

Adreno-Mend™

Healthy, Balanced Adrenal Function

DESCRIPTION

Adreno-Mend™, provided by Douglas Laboratories®, is a synergistic combination of ten highly valued herbal extracts with adaptogenic properties designed to support healthy, balanced adrenal gland function.† These plant adaptogens include Schisandra chinensis, Bacopa monnieri, Rhodiola rosea, Eleutherococcus senticosus, Magnolia officinalis, Rehmannia glutinosa, Bupleurum falcatum, Panax ginseng, Coleus forskohlii and Withania somnifera.

FUNCTIONS

The response to chronic stress - first defined as occurring in three stages by Hans Selye as alarm, resistance and exhaustion - typically results in aberrant adrenal function and adrenal fatigue, as well as abnormal cognitive, metabolic, energy, endurance, immune and glycemic function. The consequences of intermittent stress, or episodic acute stress during resistance or exhaustion, interfere with recovery and also promote abnormal neuro-endocrine, metabolic and immune system function.

The plant adaptogens in Adreno-Mend™ effectively address all stages of both acute and chronic stress, support the body's ability to adapt to stressors and help avoid the damaging consequences from those stressors. Collectively, plant adaptogens can support symptoms of fatigue and enhance endurance as well as support normal mental and emotional well being. Plant adaptogens also can increase the body's ability to resist and recover from stress while providing an overall feeling of balance and normalization. †

During acute stress, and the alarm stage of stress, Rhodiola rosea, Schizandra chinensis, Bacopa monnieri, and Eleutherococcus senticosus can support mental performance and physical working capacity, as well as promote the balanced response of the sympatho-adrenal-system (SAS) to the body's acute reaction to a stressor.

During the resistance stage Withania somnifera, Coleus forskohlii, are able to support the normal thyroid and gonadal function. In the exhaustion stage the Rehmannia glutinosa, Bupleurum falcatum and Withania somnifera act as primary agents to restore proper function of the hypothalamic-pituitary-adrenal axis and work synergistically with other plant adaptogens to support normal function of other body systems. Adaptogens with adrenotrophic properties may also decrease adrenal atrophy seen in the exhaustion stage of chronic stress. The increased cortisol levels seen in various stages of stress are modulated by Schizandra chinensis and Magnolia officinalis. Rehmannia glutinosa can help restore normal function of glucocorticoid receptors that have been down regulated due to chronically elevated levels of cortisol. Bupleurum falcatum supports adrenal recovery and normalization of the hypothalamic-pituitary-adrenal (HPA) system by promoting the release of adrenocorticotrophic hormone (ACTH), which is responsible for maintaining the normal size and function of the adrenal gland.

Stress induced elevations of catecholamines and adrenaline-induced hyperglycemia can be modulated by Magnolia officinalis, Panax ginseng and Rehmannia glutinosa. † While the primary benefit of plant adaptogens is the ability to restore healthy, balanced adrenal gland function by supporting normal hypothalamic-pituitary-adrenal (HPA) axis function, the effectiveness of these adaptogens is in large part also due to their ability to protect and promote the recovery of neuro-cognitive, neuromuscular, cardiovascular, glycemic, hepatic, thyroid, gonadal and immune system health. †

INDICATIONS

Adreno-Mend™ may be a useful dietary supplement for individuals wishing to support healthy adrenal function with this unique blend of ingredients.

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FORMULA (#200529)

Serving Size.....	2 capsules	4 capsules
Proprietary Blend	955 mg	1,910 mg
Proprietary Blend containing no less than 200 mg per 4 capsules for each of the following: Schisandra chinensis (seed, standardized to 2% schisandrins), Bacopa monnieri (aerial parts, standardized to 20% bacosides), Rhodiola rosea (root, standardized to 5% rosavins and 2% salidroside), Eleutherococcus senticosus (root, standardized to 0.8% eleutherosides), Magnolia officinalis (root, standardized to 5% honokiol), Rhemannia glutinosa (7:1 extract), Bupleurum falcatum (5:1 extract), Panax ginseng (root, standardized to 3% ginsenosides), Coleus forskohlii (root, standardized to 1% forskolin)		
Sensoril®	125 mg	250 mg
(Withania somnifera, root and leaf extract, standardized to a minimum of 8% withanolide glycoside conjugates and 32% oligosaccharides)		

SUGGESTED USE

As a dietary supplement, adults may take 2 capsules each morning with food for 1 to 2 weeks or as directed by your healthcare professional. The dose may then be increased to 4 capsules each morning with food for 1 to 3 months or as directed by your healthcare professional. After 1 to 3 months dosage may be lowered back down to 2 capsules each morning with food and may continue on 2 capsules dosage as needed or as directed by your healthcare professional.

SIDE EFFECTS

No adverse effects have been reported.

STORAGE

Store in a cool, dry place, away from direct light. Keep out of reach of children.

WARNING

If you are pregnant or nursing, consult your healthcare professional before using this product. If you are taking prescription medications, consult your healthcare professional before using this product.

REFERENCES

Ahmad F, Khan MM, Rastogi AK, Kidwai JR. Insulin and glucagon releasing activity of coleonol (forskolin) and its effect on blood glucose level in normal and alloxan diabetic rats. *Acta Diabetol Lat.* 1991 Jan-Mar;28(1):71-7.

