

# Lack of sleep may increase calorie consumption

March 14 2012

---

If you don't get enough sleep, you may also eat too much — and thus be more likely to become obese.

That is the findings of researchers who presented their study at the American Heart Association's Epidemiology and Prevention/Nutrition, Physical Activity and Metabolism 2012 Scientific Sessions.

"We tested whether [lack of sleep](#) altered the levels of the hormones leptin and ghrelin, increased the amount of food people ate, and affected energy burned through activity," said Virend Somers, M.D., Ph.D., study author and professor of medicine and cardiovascular disease at the Mayo Clinic, Rochester, Minn.. Leptin and ghrelin are associated with appetite.

The researchers studied 17 normal, healthy young men and women for eight nights, with half of the participants sleeping normally and half sleeping only two-thirds their normal time.

Participants ate as much as they wanted during the study.

Researchers found:

- The [sleep](#) deprived group, who slept one hour and 20 minutes less than the control group each day consumed an average 549 additional calories each day.
- The amount of energy used for activity didn't significantly

change between groups, suggesting that those who slept less didn't burn additional calories.

- Lack of sleep was associated with increased leptin levels and decreasing ghrelin — changes that were more likely a consequence, rather than a cause, of over-eating.

"Sleep deprivation is a growing problem, with 28 percent of adults now reporting that they get six or fewer hours of sleep per night," said Andrew D. Calvin, M.D., M.P.H., co-investigator, cardiology fellow and assistant professor of medicine at the Mayo Clinic.

The researchers noted that while this study suggests sleep deprivation may be an important part and one preventable cause of weight gain and obesity, it was a small study conducted in a hospital's clinical research unit.

"Larger studies of people in their home environments would help confirm our findings," Calvin said.

Provided by American Heart Association

Citation: Lack of sleep may increase calorie consumption (2012, March 14) retrieved 26 April 2024 from <https://medicalxpress.com/news/2012-03-lack-calorie-consumption.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--