

**Supplementary table 1 Rationale for inclusion of covariables and expected direction of any effect on birth size association**

<b>Characteristic</b>	<b>A priori expected direction of association of characteristic with birthweight</b>	<b>A priori expected direction of difference between Pakistani and White British pregnant women</b>	<b>A priori postulated direction of change in association with adjustment for characteristic</b>
<b>Socioeconomic position</b>	Lower socioeconomic position associated with lower mean birthweight	Pakistani women more likely to be of low socioeconomic position	Attenuation towards the null
<b>Smoking</b>	Mean birthweight lower in infants of mothers who smoke during pregnancy	Pakistani women less likely to smoke	Strengthen away from the null
<b>Alcohol</b>	Mean birthweight lower in infants of mothers who drink heavily during pregnancy	Pakistani women less likely to drink alcohol	Strengthen away from the null
<b>Maternal age</b>	Lower mean birthweight at the extremes of very young and old maternal age	Pakistani women tend to start families younger and continue to an older age	Attenuation towards the null
<b>Parity</b>	Mean birthweight tends to increase with increasing parity to parity 4/5 and then flattens or declines	Pakistani women tend to have higher parity	Strengthen away from the null
<b>Maternal height</b>	Mean birthweight and length higher in infants of taller mothers	Pakistani women tend to be shorter	Attenuation towards the null
<b>Maternal BMI</b>	Mean birthweight higher in infants of women with greater BMI	Pakistani women tend to have a higher BMI	Strengthen away from the null
<b>Maternal glycaemia</b>	Mean birthweight higher in women with gestational diabetes or glucose intolerance	Pakistani women more at risk of diabetes and glucose intolerance	Strengthen away from the null
<b>Maternal hypertensive disorders of pregnancy</b>	Mean birthweight lower in infants of women with pre-eclampsia	Inconsistent results but some evidence that Pakistani women more at risk of pre-eclampsia	Attenuation towards the null

These considerations are specific to the population studied here. For example, in this study all pregnant women over a given time period were invited to participate irrespective of their parity and therefore we a priori hypothesised that parity may strengthen the association in this study, but in a study that restricted participants to women in their first pregnancy, this would not be the case. These assumptions are all concerned with associations with birthweight for which there is a lot of published evidence. Some characteristics would plausibly have different associations with relative fat mass (i.e. in this cohort cord leptin differences following adjustment for birthweight) and skinfolds, but since there is little or no evidence of association of the characteristics with cord leptin/skinfolds in different ethnic groups we have focused here on birthweight only.

**Supplementary table 2 Characteristics of births by ethnicity and generation**

	White British (UK & Ireland)	All Pakistani births	Pakistani sub-groups defined by place of birth of parents				
			Pakistani: Both parents UK born	Pakistani: Mum only UK born	Pakistani: Dad only UK born	Pakistani: Both parents South Asian born	Pakistani: Other
<b>Number of births</b>	4055	4649	492	1192	1104	1411	450
<b>Mean birth weight (g) (sd)</b>	3428 (481)	3195 (461)	3176 (460)	3192 (454)	3178 (454)	3216 (474)	3197 (458)
<b>Low birthweight &lt;2500g N (%)</b>	78 (2)	263 (6)	34 (7)	78 (7)	52 (5)	75 (5)	24 (5)
<b>Sex N (%)</b> Male Female	2082(51) 1973(49)	2373(51) 2275(49)	247(50) 245(50)	624(52) 567(48)	538(49) 566(51)	716(51) 695(49)	248(55) 202(44)
<b>Maternal age N (%)</b> 19 & under	453(11)	108(2)	15(3)	27(2)	18(2)	10(0.5)	38(9)
20-29	2256(56)	2865(62)	317(65)	763(64)	752(68)	708(50)	325(72)
30-39	1264(31)	1582(34)	157(31.5)	372(31)	326(29)	645(46)	82(18)
40 & over	82(2)	94(2)	3(0.5)	30(3)	8(1)	48(3.5)	5(1)
<b>Mean maternal height (sd)</b>	1.64(6.2)	1.60(5.7)	1.61(5.6)	1.60(5.6)	1.59(5.4)	1.59(5.6)	1.61(6.4)
<b>Mean maternal BMI (sd)</b>	27(6.1)	26(5.4)	24(4.6)	27(5.8)	24(4.6)	26(5.5)	25(5.4)
<b>Mean gestation at delivery (weeks) (sd)</b>	39.6(1.2)	39.4(1.2)	39.4(1.2)	39.4(1.2)	39.4(1.1)	39.3(1.2)	39.3(1.1)
<b>Smoked cigarettes during pregnancy (%) N=8690</b> Yes No	1339 (33) 2713 (67)	144 (3) 4494 (97)	26 (5) 465 (95)	59 (5) 1130 (95)	7 (0.5) 1093 (99.5)	20 (1) 1388 (99)	32 (7) 418 (93)
<b>Drank alcohol during pregnancy (%) N=8689</b> Yes No	291 (7) 3762 (93)	0 4636 (100)	0 491 (100)	0 1190 (100)	0 1099 (100)	0 1407 (100)	0 449 (100)
<b>Mean maternal fasting blood glucose</b>	4.4(0.4)	4.6(0.6)	4.6(0.5)	4.6(0.6)	4.5(0.5)	4.7(0.7)	4.6(0.5)
<b>Mean maternal postload blood glucose</b>	5.4(1.3)	5.9(1.7)	5.6(1.3)	5.8(1.6)	5.8(1.5)	6.2(1.9)	5.7(1.5)
<b>Maternal hypertension N (%)</b> Mild / moderate	174(4)	132(3)	11(2)	42(4)	21(2)	49(3)	9(2)
Severe	32(1)	29(0.5)	1(0.5)	8(1)	9(1)	8(0.5)	3(0.5)
<b>Pre-eclampsia N (%)</b>	76(2)	74(2)	7(1)	30(3)	10(1)	21(2)	6(1)

<b>Parity N (%)</b>							
0	1891(48)	1404(32)	200(43)	367(32)	307(29)	326(24)	204(46)
1	1237(32)	1183(26)	122(26)	295(26)	305(29)	334(25)	127(29)
2	507(13)	930(21)	81(17)	237(21)	231(22)	311(23)	70(16)
3	172(4)	564(13)	47(10)	140(12)	136(13)	219(16)	22(5)
4 or more	111(3)	368(8)	16(4)	98(9)	74(7)	163(12)	17(4)
<b>Married N (%)</b>	<b>1317(32)</b>	<b>4538(98)</b>	<b>467(95)</b>	<b>1165(98)</b>	<b>1092(99)</b>	<b>1396(99)</b>	<b>418(93)</b>
<b>Living with a partner N (%)</b>	<b>2908(72)</b>	<b>4354(94)</b>	<b>455(93)</b>	<b>1088(91)</b>	<b>1076(98)</b>	<b>1340(95)</b>	<b>395(88)</b>
<b>Receipt of means tested benefits N (%)<sup>d</sup></b>	1528(38)	2211(48)	200(41)	662(56)	466(42)	695(49)	188(42)
<b>Housing tenure N(%):</b>							
Owns or mortgage	2132(53)	3259(70)	353(72)	888(75)	816(74)	929(66)	273(61)
Rents privately	1012(25)	469(10)	33(7)	83(7)	50(5)	240(17)	63(14)
Rents council/housing association	649(16)	295(6)	25(5)	61(5)	54(5)	104(7)	51(11)
Rents -other	250(6)	559(12)	72(15)	152(13)	157(14)	124(9)	54(12)
Don't know	6(0.1)	56(1)	8(2)	6(0.5)	25(2)	10(0.5)	7(2)
<b>Level of mother's education N (%)</b>							
<5 GCSE or equivalent	796(20)	1207(26)	52(10)	211(18)	385(35)	451(32)	108(24)
5 GCSE or equivalent	1400(35)	1453(31)	142(29)	408(34)	345(31)	425(30)	133(30)
A Level or equivalent & above	1471(36)	1778(39)	270(55)	496(42)	348(32)	480(34)	184(41)
Overseas unknown / other	384(9)	199(4)	28(6)	75(6)	24(2)	48(4)	24(5)
<b>Mother in current employment N (%)</b>	2603(64)	1060(23)	224(45)	449(38)	91(8)	170(12)	126(28)

