

**Supplemental Table 1** Maternal plasma omega-3 PUFAs in pregnancy and PPWR at 18 months (n=508)<sup>1</sup>

Omega-3 PUFAs (%)	PPWR (kg)								
	Model 1			Model 2			Model 3		
	$\beta$	95% CI	<i>P</i>	$\beta$	95% CI	<i>P</i>	$\beta$	95% CI	<i>P</i>
ALA	0.49	-2.00, 2.98	0.700	0.50	-1.91, 2.91	0.686	0.55	-1.84, 2.94	0.649
EPA	-0.94	-1.55, -0.33	0.002	-0.71	-1.32, -0.10	0.023	-0.74	-1.34, -0.13	0.017
DHA	-0.26	-0.50, -0.03	0.030	-0.26	-0.49, -0.03	0.029	-0.26	-0.49, -0.02	0.031
Total Omega-3	-0.25	-0.43, -0.06	0.008	-0.22	-0.40, -0.04	0.019	-0.22	-0.40, -0.04	0.016
LA	0.01	-0.11, 0.11	0.953	-0.02	-0.13, 0.08	0.650	-0.02	-0.13, 0.08	0.686
AA	-0.12	-0.31, 0.08	0.247	-0.02	-0.23, 0.18	0.815	-0.02	-0.22, 0.19	0.871
Total Omega-6	0.03	-0.07, 0.14	0.550	0.03	-0.08, 0.13	0.635	0.02	-0.08, 0.13	0.659
Omega-6:Omega-3 ratio	0.22	0.04, 0.39	0.016	0.20	0.03, 0.38	0.022	0.20	0.03, 0.37	0.023

<sup>1</sup>Data were analyzed using multiple linear regressions. Values are presented in regression coefficients ( $\beta$ ) and 95% confidence intervals (CIs). Model 1 was unadjusted; Model 2 was adjusted for maternal age, education, ethnicity, parity, gestational diabetes, early pregnancy body mass index, physical activity, smoking exposure and total energy intake; Model 3 was adjusted as for model 2 and additionally adjusted for gestational weight gain per week and mode of feeding. AA, arachidonic acid; ALA,  $\alpha$ -linolenic acid; DHA, docosahexaenoic acid; EPA, eicosapentaenoic acid; LA, linoleic acid; CI, confidence interval; PPWR, postpartum weight retention; PUFAs, polyunsaturated fatty acids.

**Supplemental Table 2** Maternal plasma omega-3 PUFAs in pregnancy and risk of PPWR  $\geq 5$ kg at 18 months (n=508)<sup>1</sup>

Omega-3 PUFAs (%)	PPWR ( $\geq 5$ kg)								
	Model 1			Model 2			Model 3		
	OR	95% CI	<i>P</i>	OR	95% CI	<i>P</i>	OR	95% CI	<i>P</i>
ALA	1.43	0.28, 7.43	0.670	1.72	0.29, 10.17	0.550	1.61	0.26, 9.95	0.606
EPA	0.27	0.12, 0.59	0.001	0.28	0.11, 0.67	0.005	0.27	0.11, 0.66	0.004
DHA	0.83	0.69, 0.98	0.031	0.80	0.66, 0.97	0.024	0.81	0.6, 0.98	0.032
Total Omega-3	0.82	0.71, 0.95	0.006	0.81	0.69, 0.95	0.010	0.81	0.69, 0.95	0.010
LA	1.05	0.97, 1.13	0.247	1.02	0.94, 1.11	0.584	1.04	0.95, 1.13	0.414
AA	0.83	0.71, 0.97	0.019	0.85	0.71, 1.02	0.077	0.85	0.71, 1.03	0.099
Total Omega-6	1.01	0.94, 1.09	0.729	1.00	0.92, 1.08	0.944	1.00	0.92, 1.09	0.938
Omega-6:Omega-3 ratio	1.14	1.02, 1.27	0.022	1.15	1.01, 1.30	0.034	1.15	1.01, 1.31	0.030

<sup>1</sup>Data were analyzed using binary logistic regressions. Values are presented in odds ratios (OR) and 95% confidence intervals (CI). Model 1 was unadjusted; Model 2 was adjusted for maternal age, education, ethnicity, parity, gestational diabetes, early pregnancy body mass index, physical activity, smoking exposure and total energy intake; Model 3 was adjusted as for model 2 and additionally adjusted for gestational weight gain per week and mode of feeding. AA, arachidonic acid; ALA,  $\alpha$ -linolenic acid; DHA, docosahexaenoic acid; EPA, eicosapentaenoic acid; LA, linoleic acid; CI, confidence interval; PPWR, postpartum weight retention; PUFAs, polyunsaturated fatty acids.