEM	N
1	C0	26.29	1.93	8	29.46	3.20	3	24.75	3.29	3	35.70	2.60	3	33.70	6.09	3
2	C10	0.28	0.02	8	0.39	0.02	3	0.32	0.03	3	0.29	0.04	3	0.34	0.05	3
3	C10-1	0.12	0.01	8	0.15	0.01	3	0.12	0.01	3	0.12	0.01	3	0.14	0.02	3
4	C10-2	0.10	0.00	8	0.10	0.00	3	0.09	0.00	3	0.10	0.01	3	0.10	0.01	3
5	C12	0.09	0.01	8	0.09	0.01	3	0.08	0.00	3	0.08	0.00	3	0.09	0.02	3
6	C12-DC	0.15	0.00	8	0.16	0.00	3	0.15	0.01	3	0.14	0.01	3	0.15	0.02	3
7	C12-1	0.07	0.00	8	0.08	0.00	3	0.07	0.00	3	0.07	0.00	3	0.07	0.01	3
8	C14	0.15	0.02	8	0.11	0.01	3	0.10	0.01	3	0.11	0.01	3	0.12	0.02	3
9	C14-1	0.10	0.01	8	0.08	0.01	3	0.08	0.01	3	0.08	0.01	3	0.09	0.02	3
10	C14-1 OH	0.04	0.00	8	0.04	0.00	3	0.04	0.00	3	0.04	0.00	3	0.04	0.01	3
11	C14-2	0.05	0.01	8	0.05	0.00	3	0.04	0.00	3	0.05	0.00	3	0.05	0.01	3
12	C14-2 OH	0.03	0.00	8	0.03	0.00	3	0.03	0.00	3	0.03	0.00	3	0.03	0.00	3
13	C16	0.29	0.04	8	0.18	0.02	3	0.19	0.01	3	0.21	0.02	3	0.23	0.02	3
14	C16-OH	0.03	0.00	8	0.03	0.00	3	0.02	0.00	3	0.03	0.00	3	0.03	0.00	3
15	C16-1	0.09	0.01	8	0.05	0.01	3	0.06	0.01	3	0.06	0.01	3	0.07	0.01	3
16	C16-1 OH	0.03	0.00	8	0.03	0.00	3	0.03	0.00	3	0.03	0.00	3	0.03	0.01	3
17	C16-2	0.03	0.01	8	0.02	0.00	3	0.02	0.00	3	0.02	0.00	3	0.03	0.00	3
18	C16-2 OH	0.02	0.00	8	0.02	0.00	3	0.02	0.00	3	0.02	0.00	3	0.02	0.00	3
19	C18	0.09	0.01	8	0.07	0.00	3	0.06	0.00	3	0.07	0.01	3	0.08	0.00	3
20	C18-1	0.24	0.04	8	0.14	0.02	3	0.15	0.02	3	0.17	0.03	3	0.18	0.03	3
21	C18-1 OH	0.03	0.00	8	0.03	0.00	3	0.03	0.00	3	0.03	0.00	3	0.03	0.00	3
22	C18-2	0.13	0.03	8	0.08	0.01	3	0.09	0.01	3	0.10	0.02	3	0.10	0.02	3
23	C2	20.68	2.07	8	25.66	1.96	3	20.73	2.08	3	24.07	1.84	3	28.58	3.50	3
24	C3	0.54	0.06	8	0.83	0.02	3	0.50	0.07	3	0.67	0.04	3	0.69	0.12	3
25	C3-DC_C4-OH	0.14	0.01	8	0.12	0.01	3	0.11	0.01	3	0.13	0.01	3	0.15	0.02	3
26	C3-OH	0.04	0.00	8	0.05	0.00	3	0.05	0.00	3	0.04	0.00	3	0.05	0.01	3
27	C3-1	0.04	0.00	8	0.04	0.00	3	0.04	0.00	3	0.04	0.00	3	0.04	0.01	3
28	C4	0.57	0.10	8	0.82	0.07	3	0.52	0.04	3	0.61	0.10	3	0.68	0.09	3
29	C4-1	0.04	0.00	8	0.05	0.00	3	0.04	0.00	3	0.04	0.00	3	0.04	0.01	3
30	C5	0.13	0.01	8	0.16	0.00	3	0.14	0.02	3	0.15	0.01	3	0.17	0.00	3
31	C5-DC_C6-OH	0.04	0.01	8	0.03	0.01	3	0.03	0.00	3	0.03	0.00	3	0.04	0.01	3
32	C5-M-DC	0.05	0.01	8	0.07	0.00	3	0.06	0.00	3	0.06	0.01	3	0.07	0.01	3
33	C5-OH_C3-DC-M	0.13	0.02	8	0.19	0.01	3	0.16	0.01	3	0.14	0.04	3	0.17	0.01	3

34	C5-1	0.04	0.00	8	0.04	0.00	3	0.04	0.00	3	0.04	0.00	3	0.04	0.00	3
35	C5-1 DC	0.05	0.01	8	0.05	0.01	3	0.04	0.01	3	0.04	0.00	3	0.05	0.02	3
36	C6_C4-1 DC	0.11	0.01	8	0.12	0.01	3	0.11	0.01	3	0.11	0.02	3	0.13	0.03	3
37	C6-1	0.04	0.00	8	0.05	0.00	3	0.04	0.00	3	0.04	0.00	3	0.04	0.01	3
38	C7-DC	0.03	0.00	8	0.04	0.00	3	0.03	0.00	3	0.03	0.00	3	0.03	0.00	3
39	C8	0.21	0.02	8	0.34	0.03	3	0.27	0.04	3	0.23	0.04	3	0.28	0.05	3
40	C9	0.11	0.01	8	0.15	0.01	3	0.12	0.01	3	0.11	0.02	3	0.14	0.02	3
41	Ala	447.75	43.72	8	544.67	71.17	3	496.33	26.43	3	587.00	86.16	3	528.67	48.70	3
42	Arg	105.80	8.83	8	114.33	6.84	3	88.03	7.42	3	182.33	14.95	3	133.00	15.31	3
43	Asn	74.78	8.90	8	90.37	3.42	3	82.17	2.60	3	84.70	16.35	3	88.07	5.55	3
44	Asp	215.20	54.31	8	141.33	12.33	3	200.03	111.53	3	302.33	24.36	3	157.83	70.11	3
45	Cit	62.98	7.01	8	41.17	2.70	3	47.50	3.20	3	56.43	9.77	3	53.77	2.89	3
46	Gln	698.50	116.03	8	1070.00	20.00	3	806.00	122.70	3	508.33	66.52	3	1281.33	473.85	3
47	Glu	65.18	7.98	8	57.27	2.57	3	45.40	1.29	3	1309.90	644.02	3	57.03	20.04	3
48	Gly	262.25	24.53	8	243.00	14.93	3	284.00	14.22	3	295.00	16.62	3	260.33	47.51	3
49	His	73.18	5.43	8	92.17	2.50	3	85.73	1.89	3	110.63	12.35	3	111.07	6.96	3
50	Ile	106.36	11.70	8	100.27	5.96	3	96.17	3.72	3	121.93	21.14	3	119.00	8.14	3
51	Leu	179.50	20.98	8	235.33	15.76	3	195.00	12.74	3	231.00	37.87	3	246.33	18.35	3
52	Met	62.84	4.89	8	80.27	12.11	3	66.43	2.00	3	92.17	17.59	3	83.73	11.09	3
53	Phe	68.89	7.28	8	82.33	6.70	3	73.00	2.99	3	94.33	8.75	3	93.37	7.58	3