<sup>d</sup>Any of: Income Support; Job Seekers Allowance; Working Tax Credit; Housing Benefits

**Supplementary table 3 Mean difference in birthweight between Pakistani and White British infants with adjustment for potential explanatory/masking variables**

Unadjusted and adjusted mean difference (95% CI) in birthweight (g) for Pakistani (N=4649) relative to White British (N=4055) origin infants for each potential explanatory / masking variable <sup>e</sup>						
	All Pakistani births N=4649	Pakistani sub-groups defined by place of birth of parents				
		Pakistani: Both parents UK born N=492	Pakistani: Mum only UK born N=1192	Pakistani: Dad only UK born N=1104	Pakistani: Both parents South Asian born N=1411	Pakistani: Other N=450
<b>Smoking N=8690</b>	<b>N=4638</b>	<b>N=491</b>	<b>N=1189</b>	<b>N=1100</b>	<b>N=1408</b>	<b>N=450</b>
Unadjusted mean difference	<b>-234 (-254, -214)</b>	-252 (-296, -208)	-236 (-266, -206)	-251 (-282, -219)	-213 (-242, -185)	-230 (-276, -185)
Adjusted mean difference	<b>-293 (-315, -272)</b>	-308 (-352, -264)	-291 (-323, -260)	-316 (-348, -284)	-276 (-306, -247)	-282 (-328, -237)
<b>Alcohol consumption N=8689</b>	<b>N=4636</b>	<b>N=491</b>	<b>N=1190</b>	<b>N=1099</b>	<b>N=1407</b>	<b>N=449</b>
Unadjusted mean difference	<b>-234 (-254, -214)</b>	-252 (-296, -208)	-236 (-267, -206)	-251 (-283, -220)	-213 (-242, -185)	-230 (-276, -185)
Adjusted mean difference	<b>-239 (-259, -218)</b>	-257 (-302, -213)	-241 (-271, -210)	-256 (-287, -224)	-218 (-247, -189)	-235 (-280, -189)
<b>Maternal age N=8704</b>	<b>N=4649</b>	<b>N=492</b>	<b>N=1192</b>	<b>N=1104</b>	<b>N=1411</b>	<b>N=450</b>
Unadjusted mean difference	<b>-233 (-253, -214)</b>	-251 (-295, -208)	-236 (-266, -206)	-250 (-281, -219)	-213 (-241, -184)	-230 (-275, -184)
Adjusted mean difference	<b>-244 (-264, -224)</b>	-260 (-304, -216)	-245 (-276, -215)	-258 (-289, -226)	-232 (-261, -204)	-226 (-272, -179)
<b>Maternal hypertension N=8704</b>	<b>N=4649</b>	<b>N=492</b>	<b>N=1192</b>	<b>N=1104</b>	<b>N=1411</b>	<b>N=450</b>
Unadjusted mean difference	<b>-233 (-253, -214)</b>	-251 (-295, -208)	-236 (-266, -206)	-250 (-281, -219)	-213 (-241, -184)	-230 (-275, -184)
Adjusted mean difference	<b>-234 (-254, -215)</b>	-254 (-298, -210)	-236 (-267, -206)	-252 (-283, -220)	-213 (-242, -185)	-232 (-278, -186)
<b>Maternal fasting glucose N=8368</b>	<b>N=4483</b>	<b>N=473</b>	<b>N=1147</b>	<b>N=1072</b>	<b>N=1353</b>	<b>N=438</b>
Unadjusted mean difference	<b>-232 (-252, -212)</b>	-252 (-297, -207)	-235 (-266, -204)	-251 (-283, -219)	-209 (-238, -180)	-229 (-276, -183)
Adjusted mean difference	<b>-257 (-277, -237)</b>	-269 (-313, -225)	-257 (-288, -226)	-266 (-297, -234)	-248 (-278, -219)	-251 (-298, -205)
<b>Maternal postload glucose N=8361</b>	<b>N=4479</b>	<b>N=473</b>	<b>N=1146</b>	<b>N=1072</b>	<b>N=1351</b>	<b>N=437</b>
Unadjusted	<b>-233</b>	-253	-236	-252	-209	-229

mean difference	<b>(-253, -212)</b>	(-297, -208)	(-267, -205)	(-284, -220)	(-238, -180)	(-276, -183)
Adjusted mean difference	<b>-239 (-260, -219)</b>	-255 (-300, -211)	-241 (-272, -210)	-257 (-289, -225)	-220 (-250, -191)	-232 (-279, -186)
<b>Maternal fasting insulin N=7840</b>	<b>N=4066</b>	N=433	N=1054	N=979	N=1202	N=398
Unadjusted mean difference	<b>-234 (-254, -212)</b>	-242 (-289, -195)	-242 (-274, -209)	-255 (-288, -222)	-206 (-236, -175)	-227 (-276, -1779)
Adjusted mean difference	<b>-252 (-354, -212)</b>	-256 (-302, -210)	-264 (-296, -232)	-266 (-299, -233)	-232 (-263, -202)	-254 (-304, -207)
<b>Maternal height N=8512</b>	<b>N=4522</b>	N=478	N=1178	N=1071	N=1362	N=438
Unadjusted mean difference	<b>-234 (-254, -214)</b>	-252 (-296, -207)	-238 (-269, -208)	-251 (-282, -219)	-213 (-242, -184)	-227 (-274, -181)
Adjusted mean difference	<b>-165 (-186, -144)</b>	-198 (-242, -154)	-177 (-208, -146)	-167 (-199, -134)	-135 (-165, -106)	-178 (-224, -133)
<b>Maternal BMI N=7991</b>	<b>N=4283</b>	N=447	N=1120	N=1021	N=1287	N=408
Unadjusted mean difference	<b>-236 (-256, -215)</b>	-249 (-295, -203)	-243 (-275, -212)	-249 (-282, -217)	-213 (-243, -183)	-238 (-286, -190)
Adjusted mean difference	<b>-213 (-233, -193)</b>	-204 (-249, -159)	-239 (-270, -209)	-205 (-237, -173)	-199 (-228, -170)	-213 (-260, -167)
<b>Parity N=8367</b>	<b>N=4449</b>	N=466	N=1137	N=1053	N=1353	N=440
Unadjusted mean difference	<b>-231 (-252, -211)</b>	-250 (-296, -206)	-232 (-264, -201)	-249 (-281, -217)	-210 (-239, -181)	-231 (-278, -185)
Adjusted mean difference	<b>-258 (-278, -237)</b>	-260 (-304, -215)	-258 (-289, -227)	-277 (-309, -245)	-249 (-279, -219)	-235 (-281, -189)
<b>Gestation N=8704</b>	<b>N=4649</b>	N=492	N=1192	N=1104	N=1411	N=450
Unadjusted mean difference	<b>-233 (-253, -214)</b>	-251 (-295, -208)	-236 (-266, -206)	-250 (-281, -219)	-213 (-241, -184)	-230 (-275, -184)
Adjusted mean difference	<b>-201 (-219, -182)</b>	-220 (-261, -179)	-204 (-232, -175)	-229 (-258, -199)	-175 (-202, -148)	-185 (-228, -143)
<b>Sex N=8703</b>	<b>N=4648</b>	N=492	N=1191	N=1104	N=1411	N=450
Unadjusted mean difference	<b>-233 (-253, -214)</b>	-251 (-295, -208)	-236 (-266, -206)	-250 (-281, -219)	-213 (-241, -184)	-230 (-275, -184)
Adjusted mean difference	<b>-233 (-253, -213)</b>	-251 (-295, -207)	-237 (-267, -207)	-247 (-278, -216)	-212 (-240, -184)	-236 (-281, -190)
<b>Socioeconomic position<sup>f</sup> N=8643</b>	<b>N=4613</b>	N=489	N=1186	N=1096	N=1397	N=445
Unadjusted mean difference	<b>-234 (-254, -214)</b>	-253 (-297, -209)	-236 (-266, -206)	-250 (-282, -219)	-215 (-243, -186)	-229 (-276, -184)

