

Table 1. Estimated main effects (mean and 95% CI) in male subjects and estimated main and interaction effects (mean and 95% CI) in female subjects of the ECPBHS sample in anthropometric measurements and biochemical measures from 15 to 25 years of age between *TFAP2B* intron 2 VNTR genotype according to the linear mixed effects regression model.

Characteristics ⁵	Coefficient ³	MALES ¹		Coefficient ⁴	FEMALES ²	
		95% CI	p value		95% CI	p value
Body weight (kg)						
4/4 genotype	-1.350	-5.113; 2.414	0.482	2.761	-2.991; 8.512	0.347
4/5 genotype	-1.984	-3.949; -0.018	0.048	4.209	0.882; 7.537	0.013
4/4 genotype × time				-0.170	-0.481; 0.141	0.285
4/5 genotype × time				-0.249	-0.432; -0.066	0.008
BMI (kg/m²)						
4/4 genotype	-0.528	-1.540; 0.485	0.307	1.011	-0.941; 2.963	0.310
4/5 genotype	-0.715	-1.244; -0.187	0.008	1.446	0.315; 2.577	0.012
4/4 genotype × time				-0.062	-0.171; 0.048	0.269
4/5 genotype × time				-0.085	-0.150; -0.021	0.009
Sum of 5 skinfolds (mm)						
4/4 genotype	-4.025	-11.658; 3.608	0.301	8.529	-11.943; 29.001	0.414
4/5 genotype	-5.396	-9.386; -1.406	0.008	9.474	-2.374; 21.322	0.117
4/4 genotype × time				-0.595	-1.718; 0.528	0.299
4/5 genotype × time				-0.632	-1.292; 0.027	0.060
BF (%)						
4/4 genotype	-1.146	-2.883; 0.591	0.196	1.026	-2.555; 4.607	0.575
4/5 genotype	-1.171	-2.079; -0.262	0.012	1.385	-0.689; 3.459	0.191
4/4 genotype × time				-0.071	-0.268; 0.126	0.480
4/5 genotype × time				-0.092	-0.208; 0.023	0.118
WC (cm)						
4/4 genotype	-1.087	-3.249; 1.076	0.325	1.809	-3.345; 6.964	0.491
4/5 genotype	-1.568	-2.698; -0.439	0.006	2.364	-0.631; 5.358	0.122
4/4 genotype × time				-0.060	-0.356; 0.236	0.690
4/5 genotype × time				-0.143	-0.317; 0.032	0.109
HC (cm)						
4/4 genotype	-1.034	-3.283; 1.216	0.368	1.309	-3.339; 5.958	0.581
4/5 genotype	-1.183	-2.358; -0.007	0.049	3.424	0.743; 6.105	0.012
4/4 genotype × time				-0.110	-0.362; 0.142	0.391
4/5 genotype × time				-0.205	-0.353; -0.058	0.006
WHR (units)						
4/4 genotype	-0.0047	-0.0163; 0.0068	0.422	0.0111	-0.0220; 0.0442	0.511
4/5 genotype	-0.0069	-0.0130; -0.0009	0.025	-0.0059	-0.0250; 0.0131	0.542
4/4 genotype × time				0.0002	-0.0017; 0.0020	0.869
4/5 genotype × time				0.0003	-0.0007; 0.0014	0.533
WHtR (units)						
4/4 genotype	-0.0080	-0.0200; 0.0041	0.197	0.0107	-0.0195; 0.0409	0.488
4/5 genotype	-0.0096	-0.0159; -0.0033	0.003	0.0135	-0.0400; 0.0311	0.131
4/4 genotype × time				-0.0003	-0.0021; 0.0014	0.704
4/5 genotype × time				-0.0008	-0.0019; 0.0002	0.126
Subscapular skinfold (mm)						
4/4 genotype	-0.774	-2.323; 0.774	0.327	2.602	-2.535; 7.738	0.321
4/5 genotype	-0.960	-1.769; -0.152	0.020	2.673	-0.312; 5.657	0.079
4/4 genotype × time				-0.183	-0.481; 0.114	0.227
4/5 genotype × time				-0.164	-0.340; 0.011	0.067
Glucose (mmol/L)						
4/4 genotype	-0.074	-0.196; 0.047	0.231	-0.228	-0.583; 0.127	0.208
4/5 genotype	-0.029	-0.094; 0.035	0.375	-0.155	-0.359; 0.049	0.137
4/4 genotype × time				0.012	-0.005; 0.030	0.168
4/5 genotype × time				0.005	-0.005; 0.016	0.297
Insulin (mU/L)						
4/4 genotype	-0.891	-2.545; 0.764	0.291	1.035	-3.899; 5.969	0.681
4/5 genotype	-1.239	-2.116; -0.363	0.006	1.224	-1.615; 4.063	0.398
4/4 genotype × time				-0.060	-0.293; 0.172	0.610
4/5 genotype × time				-0.074	-0.209; 0.061	0.282

