

# Get Proper Sleep Nightly

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✓ Fact Checked

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## STORY AT-A-GLANCE

- › Research suggests most adults need about eight hours of sleep per night to maintain good health. Lack of sleep can increase your risk for accidents, weight gain and chronic diseases, and impair your memory
- › The “sleep onset latency test” developed by the late Nathaniel Kleitman, Ph.D., can help you determine if you're sleep deprived
- › While sleep problems can be caused or exacerbated by a number of different factors, three that are frequently overlooked are your sleep position, light pollution and exposure to electromagnetic fields (EMF)
- › Research has shown that the more time you spend on electronic devices during the day, and especially at night, the longer it takes to fall asleep and the less sleep you get overall
- › One of the easiest ways to avoid nighttime EMF is to pull the circuit breaker to your bedroom before going to bed. Another really simple remedy is to turn off your Wi-Fi at night

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Lack of sleep has been scientifically linked to a wide array of health problems and is so common, it's been identified as a public health epidemic by the U.S. Centers for Disease Control and Prevention. A review of hundreds of sleep studies concluded that, as a general rule, most adults need somewhere between seven and nine hours – or right around eight hours – of sleep per night to maintain good health.

Your body, indeed every organ and even individual cells, contains biological "clocks" that regulate everything from metabolism to psychological functioning. Even half your genes have been shown to be under circadian control, turning on and off in cyclical waves.

All of these body clocks are synchronized to your master circadian clock, situated in your brain, which in turn is synchronized to the rising and setting of the sun, provided you don't confuse it with artificial lighting at night and/or insufficient sunlight during the day, that is. Over the long term, skimping on sleep – which is a surefire way to dysregulate your circadian body clock – can contribute to a whole host of chronic health problems.

## **Lack of Sleep Puts Your Health at Risk**

Research has shown that insufficient sleep and/or poor-quality sleep can increase your risk for:

**Accidents at work and on the road** – Getting less than six hours of sleep leaves you cognitively impaired. In 2013, drowsy drivers caused 72,000 car accidents in which 800 Americans were killed and 44,000 were injured.<sup>1</sup> Even a single night of sleeping only four to six hours can impact your ability to think clearly the next day.

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**Weight gain** – Getting less than seven hours of sleep per night has been shown to raise your risk of weight gain by increasing levels of appetite-inducing hormones.<sup>2</sup>

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**Diabetes** – One 2015 study<sup>3</sup> linked "excessive daytime sleepiness" with a 56% increased risk for Type 2 diabetes.

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**Depression** – More than half of people diagnosed with depression also struggle with insomnia. While it was long thought that insomnia was a symptom of depression, it now seems that insomnia may precede depression in some cases.<sup>4</sup> About 70% of those with sleep apnea, whose sleep is repeatedly disrupted throughout the night, also tend to suffer from symptoms of depression.<sup>5</sup>

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**Impaired memory formation and increased risk of memory loss<sup>6</sup>** – Sleep is essential not just for cementing events into long-term memory but also for making sense of your life. During sleep, your brain pulls together and extracts meaning, while discarding unimportant details. In fact, sleep increases your ability to gain insights that would otherwise remain elusive by about 250%.

So, during sleep, part of your brain is busy stabilizing, enhancing and integrating new memories. It's also extracting rules, and the "gist" of what's happening in your life. Reduced productivity at work and poor grades in school are other associated side effects of insufficient sleep. Creativity is also diminished.

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**Impaired sexual function.<sup>7</sup>**

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**Chronic diseases** – Sleep deprivation decreases your immune function,<sup>8</sup> which can have a snowball effect, raising your risk for cardiovascular disease,<sup>9,10</sup> Alzheimer's<sup>11</sup> and cancer, just to name a few. In the case of cancer, another critical mechanism involved is disrupted melatonin production. Melatonin is a hormone with antioxidant and anticancer activity.

It both inhibits the proliferation of cancer cells and triggers cancer cell apoptosis (self-destruction). Melatonin also interferes with the new blood supply tumors required for their rapid growth (angiogenesis). A number of studies have shown that night shift workers are at heightened risk of cancer for this reason.

