



8 Hours of Sleep

Most people need to sleep about 8 hours each night. This is especially true for college students, since the deep sleep that occurs early in the night and the dream sleep that occurs later in the night are both required to learn.



Important

Sleep is a behavioral state that is a natural part of every individual's life. We spend about one-third of our lives asleep. Nonetheless, people generally know little about the importance of this essential activity. Sleep is not just something to fill time when a person is inactive. Sleep is a required activity, not an option. Even though the precise functions of sleep remain a function.



Misconception 1

Misconception 1: Sleep is time for the body in general and the brain specifically to shut down for rest.

Sleep is an active process involving specific cues for its regulation. Although there are some modest decreases in metabolic rate, there is no evidence that any major organ or regulatory system in the body shuts down during sleep. Some brain activity, including **delta waves**, increases dramatically. Also, the **endocrine system** increases secretion of certain hormones during sleep, such as growth hormone and prolactin. In **REM sleep**, many parts of the brain are as active as at any time when awake.



Misconception 2

Misconception 2: Getting just one hour less sleep per night than needed will not have any effect on daytime functioning.

When daily sleep time is less than an individual needs, a “sleep debt” develops. Even relatively modest daily reductions in sleep time (for example, one hour) can accumulate across days to cause a sleep debt. If the debt becomes too great, it can lead to problem sleepiness. Although the individual may not realize his or her sleepiness, the sleep debt can have powerful effects on daytime performance, thinking, and mood.



Misconception 3

Misconception 3: The body adjusts quickly to different sleep schedules.

The **biological clock** that times and controls a person's sleep/wake cycle will attempt to function according to a normal day/night schedule even when that person tries to change it. Those who work night shifts naturally feel sleepy when nighttime comes. A similar feeling that occurs during travel is known as jet lag. This conflict, set up by trying to be active during the brain's biological nighttime, leads to a decrease in cognitive and motor skills. The biological clock can be reset, but only by appropriately timed cues and even then, by one to two hours per day at best. Problems resulting from a mismatch of this type may be reduced by behaviors such as sleeping in a dark, quiet room, getting exposure to bright light at the right time, and altering eating and exercise patterns.



Misconception 4

Misconception 4: People need less sleep as they grow older.

Older people don't need less sleep, but they often *get* less sleep. That's because the ability to sleep for long periods of time and to get into the deep, restful stages of sleep decreases with age. Many older people have more fragile sleep and are more easily disturbed by light, noise, and pain than when younger. They are also more likely to have medical conditions that contribute to sleep problems.



Misconception 5

Misconception 5: A “good night’s sleep” can cure problems with excessive daytime sleepiness.

Excessive daytime sleepiness can be associated with a sleep disorder or other medical condition. Sleep disorders, including sleep apnea (that is, absence of breathing during sleep), insomnia, and narcolepsy, may require behavioral, pharmacological, or even surgical intervention to relieve the symptoms. Extra sleep may not eliminate daytime sleepiness that may be due to such disorders.



Pulling All-Nighters

Pulling all-nighters can interfere with your ability to learn new material. You can memorize facts during an all-night study session and recall the information through short-term memory for a test the next day, but you will most likely have to re-learn the material for a later cumulative exam.









