

# Sleep and the Learning Process

Sleep is necessary for learning and memory function. Staying up will not improve your ability to retain what you are studying. Instead, advances in neuroscience show that sleep actually is essential for long-term memory and aids in the learning process.

## Sleep and Retaining New Information

Throughout the day, your brain picks up a variety of information from lectures, conversations, readings, and general interactions. In order to determine what should be retained or eliminated, your brain needs down time to process the material. When you sleep, your brain synthesizes the material and attempts to file the information in the appropriate contextual area of your memory for optimum recall. For this reason, individuals who fail to get enough sleep sometimes have difficulty recalling information quickly.



## Common Sleep Myths

Many students believe the ability to pull an all-nighter is a youthful advantage. Studies have demonstrated that contrary to this myth, the need for sleep doesn't change with age.

## Tips for a Better Night's Sleep

- 1** Go to bed at the same time every night—A regular sleep schedule sets your body's sleep-wake cycle and helps you fall asleep faster at night.
- 2** Sleep at night—Avoid napping for more than one hour, and after 3:00 p.m. Otherwise, you disrupt your sleep-wake cycle.
- 3** Eliminate stimulants—Caffeine and nicotine are not only addictive but also harmful because they keep you awake. Limit your caffeine intake later in the day because caffeine can take 3-10 hours to be eliminated from the body.
- 4** Exercise—Aerobic exercise can help you fall asleep and be more rested. However, exercising too close to bedtime may keep you awake longer.

## Effects of Lack of Sleep

Not getting a good night's sleep affects more than your ability to retain your physics lecture. Studies have shown that receiving less than 6 hours of sleep per night over two weeks results in the individual feeling and performing as if they had gone 48 hours without sleep. Lack of sleep has detrimental effects on the brain, nervous, cardiovascular, and immune systems, as well as metabolic functions.

## Finding Your Sleep Needs

Most individuals are only designed for 16 waking hours. Although a good night's sleep generally consists of 7-8 hours of uninterrupted rest, some may only require 6 hours while others need as much as 10 to operate at peak levels. Take the time to track your energy levels and take note of the amount of sleep you need.

## Track Your Sleep

Take advantage of one of the many sleep tracking apps available to help monitor and improve your sleep habits.

