

# Adrenal Fatigue and Dysfunction: A Debt Worse Than Credit Cards

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**Michael Cheikin MD**  
*Holistic Medicine and Physiatry*  
[www.cheikin.com](http://www.cheikin.com) 610-239-9901

Stressors are things that challenge a system, whether it is a bridge, a bacteria or a human. Since survival is a priority for living organisms, at least until procreation occurs, responding to stress is prioritized by all living things. While too much stress challenges survival, a certain amount of stress is necessary for maintenance and growth. Education challenges the brain; walking stresses the muscles and bones. As evolution advanced, organisms developed more specialized molecules and organs to manage stress.

The adrenal glands are small triangular-shaped glands that sit on top of the kidneys. During stress, they mobilize and borrow resources from the liver, muscle, and other tissues to raise blood pressure, blood sugar, and provide energy and materials for survival. The feeling of your heart racing after a near accident is an example of adrenal hormones preparing you for “fight or flight”.

After stress is over, time is needed to replenish the resources borrowed, plus some interest. You need to rest and recover. If you’ve over-used your resources, instead of resting, you will “rest-in-peace”. Then you will not procreate and those with better stress-handling genes will. Like credit card debt, the bank’s interest can quickly overtake the capacity to pay back. The cost of relying on the adrenals to survive stress quickly outweighs the benefit and can cause bankruptcy.

Chronic stress, either from the outside (work, relationships, money) or inside (infections, toxins, allergenic foods) require chronic production of adrenal hormones. Our responses to various stressors are highly individual, partly genetic, and largely learned from past experiences of our immediate ancestors (via epigenes). Our personal vulnerabilities are the first systems that get thrown off when stressed. For some, it is elevated blood pressure; others a sleep disturbance, and still others anxiety, depression or upset stomach. Most of us have not been taught techniques to monitor and recover after stress. Therefore, when we push hard on our adrenals, we feel it during and after.

Adrenal Dysfunction occurs when the glands cannot keep up with the demand for hormone production. However, in these early stages it can be intermittent, and is hard to define and measure. While

the term “Adrenal Fatigue” is a popular term, it is best called “Adrenal Dysfunction”.

## What Are the Types of Adrenal Dysfunction (“AD”)

AD occurs when the intensity of a process is too high or low. It also occurs when the timing of a response is off—a response can be too early, too late, too slow, too fast, or be too short or lengthy.

Two types of AD are measurable and therefore recognized by conventional medicine. Adrenal Insufficiency is a diagnosis made by an endocrinologist where there is lab evidence that the glands can’t produce sufficient hormone. A more extreme condition, Adrenal Failure, also called Addison’s disease, is a life-threatening condition where all production stops and hormone replacement is required for life. While there are known and unknown causes of these extreme conditions, they are often preceded by a period of dysfunctions that are intermittent and often hard to measure and define.

Earlier forms of AD can feel like being older than your age, or having any of the signs or symptoms listed in the center box. AD has a very similar symptom profile to hypothyroidism, chronic fatigue syndrome, fibromyalgia, chronic pain, depression, peri-menopause, early dementia, and various toxicities. This overlap with these other diagnoses (labels) is one of the reasons it is often missed as an underlying “root cause” of other conditions. Recovery from infections (such as Lyme, Epstein Barr, yeast, sinus and lung), surgeries, and life-changing events (childbirth, divorce, losses, moving, changing jobs) can be

impeded or outright fail if adrenal requirements are not addressed.

Loss of testosterone and fertility in men and women is a common and reasonable response by the body to chronic stress. If resources are low and being borrowed, then there are clearly not enough resources available to grow and nurture any progeny.

