

**Table S1.** Summary of regression analyses examining cross-sectional associations between sleep-timing variables and body mass index (N = 315), and homeostatic model assessment of insulin resistance (N = 312) excluding participants taking antihypertensive medication

Variable	Unadjusted		Adjusted <sup>a</sup>		Adjusted <sup>b</sup>	
	ΔR2	β	ΔR2	β	ΔR2	β
<b>BMI<sup>1</sup></b>						
Mean bedtime	0.007	0.081	0.001	0.037	-	-
Bedtime variability	0.031	0.176	***	0.002	0.050	-
Bedtime delay	0.002	0.040	0.000	-0.003	-	-
Bedtime advance	0.036	0.189	***	0.010	0.101	*
<b>HOMA-IR<sup>2</sup></b>						
Mean bedtime	0.003	0.059	0.000	-0.010	0.001	-0.032
Bedtime variability	0.060	0.245	***	0.022	0.159	**
Bedtime delay	0.015	0.125	*	0.012	0.112	*
Bedtime advance	0.016	0.125	*	0.003	0.055	0.000
-0.005						

<sup>a</sup> Adjusted for race, menopausal status, exercise, depressive symptoms, and sleep duration; \*P < 0.05; \*\*P < 0.01; \*\*\*P < 0.001.

<sup>b</sup>Further adjusted for BMI.

<sup>1</sup>N =315, <sup>2</sup>N = 312.

BMI = body mass index; HOMA-IR = homeostatic model assessment of insulin resistance.

**Table S2.** Summary of regression analyses examining prospective associations between sleep-timing variables and body mass index (N = 286) and homeostatic model assessment of insulin resistance (N = 223)

Variable	Unadjusted		Adjusted <sup>a</sup>		Adjusted <sup>b</sup>	
	ΔR2	β	ΔR2	β	ΔR2	β
<b>BMI<sup>1</sup></b>						
Mean bedtime	0.016	0.126 *	0.000	0.013	0.000	0.014
Bedtime variability	0.020	0.142 *	0.000	-0.004	0.000	0.002
Bedtime delay	0.000	-0.012	0.000	0.014	0.000	0.013
Bedtime advance	0.035	0.187 ***	0.000	-0.007	0.000	-0.006
<b>HOMA-IR<sup>2</sup></b>						
Mean bedtime	0.001	-0.023	0.003	-0.053	0.006	-0.084
Bedtime variability	0.004	0.062	0.000	-0.013	0.002	-0.050
Bedtime delay	0.016	0.125 *	0.016	0.127 *	0.016	0.127 *
Bedtime advance	0.012	0.111	0.001	0.026	0.001	-0.037

<sup>a</sup>Adjusted for BMI or HOMA-IR at Time 1.

<sup>b</sup>Further adjusted for race, menopausal status, exercise, depressive symptoms, sleep duration, and months between Time 1 and Time 2.

\*P < 0.05; \*\*P < 0.01; \*\*\*P < 0.001.

<sup>1</sup>N = 286; <sup>2</sup>N = 223.

BMI = body mass index; HOMA-IR = homeostatic model assessment of insulin resistance.