



Table S1: Plasma levels of selected fatty acids in the n-3 and n-6 pathways expressed as mol% and selected fatty acid ratios.

Fatty Acid	Day	Hour	Group	100% Soybean Oil	Mixed Oil	100% Fish Oil
18:3n-3 ALA	0			0.0 (0.0-0.0) ^e	0.0 (0.0-0.0) ^e	0.0 (0.0-0.0) ^e
	11	0		2.1 (1.8-2.8) ^b	1.1 (0.8-1.3) ^{cd}	0.6 (0.5-0.6) ^d
	11	8	Saline	1.1 (1.0-1.5) ^{cd}	0.7 (0.6-0.8) ^d	0.5 (0.4-0.5) ^d
	11	8	LPS	4.6 (3.1-5.2) ^a	1.0 (0.7-1.8) ^c	0.7 (0.6-0.8) ^d
20:5n-3 EPA	0			0.1 (0.1-0.1) ^s	0.1 (0.1-0.1) ^d	0.1 (0.1-0.1) ^d
	11	0		0.2 (0.2-0.2) ^d	3.6 (3.1-4.1) ^c	9.74 (9.2-11.1) ^b
	11	8	Saline	0.3 (0.2-0.4) ^d	3.9 (3.1-5.5) ^c	9.4 (7.7-10.0) ^{bc}
	11	8	LPS	0.2 (0.1-0.2) ^d	4.7 (4.4-4.9) ^c	12.5 (11.8-15.4) ^a
22:6n-3 DHA	0			2.9 (2.6-3.4) ^c	2.7 (2.5-3.0) ^c	2.5 (2.2-2.9) ^c
	11	0		2.0 (1.5-2.2) ^c	5.6 (4.9-5.9) ^b	13.6 (12.2-15.1) ^a
	11	8	Saline	2.7 (2.3-3.3) ^c	6.6 (6.2-7.2) ^b	13.7 (12.0-14.6) ^{ab}
	11	8	LPS	1.4 (1.1-1.9) ^d	4.9 (4.2-5.9) ^b	14.2 (13.5-16.2) ^a
18:2n-6 LA	0			3.3 (2.8-3.8) ^f	3.7 (3.3-5.5) ^e	3.8 (3.6-4.3) ^e
	11	0		29.2 (27.0-1.8) ^b	19.2 (18.9-19.7) ^c	9.1 (8.3-9.6) ^d
	11	8	Saline	27.0 (23.9-28.9) ^b	18.6 (18.0-19.9) ^c	9.3 (9.1-9.9) ^d
	11	8	LPS	38.0 (34.3-40.3) ^a	19.6 (19.2-20.8) ^c	8.9 (7.5-9.0) ^d
20:3n-6 DGLA	0			0.4 (0.4-0.5) ^a	0.4 (0.4-0.5) ^a	0.5 (0.5-0.6) ^a
	11	0		0.6 (0.5-0.8) ^a	0.5 (0.4-0.7) ^a	0.2 (0.2-0.2) ^b
	11	8	Saline	0.7 (0.6-0.8) ^a	0.6 (0.5-0.8) ^a	0.3 (0.2-0.3) ^b
	11	8	LPS	0.3 (0.2-0.6) ^a	0.5 (0.4-0.6) ^a	0.2 (0.2-0.2) ^b
20:4n-6 AA	0			13.3 (12.7-13.6) ^a	13.0 (12.4-13.1) ^a	13.1 (12.0-13.5) ^a
	11	0		7.4 (5.8-7.9) ^b	4.8 (4.4-5.3) ^c	5.3 (5.0-5.5) ^c
	11	8	Saline	9.1 (8.1-11.1) ^b	6.4 (6.0-6.5) ^c	5.7 (5.6-5.9) ^c
	11	8	LPS	4.3 (2.8-6.1) ^c	4.2 (3.6-6.1) ^c	4.6 (4.4-5.2) ^c
AA: DHA ratio	0			4.3 (4.0-5.0) ^{ab}	4.8 (4.6-5.1) ^{ab}	5.1 (4.6-6.0) ^a
	11	0		3.4 (3.1-4.0) ^b	0.9 (0.9-1.0) ^c	0.4 (0.3-0.4) ^c
	11	8	Saline	3.3 (2.6-3.8) ^b	0.9 (0.8-1.0) ^c	0.4 (0.4-0.5) ^c
	11	8	LPS	3.3 (2.7-3.6) ^b	0.8 (0.8-0.9) ^c	0.3 (0.3-0.4) ^d
n-6:n-3 ratio	0			5.4 (5.1-5.9) ^b	6.4 (5.8-6.8) ^{ab}	6.4 (5.8-7.8) ^a
	11	0		7.4 (7.1-8.1) ^a	2.0 (2.0-2.1) ^c	0.6 (0.5-0.6) ^d
	11	8	Saline	7.0 (6.6-7.5) ^a	2.0 (1.7-2.1) ^c	0.6 (0.6-0.7) ^d
	11	8	LPS	6.4 (6.1-7.1) ^{ab}	1.9 (1.8-2.1) ^c	0.5 (0.4-0.5) ^d
LA:DHA ratio	0			1.1 (1.0-1.3) ^d	1.6 (1.4-1.9) ^d	1.7 (1.2-2.0) ^d

	11	0		14.6 (12.6-21.2) ^{ab}	3.6 (3.1-3.9) ^c	0.7 (0.5-0.7) ^d
	11	8	Saline	10.4 (7.1-11.6) ^b	2.8 (2.6-3.0) ^c	0.7 (0.6-0.8) ^d
	11	8	LPS	25.2 (18.9-37.5) ^a	4.0 (3.3-5.0) ^c	0.6 (0.5-0.7) ^d
	0			6.0 (3.0-6.5) ^a	5.5 (4.6-7.2) ^a	5.3 (3.1-6.0) ^a
DGLA:EPA	11	0		3.3 (1.9-4.6) ^a	0.2 (0.1-0.2) ^b	0.02 (0.01-0.03) ^b
ratio	11	8	Saline	2.1 (1.4-3.3) ^a	0.2 (0.1-0.2) ^b	0.03 (0.03-0.03) ^b
	11	8	LPS	2.6 (1.9-3.9) ^a	0.1 (0.1-0.1) ^b	0.02 (0.01-0.02) ^b

Data show median (Q1-Q3). Day 0 means day of birth. Medians without a common letter within each fatty acid group are statistically different $p < 0.05$. AA, arachidonic acid; ALA, α -linolenic acid; DGLA, dihomo- γ linolenic acid; DHA, docosahexaenoic acid; EPA, eicosapentaenoic acid; FO100, 100 percent fish oil; LA, linoleic acid; LPS, lipopolysaccharide; MO15, mixed oil with 15% fish oil; n-3, omega-3; n-6, omega-6; SO, 100% soybean oil.