

PERQUE ADRENO DISTRESS GUARD

Stress, Fatigue and Your Energy

Trophorestorative support to rebuild energy safely, naturally

Adrenal fatigue was described in medical texts over a century ago. It still exists in today's day and age; however, we now have better diagnostic tools. Adrenal fatigue consists of a broad spectrum of non-specific yet often debilitating symptoms. The onset of this disease is often slow and insidious and common symptoms include:

1. Low energy
2. Sleep problems
3. Weight gain
4. Memory loss
5. Need for caffeine or other stimulants to 'keep going'
6. Immune system weakness and susceptibility to 'whatever is going around'.

The ability to handle stress is a key to survival! Our body has comprehensive stress adaptive systems in place, and the quick response control center is the **adrenal glands**. When this gland becomes overly stressed (distressed), our body's ability to handle challenges of living reduces, and symptoms soon begin to appear.

Your Adrenal Glands

Human adrenal glands are thumb size (walnut size) glands that sit atop our kidneys. The outer adrenal cortex comprises 80 percent of the adrenal gland and is responsible for producing over 50 different types of hormones derived from cholesterol. Two common hormones secreted are **cortisol** and **DHEA** (dehydroepiandrosterone). The inner adrenal medulla comprises the remainder of the gland and secretes common neurochemicals such as adrenalin (epinephrine, 'epi') derived from amino acids (such as l-phenylalanine and l-tyrosine).

Cholesterol is made in your liver and also comes into the body through your diet. Your liver regulates and controls how much cholesterol is in your blood. Cholesterol converts to pregnenolone, which becomes **cortisol**, the stress hormone, *or*, **DHEA**, the immune enhancer and anabolic, sex hormone source, depending on our needs at each moment.

Cortisol is a "flight or fight" stress hormone. This means it is a powerful 'defense' agent that puts us on alert, slows down our digestion, suppresses immune defense and repair, and keeps us "revved up". For brief moments, this is helpful in mobilizing and focusing our cells to meet the acute need. When this becomes chronic, we begin to tear ourselves

down (cannibalize ourselves). This is *catabolic* in effect, meaning literally, "it eats us up inside".

Cortisol production has a circadian daily rhythm with peak levels in the early morning and the lowest at night while we renew and restore our bodies during rest. In a nutshell, cortisol sustains life via two opposite but related kinds of regulatory actions: **Enhance** and activate our body's existing defense mechanisms and **modulate** the same mechanisms to prevent them from causing problems.

DHEA is the 'mother hormone' precursor to estrogens, progesterone, and testosterone. DHEA is our "feel-good" anabolic hormone. When in healthy balance, it promotes immune system health and youthful vitality. DHEA typically declines after age 35, while cortisol levels often show signs of continuing distress in too many people. In healthy people, levels of DHEA stay high and cortisol stays healthfully low throughout our life span.

Stress, DHEA and Cortisol

People with adrenal fatigue do not tolerate stress well and succumb to stress-related illnesses easily. As stress accumulates, progressively higher levels of cortisol are required acutely.

Cortisol level can no longer rise in response to stress if the gland is already working as hard as it can. When adrenals are chronically overworked and strain to maintain high cortisol levels, you lose the capacity to produce DHEA and other repair hormones in sufficient amounts. DHEA is necessary to moderate hormonal balance in the body. Insufficient DHEA production contributes to fatigue and, finally, adrenal exhaustion.

Natural Adrenal Support

Healthier diets (*see* The Alkaline Way), stress reduction tools including moderate exercise, restorative sleep, and learned relaxation techniques such as meditation, yoga, tai chi, or Pilates are good ways to naturally rest and restore your adrenals. Saliva tests measure active, free cortisol and DHEA hormone levels. Under professional guidance, supplementation with DHEA to boost DHEA levels into the healthy range in the body may be an option.

PERQUE Adreno Distress Guard is a natural, non-stimulating product that safely offers trophorestorative natural rebuilding for your adrenal glands. Our patents pending proprietary formula combines, in a unique, balanced way, Rhodiola (Rosavins), Magnolia and Phellodendron plant extracts that are micellized in perilla oil, and Medium Chain Triglycerides, thus promoting a healthier balance of cortisol and DHEA in your body.

