

Comprehensive Treatment Options for Addison's Disease

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STORY AT-A-GLANCE

- › The adrenal glands, working with the hypothalamic-pituitary-adrenal (HPA) axis, produce essential hormones cortisol and aldosterone. In Addison's disease, these glands become damaged and can't produce sufficient hormones
- › Primary symptoms include extreme fatigue, low blood pressure, hypoglycemia, muscle pain and skin darkening. The disease develops gradually, often going unnoticed until a significant illness or injury occurs
- › Managing Addison's requires hormone replacement therapy with hydrocortisone and fludrocortisone, alongside holistic strategies like dietary changes, proper hydration and careful monitoring of sodium and potassium levels
- › Dietary recommendations include whole foods rich in nutrients while avoiding processed foods, vegetable oils, caffeine and alcohol. Glucose-rich foods help combat fatigue, while calcium and vitamin D support bone health
- › Adaptogenic herbs like Holy basil, ashwagandha, and rhodiola help support adrenal function, while stress management techniques including exercise, meditation, acupuncture and quality sleep are essential for disease management

Located just above your kidneys, the adrenal glands are a part of your endocrine system¹ and are responsible for producing certain hormones.² These two triangle-shaped glands work with the hypothalamus and pituitary glands in your brain, a communication system called the hypothalamic-pituitary-adrenal (HPA) axis,³ facilitating the release of hormones into your glands to regulate stress responses.

However, when your adrenal glands become damaged, they cannot produce enough of these essential hormones. This condition is called primary adrenal insufficiency, or Addison's disease.⁴

Addison's disease is rare, affecting only 40 to 60 people per 1 million of the population.⁵ However, it could be dangerous if left untreated, causing what's called an Addisonian crisis, or acute adrenal failure, leading to shock and seizures, coma, and even death.^{6,7}

The Adrenal Glands' Role in Hormone Production

Your adrenal glands produce two types of hormones – cortisol and aldosterone – both of which have specific functions in your body. Cortisol, commonly known as the "stress hormone," helps your body respond to stress. However, it actually plays a more vital role than its nickname suggests.

Cortisol's primary function is to serve as a critical safeguard, preventing your blood glucose from dropping to dangerous low levels. This protects you from the life-threatening risk of a hypoglycemic coma.⁸ It also helps control blood pressure, reduce inflammation and control metabolism.

But cortisol has a dual nature – while it's initially anti-inflammatory, it becomes proinflammatory when chronically elevated, and isn't conducive to long-term health and longevity. Yet, having too little of it will also spell disaster. This underscores the importance of maintaining balanced levels of this hormone.

On the other hand, aldosterone, a mineralocorticoid hormone, is essential in maintaining the balance of sodium and potassium in your blood. These nutrients are vital in controlling the water and salt balance in your body. They also help stabilize your blood pressure and maintain normal nerve and muscle function.⁹

While Addison's disease is called primary adrenal insufficiency; there's also what's called secondary adrenal insufficiency, wherein the pituitary gland does not produce enough adrenocorticotropin (ACTH). This is a hormone that tells the adrenal glands to make cortisol.

Meanwhile, tertiary adrenal insufficiency affects the hypothalamus, hindering its ability to produce corticotropin-releasing hormone (CRH), which then directs the pituitary to make ACTH.

Addison's Disease Causes and Symptoms

One common cause of Addison's disease is having an autoimmune disease. The tissues of the adrenal glands, also called the suprarenal glands, can be mistakenly attacked and damaged by your immune system.¹⁰ This is why you could have a high risk of developing Addison's disease if you have:¹¹

- Graves' disease
- Vitiligo
- Chronic thyroiditis
- Pernicious anemia
- Type 1 diabetes

Since the damage to the adrenal glands occurs gradually, so do the symptoms of this disease. It usually manifests slowly, sometimes over months, which is why many people disregard their symptoms. They only pay attention to it when a significant event, such as an illness or injury, occurs and their symptoms worsen. These symptoms include:¹²

Extreme fatigue	Loss of appetite and weight loss	Low blood pressure (can lead to fainting)
Low blood sugar (hypoglycemia)	Abdominal pain	Muscle and joint pain
Depression and irritability	Areas of darkened skin	Nausea, diarrhea and vomiting
Salt cravings	Body hair loss	Sexual issues

The good news is that Addison's disease is a completely manageable condition. Managing this illness will require replacing the missing cortisol and aldosterone with hydrocortisone and fludrocortisone, respectively. You will need to consult with a healthcare practitioner to determine the proper dosage that will help you avoid life-threatening drops in these hormones.

