Supplementary Table 1. Summary of number of cohorts available for meta-analysis for each dietary exposure, and the range of intake in the identified studies.

	ALA	EPA	DHA	EPA+DHA	Fish/Seafood
Number of cohorts identified for meta-analysis	n=7	n=5	n=5	n=12	n=13
			Range of dietary intake		
Cohorts	**(g/day)**	**(mg/day)**	**(mg/day)**	**(mg/day)**	**(g/day)**
Meyer (2001)[36]*	-	-	-	30-390	-
Van Dam (2002)[40]*	0.32-0.67	-	-	-	-
Hodge (2007)[32]*	0.78-1.13	41-204	72-354	114-558	-
Vang (2008)[42]†	-	-	-	0-85	Seafood: 0-21
Kaushik_NHS (2009)[33] ‡	-	-	-	120-320	Fish: 15-42
Kaushik_NHS2 (2009)[33] ‡	-	-	-	110-300	Fish: 7-30
Kaushik_HPFS (2009)[33] ‡	-	-	-	140-420	Fish: 14-46
Patel (2009)[39] †	-	-	-	32-194	Seafood: 8-49
van Woudenbergh (2009)[41] †	-	4-77	19-159	24-237	Seafood: 0-36
Patel (2010)[38]§	0.82-1.22	50-170	50-230	-	-
Brostow (2011)[29]*	0.28-0.93	-	-	130-550	Fish: 19-86 Seafood: 22-94
Djousse_CHS (2011)[30]‖	0.96-1.84	-	-	110-730	Fish: 2-85
Djousse_WHS (2011)[31]*	0.79-1.59	10-120	40-270	60-390	Fish: 8-64
Kroger (2011)[35]*	1-2.3	6-222	18-334	31-555	-
Nanri_JPHC-Men (2011)[37]‖	-	-	-	382-1793	Seafood : 37-172
Nanri_JPHC-Women (2011)[37]‖	-	-	-	369-1703	Seafood: 35-163
Villegas_SMHS (2011)[43]*	-	-	-	20-200	Fish: 10-80 Seafood: 14-99
Villegas_SWHS (2011)[43]*	-	-	-	20-200	Fish: 10-80 Seafood: 14-99

ALA, alpha-linolenic acid; EPA, eicosapentaenoic acid; DHA, docosahexaenoic acid; NHS, Nurses' Health Study; NHS2, Nurses' Health Study 2; HPFS, Health Professionals Follow-up Study; CHS, Cardiovascular Health Study; WHS, Women's Health Study; JPHC, Japan Public Health Center-based Prospective Study; SMHS, Shanghai Men's Health Study; SWHS, Shanghai Women's Health Study.

* Values are median of the 1st quintile to the 5th quintile.

† Values are median of the lowest to the highest category of intake.

‡ Values are inter-quartile range.

§ Values are median of the 1st tertile to the 3rd tertile.

‖ Values are median of the 1st quartile to the 4th quartile.

Supplementary Table 2. Summary of number of cohorts available for meta-analysis for each fatty acid biomarker exposure, and the range of distributions in the identified studies.

Study		ALA	EPA	DHA	EPA+DHA
Number of cohorts identified for meta-analysis		n = 6	n = 5	n = 5	n = 5
Cohorts	**Measured Compartment**	**Range of distribution, as % of total fatty acids**			
Wang (2003)[44]*	Plasma-PL	0.09-0.21	-	-	-
Wang (2003)[44]*	Plasma-CE	0.29-0.56	-	-	-
Hodge (2007)[32]*	Plasma-PL	0.09-0.27	0.57-1.62	2.78-5.42	3.57-6.72
Krachler (2008)[34]†	RBC membrane	0.24-0.48	0.89-1.81	3.73-5.77	4.76-7.44
Patel (2010)[38]‡	Plasma-PL	0.15-0.30	0.66-1.58	3.54-6.07	4.30-7.77
Patel (2010)[38]‡	RBC-PL	0.10-0.18	0.64-1.40	4.50-6.47	5.16-7.70
Djousse (2011)[30]§	Plasma-PL	0.10-0.21	0.32-0.87	2.04-4.22	2.47-5.02
Kroger (2011)[35]*	RBC-PL	0.10-0.22	0.42-1.20	2.70-6.20	3.20-7.30