Adjusted mean difference	<b>-240</b> <b>(-261, -219)</b>	-268 (-313, -223)	-248 (-280, -216)	-253 (-286, -220)	-218 (-247, -189)	-233 (-279, -187)
<b>Living with a partner</b> <b>N=8690</b>	<b>N=4641</b>	N=490	N=1190	N=1103	N=1408	N=450
Unadjusted mean difference	<b>-233</b> <b>(-253, -213)</b>	-254 (-298, -209)	-236 (-266, -205)	-250 (-281, -218)	-212 (-240, -183)	-231 (-277, -185)
Adjusted mean difference	<b>-254</b> <b>(-275, -233)</b>	-274 (-318, -229)	-254 (-285, -223)	-274 (-306, -242)	-234 (-263, -205)	-246 (-292, -200)
<b>Adjusted for covariables thought a priori to reduce the difference (socioeconomic position; maternal height)</b> <b>N=8452</b>	<b>N=4487</b>	N=475	N=1168	N=1063	N=1348	N=433
Unadjusted mean difference	<b>-235</b> <b>(-255, -215)</b>	-256 (-297, -208)	-238 (-268, -207)	-251 (-283, -219)	-215 (-244, -186)	-226 (-273, -180)
Adjusted mean difference	<b>-174</b> <b>(-197, -152)</b>	-213 (-258, -168)	-191 (-222, -159)	-174 (-208, -140)	-144 (-174, -114)	-183 (-229, -137)
<b>Adjusted for covariables that did in practice reduce the difference (maternal height; maternal BMI; gestation)</b> <b>N=7991</b>	<b>N=4283</b>	N=447	N=1120	N=1021	N=1287	N=408
Unadjusted mean difference	<b>-236</b> <b>(-256, -215)</b>	-249 (-295, -203)	-243 (-275, -212)	-249 (-282, -217)	-213 (-243, -183)	-238 (-286, -190)
Adjusted mean difference	<b>-119</b> <b>(-139, -100)</b>	-118 (-160, -77)	-154 (-182, -125)	-109 (-139, -78)	-92 (-120, -64)	-128 (-171, -85)
<b>All above covariables<sup>g</sup></b> <b>N=7342</b>	<b>N=3919</b>	N=402	N=1028	N=936	N=1169	N=384
Unadjusted mean difference	<b>-235</b> <b>(-256, -213)</b>	-253 (-301, -205)	-239 (-271, -206)	-252 (-286, -218)	-211 (-242, -180)	-236 (-286, -187)
Adjusted mean difference	<b>-234</b> <b>(-258, -210)</b>	-217 (-261, -173)	-253 (-285, -222)	-232 (-266, -198)	-229 (-260, -197)	-219 (-263, -175)

<sup>e</sup> Number varies for each covariable due to differences in numbers with data for individual covariables

<sup>f</sup> Maternal education; housing tenure; receipt of means tested benefits

<sup>g</sup> Fasting glucose, postload glucose and fasting insulin were highly correlated thus postload glucose and fasting insulin were excluded from the fully adjusted model as they had the least effect and no impact on associations over that seen for fasting glucose

**Supplementary table 4 Mean difference in subscapular skinfold between Pakistani and White British infants with adjustment for potential explanatory/masking variables**

Unadjusted and adjusted mean difference (95% CI) in subscapular skinfold (mm) for Pakistani (N=3363) relative to White British (N=2678) origin infants for each potential explanatory / masking variable<sup>e</sup>

	All Pakistani births N=3363	Pakistani sub-groups defined by place of birth of parents				
		Pakistani: Both parents UK born N=346	Pakistani: Mum only UK born N=870	Pakistani: Dad only UK born N=801	Pakistani: Both parents South Asian born N=1031	Pakistani: Other N=315
<b>Smoking N=6033</b>	<b>N=3356</b>	<i>N=345</i>	<i>N=867</i>	<i>N=798</i>	<i>N=1031</i>	<i>N=315</i>
Unadjusted mean difference	<b>-0.19 (-0.25, -0.14)</b>	-0.20 (-0.33, -0.08)	-0.16 (-0.25, -0.08)	-0.29 (-0.37, -0.20)	-0.13 (-0.21, -0.05)	-0.22 (-0.35, -0.09)
Adjusted mean difference	<b>-0.27 (-0.33, -0.21)</b>	-0.27 (-0.40, -0.15)	-0.23 (-0.32, -0.15)	-0.37 (-0.46, -0.28)	-0.21 (-0.29, -0.13)	-0.28 (-0.41, -0.16)
<b>Alcohol consumption N=6032</b>	<b>N=3354</b>	<i>N=345</i>	<i>N=868</i>	<i>N=797</i>	<i>N=1030</i>	<i>N=314</i>
Unadjusted mean difference	<b>-0.19 (-0.25, -0.14)</b>	-0.20 (-0.33, -0.08)	-0.16 (-0.25, -0.08)	-0.29 (-0.37, -0.20)	-0.13 (-0.21, -0.05)	-0.21 (-0.34, -0.09)
Adjusted mean difference	<b>-0.20 (-.26, -0.14)</b>	-0.21 (-0.33, -0.09)	-0.17 (-0.26, -0.09)	-0.29 (-0.38, -0.21)	-0.14 (-0.22, -0.06)	-0.22 (-0.35, -0.09)
<b>Maternal age N=6041</b>	<b>N=3363</b>	<i>N=346</i>	<i>N=870</i>	<i>N=801</i>	<i>N=1031</i>	<i>N=315</i>
Unadjusted mean difference	<b>-0.19 (-0.25, -0.14)</b>	-0.21 (-0.33, -0.08)	-0.17 (-0.25, -0.08)	-0.28 (-0.37, -0.20)	-0.13 (-0.21, -0.05)	-0.22 (-0.34, -0.09)
Adjusted mean difference	<b>-0.22 (-0.27, -0.16)</b>	-0.22 (-0.35, -0.10)	-0.19 (-0.27, -0.10)	-0.30 (-0.39, -0.22)	-0.18 (-0.26, -0.10)	-0.21 (-0.33, -0.08)
<b>Maternal hypertension N=6041</b>	<b>N=3363</b>	<i>N=346</i>	<i>N=870</i>	<i>N=801</i>	<i>N=1031</i>	<i>N=315</i>
Unadjusted mean difference	<b>-0.19 (-0.25, -0.14)</b>	-0.21 (-0.33, -0.08)	-0.17 (-0.25, -0.08)	-0.28 (-0.37, -0.20)	-0.13 (-0.21, -0.05)	-0.22 (-0.34, -0.09)
Adjusted mean difference	<b>-0.19 (-.25, -0.14)</b>	-0.21 (-0.33, -0.09)	-0.17 (-0.25, -0.08)	-0.29 (-0.37, -0.20)	-0.13 (-0.21, -0.05)	-0.22 (-0.35, -0.09)
<b>Maternal fasting glucose N=5838</b>	<b>N=3264</b>	<i>N=334</i>	<i>N=841</i>	<i>N=784</i>	<i>N=995</i>	<i>N=310</i>
Unadjusted mean difference	<b>-0.19 (-0.25, -0.14)</b>	-0.23 (-0.35, -0.10)	-0.17 (-0.26, -0.09)	-0.29 (-0.38, -0.20)	-0.12 (-0.20, -0.04)	-0.22 (-0.35, -0.09)
Adjusted mean difference	<b>-0.26 (-0.32, -0.20)</b>	-0.27 (-0.39, -0.15)	-0.22 (-0.31, -0.14)	-0.33 (-0.41, -0.24)	-0.22 (-0.30, -0.14)	-0.28 (-0.40, -0.15)
<b>Maternal postload glucose N=5833</b>	<b>N=3262</b>	<i>N=334</i>	<i>N=840</i>	<i>N=784</i>	<i>N=995</i>	<i>N=309</i>

