

Supplementary Table 1. Anthropometry, life style and cardiovascular risk factors (continuous variables) at Phase-5 (baseline) and Phase-6 (follow-up) of the Vellore Birth Cohort participants according to their place of residence (rural or urban)

	Phase	Men		Women	
		Rural (n=240)	Urban (n=279)	Rural (n=217)	Urban (n=226)
Age, years, mean (SD)	Phase-5	28.0 (1.0)	28.1 (1.1)	28.3 (1.0)	28.5 (1.1)
	Phase-6	42.0 (0.9)	41.6 (1.0)	42.1 (1.0)	41.7 (1.0)
	% Change	14.1 (0.7)	13.9 (0.8)	13.9 (0.6)	13.2 (0.6)
Tobacco use, Yes, n (%)	Phase-5	77 (32.1)	121 (43.4)	0 (0.0)	0 (0.0)
	Phase-6	53 (22.1)	115 (41.2)	0 (0.0)	0 (0.0)
	Never	157 (65.4)	142 (50.9)	217 (100)	226 (100)
	Started	6 (2.5)	16 (5.7)	0 (0.0)	0 (0.0)
	Continued	47 (19.5)	99 (35.4)	0 (0.0)	0 (0.0)
	Stopped	30 (12.5)	22 (7.9)	0 (0.0)	0 (0.0)
Alcohol use, Yes, n (%)	Phase-5	101 (42.1)	128 (45.9)	0 (0.0)	0 (0.0)
	Phase-6	132 (55.0)	130 (46.6)	0 (0.0)	0 (0.0)
	Never	92 (38.3)	120 (43.0)	217 (100)	226 (100)
	Started	47 (19.5)	31 (11.1)	0 (0.0)	0 (0.0)
	Continued	85 (35.4)	99 (35.4)	0 (0.0)	0 (0.0)
	Stopped	16 (6.6)	29 (10.4)	0 (0.0)	0 (0.0)
SES, mean (SD) (Number of 5 Possessions)	Phase-5	2.0 (1.4)	2.9 (1.1)	1.7 (1.3)	2.7 (1.1)
	Phase-6	3.3 (0.8)	3.3 (0.8)	3.2 (0.8)	3.2 (0.9)
	% Change	1.3 (1.3)	0.4 (1.0)	1.5 (1.2)	0.5 (1.2)
Physical Activity Score, median (IQR)	Phase-5	1478 (819, 1905)	1212 (743, 1747)	1927 (1510, 2553)	1719 (1322, 2202)
	Phase-6	1290 (838, 1441)	1029 (780, 1416)	1563 (1297, 1969)	1555 (1184, 1942)
	% Change	-271 (-708, 213)	-61 (-502, 337)	-302 (-960, 68)	-212 (-608, 165)
	Height, cm, mean, (SD)	Phase-5	165.1 (6.4)	167.4 (7.2)	153.7 (5.7)
	Phase-6	164.7 (6.4)	166.7 (7.3)	153.6 (5.8)	153.2 (5.3)

