

Obesity is a complex issue and new studies are finding that sleeping less may be an important factor in weight gain.

How are the two linked? Why would people who sleep less weigh more? While people burn more calories when awake than while sleeping, there are certain things that happen when we deprive the body of sleep. It is more complicated than simply looking at the amount of physical activity that happens and how calories are burned.

There are two important hormones that are believed to be a key.

LEPTIN is released by fat cells and signals the brain to STOP eating.

GHRELIN is made in the stomach and signals the body to KEEP eating.

Studies have shown that leptin levels are lower and ghrelin levels are higher in people who sleep fewer hours.

One study used 12 healthy young men and limited them to 4 hours of sleep for 2 consecutive nights. Leptin levels (the stop eating hormone) were 18% lower in these men while the ghrelin levels (the keep eating hormone) were 28% higher than after 2 nights of sleeping 10hours. The men in this study also noticed an increase in their appetite for salty foods, sweets, and starches.

The brain also interprets a drop in leptin level as a sign of starvation, so the body's normal response to that is to boost hunger AND burn less calories. So your metabolism slows down even if you don't necessarily increase your food intake.

A Harvard Women's Health Watch study also supported these findings and found further data linking BMI (Body Mass Index) and sleep habits. The conclusion in one study noted the higher a person's BMI, the less sleep he or she reported getting per night. Overweight and obese subjects got an average of 1.86 fewer hours of sleep per week than normal weight individuals—an average of 25 minutes per night less.

Experts from the National Sleep Foundation recommend 8 hours per night to be well rested. While occasional sleep loss is not a problem, sustained "sleep debt" could point you down the road to excess weight gain and more time to "graze" the night away.

For more information about this subject you may view the website from the National Sleep Foundation using www.sleepfoundation.org.