

Supplemental Table 1. Percent body composition of 8- and 28-day-old dam-reared reference groups

(% of total body weight \pm SD; n = 4 and 4)

Tissues	8-day dam-reared	28-day dam-reared	
Total body weight, g	15 \pm 1	91 \pm 4	††
<i>Tissues as % of total body weight:</i>			
Hair	—	0.6 \pm 0.1	††
Skin	18.3 \pm 1.7	14.4 \pm 1.3	†
Skeletal muscle	14.3 \pm 1.8	27.0 \pm 0.9	††
Bones	14.6 \pm 0.8	13.1 \pm 1.4	
Brown adipose	2.2 \pm 0.2	1.0 \pm 0.2	††
White adipose	5.9 \pm 1.8	7.0 \pm 0.6	
Visceral adipose	0.4 \pm 0.1	0.9 \pm 0.1	††
Internal organs**	21.6 \pm 1.4	21.9 \pm 1.4	
Blood and other fluids	22.7 \pm 2.6	14.2 \pm 1.2	††

†, indicates statistically different values between 8- and 28-day-old dam reared reference groups of p = 0.010 - 0.050; whereas ††, indicates a statistical difference of p < 0.010.

** Internal organs includes brain, digestive tract, heart, kidneys, liver, lungs, retina, spleen, and testes, which were combined for weighing.

Supplemental Table 2. Whole organ/tissue weights for the two experimental diet and 8-day-old dam-reared reference groups(g/whole organ or tissue \pm SD; n = 7, 7, and 6)

Organ / Tissue	8-day dam-reared	28-day-old	
		d5-LNA diet	d5-LNA + DHA diet
Total body weight	14 \pm 3	85 \pm 10	88 \pm 6
Plasma¶	0.74 \pm 0.08	2.6 \pm 0.3	2.7 \pm 0.2
Red blood cells¶	0.90 \pm 0.10	3.2 \pm 0.3	3.3 \pm 0.2
Brain	0.73 \pm 0.06	1.5 \pm 0.1	1.5 \pm 0.02
Retina	0.015 \pm 0.003	0.022 \pm 0.002	0.019 \pm 0.002 †
Heart	0.12 \pm 0.02	0.41 \pm 0.05	0.40 \pm 0.02
Lung	0.27 \pm 0.04	0.60 \pm 0.1	0.70 \pm 0.1
Spleen	0.06 \pm 0.02	0.32 \pm 0.07	0.32 \pm 0.05
Digestive tract**	0.82 \pm 0.19	8.2 \pm 1.80	7.8 \pm 0.77
Liver	0.39 \pm 0.11	4.0 \pm 0.6	3.9 \pm 0.3
Kidney	0.17 \pm 0.03	0.87 \pm 0.08	0.93 \pm 0.15
Testes	0.022 \pm 0.004	0.53 \pm 0.14	0.48 \pm 0.07
Skin#	2.6 \pm 0.6	12 \pm 1	13 \pm 1
Brown adipose#	0.32 \pm 0.07	0.89 \pm 0.10	0.91 \pm 0.06
White adipose#	0.85 \pm 0.178	6.0 \pm 0.7	6.2 \pm 0.4
Visceral adipose#	0.053 \pm 0.011	0.74 \pm 0.09	0.77 \pm 0.05
Skeletal muscle#	2.1 \pm 0.4	23 \pm 3	24 \pm 2
Bones#	2.1 \pm 0.4	11 \pm 1	11 \pm 1
Total, collected tissues	12 \pm 2	76 \pm 9	78 \pm 5
Carcass§	6.3 \pm 0.9	43 \pm 4	42 \pm 3

†, indicates statistically different values between d5-LNA and d5-LNA + DHA diet groups of p = 0.010 - 0.050.

¶ Total body volume for plasma and RBC were estimated using the equations of Lee and Blaufox, 1995.

** Digestive tract includes the stomach, small and large intestines, and pancreas.

Skin, adipose, skeletal muscle, and bone were derived by multiplying their percent body compositions (supplemental table 1) by the total body weights.

§ Carcass consists of remaining bones, skeletal muscle, brown adipose, and white adipose from each animal.