Bhattacharya SK, Muruganandam AV. Adaptogenic activity of Withania somnifera: an experimental study using a rat model of chronic stress. *Pharmacol Biochem Behav.* 2003 Jun;75(3):547-55.

Calabrese C, Gregory WL, Leo M, Kraemer D, Bone K, Oken B. Effects of a standardized Bacopa monnieri extract on cognitive performance, anxiety, and depression in the elderly: a randomized, double-blind, placebo-controlled trial. *J Altern Complement Med.* 2008 Jul;14(6):707-13.

Chang H, But P. *Pharmacology and Application of Chinese Materia Medica.* Chinese University of Hong Kong, Singapore: World Scientific, 1987

Chang HM et al. *Advances in Chinese Medicinal Materials Research.* Singapore: World Science. Pub;.,1985

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Chowdhuri DK, Parmar D, Kakkar P, Shukla R, Seth PK, Srimal RC. Antistress effects of bacosides of *Bacopa monnieri*: modulation of Hsp70 expression, superoxide dismutase and cytochrome P450 activity in rat brain. *Phytother Res*. 2002 Nov;16(7):639-45.

Du J, Ling CQ, Chen YA. Effect of *Herba Epimedii Brevicornus* and prepared *Radix Rehmannia* on glucocorticoid receptor in glucocorticoid receptor down-regulated rats. *Zhongguo Zhong Xi Yi Jie He Za Zhi*. 2008 Jan;28(1):64-7.

Ealey PA, Kohn LD, Marshall NJ, Ekins RP. Forskolin stimulation of naphthylamidase in guinea pig thyroid sections detected with a cytochemical bioassay. *Acta Endocrinol (Copenh)*. 1985 Mar;108(3):367-71.

Fintelmann V, Gruenwald J. Efficacy and tolerability of a *Rhodiola rosea* extract in adults with physical and cognitive deficiencies. *Adv Ther*. 2007 Jul-Aug;24(4):929-39.

Kulkarni SK, Dhir A. *Withania somnifera*: an Indian ginseng. *Prog Neuropsychopharmacol Biol Psychiatry*. 2008 Jul 1;32(5):1093-105. Epub 2007 Sep 21.

Lee B, Shim I, Lee H, Hahm DH. Effect of *Bupleurum falcatum* on the stress-induced impairment of spatial working memory in rats. *Biol Pharm Bull*. 2009 Aug;32(8):1392-8.

Panossian A, Wagner H. Stimulating effect of adaptogens: an overview with particular reference to their efficacy following single dose administration. *Phytother Res*. 2005 Oct;19(10):819-38.

Panossian A, Wikman G. Evidence-based efficacy of adaptogens in fatigue, and molecular mechanisms
Panossian A, Wikman G. Pharmacology of *Schisandra chinensis* Bail.: an overview of Russian research and uses in medicine. *J Ethnopharmacol*. 2008 Jul 23;118(2):183-212. Epub 2008 Apr 24.

related to their stress-protective activity. *Curr Clin Pharmacol*. 2009 Sep;4(3):198-219.

Sheikh N, Ahmad A, Siripurapu KB, Kuchibhotla VK, Singh S, Palit G. Effect of *Bacopa monniera* on stress induced changes in plasma corticosterone and brain monoamines in rats. *J Ethnopharmacol*. 2007 May 22;111(3):671-6. Epub 2007 Jan 30.

Singh RH, Narsimhamurthy K, Singh G. Neuronutrient impact of Ayurvedic Rasayana therapy in brain aging. *Biogerontology*. 2008 Dec;9(6):369-74. Epub 2008 Oct 18.

Sun LJ, Wang GH, Wu B, Wang J, Wang Q, Hu LP, Shao JQ, Wang YT, Li J, Gu P, Lu B. Effects of schisandra on the function of the pituitary-adrenal cortex, gonadal axis and carbohydrate metabolism in rats undergoing experimental chronic psychological stress, navigation and strenuous exercise. *Zhonghua Nan Ke Xue*. 2009 Feb;15(2):126-9.

Tachikawa E, Kudo K. Proof of the mysterious efficacy of ginseng: basic and clinical trials: suppression of adrenal medullary function in vitro by ginseng. *J Pharmacol Sci*. 2004 Jun;95(2):140-4.

Tachikawa E, Takahashi M, Kashimoto T. Effects of extract and ingredients isolated from *Magnolia obovata* thunberg on catecholamine secretion from bovine adrenal chromaffin cells. *Biochem Pharmacol*. 2000 Aug 1;60(3):433-40.

Walker TB, Robergs RA. Does *Rhodiola rosea* possess ergogenic properties? *Int J Sport Nutr Exerc Metab*. 2006 Jun;16(3):305-15.

Xu Q, Yi LT, Pan Y, Wang X, Li YC, Li JM, Wang CP, Kong LD. Antidepressant-like effects of the mixture of

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honokiol and magnolol from the barks of *Magnolia officinalis* in stressed rodents. *Prog Neuropsychopharmacol Biol Psychiatry*. 2008 Apr 1;32(3):715-25. Epub 2007 Nov 28.

Zhang RX, Jia ZP, Kong LY, Ma HP, Ren J, Li MX, Ge X. Stachyose extract from *Rehmannia glutinosa* Libosch. to lower plasma glucose in normal and diabetic rats by oral administration. *Pharmazie*. 2004 Jul;59(7):552-6.

For more information on Adreno-Mend™, visit douglaslabs.com

† 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.

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Your patients trust you.**

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