

## Sleep

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### *Why do I need sleep?*

Sleep is essential for a person's health and well being. In today's fast paced world, we are a society of sleep-deprived individuals.

- Sleep is when the body does most of its repair work.
- During sleep a number of essential hormones are released including those that regulate energy and affect growth and metabolism. Sleep helps maintain a healthy balance of the hormones that make you feel hungry (ghrelin) or full (leptin.) When you don't get enough sleep, the hormonal imbalance will make you feel hungrier than when you are well-rested. Sleep deprivation increases the risk of obesity.
- Sleep affects how our body react to insulin, the hormone that controls your blood sugar, making a sleep deprived person more prone to insulin resistance and weight gain.
- During sleep, the body's energy supply is replenished and muscle tissue is rebuilt and restored. Growth hormone is released in deep sleep which boosts muscle mass and helps repair cells and tissues in all ages.
- Your immune system relies on sleep for defending your body against infection. White blood cells move more slowly and are not as efficient with sleep deprivation, making you more likely to get sick.
- During sleep, the heart and blood vessels are repaired. The inflammatory system may be more activated with sleep deprivation.
- While you are sleeping, the brain is preparing for the next day. It is forming new pathways to help you learn and remember information.
- Sleep helps you pay attention, make decisions, and be creative. Studies show that sleep deficiency alters activity in some parts of the brain. You may have trouble making decisions, solving problems, controlling your emotions and behaviors, and coping with change. Sleep deficiency has been linked to depression and risk-taking behavior.
- Your safety and those of others around you are compromised by lack of sleep. Reaction times are longer and effects are similar to those while driving intoxicated. Driver sleepiness is estimated to be a

factor in about 100,000 car accidents each year.

### *How much sleep do I need?*

Most adults need between 7-9 hours of sleep. The amount of sleep each person needs is an individual requirement. If a person frequently feels drowsy during the day, they are not fulfilling their sleep requirements. If you have to drink caffeinated beverages during the day to stay alert, sleep through your alarm or keeping hitting the snooze button, fall asleep during class, or nod off soon into studying/watching tv/reading a book, you are not getting enough sleep. If you are easily irritated by minor upsets or are grumpy with loved ones, roommates or co-workers, you probably need more sleep.

### *How do I get better sleep?*

With the fast paced college lifestyle, it's easy for students to neglect sleep or sacrifice it for school or social reasons. In order to have a better night's sleep, resulting in more productive days, a healthier lifestyle, a more positive mood, less stress, and an improved immune system, try the following sleeping tips. For best results, try these tips over a period of time such as 3 weeks. You should find yourself feeling better .

- Explore time management techniques to help you stay on top of your studies and maintain a more productive sleep schedule. Make sleep a priority.
- Keep regular, consistent sleeping hours. Go to bed and get up at the same time each day, even during the weekend.
- Avoid daytime naps if you have trouble falling asleep. Limit naps to less than an hour and before 6:00 PM.
- Avoid pulling "all-nighters" to cram for a test. You are more likely to make mistakes, lose your ability to concentrate during the test, and not be able to recall what you studied.
- Save the bed for sleep (and sex). Avoid watching TV, talking on the phone, reading or doing homework while in bed.
- Avoid any electronic screens for 2 hours before bed, as the brain reacts to the light by secreting hormones in the brain that signal you to stay awake. Do not sleep with your cell phone by your pillow; even that amount of light can disturb.

