



BRISTLECONE

Inclusive Family Fitness

"HYPOTHYROIDISM"

EUTHYROID SYNDROME

THYROID, it's the great mystery for millions! Fatigue, poor memory, dry skin, weight gain, headaches, hair loss, depression, nervousness, joint & muscle pain, cold hands and feet, swelling, constipation ...and the list could go on. Yet, according to recent studies, nearly 8 million people with low thyroid (hypothyroidism) go undiagnosed. ***In fact many scientists, researchers and physicians believe that up to 40% of the US population suffers from low thyroid function!***

OK, if the symptoms are clear, why the confusion and lack of diagnosis? The answer seems to be, ***Euthyroid Syndrome.***

Euthyroid is a medical term for patients who have a normal blood thyroid test, but have all the classic symptoms associated with hypothyroidism.

Euthyroid patients typically have a metabolic difficulty converting T4 into the active T3. The blood work looks normal, but due to dysfunction with conversion into the active hormone, the patient will be suffering from

TSH, T4 & T3...

obvious hypothyroid.

This also explains why many thyroid patients are prescribed synthetic thyroid hormones, like Synthroid which only contains T4, and they do not feel any better. ***It's the bio-active T3 that they're missing.***

The thyroid gland is shaped like a butterfly and is located in the lower front part of the neck. It is responsible for secreting the thyroid hormones.

These hormones travel through the blood and help cells convert oxygen and calories into energy. The thyroid hormones control the metabolism.

The brain controls the pituitary gland's production of TSH (thyroid stimulating hormone). TSH then stimulates the thyroid to produce T4. T4 is then converted into T3. This conversion happens within the cells.

T3 is vital for life; it is 4x more active than T4. ***The body must have T3.*** Survival is possible without T4, but not without T3.

DON'T WAIT!

Thyroid blood tests measure how much thyroid hormone (T4, T3, TSH) is in the bloodstream, one second, out of one minute, out of one hour. However, thyroid hormones, especially T3, are not biologically active within the bloodstream. ***The blood is a transit system; the thyroid hormones only become active once inside the cell.*** In the typical blood thyroid test, the physician will wait for an elevated TSH level which would indicate low levels of T4 & T3.

However, when the thyroid dysfunction is secondary, not primary, the secretion of TSH from the pituitary/hypothalamus is usually within the normal range, .5 - 3.04 mIU/L. ***The problem, rather, is in the secondary conversion of T4 into the bio-available T3 within the cell.***

There are numerous secondary dysfunctions affecting the T4/T3 conversion and cellular availability, among them are estrogen dominance, elevated cortisol and insulin resistance. For example, cortisol literally blocks the T3 production, and unopposed estrogen causes the body to "bind up" available T3.



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*Help, like food and wine, is sweetest
when it is most needed!
-Benjamin Disraeli*

THE BARNES THYROID TEST

Dr. Broda Barnes was the first to prove that a low basal body temperature was associated with low thyroid. Dr. Barne's initial study was published in 1942; it tracked 1,000 college students in order to prove that monitoring body temperature for thyroid function was a valid, if not superior, approach to the other blood thyroid tests.

His testing protocol included taking the temperature for 10 minutes, with a mercury-like thermometer, before getting out of bed in the morning. The temperature was recorded for 5 consecutive days, and the results were averaged. A reading below 98 strongly suggests hypothyroid.

If you suspect you have a thyroid dysfunction, you may want to consult your doctor for further testing. If your TSH is above 3.04, it is likely he/she will prescribe Synthroid or Levothyroid.

TRY IODINE...

These pharmaceuticals contain synthetic T4. If the body is having difficulty with the T4/T3 conversion, these drugs may not help. Armour Thyroid, which is a combination of both T4 & T3, may work better.

However, if blood tests come back normal, or there's difficulty getting the doctor to understand the symptoms, an over-the-counter thyroid product may be the answer.

Natural iodine is a powerful trace element essential for optimal thyroid function.

Iodine's primary biological role lies in the raw production of T4 & T3. These hormones contain atoms of iodine; the thyroid gland absorbs the iodine for optimal production. People eating a low sodium diet, vegetarians, and/or those who exercise vigorously, are often iodine deficient. Frequent dieting can also cause symptoms of low thyroid and iodine deficiency.

Thyroid glandular supplements also work well to stimulate low thyroid function. Thyroid desiccated glandular, derived from the glands of pigs or cows, has been used since the earliest treatment of hypothyroidism.

TAKE YOUR TEMP!

Dr. Barnes used Armour Thyroid (harvested pig thyroid glands), which was the original thyroid prescription medication before synthetic medications, like Synthroid, were introduced.

Thyroid glandular supplements are still available over-the-counter. Since these thyroid glandular tissue concentrates contain T4 and T3, they can be used as a first line of treatment for low, to moderate low, thyroid dysfunction. *Glandular supplements are not easy to find.* Most manufacturers shy away from selling thyroid glandular products. There can be a concern over the FDA regulation of products containing patented drug ingredients. However, two excellent sources for glandular supplements include: *American Biologics* and *Biotics Research*. Selenium is also a powerful supplement proven to aid the conversion of T4 into T3.

And lastly, try keeping a thermometer at your bedside; you may be one of the 40% with symptomatic hypothyroid.

Happy Thanksgiving!
~~~~~Kelly & Julie~~~~~