

Fig. S1 Sensitivity analysis of 15 studies evaluating TC. TC, total cholesterol.

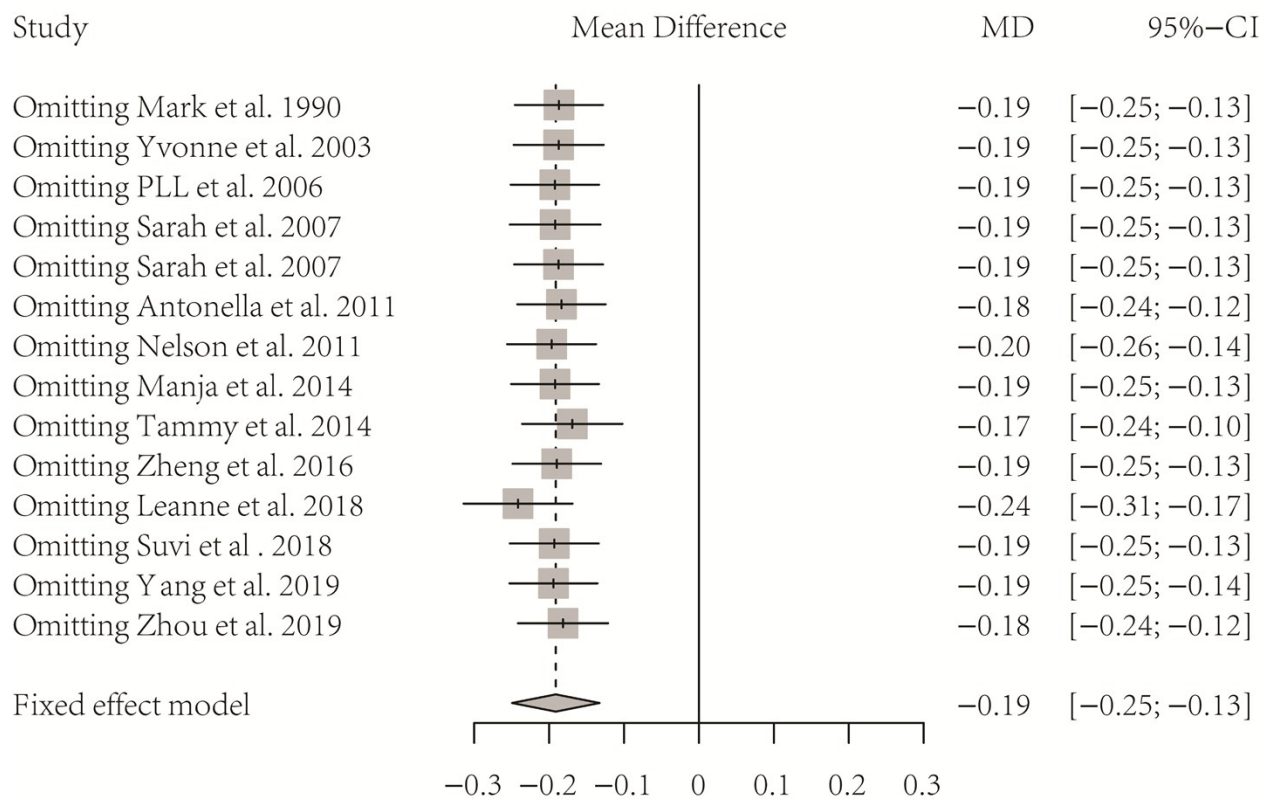


Fig. S2 Sensitivity analysis of 14 studies evaluating TG. TG, triglycerides.

