



Nutrition for Optimal Wellness™

# Adaptogenic Herbs



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*All human beings experience stress and its effects throughout life. Some handle stressful events better than others do. Continual stress over time produces a variety of symptoms such as low energy, insomnia, depression, nervousness, and impotence. In fact, these are some of today's most frequently experienced symptoms. Supplementation with adaptogenic herbs is a safe and popular way to help support a healthy stress response.\**

- **Helps support a healthy, normalized response to stress \***
- **Adaptogenic herbs possess unique antioxidant properties**
- **Essential for healthy immune system function\***
- **Manufactured at NOW's state-of-the-art, GMP certified facility**
- **Tested in-house to ensure safety, freshness, and potency**



#### References

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\*These statements have not been evaluated by the FDA. These products are not intended to diagnose, treat, cure or prevent any disease.



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## Health Professor





## Adaptogenic Stress Support

When we hear the word stress, we automatically conjure images of bad traffic, work-related deadlines, screaming children, and towering piles of bills. And while each one of these can certainly be stressful, there is more to stress than the events that leave us worried, frustrated, and disheartened. Despite how commonly we associate it with mood, stress is actually defined as an imbalance in the body's state of healthy equilibrium. Simply stated, stress interrupts mental and physiological balance.

### Understanding Stress

Stress can be acute or chronic in nature. Acute stress, such as realizing that you've just missed an important meeting, is temporary. Chronic stress, however, is more long-term and prolonged. Losing a job, being audited, or watching a loved one suffer through a life-threatening disease are all examples of chronic stress. And while the impact of stress varies greatly from person to person, the methods in which we cope biologically have not changed.

When the body perceives a threat, it responds by releasing chemical messengers that enable us to deal with the situation – a process more formally known as Fight or Flight. This is the first step in general adaptation syndrome, and is employed as a method of defense. At the biological level, the sympathetic nervous system responds to perceived threats by releasing acetylcholine, a neurotransmitter that regulates memory, muscle contraction, learning, vasodilatation, cardiac rhythm, and nerve impulse. Upon detecting an increase in acetylcholine, the adrenal glands secrete adrenaline, epinephrine, and norepinephrine-powerful mood-influencing neurotransmitters.

### The Physiological Side of Stress

It's important to note that stress affects more than just a person's mood. The changes that take place during Fight or Flight can have a serious impact on homeostasis, or balance. In order to ensure that the body continues to function properly, other major systems are forced to make changes in order to adapt. Simple stressors typically yield simple stress responses that have very little biological impact on the rest of the body. Upon resolving a minor or expected threat, the body's homeostasis is restored to normal and neurotransmitter secretion levels off.

Chronic stress is another story, though. When the sympathetic nervous system is constantly in a state of stress response, it can greatly affect the body's ability to maintain balance and healthy

neurotransmission. These ongoing changes can suppress immune system function, interfere with digestion, and reduce sexual response. Because of the continual fluctuation in brain chemicals, chronic stress may result in mood bipolarity, lost motivation, sleep cycle changes, and an increase in violent, destructive, or aggressive behavior.

### Hormonal Response to Stress

Perceived threats also have an effect on the body's hormonal system. When threatened, the adrenal cortex kicks in by increasing Cortisol production. As the body's primary steroid hormone, Cortisol is released when the body is confronted with any measure of perceived stress. And although Cortisol is an important biological tool that the body relies on for protection, prolonged stress triggers the adrenals to produce more than the body can naturally contend with. Excess Cortisol increases glucose production, which can lead to weight gain, metabolic interference, lethargy, and fatigue.

### Adaptogenic Herbal Support

Which brings us to adaptogenic herbs. When we speak of adaptogenics, we are really speaking of compounds that reinforce the body's ability to adapt not only to stress, but also to the many biological and physical changes that take place in response to stressful situations. Some of their key functions involve balancing the body's stress response, countering the inflammatory agents that trigger Cortisol production, and supporting healthy, normalized immune system response.\*

NOW Foods carries a complete line of safe and effective Adaptogenic Herbs, derived from premium botanicals and herbs. When taken as directed, they may be just what you're looking for to help keep things at a comfortable calm.

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## Defense Support Supplements from NOW

### Rhodiola

Rhodiola rosea enhances physical endurance and resistance to chemical, biological, and physical stressors. Studies have shown that it stimulates the nervous system, lessening feelings of being overwhelmed, enhancing work performance, improving sleep, and eliminating fatigue. It does this by balancing the stress/relaxation response.\* NOW® Rhodiola contains the highest amount of standardized extract available.

### American Ginseng

American Ginseng is similar to its Asian cousin, Korean Ginseng. Both varieties are considered true Panax Ginseng types. It was introduced to early American settlers by Native Americans and soon became a major export commodity to the Far East. NOW® American Ginseng is derived from 4 to 5 year-old high quality cultivated Wisconsin ginseng roots and are especially high in ginsenosides (5% minimum), the active measurable components in ginseng.

### Astragalus

For more than 2000 years, Chinese herbalists have valued Astragalus for its adaptogenic properties, as well as for its ability to enhance the body's "vital force" known as Qi. Astragalus has also been found to support healthy immune function through numerous mechanisms. Non-clinical studies using Astragalus have demonstrated its ability to stimulate the normal production of and the normal activity of specialized white blood cells, such as T-Cells and Natural Killer Cells.\*

### Eleuthero

Formerly known as Siberian ginseng, Eleuthero senticosus is a powerful adaptogenic herb that has been shown in studies to help protect against the effects of physical and mental stress.\* It has been a staple in eastern medicine for over 2,000 years, enjoying a history of both safety and effectiveness. The eleuthero roots used in NOW® Eleuthero are carefully selected based on their high eleutheroside concentrations.

### Holy Basil

This powerful adaptogenic herb enhances the body's response to stress and minimizes the negative effects of stress on the body. In addition, a number of studies have suggested that Holy Basil can support carbohydrate metabolism and, as a result, healthy blood glucose levels already within the normal range.\* Holy Basil is revered as a sacred plant in Ayurveda, the traditional therapeutic system of India.



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