

SUPPLEMENTARY MATERIAL

TABLE S1 Search strategies in PubMed

- 1 "Exercise"[Mesh]
- 2 ((((((((((((((((((((((((((((((((((Exercises[Title/Abstract])) OR (Physical Activity[Title/Abstract])) OR (Activities, Physical[Title/Abstract])) OR (Activity, Physical[Title/Abstract])) OR (Physical Activities[Title/Abstract])) OR (Exercise, Physical[Title/Abstract])) OR (Exercises, Physical[Title/Abstract])) OR (Physical Exercise[Title/Abstract])) OR (Physical Exercises[Title/Abstract])) OR (Acute Exercise[Title/Abstract])) OR (Acute (wom?n[Title/Abstract]) OR (m?n[Title/Abstract])Exercises[Title/Abstract])) OR (Exercise, Acute[Title/Abstract])) OR (Exercises, Acute[Title/Abstract])) OR (Exercise, Isometric[Title/Abstract])) OR (Exercises, Isometric[Title/Abstract])) OR (Isometric Exercises[Title/Abstract])) OR (Isometric Exercise[Title/Abstract])) OR (Exercise, Aerobic[Title/Abstract])) OR (Aerobic Exercise[Title/Abstract])) OR (Aerobic Exercises[Title/Abstract])) OR (Exercises, Aerobic[Title/Abstract])) OR (Exercise Training[Title/Abstract])) OR (Exercise Trainings[Title/Abstract])) OR (Training, Exercise[Title/Abstract])) OR (Trainings, Exercise[Title/Abstract]))
- 3 1 or 2
- 4 "Sports"[Mesh]
- 5 ((Sport[Title/Abstract]) OR (Athletics[Title/Abstract])) OR (Athletic[Title/Abstract])
- 6 4 or 5
- 7 3 or 6
- 8 "Carotid Intima-Media Thickness"[Mesh]
- 9 (Carotid Intima Media Thickness[Title/Abstract]) OR (Intima-Media Thickness, Carotid[Title/Abstract])
- 10 8 or 9
- 11 "Adult"[Mesh]
- 12 (wom ? n[Title/Abstract]) OR (m ? n[Title/Abstract])
- 13 11 or 12
- 14 7 and 10 and 13

TABLE S2 Cochrane Collaboration’s tool for assessing risk of bias

Studies	Selection bias						Other bias
	Random	Allocation concealment	Performance bias	Detection bias	Attrition bias	Reporting bias	
Adams et al.,2017	L	U	H	H	L	L	L
Niclas et al.,2019	U	U	H	H	L	U	U
Rune et al.,2016	L	U	H	H	L	U	U
Croymans et al.,2014	L	U	H	H	L	U	U
David et al.,2014	U	U	H	H	L	L	L
Samaneh et al.,2020	L	U	H	H	L	U	U
Alireza et al.,2019	L	U	H	H	L	U	U
Glodzik et al.,2018	U	U	H	H	L	U	U
Nicole et al.,2016	H	U	H	H	L	U	U
Kadoglou et al.,2021	L	U	H	U	L	U	U
Kim et al.,2020	H	U	H	H	U	U	U
Kim et al.,2017	L	U	H	H	L	U	U
Dalane et al.,2013	L	U	H	H	L	U	U
Kyuwan et al.,2019	L	U	H	H	L	U	U
Magalhães Et al.,2019	L	U	H	H	L	U	U
Motohiko et al.,2004	L	U	H	H	L	U	U
OLSON et al.,2006	L	U	H	H	U	U	U
Jinkee et al.,2016	L	U	H	H	L	U	L
Jinkee et al.,2017	L	U	H	H	L	U	U
Jinkee et al.,2010	L	U	H	H	L	U	U
Jinkee et al.,2017	L	U	H	H	L	U	U
Park et al.,2015	U	U	H	H	L	U	U
Soulmaz et al., 2018	L	U	H	H	U	U	U
Neha et al.,2021	U	U	H	H	L	U	U
Jeong et al.,2015	U	U	H	H	L	U	U
Koichiro et al.,2013	L	U	H	H	L	U	U

H, high risk; L, low risk; U, unclear risk.