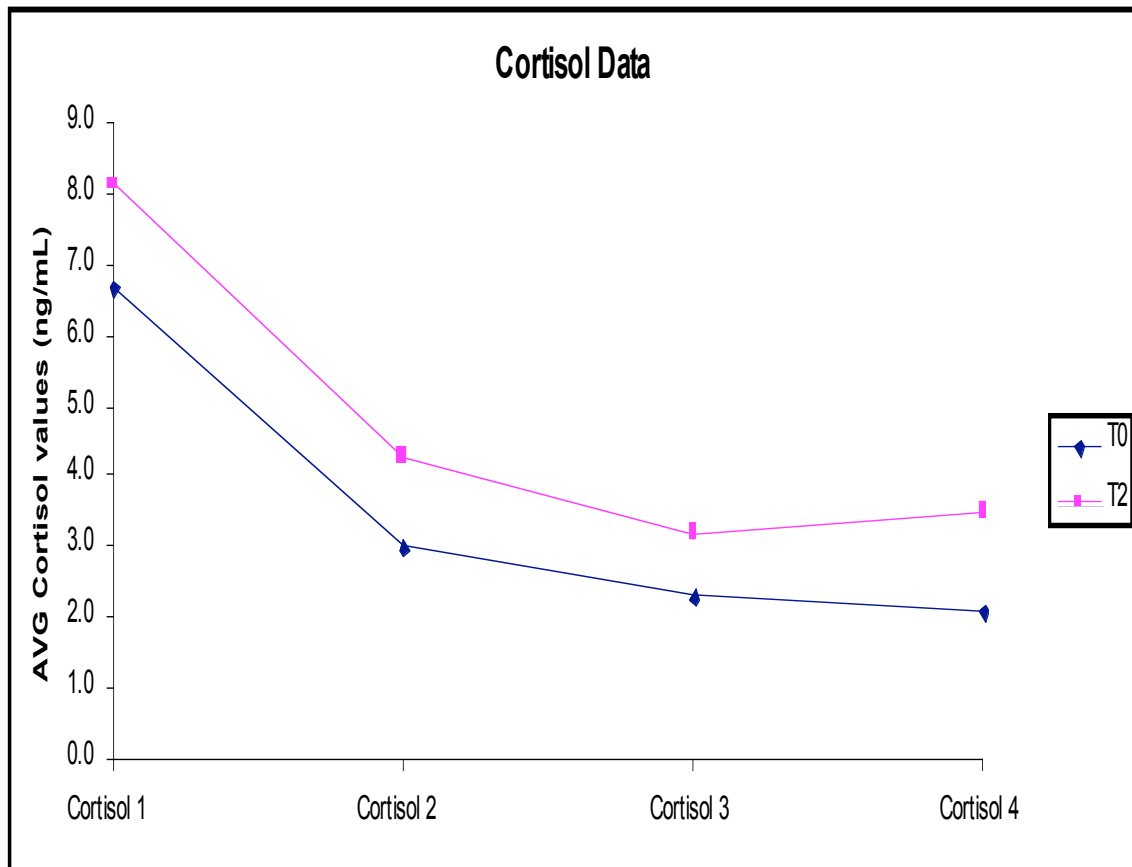
PERQUE Adreno Distress Guard: A controlled study

We are pleased to announce initial results of a recently concluded community-based controlled trial that was initiated to determine the efficacy of **PERQUE Adreno Distress Guard**. This study was carried out for a full six weeks on people who presented with signs and symptoms of adrenal fatigue. Pre- and post-evaluations of free cortisol and

