

Online Appendix 3: Results for HbA_{1c}, blood glucose and blood pressure from studies that assessed these outcomes

Authors Year	HbA _{1c} [% (mmol/mol)]		Blood glucose (mg dl ⁻¹)		Blood pressure (mmHg)		
	Change from baseline to final follow-up	Difference in change between groups ^a	Change from baseline to final follow-up	Difference in change between groups ^a	Change from baseline to final follow-up	Difference in change between groups ^a	
Adams et al. 2015 (20)	IG: 7.3 (57) to 7.3 (56) CG: 7.6 (60) to 7.6 (60)	-0.05 (-0.46) ^b	-	-	SBP	IG: 132.48 to 132.26 CG: 131.65 to 127.98	3.45 ^b
					DBP	IG: 73.22 to 73.38 CG: 72.13 to 70.97	1.32 ^b
Adepu and Ari 2010 (21)	-	-	IG: significant decrease (P=0.001) CG: non-significant decrease (P=0.798)	-	-	-	-
Aguiar et al. 2016 (23)	IG: 9.0 (75) to 8.2 (67) (P<0.001) CG: 8.9 (73) to 8.7 (72) (P=0.632)	-0.6 (-7) (P=0.010)	-	-	SBP	IG: 141.1 to 128.6 (P<0.001) CG: 142.8 to 138.4 (P=0.122)	-8.1 (P=0.071)
					DBP	IG: 78.7 to 72.4 (P=0.011) CG: 76.8 to 73.6 (P=0.142)	-3.1 (P=0.3)
Al Mazroui et al. 2009 (24)	IG: 8.5 (69) to 6.9 (52) (P<0.001) CG: 8.4 (68) to 8.3 (67) ^b	-1.5 (-16) ^b	Fasting blood glucose IG: 194.94 to 140.04 CG: 184.68 to 170.64	-40.86 ^b	SBP	IG: 131.4 to 127.2 (P<0.001) CG: 132.6 to 132.1 ^b	-3.7 ^b
					DBP	IG: 85.2 to 76.3 (P<0.001) CG: 83.9 to 84.1 ^b	-9.1 ^b
Butt et al. 2016 (25)	IG: 9.7 (82) to 8.5 (69) (P=0.001) CG: 9.6 (82) to 9.3 (78) (P=0.14)	-0.8 (-9) (P=0.04)	Fasting blood glucose IG: 190.44 to 171.00 (P=0.15) CG: 173.34 to 174.78 (P=0.94)	-20.88 (P=0.86)	-	-	-
Cani et al. 2015 (26)	IG: 9.8 (83) to 9.2 (77) (P<0.001) CG: 9.6 (82) to 9.5 (81) (P>0.999)	-0.5 (-5) ^b	-	-	-	-	-
Chan et al. 2012 (27)	IG: 9.7 (83) to 8.1 (65) CG: 9.5 (80) to 9.1 (76)	-1.2 (-13) (P<0.001)	-	-	SBP	IG: 141 to 134.5 CG: 138 to 134.8	-3.3 (P=0.34)
					DBP	IG: 75 to 72.2 CG: 74 to 73.3	-2.1 (P=0.23)
Chen et al. 2016 (28)	IG: 9.2 (77) to 8.4 (68) (P<0.001) CG: 8.9 (74) to 9.4 (79) (P<0.001)	-1.3 (-14) (P<0.001)	-	-	-	-	-
Choe et al. 2005 (29)	IG: 10.1 (87) to 8.0 (64) CG: 10.2 (88) to 9.3 (78)	-1.2 (-13) (P=0.03)	-	-	-	-	-
Chung et al. 2014 (30)	IG: 9.6 (81) to 8.2 (66) (P<0.001) CG: 9.5 (80) to 9.3 (78) (P=0.265)	-1.2 (-13) ^b	Fasting blood glucose IG: 169.2 to 135.0 (P<0.001) CG: 165.6 to 174.6 (P=0.257)	-43.2 ^b	-	-	-
Cohen et al. 2011 (31)	IG: 7.8 (62) to 7.4 (57) (Sig.) ^b CG: 8.1 (65) to 7.9 (63) (NS) ^b	-0.2 (-2) (NS) ^b	-	-	SBP	IG: 136.1 to 126.9 (Sig.) ^b CG: 136.1 to 135.3 (NS) ^b	-8.4 (Sig.) ^b