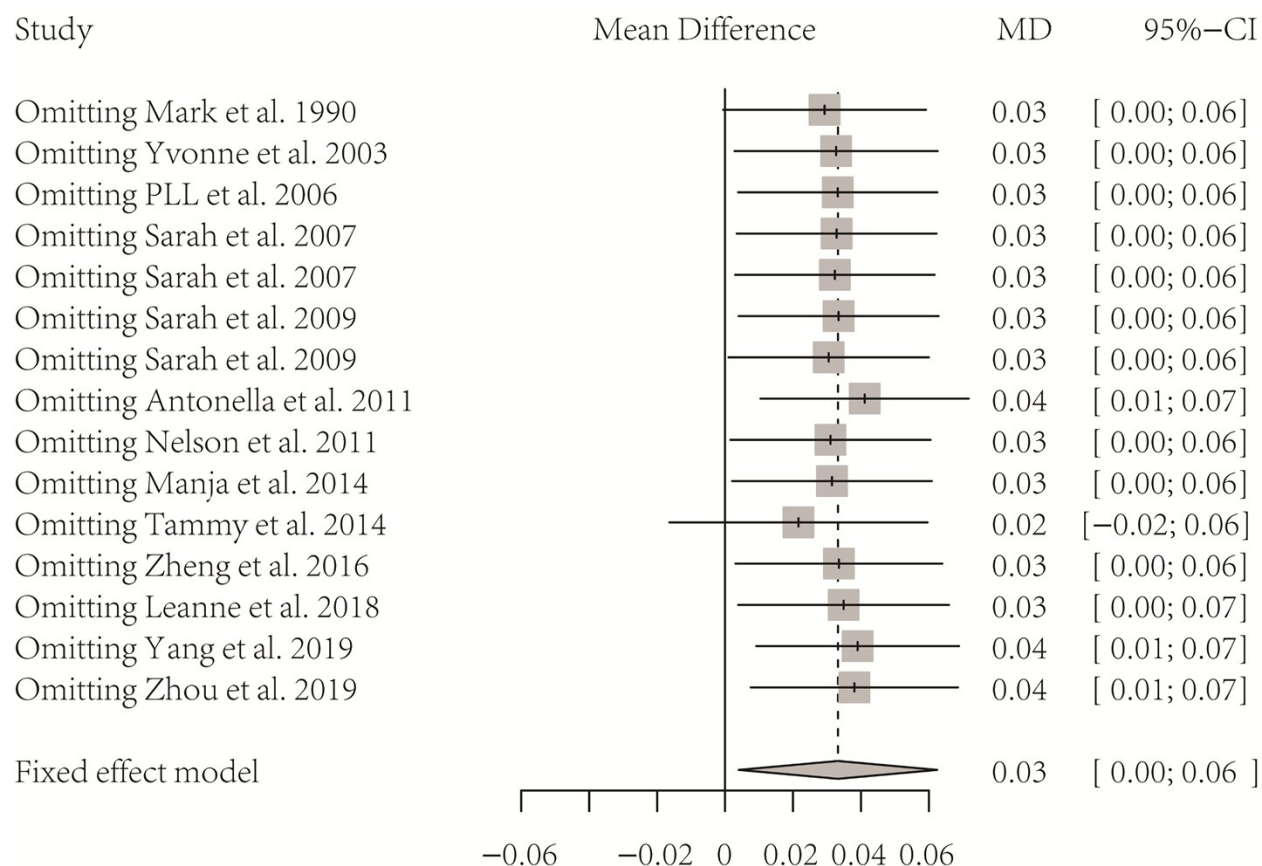


Fig S3 Sensitivity analysis of 15 studies evaluating HDL. HDL, high-density lipoprotein.

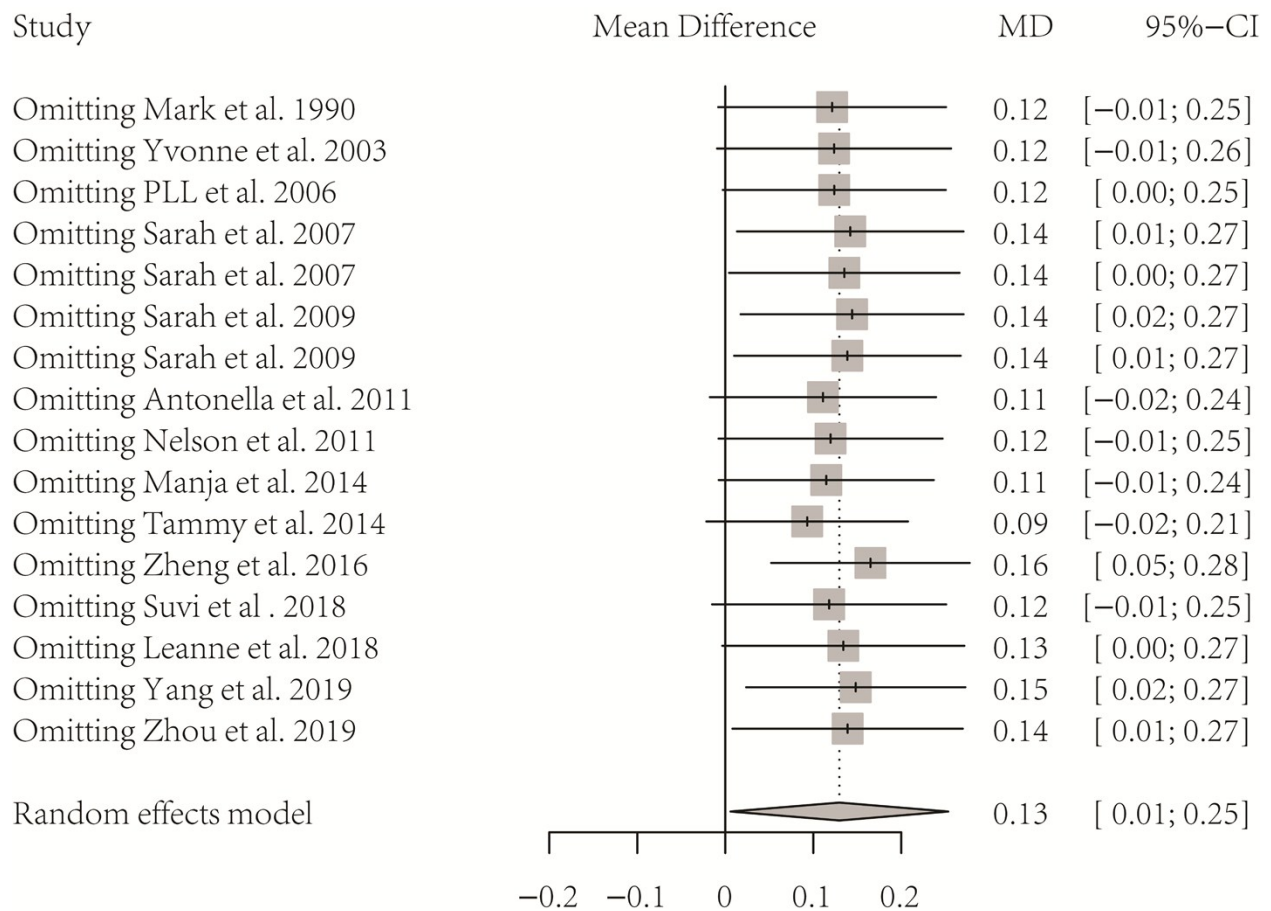


Fig. S4 Sensitivity analysis of 16 studies evaluating LDL. LDL, low-density lipoprotein.

