



## **Adrenal Fatigue | What are the Adrenals?**

The adrenal glands sit over the kidneys, where they play a significant role in the body, secreting more than 50 hormones necessary for life, including epinephrine (adrenaline), cortisol, dehydroepiandrosterone (DHEA), progesterone and testosterone. Since they produce so many essential hormones, the adrenal glands are responsible for many of the functions we need to stay alive and healthy, including energy production: carbohydrate, protein and fat conversion to blood glucose for energy and fluid and electrolyte balance. Cortisol, in particular, is extremely important for keeping our body systems in balance, as well as protecting our cells: It normalizes blood sugar and it regulates blood pressure. It controls the strength of the immune system: Too much cortisol weakens the immune system, setting the motions for increased susceptibility to infections and cancer, while too little leads to an overactive immune system and autoimmune disease.

Good adrenal health is important. As the manufacturer of adrenaline, they are the first glands to fail during prolonged or intense periods of stress. The problem with stressors is that they are "cumulative," in the sense that their impact tends to add up in the body over time until your adrenal glands (and probably your mental state) just can't take anymore.

For example a "nervous breakdown isn't when nerves break down, as nerves really don't break down; adrenal glands do. A "nervous breakdown" is actually adrenal fatigue, or when the adrenal glands can't deal with the amount of stress they're given. Adrenal fatigue used to be rare, but is now all too common because of our lack of relaxation and other lifestyle factors, such as smoking, sleep deprivation, poor eating habits and excessive caffeine intake, as well as allergies.

## **Adrenal Fatigue | Is Adrenal Fatigue "real"?**

Not to most western medical doctors, but ask the patient or even an alternative doctor or healthcare practitioner and you will get a resounding, yes. In the medical model, your adrenal glands can be functioning 20 percent below the mean average of cortisol levels and the rest of your body can be experiencing symptoms of adrenal fatigue, yet most mainstream physicians won't recognize that you have a problem. So, why don't doctors recognize adrenal fatigue? In medical school, they are only taught to look for extreme adrenal malfunction -- Addison's Disease, which occurs when the glands produce far too little cortisol, and Cushing's Syndrome, which stems from excessive cortisol production. They check adrenal function by testing ACTH levels, using a bell curve to recognize abnormal levels. This is where the problem occurs. ACTH tests only consider the top and bottom two (2) percent of the curve as abnormal, yet symptoms of adrenal malfunction occur after 15 percent of the mean on both sides of the curve.

Adrenal Fatigue is real to a lot of people. Adrenal Fatigue can be caused by chronic exposure to stress, poor nutrition, a diet depleted of vitamins and minerals, high in sugar, caffeine, and toxins, long-term illness or untreated conditions such as arthritis, lack of sleep, or a depressed immune system.

Contemporary lifestyles and eating habits contribute to the widespread incidence of adrenal depletion with issues ranging from mild to serious. Some of the symptoms and corollary conditions to adrenal depletion are insomnia



and/or hypersomnia—a sense that one cannot get enough sleep, vulnerability to colds, aches in joints and throughout the body, general fatigue, Chronic Fatigue Syndrome (CFS) or Chronic Fatigue and Immune Deficiency Syndrome (CFIDS), difficulty exerting energy, even in small spurts, poor digestion, difficulty deriving energy from food, and mental “fuzziness.”

Common to most people with Adrenal Fatigue is the use of caffeine and sugar to get by. As much as you may feel you need your three o’clock coffee and sugary snack, the caffeine and sugar spike causes your adrenals to pump out more stress hormones, eventually leaving your body more drained than it would have been without your “pick-me-up.” Tomorrow we will list out the rest of the most common recognizable ways to tell if you have Adrenal Fatigue.

### **Adrenal Fatigue | Common Signs of Adrenal Fatigue**

Feeling burned out? Low energy is such a common feeling these days, that it has become almost normal and acceptable to need caffeine and sugar to keep going as we deal with our busy lives. We try to push through by whatever means possible, especially in the afternoons. However, that feeling of fatigue can be addressed instead by naturally supporting the healthy function of your adrenal glands (check back tomorrow).