54	Pro	103.91	17.62	8	111.93	21.76	3	93.77	6.17	3	112.93	16.55	3	111.77	11.23	3
55	Ser	131.74	8.87	8	165.67	18.76	3	158.67	6.84	3	215.00	43.55	3	203.00	15.62	3
56	Thr	174.13	15.83	8	222.00	27.87	3	250.33	18.22	3	258.00	31.63	3	280.67	37.29	3
57	Trp	66.81	6.15	8	69.10	11.54	3	65.13	1.56	3	87.70	10.70	3	72.67	6.89	3
58	Tyr	97.31	9.07	8	111.47	16.85	3	90.70	3.25	3	102.70	14.72	3	105.03	11.24	3
59	Val	204.00	23.35	8	225.00	16.56	3	208.00	9.85	3	212.00	25.74	3	246.00	4.04	3
60	Histamine	0.40	0.03	8	0.41	0.02	3	0.44	0.07	3	0.56	0.06	3	0.38	0.02	3
61	Kynurenine	1.03	0.10	8	0.90	0.03	3	0.72	0.09	3	1.17	0.16	3	1.04	0.14	3
62	Met-SO	1.64	0.24	8	2.07	0.42	3	1.43	0.17	3	2.20	0.25	3	1.67	0.22	3
63	total DMA	0.47	0.08	8	0.28	0.03	3	0.34	0.13	3	0.72	0.04	3	1.00	0.59	3
64	LPC_14-0	2.60	0.12	8	2.47	0.08	3	2.34	0.14	3	2.33	0.04	3	2.44	0.14	3
65	LPC_16-0	192.20	10.20	8	183.50	15.51	3	180.82	14.72	3	197.08	11.71	3	205.85	7.38	3
66	LPC_16-1	5.40	0.43	8	2.66	0.30	3	2.85	0.29	3	3.44	0.28	3	3.28	0.03	3
67	LPC_17-0	2.21	0.07	8	2.37	0.28	3	2.52	0.26	3	2.93	0.26	3	2.67	0.19	3
68	LPC_18-0	74.33	3.60	8	91.56	9.09	3	92.22	6.91	3	100.61	7.61	3	105.47	4.54	3
69	LPC_18-1	44.34	3.53	8	30.99	2.90	3	29.84	2.82	3	37.39	2.48	3	34.86	0.42	3
70	LPC_18-2	133.55	11.38	8	129.12	11.48	3	116.95	5.94	3	135.67	7.61	3	133.76	0.92	3
71	LPC_20-3	8.68	0.75	8	5.53	0.46	3	4.74	0.30	3	6.41	0.53	3	6.03	0.33	3
72	LPC_20-4	43.69	3.50	8	36.08	3.34	3	34.69	3.18	3	48.86	3.40	3	40.87	2.81	3
73	LPC_24-0	1.16	0.05	8	1.42	0.08	3	1.43	0.10	3	1.57	0.04	3	1.63	0.26	3
74	LPC_26-0	1.44	0.08	8	1.43	0.16	3	1.43	0.25	3	1.42	0.08	3	1.55	0.32	3
75	LPC_26-1	0.90	0.06	8	0.81	0.10	3	0.91	0.13	3	0.92	0.10	3	0.91	0.20	3
76	LPC_28-0	0.95	0.05	8	1.10	0.13	3	1.09	0.18	3	1.12	0.04	3	1.21	0.23	3
77	LPC_28-1	1.04	0.06	8	1.05	0.14	3	1.20	0.14	3	1.23	0.08	3	1.20	0.27	3
78	PC_24-0	0.55	0.04	8	0.48	0.07	3	0.56	0.06	3	0.62	0.03	3	0.63	0.12	3
79	PC_26-0	4.62	0.38	8	4.07	0.70	3	4.44	0.60	3	4.21	0.28	3	4.57	0.69	3
80	PC_28-1	1.04	0.05	8	0.96	0.13	3	1.05	0.11	3	1.07	0.07	3	1.08	0.14	3
81	PC_30-0	1.16	0.06	8	1.10	0.06	3	1.06	0.02	3	1.23	0.03	3	1.22	0.05	3
82	PC_30-2	0.31	0.02	8	0.23	0.06	3	0.27	0.05	3	0.31	0.03	3	0.28	0.06	3
83	PC_32-0	19.73	1.75	8	19.44	1.16	3	17.98	1.20	3	22.67	1.04	3	21.27	0.54	3
84	PC_32-1	12.01	1.12	8	6.08	0.30	3	6.09	0.48	3	7.42	0.50	3	7.34	0.05	3

85	PC_32-2	2.82	0.19	8	1.49	0.08	3	1.52	0.14	3	1.76	0.14	3	1.72	0.04	3
86	PC_32-3	0.44	0.03	8	0.37	0.03	3	0.41	0.01	3	0.44	0.01	3	0.44	0.04	3
87	PC_34-1	214.13	14.52	8	155.95	5.35	3	143.49	9.87	3	172.45	11.20	3	178.89	5.73	3
88	PC_34-2	324.19	36.22	8	385.46	52.98	3	376.16	29.36	3	317.28	50.02	3	352.95	56.30	3
89	PC_34-3	40.00	2.52	8	24.27	1.25	3	23.66	2.44	3	26.92	2.32	3	26.24	0.89	3
90	PC_34-4	1.38	0.08	8	0.79	0.03	3	0.81	0.07	3	1.02	0.09	3	0.89	0.02	3
91	PC_36-0	2.09	0.09	8	2.21	0.05	3	2.23	0.12	3	2.41	0.23	3	2.48	0.22	3
92	PC_36-1	48.49	2.71	8	46.48	2.54	3	42.02	2.45	3	56.06	5.13	3	54.92	3.58	3
93	PC_36-2	286.26	17.20	8	329.84	25.69	3	303.27	19.06	3	312.14	27.55	3	330.76	12.76	3
94	PC_36-3	144.30	7.62	8	123.46	8.05	3	112.89	9.56	3	139.02	7.91	3	130.98	4.71	3
95	PC_36-4	268.76	14.22	8	244.31	14.62	3	230.05	21.96	3	265.39	16.02	3	260.71	8.66	3
96	PC_36-5	16.97	1.05	8	11.02	0.79	3	10.90	1.29	3	14.37	1.27	3	12.18	0.13	3
97	PC_36-6	0.81	0.04	8	0.49	0.03	3	0.47	0.04	3	0.61	0.06	3	0.55	0.02	3
98	PC_38-0	2.36	0.10	8	2.72	0.18	3	2.64	0.15	3	3.73	0.26	3	3.37	0.11	3
99	PC_38-1	0.90	0.05	8	0.83	0.12	3	0.92	0.13	3	1.12	0.06	3	1.18	0.02	3
100	PC_38-3	41.65	2.40	8	32.33	1.41	3	30.31	2.80	3	42.73	3.01	3	39.99	0.70	3
101	PC_38-4	171.13	7.31	8	166.01	10.94	3	162.32	16.98	3	205.38	14.45	3	197.10	9.04	3
102	PC_38-5	68.43	3.58	8	43.65	2.86	3	42.97	6.01	3	65.06	4.94	3	52.83	0.95	3
103	PC_38-6	207.32	10.93	8	170.70	5.08	3	163.61	11.53	3	204.93	16.12	3	201.31	10.55	3
