Supplementary table 1: Association between SNPs (*genotype*) and BMI (*outcome*) adjusted for lifestyle factors (*mediators*) in the overall analysis (men and women combined) – model 4

Lifestyle factor		**Carbohydrate score**		**Fat score**		**Alcohol consumption**		**Smoking behaviour**		**Physical activity**		**All lifestyle factors**	
SNP	**Gene**	**Estimate [kg/m²]**	**P-value**	**Estimate [kg/m²]**	**P-value**	**Estimate [kg/m²]**	**P-value**	**Estimate [kg/m²]**	**P-value**	**Estimate [kg/m²]**	**P-value**	**Estimate [kg/m²]**	**P-value**
rs10789336	NEGR1	-0.033	0.56	-0.038	0.50	-0.042	0.45	-0.035	0.53	-0.040	0.48	-0.049	0.38
rs6548238	TMEM18	-0.414	$1.63x10^{-8}$	-0.410	$2.15x10^{-8}$	-0.417	$1.33x10^{-8}$	-0.421	$9.57x10^{-9}$	-0.412	$1.66x10^{-8}$	-0.407	$2.29x10^{-8}$
rs10838738	MTCH2	-0.068	0.25	-0.068	0.24	-0.066	0.26	-0.067	0.25	-0.057	0.33	-0.063	0.27
rs9935401	FTO	0.290	$2.65x10^{-7}$	0.292	$2.25x10^{-7}$	0.289	$3.05x10^{-7}$	0.286	$4.03x10^{-7}$	0.287	$3.10x10^{-7}$	0.278	$6.97x10^{-7}$
rs17700144	MC4R	0.104	0.12	0.099	0.14	0.101	0.13	0.102	0.13	0.101	0.13	0.107	0.11
rs7498665	SH2B1	0.144	0.01	0.139	0.01	0.141	0.01	0.147	$9.10x10^{-3}$	0.135	0.02	0.133	0.02
rs11084753	KCTD15	0.018	0.76	0.020	0.74	0.012	0.83	0.013	0.83	0.007	0.90	0.020	0.72

Estimates and p-values from linear regression of the association between SNP (per minor allele) and BMI, adjusted for age, sex, survey, and one or all of the lifestyle factor