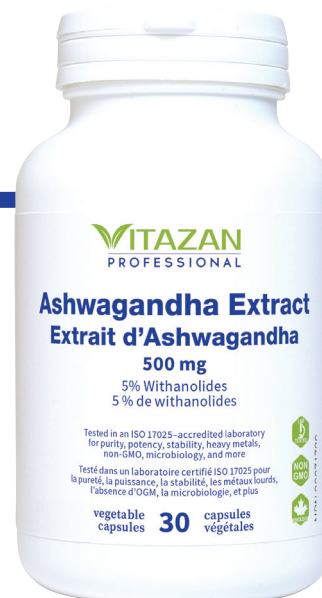


Ashwagandha Extract

500 mg • 5% Withanolides

Ashwagandha, also known as *Withania somnifera* or Indian ginseng, is regarded as a tonic par excellence in Ayurvedic medicine: It is considered a nervine tonic (cooling *Vata*) and a rejuvenating tonic (*Rasayana*).^[1]

In Western herbal medicine, ashwagandha is regarded as a restorative adaptogen, meaning that it helps the body adapt to and recover from the effects of chronic stress. Rather than acting as a stimulant like ginseng, ashwagandha has calming effects and may help reduce anxiety, decrease vigilance, promote proper sleep, improve cognitive function, and help to balance hormones including those produced by the adrenal glands. Not surprisingly then, it has also been shown to improve fertility and sexual function.



As an adaptogen, ashwagandha has normalizing effects on cortisol. In chronically stressed patients with elevated cortisol levels, supplementation with ashwagandha has been shown to reduce cortisol,^{[2][3]} while one case report demonstrated that with pathologically low cortisol levels due to nonclassical adrenal hyperplasia (NCAH), ashwagandha was reported to increase cortisol.^[4]

Table 1. Clinical Studies of Ashwagandha

Indication	Design	Outcomes	Ref.
Body weight and chronic stress	Double-blind, randomized, placebo-controlled study of 52 subjects under chronic stress who received 500 mg ashwagandha root extract or placebo for 8 weeks. Primary outcomes were judged with the Perceived Stress Scale and the Food Cravings Questionnaire. Secondary outcomes were judged with the Oxford Happiness Questionnaire, serum cortisol, BMI, and body weight.	Compared to placebo, after 4 weeks ashwagandha significantly decreased perceived stress, food cravings, cortisol, BMI, and “emotional eating.” Body weight decreased significantly compared to placebo after 8 weeks, but not 4 weeks. Ashwagandha was also shown not to affect parameters such as blood pressure, respiratory rate, pulse rate, and body temperature as compared to placebo.	[3]

The first company in the industry to have invested in an ISO 17025-accredited laboratory to test for identity, potency, oxidation, disintegration, purity, and more.



