

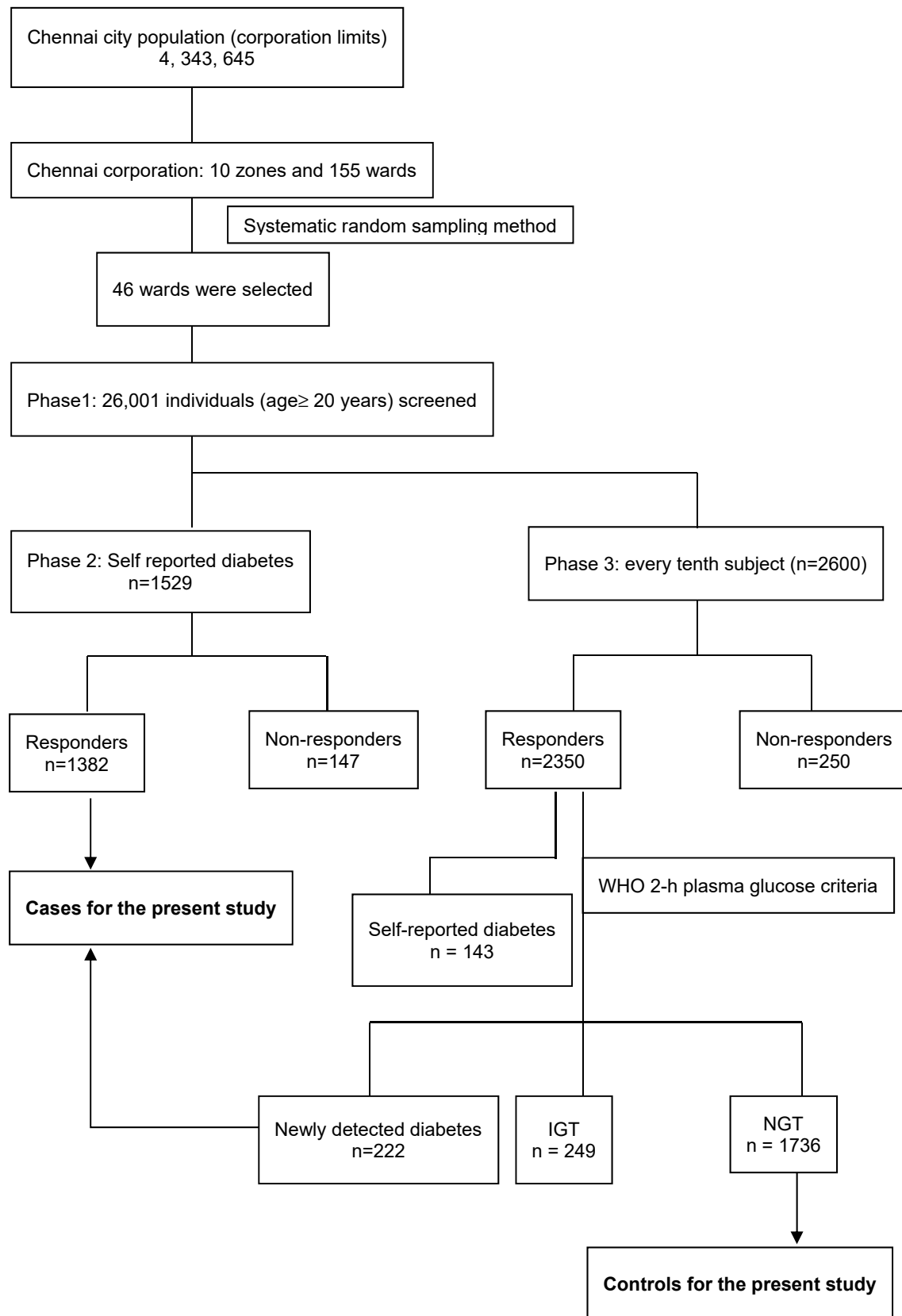
## Supplementary information

**Table S1. Genotype distribution of the seven SNPs that were chosen for our study (n= 1,062)**

Gene	SNP	MAF among NGTs	MAF among T2D cases	Overall MAF	HWE
<i>TCF7L2</i>	rs12255372	0.20	0.21	T= 0.21	0.36
<i>TCF7L2</i>	rs7903146	0.30	0.33	T= 0.31	0.12
<i>FTO</i>	rs8050136	0.06	0.13	A= 0.10	0.35
<i>FTO</i>	rs918031	0.49	0.48	C= 0.49	0.09
<i>FTO</i>	rs1588413	0.25	0.32	T= 0.29	0.15
<i>FTO</i>	rs11076023	0.49	0.45	T= 0.47	0.48
<i>FTO</i>	rs7193144	0.13	0.12	T= 0.12	0.16

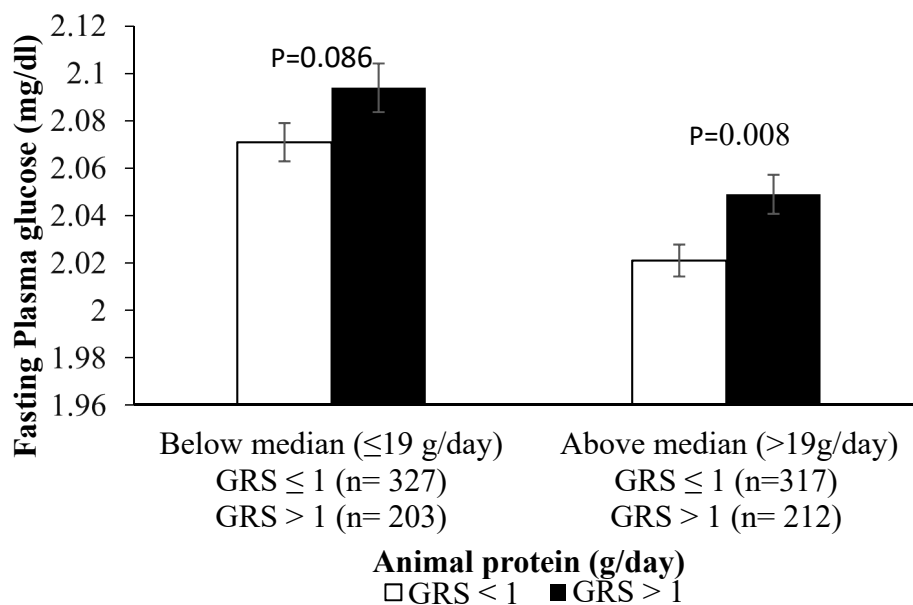
Abbreviations: SNP single nucleotide polymorphisms; MAF minor allele frequency; T2D type 2 diabetes; NGT, Normal Glucose Tolerance; HWE Hardy-Weinberg equilibrium; *TCF7L2* Transcription factor 7-like 2; *FTO* fat mass and obesity-associated.

**Figure S1: Methodology of the Chennai Urban Rural Epidemiology Study (CURES)**



**Figure S2: Interaction between 3-SNP GRS and animal protein intake (%) on fasting plasma glucose and glycated haemoglobin after adjusting for antidiabetic medications.** White bars indicate individuals with  $\text{GRS} \leq 1$  risk allele; the black bars indicate individuals with  $\text{GRS} > 1$  risk allele. (a) Individuals with  $>1$  risk allele had a significantly higher FPG compared to those with  $\leq 1$  risk allele, among those with higher intake of animal protein ( $>19$  g/day) ( $P=0.008$ ). (b) Individuals with  $>1$  risk allele had a significantly higher HbA1c compared to those with  $\leq 1$  risk allele, among those with higher intake of animal protein ( $>19$  g/day) ( $P=0.001$ ). P values were adjusted for age, sex, T2D, BMI, antidiabetic medications, total fat intake (%) and TEI. Abbreviations: GRS, genetic risk score; FPG, fasting plasma glucose; HbA1c, glycated haemoglobin and TEI, total energy intake.

**(a)**



**(b)**

