

# Sleep and Weight Gain

Will better sleep help you avoid extra pounds?

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WebMD Feature

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Could lack of sleep be causing you to gain weight?

Think about it: If you're feeling sleepy at work, you may be tempted to reach for a cup of coffee (or several cups) and a doughnut for a quick shot of energy. Later you may skip the gym and pick up takeout on your way home to your family -- no time to cook. When you finally find yourself back in your bed, you are too wound up to sleep.

It's a vicious cycle, and eventually this sleep deprivation can sabotage your waistline and your health.

It starts out innocently enough. "When you have sleep deprivation and are running on low energy, you automatically go for a bag of potato chips or other comfort foods," says Susan Zafarlotfi, PhD, clinical director of the Institute for Sleep and Wake Disorders at Hackensack University Medical Center in New Jersey.

The immediate result? You may be able to fight off sleepiness. The ultimate result? Unwanted pounds as poor food choices coupled with lack of exercise set the stage for obesity and further sleep loss.

"Sleep debt is like credit card debt," Zafarlotfi says. "If you keep accumulating credit card debt, you will pay high interest rates or your account will be shut down until you pay it all off. If you accumulate too much sleep debt, your body will crash."

Not getting enough sleep is common -- even talked about with pride -- in the U.S. "We brag about an all-nighter, but we do pay a price for staying up late and getting up early," says Mark Mahowald, MD, director of the Minnesota Regional Sleep Disorders Center in Hennepin County.

## Understanding the Sleep-Diet Connection

The sleep-diet connection is regular fodder for diet books and magazine articles. Maybe you have even heard about the sleep diet, which suggests you can lose weight while you catch your ZZZs.

And it's true, sort of.

"It's not so much that if you sleep, you will lose weight, but if you are sleep-deprived, meaning that you are not getting enough minutes of sleep or good quality sleep, your metabolism will not function properly," explains Michael Breus, PhD, author of *Beauty Sleep* and the clinical director of the sleep division for Arrowhead Health in Glendale, Ariz.

On average, we need about 7.5 hours of quality sleep per night, he says. "If you are getting this already, another half hour will not help you lose 10 pounds, but if you are a five-hour sleeper and start to sleep for seven hours a night, you will start dropping weight."

Exactly how lack of sleep affects our ability to lose weight has a lot to do with our nightly hormones, explains Breus.

The two hormones that are key in this process are ghrelin and leptin. "Ghrelin is the 'go' hormone that tells you when to eat, and when you are sleep-deprived, you have more ghrelin," Breus says. "Leptin is the hormone that tells you to stop eating, and when you are sleep deprived, you have less leptin."

More ghrelin plus less leptin equals weight gain.

“You are eating more, plus your metabolism is slower when you are sleep-deprived,” Breus says.

### The Sleep-Weight Loss Solution

So what can you do about sleep deprivation?

A lot, says Breus. First, look at how much you sleep vs. how well you sleep. “Some people such as new moms may only get to sleep for a four-hour stretch. And there are some people who get 7.5 hours of sleep that is poor quality because of pain or an underlying sleep disorder, and this has the same effect as if they got less sleep,” he says.

Trouble-shoot both with improved sleep hygiene, he says.

For starters, avoid any caffeine in the afternoon because it will keep you in the lighter stages of sleep -- which are associated with poor sleep -- at night. Breus recommends only decaf from 2 p.m. on. Exercise also helps improve sleep quality. How soon before bed should you exercise? It depends -- everyone is different. It's more important *that* you exercise than it is *when* you exercise. Breus says to be safe, don't exercise right before going to bed. “But some people exercise better before bed and it doesn't affect their sleep,” he says.

Watch what you eat before bedtime. “Pizza and beer before bedtime is not a good idea,” says Breus. “Neither is eating a big meal close to bedtime.” He suggests eating a few healthy snacks and then having a light meal -- like a bowl of cereal -- if you're running close to bedtime. Heavy, rich meals before bed can also increase risk of heartburn, which will certainly keep you up all night.

What if you are getting enough hours of sleep but wake up and feel sleepy the next day? “Talk to your doctor about seeing a sleep specialist,” Breus says. After conducting a thorough evaluation and sleep study, in which you are monitored while sleeping, the sleep specialist can help identify any underlying problem. Together you can develop a treatment plan so that you get more high-quality sleep -- and maybe even slim down.

#### SOURCES:

Susan Zafarlotfi, PhD, clinical director, Institute for Sleep and Wake Disorders, Hackensack University Medical Center, New Jersey.

Michael Breus, PhD, clinical director, sleep division, Arrowhead Health, Glendale, Ariz.; author, *Beauty Sleep*.

Mark Mahowald, MD, director, Minnesota Regional Sleep Disorders Center, Hennepin County.

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