

Table S1. Associations of outcome variables and covariates in 3 models.

	Outcome:2 hour glucose		Outcome: fasting glucose		Outcome: fasting insulin		Outcome: HOMA-IR	
	B	P*	B	P	B	P*	B	P*
Model 1								
Age	0.57	<0.0001	0.15	<0.0001	-0.03	0.344	0.00	0.574
Sex: Female vs male	2.80	0.018	-3.33	<0.0001	-0.26	0.762	-0.15	0.269
Ethnicity								
Non-Hispanic White	Reference		Reference		Reference		Reference	
Non-Hispanic Black	3.61	0.083	-0.73	0.150	1.49	0.011	0.33	0.026
Mex American	4.86	0.057	1.98	0.010	2.02	0.001	0.52	0.001
Other Hispanic	3.27	0.115	0.36	0.686	-0.06	0.567	-0.03	0.573
Non-Hispanic Asian	8.70	<0.0001	0.14	0.821	-2.07	<0.0001	-0.50	0.001
Other Race	0.01	0.940	1.35	0.313	0.06	0.702	0.05	0.798
Model 2								
Physical Activity								
Poor	Reference		Reference		Reference		Reference	
Intermediate	0.78	0.831	-0.57	0.184	-1.16	0.265	-0.35	0.232
Ideal	-6.44	0.001	-2.20	<0.0001	-3.72	<0.0001	-0.99	<0.0001
Ratio of family income to poverty	-0.85	0.214	0.10	0.628	-0.36	0.073	-0.08	0.127
Current smoking: Yes vs No	-9.37	<0.0001	0.60	0.373	-1.90	0.001	-0.46	0.003
Model 3								
BMI								
Reference ($\leq 25 \text{ kg / m}^2$)	Reference		Reference		Reference		Reference	
Overweight ($25 < \text{BMI} \leq 30 \text{ kg / m}^2$)	2.43	0.159	2.02	<0.0001	3.03	<0.0001	0.75	<0.0001
Obese ($> 30 \text{ kg / m}^2$)	12.04	<0.0001	5.37	<0.0001	9.76	<0.0001	2.55	<0.0001
History of Hypertension: Yes vs NO	4.98	0.034	1.39	0.077	1.99	0.001	0.58	0.001

Note: Model 2 has adjusted covariates in Model 1, and Model 3 has adjusted covariates in Model 1 and Model 2

*P values were calculated using log-transformed outcome variables

Table S2. Associations of rest-activity parameters with outcomes in model 4

Dependent variables	Rest-activity rhythm parameters	Model 4	
		Regression coefficient (95% CI)	P
2h-glucose*	RA	-3.0 (-4.25 to -1.75)	<0.001
	IV	3.13 (1.62 to 4.64)	0.001
	IS	-1.04 (-2.55 to 0.48)	0.20
	M10 start time	0.11 (-0.52 to 0.74)	0.63
	L5 start time	0.2 (-0.70 to 1.11)	0.78
Fasting glucose	RA	-0.25 (-0.59 to 0.09)	0.15
	IV	-0.2 (-0.69 to 0.29)	0.41
	IS	0.09 (-0.37 to 0.56)	0.68
	M10 start time	0.004 (-0.12 to 0.13)	0.95
	L5 start time	0.12 (-0.12 to 0.35)	0.32
Fasting insulin *	RA	-0.81 (-1.06 to -0.36)	0.045
	IV	0.64 (0.21 to 1.08)	0.10
	IS	-0.34 (-0.77 to 0.09)	0.52
	M10 start time	0.18 (-0.39 to 0.41)	0.11
	L5 start time	0.16 (-0.57 to 0.37)	0.5
HOMA-IR*	RA	-0.21 (-0.32 to -0.10)	0.045
	IV	0.16 (0.04 to 0.28)	0.19
	IS	-0.09 (-0.20 to 0.02)	0.64
	M10 start time	0.05 (-0.01 to 0.11)	0.13
	L5 start time	0.05 (-0.005 to 0.11)	0.40

Model 4: Adjusted for age, sex, ethnicity, ratio of family income to poverty level, physical activity, smoking and history of hypertension

* P values were calculated using log-transformed outcome variables