DeMar et al.; DHA net biosynthesis in rat pup organs, Suppl. Table 3, Retina.

Supplemental Table 3. Retina fatty acid composition of the two experimental diet and 8-day-old dam-reared reference groups

(μg /both whole retinas \pm SD; $n = 7, 7, \text{ and } 6$)

Fatty Acid	8-day dam-reared	28-day-old		
		d5-LNA diet	d5-LNA + DHA diet	
10:0	ND	ND	ND	
12:0	0.15 \pm 0.09	0.02 \pm 0.01	0.01 \pm 0.01	
14:0	3.1 \pm 0.9	0.88 \pm 0.11	0.61 \pm 0.05	††
16:0	31 \pm 5	48 \pm 4	38 \pm 3	††
18:0	26 \pm 4	69 \pm 6	57 \pm 3	††
20:0	0.40 \pm 0.13	0.72 \pm 0.22	0.55 \pm 0.03	
22:0	0.28 \pm 0.09	0.35 \pm 0.16	0.27 \pm 0.02	
24:0	0.38 \pm 0.07	0.17 \pm 0.12	0.19 \pm 0.03	
Total saturates	61 \pm 10	119 \pm 10	97 \pm 6	††
16:1n-7	3.1 \pm 0.4	0.83 \pm 0.15	0.60 \pm 0.09	††
18:1n-7	5.7 \pm 0.7	4.4 \pm 0.4	3.3 \pm 0.3	††
18:1n-9	18 \pm 3	25 \pm 2	20 \pm 1	††
20:1n-9	0.37 \pm 0.08	0.71 \pm 0.07	0.55 \pm 0.05	††
22:1n-9	0.10 \pm 0.02	0.10 \pm 0.03	0.09 \pm 0.02	
24:1n-9	0.42 \pm 0.14	0.53 \pm 0.24	0.40 \pm 0.09	
Total monounsaturates	27 \pm 4	32 \pm 3	25 \pm 2	††
18:2n-6	2.1 \pm 0.3	2.8 \pm 0.5	2.4 \pm 0.2	
18:3n-6	0.39 \pm 0.09	0.14 \pm 0.01	0.09 \pm 0.02	††
20:2n-6	0.35 \pm 0.12	0.60 \pm 0.06	0.53 \pm 0.07	
20:3n-6	0.89 \pm 0.14	0.60 \pm 0.04	0.72 \pm 0.04	††
20:4n-6	22 \pm 4	35 \pm 3	24 \pm 2	††
22:2n-6	0.29 \pm 0.14	0.09 \pm 0.01	0.10 \pm 0.02	††
22:4n-6	3.1 \pm 0.6	6.9 \pm 0.5	4.0 \pm 0.4	††
22:5n-6	3.0 \pm 0.5	12 \pm 2	1.0 \pm 0.1	††
Total n-6 PUFA	32 \pm 5	58 \pm 6	33 \pm 2	††
d5-18:3n-3	—	0.07 \pm 0.01	0.05 \pm 0.01	††
18:3n-3	0.04 \pm 0.01	0.09 \pm 0.02	0.08 \pm 0.01	
d5-20:5n-3	—	0.08 \pm 0.02	0.08 \pm 0.01	
20:5n-3	0.35 \pm 0.10	0.05 \pm 0.01	0.41 \pm 0.02	††
d5-22:5n-3	—	0.65 \pm 0.04	0.21 \pm 0.06	††
22:5n-3	1.3 \pm 0.2	0.52 \pm 0.07	1.2 \pm 0.1	††
d5-22:6n-3	—	48 \pm 9	9.5 \pm 1.0	††
22:6n-3	22 \pm 4	53 \pm 5	91 \pm 3	††
Total n-3 PUFA	23 \pm 4	102 \pm 9	102 \pm 3	††
Total fatty acids	143 \pm 23	311 \pm 27	258 \pm 13	††

ND, not detected i.e. $< 0.0001 \mu\text{g}$ /whole retinas.

††, indicates statistically different values between d5-LNA and d5-LNA + DHA diet groups of $p < 0.010$.

DeMar et al.; DHA net biosynthesis in rat pup organs, Suppl. Table 4, Spleen.

