Sleep Needs

How many hours of sleep do you need? What happens when you don’t get enough? Explore the stages of sleep and how to get on a healthy sleep schedule.

Why is sleep so important?

The quality of your sleep directly affects your mental and physical health and the quality of your waking life, including your productivity, emotional balance, brain and heart health, immune system, creativity, vitality, and even your weight. No other activity delivers so many benefits with so little effort!

When you’re scrambling to meet the demands of a busy schedule, though, or just finding it hard to sleep at night, getting by on less hours may seem like a good solution. But even minimal sleep loss can take a substantial toll on your mood, energy, mental sharpness, and ability to handle stress. And over the long-term, chronic sleep loss can wreak havoc on your mental and physical health.

Sleep isn’t merely a time when your body shuts off. While you rest, your brain stays busy, overseeing biological maintenance that keeps your body running in top condition, preparing you for the day ahead. Without enough hours of restorative sleep, you won’t be able to work, learn, create, and communicate at a level even close to your true potential. Regularly skimp on “service” and you’re headed for a major mental and physical breakdown.

The good news is that you don’t have to choose between health and productivity. By addressing any sleep problems and making time to get the sleep you need each night, your energy, efficiency, and overall health will go up. In fact, you’ll likely get much more done during the day than if you were skimping on shuteye and trying to work longer.
Myths and Facts about Sleep

Myth: Getting just one hour less sleep per night won’t affect your daytime functioning.
Fact: You may not be noticeably sleepy during the day, but losing even one hour of sleep can affect your ability to think properly and respond quickly. It also compromises your cardiovascular health, energy balance, and ability to fight infections.

Myth: Your body adjusts quickly to different sleep schedules.
Fact: Most people can reset their biological clock, but only by appropriately timed cues—and even then, by one or two hours per day at best. Consequently, it can take more than a week to adjust after traveling across several time zones or switching to the night shift.

Myth: Extra sleep at night can cure you of problems with excessive daytime fatigue.
Fact: The quantity of sleep you get is important, sure, but it’s the quality of your sleep that you really have to pay attention to. Some people sleep eight or nine hours a night but don’t feel well rested when they wake up because the quality of their sleep is poor.

Myth: You can make up for lost sleep during the week by sleeping more on the weekends.
Fact: Although this sleeping pattern will help relieve part of a sleep debt, it will not completely make up for the lack of sleep. Furthermore, sleeping later on the weekends can affect your sleep-wake cycle so that it is much harder to go to sleep at the right time on Sunday nights and get up early on Monday mornings.

Source: Your Guide to Healthy Sleep, The National Institutes of Health

How many hours of sleep do you need?

There is a big difference between the amount of sleep you can get by on and the amount you need to function optimally. According to the National Institutes of Health, the average adult sleeps less than seven hours per night. In today’s fast-paced society, six or seven hours of sleep may sound pretty good. In reality, though, it’s a recipe for chronic sleep deprivation.

Just because you’re able to operate on six or seven hours of sleep doesn’t mean you wouldn’t feel a lot better and get more done if you spent an extra hour or two in bed.

While sleep requirements vary slightly from person to person, most healthy adults need between 7 to 9 hours of sleep per night to function at their best. Children and teens need even more. And despite the notion that our sleep needs decrease with age, most older people still need at least 7 hours of sleep. Since older adults often have trouble sleeping this long at night, daytime naps can help fill in the gap.

Average Sleep Needs by Age

<table>
<thead>
<tr>
<th>Age</th>
<th>Hours Needed</th>
<th>May be appropriate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newborn to 3 months old</td>
<td>14 – 17 hrs</td>
<td>11 – 19 hrs</td>
</tr>
</tbody>
</table>
### Average Sleep Needs by Age

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Hours Consumed During Night</th>
<th>Hours Consumed Afternoon</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 to 11 months old</td>
<td>12 - 15 hrs</td>
<td>10 – 18 hrs</td>
</tr>
<tr>
<td>1 to 2 years old</td>
<td>11 – 14 hrs</td>
<td>9 – 16 hrs</td>
</tr>
<tr>
<td>3 to 5 years old</td>
<td>10 – 13 hrs</td>
<td>8 – 14 hrs</td>
</tr>
<tr>
<td>6 to 13 years old</td>
<td>9 – 11 hrs</td>
<td>7 – 12 hrs</td>
</tr>
<tr>
<td>14 to 17 years old</td>
<td>8 – 10 hrs</td>
<td>7 – 11 hrs</td>
</tr>
<tr>
<td>Young adults (18 to 25 years old)</td>
<td>7 – 9 hrs</td>
<td>6 – 11 hrs</td>
</tr>
<tr>
<td>Adults (26 to 64 years old)</td>
<td>7 – 9 hrs</td>
<td>6 – 10 hrs</td>
</tr>
<tr>
<td>Older adults (65+)</td>
<td>7 – 8 hrs</td>
<td>5 – 9 hrs</td>
</tr>
</tbody>
</table>

*Source: National Sleep Foundation*

The best way to figure out if you’re meeting your sleep needs is to evaluate how you feel as you go about your day. If you’re logging enough sleep hours, you’ll feel energetic and alert all day long, from the moment you wake up until your regular bedtime.

**Think six hours of sleep is enough?**

Think again. Researchers at the University of California, San Francisco, discovered that some people have a gene that enables them to function well on six hours of sleep a night. This gene, however, is very rare, appearing in less than 3% of the population. For the other 97% of us, six hours doesn’t come close to cutting it.

**The importance of deep sleep and REM sleep**

It’s not just the number of hours you spend asleep that’s important—it’s the *quality* of those hours. If you give yourself plenty of time for sleep but still have trouble waking up in the morning or staying alert all day, you may not be spending enough time in the different stages of sleep.

