

supplemental Table S4: Interaction between *ELOVL2* haplotype and DHA intake on breastmilk PUFA level

	LA		GLA		DGLA		AA		DTA		ALA		EPA		DHA	
	coef	<i>P</i>	coef	<i>P</i>	coef	<i>P</i>	coef	<i>P</i>	coef	<i>P</i>	coef	<i>P</i>	coef	<i>P</i>	coef	<i>P</i>
Q ₁ ^a	Reference															
Q ₂ ^a	-0.0243	0.644	-0.0161	0.344	-0.0047	0.567	-0.0053	0.635	-0.0012	0.654	-0.0099	0.643	-0.0084	0.333	-0.0031	0.876
Q ₃ ^a	-0.0102	0.857	-0.0091	0.615	0.0019	0.832	-0.0033	0.786	0.0000	0.988	-0.0239	0.295	-0.0164	0.076	-0.0120	0.57
Q ₄ ^a	-0.0432	0.446	0.0047	0.799	-0.0074	0.403	-0.0098	0.421	-0.0021	0.485	-0.0055	0.81	0.0036	0.7	0.0095	0.654
H ₁ ^b	Reference															
H ₂ ^b	-0.0723	0.046	-0.0205	0.093	-0.0065	0.253	-0.0125	0.107	-0.0022	0.251	-0.0253	0.083	-0.0143	0.022	-0.0364	0.008
H ₃ ^b	-0.0238	0.587	0.0013	0.929	-0.0074	0.292	-0.0088	0.357	-0.0023	0.345	-0.0086	0.63	-0.0097	0.194	-0.0004	0.978
H ₄ ^b	-0.0758	0.101	-0.0049	0.743	-0.0085	0.24	-0.0057	0.563	-0.0007	0.761	-0.0259	0.163	-0.0051	0.501	-0.0135	0.438
Q ₁ -H ₁ ^c	Reference															
Q ₂ -H ₂ ^c	0.1107	0.038	0.0329	0.060	0.0108	0.192	0.0255	0.025	0.0040	0.143	0.0385	0.072	0.0190	0.034	0.0586	0.004
Q ₃ -H ₂ ^c	0.0324	0.530	0.0164	0.332	0.0010	0.898	0.0076	0.492	0.0006	0.813	0.0298	0.151	0.0129	0.136	0.0338	0.082
Q ₄ -H ₂ ^c	0.0705	0.165	0.0108	0.516	0.0066	0.402	0.0150	0.167	0.0021	0.432	0.0177	0.384	0.0060	0.482	0.0274	0.15
Q ₂ -H ₃ ^c	-0.0187	0.742	-0.0006	0.974	0.0048	0.591	0.0046	0.709	0.0020	0.503	-0.0183	0.428	0.0044	0.647	-0.0174	0.417
Q ₃ ^a H ₃ ^c	0.0474	0.394	0.0029	0.870	0.0027	0.759	0.0194	0.106	0.0049	0.094	0.0241	0.285	0.0152	0.1	0.0099	0.631

Q ₄ -H ₃ ^c	0.0198	0.741	-0.0149	0.442	0.0066	0.489	0.0108	0.403	0.0018	0.557	0.0072	0.765	-0.0004	0.967	-0.0171	0.448
Q ₂ -H ₄ ^c	0.0477	0.512	0.0131	0.567	0.0096	0.403	0.0068	0.662	0.0004	0.919	0.0367	0.224	-0.0061	0.6	-0.0028	0.915
Q ₃ -H ₄ ^c	0.0709	0.278	0.0064	0.757	0.0052	0.608	0.0074	0.591	-0.0013	0.707	0.0294	0.27	0.0101	0.343	0.0177	0.467
Q ₄ -H ₄ ^c	0.0546	0.413	-0.0197	0.359	0.0035	0.734	-0.0045	0.755	-0.0019	0.591	0.0144	0.59	-0.0057	0.606	-0.0026	0.918

ELOVL2, elongase gene 2 of the very long chain fatty acid; PUFA, long chain polyunsaturated fatty acids; LA, linoleic acid; GLA, γ -linolenic acid; DGLA, dihomogamma-linolenic acid; ARA, arachidonic acid; DTA, docosatetraenoic acid; ALA, α -linolenic acid; EPA, eicosapentaenoic acid; DHA, docosahexaenoic acid.

^a Q means the quartile level of DHA intake: Q₁: <14.58 mg/day (reference); Q₂: 14.58–43.15 mg/day; Q₃: 43.16–118.82 mg/day; Q₄: \geq 118.82 mg/day.

^b H means the type of haplotype in *ELOVL2*; H₁: A-C-C (reference); H₂: A-G-G, H₃: G-C-C, H₄: A-C-G; Haplotypes are named according to its frequency.

^c Q-H means the effect of interaction between DHA intake and haplotype on PUFA levels compared with reference.