

Grade 11 Informational

Sleep: Teens Need It!

Losing Sleep

The world we live in today is filled with high-tech sleep stealers, such as television, computers, cell phones, and MP3 players, all of which cut into sleep time and make teenagers feel active and alert when they should be considering shutting down their systems for the night. As convenient and exciting and entertaining as all this technology may be, it is encroaching on a good night's sleep. Late-night activities and constant communication with friends, coupled with the need to surf the Web, are inviting outlets for teens whose days are often hectic and filled with stress. It is vital that the circadian rhythm, or the 24-hour activity cycle of the human body, includes an adequate amount of sleep. However, as teens today deal with numerous social and academic pressures, extracurricular activities, sports, and employment, sleep deprivation has become a matter of grave concern. With all these competing interests, it's no wonder teens end up fighting against their brains' and bodies' natural tendency to crave sleep.

Today's teen lives in a 24-hour society where sleep is a luxury. Most are not only chronically sleep-deprived but are in sleep debt. They experience many long hours of wakefulness and irregular sleep/wake schedules. The constant cheating on sleep causes untold wear and tear on their bodies.

The Consequences

Sleep deprivation is a rampant problem among teens and affects them in many ways. Adolescents are at risk for cognitive and emotional difficulties, impaired school performance, traffic accidents, and feelings of anxiety, depression, and hopelessness. Insufficient sleep results in decreased ability to focus on tasks and impaired attention and concentration, making it difficult for teens to excel in school. Is it any wonder that sleep deprivation leads to irritability and mood disorders?

The average teen needs at least 8 hours of sleep to stay alert all day. In 1964, Randy Gardner, who was then seventeen, stayed awake for eleven days, setting the record for sleep deprivation. During this time, he experienced blurred vision and incoherent speech, saw objects as people, and even suffered from paranoia. However, he recovered quickly when he finally slept—8 hours on the first night and 15 hours on the next.

Benefits of Sleep

Why is the right quantity and quality of sleep so critical? During sleep, the body and brain recuperate, restore, rejuvenate, and reenergize. Sleep enhances mood, perception, memory, reaction time, productivity, performance, creativity, longevity, and energy. The various activities of the sleeping brain play a vital role in regulating the body, including the immune system. A strong immune system is necessary to combat illnesses, environmental pollutants,

and other stresses on the body.

Sleep Cycle

During sleep, the body experiences a five-stage sleep cycle. Each stage lasts about 10 to 20 minutes and is repeated five to six times during the night. Stages one and two occur when we first fall asleep. We disengage from our surroundings, our brain activity diminishes, our muscles relax, and our body temperature decreases. Stages three and four are the deepest and most restorative periods of sleep. Breathing and heart rate slow, blood supply to muscles increases, tissue growth and repair occurs, and hormones essential for growth and development are released. These hormones include ghrelin and leptin, which regulate the feelings of hunger and fullness. Stage five is the rapid-eye-movement, or REM, sleep stage. REM recurs about every 90 minutes, and its duration increases later in the night. The body becomes immobile and relaxed, muscles shut down, eyes dart back and forth, the brain is activated, and dreams occur. REM sleep plays a major role in memory storage, retention, and organization. By providing energy, REM sleep prepares our bodies and minds for success the next day.

A Sleep Schedule

Four guidelines pertaining to sleep are recommended for a healthy lifestyle. We need to get enough sleep every night. Most people need at least 60 to 90 minutes more sleep than they usually get each night. We need to establish a regular sleep schedule, which means going to bed and waking up at the same time every day, even on the weekends. The body needs continuous sleep so that it can restore itself. Interrupted sleep disrupts the sleep cycles and can cause drowsiness the next day. Lost sleep can be recouped by going to bed earlier and returning to a regular sleep schedule as soon as possible.

Quality and Quantity

The quality and quantity of a person's sleep is a major factor in overall health and performance. Teens, who may still be growing and who live an active, demanding lifestyle, require even more sleep than most adults. High-quality sleep gives teens the power to face the new day with energy and awareness. A third of their lives is spent sleeping, but this time is far from unproductive. It profoundly affects the success and good health they enjoy during the other two-thirds of their lives.

Grade 11 Narrative

Uncle Wilbur

My uncle Wilbur used to spend hours every day checking on the lightning rods that stood guard on the roof of his house. We get a lot of storms here in Alabama. Sometimes we see wind up to sixty miles per hour and baseball-size hail. Lightning, Uncle Wilbur says, is a living thing, and like a cat, it will strike anything that moves. You'd better not tempt it, he always told us, because you never know when you'll be walking along one day and—"bam!"—you'll find yourself charred like a piece of chicken gristle that got left in the grease too long. He advised my cousins and me to always be mindful of the nearest sheltering tree. He said we should be prepared to drop to the ground like a hot potato at the first sound of thunder. Knowing that lightning is attracted to the tallest thing around, Uncle Wilbur worried constantly about my cousin Jared, who, at sixteen, was 6'2" and still growing.

Uncle Wilbur has always been a smart man. We all listened as he dismissed the automobile as a passing fancy. Every year it seemed more and more Model Ts came rolling into town, but Uncle Wilbur insisted that nothing could replace the reliability of a good old-fashioned mule when it came to transportation, work, or even entertainment. Yes, Uncle Wilbur's Mule Olympics, complete with obstacle courses and a long jump, was known far and wide as one of the most exciting events of the year. Sadly, the Mule Olympics did not survive into the next decade because the mules got too old and lost interest.

Nonetheless, my uncle Wilbur continued to predict future trends and warn us of impending tragedy. To this day, he reminds us that he foresaw the stock market crash of 1929, and that's why he kept his money wrapped in a handkerchief under his mattress. (Considering that a large portion of it was Confederate money, he didn't have much to begin with, but even if he had, he would not have trusted it to banks, the federal government, or any such gambling operation as the New York Stock Exchange.) When they started collecting income taxes a few years back, Uncle Wilbur refused to share his wealth with Uncle Sam, believing that one day someone would challenge this highway robbery in a court of law. He felt that by refusing to pay taxes now, he was just saving the government that extra step of having to return his money in the future. Unfortunately, Uncle Wilbur soon faced possible jail time for back taxes, which he promptly paid, still insisting that the money was just a temporary loan.

Suspicious of all bureaucratic officials, Uncle Wilbur did not take kindly to the power company man who came knocking one day in 1936. This was the year the government launched a campaign to bring electricity to rural areas like ours. Most folks, like Uncle Wilbur, were a little wary of having electricity in their homes. Many of us had running water, and we just weren't sure that the two mixed. Nevertheless, Uncle Wilbur was downright floored when the man said he wanted to string power lines up to the house. Nearly losing his temper, Uncle Wilbur exclaimed, "Here I am doing everything in my power to keep from getting struck by lightning, and you want to bring it right to my doorstep?" He sent the man on his way with a "No, thank you," and a "Good day, sir," but in the months that followed, we all eventually relented and let in the light. I must admit, playing checkers in the dark is a talent you can easily

lose without daily practice.

Many things have changed since those times. Uncle Wilbur still lives in mortal fear of a lightning strike, but because he doesn't get out much anymore, most of his lightning rods have rusted through and fallen to the ground. Now that he's retired, Uncle Wilbur lives mostly on Social Security, which he proudly proclaims as his victory. (See, he says, the government did *eventually* give his money back.) He probably spends more time reminiscing about the past than he does making future predictions, but Uncle Wilbur will be the first to tell you that television will never be as popular as radio, and the idea of a human traveling into outer space is just plain crazy!