	% Change	-0.5 (1.3)	-0.7 (1.4)	-0.2 (2.1)	-0.5 (1.8)
Body mass index,	Phase-5	19.9 (3.0)	21.5 (3.6)	20.0 (3.5)	23.1 (4.5)
kg/m ² , mean	Phase-6	23.5 (3.9)	25.2 (4.4)	25.0 (4.9)	27.8 (5.2)
(SD)	% Change	3.6 (2.7)	3.6 (2.8)	5.1 (3.3)	4.8 (3.0)
Waist	Phase-5	74.9 (9.1)	80.2 (11.4)	69.4 (8.5)	75.7 (10.3)
Circumference, cm,	Phase-6	86.8 (11.1)	92.3 (12.3)	81.1 (11.9)	87.9 (11.7)
mean (SD)	% Change	11.9 (7.4)	12.2 (8.1)	11.7 (9.0)	12.2 (9.0)
Systolic blood	Phase-5	110.3 (10.8)	114.0 (11.0)	101.3 (10.4)	101.4 (9.7)
pressure, mm Hg,	Phase-6	126.8 (15.1)	127.5 (15.7)	118.0 (13.8)	118.6 (13.7)
mean (SD)	% Change	16.4 (14.2)	12.7 (16.2)	16.7 (12.2)	17.2 (11.5)
Diastolic blood	Phase-5	70.5 (8.7)	74.7 (9.3)	71.6 (8.3)	73.3 (7.8)
pressure, mm Hg,	Phase-6	80.2 (12.2)	79.4 (12.2)	75.9 (10.0)	76.2 (10.0)
mean (SD)	% Change	9.7 (11.4)	4.7 (12.5)	4.3 (9.5)	2.9 (9.3)
Fasting plasma	Phase-5	5.4 (5.1, 5.7)	5.5 (5.2, 5.8)	5.3 (4.9, 5.7)	5.4 (5.1, 5.8)
glucose, mmol/L,	Phase-6	5.2 (4.8, 5.8)	5.3 (4.9, 5.8)	5.2 (4.8, 5.6)	5.6 (4.9, 6.2)
median (IQR)	% Change	-0.11 (-0.56, 0.39)	-0.11 (-0.56, 0.44)	-0.06 (-0.44, 0.39)	0.03 (-0.39, 0.67)
120-min glucose,	Phase-5	5.9 (5.2, 7.1)	6.4 (5.3, 7.4)	6.4 (5.6, 7.3)	6.7 (5.8, 7.7)
mmol/L,	Phase-6	6.2 (5.0, 8.5)	6.2 (5.1, 8.2)	6.4 (5.6, 7.8)	6.8 (5.7, 8.4)
median (IQR)	% Change	0.4 (-1.1, 2.4)	0.1 (-1.4, 1.8)	0.3 (-0.7, 1.8)	0.1 (-0.8, 1.5)
Total cholesterol,	Phase-5	3.7 (0.8)	4.3 (1.0)	3.8 (0.7)	4.2 (0.9)
mmol/L,	Phase-6	4.5 (1.0)	4.8 (0.9)	4.3 (0.8)	4.6 (0.9)
mean (SD)	% Change	0.7 (0.9)	0.4 (1.0)	0.5 (0.7)	0.4 (0.9)
HDL cholesterol,	Phase-5	0.98 (0.25)	0.99 (0.22)	1.08 (0.24)	1.09 (0.22)
mmol /L,	Phase-6	1.10 (0.29)	1.04 (0.26)	1.13 (0.22)	1.18 (0.27)
mean (SD)	% Change	0.12 (0.30)	0.05 (0.26)	0.06 (0.27)	0.09 (0.26)
LDL cholesterol,	Phase-5	2.22 (0.66)	2.74 (0.72)	2.27 (0.62)	2.65 (0.80)
mmol/L,	Phase-6	2.80 (0.76)	3.14 (0.80)	2.73 (0.66)	3.00 (0.75)
mean (SD)	% Change	0.58 (0.79)	0.40 (0.74)	0.45 (0.62)	0.34 (0.79)
Triglycerides,	Phase-5	1.0 (0.7, 1.3)	1.2 (0.8, 1.7)	0.8 (0.6, 1.1)	0.8 (0.6, 1.2)
mmol/L,	Phase-6	1.4 (1.0, 2.1)	1.5 (1.0, 2.3)	1.0 (0.8, 1.5)	1.0 (0.8, 1.5)
median (IQR)	% Change	0.4 (0.0, 1.0)	0.3 (-0.1, 0.9)	0.2 (0.0, 0.6)	0.2 (-0.1, 0.5)

SD – standard deviation; IQR – inter-quartile range

Supplementary Table 2. Anthropometry and life style factors in Phase-5: comparison between cohort members studied and not studied in Phase-6

Measurement		Men		Women	
		Rural	Urban	Rural	Urban
n	Not Studied	377	265	387	227
	Studied	240	279	217	226
Age, years, mean (SD)	Not Studied	27.9 (1.1)	28.3 (1.2)	28.2 (1.5)	28.5 (1.1)
	Studied	28.0 (1.0)	27.7 (1.2)	28.1 (1.0)	28.6 (1.1)
	P value	0.815	<0.001	0.958	0.656
Tobacco use Yes, n (%)	Not Studied	119 (31.2)	109 (41.1)	0 (0)	0 (0)
	Studied	77 (32.1)	121 (43.4)	0 (0)	0 (0)
	P value	0.893	0.598	0 (0)	0 (0)
Alcohol use Yes, n (%)	Not Studied	160 (42.4)	146 (55.1)	0 (0)	1 (0.4)
	Studied	101 (42.1)	128 (45.9)	0 (0)	0 (0)
	P value	0.930	0.032	0 (0)	0 (0)
SES, mean (SD), (Number of 5 Possessions)	Not Studied	2.0 (1.3)	2.7 (1.2)	1.9 (1.4)	2.5 (1.2)
	Studied	2.0 (1.4)	2.9 (1.1)	1.7 (1.3)	2.7 (1.1)
	P value	0.652	0.054	0.274	0.077
Physical Activity Score, median (IQR)	Not Studied	1469 (983, 5743)	1438 (871, 1815)	1938 (1487, 2552)	1747 (1348, 2262)
	Studied	1478 (819, 1905)	1212 (743, 1748)	1928 (1510, 2553)	1719 (1323, 2202)
	P value	0.394	0.001	0.993	0.306
Height, cm, mean (SD)	Not Studied	166.1 (6.1)	167.3 (6.5)	153.7 (6.2)	153.4 (5.5)
	Studied	165.1 (6.4)	167.4 (7.2)	153.7 (5.7)	153.7 (5.4)
	P value	0.049	0.979	0.972	0.611
Body mass index, (kg/m ²) mean (SD)	Not Studied	20.0 (3.3)	21.4 (3.5)	19.6 (3.7)	21.5 (4.0)
	Studied	19.9 (3.0)	21.5 (3.6)	20.0 (3.5)	23.1 (4.5)
	P value	0.927	0.706	0.212	<0.001
Waist Circumference, cm, mean (SD)	Not Studied	76.3 (10.1)	79.3 (11.0)	68.4 (8.8)	72.1 (8.9)
	Studied	74.9 (9.1)	80.2 (11.4)	69.4 (8.5)	75.7 (10.3)
	P value	0.077	0.348	0.171	<0.001

