

Supplement Table 1. Selected fatty acid composition in red blood cell

Fatty acids (%)	Group		
	C	SD	SDF
SFA	60.3 ± 3.1	64.1 ± 4.7	59.9 ± 3.2
MUFA	9.86 ± 1.21	7.21 ± 0.46*	8.51 ± 0.52
n-6 PUFA	25.3 ± 3.6	27.3 ± 2.9	26.1 ± 1.4
C18:2 (LA)	7.52 ± 1.25	9.64 ± 1.01	10.50 ± 0.89
C20:4 (AA)	16.8 ± 2.8	17.1 ± 1.4	15.6 ± 0.52
n-3 PUFA	4.71 ± 0.81	2.60 ± 0.20*	6.49 ± 0.54 [#]
C18:3 α (ALA)	0.17 ± 0.03	0.16 ± 0.05	0.13 ± 0.05
C20:5 (EPA)	2.22 ± 0.79	0.96 ± 0.21*	2.68 ± 0.55
C22:6 (DHA)	1.98 ± 0.74	1.39 ± 0.16	2.21 ± 0.29 [#]
Ratio			
AA/EPA	83.1 ± 27.1	159.9 ± 59.2	45.7 ± 6.4 [#]
AA/DHA	8.91 ± 2.0	12.6 ± 3.6	6.94 ± 3.66
n-6/n-3	5.43 ± 0.44	10.3 ± 1.8	4.04 ± 0.51 [#]
n-3 Index	4.26 ± 1.21	2.26 ± 0.33	5.02 ± 0.71 [#]

Data are expressed as mean ± SEM (n=8). C, control group; S, sleep deprivation; SDF, sleep deprivation + fish oil; SFA, saturated fatty acid; MUFA, monounsaturated fatty acid; PUFA, polyunsaturated fatty acid; LA, linoleic acid; AA, arachidonic acid; ALA, α -linolenic acid; EPA, eicosapentaenoic acid; DPA, docosapentaenoic acid; DHA, docosapentaenoic acid. Omega-3 index: EPA+DHA. * p <0.05 compared with control group; [#] p <0.05 compared with sleep deprivation group.

Supplement Table 2. Selected fatty acid composition in prefrontal cortex

Fatty acids (%)	Group		
	C	SD	SDF
SFA	46.2 ± 1.6	47.2 ± 2.5	46.2 ± 2.4
MUFA	22.4 ± 2.4	21.1 ± 1.8	23.9 ± 2.5
n-6 PUFA	13.4 ± 1.1	13.7 ± 1.6	12.9 ± 1.3
C18:2 (LA)	1.21 ± 0.27	1.49 ± 0.34	1.35 ± 0.22
C20:4 (AA)	12.9 ± 1.5	13.4 ± 1.2	11.7 ± 1.5
n-3 PUFA	18.3 ± 1.4	17.4 ± 2.3	18.7 ± 0.5
C18:3 α (ALA)	0.44 ± 0.08	0.54 ± 0.03	0.41 ± 0.05 [#]
C20:5 (EPA)	1.59 ± 1.24	0.56 ± 0.13 [*]	1.28 ± 0.15 [#]
C22:6 (DHA)	16.4 ± 0.2	15.7 ± 0.3 [*]	17.2 ± 0.4 [#]
Ratio			
AA/EPA	8.23 ± 0.72	23.9 ± 1.3 [*]	9.22 ± 1.7 [#]
AA/DHA	0.79 ± 0.13	0.84 ± 0.18	0.68 ± 0.19
n-6/n-3	0.74 ± 0.21	0.78 ± 0.14	0.75 ± 0.13
n-3 Index	18.0 ± 1.7	16.4 ± 0.9	18.5 ± 1.3

Data are expressed as mean ± SEM (n=8). C, control group; S, sleep deprivation; SDF, sleep deprivation + fish oil; SFA, saturated fatty acid; MUFA, monounsaturated fatty acid; PUFA, polyunsaturated fatty acid; LA, linoleic acid; AA, arachidonic acid; ALA, α -linolenic acid; EPA, eicosapentaenoic acid; DHA, docosapentaenoic acid; DPA, docosapentaenoic acid. Omega-3 index: EPA+DHA. ^{*} p <0.05 compared with normal group; [#] p <0.05 compared with regular group.