

eTable2. Empirical prediction models for the measured plasma and erythrocyte EPA and DHA

	NHS					HPFS						
	Food (servings/d)	Cohort [‡] , %	β	SE	p	Food (servings/d)	Cohort [§] , %	β	SE	p		
EPA												
Erythrocyte [¶] (Mean ± SD) (0.41 ± 0.16 %) n=1,557	Canned tuna	17.9	0.23	0.07	<.001	Erythrocyte [¶] (Mean ± SD) (0.46 ± 0.25%) n=1,364	Canned tuna	10.2	0.37	0.08	<.001	
	Dark fish	38.2	1.27	0.16	<.001		Dark fish	43.4	1.33	0.11	<.001	
	Other fish	20.0	0.23	0.08	0.003		Other fish	13.8	0.74	0.11	<.001	
	Shrimp and shellfish	8.2	0.69	0.18	<.001							
	Chicken w/ skin	12.1	0.17	0.07	0.01							
	R ² = 0.09											R ² = 0.19
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Plasma [¶] (Mean ± SD) (0.45 ± 0.23%) n=1,353	Canned tuna	17.9	0.20	0.10	0.04	Plasma [¶] (Mean ± SD) (0.54 ± 0.37%) n=1,321	Canned tuna	10.2	0.48	0.10	<.001	
	Dark fish	38.2	1.13	0.22	<.001		Dark fish	43.4	1.21	0.14	<.001	
	Other fish	20.0	0.25	0.11	0.02		Other fish	13.8	0.78	0.14	<.001	
	Shrimp and shellfish	8.2	0.66	0.25	0.009							
	R ² = 0.05											R ² = 0.14
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DHA												
Erythrocyte [¶] (Mean ± SD) (3.29 ± 0.98%) n=1,966	Canned tuna	29.1	0.40	0.05	<.001	Erythrocyte [¶] (Mean ± SD) (3.32 ± 1.11%) n=1,365	Canned tuna	19.8	0.42	0.06	<.001	
	Dark fish	22.3	1.23	0.11	<.001		Dark fish	29.5	0.90	0.08	<.001	
	Other fish	26.4	0.40	0.06	<.001		Other fish	23.2	0.60	0.08	<.001	
	Shrimp and shellfish	3.2	0.34	0.13	0.007		Chicken w/o skin	8.7	0.09	0.04	0.03	
	R ² = 0.17											R ² = 0.25
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Plasma [¶] (Mean ± SD) (1.42 ± 0.58%) n=1,766	Canned tuna	29.1	0.38	0.06	<.001	Plasma [¶] (Mean ± SD) (1.37 ± 0.60%) n=1,319	Canned tuna	19.8	0.59	0.07	<.001	
	Dark fish	22.3	1.40	0.15	<.001		Dark fish	29.5	1.05	0.09	<.001	
	Other fish	26.4	0.46	0.07	<.001		Other fish	23.2	0.66	0.10	<.001	
	Shrimp and shellfish	3.2	0.46	0.17	0.007							
	R ² = 0.14											R ² = 0.24
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[‡] 1986-1990 average percent contribution to total intake in the NHS full cohort

[§] 1990-1994 average percent contribution to total intake in the HPFS full cohort

[¶] Mean level was expressed as the percentage of total fatty acids; biomarker concentrations were adjusted for age, BMI, pack-year of smoking, fasting status, case-control status, menopausal status and hormone use

[¶] Total calories were forced into all models