



## 5 Nutraceutical Products that can Improve your Sleep Quality

A white paper collating the latest research on how nutraceuticals  
may help improve your sleep quality



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# Nutraceutical Products For Sleep

Stressful and uncertain times tend to keep us up at night. Even before the days of Covid, the stress of daily life made it difficult for millions to shut down in the evening. Nearly 25% of Americans reported long periods of suboptimal sleep in 2018. If you've dealt with insomnia before, then it's likely you were probably willing to try anything to finally get some shut-eye. Not only is insomnia physically uncomfortable, but it can also have a serious impact on one's mental health. However, many people still like to avoid habit-forming pharmaceuticals that bring relief at the cost of several short and long-term side effects. Nutraceutical products are also often significantly cheaper than these prescribed medications depending on one's insurance coverage situation.

**Nearly 70 million people in the United States suffer from chronic sleep problems according to the CDC.**

Lack of sleep is associated with multiple health issues, including physical diseases, mental health issues, and lower working productivity. While many of the serious issues are caused by sleep apnea, other milder sleep disorders may be alleviated by diet, exercise, and stress reduction.

**Poor sleep quality is also associated with many physical health issues.**

Some of these physical health issues include hypertension, diabetes, strokes, obesity, poor immune function, and heart health issues. By consuming nutraceuticals, eating a healthy diet, and exercising, you can help to improve your sleep quality and also improve your physical and mental health.

**Nutraceutical products may be able to play a role in helping to improve your sleep quality.**

This white paper will cover five options for you to consider, including valerian root tea, Vitamin D, magnesium, Ashwagandha, and passionflower tea.



## Valerian Root Can Improve Your Sleep

There are many natural remedies that have been used for thousands of years to treat insomnia. Ancient Greek physicians prescribed Valerian root as a sleep aid as early as 400 BCE. Even Roman emperor Marcus Aurelius was known to take it for his restless nights. Valerian root is not at all a new treatment, but it's one such natural sleep aid that is gaining renewed popularity in these stressful times.

**Valerian root may be able to help people who struggle with insomnia.**

Before we learn how Valerian root helps treat insomnia, we need to know what happens in our bodies as we count sheep in vain. It's important to first understand that many of the specifics of sleep and sleeplessness are still a mystery to scientists. There can be many factors behind a case of insomnia and everyone's situation is different. Medical researchers have learned that the neurotransmitter gamma-aminobutyric acid (GABA) and its relationship with our nervous system plays a large role. When we experience anxiety, there is a thunderstorm of activity lighting up our neurons. GABA helps inhibit some of this activity and produces a calming effect. Low GABA is often the culprit behind anxiety and insomnia.

Valerian root contains a number of different compounds that work together to quiet the mind at night. The valerenic acid from the root slows down the process that depletes GABA and provides a calming effect that can break the cycle of insomnia. Isovaleric acid may prevent sudden muscle contractions that are common with restless leg syndrome (RLS). The herb is also rich in hesperidin and linarin – antioxidants that have soothing effects of their own.



### **There are many types of nutraceutical products that contain valerian root.**

For those who want to add an easy solution to their bedtime routine, there are capsules with Valerian root extract as well as hybrid supplements containing melatonin and Valerian root. If you like to wind down with a book before bed, brew yourself a hot cup of bedtime tea containing Valerian root extract. You will feel a gentle calm set in after 30 minutes to an hour, but don't worry if you don't feel much of anything. Many get the most noticeable relief from insomnia after taking Valerian root extract regularly for about two weeks.

### **Valerian does not have major side effects, but it may interact with other medications.**

Valerian root is a very safe nutraceutical option for easing insomnia. However, it can interact with certain medications like benzodiazepines and depressants. If your dose is too high, you may experience headaches, nausea, and the opposite of the desired effect: trouble falling asleep. It's always wise to consult with your doctor when introducing a new supplement like valerian root, especially if you plan on taking it longer than a month.



# Magnesium

**Magnesium is commonly used to help alleviate the symptoms of mental health disorders, and may also help to improve sleep quality.**

Magnesium supplements are often praised for their ability to help reduce the symptoms of anxiety and depression. This, in turn, can help to reduce the symptoms of sleep disorders, which is often comorbid with other condition. It is crucial to note that it is best to consider magnesium supplements that can cross the blood barrier if you are taking magnesium supplements to improve your sleep quality. Some of these supplements include magnesium taurate and magnesium glycinate.

**A 2012 study found that magnesium supplements were helpful in reducing the symptoms of insomnia.**

46 adults participated in this study, and it was discovered that magnesium supplements were able to improve select symptoms of insomnia and improve sleep time, sleep efficiency, and undesired early morning awakenings. These health benefits occur because magnesium can help to relax the mind and the muscles, which in turn helps improve sleep quality.

**Magnesium helps to regulate neurotransmitters that are related to our ability to sleep.**

Although magnesium is not fully responsible for regulating these neurotransmitters, it does play a supporting role. Being deficient in magnesium could cause issues with this process, and result in multiple health issues. Issues such as old age, diabetes, alcoholism, and gastrointestinal disorders can increase magnesium deficiency. Having proper magnesium levels is associated with improved sleep quality, increased ability to fall asleep, and less restless leg syndrome symptoms.