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## **Are You Sleep Deprived?**

Daytime sleepiness is typically a tipoff that you're not getting enough sleep, but sometimes signs of sleep deprivation may be less obvious. The late Nathaniel Kleitman, Ph.D., professor emeritus in physiology at the University of Chicago and a well-recognized pioneer in sleep research,<sup>12</sup> developed a "sleep onset latency test," to determine if you're sleep deprived. Here's how it works:<sup>13</sup>

1. In the early afternoon, grab a spoon and head off to your darkened bedroom to take a nap. Place a metal tray on the floor beside your bed and hold the spoon over the tray as you attempt to fall asleep. Be sure to check the time as you lie down. (If you don't have a spoon and metal tray handy, you can still take this test by setting an alarm for 15 minutes to see if you fall asleep before it goes off.)
2. When you fall asleep and the spoon crashes down onto the tray, waking you up, immediately check the time again and note how much time has passed.
  - If you fell asleep within five minutes, it means you're severely sleep deprived.
  - If it took you 10 minutes to fall asleep, you could still use more sleep.
  - If you managed to stay awake for 15 minutes or more before falling asleep, you're probably well rested.

## **Improve Sleep With a Neutral Sleeping Position**

While sleep problems can be caused or exacerbated by a number of different factors, three of particular importance — primarily because they're so frequently overlooked — are your sleep position, light pollution and exposure to electromagnetic fields (EMF).

In the video above, chiropractor and exercise physiologist Dr. Peter Martone discusses the benefits of adopting a neutral sleeping position. If you're a side- or stomach sleeper and find yourself frequently tossing and turning at night and/or wake up with aches and pains, your sleeping position may be a primary culprit. As noted by Martone, for sound, healthy sleep, you need to sleep on your back, with your neck and spine in a neutral position.

The key to achieving this is to prop a pillow under your neck, not your head, as this allows you to maintain a proper spinal curve. For a demonstration on how to use your pillow to support your neck rather than simply elevating your head, please see the video.

If you're unaccustomed to sleeping on your back, this change will take some getting used to. So, go slow, and give yourself ample time to adjust. In the beginning, you may only be able to remain on your back for a few minutes at a time. You may even experience more pain rather than less when you first start out.

This is my preferred sleep position ever since Peter taught it to me. I also tape my mouth shut with paper tape before I go to sleep to prevent myself from breathing through my mouth. Mouth breathing is something you'll want to avoid, but it's hard to do when you are unconscious.

In Martone's experience, it takes an average of three to four months to convert from a side sleeper to a back sleeper, and even longer if you're used to sleeping on your stomach.

## **Conquer Light Pollution to Improve Sleep**

Light pollution is another major contributor to poor sleep quality. By disrupting your circadian clock and impairing melatonin secretion, light exposure at night will affect the length, depth and overall quality of your sleep. Electronic screens are major sleep thieves, robbing you of the ability to fall asleep quickly.

Research has shown that the more time you spend on electronic devices during the day, and especially at night, the longer it takes to fall asleep and the less sleep you get overall.<sup>14,15</sup> Teenagers who used electronic devices such as MP3 players, video games, tablets, smartphones and/or computers for more than five hours a day were 3.5 times more likely to get fewer than five hours of sleep per night. They were also 49% more likely to need more than an hour to actually fall asleep.

Aside from electronic screens, LEDs and fluorescent lights are particularly troublesome as they emit blue light that is not balanced by red and near infrared frequencies.<sup>16</sup> Importantly, LEDs may promote age-related macular degeneration, the leading cause of blindness.

Incandescent lights emit red and near infrared wavelengths and very little in the blue wavelengths, making them a far healthier type of lighting. Just beware of the light intensity, as too bright a light can cause problems even if it's well-balanced. Once the sun has set, the lower the light in your home the better. Candlelight is ideal. Salt lamps are another option that will not have an adverse impact on your health and sleep quality.

