

# **Five Habits That Ruin Your Sleep**

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#### STORY AT-A-GLANCE

- > Poor sleep habits like lingering in bed, avoiding sunlight and using electronics too close to bedtime can disrupt your sleep cycle. Experts recommend consistent sleep schedules and morning light exposure for better sleep
- Insufficient sleep can lead to impaired memory, slower reactions, increased risk of neurological problems, Type 2 diabetes and weakened immune function. Adults need aim for seven to nine hours of sleep every night
- Morning exercise may offer greater health benefits, including increased fat-burning and reduced risk of cardiovascular disease. Exercise can also improve sleep quality by reducing stress
- > Blue light from electronic devices can interfere with melatonin production and disrupt sleep. Limiting device use before bed and reducing EMF exposure may improve sleep quality
- > Sun exposure and adequate vitamin D levels play important roles in regulating sleep.
  Vitamin D deficiency has been linked to lower sleep quality and may impact various health aspects

Are you getting enough sleep these days? According to the National Council on Aging,<sup>1</sup> more than a third of Americans are getting less than seven hours of sleep a day.

Additionally, around 30% of adults experience insomnia.

While the optimal amount of sleep slightly varies, it would be wise for everyone above the age of 18 to aim for seven to nine hours. This duration is sufficient for your body to recover and undergo its various maintenance processes. If you're getting anything lower than that, your health may eventually suffer.

## **Are You Doing These Five Sleep-Disrupting Habits?**

If you think that you're not getting enough sleep, you may have habits that need changing. The Hearty Soul lists five examples you might be doing that can disrupt your sleep cycle:<sup>2</sup>

- 1. Lingering in bed According to sleep expert Dr. Chester Wu, staying in bed after waking up may be one of the most detrimental habits that can disrupt your sleep cycle, as it can leave you feeling groggy and tired. It's better for you to get out of bed immediately, as it creates a strong distinction between waking and sleeping.
  - On a related note, how often do you make your bed after getting up? It may seem insignificant, but tidying your bed can have a positive psychological effect on your eventual sleep at night. It creates a powerful, symbolic signal in your brain that helps deter you from returning to your bed during the day. Moreover, doing it first thing in the morning tells your brain that the day has started.
- 2. Avoiding sunlight Getting sunlight during the day is important, as it regulates your circadian rhythm. In other words, it's another signal to your body that it's daytime. Sleep health expert Dr. Chris Winter expounds on this further, saying that "Light effectively shuts off your brain's production of melatonin and lets your body know the day has begun."
  - If you're avoiding sunlight in the morning, you're potentially missing out on another habit that can have far-reaching repercussions to your health exercise. Doing it in the morning can jumpstart your brain and signal that the day has begun.
- 3. Sleeping in on weekends Catching up on a few more hours of sleep during the weekends may seem enticing, but it may disrupt your sleep cycle. According to

sleep specialist Carleara Weiss, irregular wake-up times may lead to social jet lag that can result fatigue and concentration problems. To prevent these from happening, it's important to maintain a consistent sleep schedule — even on weekends — to regulate your biological clock.

**4. Using electronics in bed** — With the advent of better wireless technology, many children and adults scroll through their phone nowadays before sleeping. In fact, statistics indicate that 75% of children and 70% of adults engage in this habit.<sup>3</sup>

While scrolling on your phone until you feel sleepy seems harmless, the blue light emitted from screens interferes with melatonin production. For those unfamiliar, blue light belongs to the visible light spectrum (a type of light we can see).

The visible spectrum is responsible for regulating your circadian rhythm, and too much of it can eventually disrupt the sleep/wake cycle. The largest natural source of blue light is sunlight, while artificial sources come from LED bulbs, computer monitors and handheld gadgets with screens.<sup>4</sup>

5. Staying in darkness after waking up — It's tempting to stay in the comfort of your bed after waking up, but according to Winter, this can confuse your body's internal clock. Providing himself as an example, he shares that he immediately gets up upon waking and exposes his body to light.

#### What Happens When You Don't Get Enough Sleep?

As mentioned, sleep is an important aspect that can be detrimental when neglected. It's not just for re-energizing yourself for the next day. It also plays a role in important processes, such as memory formation, metabolism and cardiovascular health.

When you don't get sufficient sleep, the mentioned processes are affected, which in turn impacts your health. Here are some examples:

• Impaired memory retention — A study<sup>5</sup> noted that sleep deprivation may hamper your ability to remember new information. Your body needs enough time to

transform unstable memories into a more permanent form, and sleep deprivation disrupts this process.

- Slow reaction speed during daytime Getting less than six hours of sleep affects your cognition, potentially increasing the risk of causing or getting involved in accidents. In a five-year study<sup>6</sup> released by the Foundation for Traffic Safety, researchers noted that 29,834 people were killed due to drowsy drivers.
- Increased risk of neurological problems Sleep deprivation has been found to impair the removal of misfolded neurotoxin proteins involved in neurodegenerative conditions, such as Alzheimer's disease and Parkinson's disease.<sup>7</sup>
- Increased risk of Type 2 diabetes Poor sleep quality, as well as insufficient, excessive and irregular sleep patterns increase glucose intolerance. If you're already prediabetic, poor sleep can worsen it further.<sup>8</sup>
- Impaired immune function Sleep supports your immune system, and deprivation
  can lead to an increased risk of immune-related diseases, including
  neurodegenerative, cardiometabolic and autoimmune conditions.<sup>9</sup>

### Why Exercising in the Morning Is Important

Exercise is an important component to promoting well-being, but did you know that adjusting your schedule to do it in the morning can provide greater benefits? According to training specialist David Wiener,<sup>10</sup> exercising in the morning can help you burn more calories and excess body fat. That's because fat oxidation naturally occurs during the morning hours before having your first meal.