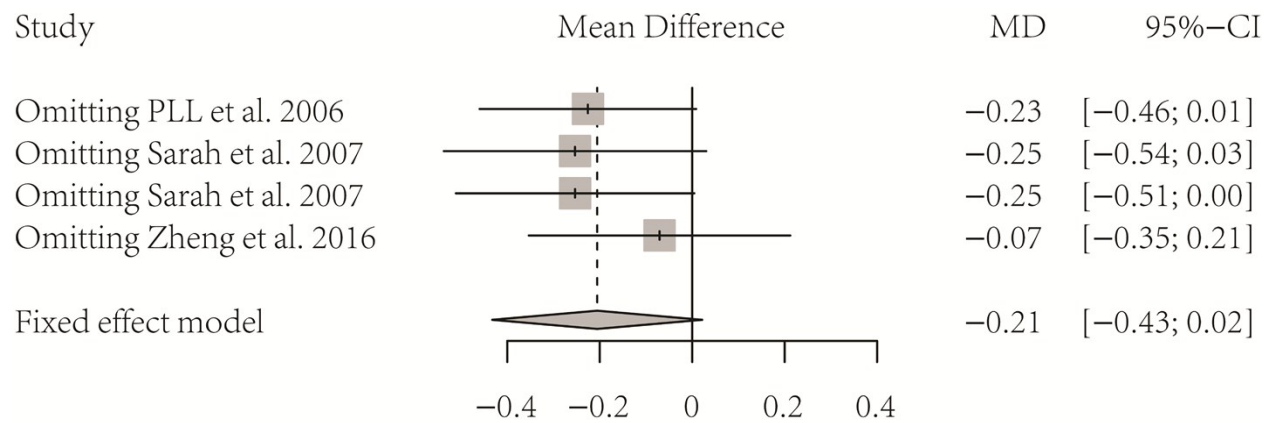


Fig. S5 Sensitivity analysis of 4 studies evaluating TC: HDL. TC, total cholesterol; HDL, high-density lipoprotein.

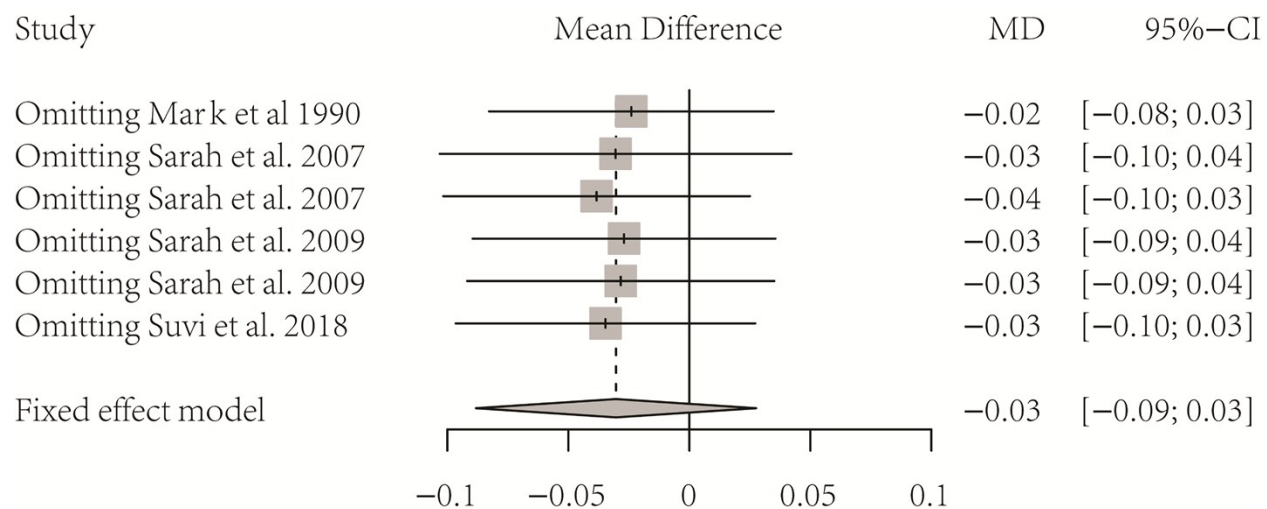


Fig. S6 Sensitivity analysis of 6 studies evaluating VLDL. VLDL, very low-density lipoproteins.

