

Supplemental Table S1. Effect of the *MTNR1B* rs10830963 genetic variant on changes in lipid metabolism traits in response to a low-/high-fat diet at 2 years of diet intervention among white subjects

	Low fat (n=240)		High fat (n=235)		p interaction
	β (SE)	p	β (SE)	p	
Model 1					
Δ Triglycerides, mg/dL	7.81 (6.18)	0.21	1.12 (5.93)	0.85	0.51
Δ Total cholesterol, mg/dL	-4.70 (2.77)	0.09	4.24 (2.81)	0.13	0.02
Δ LDL cholesterol, mg/dL	-6.59 (2.25)	0.004	3.51 (2.30)	0.13	0.002
Δ HDL cholesterol, mg/dL	0.87 (0.72)	0.23	0.30 (0.79)	0.70	0.55
Model 2					
Δ Triglycerides, mg/dL	11.1 (5.91)	0.06	0.19 (5.69)	0.97	0.25
Δ Total cholesterol, mg/dL	-4.15 (2.78)	0.14	4.16 (2.81)	0.14	0.02
Δ LDL cholesterol, mg/dL	-6.13 (2.26)	0.007	3.44 (2.31)	0.14	0.003
Δ HDL cholesterol, mg/dL	0.44 (0.68)	0.52	0.45 (0.74)	0.54	0.98

Data were calculated by using linear regression models. The interaction term was included in the models to test gene-diet interactions. β represents changes in outcomes for the increasing number of G allele of the rs10830963 variant

Model 1: Adjusted for age, gender, ethnicity, BMI at baseline, the respective baseline variable and lipid-lowering medication use

Model 2: Adjusted for age, gender, ethnicity, BMI at baseline, the respective baseline variable, lipid-lowering medication use and body weight loss at each intervention time