

SUPPLEMENTARY DATA

**Supplementary Table 1.** Glycemic control during pregnancy in 149 women with live births according to type diabetes.

	Type 1 diabetes			Type 2 diabetes		
	Real-time CGM	Controls	p-value	Real-time CGM	Controls	p-value
Number	60	59		16	14	
<i>HbA1c (%)</i>						
8 weeks	6.6 (5.4-10.0)	6.8 (5.6-10.7)	0.96	6.4 (5.3-8.1)	6.5 (5.3-9.0)	0.56
12 weeks	6.3 (5.0-8.3)	6.3 (5.1-8.3)	0.57	6.2 (5.6-7.8)	6.2 (5.1-7.7)	0.90
21 weeks	6.0 (5.2-7.4)	6.2 (4.9-7.7)	0.26	5.7 (5.2-6.9)	5.6 (4.6-6.3)	0.24
27 weeks	6.0 (4.9-7.1)	6.1 (4.8-7.4)	0.44	5.8 (5.0-7.7)	5.7 (4.8-6.6)	0.28
33 weeks	6.1 (5.1-7.8)	6.2 (4.8-8.2)	0.22	6.0 (5.1-7.0)	5.9 (5.2-6.8)	0.44
36 weeks	6.0 (5.1-7.7)	6.2 (4.7-8.4)	0.37	6.0 (5.1-6.5)	5.9 (5.2-6.7)	0.31
<i>HbA1c (mmol/mol)</i>						
8 weeks	49 (36-86)	51 (38-93)		46 (34-65)	48 (34-75)	
12 weeks	45 (31-67)	45 (32-67)		44 (38-62)	44 (32-61)	
21 weeks	42 (33-57)	44 (30-61)		39 (33-52)	38 (27-45)	
27 weeks	42 (30-54)	43 (29-57)		40 (31-61)	39 (29-49)	
33 weeks	43 (32-62)	44 (29-66)		42 (32-53)	41 (33-51)	
36 weeks	42 (32-61)	44 (28-68)		42 (32-48)	41 (33-50)	
<i>Median SMPG value (mmol/l)</i>						
8 weeks	6.9 (5.7-8.9)	6.8 (4.9-10.2)	0.96	6.2 (5.3-7.3)	7.0 (4.8-10.3)	0.04
12 weeks	6.7 (4.5-8.9)	6.7 (5.1-9.5)	0.59	6.2 (5.4-7.5)	6.7 (4.6-7.4)	0.50
21 weeks	6.5 (5.1-8.8)	6.9 (5.2-10.5)	0.08	5.9 (5.2-6.9)	5.9 (5.1-7.8)	0.64
27 weeks	6.5 (4.9-8.3)	6.5 (5.2-8.9)	0.42	5.8 (5.3-8.2)	6.5 (5.6-7.3)	0.07
33 weeks	6.3 (4.7-7.9)	6.2 (4.9-7.9)	1.00	5.8 (5.0-7.0)	6.3 (5.0-7.7)	0.30
<i>SMPG values throughout pregnancy (%)</i>						
≤3.9 mmol/l	14 (0-25)	14 (0-25)	0.96	5 (0-19)	4 (0-15)	0.79
4.0-7.9 mmol/l	58 (40-91)	58 (35-96)	0.87	80 (63-98)	78 (60-95)	0.31
≥8.0 mmol/l	28 (4-44)	28 (4-48)	0.70	15 (0-31)	18 (0-35)	0.25

Results are given as median (range). Real-time continuous glucose monitoring (real-time CGM), self-monitored plasma glucose (SMPG).