Supplemental Table 4. Spleen fatty acid composition of the two experimental diet and 8-day-old dam-reared reference groups

($\mu\text{g}/\text{whole spleen} \pm \text{SD}$; $n = 7, 7, \text{ and } 6$)

Fatty Acid	8-day dam-reared	28-day-old		
		d5-LNA diet	d5-LNA + DHA diet	
10:0	0.01 \pm 0.02	0.08 \pm 0.03	0.04 \pm 0.03	††
12:0	1.1 \pm 0.8	1.8 \pm 1.9	4.0 \pm 3.8	
14:0	16 \pm 8	23 \pm 8	27 \pm 9	
16:0	138 \pm 47	427 \pm 106	408 \pm 52	
18:0	92 \pm 29	437 \pm 82	405 \pm 64	
20:0	1.6 \pm 0.5	7.7 \pm 1.4	7.0 \pm 1.0	
22:0	2.8 \pm 0.9	11 \pm 1.9	10 \pm 1.6	
24:0	5.2 \pm 1.6	20 \pm 5	21 \pm 3	
Total saturates	257 \pm 86	927 \pm 199	882 \pm 129	
16:1n-7	2.4 \pm 0.8	4.8 \pm 2.3	5.3 \pm 1.6	
18:1n-7	18 \pm 5	27 \pm 12	21 \pm 3	
18:1n-9	36 \pm 11	526 \pm 155	546 \pm 180	
20:1n-9	1.4 \pm 0.4	33 \pm 6	31 \pm 5	
22:1n-9	0.55 \pm 0.15	0.49 \pm 0.64	8 \pm 2	††
24:1n-9	5.6 \pm 1.4	92 \pm 15	95 \pm 20	
Total monounsaturates	64 \pm 19	682 \pm 179	705 \pm 206	
18:2n-6	37 \pm 13	141 \pm 32	181 \pm 41	
18:3n-6	0.36 \pm 0.11	1.2 \pm 0.41	1.0 \pm 0.2	
20:2n-6	3.5 \pm 1.1	25 \pm 5	26 \pm 4	
20:3n-6	7.4 \pm 2.5	22 \pm 4	31 \pm 5	††
20:4n-6	133 \pm 46	579 \pm 124	447 \pm 60	††
22:2n-6	0.33 \pm 0.10	3.7 \pm 2.4	2.8 \pm 0.8	††
22:4n-6	14 \pm 4	74 \pm 17	33 \pm 6	††
22:5n-6	4.1 \pm 1.2	85 \pm 18	8 \pm 2	††
Total n-6 PUFA	201 \pm 68	931 \pm 195	731 \pm 113	†
d5-18:3n-3	—	2.2 \pm 1.5	3.1 \pm 2.0	
18:3n-3	0.35 \pm 0.11	0.86 \pm 0.30	0.41 \pm 0.36	†
d5-20:5n-3	—	1.9 \pm 0.5	2.9 \pm 0.5	††
20:5n-3	2.0 \pm 0.9	0.25 \pm 0.10	6.1 \pm 1.1	††
d5-22:5n-3	—	17 \pm 6	9.5 \pm 1.5	†
22:5n-3	15 \pm 6	2.6 \pm 1.0	16 \pm 3	††
d5-22:6n-3	—	51 \pm 12	19 \pm 4	††
22:6n-3	20 \pm 7	9.9 \pm 3.1	205 \pm 48	††
Total n-3 PUFA	37 \pm 13	90 \pm 26	262 \pm 58	††
Total fatty acids	559 \pm 185	2626 \pm 577	2579 \pm 486	

†, indicates statistically different values between d5-LNA and d5-LNA + DHA diet groups of $p = 0.010 - 0.050$; whereas

††, indicates a statistical difference of $p < 0.010$.

DeMar et al.; DHA net biosynthesis in rat pup organs, Suppl. Table 5, Digestive tract.

