

1 **Supplementary Tables**2 Table S1: Baseline Characteristics of Study Populations by Diabetes Status (DM) by
3 end of Study Follow-up

Variables	South Asians (n=6676)		Pima Indians (n=1852)	
	With DM n=461 (6.9%)	DM-Free n=6215(93.1%)	With DM (n=510) 27.5%	DM-Free (n=1,342) 72.5%
Age, years	36.0 (31.0, 40.0)	33.0 (28.0, 38.0)	30.6 (23.9,36.5)	26.5 (21.9,32.9)
Age Categories, (%)				
20-24	4.6	13.9	30.4	42.6
25-34	31	41.3	37.1	39.1
35-44	64.4	44.8	32.5	18.3
Male (%)	41.4	43.9	34.5	40
Current Smoker (%)	19.3	20.5	34	33
Current Drinker (%)	8.5	11.5	71.9	76.5
Family History (%)	43	27.6	75.1	67.1
BMI, kg/m ² ,	27.7 (24.2, 31.2)	24.2 (20.9, 27.5)	36.5 (32.6,41.9)	32.7 (28.3,37.9)
BMI Categories				
<25.0	29.5	56.2	1.2	10.4
25.0-30.0	37.6	31.3	10.2	23.6
≥30	32.9	12.5	88.6	66.0
Waist, cm	89.8 (82.0, 98.0)	82.0 (74.0, 90.0)	113 (102,125)	104 (95,116)
HbA1c, mmol/l				
HbA1c, %	5.9 (5.6, 6.2)	5.5 (5.2, 5.8)	5.6 (5.2,5.8)	5.2 (4.9,5.5)
FPG, mmol/l	5.49 (5.16, 5.99)	5.05 (4.77, 8.38)	5.38 (5.00, 5.83)	5.00 (4.66, 5.33)
Trigly, mmol/l	1.49 (1.08, 2.14)	1.20 (0.87, 1.71)	1.40 (1.05, 1.93)	1.25 (0.87, 1.79)
LDLc, mmol/l	2.75 (2.33, 3.26)	2.60 (2.12, 3.12)	2.67 (2.28, 3.19)	2.67 (2.25, 3.19)
HDLc, mmol/l	1.04 (0.88, 1.17)	1.09 (0.93, 1.27)	1.04 (0.85, 1.19)	1.11 (0.96, 1.35)
SBP, mmHg	119.5 (109.5, 129.0)	113.5 (104.5, 123.0)	114.0 (108.0,126.0)	116.0 (108.0,126.0)
DBP, mmHg	81.5 (75.0, 89.5)	77.0 (71.0, 84.0)	70.0 (64.0,78.0)	70.0 (60.0,76.0)
Fasting Insulin, pmol/L	65.98 (47.23, 101.40)	52.78(35.42, 74.31)	173.63 (104.18,284.75)	118.06 (69.45, 187.52)
HOMA-IR, μIU/ml*mmol/l	2.4 (1.8, 3.7)	1.8 (1.1, 2.5)	6.1 (3.5,10.0)	3.7 (2.2,6.2)
HOMA-B, μIU/ml/mmol/l	93.2 (62.4, 139.6)	91.6 (63.4, 132.5)	278.0 (171.0,438.0)	220.0 (120.0,374.0)

4 Data are presented as median (interquartile interval-Q1, Q3) or %; DM-Diabetes Mellitus; HbA1c Glycated
5 hemoglobin-; FPG-Fasting blood glucose; Trigly-Triglycerides; LDLc- Low Density Lipoprotein Cholesterol; HDLc- High
6 Density Lipoprotein Cholesterol; SBP- Systolic Blood pressure; DBP- Diastolic Blood pressure; *Insulin in CARRS only
7 in Delhi and Chennai samples (n= 3900); HOMA-IR, homeostatic model assessment of Insulin resistance; HOMA-
8 B, homeostasis model assessment of β-cell dysfunction; Family history – Diabetes Mellitus in father or mother;
9 HOMA-IR = fasting insulin (microU/L) x fasting glucose (nmol/L)/22.5 or [I0(μIU/ml) * G0 (mmol/l)/22.5]; HOMA-B =
10 (20 X Insulin) / (Glucose -3.5) or [20*I0(μIU/ml) / G0 (mmol/l)- 3.5]
11 Diabetes defined as FPG≥ 7.00 mmol/L (126 mg/dL) or HBA1c ≥ 48 mmol/mol (6.5 %) or self-reported/physician
12 diagnosed diabetes or medication.

