

Health Benefits of Ashwagandha, Based on Research



Medically reviewed by [Jared Meacham, Ph.D., RD, PMP, MBA, CSCS](#) — By [Jillian Kubala, MS, RD](#) and [Franziska Spritzler](#) — [Updated on November 7, 2023](#)

[Stress](#) [Athletic performance](#) [Mental health](#)

[Testosterone and fertility](#) [Blood sugar](#) [Inflammation](#)

[Thinking and memory](#) [Sleep](#) [Safety and side effects](#) [Dosage](#)

[FAQ](#) [Bottom line](#)

Potential benefits of ashwagandha include better athletic performance and sleep. Some research suggests this herb may help people with conditions like anxiety and infertility, but stronger studies are needed.

Ashwagandha is one of the most important herbs in Ayurveda, which is a traditional form of alternative medicine based on Indian principles of natural healing.

People [have used](#) [ashwagandha](#) for thousands of years to relieve stress, increase energy levels, and improve concentration.

“Ashwagandha” is Sanskrit for “smell of the horse,” which [refers to](#) [both](#) the herb’s scent and its potential ability to increase strength.

Its botanical name is *Withania somnifera*, and it’s also known by several other names, including “Indian ginseng” and “winter cherry.”

The ashwagandha plant is a small shrub with yellow flowers that’s native

to India and Southeast Asia. People use extracts or powder from the plant's root or leaves [to treat](#) a variety of conditions, including anxiety and [fertility](#) issues.

Here are 8 potential benefits of ashwagandha, based on research.

ADVERTISEMENT


1. May help reduce stress and anxiety


Ashwagandha is perhaps best known for its ability [to reduce stress](#). It's classified as an [adaptogen](#), a substance that helps the body cope with stress.

Ashwagandha [may help](#) control mediators of stress, including heat


shock proteins (Hsp70), cortisol, and stress-activated c-Jun N-terminal protein kinase (JNK-1).

It also reduces the activity of the hypothalamic-pituitary-adrenal (HPA) axis, a system in your body that regulates the stress response.


Research  suggests Ashwagandha supplements may help relieve stress and anxiety.

In a [small study](#)  with 58 participants, those who took 250 or 600 mg of ashwagandha extract for 8 weeks had significantly reduced perceived stress and levels of [the stress hormone cortisol](#) compared with those who took a placebo.

Those who took the ashwagandha supplements also saw improvements in sleep quality compared with the placebo group.

Another [study](#)  in 60 people found that those who took 240 mg of ashwagandha extract per day for 60 days had significant reductions in anxiety compared with those who received a placebo treatment.

Thus, early research suggests ashwagandha may be a helpful supplement for stress and anxiety.

However, a [2021 review](#)  of studies concluded that there's not enough evidence to form a consensus on the most appropriate dosage and form of ashwagandha for treating stress-related neuropsychiatric disorders such as anxiety.

SUMMARY

Ashwagandha may be effective for reducing stress and anxiety symptoms. However, more research is needed to form a consensus on appropriate forms and dosing to address stress and stress-related disorders.

2. May benefit athletic performance

Research has shown that ashwagandha may have beneficial effects on athletic performance and may be a worthwhile supplement for athletes.

One [analysis of research](#) included 12 studies in people who took ashwagandha doses between 120 mg and 1,250 mg per day. The results suggest the herb may enhance physical performance, including strength and oxygen use during exercise.

Another [analysis](#) that looked at five studies found that taking ashwagandha significantly enhanced maximum oxygen consumption (VO₂ max) in healthy adults and athletes.

VO₂ max is the maximum amount of oxygen a person can use during intense activity. It's a measurement of heart and lung fitness.

Having optimal VO₂ max is important for athletes and nonathletes alike. Low VO₂ max is associated with increased mortality risk, while higher VO₂ max is associated with [a lower risk](#) of [heart disease](#).

Additionally, ashwagandha may help increase muscle strength.

In a [2015 study](#), male participants who took 600 mg of ashwagandha per day and participated in resistance training for 8 weeks had significantly greater gains in muscle strength and size compared with a placebo group.

SUMMARY

Ashwagandha may help improve measures of physical performance in athletes and healthy adults, including VO₂ max and strength.