Recovery from exercise	57 young men assigned to exercise training were randomized to 600 mg ashwagandha or placebo daily for 8 weeks.	The men receiving ashwagandha had significantly: <ul style="list-style-type: none"> · greater increases in muscle strength (bench press, leg extension); · lower levels of muscle damage measured as blood creatinine kinase; · higher levels of testosterone; and · greater decreases in body fat percentage, compared to placebo. 	[5]
Fatigue related to chemotherapy	100 patients with breast cancer undergoing chemotherapy were treated with adjuvant ashwagandha 2 g every 8 hours, or chemotherapy alone.	Supplementation with ashwagandha alongside standard chemotherapy resulted in a significant decrease in ratings of fatigue and improved quality of life.	[6]
Female fertility and sexual function	50 healthy women were randomized to high-concentration ashwagandha root extract 600 mg per day or placebo daily for 8 weeks.	Women receiving ashwagandha reported significantly improved symptoms on Female Sexual Function Index (FSFI) questionnaire overall as well as for the following symptoms: Arousal, lubrication, orgasm, and satisfaction; as well as for the number of sexual encounters at the end of the treatment.	[7]
Male fertility	180 infertile male patients were administered ashwagandha 5 g daily for 3 months. Proton NMR spectroscopy was used to assess seminal plasma.	Ashwagandha normalized seminal concentrations of lactate, alanine, citrate, glycerophosphocholine (GPC), histidine, and phenylalanine; and improved the quality of semen (sperm concentration, motility) compared to baseline.	[8]
Male fertility and hormones	75 normal healthy fertile men (control subjects) and 75 men undergoing infertility screening were treated with ashwagandha supplementation.	Treatment with ashwagandha decreased oxidative markers measured in seminal fluid and improved both sperm count and motility. There were also significantly increased levels of serum testosterone and LH, and reduced levels of FSH and prolactin, which are associated with improved fertility.	[9]
Oligospermia	Pilot study. Randomized, double-blind, placebo-controlled study, of 46 men with oligospermia who received 675 mg/d of root extract in 3 doses or placebo for 12 weeks.	Increase of 53% in semen volume, increase of 167% in sperm count, increase of 57% sperm motility ($p < 0.0001$), increase of 17% serum T ($p < 0.01$), increase of 34% LH ($p < 0.02$) after 90 days from baseline. Serum hormone levels significantly difference compared to placebo.	[10]
Cognitive function	60 patients with bipolar disorder currently well-managed on medications were randomized to 500 mg ashwagandha extract or placebo daily for 8 weeks.	Compared to placebo, ashwagandha extract showed significant benefits for three cognitive tasks: Digit span backward, Flanker neutral response time, and the social cognition response rating of the Penn Emotional Acuity Test. Mood and anxiety scale scores remained stable, and adverse events were minor.	[10]
	A prospective, randomized, double-blind, placebo-controlled study was conducted in 50 adults. Subjects were treated with either ashwagandha root extract (300 mg twice daily) or placebo for eight weeks.	Compared to placebo, the ashwagandha group demonstrated significant improvement in: <ul style="list-style-type: none"> · immediate and general memory (Wechsler memory scale III) · executive function · sustained attention · information processing 	[12]

Anxiety	Systematic review: 5 human trials met inclusion criteria.	Three studies using Hamilton Anxiety Scale reported ashwagandha extract to be superior to placebo, with two of these studies reaching statistical significance. Using Beck Anxiety Inventory, ashwagandha was statistically better at reducing anxiety compared to psychotherapy. The last study demonstrated superiority of ashwagandha extract over placebo in Perceived Stress Scale.	[13]
	81 Canada Post workers with moderate to severe anxiety were randomized to receive naturopathic care featuring ashwagandha 600 mg daily, or psychotherapy for 12 weeks.	Beck anxiety index (BAI) scores decreased by 56.5% in the group receiving naturopathic care including ashwagandha, compared to 30.5% in the psychotherapy group. There were also greater improvements in self-reported mental health, concentration, fatigue, social functioning, vitality, and overall quality of life.	[14]
	64 subjects with a history of chronic stress were randomized to 60 mg ashwagandha or placebo daily for 60 days.	Ashwagandha root extract exhibited a significant reduction in scores on all the stress-assessment scales on day 60, relative to the placebo group. The serum cortisol levels were substantially reduced in the ashwagandha group relative to the placebo group.	[2]
Subclinical hypothyroid	In a prospective, randomized, double-blind, single-center, placebo-controlled study, patients with elevated TSH were given ashwagandha root (600 mg/d) or placebo for 6 weeks.	A significant improvement compared to placebo in normalizing TSH and T ₄ levels.	[15]
Obsessive-compulsive disorder (medicated with SSRI)	A randomized, double-blind, placebo-controlled trial of patients diagnosed with OCD. They either received ashwagandha 120 mg/d or placebo for 6 weeks, while taking their SSRI medication.	A significantly greater change in the Yale-Brown Obsessive Compulsive scale compared to placebo.	[16]

