

Sleep More, Weigh Less?

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In the ongoing discussion of just how much sleep we need each night, the research shows that our sleeping habits can impact our weight, contribute to insulin resistance, increase our risk of heart disease, contribute to premature aging by interfering with growth hormone production and accelerate tumor growth.

In a recent study conducted at Cedars-Sinai Medical Center in Los Angeles, CA., researchers measured insulin sensitivity in male dogs. The study showed that dogs fed a high-fat diet for six months (to induce obesity) and then exposed to one night of sleep deprivation showed more insulin resistance (a pre-diabetic state) than obese dogs exposed to a normal night's sleep. Let's look at this same situation in humans. Research shows that people who sleep less than seven hours a night tend to have a higher BMI (body mass index) than those who get more sleep. What are the biological mechanisms that link sleep deprivation and weight gain?

- * When we are sleep-deprived, leptin (the hormone that signals satiety) declines, while ghrelin (the hormone that signals hunger) rises. In one study, researchers found that people who slept only four hours for two consecutive nights had an 18% reduction in leptin and a 28% increase in ghrelin. This leads to an increase in appetite and food cravings, especially sweet and starchy foods.
- * Physiological stress is another mechanism that can help explain the link between poor sleeping habits and increased weight gain. When the body is sleep deprived, the stress that is created sends a signal to the adrenal glands to release cortisol, thereby raising glucose levels, increasing heart rate and blood pressure and stopping your digestive processes.

So, how much sleep do we really need and how can we ensure the best possible sleep? As a general rule, adults need between 6 and 8 hours of sleep per night. However, the amount of sleep we need can change if we are battling an illness or

going through a particularly stressful time. Pregnant women usually need more sleep than usual in the first trimester. Babies, children and teens benefit from 8-10 hours as their bodies need to recover at night from the stress of rapid growth processes. How can you optimize your "sleep sanctuary"?

- * Keep the temperature in your bedroom between 60-68 degrees at night. Research shows that this is optimal for sound sleep.
- * Cover your bedroom windows with blackout shades or drapes to ensure more complete darkness. Even minimal light can disrupt the pineal gland's production of serotonin and melatonin, resulting in a disrupted cycle. So, no night-lights or open bedroom doors. If you have to use a light, install a "low blue" light that emits an amber light that will not suppress melatonin production.
- * Move alarm clocks and other electrical devices away from your head. If you have to use them, place them at least three feet away.

As a nutritionist, I am always looking for more and easier ways to help my clients stay leaner and live longer. Of course, a clean diet and lots of water always head the list when we want to lose or maintain a leaner physique!