Unadjusted mean difference	<b>-0.20</b> <b>(-0.26, -0.14)</b>	-0.23 (-0.35, -0.11)	-0.17 (-0.26, -0.09)	-0.29 (-0.38, -0.20)	-0.13 (-0.21, -0.05)	-0.22 (-0.35, -0.09)
Adjusted mean difference	<b>-0.23</b> <b>(-0.29, -0.18)</b>	-0.24 (-0.36, -0.12)	-0.20 (-0.28, -0.11)	-0.32 (-0.41, -0.23)	-0.19 (-0.27, -0.11)	-0.24 (-0.37, -0.11)
<b>Maternal fasting insulin</b> <b>N=5500</b>	<b>N=2966</b>	<i>N=307</i>	<i>N=781</i>	<i>N=723</i>	<i>N=880</i>	<i>N=275</i>
Unadjusted mean difference	<b>-0.21</b> <b>(-0.26, -0.15)</b>	-0.21 (-0.34, -0.08)	-0.16 (-0.25, -0.08)	-0.32 (-0.41, -0.23)	-0.14 (-0.22, -0.06)	-0.22 (-0.36, -0.09)
Adjusted mean difference	<b>-0.25</b> <b>(-0.31, -0.19)</b>	-0.23 (-0.36, -0.11)	-0.22 (-0.30, -0.13)	-0.34 (-0.43, -0.25)	-0.20 (-0.29, -0.12)	-0.29 (-0.43, -0.16)
<b>Maternal height</b> <b>N=5937</b>	<b>N=3292</b>	<i>N=338</i>	<i>N=859</i>	<i>N=781</i>	<i>N=1004</i>	<i>N=310</i>
Unadjusted mean difference	<b>-0.19</b> <b>(-0.25, -0.13)</b>	-0.19 (-0.32, -0.07)	-0.17 (-0.25, -0.08)	-0.28 (-0.37, -0.19)	-0.13 (-0.20, -0.05)	-0.22 (-0.35, -0.09)
Adjusted mean difference	<b>-0.16</b> <b>(-0.22, -0.10)</b>	-0.17 (-0.30, -0.05)	-0.15 (-0.23, -0.06)	-0.25 (-0.34, -0.16)	-0.96 (-0.18, -0.01)	-0.20 (-0.33, -0.07)
<b>Maternal BMI</b> <b>N=5619</b>	<b>N=3137</b>	<i>N=320</i>	<i>N=826</i>	<i>N=741</i>	<i>N=958</i>	<i>N=292</i>
Unadjusted mean difference	<b>-0.19</b> <b>(-0.25, -0.13)</b>	-0.18 (-0.30, -0.05)	-0.17 (-0.26, -0.09)	-0.27 (-0.36, -0.18)	-0.13 (-0.21, -0.05)	-0.23 (-0.36, -0.10)
Adjusted mean difference	<b>-0.15</b> <b>(-0.20, -0.09)</b>	-0.08 (-0.21, 0.04)	-0.16 (-0.25, -0.08)	-0.19 (-0.28, -0.10)	-0.10 (-0.18, -0.02)	-0.18 (-0.31, -0.05)
<b>Parity</b> <b>N=5855</b>	<b>N=3250</b>	<i>N=330</i>	<i>N=844</i>	<i>N=768</i>	<i>N=998</i>	<i>N=310</i>
Unadjusted mean difference	<b>-0.19</b> <b>(-0.24, -0.13)</b>	-0.20 (-0.32, -0.07)	-0.15 (-0.24, -0.07)	-0.29 (-0.38, -0.20)	-0.13 (-0.21, -0.05)	-0.22 (-0.35, -0.09)
Adjusted mean difference	<b>-0.27</b> <b>(-0.32, -0.21)</b>	-0.23 (-0.36, -0.11)	-0.23 (-0.31, -0.14)	-0.38 (-0.47, -0.29)	-0.23 (-0.32, -0.15)	-0.23 (-0.36, -0.10)
<b>Gestation</b> <b>N=6041</b>	<b>N=3363</b>	<i>N=346</i>	<i>N=870</i>	<i>N=801</i>	<i>N=1031</i>	<i>N=315</i>
Unadjusted mean difference	<b>-0.19</b> <b>(-0.25, -0.14)</b>	-0.21 (-0.33, -0.08)	-0.17 (-0.25, -0.08)	-0.28 (-0.37, -0.20)	-0.13 (-0.21, -0.05)	-0.22 (-0.34, -0.09)
Adjusted mean difference	<b>-0.18</b> <b>(-0.24, -0.12)</b>	-0.19 (-0.31, -0.07)	-0.15 (-0.24, -0.07)	-0.28 (-0.36, -0.19)	-0.12 (-0.20, -0.04)	-0.20 (-0.33, -0.07)
<b>Sex</b> <b>N=6040</b>	<b>N=3362</b>	<i>N=346</i>	<i>N=869</i>	<i>N=801</i>	<i>N=1031</i>	<i>N=315</i>
Unadjusted mean difference	<b>-0.19</b> <b>(-0.25, -0.14)</b>	-0.21 (-0.33, -0.08)	-0.17 (-0.25, -0.08)	-0.28 (-0.37, -0.20)	-0.13 (-0.21, -0.05)	-0.22 (-0.34, -0.09)
Adjusted mean difference	<b>-0.19</b> <b>(-0.25, -0.14)</b>	-0.20 (-0.33, -0.08)	-0.16 (-0.25, -0.08)	-0.29 (-0.37, -0.20)	-0.13 (-0.21, -0.05)	-0.21 (-0.34, -0.08)
<b>Socioeconomic position<sup>f</sup></b> <b>N=6007</b>	<b>N=3340</b>	<i>N=345</i>	<i>N=866</i>	<i>N=798</i>	<i>N=1020</i>	<i>N=311</i>
Unadjusted	<b>-0.19</b>	-0.21	-0.17	-0.29	-0.13	-0.22

