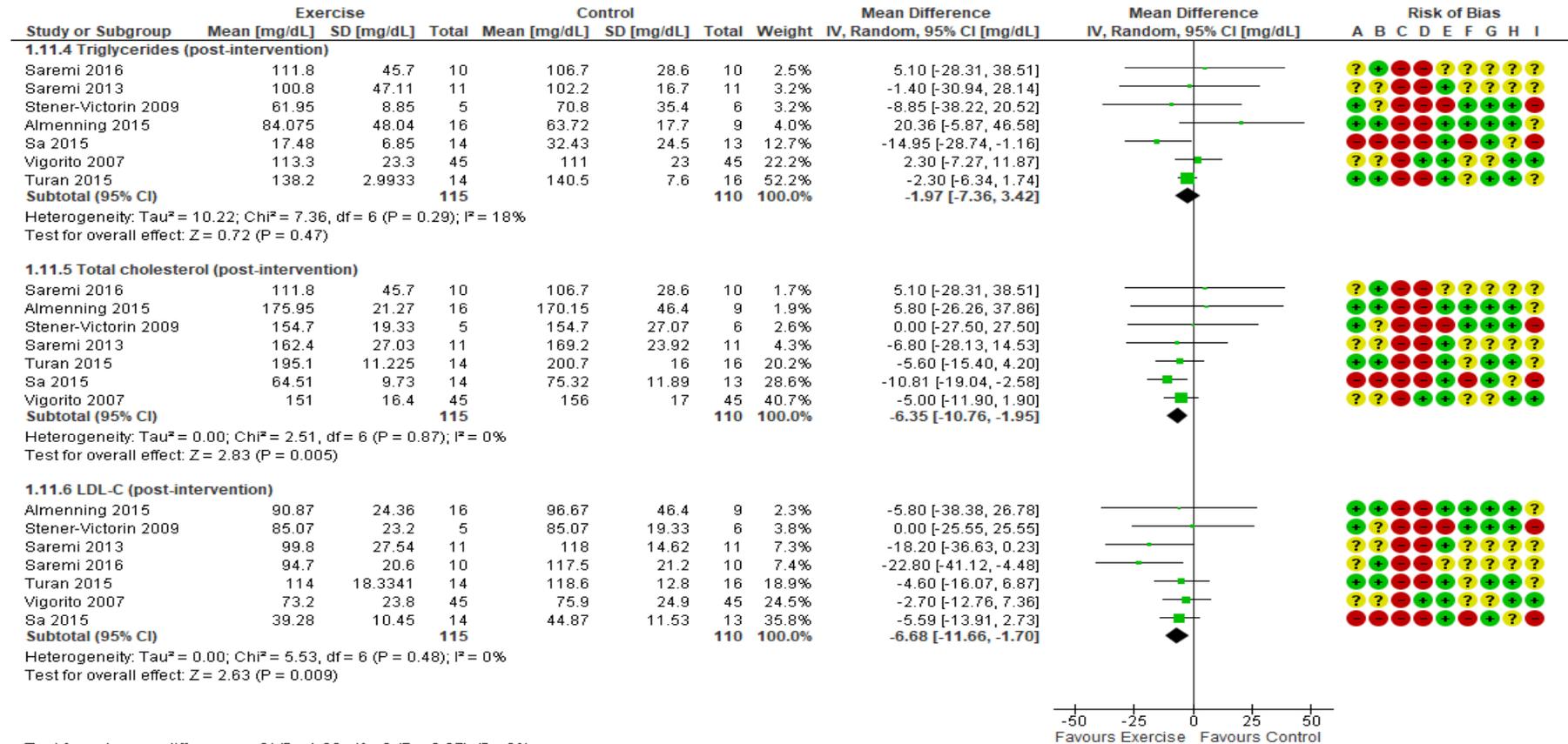


**Supplementary Figure 1.** Review of authors' judgements about each risk of bias item for each included study.

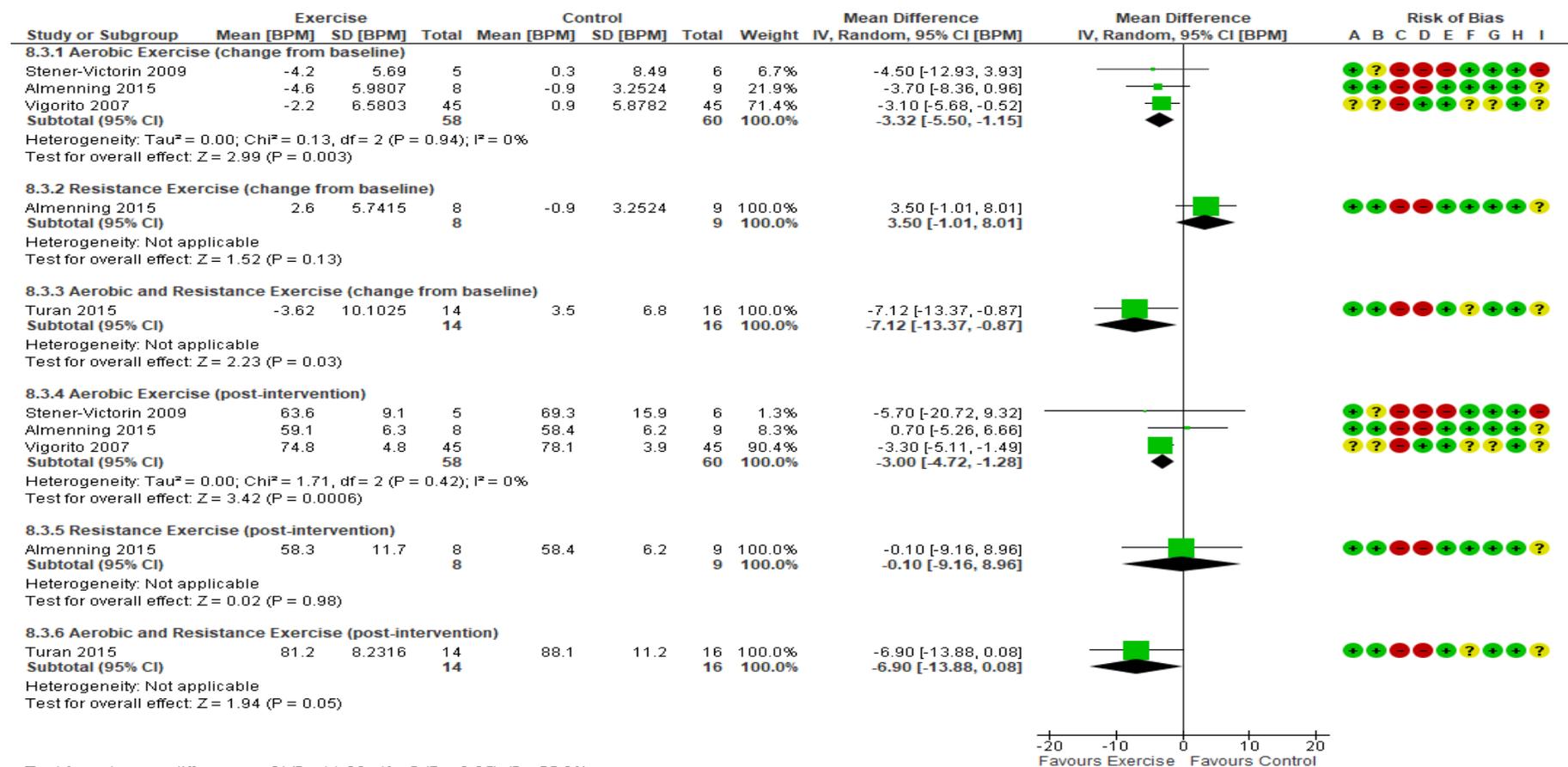
	Random sequence generation (selection bias)	Allocation concealment (selection bias)	Blinding of participants and personnel (performance bias)	Blinding of outcome assessment (detection bias)	Incomplete outcome data (attrition bias)	Selective reporting (reporting bias)	Group similarity at baseline (other bias)	Adherence (other bias)	Contamination (other bias)
Almenning 2015	+	+	-	-	+	+	+	+	?
Brown 2009	+	+	-	-	-	?	-	+	?
Bruner 2006	?	+	-	-	-	?	+	?	?
Guzick 1994	?	?	-	-	+	?	+	?	?
Hoeger 2004	+	?	-	-	-	?	+	?	?
Konopka 2015	?	?	-	-	-	+	+	?	?
Nasrekani 2016	?	?	-	-	+	?	+	?	?
Nybacka 2011	+	?	-	-	-	?	+	?	?
Petranyi 2011	?	?	-	-	+	?	?	?	?
Roessler 2013	?	?	-	-	+	?	+	-	-
Sa 2015	-	-	-	-	+	-	+	?	-
Saremi 2013	?	?	-	-	+	?	?	?	?
Saremi 2016	?	+	-	-	?	?	?	?	?
Stener-Victorin 2009	+	?	-	-	-	+	+	+	-
Thomson 2008	+	?	-	-	-	?	+	?	?
Turan 2015	+	+	-	-	+	?	+	+	?
Vigorito 2007	?	?	-	+	+	?	?	+	+
Vizza 2016	+	+	-	-	-	?	-	-	?