**However, it is difficult to monitor magnesium levels, because magnesium is stored in our bones.**



# Ashwagandha

Many people in western countries have been increasingly turning to Ashwagandha for its stress-relieving properties and its other favorable health benefits. Research is beginning to increasingly focus on the health benefits of Ashwagandha, which has been shown to have a wide range of beneficial effects on the human body. When taken in tea, powder, tinctures, or as a supplement, Ashwagandha has been shown to provide health advantages when consumed in any of these ways. Ashwagandha may help with a variety of health issues, and could also help improve your sleep quality.

## **Ashwagandha can help to reduce stress levels.**

One of the most commonly known benefits of Ashwagandha is its ability to help people relax and feel less stressed after consuming it. Ashwagandha has been shown in several trials to significantly reduce stress and anxiety in participants. During one study, 46 adults were either given Ashwagandha or a placebo daily for 60 days to see how this would alter their stress and anxiety levels. It was noted that cortisol levels dropped for the group that received ashwagandha, and more people reported a reduction in stress levels after 60 days. The reduction in cortisol is very significant, given that high cortisol levels can cause issues with heart health, stroke, diabetes, or other serious health conditions.

## **Reduced stress levels may help to improve the quality of your sleep.**

According to one study, Ashwagandha may help with sleep quality as well. Participants in this study reported sleeping better with ashwagandha doses than with placebos. 400 adults participated in this sleep study, and the researchers found that ashwagandha offered a small, but significant improvement in sleep quality.

## **Other research has also shown that ashwagandha may improve your sleep quality.**

Preliminary research has shown that ashwagandha helps people to fall asleep faster, stay asleep longer, and experience higher quality sleep. This may occur not only because of its stress-reducing properties but also because it contains trimethylene glycol, which is known to help people fall asleep.



# Passionflower and Sleep Quality

Passionflower has a wide variety of health benefits, most notably its ability to help with insomnia and anxiety. Passion Flowers come in a wide variety of shapes and sizes. Passiflora is another name for this group of plants. According to certain research, certain species may be medicinally beneficial in some cases. Passiflora incarnata, for example, may assist in the treatment of insomnia and anxiety. Passionflower has long been used medicinally by the Native Americans to cure many ailments, including Boils, sores, earaches, and liver disorders. Peruvian natives taught Spanish explorers about passionflowers. These plants were given their name because they resembled a cross.

## Passionflower tea may help reduce the symptoms of anxiety.

Passionflower may be the most effective remedy for depression associated with menopause. This herb's alkaloids "chrysin" and "benzoflavone" have been discovered to boost GABA (gamma amino-butyrac acid) in the brain as well as alleviate symptoms like hot flashes and night sweats. As an inhibitory neurotransmitter, GABA prevents over-excitation and maintains equilibrium in the brain. It also aids in reducing the activity of brain cells responsible for the onset of depression.

## Studies have also shown that passionflower tea has a direct impact on improved sleep quality

As an anti-anxiety and moderate sedative herb, Passionflower can even be used to help improve one's sleep quality. In one study, participants who were having difficulty sleeping were advised to consume a cup of Passionflower tea before going to bed for a length of time. All the volunteers reported substantial improvements in their sleep. The higher GABA in the brain that Passionflower might generate can also help alleviate the anxiety that commonly accompanies sleeplessness. Passionflower is also a muscle relaxant, which makes it easier to fall asleep at night.





## Vitamin D

Consumers who choose to purchase nutraceutical products mainly focus on vitamins and supplements such as vitamin D supplements. Vitamin D is one of the most commonly known vitamin products, which has numerous health benefits. You can improve both your mental and physical health by ensuring that you are consuming enough vitamin D, either through your diet or supplements.

**Vitamin D may help with certain mental health disorders, which could in turn help to improve your sleep quality.**

Various studies have been conducted to help shed more light on how Vitamin D can potentially help improve your mental health, given that nearly one million people suffer from Vitamin D deficiency. Studies have shown how Vitamin D is an important supplement for maintaining mental health, along with others such as Magnesium, St. John's Wort, and others. Studies have also shown that proper Vitamin D levels in earlier life may be responsible for helping to reduce the risk of developing certain mental disorders. Overall, studies are mixed though and it seems that Vitamin D may be best for maintaining one's physical health, while its contribution to mental health is not guaranteed. One randomized control trial that included over 18,000 adults in 2010 concluded that Vitamin D supplementation did not help to reduce the symptoms compared to a placebo group.

**Vitamin D deficiency can also mimic various mental health disorders, and contribute to decreased sleep quality.**

Webmd notes that the symptoms of vitamin d can mimic typical depression symptoms, including fatigue, depression, hopelessness, anxiety, and trouble sleeping. Vitamin D, in addition to other supplements such as magnesium, could be one of many methods that someone uses to combat depression or anxiety. Other types of nutraceutical products, including lion's mane and valerian root tea, can help relieve certain mental health symptoms. While vitamin d alone is certainly not a remedy for mental health issues, it is well worth monitoring to ensure that you are taking care of both your physical and mental health.





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