SUPPLEMENTARY DATA

**Supplementary Table 2.** Insulin doses in 149 included women with live births according to type diabetes.

	Type 1 diabetes			Type 2 diabetes		
	Real-time CGM	Controls	p-value	Real-time CGM	Controls	p-value
Number	60	59		16	14	
<i>Insulin dose (IU/kg/24-hours)</i>						
Pregestational	0.61 (0.18-1.89)	0.68 (0.30-1.38)	0.18	0.00 (0.00-0.96)	0.08 (0.00-1.22)	0.28
8 weeks	0.62 (0.21-1.36)	0.64 (0.31-1.43)	0.45	0.35 (0.00-1.02)	0.38 (0.00-1.21)	0.49
12 weeks	0.59 (0.23-1.37)	0.63 (0.29-1.51)	0.37	0.41 (0.18-1.06)	0.64 (0.00-1.01)	0.76
21 weeks	0.66 (0.22-1.67)	0.69 (0.30-1.53)	0.31	0.59 (0.00-1.17)	0.63 (0.00-1.27)	0.70
27 weeks	0.86 (0.32-1.89)	0.87 (0.41-1.76)	0.31	0.68 (0.00-1.65)	0.82 (0.00-1.88)	0.50
33 weeks	1.03 (0.39-1.74)	1.04 (0.48-2.14)	0.17	0.97 (0.18-1.91)	1.11 (0.00-2.40)	0.43
36 weeks	1.03 (0.35-2.12)	1.10 (0.30-2.25)	0.18	1.05 (0.48-2.33)	1.43 (0.00-2.40)	0.58
<i>Insulin dose of pregestational dose (%)</i>						
8 weeks	100 (46-189)	100 (50-150)	0.61	140 (107-207)	102 (57-193)	0.26
12 weeks	97 (49-298)	94 (55-200)	0.35	149 (110-257)	107 (78-336)	0.89
21 weeks	116 (31-318)	112 (65-276)	0.22	212 (125-324)	147 (63-318)	0.19
27 weeks	152 (48-468)	145 (92-330)	0.41	229 (178-528)	264 (97-385)	0.32
33 weeks	192 (81-636)	175 (96-564)	0.55	402 (200-708)	329 (119-611)	0.41
36 weeks	186 (66-618)	185 (84-552)	0.70	480 (258-733)	348 (137-757)	0.50

Results are given as median (range). Real-time continuous glucose monitoring (real-time CGM), insulin units (IU).

SUPPLEMENTARY DATA

**Supplementary Table 3.** Maternal and perinatal outcomes in 154 included women according to type diabetes.

	Type 1 diabetes			Type 2 diabetes		
	Real-time CGM	Controls	p-value	Real-time CGM	Controls	p-value
Number	63	60		16	15	
Live births	60 (95%)	59 (98%)		16 (100%)	14 (93%)	
Miscarriage	3 (5%)	1 (2%)	0.62	0 (0%)	1 (7%)	0.48
Males	24 (40%)	26 (44%)	0.65	10 (63%)	5 (36%)	0.14
Weight gain in pregnancy (kg)	15.1 (-0.4-32.5)	14.5 (-2.0-31.0)	0.36	11.0 (0.0-19.2)	12.7 (4.7-26.0)	0.20
Preeclampsia	5 (8%)	5 (8%)	0.98	2 (13%)	1 (7%)	1.00
Caesarean section	20 (33%)	27 (46%)	0.17	8 (50%)	6 (43%)	0.70
Gestational age at birth (days)	264 (212-278)	264 (231-276)	0.39	262 (206-280)	267 (259-277)	0.17
Preterm delivery	13 (22%)	12 (20%)	0.86	3 (19%)	0 (0%)	0.23
Birth weight (gram)	3,591 (1,829-4,356)	3,440 (2,045-4,424)	0.57	3,371 (1,070-4,260)	3,343 (2,773-3,818)	0.70
Birth weight z-score	1.18 (-1.90-3.78)	0.66 (-1.06-3.45)	0.18	0.27 (-2.32-3.18)	0.22 (-1.13-2.19)	0.65
Large for gestational age	30 (50%)	21 (36%)	0.11	4 (25%)	4 (29%)	1.00
2-hour plasma glucose (mmol/l)	2.8 (0.5-4.7) <sup>a</sup>	2.6 (1.1-5.9)	0.75	2.8 (1.8-5.5) <sup>b</sup>	3.5 (2.2-6.7)	0.07
Neonatal hypoglycemia	21 (37%) <sup>a</sup>	27 (46%)	0.33	4 (31%) <sup>b</sup>	2 (14%)	0.39
Severe neonatal hypoglycemia	9 (16%) <sup>a</sup>	10 (17%)	0.87	0 (0%) <sup>b</sup>	0 (0%)	-
Preterm delivery and/or severe neonatal hypoglycemia	18 (32%) <sup>a</sup>	16 (27%)	0.60	2 (15%) <sup>b</sup>	0 (0%)	0.22

Results are given as median (range) or number (%). Real-time continuous glucose monitoring (real-time CGM), <sup>a</sup>Number=57, <sup>b</sup>Number=13.

## SUPPLEMENTARY DATA

- Use the average glucose trends for all six days
- First focus on night-time and thereafter on daytime
- Aim for night-time:
  - Glucose levels between 4.0-6.0 mmol/l
  - Prevention of glucose levels below 3.9 mmol/l more than once per week
  - Glucose curves without consistent descending or ascending trends
- Aim for daytime:
  - Pre-prandial glucose levels between 4.0-6.0 mmol/l
  - Post-prandial glucose levels between 4.0-8.0 mmol/l
  - At least 80% of the time between 4.0-8.0 mmol/l
- Interpret glucose data combined with information on:
  - Self-monitored plasma glucose measurements
  - Mild hypoglycemic episodes per week
  - History of severe hypoglycemia
  - Diet, exercise and insulin dose
  - Gestational week