**Supplementary Figure 2.** Forest plot of comparison: Exercise vs. Control. Analysis of immediately post-intervention values for outcomes related to participant lipid profile.

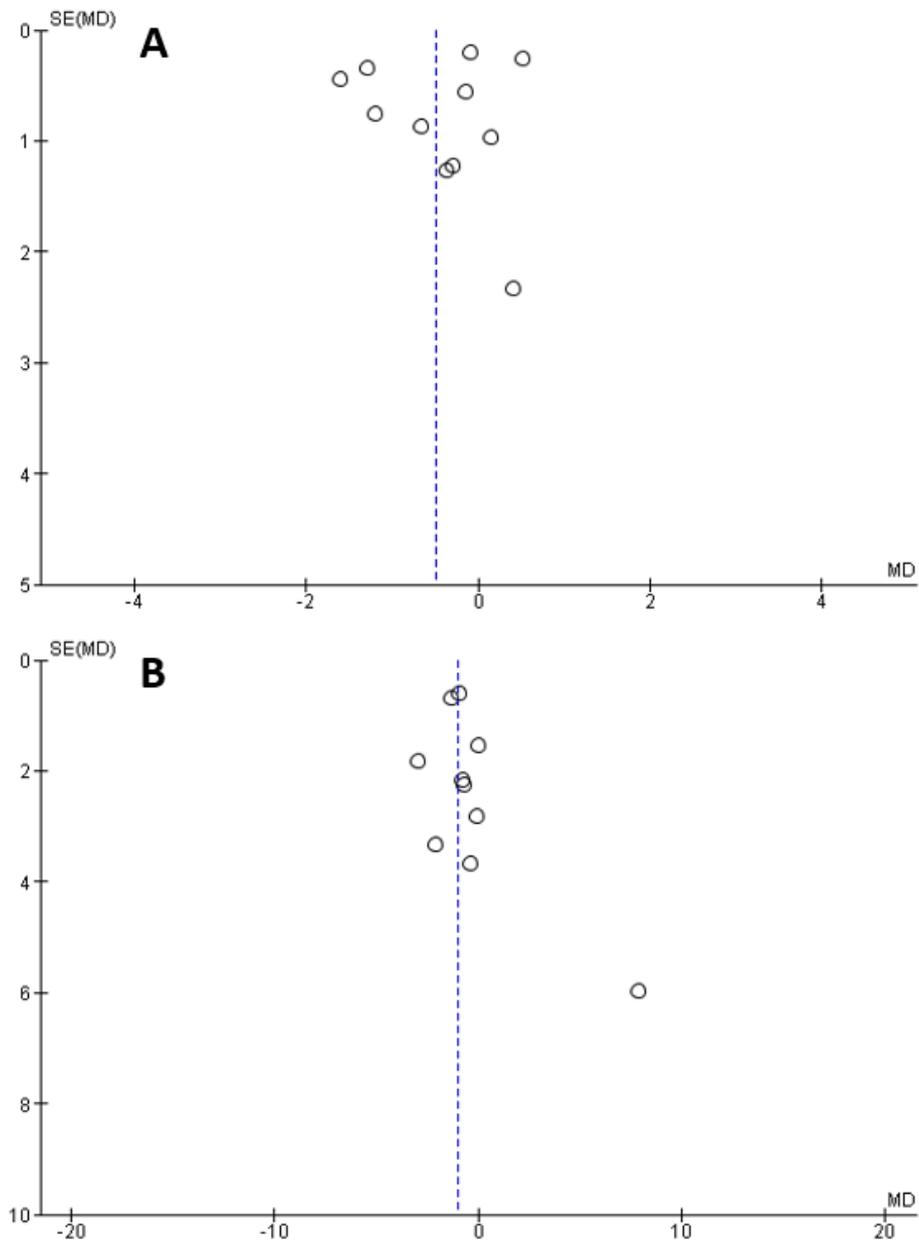


