PATIENT EDUCATION | INFORMATION SERIES

Healthy Sleep In Adults

Sleep is a reversible state of decreased responsiveness and activity defined by changes in a person's brain wave activity. Sleep is actually a very active process that involves a number of physiologic changes in organs of the body. Research has shown that sleep is needed for many important functions, including formation of memories, release of important hormones such as those for growth and appetite, and muscle repair, but the main purpose of sleep is currently unknown.



Why is sleep important?

Getting enough sleep is vital for your mental and physical health, safety, and quality of life. It is estimated that more than 25% of the U.S. population does not get enough sleep. Adequate sleep amount and quality help us concentrate, learn, react quickly, make decisions, create memories, and function optimally. Reducing your sleep time by even just 1 hour can negatively affect your thinking and reaction time the following day. Lack of sleep can be associated with several medical conditions, including depression, diabetes, heart disease, stroke, weight gain, high blood pressure, and kidney disease. It can make these and other chronic illnesses worse. Not getting enough sleep also can make it harder to fight off infections. People who do not get enough sleep are more likely to feel hungry and eat more fatty and sugary foods. Sleep deficiency is also associated with an increased risk of injury and accidents, including motor vehicle accidents, which could result in death.

How much sleep is enough?

Most adults need about 7-9 hours of sleep each day while teenagers need 8-10 hours. When you wake up on your own feeling refreshed and able to function well, you likely have had enough sleep. Very few healthy people appear to need less than 6 hours of sleep (called "short sleepers") and this sleep trait has been associated with a genetic predisposition. Most people cannot expect to function well with so little sleep.

You may be sleep deficient if you have a high likelihood of falling asleep in several of the following situations:

- Sitting and reading, sitting inactive in public place, sitting and talking to someone, or sitting quietly after lunch
- Watching TV
- Riding in a car for an hour without stopping or while

stopped for a few minutes in traffic in a car

■ Lying down to rest in the afternoon

What can I do to get better sleep?

Following these sleep hygiene tips can help improve your sleep quality. Good sleep hygiene includes the following:

- **Get enough sleep.** Allow yourself enough time to sleep (at least 7-9 consecutive hours).
- Have a sleep schedule. Go to bed and wake up the same time every day (regardless if it is the weekend or a weekday).
- Create a bedtime routine. Engage in relaxing activities before you go to bed. A warm shower or bath, listening to relaxing music or breathing exercises prior to bedtime may help.
- Have a good sleep environment. Make sure your bedroom is cool, quiet, dark, and relaxing. Minimize environmental factors that can disrupt your sleep like noise, pets, and allergens.
- Use your bed for sleeping. Your bed should be used only for sleep or intimacy and not for other activities, such as watching TV, reading, or listening to music.
- Go to bed only when you are tired. If you do not fall asleep within 20-30 minutes, get up and do something relaxing outside of the bedroom and return to bed when you feel tired. Avoid watching the clock when you are struggling to sleep
- Daily exercise. Exercise at least 30 minutes during the day most days of the week.

What should I avoid prior to bedtime so I can sleep better at night?

 Avoid electronics (computers, smartphones, tablets, video games) and bright light at least 60 minutes before bedtime.



PATIENT EDUCATION | INFORMATION SERIES

- Avoid naps at least 6 hours before bedtime.
- Avoid large meals before bedtime, but if you are hungry, a small snack can help. Avoid foods that may upset your stomach close to bedtime, such as fatty, spicy, or fried foods. High protein, high fiber, low fat, and low carbohydrate foods tend to promote better sleep.
- Avoid drinking too much liquid close to bedtime so that you can decrease the urge to urinate throughout the night.
- Avoid nicotine and alcohol in the evening. Alcohol may help you feel drowsy but it can disrupt your sleep, cause nightmares/vivid dreams, and cause you to sleep less deeply and less continuously throughout the night. Smoking and alcohol may also cause snoring and worsen sleep apnea.
- Avoid caffeine (coffee, soft drinks, tea, chocolate, energy drinks) in the afternoon and evening, as the effects of caffeine can last for up to 8 hours or more.
- Avoid **vigorous exercise** 2-3 hours before going to bed.
- Consider **removing pets** from the bedroom while you sleep if you have pets and your sleep is disrupted.
- Avoid medications that can disrupt your sleep if possible. Talk to your healthcare provider if you suspect your medications are disrupting your ability to sleep.

What if I am sleepy during the day?

Feeling sleepy during the day can be due to many causes. Not getting enough sleep is a very common cause. Sleep disorders that contribute to daytime sleepiness include obstructive sleep apnea, narcolepsy, and idiopathic hypersomnia. Many medical conditions (such as hypothyroidism, certain vitamin deficiencies, depression, and anxiety) can make you feel tired or negatively affect your sleep. Certain medications (such as some painkillers, antidepressants, antianxiety medications, and medications used to treat colds and allergies) can also cause you to be tired during the day. Having a variable schedule from rotating shift work or traveling across multiple time zones can contribute to sleepiness as well. Think about what things may play a role in your daytime sleepiness and talk to your healthcare provider.

What if I have a problem sleeping?

You may be referred for a sleep study or to see a sleep specialist who is trained to evaluate people for sleep disorders. Keep a sleep diary for a couple of weeks, noting when you get into and out of bed each day, when you sleep (including naps), and if you have any caffeine, alcohol, or nicotine throughout the day. This will help you look at your sleep pattern and what may affect it. You can share this diary with your healthcare provider. Your healthcare provider will want to know what medications

you take, including any over-the-counter medications, herbals, and supplements. Other medical conditions that can cause sleep problems need to be addressed and may require further evaluation. If you have/are diagnosed with a sleep disorder, it is important to get treatment, because sleep disorders are generally long lasting and may cause or worsen other health problems, such as diabetes and high blood pressure.

Authors: Stephanie M. Stahl, MD and Ninotchka Liban Sigua, MD

Reviewers: Marianna Sockrider MD, DrPH; Pam DeYoung RPSGT, Atul Malhotra MD, Helena Schotland MD

R Action Steps

- ✓ Get 7-9 hours of sleep each day or enough sleep so you wake up feeling refreshed.
- ✓ Follow good sleep habits.
- ✓ Talk to your healthcare provider if you think you have a sleep problem.
- ✓ Never drive or operate heavy machinery if you are sleepy.

Healthcare Provider's Contact Number:

Resources:

American Thoracic Society

- www.thoracic.org/patients/
 - Drowsiness & Sleep
 - Insomnia
 - Narcolepsy
 - OSA
 - Performance & Sleep

Centers for Disease Control and Prevention

http://www.cdc.gov/sleep/

National Heart, Lung, and Blood Institute

 http://www.nhlbi.nih.gov/health/health-topics/ topics/sdd

National Sleep Foundation

- http://sleepfoundation.org
- http://drowsydriving.org

Sleep education—American Academy of Sleep Medicine

• www.sleepeducation.com/

This information is a public service of the American Thoracic Society. The content is for educational purposes only. It should not be used as a substitute for the medical advice of one's health care provider.