Check the list below to see how many apply to you:

- Are you always on the run?
- Do you feel like you “can never do enough” or get it all done?
- Does everything seem like it’s a whole lot harder for you than it should be?
- Need coffee, colas, energy drinks, sodas, salty or sweet snacks to keep going?
- Do you use caffeine or sugar to bolster your flagging energy in the afternoon?
- Do you feel weary and irritable much of the time?
- Do you often crave salty foods or binge on sugar?
- Do you fall asleep while reading or while watching movies?
- Do you struggle to “come down” at night so you can get to sleep?
- Do you find it difficult to get out of bed in the morning?
- Do you wake up in the morning feeling that you didn’t get enough sleep?
- Morning fatigue | you don't really seem to "wake up" until 10 a.m., even if you've been awake since 7 a.m.
- Increased PMS or menopausal symptoms
- Increased allergies
- Mild depression
- Decreased ability to handle stress
- Apathy; inability to get motivated

### **Adrenal Fatigue | Back to Balanced Healthy Adrenals**

It is possible to restore, replenish and bring your adrenals back to balance and get your energy levels back up to how they used to be? The answer is, yes.

However, stress has become a “normal” part of life and the same is true for that “never-ending list” of things to do in a day, but when you are at optimal adrenal health you will take all this and more in your stride. You will feel a normal level of tiredness at the end of the day, as opposed to feeling exhausted after dragging yourself through the day. You will wake up refreshed, ready for a new day after a full night of restful sleep.



How do you go about restoring your Adrenals? The most popular and natural way to do this is by the use of herbs and nutrients to support adrenal gland health. The use of plants and herbs for the purposes of healing is known as Phytotherapy. Many people around the world have practiced the ancient art of botanical medicine and followed plant-based diets for thousands of years, but now there is evidence-based research to back up phytotherapy's treatment benefits. For example, researchers in the U.S. and around the globe have demonstrated that the herb *Eleuthero* (*Eleutherococcus senticosus*), also commonly referred to as Siberian ginseng, supports the adrenal glands with its anti-fatigue and anti-stress properties. In 2009, Swedish researchers proposed one way it does this is by increasing the specific molecules the body typically releases to protect the body against physical and emotional stress. These "molecular chaperones" help treat and repair damaged proteins during times of intense physical demand. Having more "repair" molecules on board helps build our tolerance to stress and allows for less physical destruction, and thus less feelings of exhaustion and fatigue. In Australia, another team demonstrated how *Eleuthero* inhibits the binding of stress hormones to their receptors.

Eleuthero is an adaptogen, a group of herbs known for their restorative and gland-toning properties, and is widely used by doctors and healthcare practitioners in cases of adrenal fatigue, adrenal exhaustion, stress, low function endocrine system and when the hypothalamic-pituitary-adrenal-axis is compromised. By restoring glandular function, your personal energy levels are restored, making it seem as though you have increased your energy levels, when in fact you are just running at normal energy levels.

### **Adrenal Fatigue | Herbs that Support Adrenal Function and General Health**

Adrenal fatigue and exhaustion is on the minds of many and is compromising the health and functionality of many people, especially with today's busy lifestyles, and it is so often overlooked, dismissed or brushed aside by western medicine. You may very well be one of these people and still looking for answers. How do you naturally improve adrenal gland function and health, and restore yourself back to normal energy levels? The most popular and natural way to do this is by the use of herbs and nutrients to support adrenals.

Let's take a deeper look at Phytotherapy, the use of plants and herbs for the purposes of healing and restoring adrenal health. Many people and healers around the world have practiced the ancient art of botanical medicine and followed plant-based diets for thousands of years with great success. Below is a list of a few of the most popular and adaptogenic herbs.

**ADAPTOGENS:** Along with Eleuthero, all Ginsengs (Korean, American, Siberian) are adaptogens. While all nutrients are valuable and required for sustenance, only the adaptogen will prompt the body to release its own sluggish and oft-weakened powers of self-revitalization. Adaptogens help the body remain vital and healthy even under unfavorable and stressful conditions. Adaptogens affect the energy supply of cells in your brain, muscles, liver, kidneys, glands, nerves and just about everywhere else, energizing them and allowing them to function properly even when subjected to adverse conditions. There is a most important secondary effect of this normalization of the energy supply of the cells. All body cells are continuously renewed. This most basic function depends upon a pair of nucleid proteins known as RNA and DNA. An adaptogen energizes the RNA and DNA molecules to rebuild cells.



