

1 **Table S1: Lung fatty acid content as determined by GLC.**

Common Name	Chemical Formula	VEH / CON	cSiO <sub>2</sub> / CON	cSiO <sub>2</sub> / ↑DHA	cSiO <sub>2</sub> / ↓SF.ω6	cSiO <sub>2</sub> / ↓SF.ω6↑DHA	
		(% of total fatty acids)					
Lauric	<b>C12:0</b>	0.07 ± 0.02 <sup>A</sup>	0.03 ± 0.01 <sup>B</sup>	0.04 ± 0.01 <sup>AB</sup>	0.02 ± 0.01 <sup>B</sup>	0.03 ± 0.00 <sup>AB</sup>	2
Myristic	<b>C14:0</b>	1.25 ± 0.17 <sup>A</sup>	2.38 ± 0.40 <sup>BC</sup>	2.74 ± 0.36 <sup>B</sup>	2.21 ± 0.45 <sup>C</sup>	2.10 ± 0.22 <sup>C</sup>	3
Palmitic	<b>C16:0</b>	31.76 ± 1.70 <sup>A</sup>	50.09 ± 5.32 <sup>BC</sup>	52.03 ± 3.45 <sup>BC</sup>	54.07 ± 3.86 <sup>B</sup>	48.55 ± 3.01 <sup>C</sup>	4
Palmitolaidic	<b>C16:1ω7t</b>	0.10 ± 0.02 <sup>A</sup>	0.10 ± 0.01 <sup>A</sup>	0.10 ± 0.01 <sup>A</sup>	0.05 ± 0.01 <sup>B</sup>	0.04 ± 0.01 <sup>B</sup>	5
Palmitoleic	<b>C16:1ω7c</b>	3.21 ± 0.63 <sup>A</sup>	4.02 ± 0.24 <sup>B</sup>	3.94 ± 0.32 <sup>B</sup>	3.07 ± 0.31 <sup>A</sup>	2.94 ± 0.38 <sup>A</sup>	6
Stearic	<b>C18:0</b>	10.25 ± 1.26 <sup>A</sup>	5.21 ± 1.02 <sup>B</sup>	4.82 ± 0.87 <sup>BC</sup>	3.85 ± 0.75 <sup>C</sup>	4.39 ± 0.65 <sup>BC</sup>	7
Elaidic	<b>C18:1ω9t</b>	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	8
Oleic	<b>C18:1ω9c</b>	21.01 ± 2.91 <sup>A</sup>	13.81 ± 3.37 <sup>B</sup>	10.43 ± 1.40 <sup>C</sup>	15.88 ± 2.10 <sup>BD</sup>	17.10 ± 1.80 <sup>D</sup>	9
Linoleic	<b>C18:2ω6</b>	7.78 ± 0.75 <sup>A</sup>	5.51 ± 1.04 <sup>B</sup>	5.87 ± 0.66 <sup>B</sup>	2.46 ± 0.30 <sup>C</sup>	3.14 ± 0.40 <sup>C</sup>	10
Arachidic	<b>C20:0</b>	0.09 ± 0.04 <sup>A</sup>	0.03 ± 0.01 <sup>B</sup>	0.04 ± 0.02 <sup>AB</sup>	0.03 ± 0.01 <sup>B</sup>	0.04 ± 0.01 <sup>AB</sup>	11
Gamma-linolenic	<b>C18:3ω6</b>	0.18 ± 0.10 <sup>AB</sup>	0.10 ± 0.02 <sup>A</sup>	0.07 ± 0.01 <sup>B</sup>	0.06 ± 0.02 <sup>BC</sup>	0.04 ± 0.01 <sup>C</sup>	12
Linolenic	<b>C18:3ω3</b>	0.44 ± 0.07 <sup>A</sup>	0.17 ± 0.06 <sup>BC</sup>	0.09 ± 0.03 <sup>B</sup>	0.24 ± 0.08 <sup>C</sup>	0.23 ± 0.08 <sup>C</sup>	13
Eicosanoic	<b>C20:1ω9</b>	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	14
Conjugated Linoleic	<b>CLA 9c,11t</b>	0.01 ± 0.03 <sup>A</sup>	0.01 ± 0.02 <sup>A</sup>	0.00 ± 0.00 <sup>A</sup>	0.00 ± 0.01 <sup>A</sup>	0.00 ± 0.01 <sup>A</sup>	15
Eicosadienoic	<b>C20:2ω6</b>	0.28 ± 0.03 <sup>A</sup>	0.16 ± 0.04 <sup>B</sup>	0.13 ± 0.03 <sup>B</sup>	0.07 ± 0.01 <sup>C</sup>	0.08 ± 0.02 <sup>C</sup>	16
Eicosatrienoic	<b>C20:3ω9</b>	0.11 ± 0.03 <sup>A</sup>	0.06 ± 0.02 <sup>BC</sup>	0.03 ± 0.02 <sup>B</sup>	0.10 ± 0.02 <sup>A</sup>	0.07 ± 0.02 <sup>C</sup>	17