104	PC_40-1	0.43	0.01	8	0.42	0.03	3	0.40	0.01	3	0.52	0.03	3	0.48	0.01	3
105	PC_40-2	0.59	0.03	8	0.54	0.03	3	0.49	0.04	3	0.59	0.04	3	0.58	0.02	3
106	PC_40-3	1.08	0.05	8	0.78	0.04	3	0.72	0.06	3	0.89	0.07	3	0.89	0.04	3
107	PC_40-4	4.88	0.21	8	3.95	0.26	3	3.59	0.38	3	4.76	0.44	3	4.56	0.16	3
108	PC_40-5	8.77	0.52	8	5.74	0.37	3	5.72	0.74	3	8.55	1.02	3	7.37	0.20	3
109	PC_40-6	69.42	5.57	8	65.99	2.15	3	64.77	5.32	3	88.22	9.06	3	86.14	3.56	3
110	PC_42-0	0.39	0.02	8	0.36	0.02	3	0.33	0.02	3	0.45	0.05	3	0.41	0.01	3
111	PC_42-1	0.26	0.01	8	0.23	0.01	3	0.23	0.01	3	0.32	0.02	3	0.30	0.01	3
112	PC_42-2	0.33	0.01	8	0.34	0.02	3	0.29	0.01	3	0.35	0.01	3	0.35	0.01	3
113	PC_42-4	0.41	0.02	8	0.39	0.02	3	0.35	0.03	3	0.46	0.03	3	0.45	0.00	3
114	PC_42-5	0.59	0.03	8	0.47	0.03	3	0.45	0.05	3	0.58	0.05	3	0.55	0.02	3
115	PC_42-6	1.74	0.09	8	1.46	0.09	3	1.37	0.13	3	1.59	0.15	3	1.69	0.09	3
116	PC_O-30-0	0.29	0.01	8	0.29	0.03	3	0.30	0.02	3	0.32	0.01	3	0.33	0.03	3
117	PC_O-30-1	1.02	0.10	8	0.97	0.19	3	1.01	0.15	3	0.97	0.10	3	0.99	0.16	3
118	PC_O-30-2	0.22	0.01	8	0.19	0.03	3	0.21	0.02	3	0.23	0.01	3	0.23	0.03	3
119	PC_O-32-1	1.50	0.08	8	1.80	0.13	3	1.88	0.11	3	2.03	0.04	3	2.04	0.18	3
120	PC_O-32-2	0.71	0.04	8	0.65	0.05	3	0.69	0.02	3	0.74	0.01	3	0.70	0.04	3
121	PC_O-34-0	0.68	0.03	8	0.70	0.04	3	0.71	0.06	3	0.85	0.04	3	0.73	0.02	3
122	PC_O-34-1	5.62	0.26	8	5.51	0.31	3	5.39	0.38	3	6.86	0.36	3	6.68	0.25	3
123	PC_O-34-2	7.31	0.36	8	7.57	0.43	3	7.55	0.63	3	8.37	0.50	3	8.22	0.19	3
124	PC_O-34-3	1.97	0.12	8	1.91	0.06	3	1.86	0.10	3	2.08	0.12	3	2.14	0.03	3
125	PC_O-36-0	0.66	0.02	8	0.70	0.04	3	0.67	0.05	3	0.74	0.06	3	0.73	0.01	3
126	PC_O-36-1	3.41	0.14	8	2.88	0.15	3	2.74	0.19	3	3.35	0.26	3	3.13	0.05	3
127	PC_O-36-2	14.14	0.66	8	16.19	1.46	3	15.00	1.03	3	17.81	1.33	3	16.50	0.62	3
128	PC_O-36-3	3.86	0.15	8	3.73	0.31	3	3.45	0.28	3	4.31	0.30	3	3.98	0.07	3
129	PC_O-36-4	6.98	0.32	8	9.04	0.56	3	8.92	0.45	3	11.11	0.45	3	11.11	0.39	3
130	PC_O-36-5	2.96	0.14	8	3.73	0.18	3	3.69	0.36	3	4.76	0.34	3	4.52	0.12	3
131	PC_O-38-0	6.15	0.30	8	3.49	0.16	3	3.47	0.37	3	4.83	0.60	3	4.07	0.10	3
132	PC_O-38-1	1.15	0.04	8	1.15	0.06	3	1.19	0.09	3	1.36	0.08	3	1.27	0.03	3
133	PC_O-38-2	8.84	0.48	8	12.35	1.32	3	11.73	0.53	3	12.03	0.67	3	12.48	0.46	3
134	PC_O-38-3	2.41	0.09	8	2.24	0.16	3	2.12	0.20	3	2.67	0.16	3	2.50	0.06	3
135	PC_O-38-4	7.68	0.29	8	7.98	0.60	3	7.90	0.76	3	10.86	0.85	3	9.41	0.32	3

136	PC_O-38-5	5.91	0.25	8	7.57	0.52	3	7.41	0.44	3	10.61	0.52	3	9.60	0.39	3
137	PC_O-38-6	3.95	0.18	8	4.64	0.24	3	4.54	0.23	3	6.12	0.35	3	5.79	0.19	3
138	PC_O-40-1	6.33	0.33	8	4.70	0.50	3	4.49	0.37	3	6.65	0.68	3	5.20	0.26	3
139	PC_O-40-2	1.01	0.04	8	0.87	0.06	3	0.84	0.05	3	1.10	0.11	3	1.00	0.01	3
140	PC_O-40-3	1.05	0.06	8	0.90	0.07	3	0.88	0.07	3	1.08	0.06	3	1.11	0.04	3
141	PC_O-40-4	3.54	0.14	8	3.77	0.32	3	3.97	0.48	3	4.79	0.30	3	4.39	0.11	3
142	PC_O-40-5	1.64	0.07	8	1.69	0.09	3	1.67	0.13	3	2.36	0.17	3	2.09	0.05	3
143	PC_O-40-6	4.04	0.22	8	4.04	0.19	3	3.97	0.35	3	5.64	0.55	3	4.95	0.19	3
144	PC_O-42-0	1.66	0.06	8	1.34	0.05	3	1.33	0.16	3	1.72	0.17	3	1.66	0.02	3
145	PC_O-42-1	1.15	0.04	8	0.95	0.05	3	1.00	0.07	3	1.40	0.10	3	1.22	0.08	3
146	PC_O-42-2	0.74	0.03	8	0.51	0.05	3	0.47	0.04	3	0.67	0.06	3	0.59	0.01	3
147	PC_O-42-3	1.97	0.09	8	1.40	0.16	3	1.36	0.09	3	2.01	0.21	3	1.61	0.06	3
148	PC_O-42-4	0.46	0.02	8	0.51	0.03	3	0.45	0.02	3	0.61	0.03	3	0.57	0.02	3
149	PC_O-42-5	0.88	0.03	8	0.91	0.03	3	0.91	0.06	3	1.13	0.07	3	1.09	0.03	3
150	PC_O-44-3	0.24	0.01	8	0.20	0.02	3	0.22	0.01	3	0.26	0.01	3	0.24	0.02	3
151	PC_O-44-4	0.24	0.01	8	0.20	0.01	3	0.20	0.01	3	0.25	0.01	3	0.23	0.00	3
152	PC_O-44-5	0.36	0.02	8	0.32	0.02	3	0.32	0.01	3	0.42	0.03	3	0.37	0.01	3
153	PC_O-44-6	0.31	0.02	8	0.32	0.03	3	0.30	0.01	3	0.40	0.02	3	0.38	0.00	3
154	SM_32-2 OH	1.37	0.08	8	1.86	0.21	3	1.95	0.08	3	2.34	0.28	3	2.20	0.12	3
155	SM_34-2 OH	0.36	0.02	8	0.50	0.05	3	0.48	0.02	3	0.59	0.06	3	0.56	0.02	3