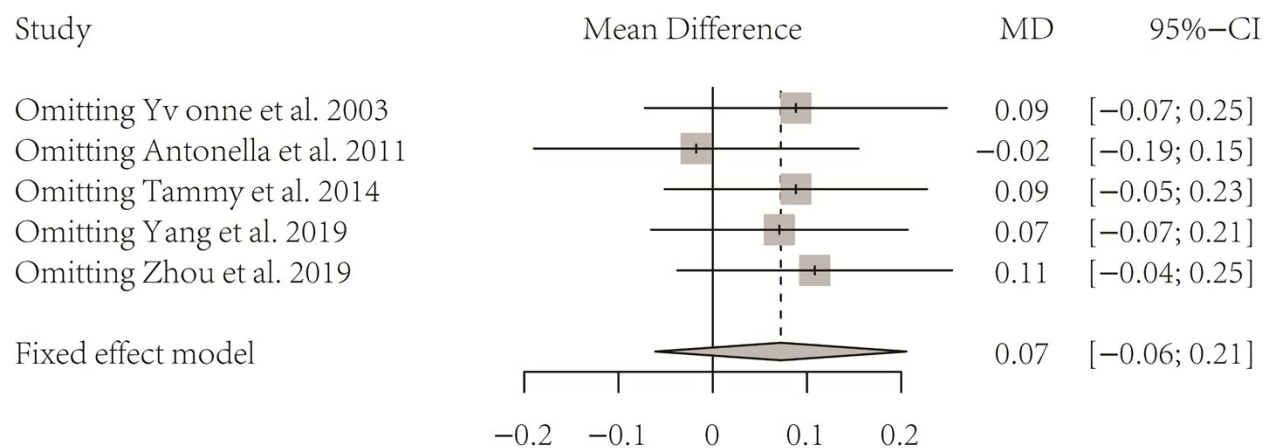


Fig. S7 Sensitivity analysis of 5 studies evaluating glucose.

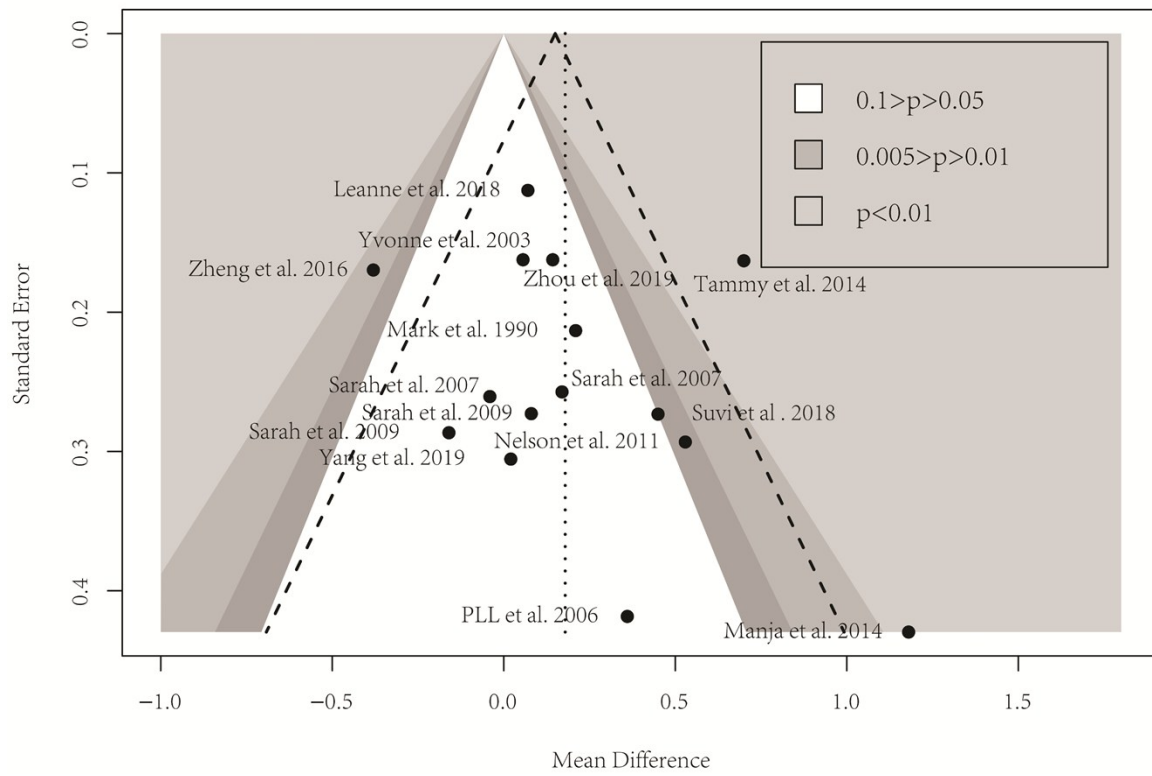


Fig. S8 Contour-enhanced funnel plots with pseudo 95% confidence limits for publication bias on TC. TC, total cholesterol.

