

SUPPLEMENTARY MATERIALS

Prediabetes in rural adolescent girls from DERVAN cohort Data from the KONKAN region of the state of Maharashtra, India. (DERVAN-4)

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Supplementary Table 1: Anthropometry and glycemia according to fat % (n=1395)

Minimum-Maximum	Q1 (n=343) (6.1% -18.5%)	Q2 (n=351) (18.6%-22.4%)	Q3 (n=351) (22.5% - 27.5%)	Q4 (Fat% ≤35) (n=270) (27.6% - 35.0%)	Q4 (Fat%>35) (n=80) (35.3% - 53.8%)	P
Weight (kg)	35.2 (33.0 – 38.0)	38.4 (36.3 – 41.4)	41.9 (39.5 – 45.3)	48.4 (44.8 – 51.4)	61.1 (55.4 – 67.6)	0.000*
Height (cm)	151.5 (147.6 – 155.4)	152.0 (148.7- 155.5)	152.0 (148.9 – 155.9)	151.4 (147.9 – 155.5)	153.1 (149.2 – 156.8)	0.264
WHR	0.736 (0.710 – 0.762)	0.741 (0.715 – 0.768)	0.751 (0.726 – 0.775)	0.768 (0.743 – 0.807)	0.806 (0.780 – 0.840)	0.000*
Fat mass (kg)	5.5 (4.7 – 6.3)	7.8 (7.1 – 8.4)	10.3 (9.3 – 11.4)	14.3 (13.0 – 16.0)	23.2 (20.1 – 28.1)	0.000*
Lean mass (kg)	28.0 (26.3 – 29.7)	28.6 (27.1 – 30.5)	29.6 (27.7 – 31.6)	31.4 (29.5 – 33.1)	34.3 (32.1 – 37.5)	0.000*
Fasting glucose (mg/dl)	95.7 (89.4 - 101.9)	94.5 (88.6 - 100.5)	95.1 (88.9 - 101.2)	96.0 (89.2 - 102.1)	97.1 (89.2 - 102.1)	0.754
HBA ₁ C (%)	5.3 (5.1 - 5.5)	5.3 (5.0 - 5.5)	5.2 (5.0 - 5.5)	5.3 (5.0 - 5.5)	5.3 (5.1 - 5.6)	0.403
Prediabetes n (%)	141 (41.1)	138 (39.3)	135 (38.5)	100 (37.0)	36 (45.0)	0.693
Fasting insulin (μIU/mL)	7.8 (6.1 - 9.7)	7.9 (6.3 - 10.1)	8.6 (6.9 - 11.0)	9.9 (8.1 - 12.2)	13.2 (10.7 - 17.2)	0.000*
HOMA-IR	1.1 (0.8 - 1.3)	1.1 (0.9 - 1.4)	1.2 (0.9 - 1.5)	1.3 (1.1 - 1.7)	1.8 (1.4 - 2.4)	0.000*
HOMA-β	85.6 (72.1 - 103.4)	90.5 (78.0 – 106.3.)	95.5 (81.0 - 114.2)	103.1 (88.9 – 124.8)	126.1 (104.8 - 156.6)	0.000*
HOMA-S	94.5 (75.9 - 118.0)	93.4 (73.8 - 115.9)	85.8 (67.1 - 107.0)	75.6 (60.3 - 90.9)	56.9 (43.0 - 71.5)	0.000*
Compensatory β-cell response	81.2 (70.1 - 100.6)	83.2 (70.7 - 100.7)	80.2 (65.9 - 97.0)	75.3 (65.0 - 92.0)	68.0 (59.9 - 89.5)	0.000*

Legends for Supplementary Table 1: Median (25th-75th centile) or n (%); * statistically significant ($p < 0.05$) by Kruskal-Wallis Test for continuous data and Chi square test for categorical data; Q1, Q2, Q3, Q4 are quartiles of body fat%. Q4 is further divided into 2 groups of ($\text{Fat\%} \leq 35$) and ($\text{Fat\%} > 35$)