Farsaei et al. 2011 (32)	IG: 9.3 (78) to 7.5 (58) (P<0.001) CG: 8.9 (74) to 9.0 (75) (P=0.317)	-1.8 (-21) ^b	Fasting blood glucose IG: 176.6 to 145.8 (P<0.001) CG: 170.4 to 165.9 (P=0.528)	-26.3 ^b	-	-
George et al. 2017 (33)	-	-	Fasting blood glucose IG: 173.23 to 136.45 (P<0.001) CG: 174.97 to 173.41 (P<0.01)	-35.22 ^b	-	-
Ghosh et al. 2010 (34)	-	-	Fasting blood glucose IG: 227 to 180 CG: 227 to 195 Postprandial blood glucose IG: 291 to 194 CG: 291 to 229	-15 ^b -35 ^b	-	-
Goruntla et al. 2019 (35)	IG: 7.79 to 6.91 (p>0.05) CG: 7.78 to 7.49	-0.58 (p=0.0023)	-	-	SBP	IG: 136.75 to 126.23 CG: 136.82 to 135.62 -9.39 P<0.0001
Jaber et al. 1996 (37)	IG: 11.5 (102) to 9.2 (77) (P=0.003) CG: 12.2 (110) to 12.1 (109) ^b	-2.1 (-24) (P=0.021)	Fasting blood glucose IG: 199.8 to 153.0 (P=0.015) CG: 228.6 to 198.0 ^b	-14.4 (NS) ^b	SBP	IG: 147 to 140 (P=0.07) CG: NR -
					DBP	IG: 88 to 82 (P=0.07) CG: NR -
Jacobs et al. 2012 (38)	IG: 9.5 (80) to 7.7 (61) CG: 9.2 (77) to 8.4 (68)	-1.0 (-11) (P<0.05)	-	-	SBP	IG: 142.5 to 132.5 CG: 134.8 to 135.4 -10.6 ^b
					DBP	IG: 79.4 to 72.0 CG: 78.3 to 77.6 -6.7 ^b
Jarab et al. 2012 (39)	IG: 8.5 (69) to 7.7 (61) CG: 8.4 (68) to 8.5 (69)	-0.9 (-10) (P=0.019)	Fasting blood glucose IG: 225.0 to 183.6 CG: 210.6 to 226.8	-57.6 (P=0.014)	SBP	IG: 132 to 126.2 CG: 134 to 135.1 -6.9 (P=0.035)
					DBP	IG: 85 to 77.9 CG: 85 to 86.8 -8.9 (P=0.026)
Javaid et al. 2019 (40)	IG: 11.0 to 7.7 (p<0.0001) CG: 10.7 to 9.7	-2 (-20) P<0.0001	Estimated Average Blood Glucose IG: 268.0 to 174.0 CG: 261.0 to 232.0	P=0.025	SBP	IG: 145 to 124 (P<0.0001) CG: 133.0 to 137.0 (P=0.082) P<0.0001
					DBP	IG: 94.0 to 87.0 (P<0.0001) CG: 85.0 to 89.0 (P=0.03) P<0.0001
Korcegez et al. 2017 (41)	IG: 8.3 (67) to 7.6 (59) (P<0.001) CG: 8.3 (67) to 8.3 (67) (P=0.671)	-0.7 (-8) (P<0.001)	Fasting blood glucose IG: 214.96 to 184.68 (P<0.001) CG: 218.13 to 195.48 (P=0.001)	-7.74 (P=0.410)	SBP	IG: 132.27 to 125.47 (P=0.002) CG: 132.08 to 133.51 (P=0.415) -8.22 (P=0.011)
					DBP	IG: 81.18 to 78.80 (P=0.035) CG: 82.46 to 83.50 (P=0.558) -3.41 (P=0.042)
Lim et al. 2016 (42)	IG: 10.1 (87) to 9.2 (77) (P=0.001) CG: 9.7 (83) to 9.6 (82) (P=0.491)	-0.8 (-9) (P=0.011)	Fasting blood glucose IG: 204.3 to 142.2 (P=0.002) CG: 167.94 to 181.98 (P=0.338)	-76.32 (P=0.002)	SBP	IG: 135.81 to 132.26 (P=0.153) CG: 133.64 to 139.39 (P=0.073) -9.3 (P=0.026)
					DBP	IG: 83.87 to 81.29 (P=0.078) CG: 83.64 to 83.64 (P=0.983) -2.58 (P=0.320)
Mahwi and Obied 2013 (43)	IG: 11.5 (103) to 9.2 (77) (P<0.001) CG: 10.0 (85) to 9.5 (80) (P=0.341)	-1.9 (-20) ^b	Fasting blood glucose IG: 249.4 to 196.4 (P=0.001) CG: 211.1 to 195.4	-37.3 ^b	-	-

