

The Powder of Adaptogens

What Are Adaptogens?

Adaptogens (or adaptogenic substances) are therapeutic botanicals often used in herbal medicine for the claimed stabilization and promotion of homeostasis.

Adaptogens positively affect overall health by reducing stress mechanisms which can contribute to a number of biochemical reactions that can be detrimental to health.

These botanicals are known to aid our bodies in reacting to or recovering from both short- and long-term physical or mental stress. Adaptogens work to counteract the effects of stress in the body.

Stress causes very real physical changes in the body, including harming the neurological, endocrine, and immune systems. Adaptogens have stimulant properties that help counteract those harmful effects.



Some adaptogens are known to also boost immunity and overall well-being. Research shows adaptogens can combat fatigue, enhance mental performance, ease depression and anxiety, support the function of vital organs and bodily systems and help you thrive rather than just muddle through.

How Do They Work?

When we experience a stressor, whether physical or mental, our bodies go through what's called general adaptation syndrome (GAS).

Adaptogens work at a molecular level by regulating a stable balance in the hypothalamic, pituitary, and adrenal glands (these are involved in stress response).

They work by “hacking” or assisting in the stress response in the body.

Typically, when our bodies are stressed, we go through three stages (GAS):

- alarm phase
- phase of resistance
- phase of exhaustion

Adaptogens help us stay in the resistance phase longer, via a stimulating effect that holds off the exhaustion. Instead of crashing in the midst of a stressful moment, task, or event, we attain equilibrium and can carry on.

When we can adapt to stress, we perform better and feel better despite what's stressing us out. When you're stressed, your adrenal gland releases the stress hormone cortisol, which energizes you to tackle an emergency or stressful moment, but too much too often is usually bad for our bodies.

Adaptogens have the potential to help indirectly with other health issues, like pain, digestive concerns, insomnia, liver issues and more. Stress sets off a cascade of physical responses that affect immune function, our hormones, our cognitive function system, and our internal clock, called our circadian rhythm. If these stressors persist, this can lead to chronic illness and or health conditions.

The Science Behind It

Many studies have found that adaptogens can be used to promote health for general well-being when used as a supplement. The available studies suggest that adaptogens really are helpful in decreasing symptoms of fatigue and exhaustion and may be most helpful when used alongside other therapies for people with chronic and acute medical conditions.

Researchers have found they have several effects on the body:

- neuroprotective elements
- anti-fatigue properties
- anti-depressive effects
- stimulant for central nervous system
- increase mental work capacity, enhances attention, and prevents stress and fatigue

While the mechanism of action of adaptogens has not been definitively determined, the existing literature suggests they work endocrinologically, through the pituitary and adrenals, and substantially reduce the negative effects that stress has on the system (Wagner et al. 1994).

Things to Know ...

1. You can find most adaptogens at your local health food store or on Amazon. Follow dosing instructions carefully that come with product information for best results.
2. Get creative in how you use them: find a method that's fun and convenient to incorporate



into your routine. You can take adaptogens as herbal supplements in capsule form, tincture form, added to smoothies as powders, or concocted into teas or soups.

3. Time your adaptogens right: we suggest taking stimulating adaptogens, like rhodiola, earlier in the day, before 3 pm, to align with the body's natural rhythms. Calming adaptogens, like holy basil, can be taken both in the daytime and before bed, however they aren't strong enough to have a sedative effect.

4. Long term use: you can use adaptogens for a few days or weeks to get through a busy time or take them for a stretch of chronic chaos, when life just keeps handing it to you. Rotating the type of adaptogen you're using after six weeks so that your body can benefit from the subtle differences among herbs is beneficial. Remember that adaptogens aren't a cure-all or a substitute.

5. As with any drug or supplement, adaptogens do have side effects, interactions, and contraindications. Consult with your health care provider if you are taking pharmaceuticals prior to use.

Top 2 Liver Adaptogens

Best known as hepatoprotective adaptogens or those with hepatoprotective effects, these are often associated with the [anti-inflammatories](#) or [antioxidants](#). A common feature of most liver diseases is hepatic inflammation.

1. Schizandra

Schizandra (*Schisandra chinensis*) has two awesome ways to help your liver, it both cleanses and protects your liver. Known as bei wu wei zi in China, it is one of the most widely used tonics of Chinese herbalism.

Its original use was to support the health of the heart, kidneys, and lungs, and as a longevity tonic. Modern research has focused attention on its role as an adaptogen and for supporting a healthy liver.

In China and Japan, the modern use of schizandra has focused on its benefit in those in need of liver support. In one review of its pharmacological activity, stabilization of liver enzymes was reported in more than 5,000 people.



The benefits were experienced within 20 days of administration of schizandra with 75% of patients returning to normal values (Chang and But 1986). A limited number of controlled studies similarly reported on the beneficial effects of the equivalent of 1.5 grams of schizandra for reducing elevated liver enzymes (Liu 1991). There are three primary mechanisms of action of schizandra

reported with regards to its ability to support a healthy liver:

- Ability to reduce lipid peroxidation induced by a number of different antagonists (antioxidant activity).
- Induction of hepatomicrosomal cytochrome P-450.
- Stimulation of protein biosynthesis and liver glycogen (Liu 1991).



Such mechanisms make schizandra ideal as a liver-supportive botanical that is underutilized in the West.

2. Milk Thistle

Milk thistle (*silybum marianum*) extract from the seeds of milk thistle is perhaps the most well researched of all the liver supportive botanicals. Part of its benefit has been in its ability to scavenge free radicals and to stimulate the regeneration of hepatocytes.

In Germany, it is the botanical extract of choice for use in supporting a healthy liver. Typically, an extract yielding a minimum of 70% silymarin (a specific class of flavonoids) is used clinically at a dose of approximately 420 mg of the extract daily (Morazzoni and Bombardelli 1995).



Strengthening & Well-Being Adaptogens for Optimal Post-Cleanse Support

Each adaptogen has a different effect on the body, so the choice of which one to take will depend on the result you seek. For example, if you're both frazzled and fried, ashwagandha might be the ticket to both energize and relax you.

Explore and reap their benefits... Enjoy!

Adaptogen	Researched Benefits
American ginseng (Panax quinquefolius)	Boosts working memory, reaction time, calmness, and immune system
Ashwagandha (Withania somnifera)	Reduces stress and anxiety
Astragalus (Astragalus membranaceus)	Combats fatigue
Cordyceps (Cordyceps militaris)	Boosts stamina
Goji berry (Lycium barbarum)	Boosts energy, physical and mental performance, calmness, and sense of well-being, and can also improve sleep
Eluethero root (Eleutherococcus senticosus)	Improves focus and staves off mental fatigue
Jiaogulan (Gynostemma Pentaphyllum)	Reduces stress and boosts endurance
Licorice root (Glycyrrhiza glabra)	Reduces stress
Rhodiola rosea (R. rosea)	Staves off physical and mental fatigue
Schisandra berry/Magnolia berry (Schisandra chinensis)	Boosts endurance, mental performance, and working capacity
Tulsi/Holy basil (Ocimum sanctum)	Reduces physical and mental stress, stress-related anxiety, and depression
Turmeric (Curcuma longa)	Boosts brain function and reduces depression
Ginger (Zingiber officinale)	Increases energy, improves cognitive function, anti-inflammatory