

## Can lack of sleep make you fat?

By Michael A. Lucia, MD



The change in America's sleep habits has been dramatic in recent years. In fact, the proportion of Americans getting fewer than seven hours of sleep per night has increased from 16 to 37 percent in the last 40 years.

It may not be just a case of a few extra hours of sleep missed to get that extra report done or catch Jay Leno's latest joke. In two generations, Americans have cut their average sleep time by nearly two hours, and we're seeing the results in more ways than the opening of yet another local coffee shop.

Excessive sleepiness is the second-leading cause of car accidents and a significant cause of truck accidents in the United States. Many major national disasters such as the Exxon Valdez, Three Mile Island and the Challenger explosion have been linked to sleep-deprived workers.

More importantly, new studies in the last year have associated sleep deprivation with changes in hormones that regulate appetite. One study with more than 900 patients established a connection between sleep deprivation and hunger, especially for sugar-rich foods and simple carbohydrates.

The primary link between the two is a neuropeptide called leptin. This hormone secreted by fat cells increases in response to sleep or food intake and has been proven to suppress caloric consumption. More sleep causes leptin to rise, which lowers appetite and decreases body weight.

Additional research in sleep medicine has identified ghrelin, another hormone secreted by the stomach. This hormone seems to have the opposite effect on appetite as leptin, increasing with sleep deprivation and causing weight gain.

As America faces a growing epidemic of obesity and with two-thirds of Americans now overweight, gastric bypass has become a serious alternative for treatment. One reason this therapy appears to work is the fact that ghrelin levels are reduced after a portion of the stomach (where ghrelin is made) is removed. Future research may focus on how to manipulate these hormones to achieve long-term weight control without the need for surgery.

But for now, in addition to diet control and increased exercise, getting a good night's sleep may be the best thing you can do to improve your health and well-being and help control those extra pounds. So get your beauty rest knowing that every extra wink is helping to fight the battle of the bulge.

Michael A. Lucia, MD, FAASM, is a board-certified pulmonologist and diplomate of the American Board of Sleep Medicine with Sierra Pulmonary & Sleep Consultants. Located on the campus of Northern Nevada Medical Center, the office is in Suite 310, Vista Medical Terrace, 2345 E. Prater Way, Sparks (up the hill from the hospital). For more information or an appointment, please call 351-2600.



Michael A. Lucia, MD,  
FAASM