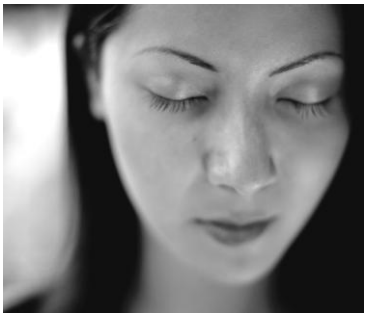
Sleep and Academics

WHY DOES SLEEP MATTER IN COLLEGE?



Sleep may be one of the most important factors for student success and often one of the most neglected. Many students will sacrifice sleep in order to work, play, or get school projects completed. However, although most people think they can function well when they don't get sleep, the truth is they cannot.

Research shows that people who are deprived of sleep perform worse on thinking and performance task than those who are not sleep deprived. Furthermore, those who were sleep deprived judged that they performed better on the task than they actually did. In comparison, the non-sleep deprived group accurately judged how well they did on the task. What this shows is that people lacking sleep think they are doing just fine when in fact, they are not. Losing sleep often results in lower performance on tasks, which frustrates and aggravates the sleep deprived student who thinks his or her performance is just fine.

SLEEP AFFECTS YOUR PERFORMANCE

MEMORY: Research shows that people who **sleep seven hours a night** do **better on memory tasks** than those who do not. Individuals will vary in terms of how much sleep is the 'right' amount, but in general most college students need at least six to eight hours a night.

RECOVERY TIME: Avoid late weekend nights when you have an important project or exam during the coming week. The effects of missing sleep can last for several days and it takes your body time to recover. When you have a large project due or an important exam, save your brain's energy and memory power by **keeping a consistent sleep schedule** during the entire week, including the weekend.

RECHARGE WITH POWER NAPS: You might be tempted to substitute sleep with caffeine. Caffeine will keep you awake, but does not help you process what you learn. Naps are an excellent way to recharge your brain and give you an energy burst. However, there is a specific **nap etiquette** you should follow to make sure naps are working for you rather than against you. Naps later than 3 pm will interfere with your nightly sleeping schedule, so avoid taking later evening naps. Naps longer than 20 minutes will leave you feeling groggy, but naps that are 15 to 20 minutes will leave you refreshed and ready to move forward with your day.

AVOID SLEEP BULIMIA: Catching up on sleep on the weekend or "sleep bulimia" (a phrase coined by Harvard psychiatrist and sleep researcher Robert Stickgold) may not be the best strategy for enhancing academic performance. To perform well on exams, Dr. Stickgold believes *it is more important to get regular sleep* (Stickgold, 1999) than catching up on sleep just before a test. **Regular sleep** not only helps us to **retain information** learned during the day but also contributes to **solving complex problems** at night.

HOW CAN I IMPROVE MY SLEEP HABITS?

1. Create a nightly routine that helps prepare your body for a good night's sleep. This should include relaxing activities such as reading or listening to mellow music. Also, selecting a specific bedtime each night will help train your body to know what cues indicate it is time for sleep.

2. Avoid doing anything in your bed other than sleeping and resting. When you watch TV in bed, study for classes, or use it for a hang out area, you send your body mixed signals. Reserving your bed only for rest ensures that when you lay down at night your body knows it is time to fall asleep.

3. Use caffeine, nicotine, and alcohol carefully. Avoid caffeine, nicotine, or alcohol four to six hours before you go to sleep**.** Be aware that caffeine and nicotine are stimulants and will disrupt your body's natural sleepiness cues. If you need to stay awake to study, the best method is to manage your time effectively to allow yourself enough sleep to keep you alert rather than relying on stimulants. Also, many people think alcohol will make them sleep better. Although alcohol has an initial sleep-inducing effect, when it wears off hours later it can result in a wake-up effect, making it difficult to stay asleep. Choose to engage in another relaxing activity at night to avoid this effect.

4. Exercise is an important part of keeping a healthy lifestyle, and regular exercise will help you sleep better each night. However, the timing of that exercise is important to ensure the optimal effect on your sleep schedule. The best time to engage in exercise that will improve sleep is in the afternoon. If you have to exercise at a different time, it is still effective but be sure to always complete your exercise at least two hours before you go to sleep. Otherwise, strenuous exercise before sleep will decrease your ability to fall asleep.

5. Most importantly, make sleep a priority. You must schedule sleep like any other daily activity, so put it on your "to-do" list and cross it off every night. But don't make it the item you do only after everything else is done – stop doing other activities so you get the sleep you need.

