

Studies Prove This Root Helps You Sleep and Manage Stress

Analysis by [Dr. Joseph Mercola](#)

✓ Fact Checked

STORY AT-A-GLANCE

- › Ashwagandha is a powerful adaptogenic herb that helps your body adjust to stress and helps promote restful sleep
- › People with insomnia experienced the most improvement in their sleep patterns using ashwagandha, which was well-tolerated in people of all health conditions and ages
- › Ashwagandha reduced anxiety and stress, which can lead to poor performance and increase your risk of adverse health conditions if left unmanaged
- › Traditional use for ashwagandha is for memory enhancement; it may also improve executive function, attention and information processing

This article was previously published October 29, 2020, and has been updated with new information.

Ashwagandha (*Withania somnifera*) is a powerful adaptogenic herb, which means it helps your body adapt to stress¹ by balancing your immune system, metabolism and hormonal systems. It is known as a multipurpose herb and was used in ancient Ayurvedic and Chinese medicine.² The plant is native to India and a member of the Solanaceae family, along with eggplant and tomato.³

A 2020 study tested ashwagandha for its ability to promote sleep. Based on the results, the researchers believe the herb could be an alternative treatment for insomnia.⁴ They

gathered 80 participants, 40 of whom were healthy individuals without a sleep disorder and 40 who had a known diagnosis of insomnia.

Consider Ashwagandha to Improve Your Sleep Quality

Each group was further split into two groups: one intervention and one control group. The intervention group received ashwagandha and the control group received a placebo. The participants took the supplements for eight weeks during which assessments were done to evaluate sleep parameters, sleep quality and anxiety.

The results revealed that the groups of healthy individuals and those with insomnia who were taking ashwagandha demonstrated significant improvement in the study parameters. Those who had insomnia showed the most improvement. The researchers wrote the "root extract was well-tolerated by all the participants irrespective of their health condition and age."⁵

The participants took 300 milligrams (mg) twice each day of the root extract KSM-66 sold by Ixoreal Biomed.⁶ The same supplement was tested in another study in which the researchers found it improved quality of sleep, quality of life and mental alertness in older adults.⁷

The researchers in the second study suggested the root extract may be effective in the elderly population as they tolerated the supplement well and "it was reported as safe and beneficial by the study participants."⁸ Kartikeya Baldwa, CEO of Ixoreal Biomed Inc., commented on the results of the newest study to a reporter from NutraIngredients:⁹

"Sleep is critical to be healthy, to recover from exercise and to function optimally both physically and cognitively. Ashwagandha root has been referenced for centuries for its sleep benefits. This study is the first clinical study to evaluate the effect of ashwagandha root extract on sleep quality in both healthy adults and insomnia patients and demonstrates significant positive effects on sleep quality in the participants.

The paper is published in a prestigious journal and is a valuable contribution to the scientific literature. It substantiates the use of ashwagandha root extract as an adaptogen that helps reduce anxiety and promote restful sleep."

Why Improving Your Sleep Quality Is Important

The importance of getting enough quality sleep each night cannot be overstated. You likely recognize that a good sleep schedule is a vital component of a healthy lifestyle. But, according to a survey from Mattress Firm, which revealed some disturbing facts about sleep patterns in America, getting a good night's sleep may be challenging.¹⁰

The results showed the average adult who responded to the survey didn't get the seven to eight recommended hours of sleep each night. Of those who responded, a total of 40% said their sleep was "not very good" or "not good at all." This may be related to the activities people reported doing in bed, which included watching TV, eating and playing video games.

But it's not only the number of hours that's important, but also the quality. Fragmented sleep can trigger chronic inflammation and contribute to mental health conditions and neurological disorders such as major depression and Alzheimer's disease.¹¹

Fragmented sleep is also associated with atherosclerosis,¹² a buildup of fatty plaque in the arteries sometimes called clogged or hardened arteries that can result in fatal heart disease.¹³

Experts estimate that up to 70 million people in the U.S. of all ages are plagued by sleep-related health conditions.¹⁴ They are common in both men and women and span all socioeconomic classes. The potential for being sleep deprived has risen significantly in the past 30 years, according to the American Sleep Apnea Association.

Contributing factors include digital technology and blurred lines between work and home. This may be exacerbated by the recent pandemic and an increasing number of people working remotely.

Ashwagandha Helps Lower Stress Markers

In addition to improving quality of sleep, the researchers found ashwagandha reduced the measure of anxiety in the participants.¹⁵ According to the Anxiety and Depression Association of America, there is a relationship between stress and anxiety. They define the difference as stress being a response to a threat, while anxiety is a response to the stress.¹⁶

Another study evaluated the effectiveness of a full-spectrum extract of ashwagandha root to help reduce stress and anxiety.¹⁷ Since stress can lead to poor performance and increase your risk for adverse health conditions, the researchers sought to evaluate the effectiveness of ashwagandha in adults who were known to be under stress.