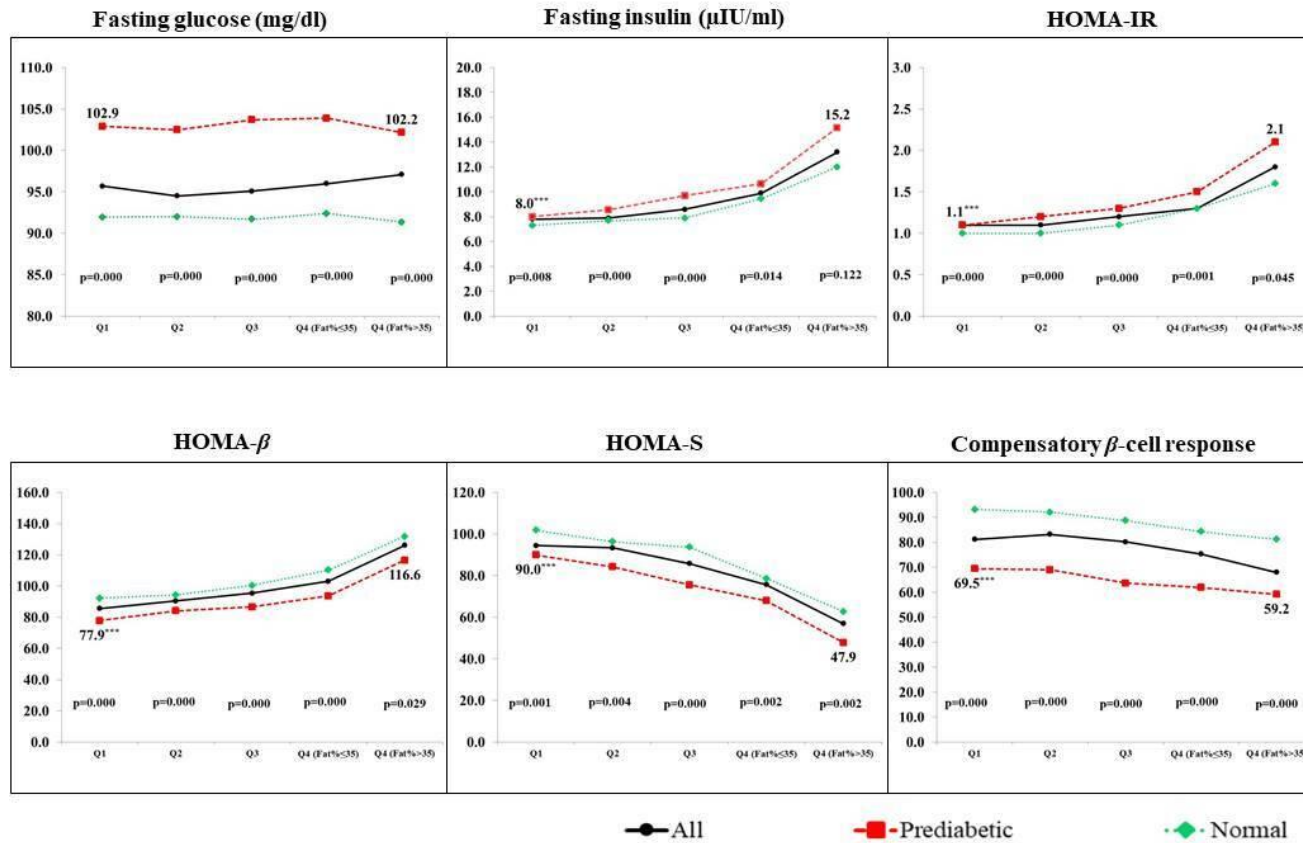
Supplementary Table 2: Anthropometry and glycemia according to waist circumference (n=1389)