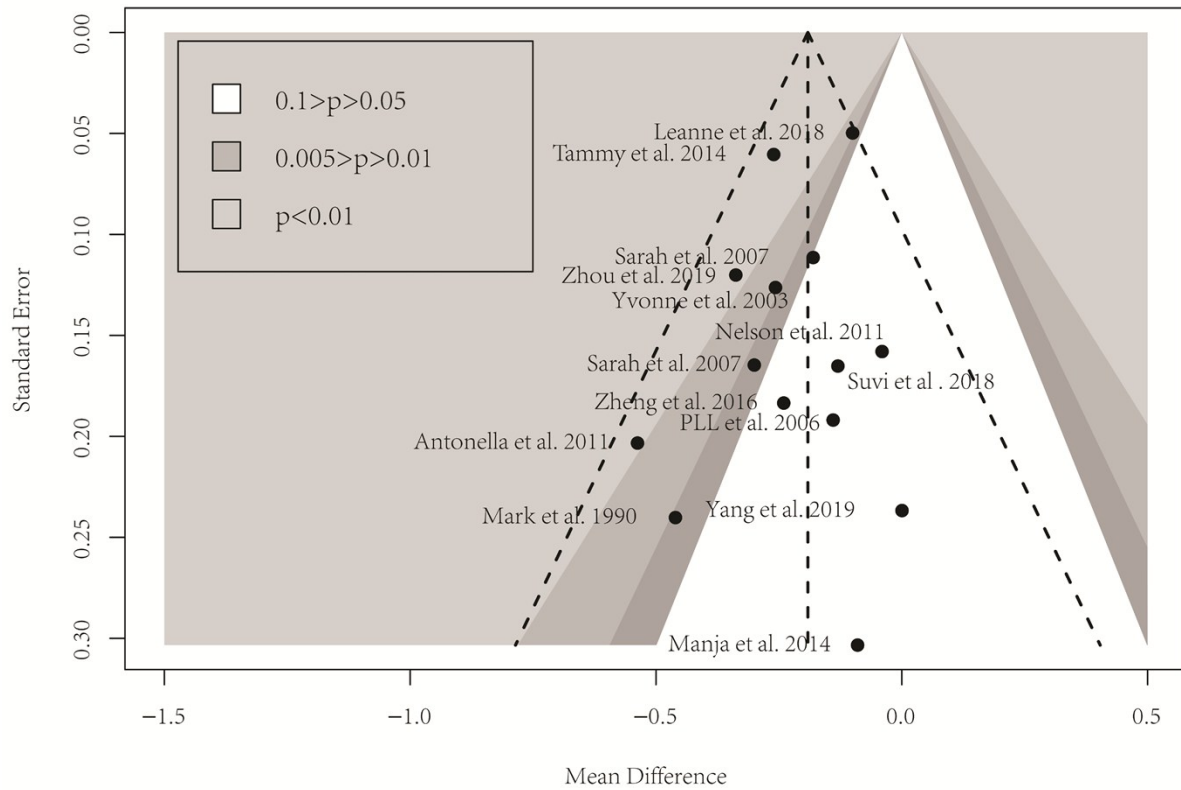


Fig. S9 Contour-enhanced funnel plots with pseudo 95% confidence limits for publication bias on TG. TG, triglycerides.

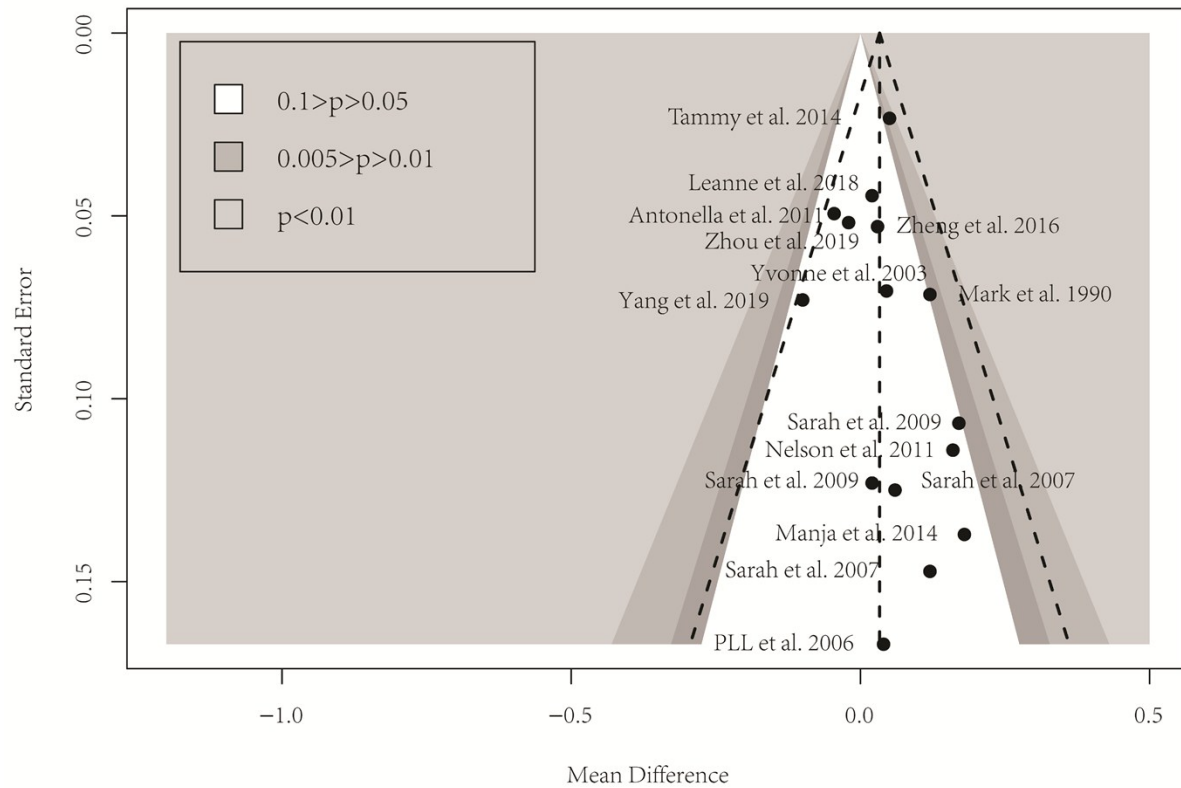


Fig. S10 Contour-enhanced funnel plots with pseudo 95% confidence limits for publication bias on HDL. HDL, high-density lipoprotein.