3. May reduce symptoms of some mental health conditions

Some evidence suggests that ashwagandha may help reduce symptoms of other [mental health conditions](#), including [depression](#), in certain populations.

In one [study](#)[👍], researchers looked at the effects of ashwagandha in 66 people with [schizophrenia](#) who were experiencing depression and anxiety.

They found that participants who took 1,000 mg of ashwagandha extract daily for 12 weeks had greater reductions in depression and anxiety than those who took a placebo.

Limited [research from 2013](#) also suggests that ashwagandha may help improve cognitive impairment in people with [bipolar disorder](#).

A [2021 review](#)[👍] concluded that ashwagandha may help manage depression, anxiety, [insomnia](#), and other mental health-related and neurological issues.


However, more research is needed into all these uses.

SUMMARY


The limited research available suggests that ashwagandha may help reduce symptoms of depression and benefit people with some mental health conditions. However, more research is needed.

4. May help boost testosterone and increase fertility in men

Ashwagandha supplements have been shown in some studies to benefit [male fertility](#) and [increase testosterone](#) levels.

In [one study](#) , 43 males aged 40–70 with overweight and mild fatigue took tablets containing ashwagandha extract or a placebo daily for 8 weeks.

The treatment was associated with an 18% greater increase in DHEA-S, a sex hormone involved in testosterone production. Participants who took the herb also had a 14.7% greater increase in testosterone than those who took the placebo.

Additionally, a [review of four studies](#)  found that ashwagandha treatment significantly increased sperm concentration, semen volume, and [sperm motility](#) in males with [low sperm count](#).

It also increased sperm concentration and motility in males with [normal sperm count](#).


However, more studies are needed.


SUMMARY

Ashwagandha may help increase testosterone levels and may have some potential benefits for male fertility. However, more research is needed.

5. May reduce blood sugar levels

Limited evidence suggests that ashwagandha may have some benefits for people with diabetes or [high blood sugar](#) levels.

A [review of 24 studies](#) , including 5 clinical studies in people with [diabetes](#), found that treatment with ashwagandha significantly [reduced blood sugar](#), hemoglobin A1c (HbA1c), insulin, blood lipids, and [oxidative stress](#) markers.

The [reason may be](#)  that certain compounds within ashwagandha — including one called withaferin A (WA) — have powerful antidiabetic activity and may help stimulate cells to take in [glucose](#) from the bloodstream.


However, research is limited at this time, and more well-designed studies are needed.


SUMMARY

Limited evidence suggests that ashwagandha may reduce blood sugar levels through its effects on insulin secretion and cells' ability to absorb glucose from the bloodstream.

6. May reduce inflammation

Ashwagandha contains compounds, including WA, that may [help reduce inflammation](#) in the body.

[Animal studies](#)  have shown that WA may also help reduce levels of inflammatory proteins such as interleukin-10 (IL-10), and there's some evidence ashwagandha may help [reduce inflammatory markers](#) in humans too.

In a [2021 study](#) , researchers gave people with COVID-19 an Ayurvedic drug containing 0.5 grams of ashwagandha and [other herbs](#) twice per day for 7 days. This reduced participants' levels of inflammatory markers CRP, IL-6, and TNF- α compared with a placebo.

The treatment formulation also contained:

- 1 gram of [giloy ghanvati](#) (*Tinospora cordifolia*)
- 2 grams of swasari ras (a traditional herbo-mineral formulation)
- 0.5 grams of [tulsi ghanvati](#) (*Ocimum sanctum*)


However, research on ashwagandha's potential effects on inflammation remain limited.

SUMMARY

Ashwagandha may help reduce inflammatory markers in the body. However, more research is needed.

7. May improve brain function, including memory

Taking ashwagandha may benefit cognitive function.

One [review](#)  of five clinical studies found early evidence that ashwagandha could improve cognitive functioning in certain populations, including older adults with [mild cognitive impairment](#) and people with

schizophrenia.