-50 -25 0 25 50  
Favours Exercise Favours Control

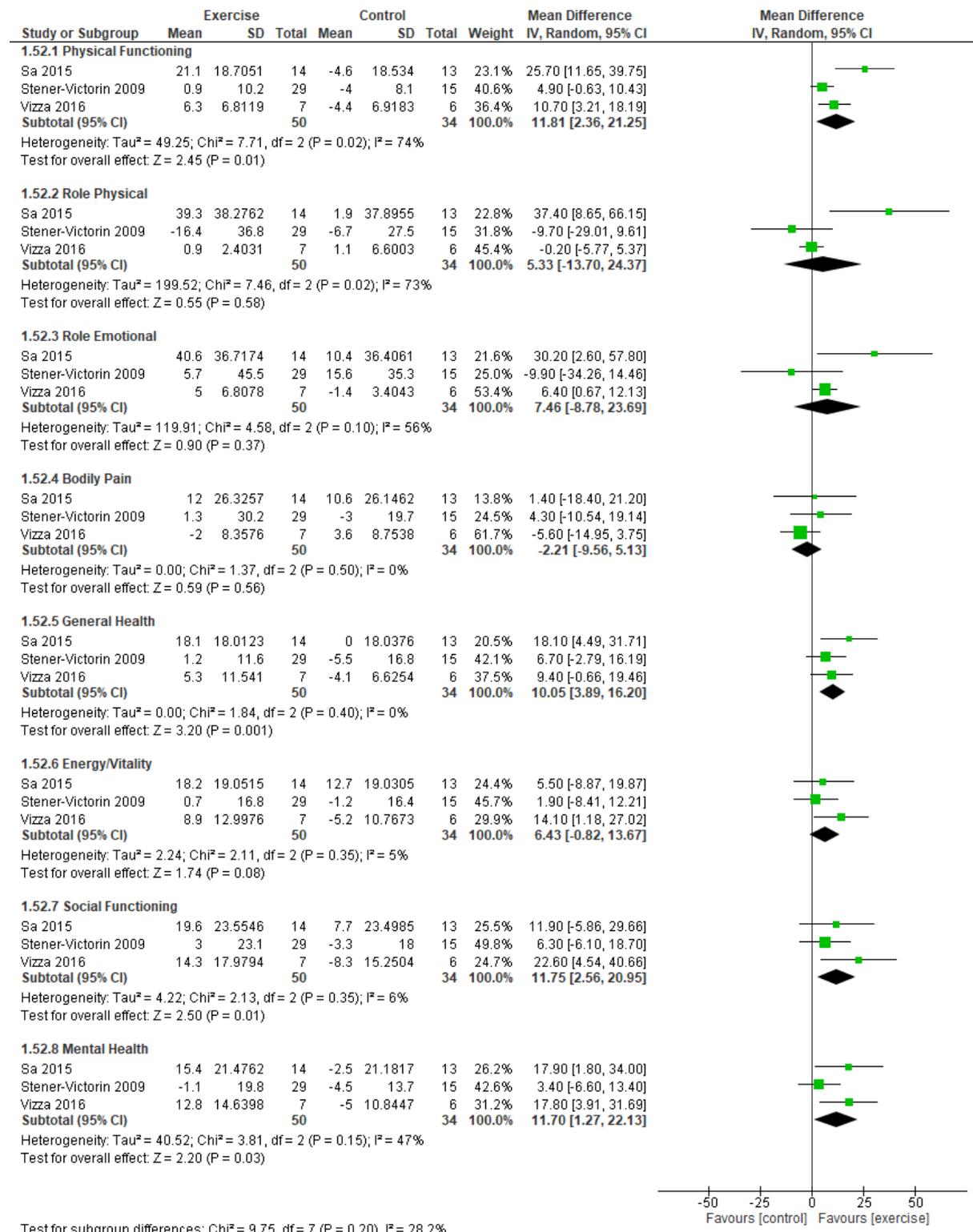
**Supplementary Figure 3** - Forest plot of comparison: Exercise vs. Control. Analysis of resting heart rate sub-groups by intervention type.