In addition to replacing the hormones that are not being produced by your adrenal glands, incorporating holistic strategies and lifestyle changes is important to help you optimize your adrenal function and manage this condition. Make sure to work with your healthcare practitioner when implementing any of these strategies, to ensure that they will complement the medical treatments you are receiving and to avoid adverse drug interactions.

Dietary Changes to Help Manage Addison's Disease

Many people with Addison's disease are prescribed corticosteroids to manage their condition; however, long-term use of these drugs heightens your risk of osteoporosis and weight gain.¹³ Hence, you must focus on consuming a nutritious, well-balanced diet, ideally rich in whole fruits, vegetables, whole grains and high-quality proteins, to not only help with weight management, but also to manage Addison's disease.

At the same time, curb your intake of unhealthy foods that are high in processed sugar, unhealthy fats and empty calories, as they lead to excess weight. Eliminate all ultraprocessed foods like processed meats, refined grains, soft drinks, fried foods, fast food and desserts from your meals. Make sure to avoid seed oils and vegetable oils, as they are loaded with **linoleic acid (LA)**. This omega-6 fat is the most pernicious toxin in the modern diet.

Also avoid high-caffeine beverages, as they could worsen some Addison's disease symptoms, like nervousness and rapid heartbeat. If you are taking medications like glucocorticoids, grapefruit and grapefruit juice must be avoided as well, as they can interact with these drugs and increase their strength.¹⁴ Avoid alcohol as well, because it also interferes with how your body absorbs and uses medications.

It's also recommended to get more glucose-rich foods in your diet, as this will help improve symptoms like fatigue and problems concentrating. In fact, your cells need glucose to function optimally; it's also the preferred and primary energy source of your brain.

When you lack cortisol because of Addison's disease, your glucose levels can drop to dangerously low levels, since you no longer have this safeguard. Hence, making sure you get a steady supply of glucose from healthy carb sources will keep you from slipping into a hypoglycemic coma.

Making sure to get enough nutrients like calcium and vitamin D is also important, particularly if you're taking corticosteroids, which has been associated with a high risk of osteoporosis.¹⁵ Dairy products such as A2 milk, and cheese made with animal rennet, are ideal sources of calcium. Meanwhile, vitamin D, which helps calcium become properly absorbed in your bones, is best acquired from sensible sun exposure.

Staying Hydrated Is Crucial When You Have Addison's Disease

Proper hydration is important for Addison's disease, too. Since your sodium levels drop and your kidneys cannot retain sodium effectively, your body loses more sodium than it can replace, which causes dehydration. Hence, you need to make sure you're drinking enough water and managing your sodium levels (which I'll discuss in the next section).

The conventional recommendation to drink eight glasses of water a day is believed to be outdated, however. A more reliable way to know if you're getting enough fluids is to listen to your body. Drink when you're thirsty – use your thirst as a guide to how much water you need to drink to ensure you have adequate hydration.

You should also inspect the color of your urine – a pale straw or light-yellow color indicates proper hydration, whereas dark yellow or amber-colored urine suggests dehydration.

Address Your Sodium and Potassium Levels

Since Addison's disease affects your sodium levels because of depleted aldosterone stores, you must carefully manage your salt intake. In fact, having cravings for salty food is one of the symptoms of this condition. Whenever you crave salty foods, reach for sodium-rich options like organic pastured eggs, artisanal aged cheeses and pickles.

Remember that the type of salt you eat matters, too. Choose unrefined and minimally processed salt, such as pink Himalayan salt, since it's rich in naturally occurring trace minerals needed for healthy bones, fluid balance and overall health.

At the same time, you must also manage your potassium intake. The general recommendation is to consume five times more potassium than sodium; however, most Americans get the opposite ratio, eating two times more sodium than potassium. This is mainly due to the high amounts of processed foods they eat. Examples of potassium-rich foods include spinach, broccoli, beet greens, oranges, coconut water and grass fed yogurt, to name a few.¹⁶

If you need help tracking your nutrient intake or planning meals to manage Addison's disease, I recommend signing up for the Mercola Health Coach App, a revolutionary tool that guides you on your wellness journey. One of its unique features, the Food Buddy, will help analyze the ingredients of your meals, and even help put together meal ideas tailored to your personal needs. It's launching soon, so stay tuned.

