Helps Recharge the Mind and Body

- A powerful Ayurvedic adaptogen
- Helps with chronic stress, low energy and poor endurance
- Supports the function of the immune system and liver
- Corn Free

Gandha-600 contains ashwagandha, a plant widely used in Ayurvedic medicine. Ashwagandha is traditionally used as Rasayana (rejuvenative tonic), to relieve general weakness and stress, especially in old age, as a sleep aid, to balance aggravated Vata (sedative), and for memory

Details
Ashwagandha is one of the most revered and widely used plants in traditional Ayurveda, the medicine of ancient India, and is the ideal supplement for those facing constant stress and chronic fatigue. Also known as Indian ginseng, it is considered a rejuvenative tonic, supporting energy and vitality. Gandha-600 is an extract of Withania somnifera (ashwagandha), properly standardized for its two main medicinal components: withanolide and sitoindoside.

In North America, ashwagandha is primarily known and used as an “adaptogen”, meaning that it enhances the body's adaptive response to stress. It also supports immunity and liver function and protects against various symptoms of stress including the development of digestive problems, vitamin C depletion, adrenal exhaustion, suppressed immunity, decreased libido and poor physical endurance. Ashwagandha has been shown to improve various parameters of aging in elderly subjects, and animal studies have shown that it can help combat chronic inflammation.
Product Variation
Product Code  Size
AOR04242      120 VEGI-CAPS

Supplements Facts
Serving Size: 1 Capsule  Amount
Ashwagandha (10:1† Withania somnifera)  600 mg

†Typically 2.5% withanolides, 0.1% sitoindosides.

Note: Herbal extracts will naturally vary in colour from one batch to another.

Non-medical ingredients:
sodium stearyl fumarate. Capsule: hypromellose.

Guarantees
AOR™ guarantees that all ingredients have been declared on the label. Contains no wheat, gluten, corn, nuts, peanuts, sesame seeds, sulphites, mustard, soy, dairy, eggs, fish, shellfish or any animal byproduct.

Adult Dosage
Take 1 capsule daily with/without food, or as directed by a qualified health care practitioner.

Cautions
Consult a health care practitioner prior to use if you are pregnant or breastfeeding. Consumption with alcohol, other drugs or natural health products with sedative properties is not recommended.

Source
Ashwagandha root extract (Withania somnifera)

Main Application
Stress
Edema
Support for tense muscles
Veta constitutional

Disclaimer
The information and product descriptions appearing on this website are for information purposes only, and are not intended to provide or replace medical advice to individuals from a qualified health care professional. Consult with your physician if you have any health concerns, and before initiating any
new diet, exercise, supplement, or other lifestyle changes.

Research

Background

The King of Adaptogens

If you suffer with chronic stress or flagging energy, then Ayurvedic tradition and a growing body of scientific research suggest that ashwagandha may be worth looking into. Ashwagandha (Withania somnifera), the so-called “Indian ginseng,” is actually not a ginseng species at all; and while it does provide powerful support against overwhelming stress, its effects are in many ways distinct from most other adaptogenic herbs. While most adaptogens primarily work by helping the body to mobilize and maintain the physiological response to stress, ashwagandha appears to work first and foremost by reducing the stress-related excesses of the alarmed nervous system. As science defines these botanicals’ effects and mechanisms of action more precisely, the blanket tag “adaptogen” will no doubt be replaced by a series of more precise terms for substances which help the body adapt to stress in different ways.

Research

Stress and Anxiety

Ashwagandha has traditionally been used as an Ayurvedic remedy for anxiety, an effect well documented in animal models. In a controlled study in humans stressed with repeated, heavy swimming, people taking ashwagandha were better protected against gastric damage, depletion of vitamin C, and exhaustion of a key adrenal hormone, and had increased physical endurance compared with people taking Panax ginseng. Similar studies have shown that providing lab animals with ashwagandha leads to better stress tolerance, longer swimming times, greater maintenance of glycogen energy stores, the development of more heart muscle mass, protection against the shrinking of the adrenals and the depletion of vitamin C, and more muscle weight gains.