1 Table S2: Age-specific Incidence (cases/1000 person-years) of diabetes[#] by sex and ethnicity

Age category (years)	South Asians			Pima		Incidence (95%CI)	Incidence rate ratio	Incidence risk difference
	New cases	PYR	Incidence(95%CI)	New cases	PYR		Pima vs South Asians	Pima vs South Asians
Male								
20-24	6	1985	3 (1.4,6.7)	48	1714	28.0 (20.1,35.9)	9.26 (3.96,26.5)	25.0 (16.7,33.3)
25-34	49	4879	10 (7.6,13.3)	74	2334	31.7 (24.5,38.9)	3.16 (2.17,4.63)	21.7 (13.9,29.4)
35-44	120	6525	18.4 (15.4,22)	40	1050	38.1 (26.3,49.9)	2.07 (1.41,2.99)	19.7 (7.4,32)
Total (Crude)	175	13389	13.1 (11.3,15.2)	162	5098	31.8 (26.9,36.7)	2.43 (1.95,3.03)	18.7 (13.4,24)
Total (Age standardised)	11.6(9.8,13.3)					33.2 (28.1,38.4)		
Female								
20-24	5	1893	2.6 (1.1,6.3)	92	3015	30.5 (24.3,36.7)	11.6 (4.8,36.4)	27.9 (21.2,34.5)
25-34	66	7190	9.2 (7.2,11.7)	115	3412	33.7 (27.5,39.9)	3.67 (2.69,5.05)	24.5 (18,31.1)
35-44	160	8170	19.6 (16.8,22.9)	121	1863	65.0 (53.4,76.5)	3.32 (2.6,4.23)	45.4 (33.4,57.3)
Total (Crude)	231	17253	13.4 (11.8,15.2)	328	8290	39.6 (35.3,43.8)	2.96 (2.49,3.51)	26.2 (21.6,30.8)
Total (Age standardised)	11.6 (10.1,13)					44.5 (39.6,49.3)		
Both sexes								
Total (Crude)	406	30642	13.2 (12,14.6)	490	13389	36.6 (33.4, 39.8)	2.76 (2.42,3.16)	23.3 (19.9,26.8)
Total (Age standardised)	11.6 (10.4,12.7)					40.4 (36.8,43.9)		

2 # Diabetes defined as FPG \geq 7.00 mmol/L (126 mg/dL) or self-reported/physician diagnosed diabetes or medication use; PYR-person years; *
3 standardised to World population; ref-reference; vs-Versus; Incidence rate ratio (IRR, ratio of incidence rates) calculated as Pima (Incidence rate)
4 divided by SA (incidence rate); Incidence risk difference (IRD, Risk difference, cases/1000 person years) calculated as Pima (Incidence rate)
5 minus SA (incidence rate)
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1 Table S3: BMI-specific Incidence (cases/1000 person-years) of diabetes[#] by sex and ethnicity

BMI categories	South Asians			Pima			Incidence rate ratio	Incidence risk difference
	New		**Incidence(95%CI)	New		**Incidence(95%CI)	Pima vs South Asians	Pima vs South Asians
	cases	PYR		cases	PYR			
Male								
<25	52	6881	7.9(5.7,10.0)	1	503	2.0 (0, 6.0)	0.26 (0.01,1.53)	-5.6 (-10.0, -1.2)
25.0-24.9	64	3173	19.0(14.3,23.7)	15	1318	11.3 (5.6,17.1)	0.56 (0.3,1.00)	-8.8 (-16.4, -1.2)
≥25.0	36	940	35.3(23.6,46.9)	146	3278	43.9 (36.7,51.1)	1.16 (0.8,1.72)	6.2 (-8.2, 20.7)
Female								
<25	36	7004	5.6(3.7,7.4)	4	591	7.2 (0.14, 14.3)	1.32 (0.34,3.67)	1.6 (-5.2, 8.5)
25.0-24.9	80	5086	15.0(11.7,18.2)	30	1457	20.1 (12.9,27.3)	1.31 (0.83,2.01)	4.9 (-3.3,13.0)
≥25.0	88	2986	26.7(21.0,32.3)	294	6242	44.3 (39.0,49.7)	1.6 (1.26,2.05)	17.6 (9.5, 25.8)

2 **Age adjusted; vs-Versus; Incidence rate ratio (IRR, ratio of incidence rates) calculated as Pima (Incidence rate) divided by SA (incidence rate);

3 Incidence risk difference (IRD, Risk difference, cases/1000 person years) calculated as Pima (Incidence rate) minus SA (incidence rate)

4 # Diabetes defined as FPG ≥ 7.0 mmol/L (126 mg/dL) or self-reported/physician diagnosed diabetes or medication use

5 Note: Incidence rate ratio and Incidence risk difference calculated from crude incidence rates

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Table S4: Factors associated with diabetes[#] incidence by ethnicity, Cox Proportional Hazards Analysis

Variables	South Asians	Pima
Age (Per 10 years)	1.0 (0.9,1.1)	1.19 (1.05,1.36)
Sex (Male)	1.03 (0.79,1.33)	0.77 (0.63,0.93)
BMI (Per Unit)	1.07 (1.04,1.09)	1.02 (1.01,1.03)
Family history of Diabetes (Yes)	1.44 (1.08,1.91)	1.17 (0.95,1.43)
Log HOMA-IR (Per SD)	4.01 (3.1,5.18)	5.20 (4.10,6.60)
Log HOMA-B (Per SD)	0.26 (0.2,0.34)	0.28 (0.22,0.36)

Diabetes defined as FPG \geq 7.00 mmol/L (126 mg/dl) or self-reported/physician diagnosed diabetes or medication use