



Stress-Relax®

# ASHWAGANDHA

600 mg

NPN 80117281

RESEARCH INFORMATION

## Feature summary

Stress-Relax Ashwagandha contains vegan, organic KSM-66 Ashwagandha® root extract. This clinically studied herbal supplement helps increase resistance to stress and anxiety in individuals with a history of chronic stress, thereby improving their quality of life. Ashwagandha is a well-recognized Ayurvedic herb that has been shown to have many health benefits related to physical and mental stress. It is traditionally used in Ayurvedic medicine to balance aggravated Vata (as a nerve tonic), as a sleep aid, for memory enhancement, and to relieve general debility, especially during convalescence or old age. KSM-66 Ashwagandha can also be used as a workout supplement to provide athletic support, helping to improve physical performance in previously untrained individuals when combined with regular resistance training.

KSM-66 Ashwagandha is a full-spectrum extract made from only the ashwagandha root. It is one of the most clinically studied ashwagandha root extracts on the market and has the same potency used in multiple clinical studies. Just one capsule provides a 600 mg dose equivalent to 7200 mg of dried ashwagandha, standardized to 5% of withanolides. This is a great choice for people who are feeling overwhelmed by stress and anxiety, and anyone looking for a herbal exercise supplement.

## How it works

Mental, physical, chemical, and other forms of stress trigger the body's hypothalamus-pituitary-adrenal (HPA) axis. The adrenal glands respond by releasing the stress hormones epinephrine, norepinephrine, and cortisol (Salve et al., 2019). Long-term or chronic exposure to elevated cortisol levels has a negative impact on health.

KSM-66 is a full-spectrum extract that contains the entire scope of phytonutrients present in ashwagandha root, including its main active group of steroidal alkaloids and lactones known as withanolides. Ashwagandha's adaptogenic effects work through the HPA axis, helping to regulate the release of cortisol into the bloodstream (Auddy et al., 2008). Its cortisol-lowering effect is important for helping to achieve a normal sleep-wake cycle and regulating blood glucose levels (Salve et al., 2019; Auddy et al., 2008).

Ashwagandha's anti-anxiety activity may be attributed to binding gamma-aminobutyric acid (GABA) receptors in the brain and calming nerve cell activity (Singh et al., 2011). Other typical physiological responses to stress, such as increased blood urea nitrogen, lactic acid, and corticosterone, along with the activation of dopamine receptors are also reduced with ashwagandha (Wankhede et al., 2015).

As an exercise supplement, ashwagandha helps increase aerobic and cardiovascular endurance (Choudhary et al., 2015). It improves endurance by influencing the activity of ATPase, the enzyme responsible for breaking down ATP (Choudhary et al., 2015). It also reduces post-exercise levels of serum creatine kinase, resulting in less muscle damage and faster recovery (Handler, 2017).

## Research

Long-term stress and anxiety can affect physical and mental well-being, negatively impacting memory, sleep, mood, energy levels, and immune function (Salve et al., 2019). Ashwagandha (*Withania somnifera*) is a plant in the nightshade family. This well-recognized Ayurvedic herb has many health benefits related to stress and anxiety. It is referred to as an adaptogen because it contains phytonutrients that increase the body's resistance to mental, physical, and chemical stress (Wankhede et al., 2015).

In a double-blind, placebo-controlled study, two strengths of KSM-66 Ashwagandha extract – 250 mg and 600 mg – were taken by healthy, stressed adults in two divided doses per day. Relative to baseline measurements, the 250 mg and 600 mg doses resulted in a 34% and 38% reduction in perceived stress, respectively, and a 17% and 33% reduction in blood cortisol levels, respectively, over the eight weeks of supplementation. The 600 mg dose was also associated with a 16% reduction in Hamilton Anxiety Rating Scale (HAM-A) scores, while results from the lower dose were not statistically significant (Salve et al., 2019).

The hormonal fluctuations of perimenopause can place the body under significant stress. In a double-blind, placebo-controlled study, women with climacteric symptoms were supplemented twice daily with 300 mg of KSM-66 Ashwagandha. Eight weeks of supplementation resulted in a significant (23.5%) reduction in overall perimenopause symptoms, including both psychological (mood, irritability, anxiety, and exhaustion) and physical aspects (hot flashes, nighttime sweating, urogenital symptoms), in addition to improved ratings of quality of life, and enhanced hormone balance (Gopal et al., 2021).

In Ayurvedic medicine, ashwagandha is a recognized rejuvenation tonic and sleep aid (Langade et al., 2019). Using a seven-point sleep scale, researchers found that participants who took 250 mg and 600 mg doses of ashwagandha per day improved significantly in measures of sleep quality (35% and 46%, respectively) (Salve et al., 2019). Additionally, a randomized, double-blind, placebo-controlled study found that 300 mg of KSM-66 Ashwagandha root extract, taken twice daily, significantly improved sleep habits in patients experiencing sleep deprivation and anxiety. Sleep actigraphy identified a 30% reduction in sleep onset latency (the time it takes to fall asleep) and a 10% improvement in patient sleep efficiency. A questionnaire also identified a 30% improvement in sleep quality compared to baseline measurements, while mental alertness upon waking up was found to improve gradually over the 10-week study (Langade et al., 2019).

High-intensity exercise physically stresses the body. In an eight-week, randomized, double-blind, placebo-controlled study, men with little experience in resistance training were supplemented with 300 mg of KSM-66 Ashwagandha extract twice per day while taking part in resistance training. Compared to the placebo, men taking KSM-66 experienced a significant increase in upper and lower body muscle strength, significantly less exercise-induced muscle damage (as shown by blood creatine kinase tests), and a significant increase in testosterone levels (Wankhede et al., 2015).

In a double-blind, placebo-controlled study, healthy athletic adults were supplemented twice daily with 300 mg of KSM-66 Ashwagandha. Cardiorespiratory endurance was then measured through a series of 12-minute run tests. It was discovered that the VO<sub>2</sub> max (oxygen consumption during peak physical exertion) increased significantly (16%) over the eight weeks of supplementation, in addition to significant improvements in fatigue recovery and quality of life measurements. Compared to the placebo group, KSM-66 was also found to increase participants' blood antioxidant levels (Tiwari et al., 2021).

## Ingredients

### Each vegetarian capsules contains:

Organic KSM-66 Ashwagandha® extract 12:1  
(*Withania somnifera*) (root) (5% withanolides) ..... 600 mg  
(Equivalent to 7200 mg total dried ashwagandha)

## Dosage

**Recommended adult dose:** 1 capsule daily or as directed by a health care practitioner. **For physical performances or as athletic support:** Use for a minimum of 8 weeks to see beneficial effects. **All uses:** Consult a health care practitioner for use beyond 12 weeks.

## Cautions

**Sleep aid:** Consult a health care practitioner if sleeplessness persists for more than 4 weeks. **All uses:** Avoid taking with alcohol or products that cause drowsiness. Consult a health care practitioner prior to use if you are pregnant or breastfeeding, have been diagnosed with hypoactive sexual disorder, sexual dysfunction, or erectile dysfunction, benign prostate hypertrophy, prostate cancer, or if you suffer from any psychological disorder or condition such as frequent anxiety or depression. Some people may experience drowsiness. Exercise caution if operating heavy machinery, driving a motor vehicle, or involved in activities requiring mental alertness. Keep out of the reach of children.

## References

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