

Table S8. Fatty acid content (% of total fatty acids, mean \pm standard error, n = 9 fish per diet, 3 fish/replicate with 3 replicates/diet) of fillets from rainbow trout fed experimental diets for 84 days (at the end of the experiment)

Fatty acids ^a	Reference	Diet ^b			F value	P value
		NI	NS	NIS		
Saturated fatty acid fractions						
14:00	3.7 ± 0.0 [a]	1.1 ± 0.0 [d]	1.3 ± 0.0 [c]	1.5 ± 0.0 [b]	3716.84	< 0.01
15:00	0.2 ± 0.0 [a]	0.1 ± 0.0 [b]	0.1 ± 0.00 [b]	0.1 ± 0.0 [b]	119.03	< 0.01
16:00	16.7 ± 0.2 [a]	14.7 ± 0.2 [b]	15.9 ± 0.2 [a]	15.9 ± 0.2 [a]	15.03	< 0.01
17:00	0.2 ± 0.0	0.1 ± 0.0	0.1 ± 0.0	0.1 ± 0.0	2.640	0.12
18:00	3.5 ± 0.1[b]	4.4 ± 0.1 [a]	4.4 ± 0.1 [a]	4.4 ± 0.1 [a]	38.64	< 0.01
20:00	0.2 ± 0.0 [b]	0.2 ± 0.0 [a]	0.2 ± 0.0 [a]	0.2 ± 0.0 [a]	12.58	< 0.01
22:00	0.0 ± 0.0 [b]	0.1 ± 0.0 [a]	0.1 ± 0.0 [a]	0.1 ± 0.0 [a]	58.59	< 0.01
24:00:00	0.1 ± 0.0	0.1 ± 0.0	0.1 ± 0.0	0.1 ± 0.0	0.82	0.52
Total SFA	24.4 ± 0.3 [a]	20.7 ± 0.2 [ab]	24.1 ± 1.9 [ab]	22.4 ± 0.2 [b]	5.78	0.02
Monounsaturated fatty acid fractions						
16:1n9	0.1 ± 0.0 [a]	0.00 ± 0.00 [b]	0.0 ± 0.0 [b]	0.0 ± 0.0 [b]	1369.00	< 0.01
16:1n7	5.5 ± 0.1 [a]	2.7 ± 0.0 [b]	2.8 ± 0.1 [b]	2.6 ± 0.1 [b]	222.39	< 0.01
18:1n9	20.4 ± 0.1 [c]	33.2 ± 0.2 [a]	31.9 ± 0.1 [b]	31.4 ± 0.4 [b]	520.93	< 0.01
18:1n7	2.2 ± 0.0 [b]	2.40 ± 0.02 [a]	2.3 ± 0.0 [a]	2.3 ± 0.0 [a]	11.80	< 0.01
20:1n9	8.6 ± 0.1 [a]	1.5 ± 0.1 [b]	1.6 ± 0.1 [b]	1.6 ± 0.0 [b]	2695.703	< 0.01
20:1n7	0.3 ± 0.0 [a]	0.0 ± 0.0 [b]	0.0 ± 0.0 [b]	0.0 ± 0.0 [b]	99.61	< 0.01
22:1n9	1.0 ± 0.0 [a]	0.2 ± 0.0 [b]	0.2 ± 0.0 [b]	0.2 ± 0.0 [b]	2158.03	< 0.01
24:1n9	0.6 ± 0.0 [a]	0.1 ± 0.0 [b]	0.1 ± 0.0 [b]	0.1 ± 0.0 [b]	62.18	< 0.01
Total MUFA	52.0 ± 0.3 [a]	40.5 ± 0.2 [b]	43.1 ± 3.8 [b]	38.6 ± 0.4 [b]	23.33	< 0.01
Omega-6 polyunsaturated fatty acid fractions						
18:2n6	8.2 ± 0.2 [c]	22.8 ± 0.4 [a]	21.7 ± 0.1 [b]	21.2 ± 0.2 [b]	515.92	< 0.01
18:3n6	0.2 ± 0.0 [c]	0.7 ± 0.1 [a]	0.5 ± 0.0 [b]	0.4 ± 0.0 [b]	34.22	< 0.01
20:2n6	0.5 ± 0.0 [b]	1.5 ± 0.1 [a]	1.5 ± 0.0 [a]	1.5 ± 0.1 [a]	63.43	< 0.01
20:3n6	0.3 ± 0.0 [c]	1.2 ± 0.1 [a]	0.9 ± 0.0 [b]	0.9 ± 0.0 [b]	73.98	< 0.01
20:4n6 ARA	0.6 ± 0.0 [b]	1.3 ± 0.1 [a]	1.2 ± 0.0 [a]	1.2 ± 0.0 [a]	49.16	< 0.01
22:4n6	0.0 ± 0.0 [b]	0.1 ± 0.01 [a]	0.1 ± 0.0 [a]	0.1 ± 0.0 [a]	61.75	< 0.01
22:5n6	0.2 ± 0.0 [c]	0.7 ± 0.1 [b]	1.1 ± 0.0 [a]	1.4 ± 0.1 [a]	53.34	< 0.01
Total n6 PUFA	9.9 ± 0.2 [b]	28.4 ± 0.4 [a]	29.4 ± 2.6 [a]	26.8 ± 0.2 [a]	84.67	< 0.01
Omega-3 polyunsaturated fatty acid fractions						
18:3n3 ALA	0.8 ± 0.0 [b]	3.2 ± 0.1 [a]	3.2 ± 0.0 [a]	3.2 ± 0.1 [a]	259.50	< 0.01
18:4n3	0.7 ± 0.0 [a]	0.6 ± 0.0 [a]	0.4 ± 0.0 [b]	0.4 ± 0.0 [b]	32.56	< 0.01
20:4n3	0.4 ± 0.0 [a]	0.2 ± 0.0 [b]	0.2 ± 0.0 [b]	0.2 ± 0.0 [b]	18.72	< 0.01
20:5n3 EPA	2.2 ± 0.0 [a]	0.8 ± 0.0 [b]	0.8 ± 0.0 [b]	0.8 ± 0.0 [b]	43.76	< 0.01
22:5n3	0.7 ± 0.0 [a]	0.3 ± 0.0 [b]	0.2 ± 0.0 [b]	0.3 ± 0.0 [b]	249.58	< 0.01
22:6n3 DHA	7.9 ± 0.1 [a]	4.8 ± 0.6 [b]	6.4 ± 0.2 [b]	7.2 ± 0.3 [Ab]	39.85	< 0.01
Total n3 PUFA	12.9 ± 0.2 [a]	10.3 ± 0.15 [b]	12.2 ± 1.1[a]	12.2 ± 0.4 [a]	9.49	0.01
Total PUFA	23.6 ± 0.3 [b]	38.8 ± 0.3 [a]	41.6 ± 3.7 [a]	39.0 ± 0.6 [a]	5.25	0.03

