CORRECTION

Correction to: Maternal blood glucose level and offspring glucose–insulin homeostasis: what is the role of offspring adiposity?

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Unfortunately, HbA_{1c} values were incorrectly converted from per cent to mmol/mol in this paper. The corrected text is provided below, along with sections of Table 1, showing corrected HbA_{1c} data, and Tables 2 and 3, showing corrected estimates of association per 1 mmol/mol HbA_{1c}.

Following the amendments to the HbA_{1c} values in mmol/mol, the authors would like to note that the magnitude and direction of effects, as well as the p values reported, have not changed and that the overall findings of the study remain unaltered.

Results

Characteristics

The mean ± SD age of the women at enrolment was 28.7 ± 6.0 years, most were non-Hispanic white (58.6%) and the median (range) of maternal HbA_{1c} was 31.2 mmol/mol (16.9–45.4) (5.0% [3.7–6.3]).

Assessment of offspring adiposity as mediator

This is likely due to the fact that, despite having a relatively normal distribution and meeting assumptions of multivariate normality, several women in our sample had a similar HbA_{1c} ($n = 98$ [28.4%] with $HbA_{1c} = 32.2$ mmol/mol [5.1%] or 31.2 mmol/mol [5.0%]), thereby reducing variability in the explanatory variable.

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Table 1 Bivariate associations of maternal and offspring characteristics with maternal HbA_{1c}

Characteristic	Overall (n=345)	HbA_{1c}			p value
		Tertile 1	Tertile 2	Tertile 3	
Maternal characteristics					
HbA_{1c}, mmol/mol, median (range)	31.2 (16.9–45.4)	29.0 (17.0–30.1)	31.7 (31.2–32.2)	34.4 (33.3–45.5)	
HbA_{1c}, %, median (range)	5.0 (3.7–6.3)	4.8 (3.7–4.9)	5.1 (5.0–5.1)	5.3 (5.2–6.3)	–

Table 2 Total effect of maternal HbA_{1c} on offspring biomarkers of glucose–insulin homeostasis at age 4–7 years

Biomarker	Model 1		Model 2	
	β (95% CI)	p value	β (95% CI)	p value
Glucose, mmol/l				
HbA_{1c} T2 vs T1	0.04 (−0.05, 0.13)		0.04 (−0.05, 0.13)	
HbA_{1c} T3 vs T1	0.17 (0.08, 0.26)*	<0.001[a]*	0.16 (0.06, 0.25)*	<0.001[a]*
HbA_{1c} (per 1 mmol/mol)	0.009 (−0.003, 0.020)	0.14[b]	0.007 (−0.004, 0.018)	0.23[b]
1/(fasting insulin), pmol/l				
HbA_{1c} T2 vs T1	−0.001 (−0.004, 0.003)		0.000 (−0.004, 0.003)	
HbA_{1c} T3 vs T1	−0.004 (−0.008, −0.000)*	0.04[a]*	−0.004 (−0.008, 0.000)	0.06[a]
HbA_{1c} (per 1 mmol/mol)	0.000 (−0.001, −0.000)*	0.04[b]*	0.000 (−0.001, 0.000)	0.07[b]
HOMA2-IR				
HbA_{1c} T2 vs T1	0.05 (−0.05, 0.15)		0.04 (−0.06, 0.14)	
HbA_{1c} T3 vs T1	0.09 (−0.00, 0.20)	0.08[a]	0.08 (−0.02, 0.19)	0.11[a]
HbA_{1c} (per 1 mmol/mol)	0.008 (−0.005, 0.020)	0.21[b]	0.006 (−0.002, 0.019)	0.32[b]
HOMA2-B				
HbA_{1c} T2 vs T1	1.10 (−5.65, 7.85)		0.80 (−5.97, 7.58)	
HbA_{1c} T3 vs T1	0.99 (−6.11, 8.08)	0.78[a]	0.62 (−6.52, 7.76)	0.86[a]
HbA_{1c} (per 1 mmol/mol)	0.460 (−0.388, 1.308)	0.29[b]	0.411 (−0.447, 1.269)	0.35[b]

Model 1 adjusted for maternal race/ethnicity, child's sex and age at assessment; Model 2 included the same adjustments as Model 1, and was additionally adjusted for pre-pregnancy BMI

