

# **Tips and Tricks to Resolve Common Sleep Problems**

#### Story at-a-glance

- Lack of sleep is a public health epidemic, and insufficient sleep has been linked to a wide variety of health problems, both physical and psychological
- ▶ Tips and tricks to address common sleep problems such as back pain, insomnia, difficulty waking up, racing thoughts or leg cramps keeping you up at night, and more, are included
- ▶ Dietary choices and electromagnetic fields may also disrupt your sleep and may need to be addressed. In the short term, while more permanent solutions are being implemented, you can also use natural sleep aids such as melatonin, chamomile, valerian root or 5-HTP

#### By Dr. Mercola

The importance of sleep is widely ignored and the cost rarely considered, even though it includes everything from reduced work productivity and increased risk of serious accidents to psychological deterioration and physiological dysfunction.

The proof is quite clear: You destroy your health if you regularly ignore your body's need for sleep to repair and recharge. Even the Centers for Disease Control and Prevention has warned that lack of sleep is a public health epidemic, noting that insufficient sleep has been linked to a wide variety of health problems.

Skyrocketing rates of insomnia among service members in the U.S. military could even affect operational readiness, a recent study warns.<sup>1</sup> Over the past decade, insomnia among military service members has quadrupled, and sleep apnea has risen five-fold.

As for how much sleep you need, research shows most adults need right around eight hours of sleep each night for optimal health and disease prevention. Children and teens need more. You will also typically need more sleep when you're ill or recuperating from an illness.

### **How Poor Sleep Affects Your Health**

Among the many health problems that poor sleep can trigger or contribute to are:

Increased risk of car accidents

Increased sensitivity to pain, as painkillers are ineffectual in treating the hypersensitivity induced by sleep loss.

In other words, painkillers may not work if you're sleep deprived<sup>2</sup>

Reduced ability to perform tasks

Reduced ability to learn or remember

Reduced productivity at work

Reduced creativity

Reduced athletic performance

Increased risk of type 2 diabetes, obesity, cancer, high blood pressure, osteoporosis and cardiovascular disease

Increased risk of depression and anxiety. Insomnia in particular has been found to follow anxiety and precede depression<sup>3</sup>

Increased risk of dementia and Alzheimer's disease

Decreased immune function

Slowed reaction time

Reduced regulation of emotions and emotional perception

Poor grades in school

Increased susceptibility to stomach ulcers

Exacerbation of chronic diseases such as Alzheimer's, Parkinson's, Multiple Sclerosis (MS) and cancer

Increased expression of genes associated with inflammation, immune excitability, diabetes, cancer risk and stress<sup>4</sup>

Premature aging by interfering with growth hormone production, normally released by your pituitary gland during deep sleep

### Common Problems That Can Rob You of Sleep

Science Alert recently published an article reviewing nine common sleep problems and some tools and techniques to address them, such as:<sup>5</sup>

- Shoulder and/or back pain. To improve sleep quality when you have a sore shoulder, avoid sleeping on the side that hurts and try hugging a pillow to your chest. Strategically placed pillows can also help with back pain. Try placing a pillow under your knees when sleeping on your back, or between your legs if sleeping on your side
- Inability to fall asleep. Identify and avoid the most common culprits, such as drinking coffee or
  caffeinated beverages too late in the day or exercising and/or using electronics too close to
  bedtime. Turn off your computer, tablets and smartphones at least two hours before bed, and
  limit TV watching. Also, be sure to avoid blue light sources such as LED lighting and
  excessively bright lights at night or wear \$6 red glasses after the sun sets
- Inability to stay asleep. Two common culprits are alcohol consumption and keeping the temperature in the room too warm. Ideal room temperature for sleeping is below 70 degrees F
- **Difficulty waking.** Get up at the same time every day, seven days a week, and keep a regular bedtime routine. When you establish a consistent, soothing bedtime routine, you're more likely to fall asleep easily. Activities such as a warm bath, reading a good book or relaxation exercises can be helpful. Seek to get to bed before 10 p.m. to optimize your chronobiological cycles
- Leg cramps. Applying heat, stretching and massaging the area can all be helpful. I keep a mobility therapy tool called a Tiger Tail by my bedside in case I get an occasional leg cramp during the night. However, the featured article failed to note that leg cramps can often be a sign of either magnesium or potassium deficiency, so increasing your magnesium and/or potassium can address the problem at its root, should your cramps be due to one of these nutritional deficiencies

### To Sleep Well, Assess and Address These Two Variables

Sleep is an outcome of two types of variables:

- Sleepiness Under normal conditions, your sleepiness should increase throughout the day, peaking just before you go to bed at night. This is ideal, as you want your sleep to be high at the beginning of the night. Making sure you're exposed to bright sunlight and high-quality lighting during the day, followed by decreased light exposure once the sun sets, will help maximize your natural sleep cycle so that you're appropriately sleepy by bedtime
- "Noise" Noise occurs in three zones: the mind level, body level and the environmental level

To get a good night's sleep, you want your sleepiness level to be high and the noise level to be low. If the noise is conceptually greater than your level of sleepiness, you will not fall asleep. Examples

of body noise include pain, discomfort, indigestion or residual caffeine from drinking coffee too late in the day. Environmental noise includes traffic, a snoring partner, music, lights or being too hot.

The most common type of mind noise is called "cognitive popcorn," those unstoppable thoughts running through your mind as soon as your head hits the pillow. This is also the most commonly reported cause of insomnia.

