

Adrenal Gland Dysfunction (Part 3): Treatment of Adrenal Fatigue

Copyright © 2009; Douglas Husbands, DC, CCN, ABAAHP. All rights reserved.

Dr. Hans Selye was way ahead of his time in his explanation of stress! As we discussed in [part 1 of this series](#), the three stages of the General Adaptation Syndrome (GAS) first outlined by Dr. Selye in 1956, are still valuable for explaining the history and progression of adrenal dysfunction. The third stage, the stage of exhaustion, involves the adrenal glands inability to make adequate cortisol, DHEA and other key hormones for healthy bodily functions. (Note: To understand the concepts and terms listed in this article, reading parts 1 and [2](#) of this series is essential.) In this third stage, aptly termed "Adrenal Fatigue" the body's ability to handle stress and recover from even minor stressors is greatly hindered. In this article we will give an overview of treatment options for adrenal fatigue from a [functional medicine perspective](#). Even being able to still use Dr. Selye's GAS model as the basis of how a dysfunctional stress response damages the body shows how far ahead of his time he was!

"I'm Sick and Tired of This"

As comedienne Wanda Sykes often says, "I'm sick and tired of..." ([fill in your complaint here!](#)). Well, when your body goes into adrenal fatigue, you literally feel like that about everything!

Diagnostic Tests

As mentioned in [part 1](#) and [part 2 of this series](#), salivary hormonal testing is the most accurate and convenient way to properly diagnose the extent of adrenal fatigue. Briefly reviewing, with the saliva test results pattern of adrenal fatigue you will see decreased cortisol output throughout the day with decreased DHEA levels.

You may wonder why your conventionally-trained medical doctor has never heard of, or does not see salivary hormonal testing as valid. Simply put, there is no training in this in medical school. It is still taught that serum testing is the only valid method for evaluating adrenal gland function and that the only valid diagnosis of inadequate cortisol output is Addison's disease. Contrary to this common error [research studies](#) show that salivary tests are valid for accurately measuring cortisol and DHEA. Also, quite frankly most doctors are so busy taking care of patients coming to them with burdensome insurance stipulations and paperwork, and following guidelines dictated by insurance companies to comply with covered tests and services, they don't have time to read much of the research other than what is fed to them by drug company representatives that visit them almost daily. Additionally, almost all of the money going to studies done at large medical research centers comes from funding from pharmaceutical companies. For these reasons the majority of medical doctors, even in the most "prestigious" research centers, remain

unaware of the research background and validity of salivary adrenal tests or even recognize adrenal fatigue as a valid condition.

There are additional in-office physical exam tests that I often perform to assist confirmation of the likelihood of adrenal fatigue. However, for the scope of this article I only mention this as recognition that this article is just an overview and not meant to be a medically comprehensive review of this topic.

Treatment for Adrenal Fatigue

Lifestyle Management:

Much of what can be done for restoring proper Hypothalamic-Pituitary-Adrenal-Thyroid-Gonadal (HPATG) axis function (see [part 1](#) of this series, page 2) is under your control. Properly-timed, restorative rest, regular sleep, work and eating patterns, and learning internal stress-reduction techniques to regulate internal responses to external stressors are essential. For example, I have to remind many of those who see me for adrenal dysfunction that has progressed to Chronic Fatigue Syndrome and/or Fibromyalgia to stay off their computer or turn off the "boob tube" by 9PM.

Looking for momentary simple things to be thankful for, such as pretty flowers, a young child's laughter, having shelter, being able to breathe deeply, laughing, (and others I encourage you right now to think of), causes our brain to release extremely powerful stress relieving neuro-chemicals. Learning to appreciate and experience these little joys each day has cumulative beneficial effects.

Training to unlearn harmful, non-productive habits/responses and learn beneficial, mutually productive habits/responses is essential for decreasing stress, thereby unburdening an already overloaded HPATG axis. For example it is our frail human nature to "react" angrily to an unkind remark or action from a spouse, friend or a coworker, rather than thoughtfully "respond" as we desire to be treated. However by thoughtfully responding to an offense with the consideration of the other persons frailties, while humbly recognizing our own, rather than escalating an offense by "returning evil for evil" there is potential for understanding and relationship building. Blowing-up, being quick tempered, or a sarcastic remark with the intention to hurt others almost always increases the stressful situation exponentially, thereby being counter-productive for everyone. For many patients I've seen with adrenal fatigue such an encounter can leave them debilitated for a few days! As I often tell patients and remind myself also, you ultimately can't control how others respond to you, but you can control how you choose to respond to others.