TABLE S3 Meta-regression analysis of the effects of study characteristics on cIMT

Variable	Coef.	S.E.	95% CI	P
Duration of exercise	0.001	0.018	-0.036-0.039	0.945
Types of exercise	-0.003	0.005	-0.140-0.008	0.538
Participants health status	0.015	0.013	-0.013-0.043	0.267
Age	0.036	0.019	-0.004-0.075	0.075
Study location	-0.006	0.009	-0.026-0.013	0.482
Intensity of exercise	0.014	0.016	-0.019-0.047	0.387
Mean cIMT at baseline of exercise group	-0.016	0.016	-0.050-0.016	0.300

CI, confidence intervals; Coeff., Coefficient; S.E., standard error; cIMT, carotid intima-media thickness.

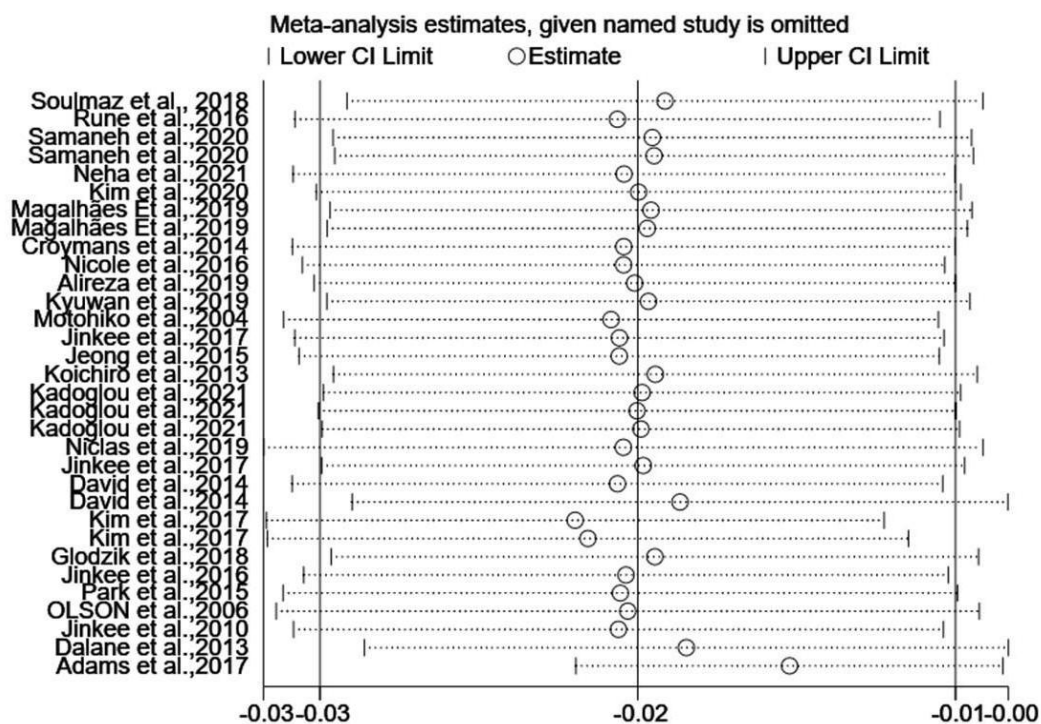


FIGURE S1 Sensitivity analysis of the relationship between exercise and cIMT.

Results were calculated by excluding each study in turn. The two ends of the dotted line represent the 95% CIs.

CI, confidence intervals; cIMT, carotid intima-media thickness.

