

Navigating Sleep Supplements

According to nationally representative data, approximately 1 in 3 Americans are falling short of the recommended 7 to 9 hours of sleep,¹ and in a recent study led by Dr. [Rebecca Robbins \(funded by the Bryte Foundation\)](#), approximately 2 in 3 Americans report not getting the restorative sleep they should, ultimately affecting their mental, emotional, and physical health. The benefits of healthy, restorative sleep are substantial, from improved focus and mood to reduced risk for chronic diseases. Sleep affects virtually every aspect of our lives and is a key pillar in overall health and well-being.

With so many Americans falling short of optimal sleep health, it may not be surprising that the use of sleep aids has grown significantly over the past few years. These sleep challenges have undoubtedly been exacerbated by the COVID-19 pandemic. Research shows that Google searches for “insomnia” increased 58% in 2020 compared to prior years².

While this increase in online searches for information about sleep supplements suggests that the general population is interested in improving sleep, not all information on the internet is evidence-based. Moreover, there is ample access to misinformation online, particularly about supplements, which causes confusion and could hinder one in their quest for effective strategies for improving their sleep.

In this article, we will provide an overview of sleep supplements to help consumers make informed decisions about what natural sleep aids.

When should you consider taking a sleep supplement?

If a lack of consistent, quality sleep is affecting your mental well-being and physical health you may feel the urge to quickly head to your local vitamin shop or drug store for a solution. But before leaning on a sleep aid, it is imperative that you consult with your physician to rule out any health problems that could be causing a lack of quality sleep.

Most commonly, vitamin deficiencies are at the top of the list for why one may be having trouble catching adequate Z's. Iron, magnesium, vitamin D, and melatonin levels are essential for restful nights, so it's beneficial to confirm they are not the cause of your

¹ Liu, Y., Wheaton, A. G., Chapman, D. P., Cunningham, T. J., Lu, H., & Croft, J. B. (2016). Prevalence of Healthy Sleep Duration among Adults—United States, 2014. *MMWR. Morbidity and Mortality Weekly Report*, 65(6), 137–141. <https://doi.org/10.15585/mmwr.mm6506a1>

² Kirsi-Marja Zitting 1, Heidi M Lammers-van der Holst 1, Robin K Yuan 1, Wei Wang 1, Stuart F Quan 1, Jeanne F Duffy 1. (2021) National Library of Medicine. Google Trends reveals increases in internet searches for insomnia during the 2019 coronavirus disease (COVID-19) global pandemic. pubmed.gov/32975191

sleepless nights.

Another important factor to look at is your stress level. Blood tests can be used to identify if your cortisol levels are high which could indicate higher levels of stress. And while studies show that natural sleep aids can greatly improve your sleep performance, this underlying issue may undermine their effectiveness.

Behavioral tendencies should also be looked at before reaching for sleep-related medication. Factors such as sleep hygiene, routine and relaxation habits, and diet and drug consumption all play a major role in the quality of your sleep. This behavioral intervention can positively impact your sleep quality and could reduce the need for a sleep aid.

By addressing these issues first you can identify whether or not taking a sleep supplement will be beneficial for your goal to experience more restful nights.

Regarding sleep supplements for children and young adults, there is insufficient research regarding the safety and efficacy of sleep supplements. In fact, the United States National Institute of Health (NIH) website states “There are no overall guidelines on the best approach to improving sleep in children.” The article goes on to state that, until more studies are published, it is best to focus on behavior changes to sleep schedules in children before attempting supplementation (which we will address later in this article).

What are the most common over-the-counter sleep supplements?

Once you decide to begin taking sleep supplements, you’ll find there are an endless array of options to choose from. Popular antihistamines such as Zzzquil, Advil PM, and Benadryl are among the most used over-the-counter sleep supplements. And while alternatives such as bedtime tea and sleep gummies have reached an all-time high, it is natural aids such as valerian root and melatonin that are the most commonly used.³

The most widely used sleep aid among adults is melatonin. According to a nationally representative study, the proportion of adults in the US reporting melatonin use increased from 0.4% on average in 2000 to 2.1% on average in 2018.⁴

How much is too much melatonin?

Despite the increasing prevalence of use in the general population, there remain many unanswered questions about melatonin. Melatonin is often mistaken for an herb but it is

³ Danielle Pacheco. Medically Reviewed by Dr. Nilong Vyas Pediatrician. Sleep Foundation. Over the Counter Sleep Aids. <https://www.sleepfoundation.org/sleep-aids/over-the-counter-sleep-aids>

⁴ Jingen Li, MD, PhD¹; Virend K. Somers, MD, PhD²; Hao Xu, MD, PhD³; *et al* JAMA. 2022;327(5):483-485. doi:10.1001/jama.2021.23652 Trends in Use of Melatonin Supplements Among US Adults, 1999-2018. <https://jamanetwork.com/journals/jama/fullarticle/2788539>

actually a hormone that is produced in the pineal gland in the brain. Referred to as the 'hormone of darkness,' melatonin is triggered by darkness, which prompts the pineal gland to start producing the hormone.

