

Mean light timing may influence body mass index and body fat

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A new study suggests that the timing of exposure to moderate levels of light may influence body mass index (BMI) and body fat.

Results show that people with more exposure to moderate or higher intensity [light](#) earlier in the day had lower [body mass index](#) and percent [body fat](#) than those with more of their moderate or higher intensity light exposure later in the day.

"These results emphasize the importance of getting the majority of your exposure to moderate or higher intensity light during the morning and provide further support that changes to environmental light exposure in humans may impact body weight regulation," said study co-author Ivy N. Cheung, a doctoral candidate in the Interdepartmental Neuroscience program at Northwestern University in Chicago, Illinois.

The research abstract was published recently in an online supplement of the journal *Sleep* and will be presented Tuesday, June 9, in Seattle, Washington, at SLEEP 2015, the 29th annual meeting of the Associated Professional Sleep Societies LLC.

The study group comprised 23 healthy adults. The majority were female, with a mean age of 26 and a mean BMI of 29. Subjects wore a wrist monitor for seven days to determine light patterns. Seventeen participants also had total percentage body fat measured using dual axis absorptiometry (DXA). Light data was binned into 2 minute epochs, smoothed using a 10-minute moving average, and then aggregated over

24 hours for each individual. The mean light timing above a threshold light level C (MLiTC) was defined as the average clock time of all aggregated data points above C lux with thresholds ranging from C=20-2,000 lux at 20 lux intervals. Height and weight were objectively measured to determine BMI.

More information: Abstract Title: Mean Light Timing is Correlated with Body Mass Index and Body Fat in Adults

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