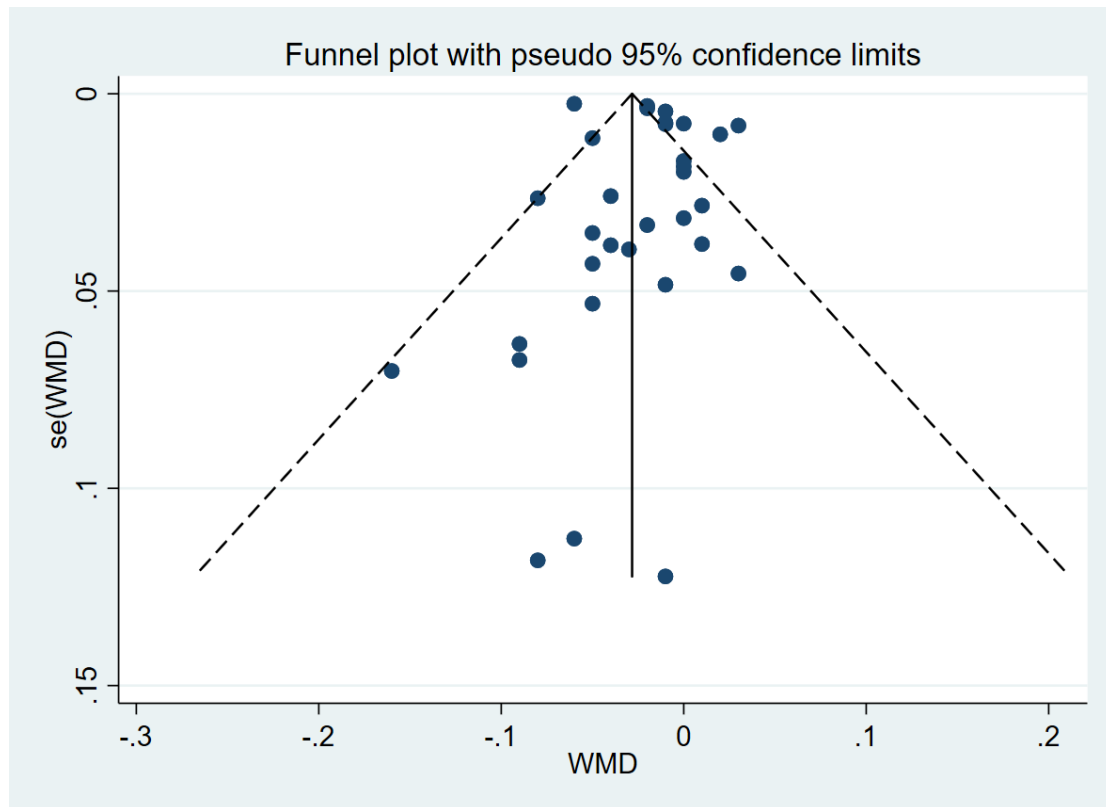


FIGURE S2 Funnel plot for publication bias. The WMDs are plotted against the standard error of the WMD. The dashed lines represent the logarithm of the summary WMD with its 95% CI.

CI, confidence intervals; WMD, weighted mean difference.

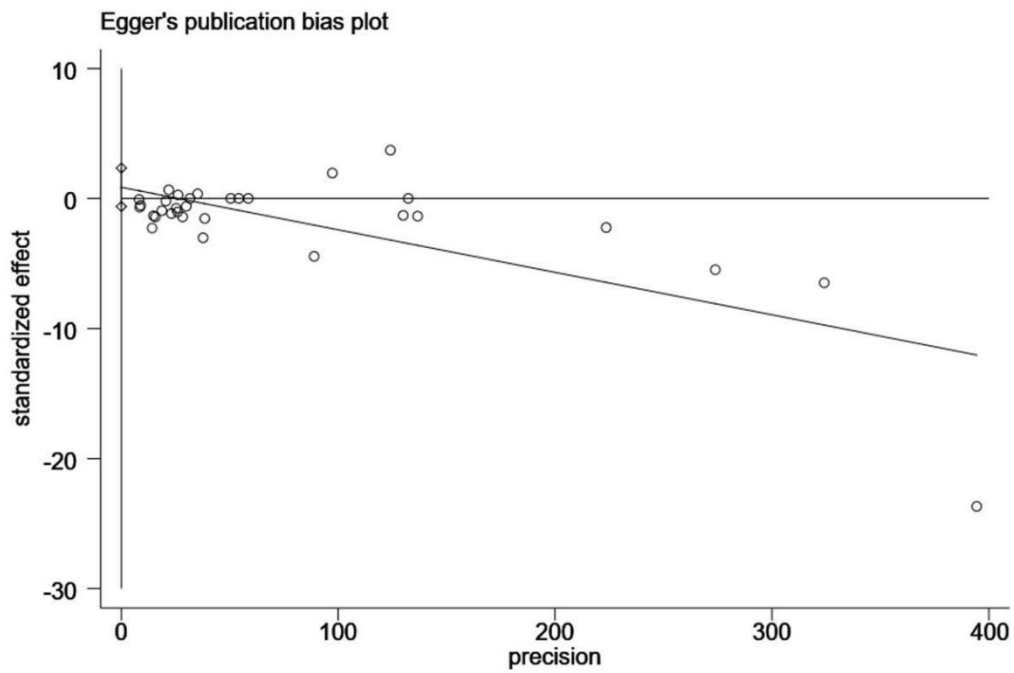


FIGURE S3 Egger's regression asymmetry test for effects of exercise on cIMT.