Table S1. Key variable definitions: Exposures.

Description	Survey question	N	N missing	Min	Max	Median
Timing of last exposure to indoor light	Yesterday, when was the last time you were exposed to <u>indoor artificial light</u> before going to bed? 1: 07:00 - 08:00 PM; 2: 08:00 - 09:00 PM; 3: 09:00 - 10:15 PM; 4: 10:15 PM - 12:45 AM; 5: 12:45 - 2:00 AM; 6: 2:00 - 3:00 AM	125	1	1.00	6.00	4.00
Timing of first exposure to outdoor light	Today, when was the first time you were outdoors in daylight (without a roof above your head)? 1: 5:00 - 8:00 AM; 2: 8:00 - 10:00 AM; 3: 10:00 - 5:00 PM; 4: 5:00 - 10:00 PM; 5: I wasn't outdoors.	125	1	1.00	4.00	2.00
Timing of first exposure to indoor light	This morning, after awakening when was the first time you were exposed to <u>indoor artificial light</u>? 1. Before 5:00 AM 2. 5.00-6:30 AM 3. 6:30-7:45 AM 4. 7:45-9:45 AM 5. 9:45-11:00 AM 6. 11:00AM-12:00 noon 7. After 12 noon	126	0	1.00	6.50	3.00

Description	Survey question	N	N missing	Min	Max	Median
Timing of last eating Episode	Last night, before bed, when did you <u>eat or drink foods or beverages</u>? (Note: black coffee, diet soda etc. without calories do NOT count) 1: Before 5:00 PM; 2: 5:00 - 6:00 PM; 3: 6:00 - 7:00 PM; 4: 7:00 - 8:00 PM; 5: 8:00 - 9:00 PM; 6: 9:00 - 10:15 PM; 7: 10:15 PM - 12:45 AM; 8: 12:45 - 2:00 AM; 9: 2:00 - 3:00 AM; 10: After 3:00 AM	125	1	1.00	8.50	5.00
Timing of first eating episode	This morning, when did you first eat or drink (Note: black coffee, diet soda etc. without calories do NOT count) 1. Before 5:00 AM 2. 5:00 -6:30 AM 3. 6:30-07:45 AM 4. 7:45 -9:45 AM 5. 9:45 -11:00 AM 6. 11:00 AM-12:00 Noon 7. I did not consume anything before 12 noon.	126	0	2.00	7.00	4.00
Morning PA proportion		126	0	0.00	100.00	33.33
Evening PA proportion		109	17	0.00	100.00	14.29

Abbreviations: PA=physical activity.

Table S2. Key variable definitions: Outcomes.

Description	N	N missing	Min	Max	Median
In-bed time, hours from midnight	126	0	-4.53	3.01	-0.51
Out-of-bed time, hours from midnight	126	0	4.06	12.27	7.40
Total sleep time, hours	126	0	4.61	9.40	7.06
L5 midpoint, dec. hours	118	8	-0.63	7.18	3.19
M10 midpoint, dec. hours	118	8	10.98	18.62	14.75

Abbreviations: dec. hours=decimal hours.

Table S3. Cut-offs for exposure variables.

Description	Cutoff
Timing of last exposure to indoor light (3.5 = 11:00 PM)	<=3.5 → 1 >3.5 →2
Timing of first exposure to outdoor light (1.5 = 9:30 AM)	<=1.5 →1 >1.5 →2
Timing of first exposure to indoor light (3 = 6:30 AM - 7:45 AM)	<=3 →1 >3→2
Timing of last eating episode (5=8:00 PM - 09:00 PM)	<=5 →1 >5 →2
Timing of first eating episode (4=7:45 AM - 9:45 AM)	<=4 →1 >4 → 2
Morning PA proportion	<=33% →1 >33% →2

Abbreviations: PA=physical activity

Table S4. Spearman correlations between timing exposures and parametric rest-activity

outcomes.

		MESOR	Amplitude (ln counts)	Acrophase (dec. hours)
Timing of last exposure to Indoor light	r	-0.10	-0.14	**0.58**
	p	0.28	0.13	**<0.001**
	N	117	117	**117**
Timing of first exposure to outdoor light	r	-0.11	-0.17	**0.50**
	p	0.26	0.06	**<0.001**
	N	117	117	**117**
Timing of first exposure to indoor light	r	**-0.26**	-0.10	**0.65**
	p	**0.005**	0.27	**<0.001**
	N	**118**	118	**118**
Timing of last eating episode	r	-0.05	-0.09	**0.61**
	p	0.63	0.35	**<0.001**
	N	117	117	**117**
Timing of first eating episode	r	-0.06	-0.11	**0.44**
	p	0.56	0.24	**<0.001**
	N	118	118	**118**
Morning PA proportion	r	0.17	0.16	**-0.32**
	p	0.06	0.09	**<0.001**
	N	118	118	**118**
Evening PA proportion	r	0.14	0.09	0.17
	p	0.15	0.40	0.10
	N	101	101	101

Abbreviations: dec. hours=decimal hours, PA=physical activity, p=p-value.

