

Secondary analysis: Mean difference in neonatal abdominal adiposity according to maternal plasma 25 (OH)D status (i.e. sufficiency vs. inadequacy) in GUSTO Study

	Model A			Model B		
	sSAT (ml)	dSAT (ml)	IAT (ml)	sSAT (ml)	dSAT (ml)	IAT (ml)
Whole MRI cohort (N=292)						
25(OH)D sufficiency (>75.0 nmol/L)	Reference	Reference	Reference	Reference	Reference	Reference
25(OH)D inadequacy (\leq 75.0 nmol/L)	5.9 (1.0, 10.8) P=0.018	1.7(0.4, 3.0) P=0.011	0.6 (-1.2, 2.4) P =0.525	8.3 (3.0, 13.5) P=0.002	2.3 (0.9, 3.7) P=0.001	1.3 (-0.6, 3.2) P =0.180
Non-GDM cohort (N=237)						
25(OH)D sufficiency (>75.0 nmol/L)	Reference	Reference	Reference	Reference	Reference	Reference
25(OH)D inadequacy (\leq 75.0 nmol/L)	4.2 (-0.8, 9.2) P=0.102	1.6 (0.2, 2.9) P= 0.026	0.4 (-1.4, 2.2) P=0.663	5.4 (0.6, 10.6) P=0.047	1.8 (0.4, 3.2) P=0.011	0.7 (-1.2, 2.6) P=0.470

Associations shown are differences in mean (95% CI) of 25(OH)D inadequacy group vs the reference 25(OH)D sufficient group.

Total sample size (N) is not always 292 or 237 due to the missing values. P values were determined with the use of a multivariable regression models.

Model A controlled for ethnicity, sex, age on MRI day, gestational week, maternal age, maternal education, maternal pre-pregnancy BMI, parity and *maternal fasting glucose levels at mid-gestation* .

Model B controlled for ethnicity, sex, age on MRI day, gestational week, maternal age, maternal education, maternal pre-pregnancy BMI, parity and *maternal 2 hour OGTT glucose levels at mid-gestation* .

Abbreviations:

sSAT: abdominal superficial subcutaneous adipose tissue, dSAT: abdominal deep subcutaneous adipose tissue, IAT: abdominal internal adipose tissue