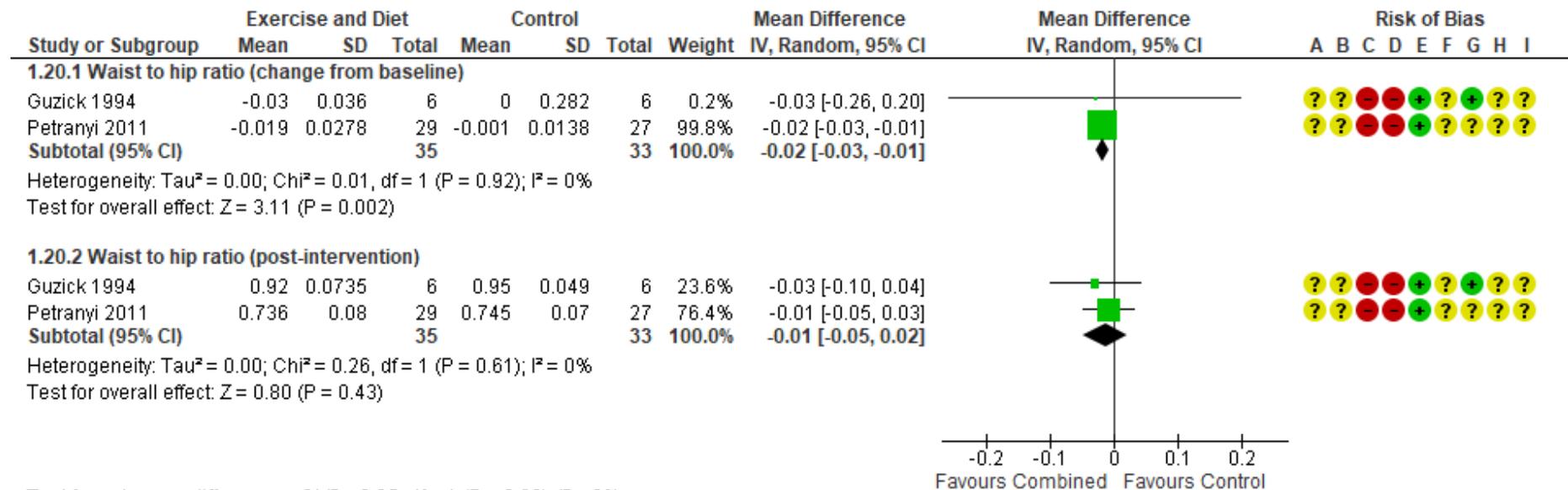
**Supplementary Figure 4.** A: Funnel plot of comparison: Exercise vs. Control, outcome: BMI (change from baseline). B: Funnel plot of comparison: Exercise vs. Control, outcome: BMI (post-intervention).



**Supplementary Figure 5.** Forest plot of comparison: Exercise vs. Control, change from baseline; Outcome: SF-36 Domains.



**Supplementary Figure 6.** Forest plot of comparison: Exercise and Diet vs. Control; outcome: Waist to Hip Ratio.

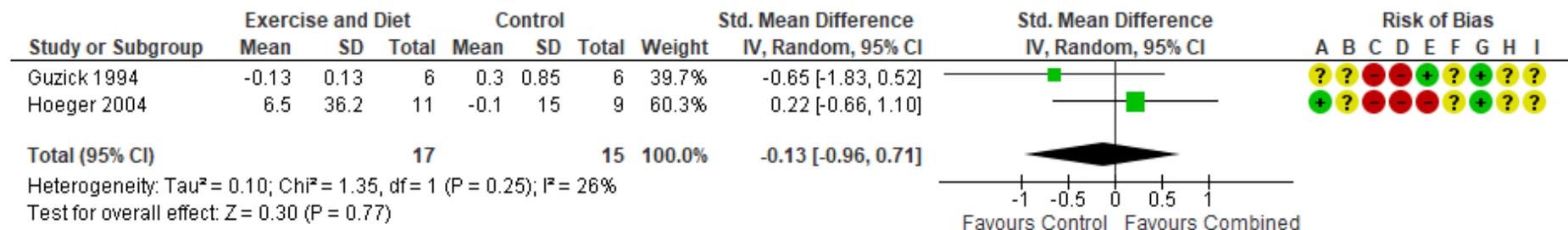


Test for subgroup differences: Chi<sup>2</sup> = 0.05, df = 1 (P = 0.83), I<sup>2</sup> = 0%

Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Group similarity at baseline (other bias)
- (H) Adherence (other bias)
- (I) Contamination (other bias)

**Supplementary Figure 7.** Forest plot of comparison: Exercise and Diet vs. Control, change from baseline. Outcome: Sex-hormone binding globulin (SHBG).



Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Group similarity at baseline (other bias)
- (H) Adherence (other bias)
- (I) Contamination (other bias)