mean difference	<b>(-0.25, -0.14)</b>	(-0.33, -0.09)	(-0.25, -0.09)	(-0.37, -0.20)	(-0.21, -0.05)	(-0.35, -0.09)
Adjusted mean difference	<b>-0.22 (-0.28, -0.16)</b>	-0.24 (-0.36, -0.12)	-0.22 (-0.30, -0.13)	-0.31 (-0.40, -0.22)	-0.15 (-0.23, -0.07)	-0.23 (-0.36, -0.10)
<b>Living with a partner N=6028</b>	<b>N=3356</b>	N=344	N=868	N=800	N=1029	N=315
Unadjusted mean difference	<b>-0.19 (-0.25, -0.14)</b>	-0.21 (-0.33, -0.09)	-0.17 (-0.25, -0.08)	-0.29 (-0.37, -0.20)	-0.13 (-0.21, -0.05)	-0.22 (-0.35, -0.09)
Adjusted mean difference	<b>-0.23 (-0.29, -0.17)</b>	-0.25 (-0.37, -0.13)	-0.20 (-0.29, -0.12)	-0.33 (-0.42, -0.24)	-0.17 (-0.25, -0.09)	-0.25 (-0.37, -0.12)
<b>Adjusted for covariables thought a priori to reduce the difference (socioeconomic position; maternal height) N=5904</b>	<b>N=3270</b>	N=337	N=856	N=778	N=993	N=306
Unadjusted mean difference	<b>-0.19 (-0.25, -0.14)</b>	-0.20 (-0.32, -0.07)	-0.17 (-0.26, -0.09)	-0.28 (-0.37, -0.20)	-0.12 (-0.20, -0.04)	-0.22 (-0.35, -0.09)
Adjusted mean difference	<b>-0.19 (-0.25, -0.13)</b>	-0.20 (-0.33, -0.08)	-0.20 (-0.28, -0.11)	-0.28 (-0.37, -0.18)	-0.12 (-0.20, -0.03)	-0.21 (-0.34, -0.08)
<b>Adjusted for covariables that did in practice reduce the difference (maternal height; maternal BMI; gestation) N=5619</b>	<b>N=3137</b>	N=320	N=826	N=741	N=958	N=292
Unadjusted mean difference	<b>-0.19 (-0.25, -0.13)</b>	-0.18 (-0.30, -0.05)	-0.17 (-0.26, -0.09)	-0.27 (-0.36, -0.18)	-0.13 (-0.21, -0.05)	-0.23 (-0.36, -0.10)
Adjusted mean difference	<b>-0.10 (-0.17, -0.04)</b>	-0.04 (-0.17, 0.08)	-0.13 (-0.22, -0.04)	-0.15 (-0.24, -0.05)	-0.59 (-0.14, 0.03)	-0.15 (-0.28, -0.02)
<b>All above covariables<sup>g</sup> N=5228</b>	<b>N=2918</b>	N=293	N=771	N=691	N=883	N=280
Unadjusted mean difference	<b>-0.19 (-0.25, -0.13)</b>	-0.20 (-0.33, -0.07)	-0.17 (-0.25, -0.08)	-0.28 (-0.38, -0.19)	-0.12 (-0.21, -0.04)	-0.25 (-0.38, -0.11)
Adjusted mean difference	<b>-0.29 (-0.37, -0.22)</b>	-0.22 (-0.36, -0.08)	-0.29 (-0.39, -0.19)	-0.36 (-0.47, -0.26)	-0.28 (-0.38, -0.18)	-0.29 (-0.42, -0.15)

<sup>e</sup> Number varies for each covariable due to differences in numbers with data for individual covariables

<sup>f</sup> Maternal education; housing tenure; receipt of means tested benefits

<sup>g</sup> Fasting glucose, postload glucose and fasting insulin were highly correlated thus postload glucose and fasting insulin were excluded from the fully adjusted model as they had the least effect and no impact on associations over that seen for fasting glucose

**Supplementary table 5 Mean difference in triceps skinfold between Pakistani and White British infants with adjustment for potential explanatory/masking variables**

Unadjusted and adjusted mean difference (95% CI) in triceps skinfold (mm) for Pakistani (N=3373) relative to White British (N=2685) origin infants for each potential explanatory / masking variable <sup>e</sup>						
	All Pakistani births N=3373	Pakistani sub-groups defined by place of birth of parents				
		Pakistani: Both parents UK born N=346	Pakistani: Mum only UK born N=872	Pakistani: Dad only UK born N=804	Pakistani: Both parents South Asian born N=1035	Pakistani: Other N=316
<b>Smoking N=6050</b>	<b>N=3366</b>	<i>N=345</i>	<i>N=869</i>	<i>N=801</i>	<i>N=1035</i>	<i>N=316</i>
Unadjusted mean difference	<b>-0.17 (-0.23, -0.12)</b>	-0.24 (-0.36, -0.12)	-0.13 (-0.22, -0.05)	-0.26 (-0.34, -0.18)	-0.11 (-0.19, -0.03)	-0.19 (-0.32, -0.07)
Adjusted mean difference	<b>-0.25 (-0.30, -0.19)</b>	-0.31 (-0.43, -0.18)	-0.20 (-0.29, -0.12)	-0.34 (-0.43, -0.25)	-0.19 (-0.27, -0.11)	-0.26 (-0.39, -0.13)
<b>Alcohol consumption N=6049</b>	<b>N=3364</b>	<i>N=345</i>	<i>N=870</i>	<i>N=800</i>	<i>N=1034</i>	<i>N=315</i>
Unadjusted mean difference	<b>-0.17 (-0.23, -0.12)</b>	-0.24 (-0.36, -0.12)	-0.14 (-0.22, -0.05)	-0.26 (-0.34, -0.17)	-0.11 (-0.19, -0.04)	-0.19 (-0.32, -0.07)
Adjusted mean difference	<b>-0.18 (-0.24, -0.13)</b>	-0.25 (-0.37, -0.13)	-0.14 (-0.23, -0.06)	-0.27 (-0.35, -0.18)	-0.12 (-0.20, -0.04)	-0.20 (-0.33, -0.08)
<b>Maternal age N=6058</b>	<b>N=3373</b>	<i>N=346</i>	<i>N=872</i>	<i>N=804</i>	<i>N=1035</i>	<i>N=316</i>
Unadjusted mean difference	<b>-0.17 (-0.23, -0.12)</b>	-0.24 (-0.36, -0.12)	-0.14 (-0.22, -0.05)	-0.26 (-0.34, -0.17)	-0.11 (-0.19, -0.03)	-0.19 (-0.32, -0.07)
Adjusted mean difference	<b>-0.20 (-0.25, -0.14)</b>	-0.25 (-0.37, -0.13)	-0.15 (-0.24, -0.07)	-0.28 (-0.36, -0.19)	-0.15 (-0.23, -0.08)	-0.18 (-0.31, -0.06)
<b>Maternal hypertension N=6058</b>	<b>N=3373</b>	<i>N=346</i>	<i>N=872</i>	<i>N=804</i>	<i>N=1035</i>	<i>N=316</i>
Unadjusted mean difference	<b>-0.17 (-0.23, -0.12)</b>	-0.24 (-0.36, -0.12)	-0.14 (-0.22, -0.05)	-0.26 (-0.34, -0.17)	-0.11 (-0.19, -0.03)	-0.19 (-0.32, -0.07)
Adjusted mean difference	<b>-0.18 (-0.23, -0.12)</b>	-0.24 (-0.36, -0.12)	-0.14 (-0.22, -0.06)	-0.26 (-0.35, -0.18)	-0.11 (-0.19, -0.04)	-0.20 (-0.32, -0.07)
<b>Maternal fasting glucose N=5854</b>	<b>N=3273</b>	<i>N=334</i>	<i>N=843</i>	<i>N=786</i>	<i>N=999</i>	<i>N=311</i>
Unadjusted mean difference	<b>-0.18 (-0.23, -0.12)</b>	-0.26 (-0.38, -0.13)	-0.14 (-0.22, -0.05)	-0.26 (-0.35, -0.18)	-0.11 (-0.19, -0.03)	-0.20 (-0.33, -0.08)
Adjusted mean difference	<b>-0.24 (-0.30, -0.19)</b>	-0.30 (-0.42, -0.18)	-0.19 (-0.27, -0.11)	-0.30 (-0.39, -0.22)	-0.21 (-0.29, -0.13)	-0.26 (-0.38, -0.13)
<b>Maternal postload glucose N=5849</b>	<b>N=3271</b>	<i>N=334</i>	<i>N=842</i>	<i>N=786</i>	<i>N=999</i>	<i>N=310</i>

