

Table S1 GWAS summary data utilized in this study

Trait		Sample N	SNPs N	population	Data source
Gut microbiome	Genus	18,340	5717754	European (16 cohorts, N= 13,266), Middle-Eastern (1 cohort, N = 481), East Asian (1 cohort, N = 811), American Hispanic/Latin (1 cohort N = 1097), African American (1 cohort, N = 114), multi-ancestry (4 cohorts, N = 2571)	MiBioGen consortium; https://mibiogen.gcc.rug.nl/ (PMID:33462485)
Adrenal medulla function	Adrenomedullin levels	21758	13106323	European	IEU Open GWAS project https://gwas.mrcieu.ac.uk/ (PMID: 33067605)
Adrenal cortex function	Hyperaldosteronism	Cases:690 m controls: 361988	20169937	European	FinnGen consortium R9 https://www.finngen.fi/en/
	Cortisol(plasma) measurement	4800	7724294	European	GWAS Catalog https://www.ebi.ac.uk/gwas/ (PMID:37277652)
	Cortisol (urine) measurement	2322	7723412	European	GWAS Catalog https://www.ebi.ac.uk/gwas/ (PMID:37277652)
	Estradiol measurement	206972	16582268	European	GWAS Catalog https://www.ebi.ac.uk/gwas/ (PMID:32042192)
	Free androgen index	162068	17239132	British	GWAS Catalog https://www.ebi.ac.uk/gwas/ (PMID:36653534)

SNP, single nucleotide polymorphism.