Likewise, animals experience a great deal of stress when under forced restraint; such animals experience fewer gastric ulcers, less behavioral despair, and less need to pump out natural “pain killers” if given ashwagandha. As well, ashwagandha protects animals against morphine tolerance, dependence, and toxicity.

Aging

In a double-blind trial in humans, 101 healthy men aged 50 to 59 were evaluated for various aging parameters over the course of a year. Increased red blood cell levels, greater libido, and lower erythrocyte sedimentation rate (a measure of chronic inflammation) were observed in the men who got ashwagandha instead of the dummy pills.

Immunity

Ashwagandha also protects the body against immune suppression. In one study, mice were given one of three drugs that suppress the immune system, with or without ashwagandha added to their
diets. Compared with animals receiving the immunosuppressive drugs alone, animals whose diets were supplemented with ashwagandha suffered much less suppression of bone marrow activity, with the result that they had higher hemoglobin, red blood cell count, platelet count, and body weights – and higher levels of the white blood cells of the immune system.

In another study, a mixture of sitoindosides from ashwagandha activated the peritoneal macrophages (a kind of immune cell) in laboratory animals, increasing their mobilization and their ability to consume foreign bacteria while boosting levels of enzymes that help the body break down damaged and toxic molecules left over from the body’s metabolic process. In yet a third study, administration of ashwagandha extract to either healthy or tumor-bearing animals was found to enhance the proliferation of immune cells and their precursors in the thymus and bone marrow, actually doubling the body’s response to either of two immunological challenges. Ashwagandha also boosted the activity of natural killer (NK) cells, and the immune cells’ ability to destroy infected and foreign cells was enhanced.

**Anti-inflammatory**

The immune system must ride out a delicate balance, however. So the observation that ashwagandha protects against the suppression of the immune system might lead to concerns that it might overactivate these same processes, potentially aggravating chronic inflammation and autoimmunity. So it’s all the more remarkable that ashwagandha has been found to have significant anti-inflammatory activity, reducing the autoimmune response to an animal model of arthritis to a similar degree as a cortisone drug. In another study, ashwagandha reduced both the degeneration of the joints and the swelling induced by an arthritis-inducing drug in experimental animals.

**Chronic Inflammation**

In some kinds of chronic inflammation (especially those involving fine particles embedded in the tissue, like silica dust in the lungs or cells infected by fungi or mycobacteria), the chronic attack of immune cells trying to clear the unceable eventually leads to a nodule made up of densely-packed immune cells trapped within the enlarged local cells. In at least two animal studies, ashwagandha has been shown to reduce the formation of these aggregated cellular nodules (granuloma) after injection with carageenan or implantation with cotton pellets.

**A Properly Standardized Extract**

The issue of proper standardization of botanicals must always be addressed, to ensure reliable, consistent results for users. The first active compounds discovered in ashwagandha were a family of steroidal lactones collectively called the withanolides. But more recently, a group of glucoside and saponin acyl derivatives of the withanolides – the sitoindosides – were identified. Sitoindosides are more specific markers than the withanolides, and appear to be responsible for much of the herb’s anti-stress and anti-anxiety activities. Accordingly, ashwagandha supplements should be standardized to their sitoindoside content, in addition to their withanolide levels.

**Market Trends**

With high levels of stress being something that many of us are forced to deal with on a regular basis,
it is no wonder that we turn to supplements to help us cope better. There are several herbs and remedies available on the market that are intended to be used as stress relievers. Some of these natural supplements include ginseng, rhodiola, chamomile and others.

**AOR Advantage**

Ashwagandha is called the “Indian ginseng,” and is actually not a ginseng species at all; and while it does provide powerful support against overwhelming stress, its effects are in many ways distinct from most other adaptogenic herbs. While most adaptogens primarily work by helping the body to mobilize and maintain the physiological response to stress, ashwagandha appears to work first and foremost by reducing the stress-related excesses of the alarmed nervous system.

**References**


**Abstract**

*Withania somnifera reverses Alzheimer’s disease pathology by enhancing low-density lipoprotein receptor-related protein in liver.*


Sehgal N, Gupta A, Valli RK, Joshi SD, Mills JT, Hamel E, Khanna P, Jain SC, Thakur SS, Ravindranath V.