156	SM_40-2 OH	2.60	0.14	8	3.04	0.29	3	3.03	0.16	3	3.65	0.56	3	3.40	0.13	3
157	SM_40-3 OH	1.88	0.08	8	2.19	0.25	3	2.23	0.18	3	3.07	0.31	3	2.63	0.15	3
158	SM_42-2 OH	0.28	0.02	8	0.38	0.04	3	0.34	0.00	3	0.43	0.04	3	0.40	0.02	3
159	SM_34-1	27.31	1.46	8	37.68	2.98	3	34.92	0.49	3	45.78	4.46	3	43.65	1.24	3
160	SM_34-2	5.04	0.23	8	6.20	0.56	3	6.18	0.20	3	7.58	0.65	3	7.35	0.31	3
161	SM_36-1	2.07	0.15	8	3.13	0.23	3	2.91	0.06	3	3.54	0.33	3	3.42	0.11	3
162	SM_36-2	0.96	0.05	8	1.38	0.10	3	1.32	0.00	3	1.51	0.12	3	1.54	0.03	3
163	SM_38-3	0.12	0.01	8	0.16	0.02	3	0.15	0.02	3	0.16	0.02	3	0.14	0.02	3
164	SM_40-1	0.57	0.06	8	0.89	0.17	3	0.62	0.04	3	0.90	0.12	3	0.98	0.05	3
165	SM_42-1	11.91	0.64	8	12.83	0.95	3	11.48	0.56	3	13.73	1.46	3	14.07	0.37	3
166	SM_42-2	20.32	1.04	8	27.79	2.80	3	26.07	1.25	3	33.84	1.06	3	33.08	0.74	3
167	SM_44-1	0.05	0.00	8	0.05	0.01	3	0.06	0.00	3	0.07	0.01	3	0.07	0.01	3
168	H1	16181.71	1304.15	8	13389.92	1226.39	3	10907.32	511.17	3	14621.15	1264.43	3	14524.56	50.52	3
169	C2,C3 / CO	0.80	0.03	8	0.94	0.18	3	0.90	0.19	3	0.71	0.10	3	0.98	0.30	3
170	AAA	233.01	20.48	8	262.90	34.27	3	228.83	4.86	3	284.73	34.07	3	271.07	24.25	3
171	BCAA	489.86	54.88	8	560.60	35.92	3	499.17	25.94	3	564.93	84.14	3	611.33	25.76	3
172	C2 / CO	0.78	0.03	8	0.91	0.18	3	0.88	0.19	3	0.69	0.10	3	0.96	0.30	3
173	Cit / Arg	0.61	0.06	8	0.36	0.02	3	0.55	0.07	3	0.31	0.04	3	0.41	0.04	3
174	CPT-I ratio	0.02	0.00	8	0.01	0.00	3	0.01	0.00	3	0.01	0.00	3	0.01	0.00	3
175	Fisher ratio	2.09	0.09	8	2.17	0.13	3	2.18	0.09	3	1.97	0.06	3	2.28	0.13	3
176	Glucogenic AA	841.74	64.10	8	953.33	100.60	3	939.00	38.42	3	1097.00	126.14	3	992.00	111.33	3
177	Kynurenine / Trp	0.02	0.00	8	0.01	0.00	3	0.01	0.00	3	0.01	0.00	3	0.01	0.00	3
178	Met-SO / Met	0.03	0.00	8	0.03	0.00	3	0.02	0.00	3	0.02	0.00	3	0.02	0.00	3
179	MUFA_PC	296.52	18.50	8	228.08	9.17	3	210.96	13.06	3	260.45	17.81	3	263.55	8.60	3
180	MUFA_PC / SFA_PC	7.39	0.34	8	6.18	0.05	3	5.90	0.13	3	5.94	0.13	3	6.38	0.39	3
181	PUFA_PC	1745.67	92.05	8	1707.27	122.73	3	1627.74	133.13	3	1815.41	127.43	3	1817.00	95.26	3
182	PUFA_PC / MUFA_PC	5.92	0.14	8	7.48	0.38	3	7.70	0.16	3	7.00	0.40	3	6.93	0.60	3
183	PUFA_PC / SFA_PC	43.68	1.94	8	46.25	2.76	3	45.42	1.94	3	41.51	2.43	3	43.85	1.71	3
184	SFA_PC	40.32	2.23	8	36.90	1.43	3	35.72	1.40	3	43.79	2.19	3	41.46	1.67	3
185	Total AC / CO	0.95	0.04	8	1.09	0.21	3	1.05	0.21	3	0.81	0.11	3	1.12	0.34	3
186	Total AC-DC / Total AC	0.01	0.00	8	0.01	0.00	3	0.01	0.00	3	0.01	0.00	3	0.01	0.00	3

187	Total AC-OH / Total AC	0.02	0.00	8	0.01	0.00	3	0.01	0.00	3	0.01	0.00	3	0.01	0.00	3
188	Total LPC	512.49	31.20	8	490.09	42.95	3	473.04	32.67	3	540.98	32.56	3	541.71	17.29	3
189	Total LPC / Total PC	0.25	0.01	8	0.25	0.01	3	0.25	0.01	3	0.26	0.01	3	0.26	0.00	3
190	Total PC	2082.52	111.14	8	1972.25	130.69	3	1874.43	147.55	3	2119.66	140.69	3	2122.01	88.13	3
191	Total PC_diacyl	1969.50	107.21	8	1854.35	126.06	3	1759.60	140.01	3	1976.20	133.25	3	1988.17	86.83	3
192	Total PC_ether	113.01	4.56	8	117.90	8.09	3	114.82	7.66	3	143.46	9.05	3	133.84	2.85	3
193	Total SM	74.30	3.58	8	97.25	8.33	3	91.18	1.99	3	116.40	9.20	3	112.58	2.48	3
194	Total SM / Total PC	0.04	0.00	8	0.05	0.00	3	0.05	0.00	3	0.05	0.00	3	0.05	0.00	3
195	Total SM / Total_SM,PC	0.03	0.00	8	0.05	0.00	3	0.05	0.00	3	0.05	0.00	3	0.05	0.00	3
196	Total SM-non OH	67.81	3.30	8	89.29	7.56	3	83.15	1.62	3	106.31	7.95	3	103.40	2.05	3
197	Total SM-OH	6.50	0.30	8	7.96	0.83	3	8.03	0.37	3	10.09	1.25	3	9.19	0.43	3
198	Total SM-OH / Total SM-non OH	0.10	0.00	8	0.09	0.00	3	0.10	0.00	3	0.09	0.00	3	0.09	0.00	3
199	Total_PC,SM	2156.82	112.99	8	2069.50	138.44	3	1965.61	149.46	3	2236.06	149.86	3	2234.60	90.27	3
200	Tyr / Phe	1.43	0.07	8	1.34	0.10	3	1.24	0.01	3	1.08	0.06	3	1.12	0.08	3

Table S4. Day 1 plasma metabolite concentrations. Values reported in μM .

