

Sound Sleep

The Importance of Sleep

- Along with nutrition and exercise, sleep is one of the three pillars of a healthy lifestyle
- Healthy/Sound sleep improves your health and quality of life in a variety of ways, both physically and mentally
- Not getting enough quality sleep is linked with many chronic diseases and conditions—such as type 2 diabetes, heart disease, obesity, and depression—and can lead to motor vehicle crashes and other serious mistakes



What is Healthy/Sound Sleep?

- Sound sleep involves making the right choices to prioritize and protect sleep
- Three key factors for sound sleep are:
 1. **Quantity** – Most adults need at least 7 hours of nightly sleep for optimal health and productivity. However, some people need more sleep to feel well-rested.
 2. **Quality** – Quantity on its own isn't enough; getting *good* sleep is important as well. Avoid common sleep disruptors, such as alcohol, caffeine, and tobacco, in the evening.
 3. **Regularity** – It's important to sleep at the *right time*. Your body sleeps best at night (when it is dark), and it functions best when you keep a regular routine.

Sleep Recommendations by Age

Age Group		Recommended Hours of Sleep Per Day
Newborn	0-3 months	14-17 hours
Infant	4-12 months	12-16 hours (including naps)
Toddler	1-2 years	11-14 hours (including naps)
Preschool	3-5 years	10-13 hours (including naps)
School Age	6-12 years	9-12 hours
Teen	13-18 years	8-10 hours
Adult	18-64 years	7-9 hours
	65 years and older	7-8 hours

The above recommendations are general guidelines. The amount of sleep needed varies by individual and depends on many factors, including age.

Sleep Debt

- The amount of sleep a person needs also increases if he or she has been deprived of sleep in previous days
- Getting too little sleep creates a "sleep debt," which is much like being overdrawn at a bank—eventually, your body will demand the debt be repaid
- While we may get used to a sleep-depriving schedule, our judgment, reaction time, and other functions are still impaired
- If you feel drowsy during the day, even during boring activities, you haven't had enough sleep



Sound Sleep Benefits

- **Physical health** – Promotes peak performance and productivity and helps fight off infection, maintain a healthy weight, and avoid chronic diseases
 - Without healthy sleep, you are more likely to have heart disease and Type 2 diabetes
- **Mental health** – Helps to balance mood and emotions
 - Without healthy sleep, you are more likely to struggle with feelings of anxiety and depression
- **Memory and focus** – Sharpens your mind so that you can think clearly
 - Without healthy sleep you are more likely to be forgetful and make mistakes
- **Safety** – Keeps you alert and helps you to react quickly
 - Without healthy sleep you are more likely to have an accident while driving or at work

Major Sleep Disorders

Note: Only a qualified healthcare provider may diagnose a sleep disorder. If you are experiencing any of the following, contact your primary care physician.

- **Insomnia** – Insomnia is a sleep disorder in which people have difficulty falling or staying asleep. Difficulty initiating or maintaining sleep often manifests as excessive daytime sleepiness, which results in functional impairment throughout the day. Chronic insomnia may be treated with a combination of sedative-hypnotic or sedating antidepressant medications along with behavioral techniques to promote regular sleep. Insomnia varies in how long it lasts and how often it occurs. About 50 percent of adults experience occasional bouts of insomnia and 1 in 10 suffers from chronic insomnia.
- **Sleep Apnea** – Snoring may be more than just an annoying habit – it may be a sign of sleep apnea. Sleep apnea is a potentially serious sleep disorder that occurs when a person's breathing is interrupted—sometimes hundreds of times—during sleep, disrupting the flow of oxygen to the brain and rest of the body. People with untreated sleep apnea commonly make periodic gasping or “snorting” noises during sleep and may experience excessive daytime sleepiness. Treatment of sleep apnea is dependent on its cause and ranges from lifestyle changes, such as losing weight or changing sleep positions, to CPAP therapy to surgery. Sleep apnea affects an estimated 26 percent of adults between the ages of 30 and 70.

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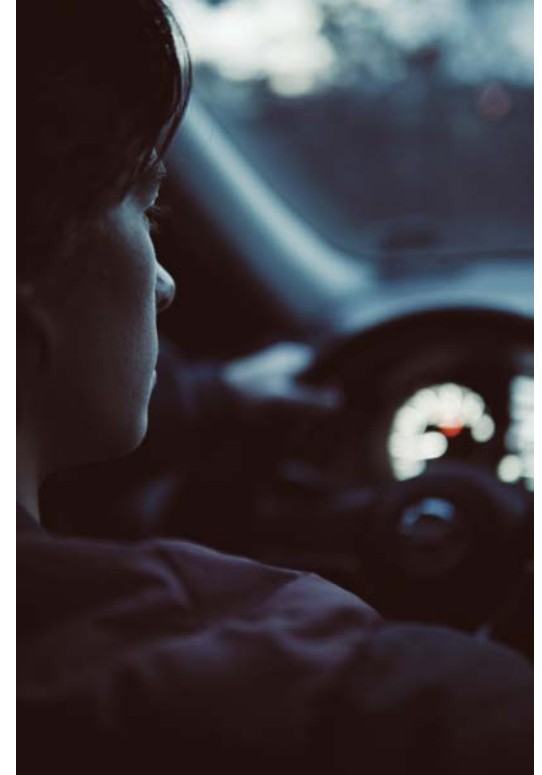
- **Restless Legs Syndrome** – Restless legs syndrome (RLS) is a sleep disorder that causes an intense, often irresistible urge to move the legs. This sensation is brought on by resting, such as sitting for prolonged periods or lying down in bed. RLS typically occurs in the evening, making it difficult to fall asleep and stay asleep. It can be associated with problems with daytime sleepiness, irritability, and concentration. RLS affects approximately 10 percent of adults.
- **Narcolepsy** – Narcolepsy is a neurological disorder of sleep regulation that affects the control of sleep and wakefulness. People with narcolepsy experience excessive daytime sleepiness and intermittent, uncontrollable episodes of falling asleep during the daytime. Some people with narcolepsy experience sudden muscle weakness with laughter or other emotions. Narcolepsy may be treated with stimulant medications combined with behavioral interventions, such as regularly scheduled naps. The Narcolepsy Network estimates only 1 in 2,000 Americans have narcolepsy.