A 30-d course of oral administration of a semipurified extract of the root of *Withania somnifera* consisting predominantly of withanolides and withanosides reversed behavioral deficits, plaque pathology, accumulation of ?-amyloid peptides (A?) and oligomers in the brains of middle-aged and old APP/PS1 Alzheimer’s disease transgenic mice. It was similarly effective in reversing behavioral deficits and plaque load in APPSwInd mice (line J20). The temporal sequence involved an increase in plasma A? and a decrease in brain A? monomer after 7 d, indicating increased transport of A? from the brain to the periphery. Enhanced expression of low-density lipoprotein receptor-related protein (LRP) in brain microvessels and the A?-degrading protease neprilysin (NEP) occurred 14-21 d after a substantial decrease in brain A? levels. However, significant increase in liver LRP and NEP occurred much earlier, at 7 d, and were accompanied by a rise in plasma sLRP, a peripheral sink for brain A?.
In WT mice, the extract induced liver, but not brain, LRP and NEP and decreased plasma and brain Aβ, indicating that increase in liver LRP and sLRP occurring independent of Aβ concentration could result in clearance of Aβ. Selective down-regulation of liver LRP, but not NEP, abrogated the therapeutic effects of the extract. The remarkable therapeutic effect of W. somnifera mediated through up-regulation of liver LRP indicates that targeting the periphery offers a unique mechanism for Aβ clearance and reverses the behavioral deficits and pathology seen in Alzheimer’s disease models.

Protective effect of Withania somnifera root powder in relation to lipid peroxidation, antioxidant status, glycoproteins and bone collagen on adjuvant-induced arthritis in rats.


Rasool M, Varalakshmi P.

The present investigation was carried out to evaluate the protective effect of Withania somnifera Linn. Dunal (family-Solanaceae), commonly known as Ashwagandha, on adjuvant-induced arthritic rats. Results were compared with those for Indomethacin, a nonsteroidal anti-inflammatory drug. Arthritis was induced by intradermal injection of complete Freund’s adjuvant (0.1 mL) into the right hind paw of Wistar albino rats. Withania somnifera root powder (1000 mg/kg/day) and Indomethacin (3 mg/kg/day) were orally administered for 8 days (from 11th to 18th day) after adjuvant injection. The anti-arthritic effect of W. somnifera root powder was assessed by measuring changes in lipid peroxidation, antioxidant status, and glycoprotein levels in plasma and spleen of arthritic animals. In addition, cartilage degradation was also assessed by estimating bone collagen, and urinary constituents in arthritic animals. Results of the present investigation showed significant increase in the level of lipid peroxides, glycoproteins, and urinary constituents with the depletion of antioxidant status and bone collagen in arthritic animals. These biochemical alterations observed were ameliorated significantly by oral administration of W. somnifera root powder (1000 mg/kg body weight) in arthritic animals. The results of this study clearly indicate that W. somnifera root powder is capable of rectifying the above biochemical changes in adjuvant arthritis.

Hypocholesteremic and antioxidant effects of Withania somnifera (Dunal) in hypercholesteremic rats.


Visavadiya NP, Narasimhacharya AV.

Hypocholesteremic and antioxidant effects of Withania somnifera (WS) Dunal (Solanaceae) were investigated in hypercholesteremic male albino rats. When the root powder of WS was added to the diet at 0.75 and 1.5 gm/rat/day, hypercholesteremic animals registered significant decreases in total lipids (-40.54%; -50.69%), cholesterol (-41.58%; -53.01%) and triglycerides (-31.25%; -44.85%) in plasma. On the other hand, significant increases in plasma HDL-cholesterol levels (15.10%; 17.71%), HMG-CoA reductase activity (19.51%; 26.02%) and bile acid content (24.64%; 30.52%) of liver were noted in these animals. A similar trend was also noted in bile acid (22.43%; 28.52%), cholesterol (14.21%; 17.68%) and neutral sterol (12.40%; 18.85%) excretion in the hypercholesteremic animals with WS administration. Further, a significant decrease in lipid-
peroxidation (-35.29%; -36.52%) occurred in WS administered hypercholesteremic animals when compared to their normal counterparts. However, it appeared that WS root powder is also effective in normal subjects for decreasing lipid profiles.