- Is your bed comfortable? If not, try a contour pillow or egg crate if the mattress is too hard.
- Check your sleeping posture. Sleeping on your stomach could disrupt your sleep by waking you up with back or neck strain. For best sleep posture, sleep on your back which allows your head, neck, and spine to rest in a neutral position. If you sleep on your side, draw your legs slightly up and place a pillow between them.
- Keep the room dark and quiet and the temperature cool. "White noise" with a fan turned on can block out outside noises. Ear plugs and sound machines can also be helpful. An eye mask or bandana can be used if the room is not dark enough.
- Avoid strenuous exercise within 3 hours before bed. You'll be too energized to sleep.
- Create a bedtime ritual. Practice relaxation techniques or do something relaxing to wind down, such as reading a book or listening to calm music. Video games, surfing the internet/checking Facebook™, watching TV shows or movies on your computer can be overstimulating and the light interferes with normal sleep patterns.
- Avoid sleeping pills unless directed by your medical practitioner. Most over-the-counter sleep medications are indicated for short bouts of insomnia. Prescription sleep medications can have some very serious side-effects. Schiffert Health Providers typically do not prescribe "sleep meds" because modifying your lifestyle to promote better sleep and reduce stress are critical and have no risk.
- Do not borrow someone else's prescription medications for ADD, such as Ritalin®, Vyvanse®. These medications are stimulants and can cause anxiety/agitation which decreases your ability to remember and process what you are studying and make it difficult to fall asleep after your big test/project is over. The medications can increase your heart rate, cause nausea, and can interfere with other medications you may be taking.
- Avoid caffeine after mid-day. 1 cup of coffee can affect sleep nine hours later. Some people are more sensitive to caffeine than others and have to eliminate it completely.
- Limit your alcohol consumption. Alcohol may help you fall asleep, but it also interrupts your sleep cycle, keeps the body in lighter stages of sleep, and reduces REM sleep time, therefore making you feel less rested the next day.
- Avoid any nicotine products, as they are stimulants.
- Avoid eating a large meal or drinking a lot too close to bedtime, as indigestion or too many visits to the bathroom can delay or interrupt sleep. If hungry, grab a small, healthy snack that combines complex carbohydrates and protein for longer lasting stability of blood sugar levels, such as a glass of milk and a banana or a small bowl of

whole-grain cereal and milk. Avoid high-sugar or high-fat snacks before bed. They may make you feel sleepy at first but a few hours later when blood sugar levels fall, you'll wake up hungry. Eating late at night promotes weight gain.

- Deal with stress in your life. If daytime troubles keep you awake, try jotting notes about ways to deal with them. If problems become overwhelming, seek the advice of a counselor.
- Exercise regularly 20-30 minutes to help you better deal with stress. Regular exercise will help you fall asleep faster and sleep longer than if you don't exercise at all. When in bed, mentally relax your muscles, beginning with your feet and working your way up to your head or imagine that you are actually in the most relaxing scenic place you can think of.
- Can't make your brain turn-off? If you can't stop thinking about things you have to do, get up and make some notes or a "to-do" list so that you don't feel like you must remember all of your thoughts. Writing down your thoughts helps to relieve stress. Then try to get some sleep.
- Don't toss and turn. If still awake after 20 minutes, get out of bed and do a quiet, relaxing activity and return to bed when you are feeling sleepy.
- Spend time outside walking and just observing the beautiful scenery around us. Make a mindful effort to take a break from your stresses and concentrate on directing your thoughts to only peaceful, calm ones. Being out in nature is restorative. You may find yourself amazed at how much more relaxed you feel with these simple suggestions.

### **What is insomnia?**

Insomnia is difficulty falling asleep or staying asleep/ waking up frequently. A few nights of difficulty falling asleep or having restless sleep is normal. Chronic insomnia is defined as sleep problems 3 nights/week, lasting at least 3 months. Stress is the most common cause of insomnia. Change in sleep habits is a common early symptoms for depression and bipolar disorder.

For evaluation and help with sleeping problems:

- Cook Counseling Center: 540-231-6557.
- Hokie Wellness: 540-231-2233. Check out the schedule for their sleep workshops: [www.hokiewellness.vt.edu](http://www.hokiewellness.vt.edu).

For more information: NIH: [www.nhlbi.nih.gov](http://www.nhlbi.nih.gov)

Mayo Clinic: [www.Mayoclinic.org/healthy-lifestyle](http://www.Mayoclinic.org/healthy-lifestyle)

National Sleep Foundation