Minimum-Maximum	Q1 (n=344) (46.8 cm - 58.4 cm)	Q2 (n=351) (58.5 cm - 62.1 cm)	Q3 (n=345) (62.1 cm - 67.0 cm)	Q4 (Normal) (n=325) (67.1 cm - 85.2 cm)	Q4 (Centrally obese) (n=24) (84.9 cm - 106.1 cm)	p
Weight (kg)	34.8 (32.8 – 37.1)	38.4 (36.7 – 40.9)	42.2 (40.2 – 44.9)	49.6 (45.9 – 53.6)	71.6 (62.1 – 80.1)	0.000 *
Height (cm)	150.1 (147.2 – 154.3)	151.4 (147.6 – 155.5)	152.9 (149.3 – 156.5)	152.5 (149.5 – 156.3)	154.0 (150.2 – 158.2)	0.000*
WHR	0.717 (0.694 – 0.738)	0.739 (0.717 – 0.760)	0.759 (0.738 – 0.778)	0.793 (0.766 – 0.822)	0.851 (0.801 – 0.892)	0.000*
Fat mass (kg)	5.9 (4.9 – 7.1)	7.9 (6.6 – 9.1)	9.8 (8.4 – 11.4)	14.5 (10.6 – 17.5)	31.8 (24.7 – 37.6)	0.000*
Lean mass (kg)	27.1 (25.4 – 28.3)	28.4 (27.0 – 30.3)	30.3 (28.7 – 31.7)	32.2 (30.7 – 33.9)	37.8 (35.0 – 39.2)	0.000*
Fasting glucose (mg/dl)	95.0 (88.7 - 101.2)	94.6 (88.1 - 100.4)	95.0 (89.1 - 101.8)	97.1 (90.4 - 102.9)	98.4 (90.6 -102.3)	0.056
HBA ₁ C (%)	5.3 (5.0 - 5.5)	5.2 (5.0 - 5.5)	5.3 (5.0 - 5.5)	5.3 (5.0 - 5.5)	5.4 (5.2 - 5.6)	0.270
Prediabetes n (%)	140 (40.7)	126 (35.9)	131 (38.0)	141 (43.3)	11 (45.8)	0.297
Fasting insulin (μIU/mL)	7.6 (5.9 - 9.4)	7.9 (6.4 -10.0)	8.9 (7.1 - 11.0)	10.3 (8.5 - 12.7)	16.6 (13.7 - 18.9)	0.000*
HOMA-IR	1.0 (0.8 - 1.3)	1.1 (0.9 - 1.4)	1.2 (1.0 - 1.5)	1.4 (1.1 - 1.7)	2.3 (1.8 - 2.5)	0.000*
HOMA-β	85.6 (73.9 - 102.9)	90.6 (76.4 - 107.1)	97.5 (81.0 - 116.1)	105.7 (89.5 - 126.9)	145.9 (110.7 - 166.2)	0.000*
HOMA-S	97.5 (78.8 - 124.9)	93.2 (73.9 - 115.8)	83.8 (66.9 - 104.9)	71.8 (57.5 - 87.3)	45.3 (40.0 - 56.2)	0.000*

Compensatory β -cell response	83.2 (70.6 - 103.6)	83.9 (70.8-102.4)	79.6 (67.9 - 95.4)	71.8 (61.9 - 90.1)	66.4 (53.2 - 78.1)	0.000*
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Legends for Supplementary Table 2: Median (25th-75th centile) or n (%); * statistically significant (p<0.05) by Kruskal-Wallis Test for continuous data and Chi square test for categorical data; Q1, Q2, Q3, Q4 are quartiles of waist circumference Q4 is further divided into 2 groups of (normal) and (centrally obese)