Cognitive functions it may benefit included:

- executive functioning
- attention
- reaction time
- performance on cognitive tasks

A [study](#) in 50 adults showed that taking 600 mg of ashwagandha extract per day for 8 weeks led to significant improvements in the following measures compared with taking a placebo:

- immediate and general memory
- attention
- information-processing speed

The researchers noted that compounds found in ashwagandha, including WA, have antioxidant effects in the brain, which may benefit cognitive health.

However, more research is needed before experts can draw strong conclusions.

SUMMARY

Ashwagandha supplements may improve memory, reaction time, and the ability to perform tasks in certain populations. However, more research is needed.

8. May help improve sleep

Many people take ashwagandha to [promote restful sleep](#), and some

evidence suggests it may help with [sleep issues](#).

For example, [a study](#) in 50 adults ages 65–80 found that taking 600 mg of ashwagandha root per day for 12 weeks significantly [improved sleep quality](#) and mental alertness upon waking compared with a placebo treatment.

Additionally, [one review](#) of five high quality studies found that ashwagandha appeared to:

- have a small but significant positive effect on overall sleep quality
- reduce anxiety levels
- help people feel more alert when they woke up

The results were more pronounced in people with [insomnia](#) and in those who took more than 600 mg daily for 8 weeks or longer.

SUMMARY

Recent evidence suggests that ashwagandha may be an effective natural remedy to improve sleep and may especially help people with insomnia.

ADVERTISEMENT

Safety and side effects


Ashwagandha is [likely safe](#) ✓ for most people when used for up to 3 months, although its long-term effects are unknown.

However, ashwagandha may not be safe if a person:

- is pregnant, as high doses may lead to [pregnancy loss](#)
- is breastfeeding
- has hormone-sensitive [prostate cancer](#)
- is taking certain medications, such as [benzodiazepines](#),

[anticonvulsants](#), or barbiturates

- is about to have surgery
- has an autoimmune or thyroid disorder
- has liver problems

Some people using ashwagandha supplements have reported the following [adverse effects](#) :

- upper gastrointestinal discomfort
- drowsiness
- diarrhea
- vomiting

Ashwagandha's effects may not be immediate, and you may have to take it for several months before noticing its effects.

Always speak with a doctor to ensure ashwagandha or other supplements are safe for you to use.

Dosage


Dosing recommendations for ashwagandha vary. For example, research has shown doses ranging from 250–1,250 mg per day to be effective for different conditions. Consult a healthcare professional if you have questions regarding ashwagandha dosing.

You can take ashwagandha in many ways, in either a single dose or multiple doses per day. And you can take it either with meals or on an empty stomach.

[How much ashwagandha can you take per day? Find out more.](#)

SUMMARY

Although ashwagandha is safe for most people, it's not safe for



everyone. It's important to check with a healthcare professional before taking ashwagandha to ensure it's safe for you and that you use a safe dose.

Frequently asked questions

What are the benefits of taking ashwagandha?

Possible benefits of ashwagandha include:

- reducing stress
- improving sleep
- boosting athletic performance
- improving memory
- increasing male fertility
- reducing inflammation
- managing blood sugar

What happens when you take ashwagandha daily?

The effects of ashwagandha will take time to appear, so a healthcare professional may recommend taking one dose daily. However, the long-term effects are unknown, and experts only recommend using it for up to 3 months.

Who should not take ashwagandha?

Ashwagandha may not be safe:

- during pregnancy
- while breastfeeding
- if you have prostate cancer, [thyroid problems](#), or an autoimmune

condition

- if you are about to have surgery
- if you have liver problems
- if you are taking benzodiazepines or other medications

Always check with a healthcare professional before using ashwagandha.

Why is Ashwagandha not FDA-approved?

Since Ashwagandha is a natural herbal supplement, it is **not regulated** ✓ by the U.S. Food and Drug Administration (FDA).

The bottom line

Ashwagandha is an ancient medicinal herb with various possible health benefits.

Study findings suggest that it **may help reduce anxiety** and stress, support restful sleep, and even improve cognitive functioning in certain populations.

Ashwagandha is likely safe for most people in the short term. However, it's not appropriate for everyone, so it's important to talk with a healthcare professional before adding ashwagandha to your routine.

