### Sleep calculator: How much sleep do you need?

To get into a good sleep routine, a person can start by figuring out exactly how much sleep they need. Then, they can determine when they should be going to bed and waking up for optimal health. Experts believe that sleep is just as important to a person's health as food and water. Getting the right amount of sleep can help prevent disease, boost immunity, and improve mental health. Still, many of us are not getting enough sleep. The Center for Disease Control and Prevention estimate that about one-third of adults consistently do not get the sleep that they need.

Building a healthy sleep pattern may require tweaking the schedule or lifestyle. While this can be challenging at first, the benefits of proper sleep are worth the effort.

# How much should you sleep?

A person's age can affect the amount of sleep that they need.

Though there are general guidelines, some people need more sleep than others, due to their lifestyle, any health conditions, and their genetic makeup.

The National Sleep Foundation (NSF) recommend that people of different ages get the following amounts of sleep every 24 hours:

- newborns (0–3 months): 14–17 hours
- infants (4–11 months): 12–15 hours
- toddlers (1-2 years): 11-14 hours
- preschoolers (3–5 years): 10–13 hours

- school-age children (6–13 years): 9–11 hours
- teenagers (14–17 years): 8–10 hours
- younger adults (18–25 years): 7–9 hours
- adults (26–64 years): 7–9 hours
- older adults (65 years and above): 7–8 hours

## How to get the right amount

The following chart can help a person figure out when they need to be going to bed to get 8 hours of sleep a night.

On average, people take 10–20 minutes to fall asleep. The calculations below assume that a person needs 15 minutes, but if someone tends to take longer, they should adjust their bedtime accordingly.

Wake-up time	Bedtime (to get 8 hours of sleep):
4:00 a.m.	7:45 p.m.
4:30 a.m.	8:15 p.m.
5:00 a.m.	8:45 p.m.
5:30 a.m.	9:15 p.m.
6:00 a.m.	9:45 p.m.

6:30 a.m.	10:15 p.m.
7:00 a.m.	10:45 p.m.
7:30 a.m.	11:15 p.m.
8:00 a.m.	11:45 p.m.
8:30 a.m.	12:15 a.m.

#### **Sleep cycles**

To be properly rested, the body must go through several sleep cycles per night, including Rapid Eye Movement (REM) and non-REM sleep.

The stages of sleep include:

- **Stage 1 non-REM**: This lasts for only a few minutes. Breathing, heart rate, and brain waves begin too slow.
- Stage 2 non-REM: This stage occurs before the body enters deep sleep. The muscles relax even more, and body temperature drops.
- Stage 3 non-REM: A person needs to reach this stage of deep sleep to feel rested, and it lasts longer in the first half of the night. Breathing and heart rate slow to their lowest levels.

• **REM sleep**: Within 90 minutes of falling asleep, a person enters REM sleep. The brain becomes more active, the most dreaming occurs, and the arms and legs become temporarily paralysed.

If the body does not go through these stages several times a night, the person may wake feeling fatigued and unfocused.

#### How to get better sleep

Getting quality sleep sometimes requires only simple tweaks in a routine. Other times, a person may need to put sleep ahead of other activities.

Here are some ways to improve the quality and quantity of sleep:

- **Be consistent**: Going to bed and waking up at the same times every day helps the body develop a rhythm, which may make it easier to fall asleep and wake up feeling rested.
- **Get exercise each day**: Exercise may improve sleep quality and help people who have chronic insomnia.
- Avoid caffeine and nicotine: Avoid these stimulants later in the day, as both can take several

hours or longer to leave the bloodstream, potentially interfering with sleep.

- **Drown out sound and light**: Using earplugs, a white noise machine, and room-darkening curtains or window treatments can help.
- Turn off TVs, smartphones, and tablets at least
  2 hours before bed: The blue light that these devices can emit can suppress melatonin, a hormone necessary for asleep.
- **Try relaxing alternatives:** Instead of looking at screens, try taking a warm bath, reading a book, or meditating.

#### When to see a doctor

In many cases, lifestyle adjustments can improve sleep quality and quantity.

However, if these changes are not effective, see a doctor. Underlying health conditions, certain medications, and other factors can interfere with quality sleep.

If a person frequently has trouble sleeping, they may want to ask their doctor about a sleep study. This can help identify sleep disorders.

#### Summary

Sleep is vital to health — being well-rested can help people lose weight and prevent certain health conditions.

To get the recommended 7–9 hours each night, it is important to get to bed at the right time, which may involve rearranging a routine. For many people, this can make a big difference.