# Racing Thoughts Keeping You Up at Night?

As noted in a recent CNN article on this topic:6

"Some nights, it's like you can't get your brain to shut up long enough for you to fall asleep. You're mentally reviewing the day you just completed while also previewing the day ahead; sometimes, your mind may even reach way back into the archives and pull up something embarrassing you did back in high school.

So fun! ... There's no one solution that will work for everybody, of course, so instead, we've rounded up suggestions from eight sleep experts."

Here's a summary of some of the tips gleaned from sleep experts, with regard to quieting racing thoughts:

- 1. Use creative distractions. If worry has you in its grip, try thinking of something else that interests you but is of no importance. Sleep expert Neil Stanley, Ph.D., said, "I fly a lot, so I imagine I have my own private jet and how would I arrange the furniture on it. If you're someone who likes going to music festivals, what would your lineup be?"
- 2. Get out of bed. Rather than tossing and turning, allowing frustration to grow, get out of bed. Try writing your thoughts down; just be sure to keep the lights dim. Telling yourself you're going to try to stay awake instead may also have the paradoxical effect of making you sleepy. The reason for this is because once you're OK with being awake, your frustration and arousal level drops, making it easier to fall asleep
- **3. Make a plan to spend more time in the sun.** Oftentimes, lack of sun exposure during the day (especially in the early morning) is to blame for persistent sleep problems. Bright sunlight first thing in the morning and/or around solar noon helps set your internal clock, allowing you to fall asleep "on schedule"<sup>7</sup>
- **4. Sleep naked**. While not addressed by CNN's sleep experts, one of the 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>8,9,10</sup>

5. Do some controlled breathing. Breathing is both an involuntary and a voluntary process. You can alter the speed and the depth of your breathing, and you can choose to breathe through your mouth or your nose. These choices lead to physical changes in your body. Slow, deep and steady breathing activates your parasympathetic response while rapid, shallow breathing activates your sympathetic response, involved in releasing cortisol and other stress hormones.

The combination of controlled breathing with counting can be particularly effective when your mind refuses to shut down at night, as it gives your mind something to focus on. One breathing exercise involving counting that you could try is the 4-7-8 breathing technique taught by Dr. Andrew Weil. It's a potent remedy for anxiety, as it acts as a natural tranquilizer for your nervous system

### **Diet Choices and Meal Timing Can Impact Your Sleep**

While one to two cups of black organic coffee can be healthy, drinking too much, especially in the afternoon or evening, can overstimulate you and, in the long term, alter your body's internal clock. Ditto for alcohol. While it may make you nod off quicker, research shows drinking alcohol makes you more likely to wake during the night, leaving you feeling less rested in the morning.

Spicy foods and unhealthy fatty or sugary foods can also lead to fragmented sleep,<sup>12</sup> especially when eaten late in the evening. This is thought to be due to the brain chemical hypocretin, a neurotransmitter that helps keep you awake and also plays a role in appetite.

Eating too close to bedtime, or very late at night when you'd normally be sleeping, may also throw off your body's internal clock. Avoiding food for at least three hours before bed will lower your blood sugar during sleep and help minimize mitochondrial damage. It will also jump-start the glycogen depletion process so you can shift to fat-burning mode.

A 2012 study<sup>13</sup> offers powerful confirmation of this recommendation. It found the mere act of temporarily altering your typical eating habits — such as getting up in the middle of the night for a snack — causes a certain protein to desynchronize your internal food clock, which can throw you off-kilter and set a vicious cycle in motion.

# Electromagnetic Fields — Environmental 'Noise' That Can Impair Sleep

Aside from getting the correct kind of light exposure during the day and avoiding excessive amounts of light and blue light at night, it's also important to address the electromagnetic field (EMF) emitted from wiring and electronic devices. EMF from electronic devices not only impairs melatonin secretion, it also harms your mitochondria by producing oxidative damage.

EMF exposure has also been linked to changes in brain neurons that affect memory and the ability to learn.<sup>14</sup> Eliminating EMF exposure can be tricky, as most homes are flooded with electric currents.

Still, you can reduce EMF to a smaller or greater degree, depending on how far you're willing to go. Here are some suggestions to consider that may improve your sleep quality:

- Turn off your Wi-Fi at night. You can also pull your circuit breaker to your bedroom before bed as this will decrease electromagnetic interference in your room in addition to the microwave radiation.
  - You aren't using your Wi-Fi at night so why keep it on? Why expose yourself to needless and dangerous microwave energy that impairs your mitochondrial function? Please, get a switch for your router and turn it off every night when you go to bed. Your body and health will thank you for it
- Avoid running electrical cords underneath your bed
- Move alarm clocks and other electrical devices away from your head, or ideally out of the
  room. If these devices must be used, keep them as far away from your bed as possible,
  preferably at least 3 feet. Portable phone bases and wireless routers should be kept as far
  away from your bedroom as possible
- Avoid sleeping with your head against a wall that contains unshielded electric wiring and/or
  electric meters, circuit breaker panels, televisions or stereos on the other side. Move your
  bed 3 feet away from the wall, install an EMF protection canopy over your bed, or turn off the
  power breaker to your bedroom

## **Emergency Remedies**

In the short term, 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<sup>15</sup> the speed at which you fall asleep, depth of sleep (achieving deep sleep 36 percent faster<sup>16</sup>) and overall quality of sleep. 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>17</sup>

As you can see, sleep problems can have any number of root causes and contributing factors, but considering the alternative, taking the time to identify your triggers is well worth the effort. Sleeping well is a foundational aspect of good health, so every effort should be made to get as high-quality sleep as possible.