

**Table 2.** Linear regression analysis of the impact of the MC4R rs17782313 C allele and the FTO rs9939609 A allele on anthropometric indices and metabolic traits in all subjects

	MC4R rs17782313 C allele			FTO rs9939609 A allele		
	Mean	SE	P-value	Mean	SE	P-value
Weight	3.998	1.809	0.0279	3.603	1.418	0.011
Weight Z-score	0.7053	0.3041	0.0210	0.6168	0.2387	0.01
Height	-0.0009	0.0073	0.8984	0.0117	0.0057	0.04
Height Z-score	0.0503	0.1235	0.6842	0.1828	0.0965	0.059
BMI	1.737	0.688	0.0122	1.346	0.5426	0.013
BMI Z-score	0.5066	0.2063	0.0147	0.3813	0.1629	0.02
Waist circumference	2.821	1.719	0.102	3.58	1.391	0.01
Waist-Hip ratio	0.0094	0.0091	0.3033	0.0179	0.0074	0.016
Waist-Height ratio	0.0189	0.0107	0.0779	0.0201	0.0087	0.021
Birth weight	-0.357	50.63	0.9944	5.26	41	0.895
Head circumference	2.243	1.334	0.094	2.227	1.086	0.041
SBP	-1.921	1.742	0.2714	2.186	1.405	0.121
DBP	0.355	1.12	0.9766	0.0232	0.989	0.9813
INS	0.859	0.673	0.2029	0.4711	0.5439	0.39
INS (LN)	0.0702	0.068	0.3033	0.05071	0.0555	0.36
GLC (MMOL)	0.031	0.0405	0.4469	0.0003	0.0326	0.9927
HOMA IR	0.201	0.1472	0.1743	0.1137	0.1196	0.342
HOMA (LN)	0.0772	0.0706	0.2747	0.05417	0.0578	0.349
CHOL	4.305	3.211	0.1812	-0.1612	2.557	0.949
HDL-C	1.168	1.084	0.282	-0.811	0.872	0.353
LDL-C	2.091	2.714	0.4416	-1.071	2.169	0.622
TGS	1.347	2.764	0.6264	0.9453	2.217	0.670
TGS (LN)	0.0034	0.0375	0.928	0.0185	0.03	0.539

\*BMI, BMI z-score and weight were adjusted for age and gender; birth weight and birth weight z-score were adjusted for gender; waist circumference and waist-hip ratio were adjusted for age, gender and BMI; glucose, insulin, HOMA-IR, cholesterol, HDL-cholesterol, LDL-cholesterol and triglycerides were adjusted for age, gender and BMI. (# Mean  $\pm$  SD).