

Difference between morphology NMA estimated relative effect compared to placebo and ranks																							
Ranks in italics, and bold diagonal is relative effect and rank compared to placebo																							
Intervention	Antioxidants	Coenzyme Q10	Folic acid	Herb/Mineral supplement	L-carnitine/L-acetylcarnitine	L-carnitine+cinn	Magnesium	Micronutrient supplement	N-acetyl cysteine	Nigella sativa seed oil	Omega-3 fatty acids	Prelox	Saffron	Selenium supplements	Vitamin C/E	Vitamin D3	Vitamin D3 + calcium	Vitamin/Miner comb	Vitamin/Miner supplements	VitaminsE	Walnuts	Zinc/Zinc + folic acid	Placebo/No treatment
Antioxidants	2.74 (-2.36, 7.79) 10 (3, 21)	-3.09 (-2.19, -4.17) 6 (4, 2)	-2.91 (-1.99, -3.67) 6 (3, 2)	-3.27 (-7.9, 1.6) 5 (0, 2)	-0.78 (1.35, -2.82) 1 (2, -3)	7.97 (8.32, 7.52) -8 (-2, -16)	6.65 (0.6, 12.99) -6 (-2, -2)	-0.53 (-2.3, 1.21) 1 (0, 1)	-1.26 (-3.45, 1.19) 3 (2, 0)	6.92 (2.34, 11.27) -6 (-2, -5)	-1.41 (0.97, -3.74) 2 (3, -1)	2.31 (-0.22, 4.81) -3 (-2, 0)	-2.49 (-4.63, -0.07) 5 (0, 2)	-1.16 (-2.4, 0.07) 2 (0, 1)	-2.13 (-1.31, -2.8) 4 (2, 1)	-3.05 (-3.92, -2.23) 6 (2, 2)	-3.34 (-6.32, -0.51) 6 (1, 2)	-1.53 (-5.26, 2.4) 3 (-1, 2)	-0.97 (-1.45, -0.4) 2 (0, 1)	-2.82 (-6.64, 0.6) 5 (0, 2)	-2.23 (-6.68, 2.24) 4 (0, 2)	-2.61 (-0.98, -4.08) 5 (4, 1)	NA 6 (9, -1)
Coenzyme Q10	3.09 (2.19, 4.17) -6 (-4, -2)	-0.34 (-4.55, 3.62) 16 (7, 23)	0.18 (0.2, 0.5) 0 (1, 0)	-0.18 (-5.71, 5.77) -1 (-4, 0)	2.31 (3.54, 1.34) -5 (-2, -5)	11.06 (10.5, 11.69) -14 (-6, -18)	9.74 (2.78, 17.16) -12 (-6, -4)	2.55 (-0.11, 5.38) 5 (-4, -1)	1.83 (-1.26, 5.36) -4 (-4, 0)	10.01 (4.53, 15.44) -13 (-6, -7)	1.68 (3.16, 0.43) -4 (-1, -3)	5.4 (1.97, 8.98) -9 (-6, -2)	0.59 (-2.45, 4.1) -2 (-4, 0)	1.93 (0.88, 1.37) -4 (-4, -1)	0.96 (-0.22, 4.23) 0 (2, 0)	0.04 (-1.74, 1.94) 0 (2, 0)	-0.25 (-4.13, 3.66) 0 (-3, 0)	1.56 (-3.07, 6.57) -3 (-5, 0)	2.12 (0.73, 3.77) -4 (-4, -1)	0.27 (-4.46, 4.77) -1 (-4, 0)	0.86 (-4.49, 6.41) -2 (-4, 0)	0.48 (1.21, 0.09) -1 (0, -1)	NA 0 (5, -3)
