

Enhanced preservation of vacuum-packaged Atlantic salmon by hyperbaric storage at room temperature versus refrigeration

Liliana G. Fidalgo¹, Mário M. Q. Simões¹, Susana Casal², José A. Lopes-da-Silva¹, Ivonne Delgadillo¹, Jorge A. Saraiva^{1*}

Supplementary Table

Table 1S – Fatty acids (FA) profile (wt.%, g FA/100 g of total lipids) along storage of Atlantic salmon stored at 75 MPa/25 °C, AP/5 °C and AP/25 °C for different storage times. Different letters along each row denote significant differences ($p < 0.05$) and absence of letters indicates not statistically significant differences.

Free fatty acids ⁽¹⁾	75 MPa/25 °C			AP/5 °C		AP/25 °C
	5 days	15 days	30 days	5 days	15 days	5 days
<i>C14:0</i>	1.27 ± 0.13	1.17 ± 0.06	1.05 ± 0.19	1.01 ± 0.10	1.30 ± 0.14	1.14 ± 0.02
<i>C16:0</i>	8.71 ± 0.61	8.24 ± 0.50	7.15 ± 1.41	6.78 ± 0.97	7.37 ± 0.16	7.86 ± 1.29
<i>C18:0</i>	1.57 ± 1.14	2.06 ± 0.12	1.82 ± 0.30	1.84 ± 0.18	1.91 ± 0.20	2.02 ± 0.35
∑ SFA	11.55 ± 1.02	11.47 ± 0.58	10.02 ± 1.90	9.62 ± 1.17	10.57 ± 0.36	10.01 ± 2.08
<i>C16:1n-7</i>	1.59 ± 0.24	1.57 ± 0.13	1.22 ± 0.16	1.34 ± 0.09	1.68 ± 0.12	1.49 ± 0.09
<i>C18:1n-7</i>	3.70 ± 0.31	3.09 ± 0.11	2.99 ± 1.09	3.34 ± 0.76	3.54 ± 0.81	3.76 ± 0.14
<i>C18:1n-9</i>	28.06 ± 3.29	29.80 ± 1.62	28.59 ± 1.06	29.69 ± 3.20	31.47 ± 5.33	28.53 ± 1.97
<i>C20:1n-9</i>	4.79 ± 0.23	4.46 ± 0.15	3.90 ± 0.70	4.36 ± 0.55	4.89 ± 0.74	4.62 ± 0.67
<i>C22:1n-9</i>	0.80 ± 0.13	0.71 ± 0.02	0.71 ± 0.18	0.66 ± 0.11	0.80 ± 0.21	0.76 ± 0.04
∑ MUFA	38.94 ± 4.13	39.63 ± 1.83	37.42 ± 1.09	39.39 ± 4.40	42.38 ± 6.64	37.72 ± 2.76
<i>C20:4n-3</i>	0.76 ± 0.04	0.74 ± 0.07	0.64 ± 0.05	0.66 ± 0.06	0.71 ± 0.08	0.72 ± 0.13
<i>C20:5n-3 (EPA)</i>	2.24 ± 0.29	2.12 ± 0.12	1.86 ± 0.36	1.80 ± 0.27	1.90 ± 0.05	2.01 ± 0.46
<i>C22:5n-3</i>	0.94 ± 0.12	0.93 ± 0.04	0.86 ± 0.16	0.90 ± 0.08	0.95 ± 0.07	0.87 ± 0.11
<i>C22:6n-3 (DHA)</i>	5.39 ± 0.41 ^a	4.93 ± 0.34 ^{ab}	4.24 ± 0.92 ^{abc}	4.21 ± 0.65 ^{abc}	3.52 ± 0.32 ^{bc}	3.23 ± 0.55 ^c
∑ n-3 PUFA	9.33 ± 0.76^a	8.72 ± 0.40^{ab}	7.59 ± 1.48^{ab}	7.57 ± 0.99^{ab}	7.08 ± 0.40^{ab}	6.31 ± 1.26^b
<i>C18:2n-6</i>	9.49 ± 0.50	8.87 ± 0.27	7.78 ± 1.25	8.35 ± 1.10	9.86 ± 1.49	9.11 ± 0.69
<i>C20:2n-6</i>	0.97 ± 0.03	0.92 ± 0.04	0.83 ± 0.15	0.89 ± 0.06	0.99 ± 0.11	0.93 ± 0.05
<i>C22:2n-6</i>	2.31 ± 0.08	2.24 ± 0.18	2.02 ± 0.21	2.14 ± 0.10	2.43 ± 0.42	2.16 ± 0.18
∑ n-6 PUFA	12.77 ± 0.59	12.02 ± 0.48	10.63 ± 1.60	11.37 ± 1.25	13.28 ± 2.00	11.26 ± 1.76
PUFA/SFA	1.93 ± 0.22	1.81 ± 0.10	1.82 ± 0.04	1.97 ± 0.06	1.92 ± 0.14	1.77 ± 0.07
n-6/n-3 ratio	1.38 ± 0.16	1.38 ± 0.10	1.41 ± 0.08	1.51 ± 0.09	1.88 ± 0.30	1.79 ± 0.14

(1) SFA: total saturated fatty acid; MUFA: monounsaturated fatty acid; PUFA: polyunsaturated fatty acid; EPA: Eicosapentaenoic acid; DHA: Docosahexaenoic acid.