Supplemental Table 5. Digestive tract** fatty acid composition of the two experimental diet and 8-day-old dam-reared reference groups

(mg/whole digestive tract \pm SD; n = 7, 7, and 6)

Fatty Acid	8-day dam-reared	28-day-old	
		d5-LNA diet	d5-LNA + DHA diet
10:0	0.05 \pm 0.04	1.6 \pm 0.5	2.4 \pm 0.3
12:0	0.40 \pm 0.34	12 \pm 4	15 \pm 2
14:0	0.55 \pm 0.40	8.7 \pm 2.9	10 \pm 1
16:0	2.4 \pm 1.1	25 \pm 8	29 \pm 3
18:0	2.3 \pm 0.7	19 \pm 3	19 \pm 0.7
20:0	0.07 \pm 0.02	0.56 \pm 0.09	0.54 \pm 0.03
22:0	0.09 \pm 0.02	0.48 \pm 0.07	0.47 \pm 0.03
24:0	0.13 \pm 0.03	0.44 \pm 0.09	0.45 \pm 0.04
Total saturates	5.9 \pm 2.6	68 \pm 18	77 \pm 6
16:1n-7	0.11 \pm 0.10	1.4 \pm 0.8	1.8 \pm 0.3
18:1n-7	0.24 \pm 0.10	3.4 \pm 1.5	1.8 \pm 0.2 †
18:1n-9	1.1 \pm 0.6	150 \pm 55	137 \pm 17
20:1n-9	0.03 \pm 0.01	1.3 \pm 0.3	1.3 \pm 0.2
22:1n-9	0.01 \pm 0.003	0.25 \pm 0.03	0.23 \pm 0.01
24:1n-9	0.08 \pm 0.02	0.77 \pm 0.10	0.78 \pm 0.10
Total monounsaturates	1.6 \pm 0.8	157 \pm 57	143 \pm 18
18:2n-6	1.3 \pm 0.7	32 \pm 9	35 \pm 4
18:3n-6	0.01 \pm 0.01	0.16 \pm 0.04	0.17 \pm 0.04
20:2n-6	0.06 \pm 0.02	0.65 \pm 0.12	0.67 \pm 0.06
20:3n-6	0.21 \pm 0.08	1.1 \pm 0.2	1.4 \pm 0.1 †
20:4n-6	2.4 \pm 0.6	14 \pm 2	11 \pm 1 ††
22:2n-6	0.01 \pm 0.005	0.30 \pm 0.14	0.09 \pm 0.01 ††
22:4n-6	0.19 \pm 0.05	1.3 \pm 0.2	0.62 \pm 0.05 ††
22:5n-6	0.06 \pm 0.02	2.1 \pm 0.4	0.22 \pm 0.03 ††
Total n-6 PUFA	4.3 \pm 1.3	52 \pm 12	50 \pm 4
d5-18:3n-3	---	1.7 \pm 0.5	2.0 \pm 0.3
18:3n-3	0.04 \pm 0.03	0.07 \pm 0.03	0.10 \pm 0.02
d5-20:5n-3	---	0.10 \pm 0.01	0.16 \pm 0.01
20:5n-3	0.06 \pm 0.03	0.02 \pm 0.01	0.52 \pm 0.04 ††
d5-22:5n-3	---	0.27 \pm 0.05	0.13 \pm 0.02 ††
22:5n-3	0.15 \pm 0.05	0.05 \pm 0.02	0.55 \pm 0.10 ††
d5-22:6n-3	---	1.9 \pm 0.2	0.61 \pm 0.04 ††
22:6n-3	0.60 \pm 0.13	0.34 \pm 0.06	7.6 \pm 0.8 ††
Total n-3 PUFA	0.85 \pm 0.24	4.4 \pm 0.8	12 \pm 1 ††
Total fatty acids	13 \pm 5	280 \pm 87	281 \pm 28

†, indicates statistically different values between d5-LNA and d5-LNA + DHA diet groups of p = 0.010 - 0.050; whereas ††, indicates a statistical difference of p < 0.010.

** Digestive tract includes the esophagus, stomach, small and large intestines, and pancreas.

DeMar et al.; DHA net biosynthesis in rat pup organs, Suppl. Table 6, Carcass.