ASSESS YOUR SLEEP HABITS

The Epworth Sleepiness Scale (M.W. Johns, 1991) was developed to measure sleep deprivation. For each situation below, indicates the most appropriate number using this scale**:**

0 = would never doze; 1 = slight chance of dozing; 2 = moderate chance of dozing; 3 = high chance of dozing.

Sitting and reading	____	Lying down to rest in the afternoon	____
Watching television	____	Sitting and talking to someone	____
Sitting inactive in a public place (i.e. lecture /meeting)	____	In a car, while stopped in traffic	____
As a passenger in a car for an hour without a break	____	Sitting quietly after lunch	____

Scoring: Add up the numbers to get a total score.
If your score is 1 – 6: Congratulations, you are getting enough sleep!
If your score is 7 – 8: You have a normal amount of sleepiness.
If your score is 9 and up: Seek the advice of a sleep specialist or your health care provider as soon as you can.

TRACK YOUR SLEEP PATTERNS

You may also want to keep a **sleep diary**, like the one below, for a week or longer to help you identify any behaviors that might contribute to your sleepiness. If you have concerns, discuss the diary with your health care provider.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Sleep time: Wake time: Hours of sleep:							
How long did it take to fall asleep?							
How many times did you wake up during the night?	❑ 1 time ❑ 2 times ❑ 3 + times	❑ 1 time ❑ 2 times ❑ 3 + times	❑ 1 time ❑ 2 times ❑ 3 + times	❑ 1 time ❑ 2 times ❑ 3 + times	❑ 1 time ❑ 2 times ❑ 3 + times	❑ 1 time ❑ 2 times ❑ 3 + times	❑ 1 time ❑ 2 times ❑ 3 + times
How awake did you feel in the morning?	❑ Energetic ❑ Calm ❑ Sluggish ❑ Exhausted	❑ Energetic ❑ Calm ❑ Sluggish ❑ Exhausted	❑ Energetic ❑ Calm ❑ Sluggish ❑ Exhausted	❑ Energetic ❑ Calm ❑ Sluggish ❑ Exhausted	❑ Energetic ❑ Calm ❑ Sluggish ❑ Exhausted	❑ Energetic ❑ Calm ❑ Sluggish ❑ Exhausted	❑ Energetic ❑ Calm ❑ Sluggish ❑ Exhausted
How awake did you feel in the evening?	❑ Energetic ❑ Calm ❑ Sluggish ❑ Exhausted	❑ Energetic ❑ Calm ❑ Sluggish ❑ Exhausted	❑ Energetic ❑ Calm ❑ Sluggish ❑ Exhausted	❑ Energetic ❑ Calm ❑ Sluggish ❑ Exhausted	❑ Energetic ❑ Calm ❑ Sluggish ❑ Exhausted	❑ Energetic ❑ Calm ❑ Sluggish ❑ Exhausted	❑ Energetic ❑ Calm ❑ Sluggish ❑ Exhausted
How often did you use caffeine or other stimulants to feel more energized?	❑ 1-2 times ❑ 3-4 times ❑ 5 + times	❑ 1-2 times ❑ 3-4 times ❑ 5 + times	❑ 1-2 times ❑ 3-4 times ❑ 5 + times	❑ 1-2 times ❑ 3-4 times ❑ 5 + times	❑ 1-2 times ❑ 3-4 times ❑ 5 + times	❑ 1-2 times ❑ 3-4 times ❑ 5 + times	❑ 1-2 times ❑ 3-4 times ❑ 5 + times
Did you feel the need to take naps during the day?	❑ Yes ❑ No	❑ Yes ❑ No	❑ Yes ❑ No	❑ Yes ❑ No	❑ Yes ❑ No	❑ Yes ❑ No	❑ Yes # No

Note: This chart is a casual evaluation tool, not a diagnostic test. If you are concerned about your sleep patterns, please consult a doctor.

Sources:

- University Health Services, Princeton University www.princeton.edu/uhs/ih_Q_A_sleep_hygiene.html
- National Sleep Foundation www.sleepfoundation.org/
- Minnesota Sleep Institute www.minnsleep.com/self_test.php
- Office of Health Education, University of Pennsylvania www.vpul.upenn.edu/ohe/library/mental/sleep/index.php
- University of Maryland Medical Center www.minnsleep.com/self_test.php
- Johns MW (1991). "A new method for measuring daytime sleepiness: the Epworth sleepiness scale". *Sleep* 14 (6): 540–5.
- Stickgold, R, Scott, L, Rittenhouse, C, & Hobson, JA (1999). Sleep Induced Changes in Associative Memory. *Journal of Cognitive Neuroscience*, *11*, 182-193.
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