Table S5. Regression results among 7 parametric rest-activity outcomes and timing exposures combinations selected by the correlation analysis. Beta values (confidence intervals).

Exposures		MESOR (ln counts)	Acrophase (dec. hours)
		Outcomes	
Last exposure to indoor light	Model 1		**1.18** **(0.68,1.68)**
	Model 2		**1.17** **(0.68,1.67)**
First exposure to outdoor light	Model 1	**-0.23** **(-0.43,-0.01)**	**1.04** **(0.57,1.52)**
	Model 2	-0.15 (-0.31,0.00)	**1.01** **(0.53,1.48)**
First exposure to indoor light	Model 1		**1.29** **(0.84,1.73)**
	Model 2		**1.25** **(0.81,1.70)**
Last eating episode	Model 1		**1.22** **(0.77,1.68)**
	Model 2		**1.24** **(0.80,1.70)**
First eating episode	Model 1		**0.74** **(0.30,1.19)**
	Model 2		**0.71** **(0.27,1.15)**
Morning PA proportion	Model 1		**-0.94** **(-1.38,-0.49)**
	Model 2		**-0.88** **(-1.34,-0.42)**

Linear regression models were performed to assess the association between 2 parametric rest-activity outcomes (Top Row) and 6 timing related exposures (left column). Betas (95% Confidence interval) are presented for each cell. Results from 2 models are presented for the first and second row for each exposure. Abbreviations: dec. hours= decimal hours, PA=physical activity

Model 1: age, sex, race/ethnicity, household income, education level, site, BMI (continuous)

Model 2: adjusted for the same covariates as in model 1, in addition to total physical activity (from wrist actigraphy)
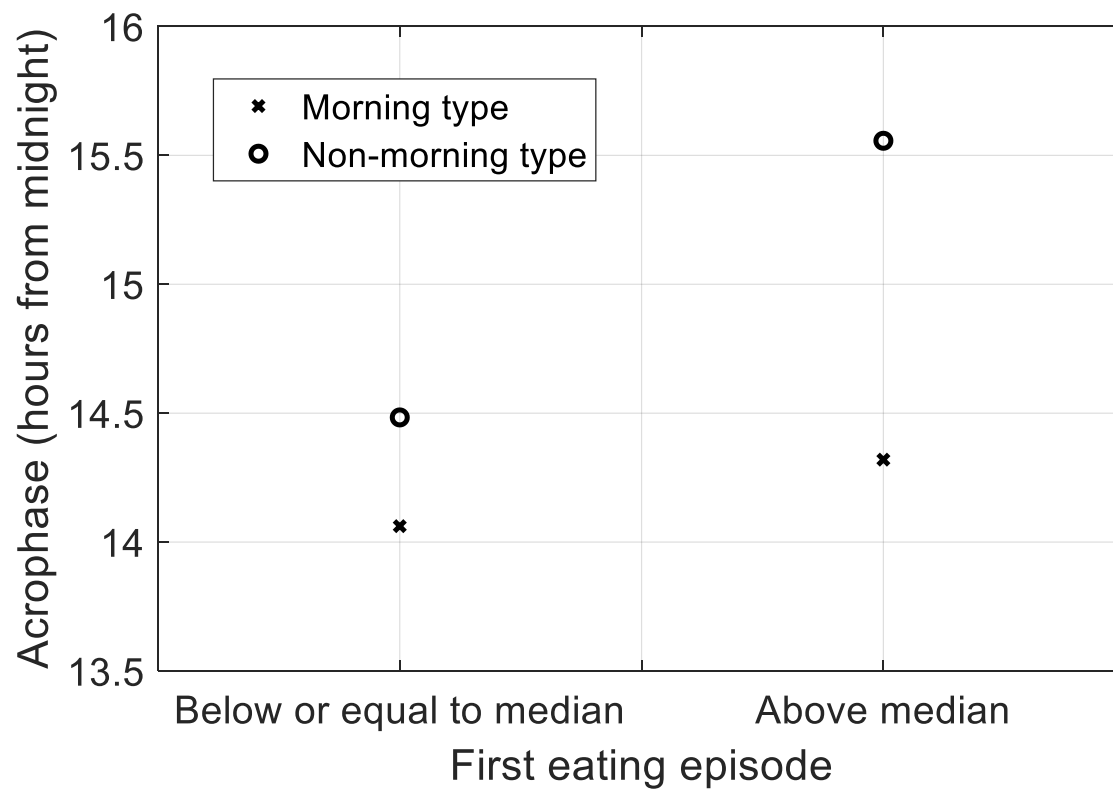
Figure 1. Interaction plot between morning type and first eating episode for acrophase. The graph represents the relationship between acrophase and first eating episode (dichotomized) adjusted for main effects of age, sex, race/ethnicity, household income, education level, study site and BMI.