According to an article in [Medical News Today](#), "the Food and Drug Administration (FDA) does not regulate melatonin as they do other drugs and medicines. This means the bottle may not contain the amount of melatonin the label suggests."

So, how much is too much?

When used properly melatonin proves to be effective, however, overuse may result in unpleasant side effects.

Melatonin has been linked to headache, dizziness, nausea, stomach cramps, drowsiness, confusion or disorientation, irritability and mild anxiety, depression, and tremors, as well as abnormally low blood pressure. It can also interact with common medications and trigger allergies.

These side effects may be a result of too much melatonin so be sure to monitor your body and mood once you begin using this natural sleep aid. It is suggested that a normal, or safe dose is about 0.5 mg to 5 mg.

As stated in an [MIT News](#) online article, "researchers also discovered that the typical health food store dosage of melatonin, which is about three milligrams (or 10 times the dosage in the study), is less effective in treating insomnia." The report goes on to highlight that "the higher dosage can cause potentially serious side effects, including hypothermia (low body temperature). The study also showed that the higher dosage elevated plasma melatonin levels during the day, which can cause a "hangover" effect in some of the subjects."

Richard Wurtman, the Cecil H. Green Distinguished Professor and program director of the Clinical Research Center, who is consistently referenced in the article, suggests that "less is more" when it comes to finding the proper dosage of melatonin and notes that speaking to a doctor to pinpoint the appropriate dosage is the key to avoiding overuse.

When to use

Several use cases for melatonin that appear to have moderate support in the scientific literature include jet lag, periods of stress, narcolepsy, restless leg syndrome, sleep apnea, and/or instances when unexpected disturbances arise, sleep supplements may be the answer to getting you back on track.

Melatonin is used to support one's biological clock so it is important to take it at nighttime to avoid disrupting your body's natural sleep cycle. This supplement should be taken no more than two hours before bed. It is also helpful to take melatonin when you can get a full night's rest so it is best to take this sleep aid when you are able to get a least 7 hours of sleep.

The health risks of long-term use of melatonin are still unclear due to a lack of studies. However, studies of short-term use show that it is generally safe to use regularly.

What to look for & what to watch out for?

According to the [National Center for Complementary and Integrated Health](#) “Some melatonin supplements may not contain what’s listed on the product label. A 2017 study tested 31 different melatonin supplements bought from grocery stores and pharmacies. For most of the supplements, the amount of melatonin in the product didn’t match what was listed on the product label. Also, 26 percent of the supplements contained serotonin, a hormone that can have harmful effects even at relatively low levels.”

It is imperative that you do your own research and follow the guidelines below to find a safe and high-quality sleep supplement that works best for you.

Originally outlined on the [FullScript Blog](#), here are some helpful tips to consider when looking for credible health sources online.

- Citation for all claims
- Transparent content production process
- Medically reviewed
- Up-to-date research government agency, hospital, or medical school websites
- Journal databases
- Professional or nonprofit organization websites

Alternatively, one should practice caution when there are no or too few citations of sources, no formal content standards, outdated information, or unrealistic claims. Be mindful of those who are promoting products and practice caution when reading personal or opinion blogs.

Also worth noting, it is important to try to avoid making the decision based on price, oftentimes lower-priced products offer decreased quality which could result in inferior outcomes.

Where to find high-quality supplements?

Many manufacturers of sleep supplements market directly with often compelling marketing advertisements and claims about their supplement and its sleep-promoting benefits, which can be tantalizing to someone experiencing sleep difficulties. With an endless number of vitamin and supplement suppliers online, it can be overwhelming to decipher where to find high-quality sleep aids.

Purchasing from a well-known and established brand is essential to ensure product

safety. Purchase 'pharmaceutical grade' melatonin whenever possible, as these providers have a higher level of scrutiny than do non-pharmaceutical grade options, and be sure to read the labels using the information above to find the best high-quality product for you.

As a general principle, it is always best to look for transparent and credible brands. Take ownership of doing your research and dig into the brand values to ensure product safety.

You can also look for brands that are backed by medical professionals and industry experts. However, we still suggest following the guidelines noted above and doing your research before making a final decision.

Behaviors that affect sleep

While sleep aids do have sleep-promoting benefits, there are steps you can implement to avoid relying solely on supplements. Here are a few suggestions:

- Avoid alcohol and caffeine
- Reduce screen time
- Practice mindfulness, including yoga and meditation
- Reduce stress
- Create an evening routine
- Go to bed at the same time every night

By improving your natural sleep habits you can help support your body's natural sleep cycle and in turn, optimize the quality of sleep you are getting.

The takeaway

More than ever, Americans are putting restful sleep at the top of their wellness priority list.

When it comes to restorative sleep, many nuances are overlooked. And while sleep supplements like melatonin have benefits in certain cases, it is vital to take the time to conduct thorough research. It may seem overwhelming at first, but doing your due diligence can kickstart your journey to overall improved health.

Always keep in mind that sleep aids such as melatonin can help you overcome challenges, and can be useful in the face of short-term struggles, such as jet lag or experiencing a period of grief, but if sleep difficulties persist, it is important to speak to your healthcare provider about your sleep issues.

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