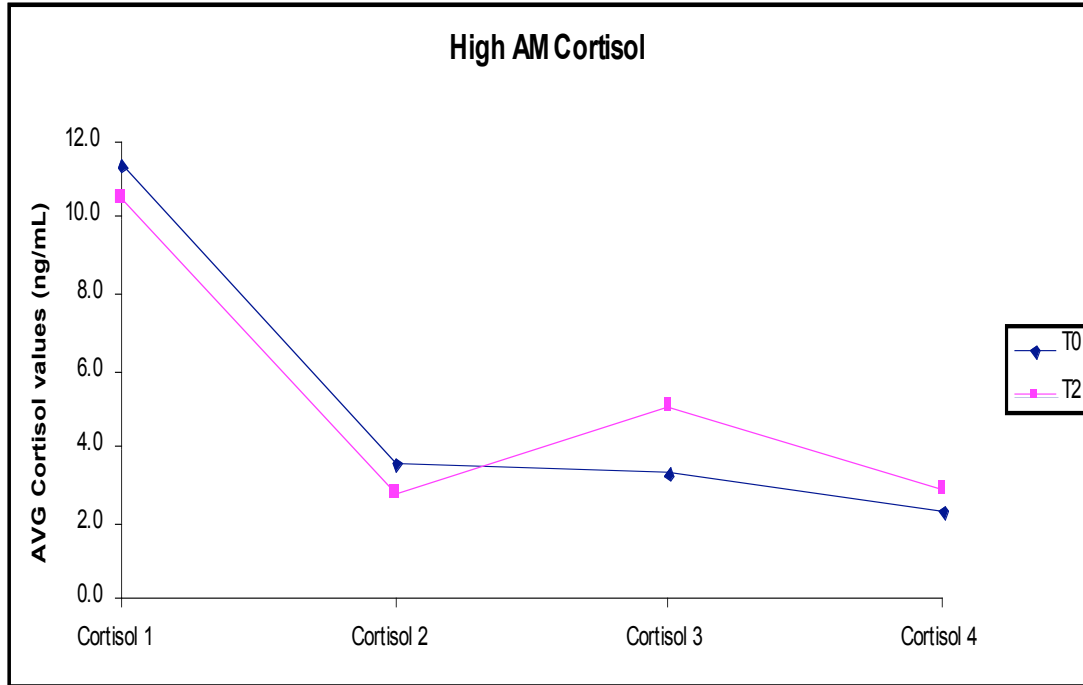
DHEA levels were done using non-invasive, saliva samples known to correlate with free blood (plasma) hormone levels.

Remarkably, **PERQUE Adreno Distress Guard** was able to **increase** first morning cortisol levels from a depressed value of 6.7 ng/mL (T0) to a much **healthier** 8.1ng/mL (T2). Similarly, late afternoon cortisol levels as shown in Fig1 were **increased** to 3.5ng/mL (T0) from a **too low** level of 2.1 (T2). This means a healthier level and rhythm of cortisol was restored in the body after just six weeks on **PERQUE Adreno Distress Guard**.

Fig 1



In contrast, participants with high first morning cortisol levels, showed signs of restoration of their adrenals by being able to **decrease** their first morning cortisol levels from 11.4 ng/mL to 10.4 ng/mL as shown in Fig 2. This greatly illustrates the trophorestorative nature of the product.



A dose of two (2) softgels of **PERQUE Adreno Distress Guard** twice a day is recommended to recharge the overly stressed or exhausted individual.

Scientific support for **PERQUE Adreno Distress Guard**:

1. Kelly, Gregory S . Rhodiola rosea: A Possible Plant Adaptogen. *Altern Med Rev* 2001;6(3):293-302
2. Experimental analysis of therapeutic properties of Rhodiola rosea herb and its possible application in medicine. *Medicina (Kaunas)*. 2004 ; 40(7) : 614-619.
3. Sufka KJ, etal. Anxiolytic properties of botanical extracts in the chick social separation-stress procedure. *Psychopharmacology (Berl)*. 2001 Jan 1;153(2):219-224.
4. Narisawa T, Fukaura Y, Yazawa K, et al. Colon cancer prevention with a small amount of dietary perilla oil high in alpha-linolenic acid in an animal model. *Cancer*. 1994; 73:2069-2075.
5. Oh-hashii K, Takehashi T, Watanabe S. Possible mechanisms for the differential effects high linoleate safflower oil and high alpha-linolenate perilla oil diets on platelet-activating factor production by rat polymorphonuclear leukocytes. *J Lipid Mediat Cell Signal*. 1997; 17:207-220.