		Sham			8 Gy			10 Gy			12 Gy			14 Gy		
		Mean	SEM	N	Mean	SEM	N	Mean	SEM	N	Mean	SEM	N	Mean	SEM	N
1	C0	26.29	1.93	8	24.89	0.95	3	24.68	2.52	3	23.15	3.24	3	23.82	2.37	3
2	C10	0.28	0.02	8	0.32	0.06	3	0.32	0.05	3	0.37	0.03	3	0.36	0.05	3
3	C10-1	0.12	0.01	8	0.13	0.02	3	0.12	0.02	3	0.14	0.01	3	0.14	0.03	3
4	C10-2	0.10	0.00	8	0.11	0.00	3	0.09	0.01	3	0.10	0.00	3	0.11	0.01	3
5	C12	0.09	0.01	8	0.09	0.01	3	0.08	0.01	3	0.08	0.01	3	0.09	0.02	3
6	C12-DC	0.15	0.00	8	0.16	0.01	3	0.15	0.01	3	0.17	0.01	3	0.16	0.01	3
7	C12-1	0.07	0.00	8	0.08	0.01	3	0.07	0.01	3	0.08	0.01	3	0.07	0.01	3
8	C14	0.15	0.02	8	0.11	0.01	3	0.10	0.01	3	0.12	0.01	3	0.11	0.02	3
9	C14-1	0.10	0.01	8	0.08	0.01	3	0.07	0.01	3	0.08	0.01	3	0.09	0.02	3
10	C14-1 OH	0.04	0.00	8	0.04	0.01	3	0.04	0.00	3	0.04	0.00	3	0.04	0.01	3
11	C14-2	0.05	0.01	8	0.05	0.00	3	0.05	0.01	3	0.05	0.01	3	0.05	0.01	3
12	C14-2 OH	0.03	0.00	8	0.03	0.01	3	0.03	0.00	3	0.03	0.00	3	0.04	0.01	3
13	C16	0.29	0.04	8	0.16	0.02	3	0.17	0.02	3	0.19	0.02	3	0.19	0.03	3
14	C16-OH	0.03	0.00	8	0.03	0.00	3	0.02	0.00	3	0.03	0.00	3	0.03	0.01	3
15	C16-1	0.09	0.01	8	0.06	0.01	3	0.05	0.01	3	0.05	0.01	3	0.06	0.01	3
16	C16-1 OH	0.03	0.00	8	0.03	0.00	3	0.03	0.00	3	0.03	0.00	3	0.03	0.00	3
17	C16-2	0.03	0.01	8	0.03	0.00	3	0.02	0.00	3	0.02	0.00	3	0.03	0.01	3
18	C16-2 OH	0.02	0.00	8	0.02	0.00	3	0.02	0.00	3	0.02	0.00	3	0.02	0.00	3
19	C18	0.09	0.01	8	0.06	0.01	3	0.06	0.00	3	0.07	0.01	3	0.07	0.01	3
20	C18-1	0.24	0.04	8	0.14	0.03	3	0.15	0.02	3	0.16	0.03	3	0.16	0.03	3
21	C18-1 OH	0.03	0.00	8	0.03	0.00	3	0.03	0.00	3	0.03	0.00	3	0.03	0.01	3
22	C18-2	0.13	0.03	8	0.08	0.01	3	0.08	0.02	3	0.09	0.02	3	0.09	0.02	3
23	C2	20.68	2.07	8	17.47	1.41	3	20.28	1.17	3	21.16	4.35	3	22.88	3.44	3
24	C3	0.54	0.06	8	0.49	0.02	3	0.57	0.08	3	0.49	0.06	3	0.50	0.02	3
25	C3-DC C4-OH	0.14	0.01	8	0.10	0.01	3	0.09	0.00	3	0.09	0.01	3	0.11	0.02	3
26	C3-OH	0.04	0.00	8	0.05	0.01	3	0.05	0.00	3	0.05	0.00	3	0.05	0.01	3
27	C3-1	0.04	0.00	8	0.04	0.01	3	0.04	0.00	3	0.04	0.00	3	0.04	0.01	3
28	C4	0.57	0.10	8	0.50	0.02	3	0.47	0.07	3	0.38	0.06	3	0.37	0.05	3
29	C4-1	0.04	0.00	8	0.04	0.00	3	0.04	0.00	3	0.04	0.00	3	0.04	0.01	3
30	C5	0.13	0.01	8	0.12	0.01	3	0.11	0.01	3	0.11	0.01	3	0.12	0.01	3
31	C5-DC C6-OH	0.04	0.01	8	0.05	0.01	3	0.03	0.00	3	0.03	0.00	3	0.04	0.01	3
32	C5-M-DC	0.05	0.01	8	0.07	0.02	3	0.05	0.00	3	0.07	0.00	3	0.08	0.01	3
33	C5-OH C3-DC-M	0.13	0.02	8	0.15	0.04	3	0.10	0.01	3	0.15	0.02	3	0.19	0.03	3

34	C5-1	0.04	0.00	8	0.04	0.00	3	0.04	0.00	3	0.04	0.00	3	0.04	0.00	3
35	C5-1 DC	0.05	0.01	8	0.06	0.02	3	0.05	0.01	3	0.05	0.01	3	0.06	0.02	3
36	C6_C4-1 DC	0.11	0.01	8	0.11	0.02	3	0.10	0.02	3	0.11	0.02	3	0.12	0.03	3
37	C6-1	0.04	0.00	8	0.04	0.01	3	0.04	0.00	3	0.04	0.00	3	0.05	0.01	3
38	C7-DC	0.03	0.00	8	0.03	0.00	3	0.03	0.00	3	0.03	0.00	3	0.03	0.01	3
39	C8	0.21	0.02	8	0.25	0.06	3	0.26	0.05	3	0.30	0.03	3	0.30	0.05	3
40	C9	0.11	0.01	8	0.12	0.03	3	0.12	0.02	3	0.14	0.01	3	0.14	0.02	3
41	Ala	447.75	43.72	8	467.33	20.09	3	350.67	20.37	3	331.00	25.03	3	302.33	25.33	3
42	Arg	105.80	8.83	8	65.33	3.30	3	79.20	11.43	3	72.57	8.62	3	70.17	3.97	3
43	Asn	74.78	8.90	8	63.93	1.76	3	70.57	5.28	3	68.33	8.14	3	61.00	1.02	3
44	Asp	215.20	54.31	8	208.00	69.72	3	108.30	46.25	3	98.47	10.93	3	95.50	30.39	3
45	Cit	62.98	7.01	8	13.97	1.39	3	10.93	1.83	3	7.67	1.58	3	7.97	2.19	3
46	Gln	698.50	116.03	8	892.33	119.98	3	1363.00	353.55	3	975.53	129.16	3	1094.33	205.75	3
47	Glu	65.18	7.98	8	56.57	6.63	3	36.40	10.19	3	46.87	6.05	3	42.97	3.12	3
48	Gly	262.25	24.53	8	301.00	15.13	3	175.33	20.76	3	161.33	9.84	3	207.67	30.49	3
49	His	73.18	5.43	8	79.67	1.36	3	82.60	4.71	3	78.93	10.17	3	79.43	4.91	3
50	Ile	106.36	11.70	8	80.23	3.49	3	91.40	8.81	3	86.00	4.56	3	88.30	6.43	3
51	Leu	179.50	20.98	8	162.00	7.51	3	185.33	7.31	3	168.67	10.40	3	173.33	19.92	3
52	Met	62.84	4.89	8	57.87	5.74	3	60.40	4.19	3	46.67	5.25	3	47.27	1.60	3