They gathered 64 individuals who had a history of chronic stress. Before beginning the intervention, the participants underwent laboratory testing that included measuring serum cortisol and assessing their stress level using a standardized assessment questionnaire.

The group was randomized into a treatment group and control group. Those in the study group took 300 mg of ashwagandha root twice a day for 60 days. Analysis of the data revealed a significant reduction in stress assessment at the end of 60 days when compared to the placebo group.

People taking ashwagandha also had substantially lower serum cortisol levels. The group taking ashwagandha reported only mild adverse effects that were comparable to the placebo group. The results led the researchers to conclude that the root extract was safe and effective at improving resistance to stress and self-assessed quality of life.

A systematic literature review evaluating five human trials found similar results to the interventional study. The researchers concluded each of the five studies demonstrated ashwagandha resulted in greater improvement than a placebo when measuring anxiety or stress.¹⁸

Ashwagandha May Help Improve Nonrestorative Sleep

Nonrestorative sleep is a subjective feeling you have that your sleep had been “insufficiently refreshing.”¹⁹ This may happen despite appearing like you had slept through the night. It is one of the symptoms of insomnia that can be independent of other signs.

Difficulty with nonrestorative sleep plays an important role in medical conditions such as fibromyalgia, chronic fatigue syndrome, heart disease and obesity.²⁰ Scientists have found it is associated with other sleep disorders such as restless leg syndrome, sleep apnea and periodic limb movement disorders.

Although it has been studied in people with sleep disturbances, one team of researchers published their study protocol and rationale to evaluate the role ashwagandha may have in nonrestorative sleep in the general population.²¹

Because nonrestorative sleep plays an important role in medical conditions that are linked to chronic inflammation and ashwagandha has demonstrated the ability to reduce stress and prepare for sleep, researchers hoped ashwagandha would help improve scores on a restorative sleep questionnaire given to participants taking the supplement for six weeks.

The results of the study were published in the journal *Sleep Medicine*. The scientists enrolled 144 individuals who completed the study and found there was a 72% improvement in sleep quality in those taking ashwagandha compared to 29% in the placebo group.²²

The researchers monitored data that showed a significant improvement in sleep efficiency, time, latency and wakefulness after sleep. Quality of life scores were vastly improved in physical, psychological and environmental domains. Additionally, there were no adverse events reported.

More Benefits From Ashwagandha Include Cognitive Function

A traditional use for ashwagandha is memory enhancement, particularly the root of the plant. In 2017, a published study in the Journal of Dietary Supplements demonstrated the root extract helped improve memory and cognitive function in 50 people who had mild cognitive impairment.²³

This is a slight decline in cognitive ability that is associated with an increased potential risk for developing other serious dementias, including Alzheimer's disease.²⁴ The participants were split into two groups either receiving 300 mg of ashwagandha root extract twice a day or placebo over eight weeks.

The participants taking ashwagandha also demonstrated improvement in executive function, information-processing speed and sustained attention.²⁵ In addition to improving function, the root extract may help slow deterioration of brain cells in people diagnosed with dementia. In one review of Ayurvedic medicines, the researchers wrote:²⁶

"The beneficial effects of Ashwagandha root constituents in neurodegenerative diseases may be due to their neurite promoting, antioxidant, anti-inflammatory, antiapoptotic, and anxiolytic activities, as well as their ability to improve mitochondrial dysfunction and restore energy levels and increase levels of antioxidant defenses such as reduced glutathione."

Another study engaged 20 healthy men who were randomized to receive 500 mg of encapsulated root and leaf extract of ashwagandha or a placebo for 14 days.²⁷ They were put through a battery of computerized psychometric testing and researchers found those taking ashwagandha showed significant improvements in their reaction time, card sorting testing and choice discrimination.

Considerations and Side Effects

If you choose to consider an ashwagandha supplement, talk to your holistic health care practitioner since even natural remedies, like herbs, can interact with other medications or supplements you may be taking.

Women who are pregnant or breastfeeding should avoid ashwagandha since it can cause spasmolytic activity in the uterus that may result in a premature birth. In general, ashwagandha is associated with only mild side effects, if any, and appears to be safe for most people.

Typical dosages can range from 125 mg to 1,250 mg each day. Many of the current studies provided participants with 600 mg of root extract each day. In addition to being taken internally, ashwagandha can also be useful in topical form as an essential oil diluted with a carrier oil.

Sources and References

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