Sleep and Chronic Disease

- **Diabetes** – Insufficient sleep is linked to an increased risk for the development of type 2 diabetes. Research also suggests sleep duration and quality may be key factors for improving blood sugar control in persons with type 2 diabetes.
- **Cardiovascular Disease** – Sleep apnea sufferers have been found to be at increased risk for a number of cardiovascular diseases. Hypertension, stroke, coronary heart disease, and irregular heartbeats are also more common among those with disordered sleep than their peers without sleep abnormalities.
- **Obesity** – Research has found short sleep duration results in metabolic changes that may be linked to obesity. Studies have also revealed an association between short sleep duration and excess body weight.
- **Depression** – Researchers believe when sleep is disrupted over and over, it can alter brain activity and neurochemicals that affect a person's mood and thinking. For example, people with insomnia are 10 times as likely to have clinical depression and 17 times as likely to have clinical anxiety than those who sleep normally. Additionally, while sleep disturbance has long been held to be a significant symptom of depression, recent studies indicate depressive symptoms may decrease once sleep apnea has been effectively treated and sufficient sleep restored.

Other Dangers of Sleep Deprivation

- Sleep deprivation magnifies alcohol's effects on the body, so a fatigued person who drinks will become much more impaired than someone who is well rested
- Sleep-deprived people who are tested by using a driving simulator or by performing a hand-eye coordination task perform as badly as or worse than those who are intoxicated



Drowsy Driving

- Drowsy driving is the dangerous combination of driving and sleepiness or fatigue
- This usually happens when a driver has not slept enough, but it can also happen due to untreated sleep disorders, medications, drinking alcohol, or shift work
- Falling asleep at the wheel is clearly dangerous, but just being sleepy affects your ability to drive safely even if you don't fall asleep
- Drowsiness makes drivers less able to pay attention to the road, slows reaction time if you have to brake or steer suddenly, and affects a driver's ability to make good decisions
- An estimated 1 in 25 American adult drivers (aged 18+) report having fallen asleep while driving in the last 30 days
- The U. S. National Highway Traffic Safety Administration reports drowsy driving is related to at least 100,000 motor-vehicle crashes and more than 1,500 deaths per year
 - However, in reality, these numbers are likely higher, as drowsy driving often goes unreported unless the driver admits to falling asleep
 - The AAA Foundation for Traffic Safety estimates 328,000 drowsy driving crashes occur annually, of which 109,000 result in injury and 6,400 are fatal

Tips for Better Sleep

- Be consistent – go to bed at the same time each night and get up at the same time each morning, including on the weekends
- Make sure your bedroom is quiet, dark, relaxing, and at a comfortable temperature
- Remove electronic devices, such as TVs, computers, and smartphones, from the bedroom
- Avoid large meals, caffeine, and alcohol before bedtime
- Get some exercise – being physically active during the day can help you fall asleep more easily at night



Tips for Shift Workers

If you experience sleepiness on the job due to shift work, try these strategies to help you stay alert:

- Avoid long commutes and extended hours
- Take short nap breaks throughout your shift
- Work with others to help keep you alert
- Try to be active during breaks (e.g., take a walk, exercise)
- Drink a caffeinated beverage (e.g., coffee, tea) to help maintain alertness during your shift
- Don't leave the most tedious or boring tasks to the end of your shift when you are apt to feel the worst
 - Night shift workers are most sleepy around 4am to 5am
- Exchange ideas with your colleagues on ways to cope with the problems of shift work; set up a support group so you can discuss these issues and learn from one another

Tips for Shift Workers on Sleeping During the Day

- Wear dark glasses to block out the sunlight on your way home
- Keep to the same bedtime and wake time schedule, even on weekends
- Eliminate light and noise from your sleep environment (use eye masks and ear plugs)
- Avoid caffeinated beverages and foods close to bedtime
- Avoid alcohol; although it may seem to improve sleep initially, tolerance develops quickly and it will soon disturb sleep



Total health



Emotional



Financial



Physical



Purpose



Social

Sources

- American Academy of Sleep Medicine (www.aasm.org) (www.sleepeducation.org)
- Centers for Disease Control and Prevention (www.cdc.gov)
- Cleveland Clinic (www.clevelandclinic.org)
- Narcolepsy Network (www.narcolepsynetwork.org)
- National Sleep Foundation (www.sleepfoundation.org)
- WebMD (www.webmd.com)