53	Phe	68.89	7.28	8	71.37	2.83	3	68.97	4.62	3	63.43	4.34	3	66.27	5.53	3
54	Pro	103.91	17.62	8	87.77	10.20	3	78.73	4.17	3	65.87	5.14	3	62.67	3.82	3
55	Ser	131.74	8.87	8	147.33	14.33	3	115.33	13.33	3	152.33	22.81	3	121.67	6.06	3
56	Thr	174.13	15.83	8	188.33	16.34	3	179.33	8.88	3	175.33	19.60	3	157.00	14.93	3
57	Trp	66.81	6.15	8	73.70	1.95	3	88.90	6.56	3	74.07	6.40	3	77.33	3.18	3
58	Tyr	97.31	9.07	8	94.60	9.65	3	79.57	8.97	3	66.97	6.98	3	64.37	6.30	3
59	Val	204.00	23.35	8	186.00	16.26	3	186.00	14.05	3	192.67	15.25	3	213.00	12.53	3
60	Histamine	0.40	0.03	8	0.38	0.03	3	0.33	0.03	3	0.32	0.03	3	0.33	0.02	3
61	Kynurenine	1.03	0.10	8	1.26	0.08	3	1.64	0.22	3	2.00	0.08	3	1.86	0.19	3
62	Met-SO	1.64	0.24	8	1.86	0.38	3	1.31	0.05	3	0.80	0.13	3	0.69	0.10	3
63	total DMA	0.47	0.08	8	0.31	0.11	3	0.18	0.03	3	0.12	0.03	3	0.08	0.04	3
64	LPC_14-0	2.60	0.12	8	2.77	0.15	3	2.66	0.14	3	2.54	0.10	3	2.64	0.29	3
65	LPC_16-0	192.20	10.20	8	175.60	7.02	3	229.75	24.82	3	189.92	27.05	3	174.79	17.48	3
66	LPC_16-1	5.40	0.43	8	3.77	0.22	3	3.75	0.40	3	2.68	0.43	3	2.33	0.26	3
67	LPC_17-0	2.21	0.07	8	2.90	0.10	3	3.88	0.41	3	3.09	0.42	3	2.78	0.29	3
68	LPC_18-0	74.33	3.60	8	85.05	5.80	3	131.29	9.62	3	114.05	16.44	3	112.80	9.71	3
69	LPC_18-1	44.34	3.53	8	34.58	0.96	3	36.30	3.05	3	27.65	4.49	3	24.55	2.84	3
70	LPC_18-2	133.55	11.38	8	107.79	1.33	3	118.77	8.88	3	97.63	18.03	3	87.02	9.71	3
71	LPC_20-3	8.68	0.75	8	6.20	0.27	3	5.35	0.52	3	3.96	0.69	3	3.70	0.34	3
72	LPC_20-4	43.69	3.50	8	47.33	0.80	3	50.22	4.88	3	40.57	6.57	3	36.63	2.89	3
73	LPC_24-0	1.16	0.05	8	1.33	0.07	3	1.62	0.25	3	1.48	0.23	3	1.47	0.04	3
74	LPC_26-0	1.44	0.08	8	1.37	0.13	3	1.37	0.25	3	1.06	0.17	3	1.03	0.02	3
75	LPC_26-1	0.90	0.06	8	1.08	0.04	3	1.07	0.25	3	0.86	0.16	3	0.83	0.03	3
76	LPC_28-0	0.95	0.05	8	0.99	0.10	3	1.16	0.19	3	0.89	0.16	3	0.89	0.02	3
77	LPC_28-1	1.04	0.06	8	1.26	0.09	3	1.35	0.27	3	1.14	0.22	3	1.06	0.05	3
78	PC_24-0	0.55	0.04	8	0.69	0.08	3	0.69	0.12	3	0.56	0.08	3	0.65	0.02	3
79	PC_26-0	4.62	0.38	8	3.88	0.30	3	3.98	0.81	3	2.99	0.41	3	3.18	0.06	3
80	PC_28-1	1.04	0.05	8	0.97	0.08	3	0.88	0.07	3	0.74	0.12	3	0.76	0.02	3
81	PC_30-0	1.16	0.06	8	0.95	0.04	3	0.93	0.08	3	0.85	0.13	3	0.89	0.01	3
82	PC_30-2	0.31	0.02	8	0.37	0.05	3	0.27	0.03	3	0.24	0.04	3	0.21	0.02	3
83	PC_32-0	19.73	1.75	8	17.81	0.27	3	17.79	1.17	3	17.95	2.01	3	18.32	0.84	3
84	PC_32-1	12.01	1.12	8	6.43	0.52	3	4.86	0.49	3	4.81	0.66	3	5.02	0.33	3

85	PC_32-2	2.82	0.19	8	1.93	0.11	3	1.34	0.12	3	1.32	0.17	3	1.12	0.04	3
86	PC_32-3	0.44	0.03	8	0.41	0.02	3	0.40	0.05	3	0.38	0.05	3	0.39	0.01	3
87	PC_34-1	214.13	14.52	8	132.95	4.60	3	120.33	3.69	3	118.61	16.08	3	119.64	10.03	3
88	PC_34-2	324.19	36.22	8	351.53	56.41	3	353.78	46.51	3	343.02	23.31	3	352.14	43.72	3
89	PC_34-3	40.00	2.52	8	26.86	2.42	3	20.21	0.82	3	18.98	3.18	3	17.04	1.97	3
90	PC_34-4	1.38	0.08	8	1.13	0.08	3	0.80	0.07	3	0.76	0.12	3	0.65	0.06	3
91	PC_36-0	2.09	0.09	8	2.34	0.14	3	2.76	0.21	3	2.66	0.15	3	2.66	0.26	3
92	PC_36-1	48.49	2.71	8	33.31	2.01	3	37.06	1.80	3	36.98	6.88	3	39.97	3.32	3
93	PC_36-2	286.26	17.20	8	260.04	19.27	3	274.99	16.77	3	277.47	27.66	3	289.90	27.08	3
94	PC_36-3	144.30	7.62	8	117.46	3.31	3	94.96	4.63	3	88.30	13.77	3	84.47	7.78	3
95	PC_36-4	268.76	14.22	8	250.72	14.91	3	227.76	22.97	3	224.84	25.57	3	220.41	17.40	3
96	PC_36-5	16.97	1.05	8	13.35	0.61	3	10.14	1.03	3	11.01	2.09	3	9.63	0.78	3
97	PC_36-6	0.81	0.04	8	0.65	0.04	3	0.49	0.06	3	0.48	0.08	3	0.43	0.02	3
98	PC_38-0	2.36	0.10	8	1.96	0.06	3	1.98	0.16	3	1.96	0.34	3	2.01	0.15	3
99	PC_38-1	0.90	0.05	8	0.74	0.08	3	0.77	0.02	3	0.71	0.10	3	0.85	0.07	3
100	PC_38-3	41.65	2.40	8	33.88	1.35	3	31.35	1.16	3	30.12	4.90	3	31.77	1.40	3
101	PC_38-4	171.13	7.31	8	182.81	9.16	3	191.09	14.46	3	199.01	22.17	3	201.83	11.58	3
102	PC_38-5	68.43	3.58	8	63.61	1.33	3	51.62	4.08	3	50.28	8.66	3	46.30	2.54	3
103	PC_38-6	207.32	10.93	8	178.70	3.27	3	187.62	16.90	3	200.73	26.19	3	200.38	17.17	3
