Stressed Out and Tired. Do You Have Adrenal Exhaustion?
By Jack Challem, The Nutrition Reporter™

If you feel perpetually tired, stressed out, and can't imagine living without caffeine, the problem may not just be too much to do and too little sleep. You could be on the verge of adrenal exhaustion.

The adrenals are small hormone-secreting glands located on each of your kidneys. They function as the body's stress-response glands and release a variety of hormones to maintain homeostasis—biological balance—in response to stress. The more stress you experience, the harder your adrenals must work to protect you.

The best-known adrenal hormones are adrenaline and cortisol. When faced with a sudden stress (e.g., a scare), the adrenals instantly release adrenaline, our “fight-or-flight” hormone. When the stress is chronic—think work, traffic, and relationships—the body ramps up production of cortisol, which buffers us against the stress. Adrenal exhaustion develops when a person can’t make any more cortisol, leading to fatigue. These days, most people counter the fatigue by consuming more caffeine to sharpen up and boost their energy levels.

You might think that adrenal exhaustion is something that affects a small number of people, but the scale of the problem may actually be huge when you consider Americans’ insatiable addiction to caffeine. Indeed, a 16-ounce Starbucks coffee contains 330 mg of caffeine, around the same amount found in about ten cans of Coca-Cola or Pepsi. If you “need” such a potent brew to get through the day, you may already be in trouble.

Do You Have Adrenal Exhaustion?

Many people certainly feel tired all the time, and the conundrum is that fatigue can be a symptom of many different diseases. However, there are certain signs that point toward adrenal exhaustion.

The top symptoms of adrenal exhaustion include fatigue, orthostatic hypotension (dizziness when standing up), frequent bouts of low blood sugar, mood and memory problems, and aches and pains in the muscles of the upper back, arms, and legs. An increasing dependence on caffeine, salt and sugar cravings, feeling cold, pollen allergies, food and chemical sensitivities, gastritis, and abdominal cramps are also common signs of adrenal exhaustion. Another indicator is feeling tired when waking up after eight or more hours of sleep, but getting a second wind in the evening.
Unfortunately, many physicians won’t make a formal diagnosis of adrenal exhaustion except in cases of Addison’s disease, also known as primary adrenal insufficiency, the most severe form of the disorder. Nearly all of the symptoms of Addison’s disease and other (secondary) types of adrenal insufficiency are identical with the exception of one: people with Addison’s disease have hyperpigmentation of the skin, which may be most evident in a darker color underneath the fingernails and in creases in the palms of the hands.

Even physicians who are willing to consider a diagnosis of adrenal exhaustion often end up ordering the wrong tests. Doctors usually try to assess adrenal function with a single blood test to measure either cortisol or ACTH (adrenocorticotropic hormone) levels. However, these tests are notoriously inaccurate except in Addison’s disease. If your doctor relies only on these blood tests, he may assume that you don’t have adrenal burnout.

You’ll get a more accurate diagnosis with a cortisol saliva test, with which most naturopathic and nutritionally oriented physicians are familiar. The test involves providing four saliva samples over the course of a day. Normally, cortisol levels are highest in the early morning and decline steadily during the day and evening, but low morning cortisol levels are typical in people with adrenal exhaustion.

**Other Factors in Adrenal Exhaustion**

Many illnesses and some medications increase the odds of developing adrenal exhaustion. Type–2 diabetes, rheumatoid arthritis, Crohn’s disease, allergies, Candida (yeast) infection, and hepatitis are often intertwined with adrenal exhaustion, either as a contributing factor or as a consequence. The regular use of oral, topical, and intranasal glucocorticoid (cortisone-containing) drugs can suppress normal adrenal function. So can antifungal drugs and some anticoagulants, such as warfarin and heparin. Low sodium levels and dehydration are also potential causes of adrenal exhaustion.

Abnormally high cortisol levels (from chronic stress, before adrenal exhaustion develops) depress the body’s production of the hormone dehydroepiandrosterone (DHEA). You need DHEA to make estrogen, progesterone, and testosterone, so high cortisol levels can interfere with your sexual hormones and libido. Additionally, elevated cortisol levels increase blood sugar levels and the “bad” low–density lipoprotein (LDL) form of cholesterol, which boosts the risk of type–2 diabetes and coronary heart disease. Combined with high levels of insulin, cortisol promotes the formation of fat around the belly. Excess cortisol can also
interfere with the body’s production of the active form of thyroid hormone.

All of these negative effects of cortisol, however, are merely the prelude to adrenal exhaustion. Chronically elevated levels of cortisol are not healthy, but it is low levels of cortisol that characterize adrenal exhaustion, in which the body’s primary defense against stress collapses. Cortisol helps maintain both normal blood pressure and blood–sugar levels. When you don’t make enough cortisol, low blood pressure can leave you feeling dizzy, and low blood sugar can lead to “crashes” and irritability.

Over the long run, adrenal exhaustion will weaken your body’s responses to bacterial, viral, fungal, and parasitic infections. It can also precipitate chronic fatigue syndrome and fibromyalgia, and it may also increase your long-term risk of cancer.

You need cortisol—just not too much.

**Vitamin Supplements for Stress and Adrenal Exhaustion**

A variety of supplements can enhance adrenal function and help the body recover from adrenal exhaustion. The top three vitamin supplements are the B–complex, extra pantothenic acid (B5), and vitamin C.

