

**Endocrine Causes of Chronic Fatigue Syndrome (CFS)/Chronic Fatigue Immune
Deficiency Syndrome (CFIDS):**

A Brief Guide for Patients and Primary Care Physicians

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This review will concentrate on Endocrine Causes of Fatigue and discuss the presentation, recommended diagnosis and treatment for these diseases.

How do you know if an Endocrine Disease is Causing Chronic Fatigue?

Patients with Endocrine diseases usually have other symptoms besides fatigue. These endocrine symptoms differ from the classic infectious symptoms associated with CFS such as fever, sore throat and swollen joints. Symptoms suggestive of an endocrine cause of fatigue as opposed to an infectious cause are listed in Table 3. If the patient has some of the symptoms listed in Table 3, an endocrine cause of chronic fatigue should be suspected. Some of the more common endocrine diseases that often present as chronic fatigue are listed in Table 4. A quick reference guide for symptoms complexes and their

Q. So I should have my growth hormone measured?

A. Not exactly. Growth hormone is secreted in pulses so a single measurement of blood levels is not helpful. Rather your Endocrinologist will probably screen you by measuring a plasma IGF-1 level. If it is low, your doctor may do sophisticated tests that stimulate growth hormone secretion and measure its levels. These tests should only be performed by personnel experienced with GH testing.

Q. I'm post-menopausal and ever since my gynecologist put me on Premarin and Provera, I've felt very tired. Any thoughts on why?

A. Estrogen replacement is a complex subject as estrogens can interact with many other hormonal systems. Even the form of the estrogen is important. Oral estrogen can alter thyroid requirements and actions of growth hormone. Yet estrogen delivered by patch does not interfere in the same way. The effects of different preparations of estrogen even vary from patient to patient. The body itself makes different estrogens, including estradiol and estriol. The symptom of fatigue may be relieved with more specific estrogen preparations. Relying solely on the common but rather generic Premarin, which is a broad preparation from the urine of pregnant horses, may be suboptimal for many women.

Q. I was diagnosed with hypothyroidism due to Hashimoto's thyroiditis and am now taking Synthroid (a form of T4). My TSH is normal (5.1 μ U/ ml, nl 0.4-5.2), yet I'm extremely fatigued. I've lost 15 pounds, only want to eat salty foods and have noticed that my skin appears more tan. I'm dizzy when I stand up. What should I do?

A. First of all, although your TSH is within normal limits, it is not optimal. I would increase your thyroid hormone replacement until your TSH is between 1 and 2 μ U/ ml. You may want to ask your Endocrinologist about taking a small amount of T3 (Cytomel) in addition to T4.

Secondly, I'm concerned that you may have adrenal insufficiency (Addison's disease). Hashimoto's thyroiditis is an autoimmune disease and patients with one autoimmune disease often develop another. In this case, it could be Addison's disease. Patients with adrenal insufficiency can have severe fatigue, weight loss, excess skin pigmentation and salt craving. They often have low blood pressure when they stand. This is due to a deficiency of the adrenal mineralocorticoid hormone, aldosterone. This may give them their fatigue. Your Endocrinologist may want to measure hormones such as cortisol, ACTH, DHEAS, renin and aldosterone. You may be treated with replacement hormones including hydrocortisone, Flurinef and DHEA.

Q. How do I find out more about Endocrine causes of chronic fatigue?

A. Visit Dr. Friedman's website at <http://www.goodhormonehealth.com>. Doctors and patients are both welcome to an easily readable table of symptoms associated with excesses and deficiencies of various hormones. For those wishing more in-depth information, e-chapters and e-articles are also available. Some material is available for purchase.