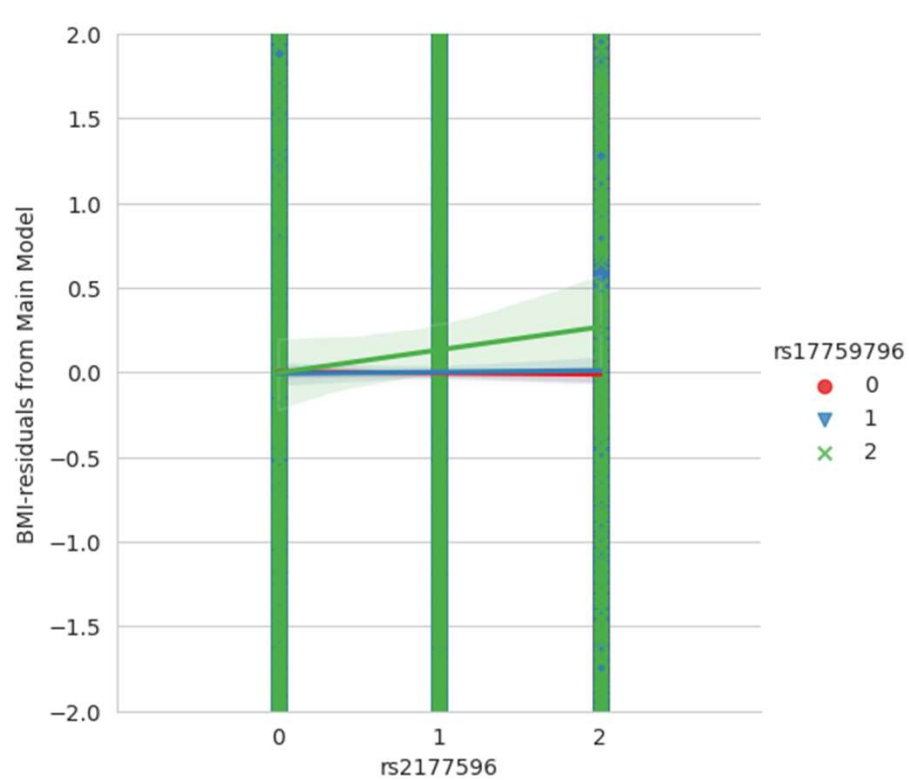
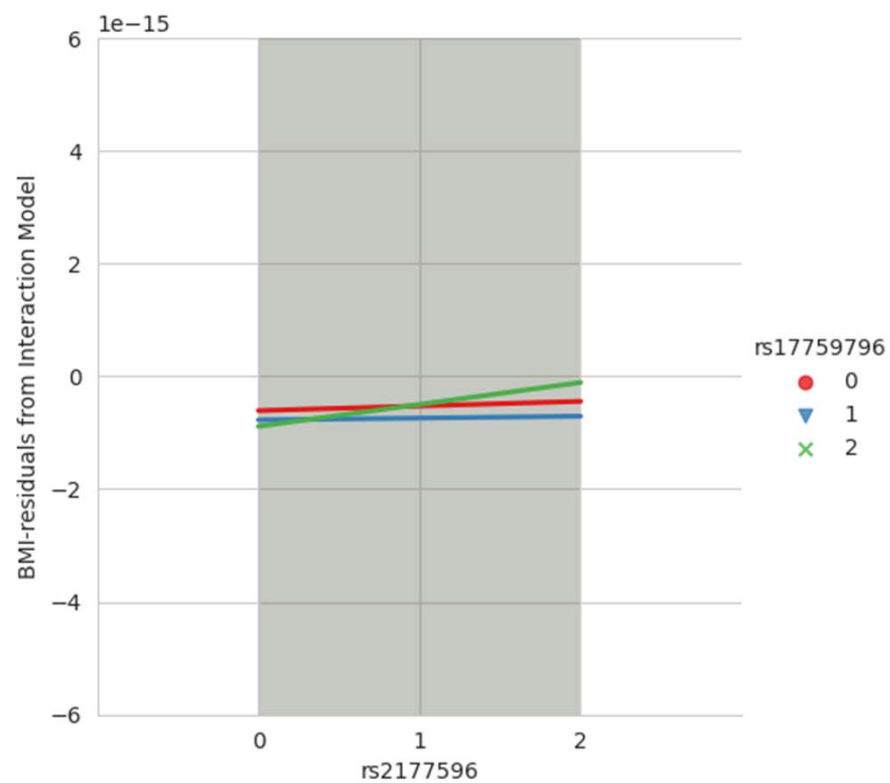


Figure S1: B) Main Effects vs Interaction Effects for SNPs rs2177596 (*RHDBB1*) and rs17759796(*MAPK1*)



$$\widehat{BMI} = \mu + \beta_1 SNP_1 + \beta_2 SNP_2 + \beta_3 Age + \beta_4 Gender$$



$$\widehat{BMI} = \mu + \beta_1 SNP_1 + \beta_2 SNP_2 + \gamma SNP_1 SNP_2 + \beta_3 Age + \beta_4 Gender$$