Folic acid	2.91 (1.99, 3.67) -6 (-3, -2)	-0.18 (-0.2, 0.5) 0 (1, 0)	-0.17 (-4.35, 4.12) 16 (6, 23)	-0.36 (-5.91, 5.27) 0 (-3, 0)	2.14 (3.94, 0.84) -5 (-1, -5)	10.88 (10.31, 11.19) -14 (-5, -18)	9.56 (2.58, 16.66) -11 (-5, -4)	2.38 (-0.31, 4.88) 5 (-3, -1)	1.65 (-1.46, 4.86) -3 (-3, 0)	9.84 (4.33, 14.94) -12 (-5, -7)	1.51 (2.96, -0.07) 0 (2, 0)	5.22 (1.77, 8.48) -9 (-5, -2)	0.42 (-2.65, 3.6) -4 (-3, 0)	1.76 (0.41, 3.73) 0 (2, 0)	0.79 (0.68, 0.87) 0 (2, 0)	-0.13 (-1.93, 1.44) 0 (2, 0)	-0.43 (-4.33, 3.16) 0 (2, 0)	1.38 (-3.27, 6.07) -3 (-4, 0)	1.95 (0.54, 3.27) -4 (-3, -1)	0.09 (-4.66, 4.27) -1 (-3, 0)	0.68 (-4.69, 5.91) -2 (-3, 0)	0.3 (1.01, -0.41) -1 (-1, -1)	NA 0 (6, -3)
Herb/Mineral supplement	3.27 (7.9, -1.6) -5 (0, -2)	0.18 (5.71, -5.77) 1 (4, 0)	0.36 (5.91, -5.27) 0 (3, 0)	-0.52 (-10.26, 9.39) 15 (3, 23)	2.49 (9.25, -4.42) -4 (-2, -5)	11.24 (16.22, 5.92) -13 (-2, -18)	9.92 (5.6, -0.39) -4 (0, -1)	2.73 (-11.76, -6.33) -3 (0, 0)	2.01 (4.45, -0.41) -3 (0, 0)	10.19 (10.24, 9.67) -12 (-2, -7)	1.86 (8.87, -5.34) -3 (3, -3)	5.58 (7.68, 3.21) -8 (-2, -2)	0.77 (1.26, 1.67) -1 (0, 0)	2.11 (5.5, -1.53) -3 (0, -1)	1.14 (6.59, -4.4) -1 (2, -1)	0.22 (3.98, -3.82) 0 (2, 0)	-0.07 (1.58, -2.1) 0 (2, 0)	1.74 (2.64, 0.8) 2 (-1, 0)	2.3 (6.45, -2) -4 (0, -1)	0.45 (1.26, -1) 0 (0, 0)	1.04 (1.22, 0.64) -1 (0, 0)	0.66 (6.92, -5.68) 0 (4, -1)	NA 1 (9, -3)
L-carnitine/L-acetylcarnitine	0.78 (-1.35, 2.82) -1 (-2, 3)	-2.31 (-3.54, -1.34) 5 (2, 5)	-2.14 (-3.34, -0.84) 5 (1, 5)	-2.49 (-9.25, 4.42) 4 (2, 5)	-1.97 (-1.01, 4.96) 11 (5, 18)	-0.49 (6.96, 10.34) -9 (-4, -13)	7.43 (-0.76, 15.82) -7 (4, -1)	0.24 (-3.65, 4.03) 2 (2, 5)	-0.48 (4.8, 4.02) 2 (2, 5)	7.7 (0.99, 14.09) -4 (0, -1)	-0.63 (-0.38, -0.91) -4 (-4, 3)	3.09 (-1.57, 7.64) -5 (99, 2.75)	-1.72 (-3.76, 2.89) -3 (2, 5)	-0.38 (-3.76, 2.89) 3 (0, 4)	-1.35 (-2.66, 0.02) 5 (0, 5)	-2.27 (-5.28, 0.6) 2 (2, 0)	-2.56 (-7.67, 2.32) 2 (-3, 5)	-0.76 (-6.61, 5.23) 1 (2, 4)	-0.19 (-2.81, 2.42) -1 (2, 4)	-2.04 (-8, 3.42) 4 (2, 5)	-1.45 (-8.03, 5.06) 3 (-2, 5)	-1.84 (-2.33, -1.25) 4 (2, 4)	NA 5 (7, 2)