References

- Singh, N., et al. "An overview on ashwagandha: A Rasayana (rejuvenator) of Ayurveda." *African Journal of Traditional, Complementary, and Alternative Medicines*, Vol. 8, No. 5 Suppl. (2011): 208–213.
- Chandrasekhar, K., J. Kapoor, and S. Anishetty. "A prospective, randomized double-blind, placebo-controlled study of safety and efficacy of a high-concentration full-spectrum extract of ashwagandha root in reducing stress and anxiety in adults." *Indian Journal of Psychological Medicine*, Vol. 34, No. 3 (2012): 255–262.
- Choudhary, D., S. Bhattacharyya, and K. Joshi. "Body weight management in adults under chronic stress through treatment with ashwagandha root extract: A double-blind, randomized, placebo-controlled trial." *Journal of Evidence-Based Complementary & Alternative Medicine*, Vol. 22, No. 1 (2017): 96–106.
- Kalani, A., G. Bahtiyar, and A. Sacerdote. "Ashwagandha root in the treatment of non-classical adrenal hyperplasia." *BMJ Case Reports*, Vol. 2012 (2012). pii: bcr2012006989.
- Wankhede, S., et al. "Examining the effect of *Withania somnifera* supplementation on muscle strength and recovery: A randomized controlled trial." *Journal of the International Society of Sports Nutrition*, Vol. 12 (2015): 43.
- Biswal, B.M., et al. "Effect of *Withania somnifera* (ashwagandha) on the development of chemotherapy-induced fatigue and quality of life in breast cancer patients." *Integrative Cancer Therapies*, Vol. 12, No. 4 (2013): 312–322.
- Dongre, S., D. Langade, and S. Bhattacharyya. "Efficacy and safety of ashwagandha (*Withania somnifera*) root extract in improving sexual function in women: A pilot study." *BioMed Research International*, Vol. 2015 (2015): 284154.
- Gupta, A., et al. "Efficacy of *Withania somnifera* on seminal plasma metabolites of infertile males: A proton NMR study at 800 MHz." *Journal of Ethnopharmacology*, Vol. 149, No. 1 (2013): 208–214.
- Ahmad, M.K., et al. "*Withania somnifera* improves semen quality by regulating reproductive hormone levels and oxidative stress in seminal plasma of infertile males." *Fertility and Sterility*, Vol. 94, No. 3 (2010): 989–996.
- Ambiye, V.R., et al. "Clinical evaluation of the spermatogenic activity of the root extract of ashwagandha (*Withania somnifera*) in oligospermic males: A pilot study." *Evidence-Based Complementary and Alternative Medicine*, Vol. 2013 (2013): 571420.
- Chengappa, K.N., et al. "Randomized placebo-controlled adjunctive study of an extract of *Withania somnifera* for cognitive dysfunction in bipolar disorder." *The Journal of Clinical Psychiatry*, Vol. 74, No. 11 (2013): 1076–1083.

12. Choudhary, D., S. Bhattacharyya, and S. Bose. "Efficacy and safety of ashwagandha (*Withania somnifera* (L.) Dunal) root extract in improving memory and cognitive functions." *Journal of Dietary Supplements*, Vol. 14, No. 6 (2017): 599–612.
13. Pratte, M.A., et al. "An alternative treatment for anxiety: A systematic review of human trial results of reported for the ayurvedic herb ashwagandha (*Withania somnifera*)." *Journal of Alternative and Complementary Medicine*, Vol. 20, No. 12 (2014): 901–908.
14. Cooley, K., et al. "Naturopathic care for anxiety: A randomized controlled trial ISRCTN78958974." *PLoS One*, Vol. 4, No. 8 (2009): e6628.
15. Sharma, A.K., I. Basu, and S. Singh. "Efficacy and safety of ashwagandha root extract in subclinical hypothyroid patients: A double-blind, randomized placebo-controlled trial." *Journal of Alternative and Complementary Medicine*, Vol. 24, No. 3 (2018): 243–248.
16. Jahanbakhsh, S.P., et al. "Evaluation of the efficacy of *Withania somnifera* (ashwagandha) root extract in patients with obsessive-compulsive disorder: A randomized double-blind placebo-controlled trial." *Complementary Therapies in Medicine*, Vol. 27 (2016): 25–29.

Each vegetable capsule contains:

Ashwagandha (*Withania somnifera*)
root extract, 5% withanolides 500 mg

Nonmedicinal ingredients: Vegetable magnesium stearate and silicon dioxide in a non-GMO vegetable capsule composed of vegetable carbohydrate gum and purified water.

Directions of use: Adults: Take 1 capsule daily or as directed by your health-care practitioner.

Cautions and warnings: Consult a health-care practitioner prior to use if you are pregnant or breast-feeding; if you have benign prostate hypertrophy or prostate cancer; if you have been diagnosed with hypoactive sexual disorder, sexual dysfunction, or erectile dysfunction; or if you suffer from any psychological disorder or condition such as anxiety or depression.

Contraindications: Combination with alcohol, other drugs, or natural health products with sedative properties is not recommended.

Product #2114 · 30 vegetable capsules · NPN 80071780 · V0581-R1