Unadjusted mean difference	<b>-0.18</b> <b>(-0.23, -0.12)</b>	-0.26 (-0.38, -0.14)	-0.14 (-0.22, -0.06)	-0.27 (-0.35, -0.18)	-0.11 (-0.19, -0.03)	-0.20 (-0.33, -0.07)
Adjusted mean difference	<b>-0.21</b> <b>(-0.27, -0.16)</b>	-0.26 (-0.39, -0.15)	-0.16 (-0.25, -0.08)	-0.29 (-0.38, -0.21)	-0.17 (-0.25, -0.09)	-0.22 (-0.34, -0.09)
<b>Maternal fasting insulin</b> <b>N=5514</b>	<b>N=2973</b>	<i>N=307</i>	<i>N=783</i>	<i>N=724</i>	<i>N=883</i>	<i>N=276</i>
Unadjusted mean difference	<b>-0.19</b> <b>(-0.25, -0.14)</b>	-0.24 (-0.37, -0.12)	-0.14 (-0.24, -0.06)	-0.29 (-0.38, -0.21)	-0.13 (-0.21, -0.05)	-0.20 (-0.34, -0.07)
Adjusted mean difference	<b>-0.23</b> <b>(-0.29, -0.18)</b>	-0.26 (-0.39, -0.14)	-0.19 (-0.28, -0.11)	-0.32 (-0.41, -0.23)	-0.19 (-0.27, -0.11)	-0.27 (-0.40, -0.14)
<b>Maternal height</b> <b>N=5954</b>	<b>N=2653</b>	<i>N=338</i>	<i>N=861</i>	<i>N=784</i>	<i>N=1008</i>	<i>N=311</i>
Unadjusted mean difference	<b>-0.17</b> <b>(-0.23, -0.12)</b>	-0.23 (-0.35, -0.11)	-0.14 (-0.22, -0.06)	-0.26 (-0.34, -0.17)	-0.11 (-0.19, -0.03)	-0.20 -0.33, -0.08)
Adjusted mean difference	<b>-0.13</b> <b>(-0.19, -0.08)</b>	-0.20 (-0.32, -0.07)	-0.10 (-0.19, -0.02)	-0.21 (-0.30, -0.12)	-0.07 (-0.15, 0.01)	-0.17 (-0.30, -0.05)
<b>Maternal BMI</b> <b>N=5636</b>	<b>N=3147</b>	<i>N=320</i>	<i>N=828</i>	<i>N=744</i>	<i>N=962</i>	<i>N=293</i>
Unadjusted mean difference	<b>-0.17</b> <b>(-0.23, -0.11)</b>	-0.22 (-0.35, -0.10)	-0.14 (-0.22, -0.05)	-0.25 (-0.34, -0.16)	-0.11 (-0.19, -0.03)	-0.20 (-0.33, -0.07)
Adjusted mean difference	<b>-0.13</b> <b>(-0.19, -0.07)</b>	-0.14 (-0.26, -0.01)	-0.13 (-0.21, -0.04)	-0.17 (-0.26, -0.09)	-0.09 (-0.17, -0.01)	-0.16 (-0.28, -0.03)
<b>Parity</b> <b>N=5871</b>	<b>N=3259</b>	<i>N=330</i>	<i>N=845</i>	<i>N=771</i>	<i>N=1002</i>	<i>N=311</i>
Unadjusted mean difference	<b>-0.17</b> <b>(-0.22, -0.11)</b>	-0.24 (-0.36, -0.11)	-0.12 (-0.20, -0.04)	-0.26 (-0.35, -0.18)	-0.10 (-0.18, -0.03)	-0.19 (-0.32, -0.07)
Adjusted mean difference	<b>-0.23</b> <b>(-0.29, -0.18)</b>	-0.27 (-0.39, -0.15)	-0.18 (-0.27, -0.10)	-0.34 (-0.42, -0.25)	-0.20 (-0.28, -0.12)	-0.20 (-0.32, -0.08)
<b>Gestation</b> <b>N=6058</b>	<b>N=3373</b>	<i>N=346</i>	<i>N=872</i>	<i>N=804</i>	<i>N=1035</i>	<i>N=316</i>
Unadjusted mean difference	<b>-0.17</b> <b>(-0.23, -0.12)</b>	-0.24 (-0.36, -0.12)	-0.14 (-0.22, -0.05)	-0.26 (-0.34, -0.17)	-0.11 (-0.19, -0.03)	-0.19 (-0.32, -0.07)
Adjusted mean difference	<b>-0.16</b> <b>(-0.21, -0.10)</b>	-0.22 (-0.34, -0.10)	-0.12 (-0.20, -0.04)	-0.25 (-0.33, -0.16)	-0.09 (-0.17, -0.01)	-0.17 (-0.29, -0.04)
<b>Sex</b> <b>N=6057</b>	<b>N=3372</b>	<i>N=346</i>	<i>N=871</i>	<i>N=804</i>	<i>N=1035</i>	<i>N=316</i>
Unadjusted mean difference	<b>-0.17</b> <b>(-0.23, -0.12)</b>	-0.24 (-0.36, -0.12)	-0.13 (-0.22, -0.05)	-0.26 (-0.34, -0.17)	-0.11 (-0.19, -0.03)	-0.19 (-0.32, -0.07)
Adjusted mean difference	<b>-0.17</b> <b>(-0.23, -0.12)</b>	-0.24 (-0.36, -0.12)	-0.13 (-0.22, -0.05)	-0.26 (-0.35, -0.18)	-0.11 (-0.19, -0.03)	-0.19 (-0.31, -0.06)
<b>Socioeconomic position<sup>f</sup></b> <b>N=6024</b>	<b>N=3350</b>	<i>N=345</i>	<i>N=868</i>	<i>N=801</i>	<i>N=1024</i>	<i>N=312</i>
Unadjusted	<b>-0.17</b>	-0.24	-0.13	-0.26	-0.11	-0.19