L-carnitine+cinn	-7.97 (-8.32, -7.52) 8 (2, 16)	-11.06 (-10.5, -11.69) 14 (6, 18)	-10.88 (-10.31, -11.19) 14 (5, 18)	-11.24 (-16.22, -5.92) 13 (2, 18)	-8.74 (-6.96, -10.34) 9 (4, 13)	-10.71 (-5.96, 15.31) 2 (1, 5)	-1.32 (-7.72, 5.48) 2 (0, 14)	-8.5 (-10.62, -6.31) 2 (0, 18)	-9.23 (-11.76, -6.33) -1 (0, 11)	-1.04 (-5.98, 3.75) -7 (35, 15)	-9.37 (-7.35, -11.26) 5 (0, 16)	-5.66 (-8.54, -2.71) 5 (0, 16)	-10.46 (-12.95, -7.59) 12 (2, 18)	-9.12 (-10.72, -7.45) 10 (2, 17)	-10.09 (-9.63, -10.32) 12 (4, 17)	-11.01 (-12.24, -9.74) 13 (4, 18)	-11.31 (-14.63, -8.02) 14 (3, 19)	-9.5 (-13.58, -5.12) 11 (1, 18)	-8.93 (-9.77, -7.92) 10 (2, 17)	-10.79 (-14.96, -6.92) 13 (2, 18)	-10.2 (-15, -5.28) 12 (2, 18)	-10.58 (-9.29, -11.6) 13 (6, 17)	NA 14 (11, 15)
Magnesium	-6.65 (-0.6, -12.99) 6 (2, 2)	-9.74 (-2.78, -17.16) 12 (6, 4)	-9.56 (-2.58, -16.66) 11 (5, 4)	-9.92 (-8.49, -11.4) 7 (2, 4)	-7.43 (0.76, -15.82) -8 (1, 19)	9.4 (7.72, -5.48) -1 (0, 19)	-0.24 (-2.89, -11.79) 8 (2, 3)	9.1 (-4.04, -1.8) 8 (2, 4)	-0.73 (-1.15, -0.02) 1 (0, 1)	7.46 (4.64, 10.06) -7 (-2, -6)	-0.87 (-2.08, 0.34) -4 (-2, -1)	2.84 (2.08, 3.6) -4 (-2, -1)	-1.96 (-3.26, -0.6) 3 (0, 1)	-0.62 (-0.1, -1.14) 1 (0, 0)	-1.59 (0.99, -4.01) 3 (2, 0)	-2.51 (-1.62, -3.43) 5 (2, 1)	-2.81 (-4.02, -1.71) 5 (1, 1)	1 (0.85, -1.61) 2 (-1, 1)	-0.43 (-2.96, 1.19) 1 (0, 0)	-2.29 (-4.34, -0.61) 4 (0, 1)	-1.69 (-4.38, 1.03) 3 (0, 1)	-2.08 (1.32, -5.29) 4 (4, 0)	NA 5 (9, -2)
Micronutrient supplement	0.53 (2.3, -1.21) -1 (0, -1)	-2.55 (0.11, -5.38) 5 (4, 1)	-2.38 (0.31, -4.88) 5 (3, 1)	-2.73 (-5.62, 0.39) 4 (0, 1)	-0.24 (3.65, -4.03) 0 (2, -4)	8.5 (6.62, 6.31) -9 (-2, -1)	7.19 (2.89, 11.79) -7 (-2, -3)	2.21 (-4.66, 9) 11 (3, 22)	-0.73 (-1.15, -0.02) 1 (0, 1)	7.46 (4.64, 10.06) -7 (-2, -6)	-0.87 (-2.08, 0.34) -4 (-2, -1)	2.84 (2.08, 3.6) -4 (-2, -1)	-1.96 (-3.26, -0.6) 3 (0, 1)	-0.62 (-0.1, -1.14) 1 (0, 0)	-1.59 (0.99, -4.01) 3 (2, 0)	-2.51 (-1.62, -3.43) 5 (2, 1)	-2.81 (-4.02, -1.71) 5 (1, 1)	1 (0.85, -1.61) 2 (-1, 1)	-0.43 (-2.96, 1.19) 1 (0, 0)	-2.29 (-4.34, -0.61) 4 (0, 1)	-1.69 (-4.38, 1.03) 3 (0, 1)	-2.08 (1.32, -5.29) 4 (4, 0)	NA 5 (9, -2)