Each stage of sleep in your sleep cycle offers different benefits. However, **deep sleep** (the time when the body repairs itself and builds up energy for the day ahead) and mind and mood-boosting **REM sleep** are particularly important. You can ensure you get more deep sleep by avoiding alcohol, nicotine, and being woken during the night by noise or light. While improving your overall sleep will increase REM sleep, you can also try sleeping an extra 30 minutes to an hour in the morning, when REM sleep stages are longer. See [The Biology of Sleep](#) to learn more.

**Signs that you’re not getting enough sleep**

If you’re getting less than eight hours of sleep each night, chances are you’re sleep deprived. What’s more, you probably have no idea just how much lack of sleep is affecting you.
How is it possible to be sleep deprived without knowing it? Most of the signs of sleep deprivation are much more subtle than falling face first into your dinner plate. Furthermore, if you’ve made a habit of skimping on sleep, you may not even remember what it feels like to be truly wide-awake, fully alert, and firing on all cylinders. Maybe it feels normal to get sleepy when you’re in a boring meeting, struggling through the afternoon slump, or dozing off after dinner, but the truth is that it’s only “normal” if you’re sleep deprived.

You may be sleep deprived if you...

- Need an alarm clock in order to wake up on time
- Rely on the snooze button
- Have a hard time getting out of bed in the morning
- Feel sluggish in the afternoon
- Get sleepy in meetings, lectures, or warm rooms
- Get drowsy after heavy meals or when driving
- Need to nap to get through the day
- Fall asleep while watching TV or relaxing in the evening
- Feel the need to sleep in on weekends
- Fall asleep within five minutes of going to bed

The effects of sleep deprivation

While it may seem like losing sleep isn’t such a big deal, sleep deprivation has a wide range of negative effects that go way beyond daytime drowsiness. Lack of sleep affects your judgment, coordination, and reaction times. In fact, sleep deprivation can affect you just as much as being drunk.

The effects include:

- Fatigue, lethargy, and lack of motivation
- Moodiness and irritability; increased risk of depression
- Decreased sex drive; relationship problems
- Impaired brain activity; learning, concentration, and memory problems
- Reduced creativity and problem-solving skills; difficulty making decisions
- Inability to cope with stress, difficulty managing emotions
- Premature skin aging
- Weakened immune system; frequent colds and infections; weight gain
- Impaired motor skills and increased risk of accidents; hallucinations and delirium
- Increased risk of serious health problems including stroke, diabetes, high blood pressure, heart disease, Alzheimer’s disease, and certain cancers
How sleep deprivation can add to your waistline

Ever noticed how when you’re short on sleep you crave sugary foods that give you a quick energy boost? There’s a good reason for that. Sleep deprivation has a direct link to overeating and weight gain.

There are two hormones in your body that regulate normal feelings of hunger and fullness. Ghrelin stimulates appetite, while leptin sends signals to the brain when you are full. However, when you don’t get the sleep you need, your ghrelin levels go up, stimulating your appetite so you want more food than normal, and your leptin levels go down, meaning you don’t feel satisfied and want to keep eating. So, the more sleep you lose, the more food your body will crave.

How to get the sleep that you need

Whether you’re looking to resolve a specific sleep problem, or just want to feel more productive, mentally sharp, and emotionally balanced during the day, experiment with the following sleep tips to see which work best for you:

Rule out medical causes for your sleep problems. A sleep disturbance may be a symptom of a physical or mental health issue, or a side-effect of certain medications.

Stick to a regular sleep schedule. Support your biological clock by going to bed and getting up at the same time every day, including weekends.

Get regular exercise. Regular exercise can improve the symptoms of many sleep disorders and problems. Aim for 30 minutes or more of activity on most days—but not too close to bedtime.

Be smart about what you eat and drink. Caffeine, alcohol, and sugary foods can all disrupt your sleep, as can eating heavy meals or drinking lots of fluids too close to bedtime.

Get help with stress management. If the stress of managing work, family, or school is keeping you awake at night, learning how to handle stress in a productive way can help you sleep better at night.

Improve your sleep environment. Keep your bedroom dark, quiet, and cool, and reserve your bed for just sleeping and sex.

Develop a relaxing bedtime routine. Avoid screens, work, and stressful conversations late at night. Instead, wind down and calm your mind by taking a warm bath, reading by a
dim light, or practicing a relaxation technique to prepare for sleep.

**Postpone worrying.** If you wake during the night feeling anxious about something, make a brief note of it on paper and postpone worrying about it until the next day when it will be easier to resolve.

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**Other resources**

- [Improving Sleep](#) – A guide to a good night’s rest. (Harvard Medical School Special Health Report)
- [Brain Basics: Understanding Sleep](#) – Sleep benefits and sleep needs, dreaming, circadian rhythms, sleep cycles and stages, and sleep disorders. (National Institute of Neurological Disorders and Stroke)
- [Your Guide to Healthy Sleep](#) (PDF) – Why sleep matters, the stages and cycles of sleep, the dangers of sleep deprivation, and dealing with common sleep problems. (National Institutes of Health)
- [How Much Sleep Do We Really Need?](#) – Research on sleep needs and sample sleep requirements in different age ranges. (The National Sleep Foundation)
- [All About Sleep](#) – Figure out if your child is getting adequate sleep and learn about the sleep needs of different age groups. (KidsHealth)
- [How Much Sleep Do You Need?](#) Details the most recent recommended sleep times by age group. (Berkeley Wellness)
- [Consequences of Insufficient Sleep](#) – Articles and videos on the consequences of sleep deprivation and chronic lack of sleep, including its impact on driving, judgment, and disease risk. (Harvard Healthy Sleep)