Adaptogenic Herbs to Boost Adrenal Function

Certain adaptogenic herbs could have profound benefits for your adrenal glands. They help target the HPA axis and stress systems to improve the body's adrenal glands and response to stress. One study¹⁷ notes that adaptogenic herbs help increase the effectiveness of adrenal gland secretions.

*"[A]daptogens can increase cellular energy levels and prevent oxidative damages, leading to the maintenance of normal adrenal function," the researchers reported.*¹⁸

Adaptogenic herbs help boost your body's resiliency to stress by regulating hormones and supporting your immune system. Below are some examples for you to try to help manage Addison's disease:

- **Holy basil or tulsi (*Ocimum tenuiflorum*)** – Dubbed the "elixir of life" due to its ability to promote longevity and well-being, Tulsi has antistress, adaptogenic, antioxidant and anti-inflammatory properties, to name a few.¹⁹ A valuable herb in India for 5,000 years, it's believed to purify the mind, body and spirit.

Tulsi contains hundreds of beneficial phytochemicals that offer adaptogenic and immune-enhancing properties, helping combat stress, strengthen your immune system and keep your metabolism functioning optimally, including helping maintain optimal blood sugar levels.

- **Ashwagandha (*W. somnifera*)** – It balances your immune system, metabolism and hormonal systems. The root offers high amounts of active ingredients that help modulate thyroid, progesterone, testosterone and estrogen.

A review published in the International Journal of Molecular Sciences notes that ashwagandha has a positive impact on the endocrine system function by improving the thyroid gland's secretory function and normalizing adrenal activity.²⁰ According to the researchers:

*"W. somnifera mainly affects the hypothalamic–pituitary–gonadal (HPG) axis through non-oxidative mechanisms, as well as antistress effects through the hypothalamic–pituitary–adrenal (HPA) axis."*²¹

- **Siberian ginseng (*Eleutherococcus senticosus*)** – Also known as Eleuthero, this herb is known for its ability to help ease stress and fatigue. A study²² lists it as one of the plant-originated adaptogens that help support adrenal function.
- **Rhodiola** – This herb has antidepressant and anti-anxiety properties, helping reduce burnout associated with work stress. It's particularly beneficial for your nervous system. Rhodiola's energy and vitality-boosting effects have clear benefits for those

struggling with chronic fatigue, and as an additional advantage, it tends to be fast-acting.

Other Lifestyle Modifications to Beat Stress

Proper stress management is an integral part of dealing with Addison's disease, to prevent severe symptoms from arising. Hence, I recommend these stress-relieving strategies to help you out:

- **Regular exercise** – Incorporating a regular exercise routine helps you stay physically active and also increases your sense of well-being. It helps boost production of endorphins, the feel-good neurotransmitters in your brain. One of the easiest ways to be physically active is walking, ideally in a natural setting.
- **Stress management techniques** – Mindfulness, meditation or yoga are helpful ways to regulate your body's stress response. The Emotional Freedom Techniques (EFT) is also an effective technique to help calm your mind.
- **High-quality sleep** – Sleep is one of the foundational pillars of your health and wellness; not getting enough of it will cause every aspect of your health to suffer. Improving your sleep habits, such as optimizing your bedroom temperature and eliminating gadgets and any light source in your room during bedtime will go a long way toward improving your sleep and balancing your hormones.

I recommend reading my article, "[Top 33 Tips to Optimize Your Sleep Routine](#)," for more ways to improve your sleep habits.

- **Acupuncture** – This thousands-year-old technique involves inserting ultrafine needles into specific points in your body, also known as meridians, to help ease common health complaints. It balances your energy flow, called "qi" to stimulate your body and supports its natural ability to heal itself.

Acupuncture is also effective for stress management. In a 2021 study²³ involving nursing students, the researchers found that acupuncture helped decrease stress

levels in all measurements.

- **Chiropractic care** – This alternative medicine focuses on treating the spine and conditions related to the bones, muscles and joints. Chiropractic care helps ease stress and improve nervous system function.

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