**Supplements**

**Figure S1.** **Plasma glucose and C-peptide responses to oral glucose ingestion in the *KCNQ1* R670K carrier (*KCNQ1*) and *KCNE1* G60D carrier (*KCNE1*) and their BMI, sex and age matched control participants.** Control to KCNQ1 (R670K) (n=2, men, BMI=26.8±0.7, age= 49.4±2.3, fat%=23.9±3.5). Control to KCNE1 (G60D) (n=2, men, BMI=19.6±1.3, age= 49.4±0.6, fat%=16.8±6.6)

**Figure S2 Results from 3-7 day continuous glucose monitors (CGM).** Increase of blood glucose levels within 1hr after carbohydrate rich meals(a) and the mean glucose levels for during the whole period(b)from the *KCNQ1* (red)R670K carrier (*KCNQ1*) and *KCNE1* G60D carrier (*KCNE1*) (blue) and their matched control participants, means ± SEM.

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