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Hey You! Wake Up!

American kids aren't getting enough sleep. And it's a way bigger problem than you think.

By Matthew Hutson

In 1964, a teenager in San Diego named Randy Gardner hatched an idea for a science fair project: He would see how long he could stay awake. By the end of the experiment, he had been up for 264 hours. That's 11 days!

Gardner had set a record for the longest period without sleep. But along the way, he was not quite himself. He became moody, forgetful, paranoid. At one point, he mistook a street sign for a person. On day four, he thought he was a running back for the San Diego Chargers.

You probably don't have plans to stay up 11 days straight, but if you're like most kids, you'll pull an occasional late-nighter to finish your history essay. Even on regular nights, you probably stay up too late. Teenagers need about nine hours of sleep a night. Yet a recent survey found that on weeknights, as few as 14 percent of teens get enough zzz's. They aren't the only ones who are tired, either. According to the Centers for Disease Control and Prevention, one-third of adults are chronically sleep deprived too.

Permanent Damage

You know the effects of a crummy night's sleep: You feel groggy, forgetful, and clumsy. It's no wonder - 24 hours without sleep leaves you as impaired as if you were legally drunk. In fact, lack of sleep can cause brain cells to die.

Adolescence is a bad time to put that kind of stress on your brain. During your teen years, your brain changes rapidly, creating new pathways and pruning old ones. Over time, a sleep deficit has been shown to cause permanent damage. It also puts teenagers at risk for depression, anxiety, obesity, bad grades, sports injuries, low self-esteem, and serious diseases. In adults, it affects concentration, health, job performance, and mood.

Consider this: The police and military sometimes use sleep deprivation to get information out of suspects. After hours or days of being kept awake, suspects often break down and tell an interrogator anything he or she wants to know. Need more proof that sleep is important? Drowsy driving causes more than 100,000 car accidents every year.

A Wonky Clock

So how do you know if you are sleep deprived? If it takes five alarms to get you up in the morning, or if you're falling asleep in class and drooling on your desk, chances are you're not getting enough shut-eye.

Getting adequate sleep can change your life. While you sleep, your body re-energizes, builds muscle and bone, and strengthens your immune system. Your brain enhances memories and solves problems. Studies show that you're more likely to remember something if you sleep after it. (Maybe a good night's rest is all you need to memorize the Gettysburg Address!)

Unfortunately, getting more sleep can feel like an uphill battle, as if your body - and the world - is working against you.

This is why: Sleep is regulated by two systems. The first system tells your body that the longer you're awake, the more you need to sleep. The second is what's known as a circadian rhythm - that is, a 24-hour cycle. (*Circadian* comes from the Latin roots *circa*, meaning "around," and *dies*, meaning "day.") This rhythm is controlled by an internal body clock that tells you when it's time to be awake and asleep.

During puberty, that clock shifts. Suddenly you feel like going to bed one to three hours later. But since school starts the same time it always has, getting enough sleep becomes difficult. An irregular schedule - such as sleeping until noon on Saturdays and going to bed at different times during the week - can also disrupt your circadian rhythm and make you feel exhausted.

A Perfect Storm

There may be something else contributing to your grogginess: technology. In a recent study, a group of 100 teenagers did an average of four tech-related activities after 9 p.m. They went online, watched TV, played video games, and used cell phones. The more tech they used, the harder it was for them to fall asleep.

Part of the problem is that tech-related activities get your mind all revved up, making it difficult to relax. The other problem is that light - particularly the blue-wave light that many gadgets produce - tells your body it's daytime. This prevents the release of melatonin, a hormone triggered by darkness that makes you drowsy.

Like technology, anxiety can interfere with your brain's ability to turn off. You may lay in bed for hours worrying about an upcoming math test or a fight you just had with your BFF.

Mary Carskadon, a professor of psychiatry and human behavior at Brown University, calls the factors that affect sleep in teens a "perfect storm" for a sleep deficit. And while sleep deprivation may not kill you, it does kill other animals. Consider this: Flies and rats die sooner without sleep than they do without food.

So go to bed - before you find yourself talking to stop signs!