Total n6 LCPUFA	1.5 ± 0.1 [b]	4.8 ± 0.2 [a]	5.0 ± 0.4 [a]	5.0 ± 0.1 [a]	31.67	< 0.01
Total n3 LCPUFA	11.5 ± 0.2 [a]	6.5 ± 0.2 [b]	8.3 ± 0.9 [b]	8.7 ± 0.3 [b]	64.28	< 0.01
n3/n6 PUFA ratio	1.3 ± 0.0 [a]	0.4 ± 0.0 [c]	0.4 ± 0.0 [b]	0.5 ± 0.0 [b]	24.22	< 0.01
n3/n6 LCPUFA ratio	7.6 ± 0.2 [a]	1.4 ± 0.0 [c]	1.7 ± 0.0 [b]	1.7 ± 0.0 [b]	1001.97	< 0.01
20:5n3 EPA/20:4n6 ARA	0.3 ± 0.0 [b]	1.6 ± 0.1 [a]	1.4 ± 0.1 [a]	1.5 ± 0.1 [a]	586.17	< 0.01

^aSFA refers to saturated fatty acids (sum of all fatty acids without double bonds); MUFA, monounsaturated fatty acids (sum of all fatty acids with a single bond, where ARA refers to arachidonic acid); PUFA, polyunsaturated fatty acids (sum of all fatty acids with ≥ 2 double bonds); n6 PUFA, omega 6 polyunsaturated fatty acids (18:2, 18:3, 20:2, 20:3, 20:4, 22:4, 22:5, where ALA refers to α -linolenic acid, EPA to eicosapentaenoic acid, DPA to docosapentaenoic acid, and DHA to docosahexaenoic acid); n6 LCPUFA, omega 6 long chain polyunsaturated fatty acids (20:2, 20:3, 20:4, 22:4, 22:5); n3 PUFA, omega 3 polyunsaturated fatty acids (18:3, 18:4, 20:3, 20:4, 20:5, 22:5, 22:6); n3 LCPUFA, omega 3 long chain polyunsaturated fatty acids (20:3, 20:4, 20:5, 22:5, 22:6); and n3:n6 ratio, calculated for total n3 PUFA: total n6 PUFA.

^bNI refers to *Nannochloropsis* sp. + *Isochrysis* sp.; NS, *Nannochloropsis* sp. + *Schizochytrium* sp.; NIS, *Nannochloropsis* sp. + *Isochrysis* sp. + *Schizochytrium* sp.; mean values not sharing a common bracketed letter in the same row differed significantly as determined by Tukey's HSD test, $P < 0.05$; both letters appearing together means no difference.