

Nutritional Support For Adrenal Health

Our two adrenal glands are on top of the kidneys, hence, the terms “adrenal,” as in “added” to the renal glands

The adrenal glands are composed of two entirely separate sections, the cortex and the medulla. Like the pituitary gland, the two sections of the adrenals evolved from two entirely different types of tissue.

This is an excerpt from the ridiculously long article, *Holistic Guide to Healing the Endocrine System and Balancing Our Hormones* I believe that it's easier to heal the body when you understand how the body works, but understanding the endocrine system is big a task. It's a long article, but I think it's worth it and I hope you'll check it out.

Adrenal Medulla

The adrenal medulla evolved from the nervous system. The adrenal medulla works with the autonomic nervous system (the unconscious processes like breathing and digestion). The inner adrenal medulla has a direct connection to the brain.

Adrenal Medulla Hormones

The adrenal glands produce adrenaline (80%) and noradrenaline (20%), more commonly known among the medical establishment as epinephrine and norepinephrine. These hormones together are known as catecholamines.

The medullary hormones are not essential for life, but life without them would be difficult. Without stress, these hormones wouldn't be necessary, but there are varying degrees of stress. The adrenal medulla hormones compensate when we stress our bodies with a simple act like standing up from a reclining or sitting position. Without these hormones, your blood pressure would drop when you stand because gravity causes your blood to pool at the feet and legs.

Adrenaline

Epinephrine, more commonly called adrenaline, can increase heart rate, contract blood vessels, dilate air passages, and get the nervous system ready for a fight or flight response. Epinephrine acts on almost every part of the body.

Noradrenaline

Norepinephrine, also known as noradrenaline, works with epinephrine and adds its own stimulus to the brain. Like adrenaline, noradrenaline responds to the fight-or-flight stimulus. Noradrenaline increases our heart rate, triggering the release of glucose from the body's energy stores, and increasing blood flow to our muscles. Noradrenaline also affects the parts of the brain where attention and response actions are carried out. Noradrenaline is also an anti-inflammatory agent for the brain.

Adrenal Medulla Disorders

When the medulla is in trouble, so is the nervous system. Pathology of the adrenal medulla is primarily caused by neoplasm (tumors) or otherwise poor nervous system functionality, but there are many other issues that can cause too much or not enough of the two hormones. The nervous system will compensate for a lack of adrenal hormones for some time, but healing the thyroid, healing the entire adrenal gland, and if need be, healing the endocrine system as a whole, is the only way to ensure returned health to the adrenal medulla.

Adrenal Cortex

The adrenal cortex is divided into three zones and produces three main types of steroid hormones.

In medical school, one way we learned to remember these three layers is: 'Salt, sugar, sex... the deeper it goes, the sweeter it gets.' Not important, but catchy." – Precision Nutrition

Zona Glomerulosa & Mineralocorticoids

Mineralocorticoids (such as aldosterone, which makes up about 96% of the hormones in this mineralocorticoid group) produced in the zona glomerulosa help regulate blood pressure and electrolyte balance. Aldosterone controls water and electrolyte (sodium and potassium) concentration.

The mineralocorticoids act upon the kidneys, which under the direction of these hormones excrete sodium or potassium as required to maintain optimal balance. Adrenal adenomas (benign, actively secreting growths in the cortex) cause hyper-production of aldosterone, which may account for as much as 25% of patients with high blood pressure.

Zona Fasciculata & Glucocorticoids

Cortisol (also called hydrocortisone) makes up 95% of the glucocorticoids hormones produced, but there's also corticosterone and cortisone.

What does cortisol do:

- Depresses the immune system.
- Anti-inflammatory by reducing immune system response.
- Retards allergic overreactions, but this may slow wound healing.
- Promotes the breakdown of protein (catabolism).
- Promotes the conversion of triglycerides to stored fatty acids.
- Promotes glucose formation (gluconeogenesis).
- Promotes resistance to stress which results in higher blood pressure.

Two well-known diseases of the adrenals are Addison's disease and Cushing's syndrome. Addison's disease results from acute adrenocortical insufficiency. Cushing's syndrome is caused by excessive adrenal cortical function.