104	PC_40-1	0.43	0.01	8	0.38	0.00	3	0.38	0.01	3	0.34	0.04	3	0.33	0.00	3
105	PC_40-2	0.59	0.03	8	0.40	0.01	3	0.34	0.01	3	0.33	0.06	3	0.31	0.01	3
106	PC_40-3	1.08	0.05	8	0.67	0.04	3	0.53	0.02	3	0.51	0.09	3	0.48	0.02	3
107	PC_40-4	4.88	0.21	8	3.70	0.21	3	3.15	0.10	3	3.10	0.47	3	3.08	0.17	3
108	PC_40-5	8.77	0.52	8	6.43	0.50	3	5.51	0.31	3	5.66	0.93	3	5.18	0.09	3
109	PC_40-6	69.42	5.57	8	60.93	1.42	3	74.35	3.58	3	86.30	13.04	3	91.80	6.74	3
110	PC_42-0	0.39	0.02	8	0.29	0.02	3	0.28	0.02	3	0.27	0.05	3	0.27	0.01	3
111	PC_42-1	0.26	0.01	8	0.21	0.01	3	0.20	0.01	3	0.20	0.03	3	0.20	0.01	3
112	PC_42-2	0.33	0.01	8	0.26	0.00	3	0.25	0.01	3	0.24	0.03	3	0.24	0.01	3
113	PC_42-4	0.41	0.02	8	0.33	0.01	3	0.30	0.00	3	0.30	0.05	3	0.30	0.01	3
114	PC_42-5	0.59	0.03	8	0.43	0.02	3	0.40	0.03	3	0.39	0.07	3	0.37	0.03	3
115	PC_42-6	1.74	0.09	8	1.24	0.09	3	1.03	0.04	3	1.06	0.16	3	1.04	0.08	3
116	PC_O-30-0	0.29	0.01	8	0.28	0.03	3	0.26	0.01	3	0.25	0.03	3	0.25	0.01	3
117	PC_O-30-1	1.02	0.10	8	0.90	0.10	3	0.83	0.11	3	0.68	0.12	3	0.73	0.04	3
118	PC_O-30-2	0.22	0.01	8	0.23	0.02	3	0.22	0.02	3	0.20	0.03	3	0.21	0.02	3
119	PC_O-32-1	1.50	0.08	8	1.51	0.10	3	1.59	0.10	3	1.48	0.21	3	1.61	0.04	3
120	PC_O-32-2	0.71	0.04	8	0.62	0.04	3	0.54	0.05	3	0.49	0.07	3	0.51	0.00	3
121	PC_O-34-0	0.68	0.03	8	0.67	0.02	3	0.68	0.06	3	0.63	0.08	3	0.61	0.03	3
122	PC_O-34-1	5.62	0.26	8	4.59	0.04	3	4.57	0.21	3	4.48	0.52	3	4.62	0.34	3
123	PC_O-34-2	7.31	0.36	8	6.04	0.18	3	5.28	0.32	3	5.26	0.79	3	5.04	0.49	3
124	PC_O-34-3	1.97	0.12	8	1.54	0.05	3	1.48	0.11	3	1.44	0.20	3	1.43	0.07	3
125	PC_O-36-0	0.66	0.02	8	0.60	0.02	3	0.61	0.03	3	0.60	0.08	3	0.60	0.03	3
126	PC_O-36-1	3.41	0.14	8	2.67	0.11	3	2.42	0.15	3	2.31	0.26	3	2.35	0.13	3
127	PC_O-36-2	14.14	0.66	8	13.33	0.11	3	12.19	0.71	3	11.86	1.80	3	11.87	0.90	3
128	PC_O-36-3	3.86	0.15	8	3.34	0.11	3	2.72	0.19	3	2.56	0.40	3	2.41	0.22	3
129	PC_O-36-4	6.98	0.32	8	5.80	0.12	3	5.22	0.37	3	5.02	0.75	3	5.43	0.46	3
130	PC_O-36-5	2.96	0.14	8	2.66	0.03	3	2.66	0.23	3	2.73	0.31	3	2.83	0.21	3
131	PC_O-38-0	6.15	0.30	8	5.14	0.40	3	4.19	0.38	3	4.22	0.75	3	3.82	0.37	3
132	PC_O-38-1	1.15	0.04	8	0.90	0.02	3	0.86	0.05	3	0.79	0.08	3	0.83	0.06	3
133	PC_O-38-2	8.84	0.48	8	7.43	0.11	3	6.90	0.53	3	6.73	1.16	3	7.18	0.63	3
134	PC_O-38-3	2.41	0.09	8	2.17	0.08	3	1.84	0.15	3	1.65	0.27	3	1.64	0.11	3
135	PC_O-38-4	7.68	0.29	8	8.68	0.03	3	7.72	0.75	3	7.59	1.09	3	7.33	0.37	3

136	PC_O-38-5	5.91	0.25	8	4.94	0.10	3	4.57	0.39	3	4.39	0.69	3	4.56	0.28	3
137	PC_O-38-6	3.95	0.18	8	3.24	0.10	3	3.16	0.20	3	3.18	0.52	3	3.41	0.23	3
138	PC_O-40-1	6.33	0.33	8	6.97	0.23	3	6.34	0.43	3	6.58	1.31	3	5.83	0.48	3
139	PC_O-40-2	1.01	0.04	8	0.85	0.03	3	0.80	0.09	3	0.76	0.14	3	0.73	0.05	3
140	PC_O-40-3	1.05	0.06	8	0.84	0.03	3	0.75	0.03	3	0.71	0.11	3	0.68	0.02	3
141	PC_O-40-4	3.54	0.14	8	3.97	0.05	3	3.49	0.34	3	3.49	0.53	3	3.44	0.25	3
142	PC_O-40-5	1.64	0.07	8	1.41	0.07	3	1.33	0.08	3	1.25	0.18	3	1.26	0.07	3
143	PC_O-40-6	4.04	0.22	8	4.00	0.09	3	4.14	0.38	3	4.30	0.68	3	4.27	0.29	3
144	PC_O-42-0	1.66	0.06	8	1.41	0.05	3	1.17	0.07	3	1.18	0.14	3	1.10	0.08	3
145	PC_O-42-1	1.15	0.04	8	1.34	0.05	3	1.05	0.02	3	1.10	0.19	3	0.96	0.03	3
146	PC_O-42-2	0.74	0.03	8	0.64	0.03	3	0.52	0.02	3	0.51	0.08	3	0.46	0.03	3
147	PC_O-42-3	1.97	0.09	8	1.93	0.11	3	1.86	0.11	3	1.85	0.37	3	1.69	0.10	3
148	PC_O-42-4	0.46	0.02	8	0.35	0.01	3	0.29	0.03	3	0.32	0.07	3	0.30	0.02	3
149	PC_O-42-5	0.88	0.03	8	0.81	0.03	3	0.77	0.04	3	0.78	0.09	3	0.78	0.03	3
150	PC_O-44-3	0.24	0.01	8	0.22	0.01	3	0.23	0.02	3	0.25	0.05	3	0.22	0.01	3
151	PC_O-44-4	0.24	0.01	8	0.21	0.01	3	0.17	0.00	3	0.18	0.02	3	0.16	0.00	3
152	PC_O-44-5	0.36	0.02	8	0.30	0.02	3	0.31	0.01	3	0.29	0.05	3	0.28	0.02	3
153	PC_O-44-6	0.31	0.02	8	0.24	0.01	3	0.21	0.02	3	0.22	0.04	3	0.21	0.01	3
154	SM_32-2 OH	1.37	0.08	8	1.49	0.12	3	2.21	0.33	3	2.13	0.27	3	2.08	0.04	3