**B–complex.** The B–complex vitamins have long been known as anti–stress nutrients. I recommend a daily supplement containing at least 50 mg of vitamins B1, B2, and B3. The dosages of other vitamins in a B–complex supplement will fall into place, though there will be minor differences between brands.

**Pantothenic Acid.** The body needs this B vitamin to make adrenal hormones, and people with adrenal exhaustion usually need more than the amount in most high–potency B–complex supplements. Take 500 mg extra of pantothenic acid twice daily.

**Vitamin C.** You also need this vitamin to make adrenal hormones. Take at least 1,000 mg three times daily. Too much vitamin C will loosen your stools, so if that happens, simply reduce the amount.

Several other nutritional supplements may be helpful, if you aren’t already taking them. They include phosphatidylserine (500 mg twice daily), zinc, (15 mg twice daily), and N–acetylcysteine (500 mg twice daily).
Herbal Supplements for Adrenal Exhaustion

The top herbal supplements for adrenal exhaustion are licorice root, rhodiola, eleuthero, and ashwagandha.

**Licorice root.** This herb is especially important for maintaining healthy cortisol levels in those with adrenal exhaustion. It contains glycyrrhizin, which gets converted to glycyrrhetinic acid in the intestine. Glycyrrhetinic acid inhibits the body’s breakdown of cortisol by blocking the activity of the enzyme that normally inactivates cortisol. When taking licorice root supplements for adrenal exhaustion, be sure that the product is *not* deglycyrrhizinated. (Deglycyrrhized or DGL supplements are preferred for other purposes, such as for coughs, ulcers, and inflammation.) Licorice root supplements vary, follow label instructions.

*Note:* Large amounts of *non*deglycyrrhizinated licorice may increase your blood pressure, which tends to be low in people with adrenal exhaustion. As you start recovering from adrenal exhaustion, you will likely notice fewer episodes of dizziness.

**Rhodiola rosea.** This herb is considered an adaptogen, meaning that it helps you adapt to stress. It improves adrenal function and can help with stress–related fatigue. Take 200 to 300 mg daily.

**Eleutherococcus senticosus.** Sometimes referred to as eleuthero or *Siberian ginseng,* this herb is also an adaptogen and can help compensate for stress. Take 200 to 300 mg daily.

**Ashwagandha.** This particular herb has a long history of use in Ayurvedic medicine. Known also as *Indian ginseng,* ashwagandha can be helpful to people with fatigue from chronic stress. It has a mild relaxing effect, so it can be especially beneficial to people with “type A” personalities. Take 500 mg daily.

**Adrenal–cortex extract.** Yet another option is to take a supplement containing adrenal–cortex extract. These supplements contain minute amounts of adrenal hormones and are safe compared with prescription glucocorticoid drugs. Still, it is best to get a confirmed diagnosis of adrenal exhaustion (by a nutritionally oriented M.D. or N.D.) before using an adrenal cortex supplement. Because adrenal supplements vary, follow either label directions or your physician’s guidance.

**Diet and Lifestyle**
In addition to chronic stress, poor eating habits also contribute to adrenal burnout. Foods high in refined sugars and carbohydrates do not supply the vitamins needed to support adrenal hormone production. Sugary foods will quickly increase blood sugar levels, offsetting the periods of hypoglycemia (low blood sugar) often associated with adrenal exhaustion, but over the long term these foods aggravate both adrenal problems and increase the risk of type-2 diabetes.

It’s important to adopt a diet that emphasizes quality protein and high-fiber vegetables and minimizes unnecessary refined sugars, refined carbohydrates, and junk foods. But the way you eat is just as important. Stress sets the stage for wolfing down foods, particularly fast foods. Instead, linger over a slower, healthier meal.

Although reducing salt intake is generally healthier, people with adrenal exhaustion can actually benefit from adding more salt to their food. Approximately one in five people with low blood levels of sodium has secondary adrenal exhaustion, and salt cravings are the body’s way to boost sodium levels. So if you have adrenal exhaustion, liberally salt your food. You can use various brands of natural salt, such as Celtic Sea Salt and RealSalt.

It’s also important to reduce your consumption of caffeine in coffee, black tea, soft drinks, and energy drinks. People often feel captive to their caffeine addiction, but caffeine withdrawal might actually be easier than you think. As you recover from adrenal exhaustion, you’ll find that you have less need for caffeine as a stimulant. You may not entirely stop drinking coffee, but you will likely be able to reduce your consumption to just one or two cups of weak coffee in the morning and none in the afternoon or evening. Tip: Try blending your ground coffee beans with Teccino, a caffeine-free tasty coffee substitute.

Finally, it’s essential that you get more sleep. This means absolutely no caffeine after the morning and no soft drinks with aspartame (which is chemically related to a stimulating neurotransmitter). At night, start preparing for sleep by turning off the television and dimming the lights at least one hour before going to bed. To promote sound sleep, remove most or all ambient light sources, such as nightlights, which can interfere with sleep. If you have an illuminated clock, turn it so it faces away from you. If your blinds or drapes don’t block out streetlights, buy new light-proof window coverings. Your bedtime should be whatever time gives you at least eight hours of sleep.

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