**AYURVEDA ASHWAGANDHA:** has been used for 4,000 years plus in India. Generally, Ashwagandha stimulates the immune system. It has also been shown to inhibit inflammation and improve memory. Taken together with Ginseng, these actions support the traditional reputation of Ashwagandha as a tonic or adaptogen. It counteracts the effects of stress and generally promotes wellness.

**CORDYCEPS:** While recently been purported for their anti-cancer properties, Cordyceps are a prized antioxidant fungus that can slow aging and take a load off the adrenals by supporting the immune system, balancing the inflammatory response and helping to stabilize blood sugar. They also help restore normal functioning of various parts of the body by stimulating the immune system, benefiting the circulatory system and promoting energy, vitality and longevity. They develop strong anti-aging power and are known as a powerful anti-oxidant.

**BARBERRY ROOT:** A stimulant to the adrenal gland, this herb also tends to increase secretions and excretions thus improving digestion and assimilation. This is done through the activation of the lymphatic system and ductless glands.

**BLESSED THISTLE:** Also a stimulant to the adrenal gland. Thistle, a known stimulator due to its bitterness, tends to increase gastric and bile secretions. It is also tonifying to the liver and digestive tract.

#### **Adrenal Fatigue | Additional Beneficial Nutrients**

Most diets are low in the essential nutrients required to maintain adrenal health and function. That's why many individuals and healthcare professionals use supplementation as way to naturally support the adrenals and restore adrenal function and normal energy levels.

Many of these adrenal support products often use a singular nutrient, or better yet, some are complex synergistic formulas combining several beneficial nutrients into one powerful formula. While B vitamins are well known and well documented for their anti-stress properties, there are many other vital nutrients that produce health promoting results for so many people troubled with adrenal fatigue and exhaustion. Here's a few:

**VITAMIN B5 (Pantothenic Acid):** Vitamin B5 is known as the anti-stress vitamin. Pantothenic acid plays a role in the production of the adrenal hormones and formation of antibodies, aids in vitamin utilization, and helps to convert fats, carbohydrates, and proteins into energy. It is needed to produce vital steroids and cortisone in the adrenal glands and is an essential element of coenzyme A, which is also thought to play a major role in the body's ability to cope with stress and strengthen the immune system.

**VITAMIN B6 (Pyridoxine):** Vitamin B6 must be obtained from the diet, because humans cannot synthesize it. It plays a vital role in the function of approximately 100 enzymes that catalyze essential chemical reactions in the body. These vitamins work together to sustain proper chemical reactions and support the adrenals in providing the necessary energy for our lives.

**VITAMIN B12 (Cyanocobalamin):** Vitamin B12 is needed to prevent anemia. It aids in cell formation and cellular longevity. This vitamin is also required for proper digestion, absorption of foods, protein synthesis, and metabolism of carbohydrates and fats. The beneficial effects of vitamin B12 on adrenal gland health and adrenal function were



well documented in an article in the June 1984 edition of "Reproduction Nutrition Development". The article discussed an investigation on the effects of vitamin B12-deficiency towards adrenal cortex function. The study showed that an erratic endocrinological control mechanism located in the hypothalamus-pituitary axis led to irregular cycles due to diets insufficient in vitamin B12 and that adrenal function was restored upon supplementation or an increase of B12 in the diet.

**VITAMIN C:** Vitamin C is an antioxidant that is required for tissue growth and repair and adrenal gland function. Humans, unlike most animals, cannot make Vitamin C in their bodies and can only store it. We store Vitamin C in a system within the adrenals, called the Ascorbate system, and stress can deplete our store of Vitamin C. In January 2008, Baehr and colleagues commented on their research in a letter to the editor of the "American Journal of Clinical Nutrition," involving vitamin C-deprivation leading to impaired adrenal function can be alleviated by vitamin C supplementation due to its antioxidant effects that restore adrenal enzymatic activity to protect the function of the adrenal cortex against reactive oxygen species.

