

**Supplemental Table 1: Selected fatty acids<sup>1</sup> esterified as triacylglycerols and phospholipids**

g/100g fatty acids	Zucker fa/fa rats			Long-Evans rats		
	Control Group	Baked Salmon Group	P diets	Control group	Baked Salmon group	P diets
<b>Triacylglycerols</b>						
16:0	32.9 ± 3.2	32.4 ± 1.6	0.76	27.7 ± 1.9	26.9 ± 3.5	0.63
18:0	3.12 ± 0.39	2.77 ± 0.46	0.21	4.95 ± 1.86	4.76 ± 2.44	0.88
ΣSFA <sup>2</sup>	38.3 ± 3.2	37.1 ± 2.0	0.47	34.9 ± 3.9	33.8 ± 5.1	0.69
16:1n-7	8.82 ± 1.25	7.19 ± 0.75	0.88	5.21 ± 0.95	4.32 ± 1.83	0.31
16:1n-9	0.76 ± 0.10	0.76 ± 0.07	0.88	0.57 ± 0.08	0.49 ± 0.05	0.087
18:1n-7	4.21 ± 0.37	3.48 ± 0.28	4.7x10 <sup>-3</sup>	3.18 ± 0.48	2.73 ± 0.46	0.13
18:1n-9	27.3 ± 1.4	26.8 ± 1.1	0.50	22.7 ± 2.2	22.8 ± 3.6	0.94
ΣMUFA <sup>3</sup>	41.7 ± 1.8	38.9 ± 1.8	0.026	32.0 ± 2.8	30.9 ± 5.2	0.66
18:3n-3	1.00 ± 0.41	1.17 ± 0.22	0.42	1.51 ± 0.23	1.73 ± 0.40	0.26
20:5n-3	0.44 ± 0.12	1.32 ± 0.35	4.2x10 <sup>-4</sup>	0.69 ± 0.22	2.02 ± 0.92	6.5x10 <sup>-3</sup>
22:5n-3	0.78 ± 0.08	1.78 ± 0.36	1.8x10 <sup>-4</sup>	0.56 ± 0.17	1.21 ± 0.52	4.7 x10 <sup>-3</sup>
22:6n-3	1.09 ± 0.16	3.87 ± 0.83	4.2x10 <sup>-5</sup>	1.45 ± 0.41	3.47 ± 1.42	7.5 x10 <sup>-3</sup>
Σn-3 PUFA <sup>4</sup>	3.3 ± 0.6	8.2 ± 1.7	1.6x10 <sup>-4</sup>	4.2 ± 0.9	8.6 ± 3.1	0.0072
18:2n-6	12.3 ± 2.9	12.29 ± 1.29	0.99	22.8 ± 2.9	21.9 ± 3.2	0.63
20:3n-6	0.38 ± 0.03	0.59 ± 0.08	2.9x10 <sup>-4</sup>	0.23 ± 0.13	0.33 ± 0.20	0.33
20:4n-6	2.37 ± 0.21	1.79 ± 0.51	0.042	4.61 ± 0.55	3.39 ± 0.73	8.5x10 <sup>-3</sup>
22:4n-6	0.69 ± 0.12	0.48 ± 0.13	0.019	0.46 ± 0.15	0.37 ± 0.08	0.23
Σn-6 PUFA <sup>5</sup>	16.6 ± 2.8	15.9 ± 1.8	0.60	29.0 ± 3.5	26.7 ± 4.0	0.33
<b>Phospholipids</b>						
16:0	18.1 ± 1.1	17.1 ± 1.4	0.26	22.4 ± 1.3	21.5 ± 2.5	0.49
18:0	27.0 ± 1.2	29.2 ± 1.8	0.048	23.6 ± 1.00	25.8 ± 1.8	0.034
24:0	0.93 ± 0.09	0.56 ± 0.08	3.8x10 <sup>-5</sup>	1.26 ± 0.19	0.96 ± 0.16	0.013
ΣSFA <sup>2</sup>	47.5 ± 1.0	48.1 ± 0.5	0.25	49.4 ± 1.0	50.1 ± 1.2	0.25
