

Longer sleep times may counteract genetic factors related to weight gain

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Toss out another old wives' tale: Sleeping too much does not make you fat. Quite the opposite, according to a new study examining sleep and body mass index (BMI) in twins, which found that sleeping more than nine hours a night may actually suppress genetic influences on body weight.

The study looked at 1,088 pairs of twins and found that sleeping less than seven hours a night was associated with both increased BMI and greater genetic influences on BMI. Previous research has shown that genetic influences include things like [glucose metabolism](#), energy use, fatty acid storage and satiety. In this study, the [heritability](#) of BMI was twice as high for the short sleepers than for twins who slept longer than nine hours a night.

"The results suggest that shorter [sleep](#) provides a more permissive environment for the expression of obesity related genes," said principal investigator Nathaniel Watson, MD, MSc, of the University of Washington. "Or it may be that extended sleep is protective by suppressing expression of obesity genes."

Watson and colleagues determined that for twins sleeping less than seven hours, genetic influences accounted for 70 percent of the differences in BMI, with common environment accounting for just 4 percent and unique environment 26 percent. For twins averaging more than nine hours of sleep, [genetic factors](#) were attributed to 32 percent of weight variations, with common environment accounting for 51 percent and

unique environment 17 percent.

More research is needed, Watson said, but these preliminary results may suggest that behavioral weight loss measures would be most effective when genetic drivers of body weight are mitigated through sleep extension.

Provided by American Academy of Sleep Medicine

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