mean difference	<b>(-0.23, -0.12)</b>	(-0.36, -0.12)	(-0.22, -0.05)	(-0.34, -0.17)	(-0.19, -0.03)	(-0.31, -0.06)
Adjusted mean difference	<b>-0.20</b> <b>(-0.26, -0.15)</b>	-0.27 (-0.39, -0.15)	-0.18 (-0.27, -0.10)	-0.29 (-0.38, -0.20)	-0.14 (-0.22, -0.06)	-0.20 (-0.33, -0.08)
<b>Living with a partner</b> <b>N=6045</b>	<b>N=3366</b>	N=344	N=870	N=803	N=1033	N=316
Unadjusted mean difference	<b>-0.17</b> <b>(-0.23, -0.12)</b>	-0.24 (-0.36, -0.12)	-0.14 (-0.22, -0.06)	-0.26 (-0.35, -0.18)	-0.11 (-0.18, -0.03)	-0.20 (-0.32, -0.07)
Adjusted mean difference	<b>-0.21</b> <b>(-0.26, -0.15)</b>	-0.27 (-0.39, -0.15)	-0.17 (-0.25, -0.09)	-0.30 (-0.39, -0.21)	-0.14 (-0.22, -0.06)	-0.22 (-0.35, -0.09)
<b>Adjusted for covariables thought a priori to reduce the difference (socioeconomic position; maternal height)</b> <b>N=5921</b>	<b>N=3280</b>	N=337	N=858	N=781	N=997	N=307
Unadjusted mean difference	<b>-0.17</b> <b>(-0.23, -0.12)</b>	-0.23 (-0.35, -0.11)	-0.14 (-0.22, -0.05)	-0.26 (-0.34, -0.17)	-0.11 (-0.19, -0.03)	-0.20 (-0.32, -0.07)
Adjusted mean difference	<b>-0.16</b> <b>(-0.22, -0.10)</b>	-0.23 (-0.35, -0.10)	-0.15 (-0.24, -0.06)	-0.24 (-0.33, -0.15)	-0.09 (-0.17, -0.01)	-0.18 (-0.31, -0.05)
<b>Adjusted for covariables that did in practice reduce the difference (maternal height; maternal BMI; gestation)</b> <b>N=5636</b>	<b>N=3147</b>	N=320	N=828	N=744	N=962	N=293
Unadjusted mean difference	<b>-0.17</b> <b>(-0.23, -0.11)</b>	-0.22 (-0.35, -0.10)	-0.14 (-0.22, -0.05)	-0.25 (-0.34, -0.16)	-0.11 (-0.34, -0.16)	-0.20 (-0.33, -0.07)
Adjusted mean difference	<b>-0.07</b> <b>(-0.13, -0.01)</b>	-0.08 (-0.21, 0.04)	-0.08 (-0.16, 0.01)	-0.11 (-0.20, -0.02)	-0.03 (-0.11, 0.05)	-0.10 (-0.23, 0.02)
<b>All above covariables<sup>g</sup></b> <b>N=5243</b>	<b>N=2926</b>	N=293	N=772	N=693	N=887	N=281
Unadjusted mean difference	<b>-0.17</b> <b>(-0.23, -0.11)</b>	-0.24 (-0.37, -0.11)	-0.12 (-0.20, -0.03)	-0.26 (-0.35, -0.17)	-0.11 (-0.19, -0.03)	-0.21 (-0.34, -0.07)
Adjusted mean difference	<b>-0.25</b> <b>(-0.32, -0.18)</b>	-0.25 (-0.38, -0.11)	-0.22 (-0.32, -0.12)	-0.32 (-0.42, -0.21)	-0.25 (-0.34, -0.15)	-0.24 (-0.37, -0.10)

<sup>e</sup> Number varies for each covariable due to differences in numbers with data for individual covariables

<sup>f</sup> Maternal education; housing tenure; receipt of means tested benefits

<sup>g</sup> Fasting glucose, postload glucose and fasting insulin were highly correlated thus postload glucose and fasting insulin were excluded from the fully adjusted model as they had the least effect and no impact on associations over that seen for fasting glucose

**Supplementary table 6 Cord blood leptin concentration for Pakistani infants relative to White British infants with adjustment for potential explanatory/masking variables.  
Values are ratios of geometric means**

Unadjusted and adjusted cord leptin ratios of geometric means (95% CI) for Pakistani relative to White British origin infants for each potential explanatory / masking variable <sup>e</sup>						
	All Pakistani births N=775	Pakistani sub-groups defined by place of birth of parents				
		Pakistani: Both parents UK born N=75	Pakistani: Mum only UK born N=245	Pakistani: Dad only UK born N=211	Pakistani: Both parents South Asian born N=174	Pakistani: Other N=70
<b>Smoking N=1385</b>	<b>N=773</b>	<b>N=75</b>	<b>N=245</b>	<b>N=210</b>	<b>N=173</b>	<b>N=70</b>
Unadjusted mean difference	<b>1.11 (1.01, 1.21)</b>	1.09 (0.90, 1.33)	1.20 (1.06, 1.35)	1.08 (0.95, 1.23)	1.06 (0.92, 1.21)	1.01 (0.83, 1.24)
Adjusted mean difference	<b>1.06 (0.96, 1.17)</b>	1.05 (0.86, 1.28)	1.15 (1.01, 1.31)	1.04 (0.91, 1.19)	1.01 (0.88, 1.17)	0.98 (0.80, 1.20)
<b>Alcohol consumption N=1385</b>	<b>N=774</b>	<b>N=75</b>	<b>N=245</b>	<b>N=211</b>	<b>N=173</b>	<b>N=70</b>
Unadjusted mean difference	<b>1.10 (1.01, 1.20)</b>	1.09 (0.89, 1.32)	1.20 (1.06, 1.35)	1.07 (0.94, 1.21)	1.06 (0.92, 1.21)	1.01 (0.83, 1.24)
Adjusted mean difference	<b>1.10 (1.01, 1.21)</b>	1.09 (0.89, 1.33)	1.12 (1.06, 1.36)	1.07 (0.94, 1.22)	1.06 (0.92, 1.21)	1.01 (0.83, 1.24)
<b>Maternal age N=1387</b>	<b>N=775</b>	<b>N=75</b>	<b>N=245</b>	<b>N=211</b>	<b>N=174</b>	<b>N=70</b>
Unadjusted mean difference	<b>1.11 (1.01, 1.21)</b>	1.09 (0.89, 1.32)	1.20 (1.06, 1.35)	1.07 (0.94, 1.21)	1.07 (0.93, 1.23)	1.01 (0.83, 1.24)
Adjusted mean difference	<b>1.08 (0.99, 1.18)</b>	1.08 (0.89, 1.32)	1.13 (1.00, 1.28)	1.06 (0.93, 1.21)	1.06 (0.93, 1.22)	1.03 (0.84, 1.26)
<b>Maternal hypertension N=1387</b>	<b>N=775</b>	<b>N=75</b>	<b>N=245</b>	<b>N=211</b>	<b>N=174</b>	<b>N=70</b>
Unadjusted mean difference	<b>1.11 (1.01, 1.21)</b>	1.09 (0.89, 1.32)	1.20 (1.06, 1.35)	1.07 (0.94, 1.21)	1.07 (0.93, 1.23)	1.01 (0.83, 1.24)
Adjusted mean difference	<b>1.10 (1.01, 1.21)</b>	1.01 (0.83, 1.23)	1.09 (0.96, 1.23)	1.03 (0.90, 1.17)	1.02 (0.89, 1.17)	0.92 (0.75, 1.12)
<b>Maternal fasting glucose N=1333</b>	<b>N=749</b>	<b>N=72</b>	<b>N=234</b>	<b>N=204</b>	<b>N=170</b>	<b>N=69</b>
Unadjusted mean difference	<b>1.11 (1.01, 1.21)</b>	1.08 (0.89, 1.32)	1.20 (1.06, 1.36)	1.08 (0.95, 1.23)	1.07 (0.93, 1.23)	0.99 (0.81, 1.22)
Adjusted mean difference	<b>1.03 (0.94, 1.13)</b>	1.01 (0.83, 1.23)	1.09 (0.96, 1.23)	1.02 (0.90, 1.17)	1.02 (0.89, 1.17)	0.92 (0.75, 1.12)
<b>Maternal postload glucose</b>						

