Why Getting Too Little Sleep Can Make You Fatter

The scientific consensus is clear: we need more sleep. Our bodies and brains rely on getting sufficient shuteye, and cutting ourselves short deals a compounding blow to our health. A new study adds to the argument by showing that sleeping too little correlates with a bigger waistline and higher body mass index (BMI), among other negatives.

The study of 1,615 adults found that people who slept an average of six hours a night had a waist circumference three centimeters larger than those who slept nine hours a night (that’s about 1.18 inches). The short sleepers also had a higher BMI on average and lower HDL cholesterol (the so-called “good cholesterol” number that ideally should be higher).

Participants had blood samples taken and their waist circumference, weight and blood pressure recorded. Sleep times fell into three categories: average of about 6 hours, average of about 7.5 hours, and average of about 9 hours. Across the board, the 6-hour group had worse outcomes than the other two groups.

"Because we found that adults who reported sleeping less than their peers were more likely to be overweight or obese, our findings highlight the importance of getting enough sleep,” said Dr. Laura Hardie, the study's senior investigator. “How much sleep we need differs between people, but the current consensus is that seven to nine hours is best for most adults."
The study didn’t find a link between sleeping less and eating a worse diet, which places even more emphasis on sleep as a driving factor in the results.

A few caveats apply: the study relied on self-reporting for sleep; the numbers are average ranges rather than specific amounts. Diet was also self-reported, so there could be some fuzziness there as well. And the study didn’t track results over time, which would provide a more complete picture of what sleeping less does to our bodies. Overall, the study should be viewed as a snapshot in time rather than a comprehensive analysis of the relationship between sleep and health.

As with all studies like this, we also have to consider the flip-side: is sleeping less the cause or the result of weight gain? First it's important to note that this study doesn't prove a cause in either direction. But, when viewed against the backdrop of previous research showing a link between sleep and obesity, it's most likely that the arrow is going from sleeping too little to gaining extra pounds.

The reasons why this is true are a topic of ongoing discussion, but two strong evidence-based possibilities are: (1) sleep deprivation handicaps self-control, little by little, resulting in food choices that pack on weight over time, and (2) lack of sleep, even in small amounts each night, disrupts hormones that regulate appetite, inducing hunger and triggering nighttime cravings that result in more weight gain.

While these results aren’t good news for short sleepers, there’s a positive message here as well. Sleep is a factor most of us can influence—just like adjusting our diets, we can adjust our sleep patterns, and the scientific consensus is that we’d benefit from doing both.