If you choose to watch TV after sunset, then you must be particularly cautious as most new TVs are "smart," meaning they communicate wirelessly by Wi-Fi and it is impossible to turn off. Fortunately, there is a simple solution. You can use a computer monitor for your screen, which does not have a Wi-Fi signal.

Even better would be to watch TV through a computer that is hooked up with a wired Ethernet and is in airplane mode. The advantage of doing this is that you can use a blue light screen blocker. [Iris](#) is the absolute best one and I have used it for many years.

If you use Iris at night, you won't need blue blocking glasses. If you are unable to hook your monitor to a TV, then you will need to use the glasses. While blue light blockers work, glasses with red lenses actually work even better, as they not only block blue light but also yellow and green.

## **Avoid Nighttime EMF to Bolster Sleep Quality and Health**

Another factor that can have a significant impact on your sleep quality and health is EMFs emitted from wiring and electronic devices. This is true regardless of the time of your exposure, but it's particularly problematic at night:

- There's evidence showing EMF exposure reduces melatonin production,<sup>17</sup> making it particularly important to eliminate EMFs in your bedroom. As mentioned, melatonin not only regulates your sleep-waking cycle; it's also a powerful antioxidant, and low levels have been repeatedly linked to an increased risk of cancer.<sup>18</sup>
- Sleep is the most important time for your brain, as its detoxification processes occur only during deep sleep. During deep sleep, your brain's glymphatic system is activated, allowing it to detoxify and eliminate accumulated waste products,

including amyloid-beta proteins, which are a hallmark of Alzheimer's disease. EMF exposure has also been linked to neuronal changes that affect memory and your ability to learn.<sup>19</sup>

- EMFs harm your body's mitochondria by producing excessive oxidative damage, so "marinating" in EMFs all night, every night, can cause or contribute to virtually any chronic ailment, including premature aging.

One of the easiest ways to avoid or radically limit your nighttime electric field exposure from the wiring in your room is to pull the circuit breaker to your bedroom before going to bed. You can have an electrician install a remote breaker for convenience, which is what I have done.

This will virtually eliminate electric fields in your bedroom, unless you have adjacent rooms with wiring in them, in which case you will need to measure the electric fields with a meter after you shut off the power to see if it goes into the lowest range.

If your building code requires electrical wiring to be in a conduit, you're in luck, as this means all you need to do to eliminate this radiation is to unplug any electronic equipment or lighting.

Another really important step is to turn off your Wi-Fi at night. It would be best to hard wire your home so you have no Wi-Fi 24/7 in your home, but I realize many are unwilling or unable to take this step. Please, don't justify that it doesn't make a difference because your neighbor has their Wi-Fi on all the time.

It's important to realize that the Wi-Fi in your home is nearly always more of a danger to you than what's coming from outside your home. You can confirm this by measuring the microwave signals with a meter, and see what your exposure is.

## **Emergency Sleep Remedies**

If you're currently not sleeping enough, or getting poor-quality sleep, your chief aim would be to a) make sure you're getting sufficient amounts of sleep each night by going

to bed earlier, and b) addressing any and all factors that prevent you from falling asleep quickly and staying asleep throughout the night, including your sleep position, light pollution and EMF exposure discussed above.

For even more tips on how to improve your sleep quality you could try a gentle sleep aid while implementing more permanent lifestyle and/or environmental changes. Natural sleep remedies that may help you get a good night's sleep include:

- **Melatonin** – Start with as little as 0.25 milligrams (mg) and work your way up in quarter-gram increments from there until you get the desired effect.
- **Valerian root** – Studies have found valerian root helps improve the speed at which you fall asleep, depth of sleep (achieving deep sleep 36% faster<sup>20</sup>). Start with a minimal dose and use the lowest dose needed to achieve the desired effect, as higher dosages can have an energizing effect in some people. Typical dosages used in studies range between 400 mg and 900 mg, taken anywhere from 30 minutes to two hours before bed.
- **Chamomile** – This herb is typically used in the form of infusions, teas, liquid extracts or essential oils made from the plant's fresh or dried flower heads. It has sedative effects that may help with sleep, which is why chamomile tea is often sipped before bed.
- **5-hydroxytryptophan (5-HTP)** – The chemical 5-HTP promotes production of serotonin, thereby giving mood a boost and enhancing sleep. In one study, an amino acid preparation containing both GABA (a calming neurotransmitter) and 5-HTP reduced time to fall asleep, increased the duration of sleep and improved sleep quality.<sup>21</sup>