The adrenal hormones are potent modulators of the immune system—think of pharmaceutical prednisone. Therefore, sub-optimal adrenal function can be linked to immune dysfunctions such as allergies, auto-immune diseases and skin reactions. AD can also be a cause of gastro-intestinal dysfunction

## Adrenal Dysfunction: Signs & Symptoms

Fatigue

Thyroid Dysfunction

Blood Pressure  
Dysfunction (high or low)

High Blood Sugar

Sexual Dysfunction

Female Hormone  
Dysfunction

Swelling/Dryness

Memory Dysfunction

Word-Finding Dysfunction

Mental foginess

Depression, Anxiety,  
and/or Irritability

Sleep Dysfunction

Poor Skin Healing

Prone to infection

Prolonged recovery from  
illness, surgery or stress

including ulcers, GERD, Irritable Bowel Syndrome, and leaky gut. AD is intimately involved in most inflammatory conditions of the body, including arthritis, Alzheimer's, atherosclerosis, mood disorders, and aging. AD can also be caused by the improper utilization of agents such as thyroid or sex hormones, and those that affect the gut ecology (antibiotics), immune system (steroids), brain (anti-anxiety and anti-depressants and others), and/or cardiovascular system (such as blood pressure medicines).

### Is AD Measurable?

For several glands, we can measure hormone levels easily. In diabetes, there is typically too much insulin initially (Type 2), until the pancreas fails and can no longer make insulin (Type 1). Both conditions can be reliably measured with blood tests. A similar condition occurs with the thyroid system.

However, with the adrenal glands, while failure is measurable (no hormone), dysfunction is hard to measure. There are numerous factors that make these hormones difficult to measure (such as binding globulins) and interpret. These hormone levels change throughout the day, the month, with changing sleep, stress and even position! Even putting a needle in a vein can raise cortisol, causing a false high or false normal in the blood.

Some alternative practitioners offer a saliva test, which can be helpful in select cases. Saliva can be collected several times over a day. With women, samples can also be collected over days or weeks to look for patterns.

While the objective measures above are useful, learning to observe, monitor and track subjective experience is critical. If consistent subtle changes and delayed patterns can be detected, this is singly the most important factor in healing. Sensations and impressions from the body are provided 24/7 and are the venue for the body to convey information from databases representing billions of years of evolution.

### Treating AD

Conventional medicine believes that when glands fail (thyroid, pancreas, or adrenals, sex glands) they cannot recover and require lifetime external (pharmaceutical) replacement. However, if dysfunction of these glands is caught early, recovery can occur. Because of the complex web in which these hormones operate, trying to manipulate or adjust them externally will always have limited results. A steady-state dose can respond only to a steady state and life is filled with unpredictable events that require brief or periodic adjustment.

Since the cause of AD is multi-factorial and highly individual, so is the treatment. AD is lifestyle dis-ease, so the main treatment is education and lifestyle modification.

Good sleep, food, movement, and psycho-spiritual support are sometimes all that's needed. Reduction or elimination of toxins such as alcohol, drugs, occupational chemicals and toxic relationships are

often necessary. Since we all go through stressful periods, stress management, learning how to deal with stress, is essential. Ultimately, it is the patient's choices that will determine the rate and degree of healing. For example, some patients are unwilling to sleep more than 6 hours a night, while others are unwilling to change their food choices or alcohol consumption. Adding core supplements that support the adrenal (and other) glands, self-care methods such as yoga, meditation and biofeedback, and energetic techniques such as acupuncture and massage can facilitate the healing process.

Paying off credit card interest and debt is painful, but so is bankruptcy and not having resources. With regard to stress and optimal health, recognizing and paying off adrenal debt requires a period of "frugality", but can have a profound impact on the quality and quantity of life.

### \*IMPORTANT NOTES:

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3. Dr. Cheikin's website has related articles such as "Cortisol", Auto-Immune Disease, Hormonal Web and others.

Michael Cheikin MD is a holistic physician, Board Certified in Physical Medicine and Rehabilitation ("Physiatry"), Pain Management, Spinal Cord Medicine and Electrodiagnostic Medicine and licensed in Medical Acupuncture. Dr. Cheikin has extensively studied yoga, diet and metabolism, Ayurvedic, Chinese and energy medicine and other alternative modalities for over 30 years. He specializes in obscure, chronic and severe problems that have not responded satisfactorily to other methods of healing. [www.cheikin.com](http://www.cheikin.com) 4/12/2018 a12