Just one thing

Try this today: Here are more ideas to help you reduce stress:

- Spend some time in the great outdoors.
- Try to get enough sleep.
- Move your body by participating in enjoyable activities.
- Spend time with loved ones.
- Set boundaries to protect and prioritize your physical and

mental health.

Read [this article](#) for more ways to reduce stress and anxiety.

Was this helpful?  

healthline

Last medically reviewed on November 7, 2023

How we reviewed this article:

 **SOURCES**  **HISTORY**

Our experts continually monitor the health and wellness space, and we update our articles when new information becomes available.

Current Version

Nov 7, 2023

Written By

Jillian Kubala MS, RD, Franziska Spritzler

Edited By

Alina Sharon

Medically Reviewed By

Jared Meacham, Ph.D., RD, PMP, MBA, CSCS

Copy Edited By

Copy Editors

Jun 5, 2023

Written By

Jillian Kubala MS, RD, Franziska Spritzler

Edited By

Yvette Brazier

Medically Reviewed By

Jared Meacham, Ph.D., RD, PMP, MBA, CSCS

Copy Edited By

Copy Editors

[VIEW ALL HISTORY](#) +

Share this article



READ THIS NEXT

Do Rhodiola Rosea and Ashwagandha Work Well Together?

Medically reviewed by [Kerry Boyle D.Ac., M.S., L.Ac., Dipl. Ac., CYT](#)

Research suggests rhodiola and ashwagandha work well together, but you may want to take them at different times of day.

[READ MORE](#)

What Does Ashwagandha Do for Women's Wellness?

Ashwagandha's ability to balance hormones may benefit women's overall wellness, impacting the menstrual cycle, reproduction, and menopause.

[READ MORE](#)

Does Ashwagandha Make You Fertile? 7 Things to Know About This Herb

While research is still evolving, ashwagandha shows potential in addressing various aspects of fertility, including libido, hormone levels,...

[READ MORE](#)

Does Rhodiola Help with Weight Loss?

Rhodiola is best known for its benefits with physical performance and endurance, less so for weight loss.

[READ MORE](#)

How Long Does Rhodiola Rosea Take to Work?

Rhodiola rosea may provide some early benefits within the first couple of weeks of use.

[READ MORE](#)

How Much Ashwagandha Should I Take for Testosterone?

Medically reviewed by [Dominique Fontaine, BSN, RN, HNB-BC, HWNC-BC](#)

Many studies show that taking ashwagandha daily can increase testosterone, but there isn't a clinical agreement on dosage. Let's look...

[READ MORE](#)

The Difference Between Ashwagandha and CBD

Medically reviewed by [Dominique Fontaine, BSN, RN, HNB-BC, HWNC-BC](#)

Both Ashwagandha and CBD have gotten a lot of press as natural healers. Let's see if the science backs up their claims.

[READ MORE](#)

Can Ashwagandha Trigger Anxiety?

Ashwagandha is usually used to treat anxiety, but some people may have an adverse reaction that causes anxiety. Let's look deeper:

[READ MORE](#)

Can Ashwagandha Help with Sleep?

Ashwagandha is a supplement that may help you sleep better.

[READ MORE](#)

What Is Corn Silk, and Does It Have Benefits?



By [Ansley Hill, RD, LD](#)

Corn silk is the long, silky threads that grow on corncobs. This article explains everything you need to know about corn silk, including its uses...

[READ MORE](#)



Get our wellness newsletter

Filter out the noise and nurture your inbox with health and wellness advice that's inclusive and rooted in medical expertise.

SIGN UP

Your [privacy](#) is important to us

[About Us](#)

[Health Topics](#)

[Contact Us](#)

[Medical Affairs](#)

[Terms of Use](#)

[Content Integrity](#)

[Privacy Policy](#)

[Newsletters](#)

[Privacy Settings](#)

[Do Not Sell My Info](#)

[Advertising Policy](#)

© 2023 Healthline Media LLC. All rights reserved. Our website services, content, and products are for informational purposes only. Healthline Media does not provide medical advice, diagnosis, or treatment. [See additional information.](#)

[About](#) | [Careers](#) | [Advertise with us](#)

OUR BRANDS

Healthline
Medical News Today
Greatist
Psych Central
Bezzy

