

SUPPLEMENTARY DATA

Supplementary Table 1: Maternal characteristics in women included in the LiP study as according to WHO2013 GDM in 1st trimester

	GDM in 1 st trimester*	No GDM in 1 st trimester*	P
N	90	198	
<i>Maternal characteristics</i>			
Age (years)	29 (27-33)	29 (26-31)	0.10
BMI (kg/m ²)	34.5 (32.3-38.1)	33.0 (31.4-35.7)	<0.01
Caucasian ethnicity	100%	100%	NA
Primiparity	48 (53.3%)	108 (54.8%)	0.81
Gestational weight gain (kg)†	7.3 (4.7-10.7) (n=88)	8.0 (5.3-11.5) (n=188)	0.25
Excessive gestational weight gain (>9 kg)	34 (38.6%) (n=88)	79 (42.0%) (n=188)	0.59
School ≥ 12 years	62 (68.9%)	137 (69.5%)	0.91
Further education ≥3 years	37 (41.1%)	97 (49.2%)	0.20
Gainfully employed	63 (70.0%)	135 (68.5%)	0.80
Smoking in pregnancy by inclusion	10 (11.1%)	16 (8.1%)	0.41

* WHO2013 GDM criteria (FVPG \geq 5.1 mmol/L and/or 2h capillary blood glucose \geq 8.5 mmol/L) in first trimester.

† Weight at 34-36 weeks minus weight at 10-12 weeks.

Data are presented as median (interquartile range) or numbers (%). Differences are tested with Chi2 test, students t test or Mann-Whitney U-test, where appropriate

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Supplementary Table 2. Maternal metabolic measures in women included in the Lifestyle in Pregnancy study according to WHO2013 GDM in 1st trimester

	GDM in 1 st trimester*	No GDM in 1 st trimester*	P
N	90	198	
Fasting venous plasma glucose (mmol/L)			
GA 12-15	5.2 (5.1-5.4) (n=90)	4.8 (4.7-4.9) (n=196)	<0.01
GA 28-30	5.1 (4.8-5.5) (n=87)	4.7 (4.6-5.0) (n=191)	<0.01
2-h capillary blood glucose (mmol/l)			
GA 12-15	6.5 (5.9-7.5) (n=86)	6.2 (5.6-6.9) (n=191)	<0.01
GA 28-30	6.6 (5.9-7.4) (n=84)	6.1 (5.5-7.0) (n=182)	<0.01
Fasting insulin (mU/L)			
GA 12-15	11.5 (8.8-16.5) (n=89)	9.1(6.5-11.7) (n=194)	<0.01
GA 28-30	14.8 (11.3-20.7) (n=87)	11.7 (9.0-15.7) (n=188)	<0.01
HOMA-IR			
GA 12-15	2.7 (2.1-4.0) (n=89)	1.9 (1.4-2.4) (n=193)	<0.01
GA 28-30	3.3 (2.6-4.8) (n=87)	2.5 (1.8-3.4) (n=187)	<0.01
Delta HOMA-IR 12-28	0.6 (-0.0-1.3) (n=87)	0.6 (0.2-1.3) (n=188)	0.86
Fasting total cholesterol (mmol/L)			
GA 12-15	5.1 (4.7-5.3) (n=88)	5.2 (4.7-5.9) (n=196)	0.02
GA 28-30	6.1 (5.5-6.6) (n=87)	6.5 (5.9-7.1) (n=192)	<0.01
Delta cholesterol 12-28	1.0 (0.7-1.3) (n=85)	1.3 (1.0-1.6) (n=191)	<0.01
Fasting HDL (mmol/L)			
GA 12-15	1.68 (1.41-1.97) (n=88)	1.79 (1.52-2.08) (n=196)	0.01
GA 28-30	1.71 (1.43-2.02) (n=86)	1.84 (1.54-2.17) (n=192)	<0.01
Delta HDL 12-28	0.03 (-0.13-0.19) (n=84)	0.06 (-0.08-0.18) (n=191)	0.33
Fasting LDL (mmol/L)			
GA 12-15	2.8 (2.5-3.1) (n=88)	2.9 (2.4-3.4) (n=196)	0.14
GA 28-30	3.6 (2.9-4.0) (n=86)	3.8 (3.2-4.4) (n=192)	<0.01
Delta LDL 12-28	0.6 (0.3-0.9) (n=84)	0.9 (0.6-1.3) (n=191)	<0.01
Fasting triglycerides (mmol/L)			
GA 12-15	1.39 (1.12-1.87) (n=88)	1.39 (1.12-1.68)	0.22
GA 28-30	2.16 (1.80-2.74) (n=86)	2.15 (1.8-2.7)	0.11
Delta triglycerides	0.71 (0.49-1.21) (n=84)	0.79 (0.47-1.07) (n=191)	0.24

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12-28			
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Supplementary Table 3. Obstetric outcomes in women included in the Lifestyle in Pregnancy study according to WHO2013 GDM in 1st trimester

	GDM in 1 st trimester*	No GDM in 1 st trimester*	P
N	90	198	
Pregnancy induced hypertension (PIH)	13 (14.4%)	17 (8.6%)	0.14
Preeclampsia (PE)	5 (5.6%)	13 (6.6%)	0.74
PIH + PE	18 (20.0%)	30 (15.2%)	0.31
Caesarean section planned	11 (12.2%)	15 (7.6%)	0.21
Caesarean section emergency	13 (14.4%)	35 (17.7%)	0.48
Caesarean section total	24 (26.7%)	50 (25.4%)	0.82
Gestational age (days)	283 (273-289)	284 (275-289)	0.65
Shoulder dystocia	1 (1.1%)	8 (4.1%)	0.18
Male fetus	49 (54.4%)	105 (54.0%)	0.93
Preterm birth (<GA 37)	4 (4.4%)	9 (4.4%)	0.96
Birth weight (g)	3657 (3366-4172)	3665 (3399-4023)	0.59
Birth weight z-score	0.28 (-0.48-0.98)	0.13 (-0.48-0.67)	0.37
Birth weight \geq 4000 g	29 (32.2%)	52 (26.4%)	0.31
Birth weight \geq 4500 g	3 (3.3%)	11 (5.6%)	0.41
Large for gestational age (LGA)**	15 (16.7%)	23 (11.7%)	0.25
Abdominal circumference (cm)	34 (32-35) (n=55)	34 (32-35) (n=127)	0.95
Cord blood C-peptide (pmol/L)	496 (326-613) (n=30)	436 (315-551) (n=68)	0.81
Cord blood C-peptide \geq 90 centile	10 (33.3%)	16 (23.5%)	0.31
NICU admission	15 (16.7%)	21 (10.7%)	0.15

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