AdreneVive
Product #919

DOSE FORM:
Two-piece veggie capsule, size 00

OTHER INGREDIENTS:
Natural Vegetable Capsules. This product may contain one or more of the following: Calcium Silicate, Magnesium Stearate, Microcrystalline Cellulose and Silicon Dioxide.

RATIONALE:
AdreneVive is a mixture of ingredients to help lower excess cortisol, increase the HPA axis feedback loop and reduce the side-effects of acute cortisol and adrenal stress.

RESEARCH FINDINGS:

Ashwagandha:
• Ashwagandha (Withania somnifera) has traditionally been used in Ayurvedic medicine and has been found to have many adaptogenic properties including anti-stress, antioxidant, immunomodulatory and rejuvenating effects.1
• An extract of Ashwagandha (100mg/kg of weight) or placebo was given to mice prior to a forced swim test. It was found that the extract approximately doubled the swim time compared to those receiving the placebo.1
• In a similar swim test study in mice receiving Ashwagandha, it was found that Ashwagandha prevented a weight increase of the adrenals and a reduction in ascorbic acid content of the adrenals usually caused by the swim test.1

L-Theanine:
• L-Theanine is an amino acid found predominately in green tea. It crosses the blood brain barrier and has been found to increase dopamine and serotonin production in the brain. L-Theanine is also responsible for increasing alpha-brain wave activity, a sign of relaxation.2
• 200 mg of L-Theanine was shown to increase alpha-brain wave activity in students and produce a sense of relaxation.2
• In a study examining the effects of L-Theanine on stress, volunteers were given either L-Theanine at the beginning or middle of a stressful arithmetic problem, placebo or nothing. Those receiving the L-Theanine had a reduction in heart rate and salivary IgA, both responses to an acute stress task.3
• In a study measuring the effects of a L-Theanine containing soft drink on brain activity (measured at 1, 2, 3, and 4 hours after ingestion by VEP and EEG), it was found that the L-Theanine was able to attenuate a higher level of mental performance.4

Phosphatidylserine:
• Phosphatidylserine is a soy derived phospholipid that is found in high concentrations in the brain.
• In studies administering phosphatidylserine (50-800 mg) to subjects under stress (physical, emotional, mental, etc), it has been found that phosphatidylserine blunts the effects of cortisol and ACTH. Authors conclude that phosphatidylserine may counteract stress induced activation of the HPA axis.5,6,7,8
• Administration of higher doses (100-800mg) of phosphatidylserine have been studied in exercising subjects. It has been found that phosphatidylserine has reduced the cortisol response to overtraining, improve the feeling of well-being, and improve performance.9,10,11

Rhodiola Rosea:
• Rhodiola rosea has been used extensively in Russia, Scandinavia, and traditional folk medicine as an adaptogenic herb. Rhodiola rosea is used to treat fatigue, mental clarity, memory, and increase work productivity.12
• An adaptogen is a substance that nonspecifically increases the resistance of an organism and does not disturb normal biological parameters.
• The Soviet Ministry of Health approved a preparation of R. rosea as a medicine and tonic as a stimulant for fatigue. In Sweden, R. rosea is recognized as an Herbal Medicinal Product and also described as an anti-fatigue agent in the Textbook of Phytotherapy for Pharmacists. Denmark has also registered R. rosea as a medical product in the category of botanical drugs.12

<table>
<thead>
<tr>
<th>Supplement Facts</th>
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<tbody>
<tr>
<td>Serving Size: 2 Capsules</td>
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<tr>
<td>Servings Per Container: 30</td>
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<tr>
<td>2 capsules contain</td>
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<tr>
<td>Ashwagandha Root Extract</td>
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<tr>
<td>(Standardized to contain 1.5% Withanolides)</td>
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<tr>
<td>Skullcap Root Extract</td>
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<tr>
<td>(Standardized to contain 30% Flavonoids as S. baicalensis)</td>
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<tr>
<td>Eleuthero (Siberian Ginseng) Root Extract</td>
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<tr>
<td>(Standardized to contain 0.8% Eleutherosides)</td>
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<tr>
<td>Rhodiola rosea Root Extract</td>
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<tr>
<td>(Standardized to contain 3% Rosavins)</td>
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<tr>
<td>L-Theanine</td>
</tr>
<tr>
<td>Phosphatidylserine (from soy Lecithin)</td>
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</tbody>
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* % Daily Value not established

2 capsules contain

% Daily Value

Ashwagandha Root Extract 250 mg *
(Standardized to contain 1.5% Withanolides)

Skullcap Root Extract 250 mg *
(Standardized to contain 30% Flavonoids as S. baicalensis)

Eleuthero (Siberian Ginseng) Root Extract 200 mg *
(Standardized to contain 0.8% Eleutherosides)

Rhodiola rosea Root Extract 200 mg *
(Standardized to contain 3% Rosavins)

L-Theanine 100 mg *
Phosphatidylserine (from soy Lecithin) 100 mg *

* % Daily Value not established
A randomized, double-blind, placebo controlled clinical study examined the effects of R. rosea on fatigue and stress. 161 cadets ages 19-21 volunteered. The study showed a significant antifatigue effect for those who received the R. rosea (185 mg, twice daily).

**Siberian Ginseng:**
- Siberian ginseng is used in China to improve general health, improve memory, and enhance endurance. Siberian ginseng is regarded as an adaptogen.
- The German Commission E approved eleuthero as a tonic to help with fatigue and concentration.
- Specific compounds of Siberian ginseng, known as eleutherosides, have been shown to be the primary compounds responsible for Siberian ginseng's adaptogenic activity.
- 20 elderly hypertensive volunteers were randomized in a double-blind manner to receive either 300 mg/day E. senticosus or placebo. Volunteers receiving the E. senticosus noticed improvement in mental health and social functioning after 4 weeks.

**Skullcap Root:**
- The effects of SSF, an active constituent extracted from stems and leaves of baical skullcap, was examined in mice given D-galactose to impair memory. It was found that SSF could significantly reverse the increased latencies and number of errors in mice undergoing a water maze task. The authors conclude that SSF could ameliorate the cognitive deficits and pathologic alterations of neuron and immune systems in mice given d-galactose.
- Wogonin, a plant flavone found in Scutellaria baicalensis, has been found to inhibit dexamethasone-induced [a glucocorticoid] apoptotic changes such as phosphatidylyserine translocation and caspase activation in rat thymocytes. This suggests that wogonin may be a likely candidate to reduce the immunosuppressive side effect of glucocorticoid.

**DOSE:**
As a dietary supplement, 2 capsules 1-2 times per day or as recommended by your health care professional.

**CONTRAINDICATIONS, ADVERSE OR OTHER REACTIONS:**
Do not consume this product if you are pregnant or nursing, consult your physician for information.

**REFERENCES:**