

## **What Your Dr May Not Tell You About Your Thyroid**

How to know if you need thyroid, how to test it, and how to supplement it.

By John R. Lee, M.D. and Virginia Hopkins

The thyroid glands located on either side of your neck make thyroid hormones that help regulate dozens of important body functions, including metabolism, and temperature. The two primary kinds of thyroid hormone are known as T3 and T4. While hyperthyroidism or high thyroid is relatively rare, millions of people take a thyroid supplement for low thyroid or hypothyroid symptoms.

Statistically about ten percent of the general population is hypothyroid, but about five times more women than men are hypothyroid, and 20 percent of women over age 65 test for low hypothyroid. That alone gives us a big clue that thyroid is connected in some way to estrogen, progesterone, and other steroid hormones. Of the top 200 best-selling drugs in the U.S. in 1996, the thyroid supplement synthroid was number three.

When your thyroid levels are low, the brain, the ovaries and the adrenal glands are affected. There are many possible symptoms of low thyroid, but some of the most common are intolerance to cold, fatigue, unexplained weight gain, dry skin and hair, brittle nails, headaches, foggy thinking, and puffy face and eyes.

### **When Do You Need Thyroid Supplements?**

Deciding whether or not you need thyroid supplementation involves clinical judgement on the part of your doctor. Here's a typical example. A premenopausal woman we'll call Ann sees her doctor for complaints of fatigue, weight gain, and thinning hair. Her T3 and T4 tests are normal but her TSH (thyroid stimulating hormone) is a bit high, indicating low overall thyroid function. He has her take her basal body temperature (under the armpit in the morning) and it is low. Ann's doctor prescribes thyroid hormone supplements for her.

Some time later, Ann's periods become more scant and a bit irregular, and her doctor prescribes estrogen supplements. Six weeks later, her fatigue becomes extreme, and the doctor finds her TSH high again. Her thyroid dose is increased. Her symptoms only partially resolve so her thyroid dose is increased even more. She finds she is gaining weight and her breasts are so swollen and tender that she can not lie in bed without discomfort. She quits the estrogen supplement and, within two weeks, she is feeling fine again, but a few weeks later begins to exhibit symptoms of high thyroid levels such as a rapid heartbeat, due to the high dose of thyroid she is taking. Again, the estrogen supplement was excessive and interfered with the functioning of thyroid hormone.

Here's yet another common scenario that Dr. Lee experienced in his practice. A premenopausal woman reports poor sleep, weight gain, swollen breasts, water retention, and lack of energy. She is also taking thyroid supplements for presumed hypothyroidism. To restore her hormone balance, Dr. Lee recommends progesterone cream and a check of her TSH level in six weeks or so. In six weeks, TSH is found to be

low, indicating that her thyroid medication should be reduced. Three months later, her TSH is again low, and her thyroid dose is again reduced. Eventually her thyroid hormones test normal and she no longer has any need for thyroid supplements.

The symptoms of progesterone deficiency and hypothyroidism can be very similar. Being premenopausal, we know that her estrogen production was sufficient (if you are menstruating you have adequate estrogen). Because she still had regular periods, her doctor, like so many others, did not feel the need to test her progesterone level. He assumed that, despite her normal T3 and T4 levels, her fatigue and low basal temperature indicated hypothyroidism. He did not know that progesterone is anabolic (burns fat) and thermogenic (increases temperature) so that a deficiency causes weight gain and low temperature. He simply did not consider the possibility of progesterone deficiency.

This is not to say that all cases of hypothyroidism in women are misdiagnosed. I estimate, however, that 90 percent of them are secondary to estrogen dominance and progesterone deficiency. Some women do, in fact, need a little thyroid supplementation but the incidence is much lower than is generally appreciated.

It is certainly no secret that progesterone raises one's body temperature a bit. One of the tests for successful ovulation is a rise in basal temperature secondary to the production of progesterone at ovulation. The Catholic Church knows this and uses this test in fertility planning. If the Pope knows this, why doesn't your doctor know this? Why is this not taught in medical school? Why is progesterone deficiency not included in the differential diagnosis of fatigue and low basal temperature? I believe it stems from a mindset problem in conventional medicine that has ignored the study of progesterone for the past four to five decades in favor of the synthetic progestins.

Synthetic progestins do not enhance thyroid hormone function; in fact, they make the problem worse. They occupy progesterone receptors and prevent real progesterone from its normal function. The PDR lists fatigue and loss of energy as common side effects of synthetic progestins.

### **Other Thyroid Blockers**

A new clinical symptom that doctors are seeing increasingly frequently is a cluster of symptoms caused by eating too much soy. Some women are eating soy products such as tofu and tempeh, taking soy protein powders, drinking soy milk, eating soy "energy" bars, and taking soy supplements for their phytoestrogenic effect – every day! This is overdoing it and leads to blocked uptake of glucose in the brain, blocked absorption of minerals, blocked absorption of protein, and blocked thyroid function. Like everything else, soy should be eaten in moderation and I don't recommend the use of soy protein powders or drinking soy milk on a regular basis. Eating soy a few times a week should be plenty.

If you eat excessive amounts of the cruciferous vegetables such as broccoli, cauliflower, cabbage and Brussels sprouts, you can block thyroid function. Again, a few times a week is plenty.

Many prescription drugs can block or decrease levels of one or both thyroid hormones. The most common include prednisone, barbituates, oral contraceptives, cholesterol-lowering drugs, heparin, phenytoin (Dilantin), propranolol, and aspirin.

### Taking Thyroid Supplements

A New England Journal of Medicine article in 1999 found that patients with true thyroid deficiency generally do better with thyroxine (T4) plus low dose triiodothyronine (T3) supplements than with thyroxine (T4) alone, which is standard conventional medical treatment. This should not be surprising since the normal thyroid gland secretes both hormones. Whatever hormone is deficient, it is always better to supplement the real hormone.

When deciding which thyroid hormone to take, most doctors offer women a choice between Armour thyroid, which is ground up or dessicated cow or pig thyroid (also called USP thyroid), or one of the thyroxines (levothyroxine sodium), with the most common brand names of Levoxyl and Synthroid. If you're not going to use Armour, which supplies both T3 and T4 in approximately the ratio made by the human thyroid, I would recommend that you take both thyroxine (T4) and triiodothyronine (T3), also called liothyronine sodium, with brand names of Cytomel and Triostat.

Most women diagnosed as hypothyroid are at the age when they are still menstruating but are deficient in progesterone. Why not make it routine in medicine to investigate the potential role of progesterone in their thyroid problem? Hormones are not independent of each other. Their functions are interconnected and complex. The role of the doctor is to find the right blend of hormones to create the best possible balance of all of them, including progesterone, for each individual patient.

Bunevicius R, Kazanavicius G, Zalinkevicius R, and Prange AJ, Jr. Effects of thyroxine as compared with thyroxine plus triiodothyronine in patients with hypothyroidism. NEJM 1999; 340: 424-429.

For more details about thyroid function and hormone balance, please read the 2004 edition of "What Your Doctor May Not Tell You About Menopause" by Dr. John R. Lee.