A 2022 study<sup>11</sup> supports this hypothesis. Researchers found a link between the time of day you exercise and the risk of coronary heart disease and stroke. They selected 86,657 men and women who didn't have cardiovascular disease and compared the peak time of activity across a 24-hour period.

Results showed that participants who were most active during the late morning had a significantly lower risk of stroke and coronary artery disease compared to people who

were more active during midday.

Interestingly, exercise may lead to better sleep quality, too. In a meta-analysis<sup>12</sup> published in Cureus, researchers noted that being physically active can reduce stress, subsequently helping diminish daytime sleepiness and boost sleep quality at night. Moreover, exercise has been observed to be beneficial in both younger and older populations, highlighting the beneficial effects of exercise for everyone.

### **Blue Light From Your Gadgets May Be Disrupting Your Sleep**

Do you habitually scroll through your phone so you can feel sleepy, only to find out you can't fall asleep right away? As mentioned earlier, blue light from the screen blocks melatonin production.

When your retinas receive light, they send a signal to your suprachiasmatic nucleus (SCN), which is the group of cells in your hypothalamus controlling the biological clock. The signals create a chain reaction in your SCN that affect body temperature, sleep drive and appetite, making it harder to sleep.<sup>13</sup>

"In the evening, as it becomes dark outside, melatonin levels rise and body temperature lowers. Melatonin stays elevated throughout the night, promoting sleep. As long as our eyes perceive light, the SCN responds by suppressing melatonin production.

This explains why evening exposure to light, such as that from indoor light or electronic devices that emit blue light, such as a computer or television, make it harder to fall asleep."

Not to mention, using your phone increases the overall time you're exposed to electromagnetic fields (EMFs). These invisible sources of radiation may promote poor health. For example, a 2023 study<sup>14</sup> noted that men who used their cellphones more than 20 times a day had significantly lower sperm counts compared to men who only used their phones once a week or less. In the case of women, EMF exposure can increase the risk of miscarriage.<sup>15</sup>

The list below shows some strategies that can help minimize your exposure to EMFs and help you sleep better at night. For more additional strategies, you can read my article "Ten New Studies Detail Health Risks of 5G."

- Shut off the electricity to your bedroom at night. This typically works to reduce
  electrical fields from the wires in your wall unless there is an adjoining room next to
  your bedroom. If that is the case, you will need to use a meter to determine if you
  also need to turn off power in the adjacent room.
- Use a battery-powered alarm clock, ideally one without any light.
- Replace CFL bulbs with incandescent bulbs. Ideally remove all fluorescent lights
  from your house. Not only do they emit unhealthy light, but more importantly, they
  will actually transfer current to your body just being close to the bulbs.
- If you must use Wi-Fi, shut it off when not in use, especially at night when you're sleeping. Ideally, work toward hardwiring your house so you can eliminate Wi-Fi altogether. If you have a notebook without any Ethernet ports, a USB Ethernet adapter will allow you to connect to the internet with a wired connection.
- Avoid using your cellphone and other electronic devices at least an hour (preferably several) before bed.

#### **Embrace Sunlight to Get Better Sleep at the End of the Day**

Aside from signaling your body that the day has started, sunlight produces vitamin D, and research suggests it plays a role in promoting sleep. According to a study<sup>16</sup> published in Frontiers in Neurology, vitamin D deficiency has been linked to lower-quality sleep:

"Low vitamin D status is quite common especially in the winter months in central Europe, and vitamin D deficiency has been associated with impaired sleep. Vitamin D seems to have an important role in sleep regulation. Vitamin D deficiency increases the risk of sleep disorders and is reported to be associated with sleep difficulties, shorter sleep duration, and nocturnal awakenings."

How does vitamin D work to promote sleep? According to a 2020 study,<sup>17</sup> researchers noted that vitamin D receptors, as well as enzymes that control their activation, "are expressed in several areas of the brain involved in sleep regulation."

Moreover, the researchers observed that vitamin D influences melatonin production, the hormone responsible for regulating circadian rhythm. In this regard, boosting vitamin D levels may help improve sleep quality and even manage sleep disorders, according to findings from a 2023 study.<sup>18</sup>

In addition to regulating your circadian rhythm, vitamin D plays a role in many biological processes. Research<sup>19</sup> has shown that it has diverse functions, such as:

- Bone health Promotes stronger bones through proper calcium and phosphorus handling
- Immune system Helps fight microbes as well as reduction of proinflammatory cytokines
- Cancer Inhibits cell proliferation, angiogenesis and metastasis of cancerous cells
- Cardiovascular health Reduces oxidative stress, inflammation and thrombogenesis in the cardiovascular system

Regarding optimal vitamin D levels, I've long recommended 60 to 80 ng/mL (150 to 200 nmol/L) for optimal health and disease prevention. Moreover, vitamin D levels higher than 100 ng/mL appear to be safe in helping manage certain chronic diseases.

The best way to do this is to walk outside in minimal clothing, preferably during solar noon (around 12:30 to 1:30 PM). Aside from the UVB radiation hitting your skin to produce vitamin D, you're also getting additional benefits from near-infrared radiation.

Have your blood tested first to serve as the baseline, then test again to be sure you're hitting my recommended range. If results show that you're still low (or if you've reached 80 ng/ml), you'll need to adjust your sunlight exposure accordingly to stay within range. Then, retest in another three to four months.

#### **Sources and References**

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