

**Supplementary Table 3.** Baseline characteristics of subjects at the antepartum and postpartum periods according to absolute ASM tertiles

Absolute ASM tertiles	Lowest $(n=98)$	Middle ( $n=108$ )	Highest $(n=99)$	P value
Total number	98	108	99	
Incident prediabetes and T2DM	45 (45.9)	59 (54.6)	50 (50.5)	0.522
Model 1	Ref	1.42 (0.82–2.46)	1.20 (0.69–2.10)	
Model 2	Ref	1.09 (0.55–2.18)	0.52 (0.22-1.23)	
Model 3	Ref	1.50 (0.69-3.27)	0.63 (0.23-1.71)	
BMI < 23 kg/m $^2$ ( $n = 169$ )	84	64	21	
Incident prediabetes and T2DM	38 (45.2)	30 (46.9)	3 (14.3)	0.056
Model 1	Ref	1.07 (0.56-2.05)	0.20 (0.06-0.74)	
Model 2	Ref	0.96 (0.43-2.17)	0.18 (0.04-0.88)	
Model 3	Ref	1.16 (0.46-2.91)	0.21 (0.04–1.16)	
BMI $\geq 23 \text{ kg/m}^2 (n=136)$	14	44	78	
Incident prediabetes and T2DM	7 (50.0)	29 (65.9)	47 (60.3)	0.807
Model 1	Ref	1.93 (0.57-6.54)	1.52 (0.48-4.95)	
Model 2	Ref	0.93 (0.17-5.11)	0.59 (0.11-3.26)	
Model 3	Ref	1.47 (0.15–14.54)	0.66 (0.06-6.79)	
ASM, kg	$14.0 \pm 0.8$	$16.0 \pm 0.5^{a}$	$18.1\pm1.3^{\text{a,b}}$	< 0.001
ASM/BMI, m <sup>2</sup>	$0.67 \pm 0.06$	$0.71 \pm 0.08^{a}$	$0.71\pm0.08^{\rm a}$	< 0.001
Follow-up duration, yr	$3.48 \pm 2.56$	$3.48 \pm 2.58$	$2.91 \pm 2.16$	0.339
Postpartum parameters				
Age, yr	$34.3 \pm 3.8$	$34.7 \pm 3.5$	$35.7 \pm 3.7^{a}$	0.028
Height, cm	157.2±4.2	$160.8 \pm 4.3^{a}$	$163.6 \pm 4.5^{a,b}$	< 0.001
Body weight, kg	51.5±4.7	$58.4 \pm 5.8^{a}$	$69.5 \pm 8.4^{a,b}$	< 0.001
BMI, kg/m <sup>2</sup>	$20.9 \pm 2.2$	$22.7 \pm 2.8^{a}$	$26.0 \pm 3.5^{a,b}$	< 0.001
Waist circumference, cm	$77.0 \pm 6.6$	$81.8 \pm 6.8^{a}$	$89.0 \pm 9.1^{a,b}$	< 0.001
Whole body fat mass, kg	$16.4 \pm 3.8$	$18.8 \pm 5.4^{a}$	$25.2 \pm 7.1^{a,b}$	< 0.001
Estimated visceral fat area, cm <sup>2</sup>	66.7±25.2	$81.9 \pm 29.9^{a}$	$111.9 \pm 34.7^{a,b}$	< 0.001
Systolic blood pressure, mm Hg	114.6±15.2	$118.4 \pm 14.5$	121.7 ± 12.5 <sup>a</sup>	0.004
Diastolic blood pressure, mm Hg	69.7±11.3	$70.9 \pm 11.3$	$74.4 \pm 10.8^{a}$	0.012
Family history of diabetes	47 (49.5)	54 (52.4)	58 (62.4)	0.185
Parity (nullipara)	67 (70.5)	67 (65.0)	56 (59.6)	0.053
Breast feeding	58 (68.2)	66 (65.3)	49 (54.4)	0.040
Fasting plasma glucose, mg/dL	93.9±12.4	94.4±8.9	$98.3 \pm 11.4^{a}$	0.008
PP 2 hours, mg/dL	$138.9 \pm 37.4$	138.1±38.3	131.5±38.9	0.349
HbA1c, %	$5.4 \pm 0.3$	5.4±0.4	$5.5 \pm 0.4$	0.058
Insulin, μIU/mL	$6.9 \pm 2.8$	$8.5 \pm 4.1^{a}$	$9.6 \pm 4.4^{a,b}$	< 0.001
C-peptide, ng/mL	$1.6 \pm 0.9$	$2.0 \pm 1.4$	$2.3 \pm 1.2^{a}$	< 0.001
HOMA-IR	1.65±0.79	$1.91 \pm 0.94^{a}$	$2.44 \pm 1.34^{a,b}$	< 0.001
НОМА-β	4.78±2.76	5.28±2.05	$5.89 \pm 2.57^{a}$	0.016