Supplemental Table 6. Carcass** fatty acid composition of the two experimental diet and 8-day-old dam-reared reference groups

(mg/total carcass \pm SD; n = 7, 7, and 6)

Fatty Acid	8-day dam-reared	28-day-old	
		d5-LNA diet	d5-LNA + DHA diet
10:0	2.0 \pm 1.4	23 \pm 8	21 \pm 4
12:0	13 \pm 7	129 \pm 38	128 \pm 25
14:0	11 \pm 6	87 \pm 24	90 \pm 16
16:0	28 \pm 10	206 \pm 46	227 \pm 35
18:0	14 \pm 3	105 \pm 16	104 \pm 10
20:0	0.26 \pm 0.05	2.1 \pm 0.2	1.6 \pm 0.2 ††
22:0	0.30 \pm 0.05	2.0 \pm 0.1	1.8 \pm 0.2
24:0	0.58 \pm 0.11	16 \pm 2	6.2 \pm 1.3 ††
Total saturates	69 \pm 28	570 \pm 131	579 \pm 89
16:1n-7	3.1 \pm 1.6	16 \pm 4	20 \pm 5
18:1n-7	3.4 \pm 0.9	12 \pm 2	11 \pm 1
18:1n-9	21 \pm 6	1153 \pm 289	1120 \pm 203
20:1n-9	0.46 \pm 0.11	9.4 \pm 1.4	7.4 \pm 1.3 †
22:1n-9	0.09 \pm 0.01	1.0 \pm 0.1	0.75 \pm 0.17 ††
24:1n-9	0.38 \pm 0.070	4.8 \pm 0.4	4.5 \pm 0.6
Total monounsaturates	98 \pm 37	1196 \pm 295	1163 \pm 208
18:2n-6	12 \pm 4	247 \pm 54	251 \pm 40
18:3n-6	0.23 \pm 0.06	1.3 \pm 0.3	0.97 \pm 0.18 †
20:2n-6	0.80 \pm 0.18	4.6 \pm 0.6	3.7 \pm 0.7 †
20:3n-6	1.4 \pm 0.3	6.5 \pm 0.9	7.0 \pm 0.9
20:4n-6	12 \pm 2	63 \pm 7	46 \pm 3 ††
22:2n-6	0.09 \pm 0.02	0.70 \pm 0.39	0.65 \pm 0.14 ††
22:4n-6	2.2 \pm 0.3	9.2 \pm 1.0	4.7 \pm 0.3 ††
22:5n-6	0.66 \pm 0.13	17 \pm 2	3.2 \pm 0.6 ††
Total n-6 PUFA	29 \pm 6	350 \pm 64	317 \pm 43
d5-18:3n-3	—	16 \pm 4	16 \pm 3
18:3n-3	0.74 \pm 0.35	0.92 \pm 0.35	1.0 \pm 0.2
d5-20:5n-3	—	0.49 \pm 0.06	0.63 \pm 0.09 †
20:5n-3	0.30 \pm 0.05	0.16 \pm 0.05	1.3 \pm 0.2 ††
d5-22:5n-3	—	2.5 \pm 0.4	1.1 \pm 0.2 ††
22:5n-3	1.7 \pm 0.3	1.2 \pm 0.3	3.1 \pm 0.5 ††
d5-22:6n-3	—	13 \pm 2	3.8 \pm 1.4 ††
22:6n-3	3.4 \pm 0.5	5.9 \pm 0.9	74 \pm 8 ††
Total n-3 PUFA	6.2 \pm 1.1	40 \pm 6	101 \pm 12 ††
Total fatty acids	202 \pm 72	2155 \pm 493	2161 \pm 344

†, indicates statistically different values between d5-LNA and d5-LNA + DHA diet groups of p = 0.010 - 0.050; whereas ††, indicates a statistical difference of p < 0.010.

** Carcass consists of remaining bones, skeletal muscle, brown adipose, and white adipose from each animal.

DeMar et al.; DHA net biosynthesis in rat pup organs, Suppl. Table 7, Red leg muscle.