N-acetyl cysteine	1.26 (3.45, -1.19) -3 (0, -2)	-1.83 (1.26, -5.36) 4 (4, 0)	-1.65 (1.46, -4.86) 3 (3, 0)	-2.01 (-4.45, 0.41) 3 (0, 0)	0.48 (4.8, -4.02) -2 (2, -5)	9.23 (11.76, 6.33) -10 (-5, -18)	7.91 (4.04, 11.8) -8 (-2, -4)	0.73 (1.15, 0.02) 1 (0, 1)	1.48 (-5.81, 8.98) 12 (3, 23)	8.18 (5.79, 10.08) -9 (-2, -7)	-0.15 (-4.42, -4.93) -5 (-2, -2)	3.57 (3.23, 3.62) -2 (2, -2)	-1.23 (-1.19, 1.26) 0 (2, 0)	0.1 (1.04, -1.13) 0 (0, -1)	-0.87 (2.14, -3.99) 2 (2, -1)	-1.79 (-0.48, -3.42) 3 (2, 0)	-2.08 (-2.87, -1.7) 0 (-1, 0)	-0.27 (-1.81, 1.21) 0 (-1, 0)	0.29 (1.99, -1.59) -1 (0, -1)	-1.56 (-3.2, -0.6) 2 (0, 0)	-0.97 (-3.23, 1.04) 2 (0, 0)	-1.35 (-2.47, -5.27) 3 (4, -1)	NA 3 (9, -3)
Nigella sativa seed oil	-6.92 (-2.34, -11.27) 6 (2, 5)	-10.01 (-4.53, -15.44) 13 (6, 7)	-9.84 (-4.33, -14.94) 12 (5, 7)	-10.19 (-10.24, -9.67) 12 (2, 7)	-7.7 (-0.99, -14.09) 7 (4, 2)	1.04 (5.98, -3.75) -1 (0, -1)	-0.27 (-1.75, 1.72) 1 (0, 3)	-7.46 (-4.64, -10.06) 7 (2, 6)	-8.18 (-10.79, -10.08) 9 (2, 7)	9.67 (-0.02, 19.06) 4 (1, 16)	-8.33 (-2.56, -12.6) 9 (5, 4)	-4.62 (-6.98, -11.34) 11 (7, 2)	-9.42 (-4.74, -11.2) 9 (2, 6)	-8.08 (-3.65, -14.07) 10 (4, 6)	-9.05 (-9.63, -14.07) 10 (4, 6)	-9.97 (-6.26, -13.5) 12 (4, 7)	-10.27 (-8.66, -11.78) 12 (3, 7)	-8.46 (-7.6, -8.87) 9 (1, 7)	-7.89 (-11.67, -4.5) 8 (2, 6)	-9.74 (-8.99, -10.67) 11 (2, 7)	-9.15 (-9.02, -9.03) 10 (2, 7)	-9.54 (-3.32, -15.35) 12 (6, 6)	NA 12 (11, 4)
Omega-3 fatty acids	1.41 (-0.97, 3.74) -2 (-3, 1)	-1.68 (-3.16, -0.43) 4 (1, 3)	-1.51 (-2.96, 0.07) 3 (0, 3)	-1.86 (-8.87, 5.34) 3 (3, 3)	0.63 (0.38, 0.91) -1 (-1, -2)	9.37 (7.35, 11.26) -10 (-5, -18)	8.06 (-0.38, 16.73) -3 (2, 0)	0.87 (-4.42, 4.93) -5 (-2, -2)	0.15 (-1.19, 8.55) -5 (-5, -4)	8.33 (-1.39, 4.05) 12 (6, 20)	3.72 (-1.19, 8.55) -5 (-5, -4)	3.72 (-1.19, 8.55) -5 (-5, -4)	-1.09 (-5.61, 3.67) 2 (-3, 3)	0.25 (-3.37, 3.8) 0 (3, 2)	-0.72 (-2.28, 0.93) 3 (2, 0)	-1.64 (-4.89, 1.51) 3 (2, 0)	-1.93 (-7.29, 3.23) 1 (-3, 2)	-0.44 (-6.23, 6.14) -1 (-3, 2)	-2.42 (-2.42, 3.33) 3 (3, 3)	-7.62 (-7.62, 4.33) 3 (3, 3)	-1.41 (-7.65, 5.97) 2 (-3, 3)	-1.21 (-1.95, -0.34) 3 (1, 2)	NA 4 (6, 0)
Prelox	-2.31 (0.22, -4.81) 3 (2, 0)	-5.4 (-1.97, -8.98) 9 (6, 2)	-5.22 (-1.77, -8.48) 9 (5, 2)	-5.58 (-3.98, 3.82) 8 (2, 2)	-3.09 (1.57, -7.64) 4 (4, -3)	5.66 (8.54, 2.71) -5 (0, -16)	4.34 (0.82, 8.18) -3 (0, -2)	-2.84 (-2.08, -3.6) 4 (2, 1)	-3.57 (-3.23, -3.62) 5 (2, 2)	4.62 (2.56, 6.46) -4 (0, -5)	-3.72 (-1.19, -8.55) 5 (5, -1)	5.05 (-2.58, 12.6) 7 (1, 21)	-4.8 (-4.41, -4.88) 7 (2, 2)	-3.46 (-2.18, -4.75) 5 (2, 1)	-4.44 (-1.09, -7.61) 7 (4, 1)	-5.36 (-3.7, -7.04) 8 (4, 2)	-5.65 (-6.1, -5.32) 9 (3, 2)	-3.84 (-5.04, -2.41) 6 (1, 2)	-3.27 (-1.23, -5.3) 5 (2, 1)	-5.13 (-0.76, -8.89) 8 (6, 1)	-4.92 9 (11, -1)	NA	
Saffron	2.49 (4.63, 0.07) -5 (0, -2)	-0.59 (2.45, -4.1) 2 (4, 0)	-0.42 (2.65, -3.6) 1 (3, 0)	-0.77 (-3.26, 1.67) 7 (0, 0)	1.72 (5.99, -2.75) -4 (-2, -5)	10.46 (12.95, 7.59) -12 (-2, -18)	9.15 (5.23, 13.06) -10 (-2, -4)	1.96 (2.34, 1.28) -3 (0, -1)	1.23 (1.19, 1.26) -2 (0, 0)	9.42 (6.98, 11.34) -11 (-2, -7)	1.09 (5.61, -3.67) -2 (3, -3)	4.8 (4.41, 4.88) -7 (-2, -2)	0.25 (-6.99, 7.72) 14 (3, 23)	1.34 (2.23, 0.14) -2 (0, -1)	0.37 (3.32, -2.73) 0 (2, -1)	-0.55 (0.71, -2.16) 1 (2, 0)	-0.85 (-1.68, -0.44) -2 (-1, 0)	0.96 (-0.62, 2.47) 3 (0, -1)	1.53 (3.18, -0.33) 0 (0, 0)	-0.33 (-2.01, 0.67) -1 (0, 0)	0.27 (-2.04, 2.31) -1 (4, -1)	-0.12 (3.66, -4.01) 1 (4, -1)	NA 1 (9, -3)
Selenium supplements	1.16 (2.4, -0.07) -2 (0, -1)	-1.93 (0.22, -4.23) 4 (4, 1)	-1.76 (0.41, -3.73) 4 (3, 1)	-2.11 (-5.5, 1.53) 3 (0, 1)	0.38 (3.76, -2.89) -1 (2, -4)	9.12 (10.72, 7.45) -10 (-2, -17)	7.81 (3, 12.93) -8 (-2, -3)	0.62 (0.1, 1.14) -1 (0, 1)	-0.1 (-1.04, 1.13) 0 (0, 1)	8.08 (4.74, 11.2) -9 (-2, -6)	-0.25 (-2.23, -0.14) 0 (3, 2)	3.46											