<b>N=1331</b>	<b>N=749</b>	<b>N=72</b>	<b>N=234</b>	<b>N=204</b>	<b>N=170</b>	<b>N=69</b>
Unadjusted mean difference	<b>1.11</b> <b>(1.01, 1.21)</b>	1.08 (0.89, 1.32)	1.20 (1.06, 1.36)	1.08 (0.95, 1.23)	1.07 (0.93, 1.23)	0.99 (0.81, 1.22)
Adjusted mean difference	<b>1.07</b> <b>(0.98, 1.17)</b>	1.08 (0.89, 1.32)	1.13 (1.00, 1.28)	1.07 (0.94, 1.21)	1.02 (0.89, 1.18)	0.99 (0.81, 1.21)
<b>Maternal fasting insulin</b> <b>N=1237</b>	<b>N=695</b>	<b>N=66</b>	<b>N=215</b>	<b>N=192</b>	<b>N=159</b>	<b>N=63</b>
Unadjusted mean difference	<b>1.09</b> <b>(1.00, 1.19)</b>	1.15 (0.93, 1.41)	1.18 (1.04, 1.35)	1.07 (0.94, 1.23)	1.05 (0.91, 1.21)	0.90 (0.73, 1.11)
Adjusted mean difference	<b>1.05</b> <b>(0.96, 1.14)</b>	1.15 (0.93, 1.41)	1.18 (1.04, 1.35)	1.07 (0.94, 1.23)	1.05 (0.91, 1.21)	0.90 (0.73, 1.11)
<b>Maternal height</b> <b>N=1379</b>	<b>N=769</b>	<b>N=74</b>	<b>N=242</b>	<b>N=211</b>	<b>N=173</b>	<b>N=69</b>
Unadjusted mean difference	<b>1.10</b> <b>(1.01, 1.20)</b>	1.10 (0.90, 1.33)	1.19 (1.06, 1.35)	1.07 (0.94, 1.22)	1.07 (0.93, 1.23)	1.07 (0.93, 1.23)
Adjusted mean difference	<b>1.11</b> <b>(1.01, 1.22)</b>	1.10 (0.90, 1.35)	1.21 (1.06, 1.37)	1.08 (0.95, 1.23)	1.08 (0.94, 1.25)	1.00 (0.82, 1.24)
<b>Maternal BMI</b> <b>N=1268</b>	<b>N=707</b>	<b>N=68</b>	<b>N=221</b>	<b>N=196</b>	<b>N=155</b>	<b>N=67</b>
Unadjusted mean difference	<b>1.09</b> <b>(0.99, 1.19)</b>	1.10 (0.89, 1.36)	1.20 (1.05, 1.36)	1.05 (0.92, 1.21)	1.03 (0.89, 1.20)	0.98 (0.80, 1.21)
Adjusted mean difference	<b>1.17</b> <b>(1.06, 1.28)</b>	1.23 (1.00, 1.51)	1.27 (1.12, 1.43)	1.09 (0.95, 1.24)	1.15 (1.00, 1.33)	1.06 (0.87, 1.31)
<b>Parity</b> <b>N=1347</b>	<b>N=750</b>	<b>N=72</b>	<b>N=238</b>	<b>N=204</b>	<b>N=167</b>	<b>N=69</b>
Unadjusted mean difference	<b>1.10</b> <b>(1.01, 1.21)</b>	1.10 (0.90, 1.34)	1.19 (1.06, 1.35)	1.07 (0.94, 1.22)	1.07 (0.93, 1.23)	1.01 (0.82, 1.24)
Adjusted mean difference	<b>1.07</b> <b>(0.98, 1.17)</b>	1.08 (0.88, 1.31)	1.15 (1.01, 1.30)	1.04 (0.92, 1.19)	1.04 (0.90, 1.20)	1.00 (0.81, 1.22)
<b>Gestation</b> <b>N=1387</b>	<b>N=775</b>	<b>N=75</b>	<b>N=245</b>	<b>N=211</b>	<b>N=174</b>	<b>N=70</b>
Unadjusted mean difference	<b>1.11</b> <b>(1.01, 1.21)</b>	1.09 (0.89, 1.33)	1.20 (1.06, 1.36)	1.07 (0.94, 1.22)	1.07 (0.93, 1.23)	1.01 (0.83, 1.24)
Adjusted mean difference	<b>1.12</b> <b>(1.03, 1.22)</b>	1.12 (0.92, 1.36)	1.23 (1.09, 1.38)	1.08 (0.95, 1.23)	1.08 (0.93, 1.23)	1.05 (0.86, 1.28)
<b>Sex</b> <b>N=1387</b>	<b>N=775</b>	<b>N=75</b>	<b>N=245</b>	<b>N=211</b>	<b>N=174</b>	<b>N=70</b>
Unadjusted mean difference	<b>1.11</b> <b>(1.01, 1.21)</b>	1.09 (0.89, 1.33)	1.20 (1.06, 1.36)	1.07 (0.94, 1.22)	1.07 (0.93, 1.23)	1.01 (0.83, 1.24)
Adjusted mean difference	<b>1.10</b> <b>(1.01, 1.20)</b>	1.11 (0.92, 1.35)	1.19 (1.05, 1.33)	1.09 (0.96, 1.23)	1.05 (0.92, 1.20)	0.97 (0.80, 1.19)
<b>Socioeconomic position<sup>†</sup></b> <b>N=1378</b>	<b>N=768</b>	<b>N=75</b>	<b>N=240</b>	<b>N=210</b>	<b>N=174</b>	<b>N=69</b>

Unadjusted mean difference	<b>1.11</b> <b>(1.02, 1.21)</b>	1.09 (0.90, 1.33)	1.21 (1.07, 1.37)	1.07 (0.94, 1.22)	1.07 (0.94, 1.22)	1.04 (0.85, 1.27)
Adjusted mean difference	<b>1.08</b> <b>(0.98, 1.19)</b>	1.10 (0.90, 1.35)	1.17 (1.02, 1.32)	1.05 (0.92, 1.20)	1.02 (0.88, 1.18)	1.02 (0.83, 1.25)
<b>Living with a partner</b> <b>N=1383</b>	<b>N=772</b>	<b>N=74</b>	<b>N=244</b>	<b>N=211</b>	<b>N=173</b>	<b>N=70</b>
Unadjusted mean difference	<b>1.11</b> <b>(1.01, 1.21)</b>	1.10 (0.90, 1.34)	1.20 (1.06, 1.36)	1.07 (0.94, 1.22)	1.07 (0.93, 1.23)	1.01 (0.83, 1.24)
Adjusted mean difference	<b>1.07</b> <b>(0.98, 1.17)</b>	1.06 (0.87, 1.30)	1.16 (1.02, 1.31)	1.04 (0.91, 1.18)	1.03 (0.90, 1.19)	0.99 (0.81, 1.22)
<b>Fully adjusted model<sup>c</sup></b> <b>N=1130</b>	<b>N=617</b>	<b>N=58</b>	<b>N=188</b>	<b>N=174</b>	<b>N=137</b>	<b>N=60</b>
Unadjusted mean difference	<b>1.08</b> <b>(0.98, 1.19)</b>	1.16 (0.93, 1.45)	1.20 (1.05, 1.38)	1.08 (0.94, 1.24)	1.00 (0.86, 1.17)	0.87 (0.69, 1.08)
Adjusted mean difference	<b>1.03</b> <b>(0.92, 1.14)</b>	1.16 (0.93, 1.45)	1.09 (0.94, 1.26)	1.02 (0.88, 1.18)	0.99 (0.85, 1.17)	0.84 (0.67, 1.04)

<sup>e</sup> Number varies for each covariable due to differences in numbers with data for individual covariables

<sup>f</sup> Maternal education; housing tenure; receipt of means tested benefits

<sup>c</sup>To maintain statistical power only those covariables that had an effect were included in the final model:  
smoking;maternal fasting glucose; maternal postload glucose; maternal fasting insulin; maternal BMI; living with a partner