Supplemental Table 7. Red gastrocnemius fatty acid composition of the two experimental diet and 8-day-old dam-reared reference groups

(mg/g red gastrocnemius leg muscle \pm SD; n = 7, 7, and 6)

Fatty Acid	8-day dam-reared	28-day-old		
		d5-LNA diet	d5-LNA + DHA diet	
10:0	0.05 \pm 0.06	0.008 \pm 0.006	0.004 \pm 0.004	
12:0	0.89 \pm 0.40	0.24 \pm 0.09	0.15 \pm 0.07	
14:0	1.3 \pm 0.3	0.32 \pm 0.09	0.21 \pm 0.05	†
16:0	3.9 \pm 0.5	2.0 \pm 0.4	1.7 \pm 0.2	
18:0	2.2 \pm 0.1	2.3 \pm 0.2	2.1 \pm 0.1	†
20:0	0.03 \pm 0.003	0.02 \pm 0.004	0.02 \pm 0.002	
22:0	0.03 \pm 0.003	0.01 \pm 0.002	0.01 \pm 0.001	
24:0	0.04 \pm 0.01	0.01 \pm 0.003	0.01 \pm 0.004	
Total saturates	8.4 \pm 1.0	5.0 \pm 0.7	4.2 \pm 0.4	†
16:1n-7	0.36 \pm 0.13	0.04 \pm 0.01	0.03 \pm 0.01	
18:1n-7	0.49 \pm 0.11	0.14 \pm 0.05	0.10 \pm 0.01	†
18:1n-9	2.5 \pm 0.6	6.5 \pm 1.6	4.1 \pm 0.8	††
20:1n-9	0.05 \pm 0.01	0.10 \pm 0.02	0.06 \pm 0.01	††
22:1n-9	0.01 \pm 0.002	0.015 \pm 0.003	0.011 \pm 0.001	†
24:1n-9	0.04 \pm 0.01	0.05 \pm 0.01	0.05 \pm 0.01	
Total monounsaturates	3.5 \pm 0.9	6.9 \pm 1.7	4.3 \pm 0.8	††
18:2n-6	1.3 \pm 0.2	2.9 \pm 0.5	2.1 \pm 0.3	††
18:3n-6	0.02 \pm 0.004	0.005 \pm 0.001	0.004 \pm 0.0005	
20:2n-6	0.08 \pm 0.01	0.09 \pm 0.02	0.06 \pm 0.01	††
20:3n-6	0.20 \pm 0.01	0.14 \pm 0.03	0.13 \pm 0.01	
20:4n-6	1.9 \pm 0.1	1.7 \pm 0.1	1.1 \pm 0.1	††
22:2n-6	0.008 \pm 0.002	0.007 \pm 0.003	0.006 \pm 0.001	
22:4n-6	0.34 \pm 0.03	0.19 \pm 0.03	0.05 \pm 0.004	††
22:5n-6	0.14 \pm 0.02	0.62 \pm 0.04	0.06 \pm 0.005	††
Total n-6 PUFA	4.0 \pm 0.3	5.7 \pm 0.7	3.5 \pm 0.3	††
d5-18:3n-3	—	0.05 \pm 0.01	0.03 \pm 0.01	†
18:3n-3	0.09 \pm 0.02	0.004 \pm 0.001	0.002 \pm 0.0002	†
d5-20:5n-3	—	0.01 \pm 0.002	0.01 \pm 0.001	
20:5n-3	0.06 \pm 0.01	0.002 \pm 0.001	0.03 \pm 0.003	††
d5-22:5n-3	—	0.09 \pm 0.02	0.03 \pm 0.005	††
22:5n-3	0.24 \pm 0.11	0.03 \pm 0.01	0.06 \pm 0.01	††
d5-22:6n-3	—	0.54 \pm 0.02	0.20 \pm 0.02	††
22:6n-3	0.45 \pm 0.05	0.18 \pm 0.03	2.3 \pm 0.1	††
Total n-3 PUFA	0.84 \pm 0.13	0.90 \pm 0.06	2.7 \pm 0.1	††
Total fatty acids	17 \pm 2	18 \pm 3	15 \pm 2	†

†, indicates statistically different values between d5-LNA and d5-LNA + DHA diet groups of p = 0.010 - 0.050; whereas ††, indicates a statistical difference of p < 0.010.

DeMar et al.; DHA net biosynthesis in rat pup organs, Suppl. Table 8, White leg muscle.