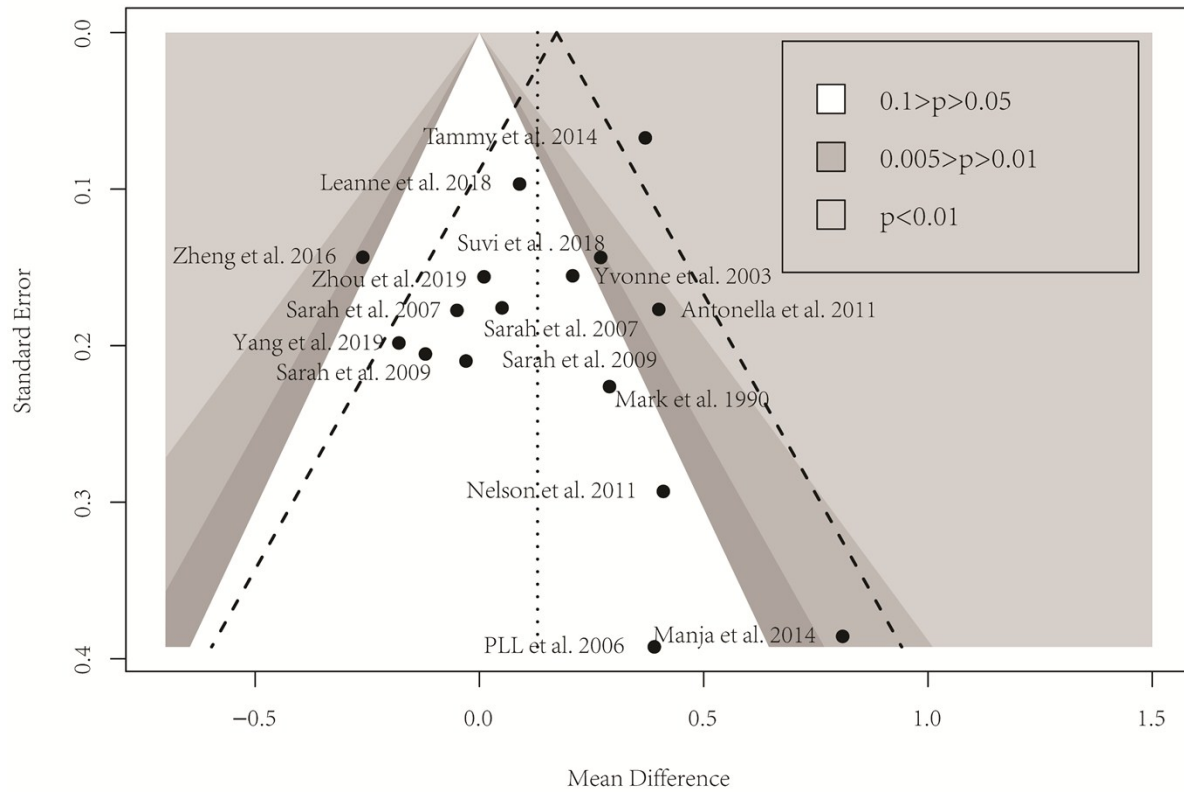


Fig. S11 Contour-enhanced funnel plots with pseudo 95% confidence limits for publication bias on LDL. LDL, low-density lipoprotein.

