

Table 5. The short- (ST), medium- (MT) and long-term (LT) effects of RET on all outcomes reported in healthy young adults aged 18-40 years.

Blood marker	Number of studies	Number of participants		Mean difference [95% CI]	P values	Heterogeneity	
		RT	CON				
SBP (mmHg) <i>MT</i>	11	150	122	-0.56 [-1.57, 0.44] †	0.27	$\chi^2 = 49.4, I^2 = 80\%, P < 0.00001$	
DBP (mmHg) <i>MT</i>	11	150	124	-0.81 [-1.59, -0.04] †	0.04*	$\chi^2 = 41.91, I^2 = 76\%, P < 0.00001$	
MAP (mmHg) <i>MT</i>	4	44	41	3.48 [2.09, 4.87] #	< 0.00001*	$\chi^2 = 4.19, I^2 = 28\%, P = 0.24$	
RHR (bpm) <i>MT</i>	12	157	130	0.12 [-0.79, 1.03]	0.79	$\chi^2 = 163.07, I^2 = 93\%, P < 0.00001$	
VO₂max (ml/kg/min)	<i>ST</i>	3	31	24	2.53 [-0.01, 5.07] †	0.05*	$\chi^2 = 5.06, I^2 = 61\%, P = 0.08$
	<i>MT</i>	11	161	126	0.91 [0.29, 1.53] †	0.004*	$\chi^2 = 28.23, I^2 = 65\%, P = 0.002$
	<i>LT</i>	2	33	39	-1.35 [-4.03, 1.33] #	0.32	$\chi^2 = 0.01, I^2 = 0\%, P = 0.91$
Total Cholesterol (mg/dL) <i>MT</i>	6	63	67	6.23 [2.97, 9.49] #	0.0002*	$\chi^2 = 83.22, I^2 = 94\%, P < 0.00001$	
HDL-chol (mg/dL) <i>MT</i>	6	78	76	1.85 [0.74, 2.97] †	0.001*	$\chi^2 = 42.3, I^2 = 88\%, P < 0.00001$	
LDL-chol (mg/dL) <i>MT</i>	6	78	76	-0.30 [-2.49, 1.88] †	0.78	$\chi^2 = 70.26, I^2 = 93\%, P < 0.00001$	
Triglycerides (mg/dL) <i>MT</i>	5	70	65	1.74 [0.04, 3.44] #	0.04*	$\chi^2 = 9.64, I^2 = 59\%, P = 0.05$	
Fasted glucose (mg/dL) <i>MT</i>	4	40	43	3.12 [2.02, 4.22] #	< 0.00001*	$\chi^2 = 21.93, I^2 = 86\%, P < 0.0001$	

* Indicates statistical significance. † Indicates favouring resistance exercise training. # Indicates favouring control. ST - short term, MT – medium term, LT – long term, VO₂max – aerobic capacity, HDL-chol – high density lipoprotein cholesterol, LDL-chol – low density lipoprotein cholesterol.