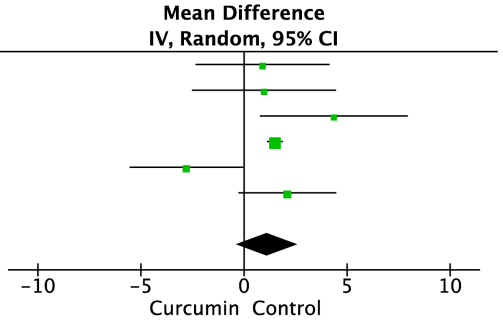
A

Study or Subgroup	Curcumin Mean	Curcumin SD	Curcumin Total	Control Mean	Control SD	Control Total	Weight	Mean Difference IV, Random, 95% CI	Year
Upadhyay et al.,2023	33.43	5.33	30	32.53	7.36	30	12.6%	0.90 [-2.35, 4.15]	2023
Piyush et al., 2019	25.4	7.2	30	24.43	6.6	30	11.5%	0.97 [-2.53, 4.47]	2019
Rai et al., 2019	30.9	7.91	40	26.54	8.35	39	11.1%	4.36 [0.77, 7.95]	2019
Saran et al., 2018	33.2	0.7	30	31.7	0.8	30	31.8%	1.50 [1.12, 1.88]	2018
Hazarey et al., 2015	21.13	4.54	15	23.93	2.98	15	15.3%	-2.80 [-5.55, -0.05]	2015
Yadav et al., 2014	24.5	3.3	20	22.4	4.3	20	17.7%	2.10 [-0.28, 4.48]	2014
Total (95% CI)			**165**			**164**	**100.0%**	**1.13 [-0.35, 2.61]**	

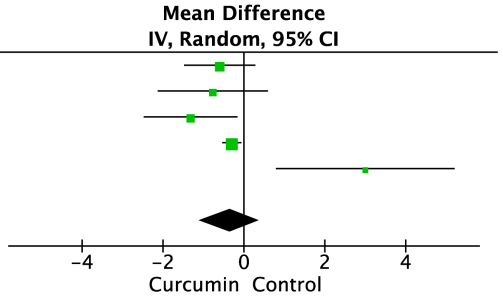
Heterogeneity: $Tau^2 = 1.75$; $Chi^2 = 12.25$, df = 5 (P = 0.03); $I^2 = 59\%$
Test for overall effect: Z = 1.50 (P = 0.13)



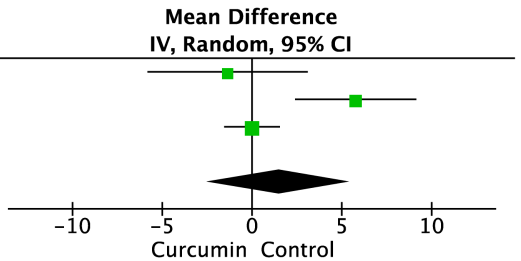
B

Study or Subgroup	Curcumin Mean	Curcumin SD	Curcumin Total	Control Mean	Control SD	Control Total	Weight	Mean Difference IV, Random, 95% CI	Year
Upadhyay et al.,2023	6.1	1.75	30	6.7	1.73	30	23.3%	-0.60 [-1.48, 0.28]	2023
Piyush et al., 2019	6.03	3.1	30	6.8	2.2	30	16.1%	-0.77 [-2.13, 0.59]	2019
Rai et al., 2019	5.3	2.32	40	6.62	2.9	39	18.8%	-1.32 [-2.48, -0.16]	2019
Saran et al., 2018	6.23	0.52	30	6.53	0.4	30	33.1%	-0.30 [-0.53, -0.07]	2018
Hazarey et al., 2015	6.4	2.3	15	3.4	3.71	15	8.6%	3.00 [0.79, 5.21]	2015
Total (95% CI)			**145**			**144**	**100.0%**	**-0.35 [-1.10, 0.40]**	

Heterogeneity: $Tau^2 = 0.43$; $Chi^2 = 12.35$, df = 4 (P = 0.01); $I^2 = 68\%$
Test for overall effect: Z = 0.92 (P = 0.36)



C

Study or Subgroup	Curcumin Mean	Curcumin SD	Curcumin Total	Control Mean	Control SD	Control Total	Weight	Mean Difference IV, Random, 95% CI
Piyush et al., 2019	25.27	10.1	30	26.63	7.3	30	27.6%	-1.36 [-5.82, 3.10]
Rai et al., 2019	26.85	8.73	40	21.08	6.43	39	32.5%	5.77 [2.39, 9.15]
Yadav et al., 2014	18.7	2.5	20	18.7	2.5	20	39.9%	0.00 [-1.55, 1.55]
Total (95% CI)			**90**			**89**	**100.0%**	**1.50 [-2.46, 5.46]**

Heterogeneity: $Tau^2 = 9.62$; $Chi^2 = 10.25$, df = 2 (P = 0.006); $I^2 = 80\%$
Test for overall effect: Z = 0.74 (P = 0.46)