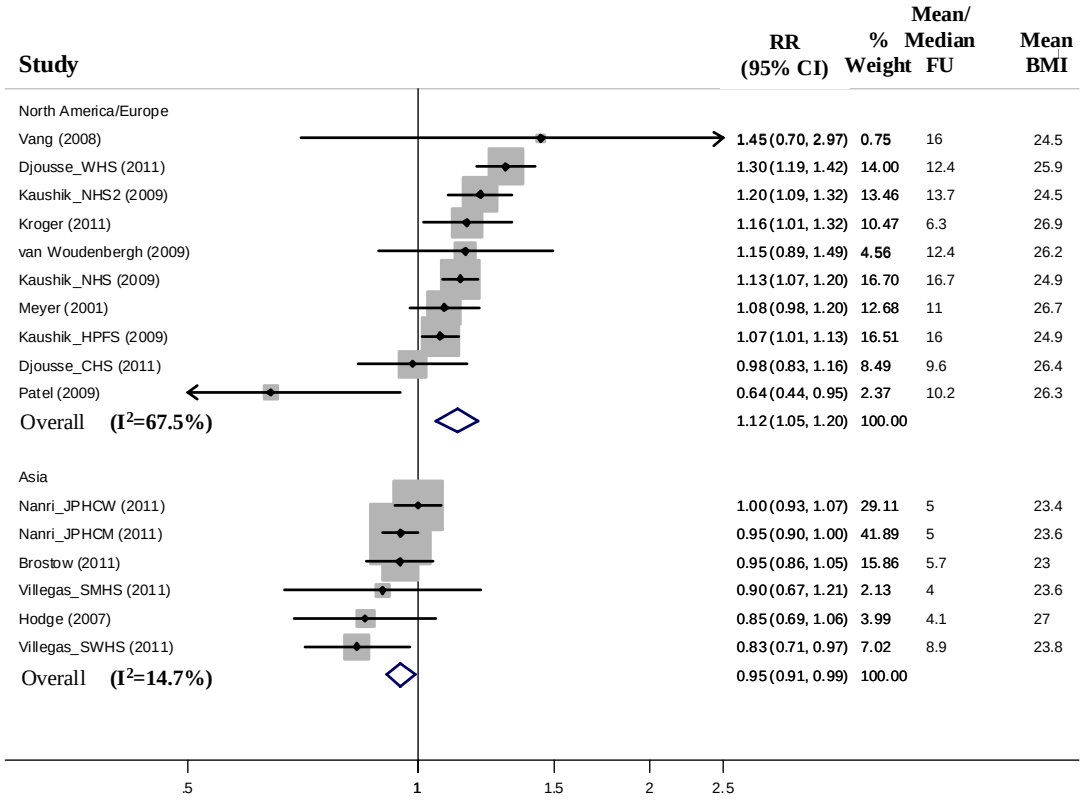
RBC, red blood cell; PL, phospholipids; CE, cholesterol esters. Note both Wang *et al* [44], and Patel *et al* [38] measured fatty acids in 2 different compartments and assessed association of each with risk of type 2 diabetes.

* Values are median of the 1st quintile to the 5th quintile.

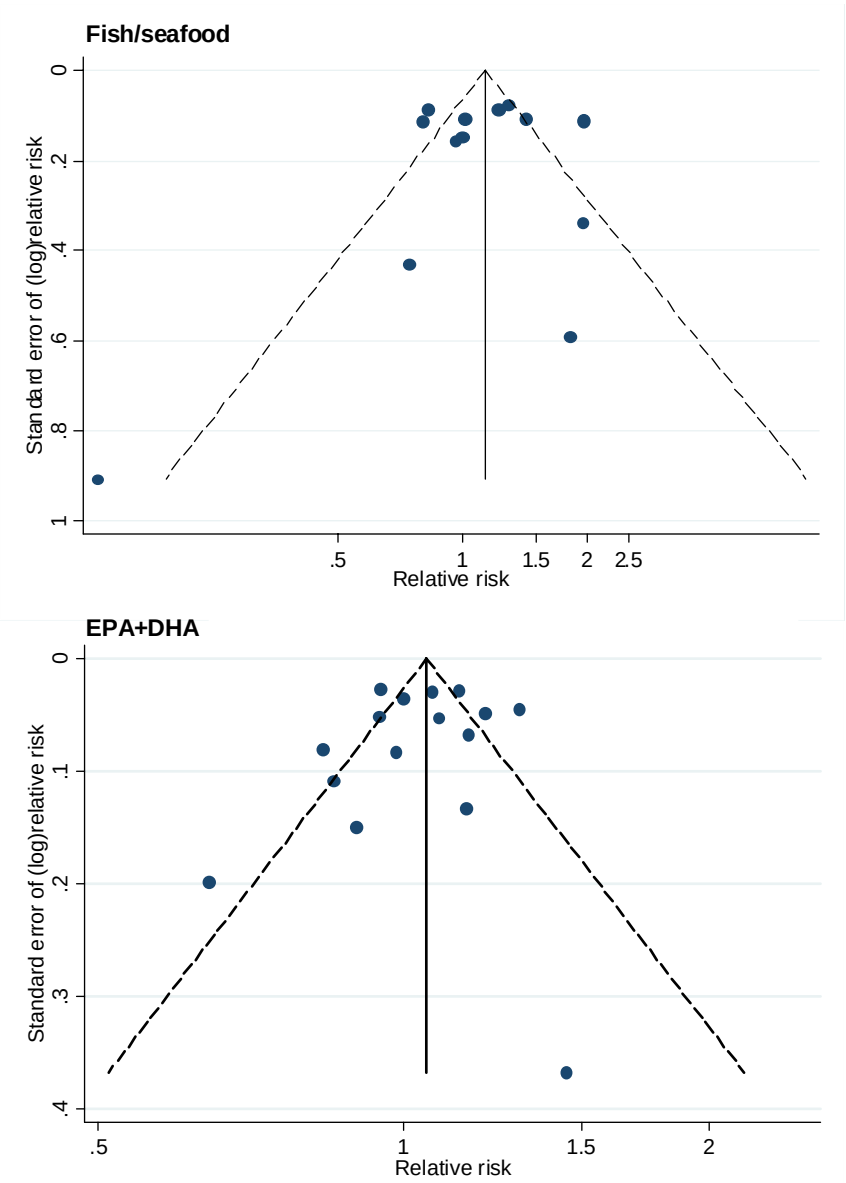
† Values are mean-SD to mean+SD.

‡ Values are median of the 1st tertile to the 3rd tertile.

§ Values are median of the 1st quartile to the 4th quartile.



Supplementary Figure 1. Relative risk of incident type 2 diabetes per 250mg/day of EPA+DHA intake, stratified by the study location



Supplementary Figure 2. Funnel plots for studies that assessed the association of dietary fish/seafood (top panel), and of dietary EPA+DHA (bottom panel), with risk of incident type 2 diabetes