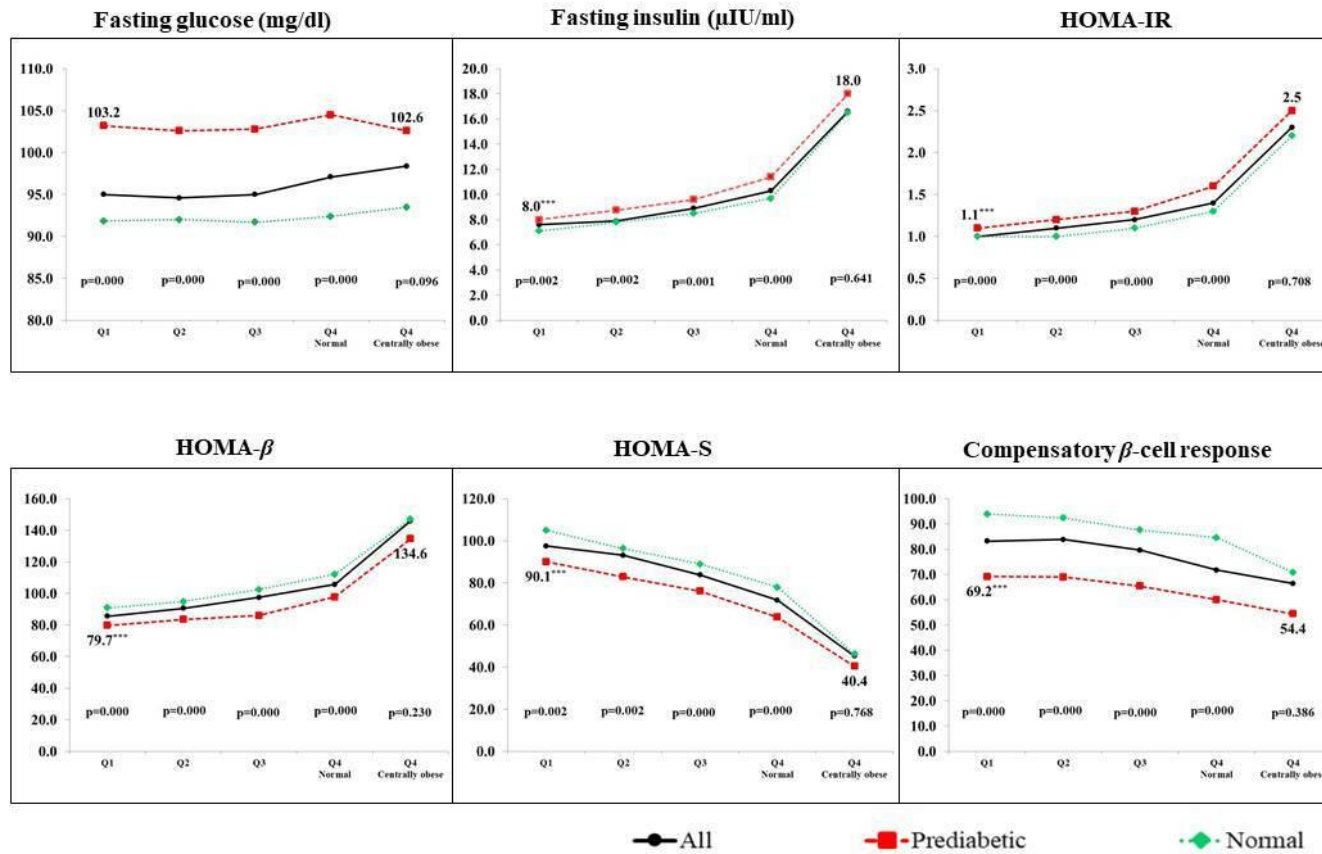
Supplementary Figure 1: Glycemic parameters of PD and NGT adolescent girls across fat% quartiles.



Legends for Supplementary Figure 1: Q1, Q2, Q3, Q4 are quartiles of body fat%. Q4 is further divided into 2 groups of (Fat% ≤ 35) and (Fat% > 35); p- p value by Kruskal-Wallis Test

Note: Data represented by median values.

Supplementary Figure 2: Glycemic parameters of PD and NGT adolescent girls across waist circumference quartiles.



Legends for Supplementary Figure 2: Q1, Q2, Q3, Q4 are quartiles of waist circumference Q4 is further divided into 2 groups of (normal) and (centrally obese); p- p value by Kruskal-Wallis Test
 Note: Data represented by median values.