Supporting Healthy Cortisol Production:

In stage 3 adrenal dysfunction, also known as adrenal fatigue (aka "adrenal exhaustion"), assisting the body with substances that help increase low cortisol production to healthy levels is very beneficial. As stated in parts 1 and 2 of this series, this would be very counter-productive and dangerous if someone is in a hypercortisolism stage...*which is why it is imperative to objectively use salivary hormonal testing to determine the stage of adrenal dysfunction!*

Herbs, Pregnenolone, Cortisol and DHEA: There are nutritional supplement substances that can increase cortisol levels. Licorice root extract can effectively raise cortisol. The adaptogenic herbs mentioned in part 2 of this series, including Ashwagandha, Panax Ginseng, Siberian Ginseng, Ginger root, and Ginkgo biloba, can assist the body's response to secrete adequate levels of cortisol and DHEA. As mentioned in the other parts of this series, someone who has been pursuing a pharmaceutical course of treatment for CFS or Fibromyalgia should consult with a health practitioner knowledgeable in the use of these herbs if they are transitioning from pharmaceutical treatment to using these botanical sources to prevent harmful interactions.

Herbs to avoid in adrenal fatigue would be Ephedra (or the prescription Psuedafed) cola nut, strong black teas and coffee. Even decaffeinated coffee should be avoided because of certain acids in coffee exhausting the adrenals. Clinically I have seen women especially have problems with coffee with adrenal fatigue. These substances all prevent recovery by further exhausting your adrenals.

Mexican wild yam extract, *Dioscorea villosa*, can be synthesized in the laboratory to pregnenolone and cortisol. Research on the effectiveness is varied. Clinically, I have found these highly beneficial in individual cases when judiciously used.

DHEA can be highly beneficial in those with extreme adrenal fatigue. Again judicious use is necessary and consideration for the entire patient history, use of any prescription medications, and use of other herbs must be considered.

Vitamins and Minerals: The synthesis and secretion of cortisol is dependent on adequate therapeutic levels of Vitamin C, niacin, pantothenic acid, biotin and folic acid. Good serum levels of the minerals potassium, zinc, iron, and copper are required for proper levels of cortisol secretion.

Adrenal Glandular Extracts: Glandular extracts from grass-fed, free-range, added hormone-free cows can be highly beneficial to rebuild adrenal gland function in those with severe adrenal fatigue. I have used this on occasion with severe adrenal fatigue and found it clinically helpful. This can even be beneficial in some cases of Addison's disease. Proper monitoring is essential and you must use a health practitioner knowledgeable in proper dosing who has a comprehensive perspective.

Diet: With adrenal fatigue, table sugar, alcohol, caffeine, soda's, and white flour products must be avoided at all costs. Clinically I have found that the caffeine in white and green tea is not a problem in those with adrenal fatigue, due to the other components in green tea, the EGCG's in particular. Concentrated sugary juices should be avoided and watered-down fruit juices may be consumed moderately. Adequate water (1/2 ounce per pound of bodyweight each day) is essential for appropriate hydration.

Abundant amounts of dark green leafy and brightly colored vegetables, deep-dark colored fruits, and concentrated protein food sources with healthy levels of omega-3 fats should be staples of the diet. Preferably gluten-free whole grains may be included for healthy carbohydrates. Beans legumes, lentils and nuts are beneficial for fiber, various beneficial fats and other phytonutrients.

Exercise: In adrenal fatigue, one of the last things you may feel like doing is exercising. Exercise with this condition should be light to moderate and an enjoyable activity. Vigorous exercise is not recommended in this case. Going for an enjoyable walk in the park, dancing, and sexual activity with a spouse are activities which will increase blood and lymph fluid flow and increase breathing rate and depth.

Concluding Comments

Many people with adrenal gland associated disorders go undiagnosed or are misdiagnosed every day. With the adrenal glands and thyroid glands as sentinel organs, it is imperative to consider maintaining optimal function of these and the entire HPATG axis. In this overview written for the non-medical reader, I hope I have increased your awareness to assist you with knowing your options and making better informed choices towards improving and maintaining your health.

If you or someone you know have questions about adrenal gland dysfunction, fibromyalgia or chronic fatigue syndrome don't hesitate to call us at 650-593-4447. We are here to help. We are always happy to welcome new patients to our clinic in San Carlos, California including those who need to make the trip from out of the local area. [Click here](#) to contact us by phone, fax or e-mail.

About the Author: Dr. Douglas Husbands graduated from San Francisco State University with a Bachelor of Science degree in Biology/Human Physiology in 1983. He later graduated from Cleveland Chiropractic College of Los Angeles in 1991. In 1996 he earned his post-graduate board certification as a Certified Clinical Nutritionist with the International and American Associations of Clinical Nutritionists, and in 2000 as a board certified Anti-Aging Health Care Practitioner with the American Board of Anti-Aging Health Practitioners. In 2003, he completed training in Functional Medicine with the Institute for Functional Medicine. Dr. Husbands has been sought for expert opinion by national health magazines and been published in peer-reviewed journals. He has taught many classes and lectured extensively to a wide variety of audiences on natural health topics and functional medicine. Dr. Husbands returned to his birthplace, the San Francisco Bay Area in 2004 and practices natural health care in San Carlos, CA at Athens Chiropractic Clinic. His website is www.drhusbands.com, and he can be reached through the contact form link from his website here: <http://www.drhusbands.com/contact.cfm>.