Supplemental Table 8. White gastrocnemius fatty acid composition of the two experimental diet and 8-day-old dam-reared reference groups

(mg/g white gastrocnemius leg muscle \pm SD; n = 7, 7, and 6)

Fatty Acid	8-day dam-reared	28-day-old	
		d5-LNA diet	d5-LNA + DHA diet
10:0	0.11 \pm 0.18	0.02 \pm 0.03	0.05 \pm 0.06
12:0	1.7 \pm 2.0	0.32 \pm 0.26	0.69 \pm 0.70
14:0	1.7 \pm 1.5	0.37 \pm 0.19	0.53 \pm 0.43
16:0	4.3 \pm 2.2	1.9 \pm 0.4	2.0 \pm 0.6
18:0	2.2 \pm 0.3	1.6 \pm 0.2	1.5 \pm 0.2
20:0	0.03 \pm 0.002	0.01 \pm 0.003	0.01 \pm 0.002
22:0	0.03 \pm 0.002	0.008 \pm 0.002	0.009 \pm 0.005
24:0	0.04 \pm 0.004	0.009 \pm 0.003	0.008 \pm 0.003
Total saturates	10 \pm 6	4.3 \pm 1.1	4.8 \pm 1.9
16:1n-7	0.45 \pm 0.33	0.05 \pm 0.04	0.08 \pm 0.06
18:1n-7	0.51 \pm 0.19	0.12 \pm 0.04	0.08 \pm 0.01 †
18:1n-9	2.8 \pm 1.6	5.9 \pm 2.8	6.9 \pm 5.1
20:1n-9	0.05 \pm 0.02	0.07 \pm 0.01	0.05 \pm 0.02
22:1n-9	0.01 \pm 0.003	0.01 \pm 0.002	0.01 \pm 0.002
24:1n-9	0.04 \pm 0.002	0.04 \pm 0.005	0.04 \pm 0.005
Total monounsaturates	3.9 \pm 2.1	6.2 \pm 2.9	7.1 \pm 5.2
18:2n-6	1.4 \pm 0.7	2.2 \pm 0.6	2.0 \pm 1.0
18:3n-6	0.02 \pm 0.01	0.009 \pm 0.003	0.006 \pm 0.003
20:2n-6	0.09 \pm 0.03	0.06 \pm 0.01	0.05 \pm 0.01
20:3n-6	0.20 \pm 0.04	0.11 \pm 0.02	0.10 \pm 0.01
20:4n-6	1.8 \pm 0.1	1.4 \pm 0.1	0.84 \pm 0.04 ††
22:2n-6	0.007 \pm 0.001	0.005 \pm 0.003	0.004 \pm 0.0004
22:4n-6	0.32 \pm 0.05	0.15 \pm 0.02	0.05 \pm 0.01 ††
22:5n-6	0.13 \pm 0.02	0.44 \pm 0.03	0.04 \pm 0.004 ††
Total n-6 PUFA	4.0 \pm 0.8	4.4 \pm 0.7	3.1 \pm 1.0 †
d5-18:3n-3	—	0.05 \pm 0.03	0.08 \pm 0.07
18:3n-3	0.11 \pm 0.08	0.003 \pm 0.003	0.003 \pm 0.002
d5-20:5n-3	—	0.01 \pm 0.002	0.01 \pm 0.002
20:5n-3	0.06 \pm 0.01	0.002 \pm 0.001	0.02 \pm 0.003 ††
d5-22:5n-3	—	0.07 \pm 0.01	0.03 \pm 0.004 ††
22:5n-3	0.27 \pm 0.03	0.03 \pm 0.01	0.05 \pm 0.01 ††
d5-22:6n-3	—	0.36 \pm 0.03	0.15 \pm 0.01 ††
22:6n-3	0.43 \pm 0.06	0.16 \pm 0.04	1.8 \pm 0.1 ††
Total n-3 PUFA	0.87 \pm 0.16	0.68 \pm 0.08	2.1 \pm 0.1 ††
Total fatty acids	19 \pm 9	15 \pm 5	17 \pm 8

†, indicates statistically different values between d5-LNA and d5-LNA + DHA diet groups of p = 0.010 - 0.050; whereas

††, indicates a statistical difference of p < 0.010.

DeMar et al.; DHA net biosynthesis in rat pup organs, Suppl. Table 9, Soleus leg muscle.