155	SM_34-2 OH	0.36	0.02	8	0.39	0.03	3	0.58	0.07	3	0.53	0.08	3	0.53	0.03	3
156	SM_40-2 OH	2.60	0.14	8	2.65	0.11	3	3.82	0.70	3	3.68	0.58	3	3.19	0.15	3
157	SM_40-3 OH	1.88	0.08	8	1.98	0.08	3	2.70	0.45	3	2.46	0.36	3	2.29	0.05	3
158	SM_42-2 OH	0.28	0.02	8	0.29	0.01	3	0.39	0.05	3	0.37	0.06	3	0.32	0.00	3
159	SM_34-1	27.31	1.46	8	29.06	1.19	3	42.04	4.44	3	40.88	6.08	3	40.51	1.41	3
160	SM_34-2	5.04	0.23	8	4.94	0.09	3	6.63	0.60	3	6.22	0.99	3	6.20	0.30	3
161	SM_36-1	2.07	0.15	8	2.42	0.09	3	3.85	0.56	3	3.46	0.54	3	3.56	0.15	3
162	SM_36-2	0.96	0.05	8	1.06	0.04	3	1.56	0.18	3	1.41	0.21	3	1.43	0.08	3
163	SM_38-3	0.12	0.01	8	0.10	0.01	3	0.15	0.02	3	0.11	0.03	3	0.12	0.01	3
164	SM_40-1	0.57	0.06	8	0.54	0.03	3	0.71	0.15	3	0.50	0.17	3	0.50	0.06	3
165	SM_42-1	11.91	0.64	8	8.82	0.39	3	10.77	0.86	3	10.83	2.10	3	9.54	0.88	3
166	SM_42-2	20.32	1.04	8	22.34	0.56	3	29.37	3.43	3	28.02	4.57	3	25.97	1.19	3
167	SM_44-1	0.05	0.00	8	0.05	0.01	3	0.06	0.01	3	0.06	0.01	3	0.05	0.01	3
168	H1	16181.71	1304.15	8	12417.13	842.46	3	12271.75	696.04	3	10674.50	1195.74	3	11067.93	1124.44	3
169	C2,C3 / CO	0.80	0.03	8	0.73	0.08	3	0.87	0.14	3	0.93	0.14	3	1.01	0.22	3
170	AAA	233.01	20.48	8	239.67	12.85	3	237.43	20.14	3	204.47	16.91	3	207.97	14.58	3
171	BCAA	489.86	54.88	8	428.23	15.80	3	462.73	29.92	3	447.33	29.48	3	474.63	37.68	3
172	C2 / CO	0.78	0.03	8	0.71	0.08	3	0.85	0.14	3	0.91	0.14	3	0.99	0.22	3
173	Cit / Arg	0.61	0.06	8	0.21	0.02	3	0.14	0.00	3	0.10	0.01	3	0.11	0.03	3
174	CPT-I ratio	0.02	0.00	8	0.01	0.00	3	0.01	0.00	3	0.01	0.00	3	0.01	0.00	3
175	Fisher ratio	2.09	0.09	8	1.79	0.03	3	1.96	0.04	3	2.20	0.06	3	2.28	0.07	3
176	Glucogenic AA	841.74	64.10	8	915.67	9.21	3	641.33	47.81	3	644.67	43.76	3	631.67	52.39	3
177	Kynurenine / Trp	0.02	0.00	8	0.02	0.00	3	0.02	0.00	3	0.03	0.00	3	0.02	0.00	3
178	Met-SO / Met	0.03	0.00	8	0.03	0.00	3	0.02	0.00	3	0.02	0.00	3	0.01	0.00	3
179	MUFA_PC	296.52	18.50	8	193.15	7.19	3	181.38	4.20	3	179.10	26.34	3	182.85	13.97	3
180	MUFA_PC / SFA_PC	7.39	0.34	8	5.36	0.16	3	5.19	0.30	3	5.21	0.15	3	5.32	0.25	3
181	PUFA_PC	1745.67	92.05	8	1633.26	96.15	3	1601.77	133.13	3	1612.61	171.71	3	1627.58	140.50	3
182	PUFA_PC / MUFA_PC	5.92	0.14	8	8.51	0.75	3	8.81	0.53	3	9.12	0.40	3	8.90	0.35	3
183	PUFA_PC / SFA_PC	43.68	1.94	8	45.41	3.01	3	45.39	0.55	3	47.44	0.96	3	47.20	1.83	3
184	SFA_PC	40.32	2.23	8	36.01	0.29	3	35.30	2.99	3	34.13	4.21	3	34.35	1.72	3
185	Total AC / CO	0.95	0.04	8	0.87	0.08	3	1.01	0.16	3	1.09	0.15	3	1.17	0.26	3
186	Total AC-DC / Total AC	0.01	0.00	8	0.02	0.00	3	0.01	0.00	3	0.01	0.00	3	0.01	0.00	3

187	Total AC-OH / Total AC	0.02	0.00	8	0.02	0.00	3	0.01	0.00	3	0.01	0.00	3	0.01	0.00	3
188	Total LPC	512.49	31.20	8	472.00	10.38	3	588.53	53.48	3	487.50	74.49	3	452.52	43.25	3
189	Total LPC / Total PC	0.25	0.01	8	0.25	0.01	3	0.32	0.01	3	0.26	0.02	3	0.25	0.01	3
190	Total PC	2082.52	111.14	8	1862.41	90.10	3	1818.45	140.14	3	1825.84	202.19	3	1844.79	154.51	3
191	Total PC_diacyl	1969.50	107.21	8	1759.62	91.42	3	1724.52	134.02	3	1733.52	188.34	3	1753.15	148.31	3
192	Total PC_ether	113.01	4.56	8	102.79	1.60	3	93.93	6.48	3	92.31	14.15	3	91.63	6.20	3
193	Total SM	74.30	3.58	8	75.63	2.08	3	104.21	11.66	3	100.23	15.82	3	95.85	3.89	3
194	Total SM / Total PC	0.04	0.00	8	0.04	0.00	3	0.06	0.00	3	0.05	0.00	3	0.05	0.00	3
195	Total SM / Total_SM,PC	0.03	0.00	8	0.04	0.00	3	0.05	0.00	3	0.05	0.00	3	0.05	0.00	3
196	Total SM-non OH	67.81	3.30	8	68.84	1.81	3	94.52	10.08	3	91.07	14.48	3	87.44	3.66	3
197	Total SM-OH	6.50	0.30	8	6.79	0.30	3	9.69	1.60	3	9.16	1.34	3	8.41	0.23	3
198	Total SM-OH / Total SM-non OH	0.10	0.00	8	0.10	0.00	3	0.10	0.01	3	0.10	0.00	3	0.10	0.00	3
199	Total_PC,SM	2156.82	112.99	8	1938.04	89.75	3	1922.66	151.80	3	1926.06	217.11	3	1940.64	157.58	3
200	Tyr / Phe	1.43	0.07	8	1.32	0.09	3	1.15	0.05	3	1.05	0.05	3	0.97	0.01	3

Table S5. Day 3 plasma metabolite concentrations. Values reported in μM .