Sleep

Oh, for the good old days.

A hundred years ago, Americans averaged 12 hours of sleep per night. It was obviously easier back then to decide when we'd had enough for one day. More recently, 60 years ago, we were down to 8 or 9 hours a night. A trend was definitely starting to show.

Today, the average night's sleep has dropped below 7 hours. And in fact about a third of us get by on less than 6 hours.

We're sleeping less, all right. And it's not because we don't need sleep any more, because we do, and more than we're getting. The reason we don't sleep enough is directly related to our ever-evolving standard of living. It all started with Mr. Edison and his electric light. Suddenly, we were able to keep daytime going 24/7. We started looking for more to do with our newfound freedom from the dark. Over time we were bombarded with opportunities, which became distractions, which gave way to sleep-robbing anxiety. Other technology followed suit. TV brought us the couch potato. Machinery replaced the work we used to do physically. We still needed the sleep, but we weren't getting tired any more in the same healthy ways.

And now, along with other health concerns we face when we don't sleep enough, studies are starting to show a connection between lack of sleep and obesity.

A large population study found that those sleep-deprived souls who sleep for 6 hours are 23% more likely to be obese than those sleeping 7-9 hours a night. The likelihood doubles to 50% for those sleeping 5 hours a night, and it spikes to a mind-numbing 73% for the 4-hour sleeper!

Studies and theories differ on why this is the case. Some theories are based strictly on the obvious math of it all. More hours awake mean more hours for eating throughout the day. And if those hours are spent predominantly on sedentary activities like the computer or the TV, there's no place for the calories to go but the waistline. However, research conducted by Sanjay Patel, MD found that the opposite was true when he looked at 70,000 middle-aged women. Those who slept less actually ate less, exercised the same amount, and still gained more weight.

Other studies support these findings, or at least help explain them. Sleep deprivation has been found to change the regulation of appetite and energy

expenditure. So without eating one single extra morsel, the weight gain can increase (talk about adding insult to injury!).

Hormones apparently factor in as well. Weight-related hormones ghrelin, leptin, cortisol, adiponectin, and perhaps others are found to fluctuate according to sleep patterns. And our appetite and energy levels fluctuate with them. Let's take a look at each one of these hormones and the role it plays in weight control.

- Ghrelin is a hormone responsible for increased appetite, increased desirability of food, decreased fat utilization, and decreased energy expenditure. After just two sleep-deprived nights, ghrelin levels are affected, resulting in a ***forty-five percent*** increase in cravings for carbohydrate-rich foods.

  Ghrelin levels are depressed for the first several months following gastric bypass surgery, giving people a metabolic and behavioral edge in their weight loss efforts. It's a lot easier to avoid baked goods and sweets when they make you nauseated.

- Leptin is the reverse of ghrelin: it tells your body when to stop eating. Sleep deprivation decreases leptin levels, minimizing its ability to decrease appetite and maximize energy expenditures.

  Studies show that those who sleep less than 8 hours a night have higher levels of body fat, which decreases sensitivity to leptin. The signals to stop eating can be severely hampered. A food-rich environment with faulty appetite control is a sure recipe for weight gain.

- Cortisol, the stress hormone, rises during the afternoon and evening hours in those with sleep deprivation. Cortisol affects weight by increasing appetite and fat accumulation and reducing insulin sensitivity. It also impairs glucose tolerance.

- Adiponectin is a hormone that enables insulin to move from the bloodstream into cells where it is used for fuel or stored. Adiponectin is decreased during periods of sleep deprivation.

Sleep apnea is a common disorder among weight loss surgery candidates. It may persist up to a year after weight loss surgery. Some people unwisely assume that their sleep apnea has been resolved after surgery and stop using their CPAP machines too soon. Sleep apnea interrupts normal sleep patterns and discontinued treatment may hinder weight loss efforts after bariatric surgery.

So, with all this information to process, let's get down to the big question: how much sleep do I need to maintain the optimum weight-loss scenario? First of all we can relax a little because nobody's recommending we try to clock anywhere near pre-Edison hours. So we can keep our electric lights, our computers, our TV's, our desk jobs and still get the sleep we need. In fact, most experts are recommending a very doable 7-8 hours. 9 -10 may increase your obesity risk almost as much as no enough sleep. Go figure. If you find after getting 7-8 you still feel fatigued, you should ask your doctor about being tested for sleep apnea.

The American Academy of Sleep has the following tips for getting a good night's sleep:

Follow a consistent bedtime routine.
Establish a relaxing setting at bedtime.
Get a full night's sleep every night.
Avoid caffeine or any other stimulants before bedtime.
Be worry-free at bedtime.
Don't go to bed hungry, or too full.
Avoid rigorous exercise within six hours of your bedtime.
Make your bedroom quiet, dark, and a little cool.
Get up at the same time every morning.

You've probably noticed that some of these tips (i.e., be worry-free at bedtime) are easier said than done. But by no means are they impossible. You may find the article entitled, "The Power of Attitude" in this same section helpful.

And remember, those little switches Mr. Edison and his fellow inventors designed to turn their gadgetry on will also turn them off. So make generous use of that provision. Give your sleep schedule the priority it deserves. And see if you don't start feeling progressively better with each and every wake-up.