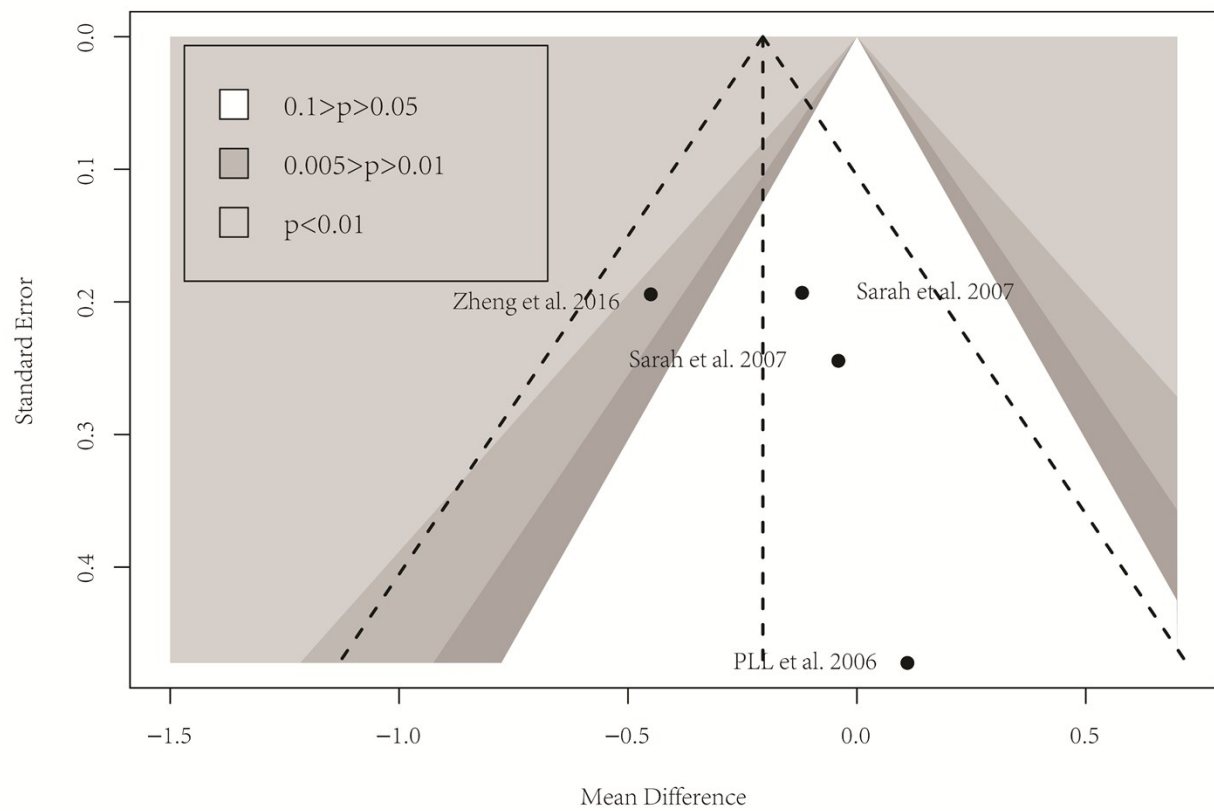


Fig. S12 Contour-enhanced funnel plots with pseudo 95% confidence limits for publication bias on TC: HDL. TC, total cholesterol; HDL, high-density lipoprotein.

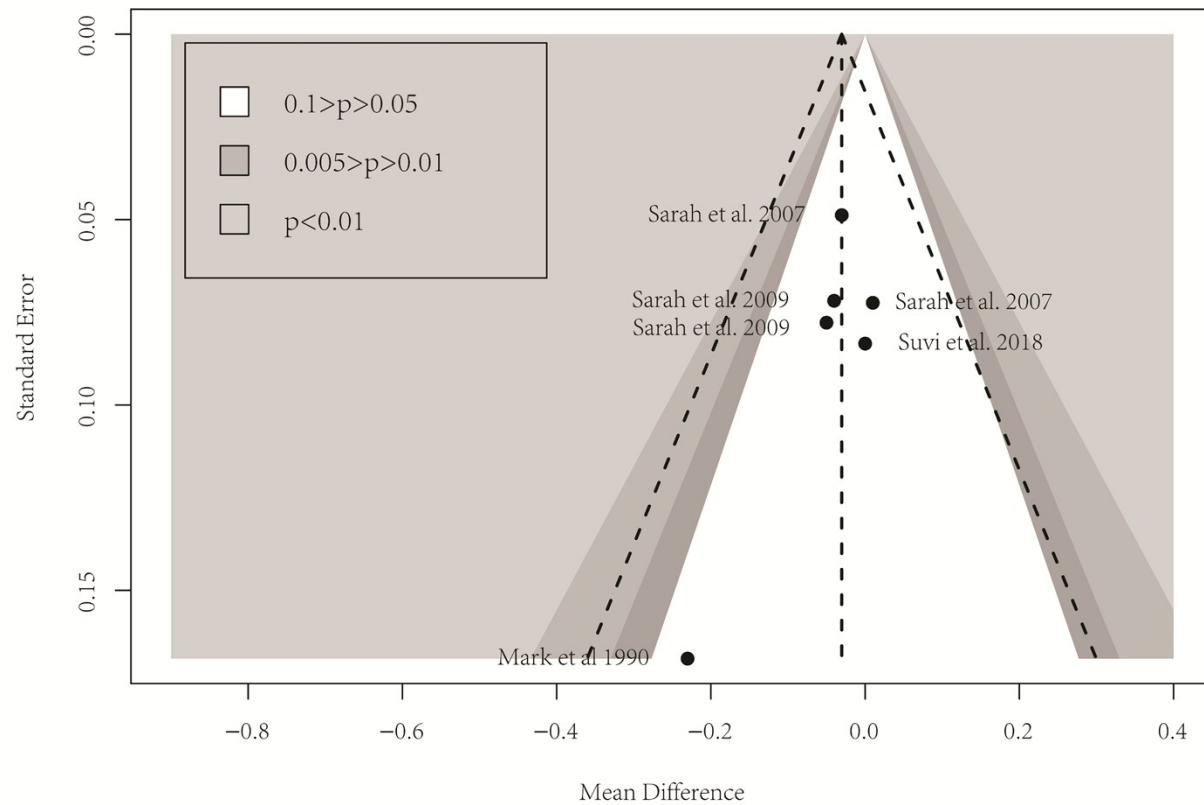


Fig. S13 Contour-enhanced funnel plots with pseudo 95% confidence limits for publication bias on VLDL. VLDL, very low-density lipoproteins.