SD – standard deviation; IQR – inter-quartile range. ^ap-values from independent-t-test; ^bp-values from chi-square statistics; ^cp-values from t-test after log transformation

Supplementary Table 3. Cardiovascular risk factors in Phase-5: comparison between cohort members studied and not studied in Phase-6

Measurement		Men		Women	
		Rural	Urban	Rural	Urban
n	Not Studied	377	265	387	227
	Studied	240	279	217	226
Systolic blood pressure, mm Hg, mean, (SD)	Not Studied	110.9 (11.0)	113.6 (10.8)	101.8 (11.2)	100.8 (10.8)
	Studied	110.3 (10.8)	114.8 (11.0)	101.3 (10.4)	101.4 (9.7)
	P value ^a	0.498	0.198	0.566	0.537
Diastolic blood pressure, mm Hg, mean, (SD)	Not Studied	71.3 (9.3)	74.9 (9.1)	72.7 (8.7)	72.5 (8.5)
	Studied	70.5 (8.7)	74.7 (9.3)	71.6 (8.3)	73.3 (7.8)
	P value ^a	0.254	0.838	0.142	0.301
Fasting plasma glucose, mmol/L, median (IQR)	Not Studied	5.4 (5.1, 5.7)	5.4 (5.0, 5.8)	5.3 (5.0, 5.6)	5.3 (5.0, 5.7)
	Studied	5.4 (5.1, 5.7)	5.5 (5.2, 5.8)	5.3 (4.9, 5.7)	5.4 (5.1, 5.8)
	P value ^b	0.138	0.181	0.932	0.030
120-min glucose, mmol/L, median (IQR)	Not Studied	5.9 (5.1, 6.9)	6.3 (5.3, 7.4)	6.2 (5.3, 7.1)	6.5 (5.6, 7.7)
	Studied	5.9 (5.2, 7.1)	6.4 (5.3, 7.4)	6.4 (5.6, 7.3)	6.7 (5.8, 7.7)
	P value ^b	0.600	0.762	0.870	0.261
Total cholesterol, mmol/L, mean (SD)	Not Studied	3.8 (0.9)	4.3 (0.9)	3.8 (0.8)	4.0 (0.8)
	Studied	3.7 (0.8)	4.3 (1.0)	3.8 (0.7)	4.2 (0.9)
	P value ^a	0.073	0.630	0.997	0.007
HDL cholesterol, mmol/L, mean (SD)	Not Studied	0.97 (0.23)	0.97 (0.24)	1.10 (0.23)	1.08 (0.25)
	Studied	0.98 (0.25)	0.99 (0.22)	1.08 (0.24)	1.09 (0.22)
	P value ^a	0.498	0.270	0.328	0.500
LDL cholesterol, mmol/L, mean (SD)	Not Studied	2.35 (0.72)	2.70 (0.76)	2.28 (0.69)	2.47 (0.65)
	Studied	2.22 (0.66)	2.74 (0.72)	2.27 (0.62)	2.65 (0.80)
	P value ^a	0.027	0.513	0.852	0.009
Triglycerides, mmol/L, median (IQR)	Not Studied	0.98 (0.70, 1.34)	1.10 (0.82, 1.66)	0.78 (0.58, 1.00)	0.80 (0.63, 1.08)
	Studied	0.95	1.17	0.75	0.83

	(0.72, 1.31)	(0.81, 1.70)	(0.56, 1.08)	(0.62, 1.17)
P value ^b	0.616	0.674	0.493	0.512

^ap-values from independent-t-test; ^bp-values from t-test after log transformation. SD – standard deviation; IQR – inter-quartile range

Supplementary Figure 1. Kernel density plots showing the change in total-, HDL- and LDL-cholesterol from Phase-5 to Phase-6 in rural and urban men and women.