			(P=0.196)			
Maidana et al. 2016 (44)	IG: 8.5 (69) to 6.6 (49) (P<0.001) CG: 8.6 (70) to 8.8 (73) (P=0.332)	-2.1 (-23) ^b	IG: 189.7 to 124.0 (P<0.001) CG: 202.8 to 211.9 (P=0.463)	-74.8 ^b	-	-
Mourão et al. 2013 (45)	IG: 9.9 (85) to 9.3 (78) CG: 9.5 (80) to 10.2 (88)	-1.3 (-14) (P=0.001)	Fasting blood glucose IG: 177.7 to 156.3 CG: 174.4 to 187.8	-34.8 (P=0.007)	SBP	IG: 152.9 to 140.8 CG: 140.4 to 137.5 -9.2 (P=0.013)
					DBP	IG: 85.1 to 82.1 CG: 82.9 to 80.4 -0.5 (P=0.809)
Nascimento et al. 2016 (46)	IG: 8.6 (70) to 7.7 (61) (P<0.05) CG: 8.2 (66) to 8.0 (64) (P<0.05)	-0.7 (-8)	Fasting blood glucose IG: 167.4 to 117.3 (P<0.05) CG: 162.33 to 142.2 (P<0.05)	-30.09 (P<0.05)	-	-
Odegard et al. 2005 (47)	IG: 10.2 (88) to 8.2 (66) CG: 10.6 (92) to NR	- (P=0.61)	-	-	-	-
Plaster et al. 2012 (48)	-	-	Fasting blood glucose IG: 198 to 130 (P<0.01) CG: 181 to 173 ^b	-60 ^b	SBP	IG: 138 to 131 CG: 138 to 141 -10 ^b
					DBP	IG: 80 to 78 CG: 80 to 81 -3 ^b
Ramanath and Santhosh 2011 (49)	-	-	Fasting blood glucose IG: 151.13 to 132.50 CG: 138.50 to 146.21 Postprandial blood glucose IG: 219.69 to 178.87 CG: 200.42 to 201.19	-26.34 ^b -41.59 ^b	-	-
Scott et al. 2006 (50)	IG: 8.8 (73) to 7.1 (54) (P=0.003) CG: 8.7 (72) to 8.0 (64) (P<0.05)	-1.0 (-11) (P<0.05)	-	-	SBP	IG: 130.0 to 126.6 CG: 130.7 to 132.8 -5.5 (P=0.023)
					DBP	IG: 79.3 to 75.9 CG: 79.6 to 78.2 -2.0 ^b
Shao et al. 2017 (51)	IG: 7.4 (57) to 6.7 (50) (P<0.001) CG: 7.4 (57) to 7.5 (58) (P=0.410)	-0.78 (-9) ^b	Fasting blood glucose IG: 132.12 to 112.68 (P<0.001) CG: 134.10 to 139.14 (P=0.205)	-24.48 ^b	SBP	IG: 131.99 to 127.58 (P<0.001) CG: 130.00 to 129.46 (P=0.529) -3.87 ^b
					DBP	IG: 82.15 to 80.25 (P=0.018) CG: 80.05 to 81.55 (P=0.014) -3.4 ^b
Siaw et al. 2017 (52)	IG: 8.6 (70) to 8.1 (65) CG: 8.5 (69) to 8.5 (69)	-0.5 (-5) (P=0.04)	-	-	SBP	IG: 129.2 to 126.9 CG: 130.5 to 132.0 -3.8 (P=0.12)
Simpson et al. 2011 (53)	IG: 7.5 (58) to 7.4 (57) CG: 7.3 (56) to 7.3 (57)	-0.2 (-2) (NS) ^b	-	-	SBP	IG: 130.4 to 123.0 (P<0.001) CG: 128.3 to 125.8 (P=0.06) -4.9 (P=0.01)
					DBP	IG: 74.4 to 72.1 (P<0.05) CG: 73.9 to 74.5 ^b -2.9 (P<0.05)
Sriram et al. 2011 (54)	IG: 8.4 (69) to 6.7 (50) (P<0.01) CG: 9.0 (75) to 8.3 (67) (P>0.05)	-1.0 (-11) ^b	Fasting blood glucose IG: 195.57 to 107.25 (P<0.01) CG: 186.00 to 149.57 (P>0.05)	-51.89 ^b	-	-
Suppakitiporn et al. 2005 (55)	IG: 8.2 (66) to 7.9 (63) CG: 8.0 (64) to 8.8 (73)	-1.0 (-11) ^b	Fasting blood glucose IG: 152.36 to 145.20 CG: 150.16 to 159.16	-16.16 ^b	-	-



Wishah et al. 2014 (56)	IG: 8.9 (74) to 7.2 (55) CG: 8.2 (66) to 7.9 (63)	-1.4 (-15) (P<0.05)	Fasting blood glucose IG: 180.2 to 126.9 CG: 159.6 to 158.0	-51.4 (P<0.05)	-	-	
Withidpanyawong et al. 2019 (57)	IG: 9.2 (77) to 7.8 (62) (P<0.001) CG: 9.1 (76) to 8.9 (73) (P=0.270)	-1.16 (-12.71) (P<0.001)	-	-	SBP	IG: 136.73 to 134.09 (P=0.106) CG: 134.14 to 137.34 (P=0.034)	-4.06 (P=0.015)
					DBP	IG: 78.45 to 75.50 (P=0.024) CG: 76.09 to 77.2 (P=0.290)	-0.21 (P=0.198)
Wu et al. 2018 (58)	IG: 8.16 to 7.90 CG: 8.16 to 8.04 (P=0.30)	-0.14 (-1.7) (p = 0.30)	-	-	SBP	-	-1.5 (p=0.12)

^aNegative values indicate IG had greater decrease; positive values indicate CG had greater decrease.

^bP-value not reported.

CG = control group; DBP = diastolic blood pressure; HbA_{1c} = glycosylated hemoglobin; IG = intervention group; NR = not reported; NS = not significant; SBP = systolic blood pressure; Sig. = significant.