Supplemental Table 9. Soleus fatty acid composition of the two experimental diet and 8-day-old dam-reared reference groups

(mg/g soleus leg muscle \pm SD; n = 7, 7, and 6)

Fatty Acid	8-day dam-reared	28-day-old	
		d5-LNA diet	d5-LNA + DHA diet
10:0	0.003 \pm 0.002	0.02 \pm 0.03	0.04 \pm 0.03
12:0	0.41 \pm 0.40	0.65 \pm 0.43	0.97 \pm 0.47
14:0	0.79 \pm 0.60	0.62 \pm 0.29	0.79 \pm 0.34
16:0	3.2 \pm 1.0	2.0 \pm 0.4	2.5 \pm 0.6
18:0	2.7 \pm 0.4	2.6 \pm 0.2	2.5 \pm 0.7
20:0	0.05 \pm 0.01	0.03 \pm 0.002	0.03 \pm 0.01
22:0	0.04 \pm 0.01	0.02 \pm 0.002	0.02 \pm 0.005
24:0	0.06 \pm 0.01	0.01 \pm 0.001	0.02 \pm 0.004 †
Total saturates	7.3 \pm 2.1	6.0 \pm 1.2	6.9 \pm 1.9
16:1n-7	0.20 \pm 0.12	0.11 \pm 0.03	0.14 \pm 0.07
18:1n-7	0.45 \pm 0.10	0.16 \pm 0.04	0.13 \pm 0.03
18:1n-9	1.9 \pm 0.6	10 \pm 4	11 \pm 4
20:1n-9	0.04 \pm 0.01	0.10 \pm 0.02	0.09 \pm 0.02
22:1n-9	0.02 \pm 0.01	0.02 \pm 0.002	0.02 \pm 0.003
24:1n-9	0.06 \pm 0.01	0.06 \pm 0.01	0.06 \pm 0.01
Total monounsaturates	2.6 \pm 0.9	11 \pm 4	12 \pm 4
18:2n-6	1.1 \pm 0.3	3.3 \pm 0.7	3.3 \pm 0.9
18:3n-6	0.02 \pm 0.01	0.01 \pm 0.003	0.01 \pm 0.003
20:2n-6	0.08 \pm 0.02	0.08 \pm 0.01	0.07 \pm 0.01
20:3n-6	0.22 \pm 0.03	0.15 \pm 0.02	0.16 \pm 0.04
20:4n-6	2.3 \pm 0.1	1.9 \pm 0.1	1.2 \pm 0.3 †
22:2n-6	0.01 \pm 0.002	0.007 \pm 0.002	0.007 \pm 0.003
22:4n-6	0.41 \pm 0.04	0.20 \pm 0.02	0.07 \pm 0.01 ††
22:5n-6	0.17 \pm 0.02	0.63 \pm 0.04	0.07 \pm 0.01 ††
Total n-6 PUFA	4.3 \pm 0.4	6.3 \pm 0.6	5.0 \pm 1.2 ††
d5-18:3n-3	—	0.10 \pm 0.04	0.13 \pm 0.05
18:3n-3	0.05 \pm 0.03	0.005 \pm 0.002	0.006 \pm 0.002
d5-20:5n-3	—	0.01 \pm 0.002	0.01 \pm 0.004 †
20:5n-3	0.07 \pm 0.01	0.003 \pm 0.001	0.03 \pm 0.01 ††
d5-22:5n-3	—	0.09 \pm 0.01	0.04 \pm 0.005 ††
22:5n-3	0.35 \pm 0.02	0.02 \pm 0.005	0.07 \pm 0.01 ††
d5-22:6n-3	—	0.52 \pm 0.05	0.19 \pm 0.03 ††
22:6n-3	0.57 \pm 0.06	0.15 \pm 0.04	2.3 \pm 0.4 ††
Total n-3 PUFA	1.0 \pm 0.1	0.90 \pm 0.07	2.8 \pm 0.4 ††
Total fatty acids	15 \pm 3	24 \pm 5	26 \pm 7

†, indicates statistically different values between d5-LNA and d5-LNA + DHA diet groups of p = 0.010 - 0.050; whereas ††, indicates a statistical difference of p < 0.010.