**Nootropic-like effect of ashwagandha (Withania somnifera L.) in mice.**


Dhuley JN.

Ashwagandha (Withania somnifera L.) root extract (50, 100 and 200 mg/kg; orally) improved retention of a passive avoidance task in a step-down paradigm in mice. Ashwagandha (50, 100 and 200 mg/kg; orally) also reversed the scopolamine (0.3 mg/kg)-induced disruption of acquisition and retention and attenuated the amnesia produced by acute treatment with electroconvulsive shock (ECS), immediately after training. Chronic treatment with ECS, for 6 successive days at 24 h intervals, disrupted memory consolidation on day 7. Daily administration of ashwagandha for 6 days significantly improved memory consolidation in mice receiving chronic ECS treatment. Ashwagandha, administered on day 7, also attenuated the disruption of memory consolidation produced by chronic treatment with ECS. On the elevated plus-maze, ashwagandha reversed the scopolamine (0.3 mg/kg)-induced delay in transfer latency on day 1. On the basis of these findings, it is suggested that ashwagandha exhibits a nootropic-like effect in naive and amnesic mice.

**Anxiolytic-antidepressant activity of Withania somnifera glycowithanolides: an experimental study.**


Bhattacharya SK, Bhattacharya A, Sairam K, Ghosal S.
The roots of Withania somnifera (WS) are used extensively in Ayurveda, the classical Indian system of medicine, and WS is categorized as a rasayana, which are used to promote physical and mental health, to provide defence against disease and adverse environmental factors and to arrest the aging process. WS has been used to stabilize mood in patients with behavioural disturbances. The present study investigated the anxiolytic and antidepressant actions of the bioactive glycowithanolides (WSG), isolated from WS roots, in rats. WSG (20 and 50 mg/kg) was administered orally once daily for 5 days and the results were compared by those elicited by the benzodiazepine lorazepam (0.5 mg/kg, i.p.) for anxiolytic studies, and by the tricyclic anti-depressant, imipramine (10 mg/kg, i.p.), for the antidepressant investigations. Both these standard drugs were administered once, 30 min prior to the tests. WSG induced an anxiolytic effect, comparable to that produced by lorazepam, in the elevated plus-maze, social interaction and feeding latency in an unfamiliar environment, tests. Further, both WSG and lorazepam, reduced rat brain levels of tribulin, an endocoid marker of clinical anxiety, when the levels were increased following administration of the anxiogenic agent, pentylenetetrazole. WSG also exhibited an antidepressant effect, comparable with that induced by imipramine, in the forced swim-induced ‘behavioural despair’ and ‘learned helplessness’ tests. The investigations support the use of WS as a mood stabilizer in clinical conditions of anxiety and depression in Ayurveda.

**Antistressor effect of Withania somnifera. J**

*Ethnopharmacol 1999 Jan; 64(1): 91-3.*

Archana R, Namasivayam A.

Withania somnifera is an Indian medicinal plant used widely in the treatment of many clinical conditions in India. Its antistressor properties have been investigated in this study using adult Wistar strain albino rats and cold water swimming stress test. The results indicate that the drug treated animals show better stress tolerance.

**Effect of ashwagandha (Withania somnifera Dunal) on the process of aging in human volunteers.**


Kuppurajan K, Rajagopalan SS, Sitaraman R, Rajgopalan V, Janaki R, Venkataraghavan S.

A double-blind clinical trial of Ashwagandha (Withania somnifera Dunal) on the prevention of process of ageing in 101 male healthy adults in the age group 50-59 years has been completed. The results indicate that the increase in haemoglobin, RBC, hair melanin and seated stature in the treated group is statistically significant in comparison to the placebo. The decrease in serum cholesterol was more and in nail calcium it was less in the treated as compared to the placebo and this difference was statistically significant. The decrease in Erythrocyte Sedimentation Rate is much higher in the treated group than in the placebo group and this difference was statistically significant. “In this study, 71.4% of people have reported improvement in their capacity of sexual performance. Though it is a subjective clinical improvement, still the statement of majority of the volunteers testifying its
aphrodisiac effect is worth noting.”