**ASPARTIC ACID:** Aspartic Acid gets its reputation as a treatment for chronic fatigue from the crucial role it plays in generating cellular energy. In addition, this amino acid helps transport minerals needed to form healthy RNA and DNA to the cells, and strengthens the immune system by promoting increased production of immunoglobulin's and antibodies (immune system proteins). It keeps the mind sharp by increasing concentrations of NADH in the brain, which is thought to boost the production of neurotransmitters and chemicals needed for normal mental functioning.

**ZINC:** Zinc aids metabolic and energy producing processes performed by the body and promotes a healthy immune system. In simple terms, when the body is under stress ("fight or flight") the body releases larger than normal amounts of zinc and magnesium ("calming minerals") in an effort to calm the stress. In doing so, the body is depleting its stores of zinc and magnesium, which are required for their energy producing properties. So, the adrenals glands are called upon to work extra hard to produce even more energy to make up for this energy shortfall.

**L-ALANINE:** L-Alanine is one of the most important amino acids released by muscle, functioning as a major energy source through the synthesis of glucose from glycogen stored in the liver. L-Alanine is also an inhibitory or calming neurotransmitter in brain.

**FOLIC ACID:** Folic acid is considered a brain food. It is needed for energy production and the formation of red blood cells. Folic acid levels in the body can be depleted by alcoholism, low dietary intake, or poor absorption.

**ADRENAL SUBSTANCE:** The protein derived from this adrenal gland substance, containing some important adrenal hormones, helps to rebuild and repair the adrenal glands.

**PITUITARY SUBSTANCE:** The protein derived from this pituitary substance, containing some important pituitary hormones, helps to build and repair the adrenal glands, through the hypothalamus-pituitary-adrenal axis.



## Tips for Maintaining Adrenal Health

- **Sleep** - Resist the temptation to burn the candle at both ends! Getting 8-10 hours of sleep a night is one of the best ways to restore your adrenal glands. It's best to turn in early if you can. Drink herbal tea or consider a natural herbal supplement to help you wind down. And if you need one, and can, take a nap during the day.
- **Modify Your Exercise** - Some people feel great after they exercise and if so, keep with your program. Other people feel drained with exercise and it's ok and important to take it slow as you build back your energy levels. Mornings are best for aerobic exercise because this is when your cortisol is naturally highest, but try not to let your heart rate go above 90 beats per minute. Try relaxing walks, yoga, or any kind of exercise that restores you instead of draining you.
- **Take an Herbal Formula** - Supplement your body with herbs and nutrients that restore, replenish and support your adrenals and your whole body. Make sure you purchase from a reputable company, whose products are clinically tested and of a high quality.
- **Relieve Stress** - Learn to take time for yourself, where no-one is making demands on you and you can just relax. Schedule a massage or enlist a partner or friend to give you one; practice yoga, tai chi or qi gong; put up your feet and enjoy a cup of tea; or call a friend just to chat. Cultivate the practices that best relieve tension and stress for you. Just five minutes a day of quiet breathing or meditation can do wonders for your adrenals and your health in general.
- **Play** - Take a good look at your life, and let go of as many of the things that drain you as possible, replacing them with those that fulfill you. Engage with the people, activities, and work you most enjoy. Go to the beach, play with your grandchildren, go dancing; whatever you have fun doing, give yourself permission to do it during this time of healing. Your adrenals will soak these experiences up with pleasure and respond quicker.

### Use natural ways to get your energy back.

Today's lifestyle is rushed, busy and full of activities and it's easy to get burned out and run down. There are other options to just relying on sugar, carbs, and caffeine to make it through the day. Don't put up with feeling so tired and depressed anymore. Natural herbal/nutrient options for adrenal support are available to boost your energy, and restore your adrenals and set you on the road to adrenal health and optimum performance.

[ADR Complex](#) | [Adrenal Cortex 100](#) | [Adaptostym](#) | [Energi](#) | [Gland Aid](#)

[Click here to check out all our natural adrenal support formulas](#)