[a] p trend

[b] p difference

*Statistical significance at $\alpha = 0.05$

T1, tertile 1; T2, tertile 2; T3, tertile 3

Table 3 Total and direct effects of maternal HbA_{1c} on offspring biomarkers of glucose–insulin homeostasis at age 4–7 years and comparison of mediation by per cent fat mass (%FM) at birth, during childhood (age 4–7 years) and cumulatively from birth to childhood

Biomarker	Total effect		Natural direct effect					
	No adjustment for %FM		Adjusted for %FM at birth		Adjusted for %FM at age 4–7 years		Adjusted for cumulative %FM (at birth + age 4–7 years)	
	β (95% CI)	p value	β (95% CI)	p value	β (95% CI)	p value	β (95% CI)	p value
Glucose, mmol/l								
HbA_{1c} T2 vs T1	0.04 (−0.05, 0.13)		0.05 (−0.04, 0.14)		0.04 (−0.05, 0.13)		0.05 (−0.04, 0.13)	
HbA_{1c} T3 vs T1	0.17 (0.08, 0.26)*	<0.001[a]*	0.17 (0.08, 0.27)*	<0.001[a]*	0.16 (0.07, 0.26)*	<0.001[a]*	0.17 (0.08, 0.26)*	<0.001[a]*
HbA_{1c} (per 1 mmol/mol)	0.009 (−0.003, 0.020)	0.14[b]	0.010 (−0.002, 0.021)	0.09[b]	0.008 (−0.003, 0.020)	0.15[b]	0.009 (−0.002, 0.0021)	0.12[b]
1/(fasting insulin), pmol/l								
HbA_{1c} T2 vs T1	−0.001 (−0.004, 0.003)		−0.001 (−0.004, 0.003)		−0.000 (−0.004, 0.003)		−0.000 (−0.004, 0.003)	
HbA_{1c} T3 vs T1	−0.004 (−0.008, −0.000)*	0.04[a]*	−0.004 (−0.008, −0.000)*	0.05[a]*	−0.004 (−0.007, 0.000)	0.08[a]	−0.003 (−0.007, 0.001)	0.09[a]
HbA_{1c} (per 1 mmol/mol)	−0.000 (−0.001, −0.000)*	0.04[b]*	−0.001 (−0.001, −0.000)*	0.04[b]*	−0.000 (−0.001, 0.000)	0.06[b]	−0.000 (−0.001, 0.000)	0.07[b]
HOMA2-IR								
HbA_{1c} T2 vs T1	0.05 (−0.05, 0.15)		0.04 (−0.05, 0.14)		0.04 (−0.06, 0.13)		0.03 (−0.06, 0.13)	
HbA_{1c} T3 vs T1	0.09 (−0.00, 0.20)	0.08[a]	0.08 (−0.02, 0.19)	0.11[a]	0.07 (−0.03, 0.17)	0.19[a]	0.06 (−0.04, 0.16)	0.23[a]
HbA_{1c} (per 1 mmol/mol)	0.008 (−0.005, 0.020)	0.21[b]	0.006 (−0.006, 0.019)	0.31[b]	0.006 (−0.006, 0.018)	0.33[b]	0.004 (−0.008, 0.016)	0.51[b]
HOMA2-B								
HbA_{1c} T2 vs T1	1.10 (−5.65, 7.85)		0.72 (−5.98, 7.43)		0.44 (−6.14, 7.03)		0.10 (−6.45, 6.65)	
HbA_{1c} T3 vs T1	0.99 (−6.11, 8.08)	0.78[a]	−0.01 (−7.10, 7.09)	0.99[a]	−0.74 (−7.70, 6.22)	0.84[a]	−1.61 (−8.57, 5.35)	0.71[a]
HbA_{1c} (per 1 mmol/mol)	0.460 (−0.388, 1.308)	0.29[b]	0.310 (−0.544, 1.163)	0.48[b]	0.340 (−0.489, 1.169)	0.42[b]	0.176 (−0.658, 1.010)	0.68[b]

Model 1 adjusted for maternal race/ethnicity, child's sex and age at assessment

[a] p trend

[b] p difference

*Statistical significance at α = 0.05

T1, tertile 1; T2, tertile 2; T3, tertile 3