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## Supplementary Table 3. Continued

Absolute ASM tertiles	Lowest (n=98)	Middle ( <i>n</i> =108)	Highest (n=99)	P value
Insulinogenic index	$0.41 \pm 0.27$	$0.31 \pm 1.20$	$0.56 \pm 0.50$	0.329
Total cholesterol, mg/dL	$216.7 \pm 46.3$	$201.7 \pm 44.4$	211.7±36.8	0.051
Triglyceride, mg/dL	$99.7 \pm 60.3$	$105.9 \pm 63.1$	$126.4 \pm 67.2^{a}$	0.014
HDL cholesterol, mg/dL	$65.7 \pm 13.6$	$62.5 \pm 12.4$	$58.7 \pm 13.9^{a}$	0.002
LDL cholesterol, mg/dL	$123.6 \pm 35.6$	$116.7 \pm 32.7$	$125.8 \pm 26.8$	0.132
Antepartum parameters				
Fasting plasma glucose, mg/dL	$83.7 \pm 10.8$	$85.4 \pm 11.5$	$90.8 \pm 10.6^a$	< 0.001
PP 1 hour, mg/dL	191.2±27.5	$191.0 \pm 25.9$	$193.9 \pm 24.4$	0.685
PP 2 hours, mg/dL	$181.9 \pm 25.1$	$174.2 \pm 21.2$	$176.3 \pm 33.9$	0.121
PP 3 hours, mg/dL	$148.3 \pm 20.7$	$143.8 \pm 23.6$	$137.2 \pm 36.1^a$	0.034
HbA1c, %	$5.2 \pm 0.3$	$5.2 \pm 0.4$	$5.4 \pm 0.4^{a}$	0.002
Insulin, μIU/mL	$9.4 \pm 5.3$	$11.0 \pm 5.5$	$12.3 \pm 5.9^{a}$	0.004
C-peptide, ng/mL	$2.2 \pm 1.4$	$2.4 \pm 1.3$	$2.8\pm1.4^{a}$	0.008
HOMA-IR	$1.94 \pm 1.17$	$2.33 \pm 1.19$	$2.78 \pm 1.33^{a}$	< 0.001
НОМА-β	11.6±24.3	$8.13 \pm 29.3$	$10.9 \pm 9.8$	0.574

Values are presented as number (%), odds ratio (95% confidence interval), or mean ± standard deviation. Antepartum and postpartum values were calculated at 24 to 28 weeks of gestation and at 6 to 8 weeks after delivery, respectively. Odds ratio (95% confidence interval) are calculated using a logistic regression model. Model 1 is unadjusted; Model 2 is adjusted for age, family history of diabetes, systolic blood pressure, total fat mass, and waist circumference; and Model 3 is adjusted for the variables listed for Model 2 plus breast feeding, exercise after delivery, fasting plasma glucose concentration during pregnancy, and postpartum BMI change. Statistical significance for linear by linear association between categorical variables was calculated using chi-square tests or ANOVA (Bonferroni method for post hoc analysis), with significance set at P < 0.05. ASM, appendicular skeletal muscle mass; T2DM, type 2 diabetes mellitus; BMI, body mass index; PP, postprandial glucose; HbA1c, glycosylated hemoglobin; HOMA-IR, homeostasis model assessment of insulin resistance; HOMA-β, homeostasis model assessment of β-cell function; HDL, high-density lipoprotein; LDL, low-density lipoprotein.

<sup>&</sup>lt;sup>a</sup>Significant difference (P<0.05) compared to the lowest group, <sup>b</sup>Compared to the middle group.