Behenic	<b>C22:0</b>	0.05 ± 0.01 <sup>A</sup>	0.04 ± 0.02 <sup>AB</sup>	0.04 ± 0.02 <sup>AB</sup>	0.03 ± 0.01 <sup>B</sup>	0.04 ± 0.01 <sup>AB</sup>	18
Dihomo-g-linolenic	<b>C20:3ω6</b>	0.87 ± 0.13 <sup>A</sup>	0.38 ± 0.08 <sup>BC</sup>	0.44 ± 0.09 <sup>B</sup>	0.28 ± 0.05 <sup>C</sup>	0.37 ± 0.07 <sup>BC</sup>	19
Arachidonic	<b>C20:4ω6</b>	7.70 ± 1.18 <sup>A</sup>	5.83 ± 0.30 <sup>B</sup>	1.63 ± 0.20 <sup>CD</sup>	5.47 ± 0.32 <sup>B</sup>	1.02 ± 0.12 <sup>D</sup>	20
Eicosapentaenoic	<b>C20:5ω3</b>	0.08 ± 0.03 <sup>A</sup>	0.09 ± 0.02 <sup>A</sup>	0.76 ± 0.09 <sup>BC</sup>	0.08 ± 0.02 <sup>A</sup>	0.85 ± 0.08 <sup>C</sup>	21
Lignoceric	<b>C24:0</b>	0.09 ± 0.01 <sup>A</sup>	0.07 ± 0.01 <sup>AB</sup>	0.07 ± 0.01 <sup>AB</sup>	0.05 ± 0.01 <sup>BC</sup>	0.04 ± 0.00 <sup>C</sup>	22
Adrenic	<b>C22:4ω6</b>	2.53 ± 0.39 <sup>A</sup>	1.36 ± 0.31 <sup>B</sup>	0.13 ± 0.04 <sup>C</sup>	1.00 ± 0.19 <sup>B</sup>	0.08 ± 0.02 <sup>D</sup>	23
Docosapentaenoic ω6	<b>C22:5ω6</b>	0.61 ± 0.28 <sup>A</sup>	0.70 ± 0.24 <sup>A</sup>	0.91 ± 0.33 <sup>AB</sup>	0.65 ± 0.22 <sup>A</sup>	1.30 ± 0.36 <sup>B</sup>	24
Docosapentaenoic ω3	<b>C22:5ω3</b>	0.89 ± 0.10 <sup>A</sup>	0.50 ± 0.08 <sup>B</sup>	0.70 ± 0.12 <sup>C</sup>	0.26 ± 0.03 <sup>D</sup>	0.68 ± 0.10 <sup>C</sup>	25
Docosahexaenoic	<b>C22:6ω3</b>	3.04 ± 0.47 <sup>A</sup>	2.40 ± 0.09 <sup>B</sup>	8.88 ± 0.77 <sup>C</sup>	2.12 ± 0.12 <sup>D</sup>	8.87 ± 0.53 <sup>C</sup>	26
Total SF		44.45 ± 3.07 <sup>A</sup>	58.39 ± 4.96 <sup>B</sup>	60.32 ± 2.94 <sup>B</sup>	60.61 ± 3.58 <sup>B</sup>	55.50 ± 2.61 <sup>B</sup>	27
Total MUFA		28.89 ± 3.46 <sup>A</sup>	22.51 ± 3.62 <sup>B</sup>	18.67 ± 1.32 <sup>C</sup>	25.75 ± 2.67 <sup>AB</sup>	26.90 ± 1.75 <sup>A</sup>	28
Total ω-3 PUFA		4.45 ± 0.61 <sup>A</sup>	3.12 ± 0.11 <sup>B</sup>	10.44 ± 0.84 <sup>C</sup>	2.69 ± 0.19 <sup>D</sup>	10.64 ± 0.63 <sup>C</sup>	29
Total ω-6 PUFA		19.93 ± 1.61 <sup>A</sup>	14.31 ± 1.73 <sup>B</sup>	9.17 ± 1.06 <sup>C</sup>	9.98 ± 0.92 <sup>C</sup>	6.02 ± 0.67 <sup>D</sup>	30
EPA+DHA		3.12 ± 0.47 <sup>A</sup>	2.49 ± 0.09 <sup>B</sup>	9.65 ± 0.75 <sup>C</sup>	2.20 ± 0.12 <sup>D</sup>	9.72 ± 0.49 <sup>C</sup>	31

34 Data presented as mean ± SD. Difference between diets compared by ordinary one-way ANOVA followed by Tukey's multiple comparison. Nonparametric versions  
 35 of these tests were used when applicable. Unique letters indicate significant differences between groups (p<0.05).  
 36