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TriGandha™ is a unique blend of three different forms of comprehensive and well-researched ashwagandha extracts for mood and stress support.* TriGandha™ is a carefully formulated product by Designs for Health based on industry-leading ashwagandha sources of whole-plant extracts, Sensoril® and NooGandha®, along with a high-quality, standardized, root-only extract, which was designed as a compound to provide optimal efficacy and bioactive diversity. Each 1-capsule serving provides 650 mg of adaptogenic ashwagandha extracts to encourage a healthy response to stress and occasional anxiety.*

Formula Highlights

- Exclusive combination of three different forms of adaptogenic ashwagandha
- 650 mg of ashwagandha per capsule
- Ashwagandha extracts standardized to meet clinically effective amounts of bioactives
- Contains both root and leaf whole plant extracts
- Includes 250 mg of Sensoril® that contains >10% withanolides
- Includes 250 mg of NooGandha® – a non-GMO extract that uses a custom cross-liposomal-micellar delivery technology for enhanced absorption and bioavailability
- NooGandha® delivers ultra-concentrated amounts of Withanoid I and Withanoid II compounds that exhibit nootropic effects*
- Suitable for vegetarians and vegans

Adaptogens

In today's fast-paced lifestyle, demanding professional and social obligations, environmental stressors, poor dietary habits, and unhealthy lifestyle choices contribute significantly to the ever-increasing burden of stress that individuals experience. It is well-established that stress plays a significant role in the development of various disease states and conditions. Adaptogens are plants that contain bioactive compounds that target specific molecules (e.g., stress hormones), signaling pathways, and networks (e.g., hypothalamic-pituitary-adrenal [HPA] axis) within the body that interact with and modify key mediators to enable a better adaptation to stress.¹ In doing so, adaptogenic herbs help support an organism's ability to adapt and survive by enhancing the nonspecific phase of stress resistance, which promotes allostasis.^{1,2} While most adaptogens possess stimulating properties, one of the novel aspects of ashwagandha is that it can also impart relaxing and somewhat soothing effects on the nervous system (hence the species moniker of "somnia" relating to somnolence or sleep).

Ingredient Highlights

Ashwagandha (*Withania somnifera*), also known as Indian ginseng (although not technically part of the ginseng family), is a well-researched, adaptogenic herb that has been revered and used traditionally for centuries in the Ayurvedic system of medicine. Ayurvedic practitioners use ashwagandha to promote balance and homeostasis within the body and help counteract the adverse effects of stress.³ In Ayurveda, ashwagandha is referred to as the "Prince of Herbs" due to its broad range of targeted effects. It is a small, woody shrub in the *Solanaceae* genus (and a member of the nightshade family) that grows in a wide range of habitats and contains a diverse array of bioactive phytochemical constituents, such as withanolide glycosides (e.g., withaferin A), alkaloids, and polysaccharides, that contribute to its adaptogenic properties.

Benefits*

- May encourage a healthy stress response
- May help support occasional anxiety
- Promotes healthy moods and positive mental outlook
- May promote restorative sleep
- May support overall adrenal health
- May support healthy cognitive function and memory
- May help support focus and reaction time

Supplement Facts

Serving Size 1 capsule

Amount Per Serving	% Daily Value
Ashwagandha Extract (Sensoril®) (<i>Withania somnifera</i>)(root and leaf)	250 mg *
Ashwagandha Extract (NooGandha®) (<i>Withania somnifera</i>)(root and leaf)	250 mg *
Ashwagandha Extract (<i>Withania somnifera</i>) (root)[standardized to contain 1.5% withanolides]	150 mg *

*Daily Value not established.

Other Ingredients: Cellulose (capsule), microcrystalline cellulose, dicalcium phosphate, vegetable stearate, silicon dioxide.

The most effective adaptogens are considered to be those that can modulate and minimize the negative physiological impact of stress on the body while also having the capacity to be used in multiple dosages in a way that minimizes harm.⁴ Ashwagandha is known to help the body successfully adapt to stressful situations and has been shown through research to have significantly favorable mental and physiological effects in humans.^{3,4}

Several human trials have provided evidence of the efficacy of the *Withania somnifera* extract (WSE) as anxiolytic, mood-enhancing, and adaptogenic.⁵⁻⁸ In a prospective, randomized clinical trial, supplementation with 500 mg to 600 mg per day of ashwagandha for 60 days significantly reduced serum cortisol levels and scores on all stress and anxiety assessment scales when compared to a placebo. This evidence suggests that this dose may help support occasional anxiety, and it may lower the likelihood of insomnia in adults who self-report being chronically stressed or those who have anxious tendencies.⁴ Ashwagandha is also believed to work as a nervine tonic, in part, by helping to regulate the HPA axis and its ability to exert gamma-aminobutyric acid-ergic (GABAergic) effects, thereby supporting restorative sleep. Hyperactivation of the HPA axis is a common driver of sleep disorders.^{9,10}

TriGandha™ Composition: TriGandha™ provides 250 mg of each of the patented ashwagandha extracts, Sensoril® and NooGandha®, along with 150 mg of a high-quality root-only *Withania somnifera* extract standardized to contain 1.5% withanolides.

Sensoril® ashwagandha is composed of the root and leaf and is standardized to contain three bioactive compounds (withanolide, withaferin A, and oligosaccharides), providing the highest level of withanolide glycosides on the market ($\geq 10\%$).¹¹ A clinical trial examined the effects of 125 mg two times per day (or 250 mg total) of Sensoril® *Withania somnifera* extract in chronically stressed patients. Compared to a placebo, the *Withania somnifera* extract treatment group had significantly reduced overall stress (by 62.2%) at 30 and 60 days, as evidenced by lowered serum cortisol levels, blood pressure and pulse rates, serum C-reactive protein levels, improved modified Hamilton anxiety scale ratings, and increased serum dehydroepiandrosterone sulfate (DHEA-S) levels.¹² Additionally, Sensoril® *Withania somnifera* extract supplementation demonstrated significant improvements in cognitive function, mood, fatigue, symptoms of occasional sleeplessness, and an increase in energy levels, focus, and reaction time compared to the placebo groups.^{12,13} These results suggest that Sensoril® supplementation may help the body cope with stress and may help increase resistance to fatigue and tension.*

NooGandha® root and leaf extract provides an ultra-concentrated source of highly bioavailable non-glycosylated withanolides with adaptogenic benefits, along with Withanoid I and Withanoid II compounds that support cognitive performance.* NooGandha® uses a clean and environmentally responsible water extraction process, free of harsh or toxic chemical solvents.

In a randomized, placebo-controlled (unpublished to date) study of self-reported chronically stressed individuals showed that both serving sizes of 400 mg per day and 225 mg per day of NooGandha® *Withania somnifera* extract for 15 days significantly reduced perceived stress, anxiety, depression, food cravings, and cortisol levels. Results from the same study showed significant improvements in cognitive flexibility (e.g., reasoning, switching tasks, impulse control, decision-making, etc.), visual memory, and reaction time compared to a placebo.

Recommended Use: Take 1 capsule per day or as directed by your health-care practitioner.

For a list of references cited in this document, please visit:

<http://www.designsforhealth.com/techsheet-references/trigandha-references.pdf>

[NOO]GANDHA®

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*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

To contact Designs for Health, please call us at (860) 623-6314, or visit us on the web at www.designsforhealth.com.