

**Supplementary Table 1.** Fatty acid profile of fish oil fed salmon (FO), soybean oil fed salmon (SO) and vegetable oils used in mice diets.

FA (%)	Atlantic salmon		Vegetable oils			
	FO salmon	SO salmon	Olive oil	Coconut oil	Safflower oil	Flax oil
6:0	-	-	-	0.7	-	-
8:0	-	-	-	8.2	-	-
10:0	-	-	-	6.5	-	-
12:0	-	-	-	41.8	-	-
14:0	4.2	0.7	-	20.4	0.1	-
15:0	0.3	-	-	-	-	-
16:0	15.7	13.8	10.0	10.1	6.8	5.2
17:0	0.3	0.1	0.1	-	-	-
18:0	3.3	4.5	3.0	3.5	2.6	5.8
20:0	0.2	0.3	0.4	0.2	0.3	0.2
22:0	-	0.1	0.1	-	0.3	0.2
24:0	-	-	-	0.1	0.1	0.1
SFA	23.9	19.5	13.9	91.5	10.2	11.5
16:1n-9	0.3	0.2	0.1	-	-	-
16:1n-7	3.5	0.8	0.6	-	-	-
18:1n-11	1.4	0.2	-	-	-	-
18:1n-9	8.4	16.5	75.8	6.8	12.2	17.9
18:1n-7	2.1	1.8	1.7	0.1	0.7	0.6
20:1n-11	0.9	0.2	-	-	-	-
20:1n-9	5.8	1.4	0.3	-	0.2	0.1
20:1n-7	0.2	-	-	-	-	-
22:1n-11	7.8	1.1	-	-	-	-
22:1n-9	0.6	0.2	-	-	-	-
24:1n-9	0.6	0.2	-	-	-	-
MUFA	31.5	22.6	78.6	6.9	13.0	18.6
18:2n-6	2.6	30.2	6.7	1.9	76.0	14.4
20:2n-6	0.3	2.2	-	-	-	-
20:3n-6	0.2	2.0	-	-	-	-
20:4n-6	1.0	1.3	-	-	-	-
Total n-6	4.1	35.7	6.7	1.9	76.0	14.4
n-6 HUFA	1.3	3.5	-	-	-	-
18:3n-3	1.0	3.4	0.6	-	0.2	55.2
18:4n-3	1.3	0.5	-	-	-	-
20:4n-3	1.2	0.6	-	-	-	-
20:5n-3	8.4	3.3	-	-	-	-
22:5n-3	2.4	0.9	-	-	-	-
22:6n-3	23.3	12.4	-	-	-	-
Total n-3	37.5	21.1	0.6	-	0.2	55.2
n-3 HUFA	35.3	17.2	-	-	-	-