## **Take Control of Your Health by Making Sleep a Priority**

In a world where technology facilitates and even encourages around-the-clock activity and connectivity, it becomes an individual responsibility to protect your health by setting boundaries and creating your own rules for when and how you're going to be



"connected." Sleep is one of the foundation pillars of optimal health; you sacrifice it at great risk to your mental, emotional and physical well-being. So, if you're not getting enough quality sleep, start by addressing the basics:

- Make sure you go to bed early enough.
- Expose yourself to bright sunlight in the morning and/or around solar noon to "set" your master clock, and to avoid blue light exposure after sunset for the same reason.<sup>22</sup> Blue-blocking glasses can be used to counteract artificial lighting and electronic screens.
- Sleep in complete darkness (use blackout shades or an eye mask). Research<sup>23</sup> reveals even dim light exposure during sleep can affect your cognition the next day.
- Find your ideal temperature for sleeping. Studies suggest the optimal temperature for sleep is quite a bit cooler than many realize – between 60 and 68 degrees F. Temperatures above or below this tend to increase restlessness.

Something as simple as sleeping naked may do the trick if you don't want to crank down the temperature on your air conditioning. One of the established benefits of sleeping in the buff is improved sleep quality, in part by preventing overheating.

One study showed a surface skin temperature difference of as little as 0.08 degrees F (or 0.4 degrees C) led to sounder sleep.<sup>24,25,26</sup> Studies have also found sleeping in the nude has several other health benefits, including improved metabolism and blood circulation.

- Make your bedroom an EMF-free zone to optimize nighttime brain detoxification and protect your mitochondrial health.

## Sources and References

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- <sup>1</sup> [NHTSA Research on Drowsy Driving](#)
- <sup>2</sup> [Cell Metabolism September 24, 2015 DOI](#)
- <sup>3</sup> [Science Daily September 18, 2015](#)
- <sup>4</sup> [New York Times November 18, 2013](#)

- <sup>5</sup> Medical News Today September 23, 2015
- <sup>6</sup> Scientific American October 2015; 313(4)
- <sup>7</sup> WebMD September 30, 2015
- <sup>8</sup> Medical News Today September 30, 2015
- <sup>9</sup> Curr Cardiol Rev. 2010 Feb; 6(1): 54–61. doi: 10.2174/157340310790231635
- <sup>10</sup> NPR September 14, 2015
- <sup>11</sup> Neurobiology of Aging 18 February 2014 [Epub ahead of print]
- <sup>12</sup> Chicago Chronicle, September 23, 1999; 19(1)
- <sup>13</sup> Independent October 25, 2016
- <sup>14</sup> BMJ Open 2015;5:e006748
- <sup>15</sup> The Verge February 3, 2015
- <sup>16</sup> Harvard Health, Blue Light Has a Dark Side
- <sup>17</sup> Bioelectromagnetics 1998;19(2):123-7
- <sup>18</sup> Biomed Research International 2014, article ID 169459
- <sup>19</sup> National Library of Medicine, July 13, 2017
- <sup>20</sup> Pharmacopsychiatry 2000 Mar;33(2):47-53
- <sup>21</sup> American Journal of Therapeutics 2010 Mar-Apr;17(2):133-9
- <sup>22</sup> Reuters May 18, 2017
- <sup>23</sup> Neruoimage 2010 Apr 15; 50(3-3): 1313–1319
- <sup>24</sup> Lifehack.org, 10 Benefits to Sleeping Naked
- <sup>25</sup> Forbes September 13, 2016
- <sup>26</sup> Elite Daily March 2, 2015