HOMA (units)						
4/4 genotype	-0.249	-0.663; 0.166	0.240	0.138	-1.064; 1.341	0.822
4/5 genotype	-0.314	-0.534; -0.094	0.005	0.168	-0.524; 0.861	0.633
4/4 genotype × time				-0.009	-0.065; 0.048	0.769
4/5 genotype × time				-0.012	-0.045; 0.021	0.463
Cholesterol (mmol/L)						
4/4 genotype	-0.111	-0.353; 0.132	0.371	0.487	-0.006; 0.981	0.053
4/5 genotype	-0.017	-0.144; 0.110	0.794	-0.005	-0.288; 0.278	0.973
4/4 genotype × time				-0.018	-0.042; 0.006	0.143
4/5 genotype × time				0.002	-0.012; 0.016	0.767
HDL-cholesterol (mmol/L)						
4/4 genotype	0.031	-0.064; 0.125	0.525	0.018	-0.213; 0.249	0.877
4/5 genotype	0.007	-0.042; 0.056Q1	0.780	-0.003	-0.136; 0.130	0.960
4/4 genotype × time				0.001	-0.011; 0.013	0.852
4/5 genotype × time				0.001	-0.006; 0.008	0.839
LDL-cholesterol (mmol/L)						
4/4 genotype	-0.112	-0.337; 0.113	0.330	0.337	-0.190; 0.865	0.210
4/5 genotype	-0.038	-0.159; 0.083	0.537	-0.055	-0.356; 0.246	0.720
4/4 genotype × time				-0.012	-0.037; 0.012	0.325
4/5 genotype × time				0.002	-0.012; 0.016	0.758
Triglycerides (mmol/L)						
4/4 genotype	-0.042	-0.197; 0.113	0.595	0.143	-0.199; 0.484	0.414
4/5 genotype	-0.042	-0.124; 0.039	0.309	0.055	-0.142; 0.252	0.584
4/4 genotype × time				-0.008	-0.025; 0.009	0.358
4/5 genotype × time				-0.001	-0.011; 0.008	0.772

¹ Models did not include time × *TFAP2B* intron 2 VNTR interaction

² Models included time × *TFAP2B* intron 2 VNTR interaction

³ Coefficient can be interpreted as the mean difference in anthropometrical measurements and biomarkers between *TFAP2B* intron 2 VNTR 4/4 and 5/5 genotype or between 4/5 and 5/5 genotype at each timepoint.

⁴ Difference in the rate of change in anthropometrical measurements and biomarkers between *TFAP2B* intron 2 VNTR 4/4 and 5/5 genotype or between 4/5 and 5/5 genotype can be calculated as the sum of main effect coefficient and time × interaction coefficient at given timepoint.

⁵ Means and 95% confidence intervals are graphed in Figures 1–3 for a clear visualization.