



Calm Energy[®]

Ashwagandha (*Withania somnifera*) is a small evergreen shrub. Ashwagandha has been used in Ayurvedic medicine in India for hundreds of years. It has been used as an "adaptogenic" herb, meaning that it is used with the intention to help the body resist physiological and psychological stress. Traditional medicinal use of *Withania somnifera* has employed root powder derived from wild plants¹, which are relatively low in concentration of bioactives². Cultivated *Withania somnifera* varieties differ morphologically from wild *Withania somnifera*³, and have higher levels of bioactive components^{2,4}. Methods to further concentrate levels of bioactives in standardized *Withania somnifera* extracts have also been developed⁴. The *Withania somnifera* extract used in this supplement; trade name **Sensoril[®]** (Natreon Inc., New Brunswick, New Jersey) is derived from a withaferin A and corresponding withanolide glycoside-predominant, genetically uniform chemotype. *Withania somnifera* root and leaf material are processed using a water-based extraction protocol and assessed using high performance thin layer chromatography analysis of fractions against standard references (CAMAG Linomat V applicator, CAMAG TLC Scanner, and WinCats software version 1.3.4; CAMAG, Sonnenmattstr. Muttensz, Switzerland) in accordance with US Patent 6,713,092.



Calm Energy[®]:

- Relieves Symptoms of Chronic Stress
- Promotes Concentration
- Enhances Energy Levels



Key Features of Sensoril®:

Sensoril® Mechanism of Action

Indicator	Increase	Decrease	Outcome
Acetylcholinesterase		*	Enhances mental cognition ¹
Serum cortisol**		*	Enhances mental cognition, boosts energy, reduces stress related symptoms, enhances sleep, improves weight management ²
Serum DHEA	*		Enhances mental cognition, boosts energy ³
ATP levels	*		Boosts energy ⁴
Nitric oxide synthase	*		Boosts energy (enhancing tissue oxygenation) ⁴
C-reactive protein		*	Anti-inflammation (relieving muscle pain after a hard workout) ²

**Main mechanism of action

Dosage:

For adults take one to two capsules daily or as directed by a physician.

Precautions:

In pregnancy, breast feeding , or patients taking prescription and non-prescription medications.

Packaging:

Bottle in carton containing 30 capsules.

References:

1. Bector NP, Puri AS, Sharma D. Role of Withania somnifera (Ashwagandha) in various types of arthropathies. Ind Jour Med Res.1968;56:1581-1583.
2. Ghosal S. In pursuit of standardization of Ayurvedic drugs. Ann Natl Acad Ind Med. 1986;1:1-14.
3. Ray AB, Gupta M. Withasteroids, a growing group of naturally occurring steroidal lactones. In: Herz W, Kerby GW, Moore RE. eds. Progress in the chemistry of organic natural products. Wein-Springer-Verlag, New York. 1994; 63:1-106.
4. Ghosal S. Withania somnifera composition. Method for obtaining same and pharmaceutical, nutritional and personal care formulations thereof. 2004. US Patent 6,713,092.
5. B Abedon. Nutraceutical Supplementation Enhances Mental Cognition. NutraGenesis. LLC 2009.
6. B Auddy, J Hazra, A Mitra, B Abedon, S Ghosal. A Standardized Withania Somnifera Extract Significantly Reduces Stress-Related Parameters in Chronically Stressed Humans: A Double-Blind, Randomized, Placebo-Controlled Study. JANA Vol. 11, No. 1, 2008.
7. B Abedon. Sensoril® - A Patented Extract that Reduces Stress and Enhances Sleep. NutraGenesis. LLC 2008.
8. B Abedon. Sensoril®Energy White Paper. NutraGenesis. LLC 2008.