16:1n-7	0.83 ± 0.15	0.63 ± 0.11	0.030	0.43 ± 0.043	0.31 ± 0.06	2.6 x10 <sup>-3</sup>
18:1n-9	3.72 ± 0.55	3.12 ± 0.63	0.13	2.75 ± 0.24	2.64 ± 0.12	0.34
18:1n-7	2.45 ± 0.25	1.82 ± 0.30	4.7x10 <sup>-3</sup>	2.33 ± 0.17	1.66 ± 0.29	6.5x10 <sup>-4</sup>
24:1n-9	0.94 ± 0.10	1.12 ± 0.17	0.069	0.95 ± 0.16	1.53 ± 0.25	6.9x10 <sup>-4</sup>
ΣMUFA <sup>3</sup>	8.2 ± 0.8	7.0 ± 1.0	0.059	6.7 ± 0.3	6.5 ± 0.4	0.24
20:5n-3	0.11 ± 0.02	0.49 ± 0.12	7.0x10 <sup>-5</sup>	0.09 ± 0.02	0.35 ± 0.13	6.2x10 <sup>-4</sup>
22:5n-3	0.70 ± 0.06	0.74 ± 0.06	0.31	0.49 ± 0.06	0.67 ± 0.08	1.4 x10 <sup>-3</sup>
22:6n-3	4.53 ± 0.22	6.73 ± 0.43	3x10 <sup>-6</sup>	4.81 ± 0.39	5.91 ± 0.69	6.8 x10 <sup>-3</sup>
Σn-3 PUFA <sup>4</sup>	5.4 ± 0.2	8.0 ± 0.4	3.4x10 <sup>-7</sup>	5.4 ± 0.4	7.0 ± 0.8	1.3x10 <sup>-3</sup>
18:2n-6	8.00 ± 0.36	9.51 ± 1.94	0.12	7.92 ± 0.77	8.38 ± 0.34	0.21
20:3n-6	1.05 ± 0.16	2.10 ± 0.48	1.3x10 <sup>-3</sup>	0.55 ± 0.10	0.97 ± 0.32	0.013
20:4n-6	28.2 ± 0.6	24.6 ± 2.6	0.014	28.9 ± 1.2	26.3 ± 0.9	1.6 x10 <sup>-3</sup>
22:5n-6	0.79 ± 0.13	0.19 ± 0.04	2.4x10 <sup>-6</sup>	0.22 ± 0.08	0.08 ± 0.01	2.5 x10 <sup>-3</sup>
Σn-6 PUFA <sup>5</sup>	38.9 ± 0.4	37.0 ± 0.7	6.4x10 <sup>-4</sup>	38.5 ± 0.6	36.4 ± 1.1	2.4x10 <sup>-3</sup>

<sup>1</sup>Showing fatty acids present in amounts >0.3 g/100g fatty acids in at least one of the experimental groups.

<sup>2</sup>Sum of 12:0, 14:0, 15:0, 16:0, 17:0, 18:0, 20:0, 22:0, 23:0, 24:0.

<sup>3</sup>Sum of 14:1n-5, 16:1n-7, 16:1n-9, 17:1n-8, 18:1n-5, 18:1n-7, 18:1n-9, 20:1n-9, 24:1n-9.

<sup>4</sup>Sum of 18:3n-3, 20:3n-3, 20:5n-3, 22:5n-3, 22:6n-3.

<sup>5</sup>Sum of 18:2n-6, 18:3n-6, 20:3n-6, 20:4n-6, 22:4n-6, 22:5n-6.

Values are mean and standard deviations, n= 5 in Zucker fa/fa Control group, and n=6 in all other groups.

p <0.05 were considered significant. Groups within rat strains are compared using Independent Samples T Test assuming equal variances.