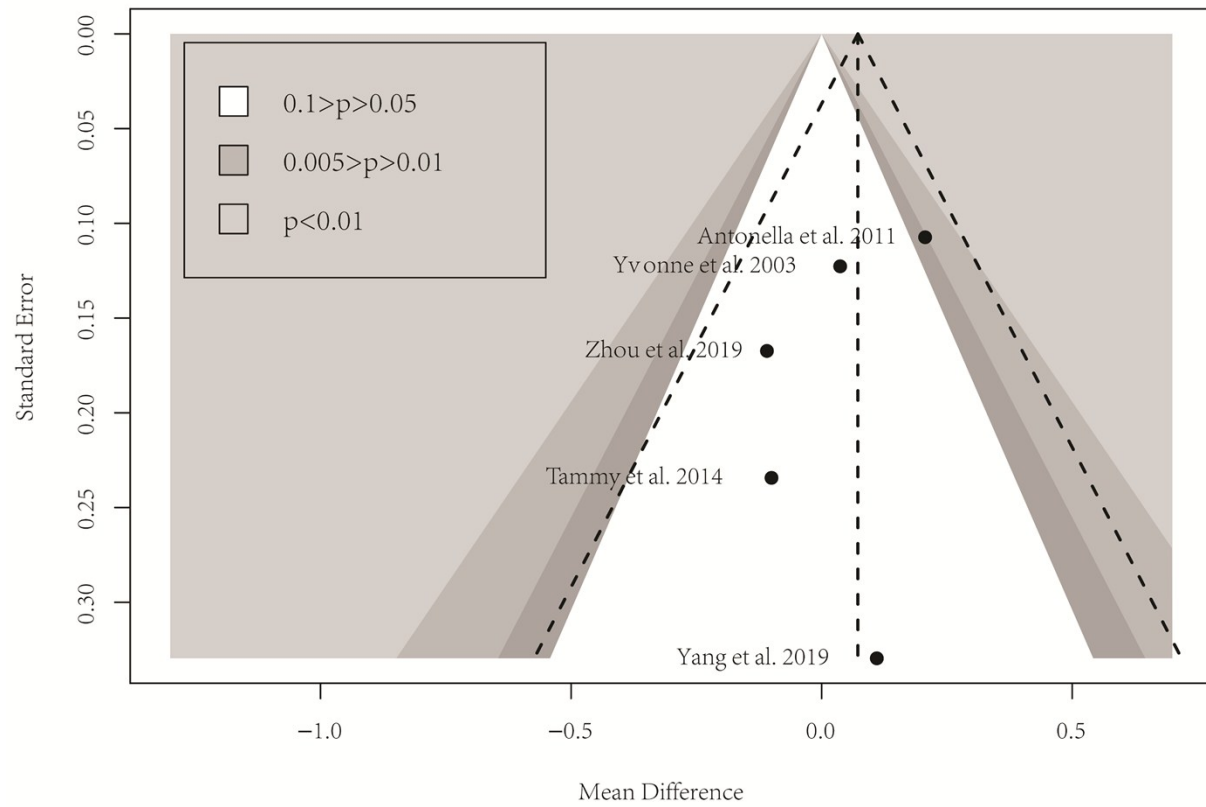


Fig. S14 Contour-enhanced funnel plots with pseudo 95% confidence limits for publication bias on glucose.

	Random sequence generation (selection bias)	Allocation concealment (selection bias)	Blinding of participants and personnel (performance bias)	Blinding of outcome assessment (detection bias)	Incomplete outcome data (attrition bias)	Selective reporting (reporting bias)	Other bias
Antonella 2011	?	?	?	+	+	+	+
Leanne 2018	?	?	?	+	?	+	+
Manja 2014	?	?	+	+	+	+	+
Mark 1990	?	?	?	+	+	+	+
Nelson 2011	?	?	+	+	+	+	+
PLL 2006	?	?	?	+	+	+	+
Sarah 2007	+	+	?	+	+	+	+
Sarah 2009	+	?	?	+	+	+	+
Suvi 2018	?	-	-	+	+	+	?
Tammy 2014	?	+	?	+	+	+	+
Yang 2019	+	+	+	+	+	+	+
Yvonne 2003	?	?	+	+	+	+	+
Zheng 2016	+	+	+	+	+	+	+
Zhou 2019	+	+	+	+	+	+	+

Fig. S15 Risk of bias summary: each risk of bias item for each included study.

Table S1 Pooled estimates for EPA/DHA v. ALA supplementation on cardiometabolic indicators assuming correlation coefficients were obtained from baseline and end of study data provided by Zhou, PLL and Mark

Outcomes	No.trials	WMD	95% CI	<i>P</i>	<i>I</i> ² (%)
TC	15	0.163	0.018, 0.307	0.027	73.2
LDL	16	0.271	0.023, 0.518	0.032	90.1
HDL	15	0.036	0.003, 0.070	0.034	42.5
VLDL	6	-0.028	-0.066, 0.010	0.145	0
TG	14	-0.204	-0.272, -0.137	< 0.001	30.3
TC/HDL	4	-0.190	-0.427, 0.046	0.115	81.3
Glucose	5	0.057	-0.102, 0.215	0.482	0

WMD: weighted mean difference; CI: confidential interval; ALA: α -linolenic acid; EPA: eicosapentaenoic acid; DHA: docosahexaenoic acid; TG: triglycerides; TC: total cholesterol; HDL: high-density lipoprotein; LDL: low-density lipoprotein; VLDL: very low-density lipoproteins.

P value is *P* for WMD.