John F. Kennedy may be history's most famous Addison's

disease patient and required regular cortisone injections to deal with stress. Since one of the side effects of cortisol injections is a “tanning” of the skin, JFK looked his best (tanned and relaxed) during times of stress – immediately after injections.” – John Barron

Full blown Addison’s disease is rare, but adrenal fatigue is extremely common. Cushing’s syndrome is rare, too.

Zona Reticularis & Androgens

Testosterone is the most well-known androgen. Androgens are masculinizing hormones. In adult males, not many of these hormones are produced in the adrenal gland. Men produce most of their androgens in the testes while women produce their androgens in the adrenal glands.

Adrenal Fatigue

Many health care professionals estimate that 80% or more American adults suffer from some level of adrenal fatigue. With our addiction to caffeine, nicotine, and other stimulants and our tendency to bathe in Wi-Fi and cellular radiation, it seems likely.

Symptoms of Adrenal Fatigue Include

- body aches
- trouble concentrating
- racing thoughts
- moodiness and irritability
- always feeling tired
- feeling overwhelmed
- hormone imbalance
- cravings for sweet and salty foods

Nutrients that Boost Adrenal Response

- Ashwagandha

- Holy basil
- Kava Kava
- Ginseng
- Licorice root
- Astragalus
- Fish oil(with EPA & DHA)
- Magnesium
- Vitamin B1
- Vitamin B5
- Vitamin B12
- Vitamin C
- Vitamin D3
- Zinc
- Progesterone
- DHEA
- Glandulars (desiccated adrenal gland)

How to Heal Adrenal Glands

Supplement with vitamin D3, a B complex that's got extra B5, a fatty acid supplement with DHA and EPA, a good multivitamin powder, and a liquid mineral formula.

Get the diet right. No stimulants like coffee, caffeinated teas, energy drinks, tobacco, etc. In fact, no drugs period. Eat more fresh raw vegetables than anything else, and eliminate refined and processed foods like white rice, HFCS, and even that bag of organic, super healthy, ancient grain, non-GMO quinoa chips. If you didn't make it, don't eat it.

Make sure the body is working right in other areas that affect adrenals. The endocrine system as a whole, and especially the thyroid, kidneys, and hypothalamus, must be in decent working order to heal the adrenals all the way. If necessary, kill Candida and balance the gut. (it's likely very necessary if you have adrenal fatigue with our toxic, sugar-laden, antibacterial crazed society, which is often the underlining

cause of endocrine disorders).

Start grounding regularly, at least 15 minutes a day (more is better). Do some sun gazing while you're at it (but do not look directly at the sun). Get out in nature a little every day or as often as possible (again, more is better). Avoid or compensate for Wi-Fi, cellular, and other EMFs (salt lamps help, grounding probably does, too). Learn to breathe properly by breathing in deeply in a manner that causes your stomach to expand when you breathe in.

If your symptoms don't improve quickly, glandular supplementation can help (if you're not vegan) and a few adaptation herbs can help as well.

Conclusion

Diet is, as always, paramount. A slightly alkaline diet full of fresh produce detoxifies the endocrine system and keeps it healthy. Stimulants such as caffeine and nicotine, and most any drug use need to be eliminated for healthy adrenal function. Check out *Detox Cheap and Easy Without Fasting – Recipes Included* for more on diet. And again, this is only an excerpt from the ridiculously long article, *Holistic Guide to Healing the Endocrine System and Balancing Our Hormones*. It's worth the read for anyone wanting to get well.

Related Reading:

- *Understanding Stress, Chronic Stress, and Adrenal Fatigue*
- *Hypothyroidism – Natural Remedies, Causes, and How To Heal the Thyroid*
- *How to Cure Lyme Disease, and Virtually Any Other Bacterial Infection, Naturally*
- *How To Detoxify and Heal From Vaccinations – For Adults and Children*
- *How to Detoxify From Antibiotics and Other Chemical*

Antimicrobials

- *The Power of Our Hormones and How To Balance Them*