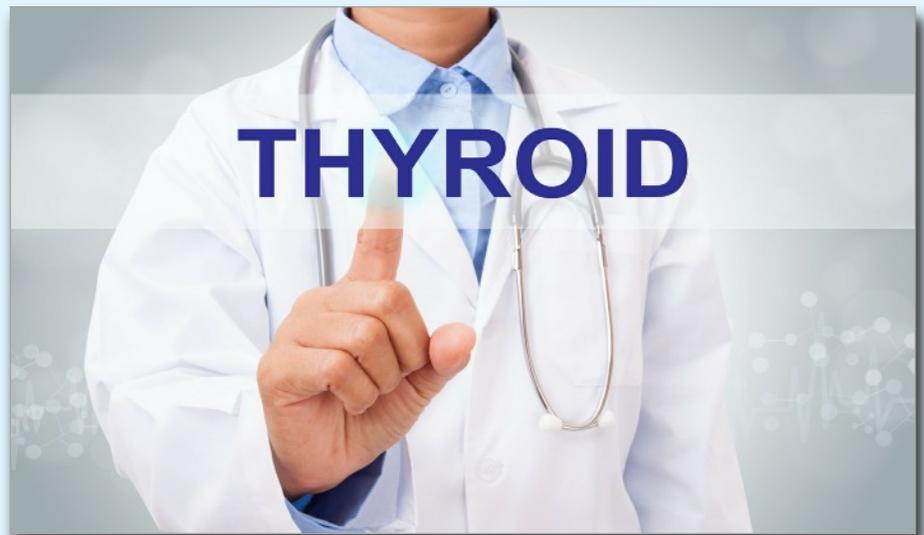


## Fine Tuning Thyroid Symptoms

*"Here are some updated adjustments to calibrate thyroid dysfunction pertaining to metabolic syndrome, leptin, testosterone & growth hormone."*

Fine tuning thyroid symptoms can be challenging because so many factors can down regulate its effectiveness. Remember that optimal thyroid function is a prerequisite for optimal mitochondrial growth and health. Regular viewers know we have covered thyroid function in the past but here are some updated adjustments Dr. Eidenier kindly shared to calibrate thyroid dysfunction pertaining to metabolic syndrome, leptin, testosterone and growth hormone.

Thyroid Dysfunction and Metabolic Syndrome: Metabolic syndrome or insulin resistance is accompanied by a reduction of T-4 to T-3 conversion, resulting in T-3 insufficiency at the cellular level. Elevated insulin will also decrease TSH levels, thereby making TSH a poor thyroid marker with metabolic syndrome. Clinically, iodine (Iodizyme-HP, 1/2 to 1 tablet daily; GTA, 1 tablet daily along with Celtic sea salt; and 200 mcg of seleni-



um) and Meda-Stim, 1 bid, will generally overcome the reduced peripheral T-3 insufficiency caused by metabolic syndrome.

Thyroid Dysfunction and Leptin: Leptin is a major regulator of weight. As weight is gained leptin is secreted by the hypothalamus to signal that the energy stores are sufficient. The leptin should then cause a reduction in hunger, increased basal metabolic rate, etc. Research indicates that many patients that have trouble losing weight have leptin resistance. Leptin resistance is

seen by the body as starvation caused by or resulting in reduced T-3 and a reduction in TSH. Many clinicians mislabel the reduction in TSH as thyroid hyperfunction with the confusing decrease in T-3 as seen with thyroid hypofunction. When leptin levels are above 10 with dieting and no weight loss occurs, leptin resistance is present.

The core issue or locus is frequently reduced intracellular T-3 levels, especially if the reverse T-3 is increased. This scenario is similar to that seen with very low calorie diets; the

thyroid believes you are trying to kill yourself so it lowers the T-4 to T-3 conversion, resulting in a reduced basal metabolic rate, to help maintain life. The therapy is similar to the thyroid-metabolic syndrome we just discussed: Iodizyme-HP, GTA, Meda-Stim and Selenium.

Thyroid Dysfunction and Testosterone: Decreased testosterone can result in decreased conversion of T-4 to T-3 resulting in decreased tissue levels of T-3. Generally those patients who are obese, diabetic or have metabolic syndrome, again a form of insulin resistance will have decreased testosterone that further suppresses T-4 to T-3 conversion. Consider the therapy we've discussed for thyroid-metabolic syndrome (Iodizyme-HP, GTA, Meda-Stim and Selenium) but make sure to rule out decreased progesterone with decreased testosterone, whether male or female. Consider b-Vital at 1 tid to increase testosterone.

Thyroid Dysfunction and Human Growth Hormone (measured with IGF-1): Human growth hormone (HGH) insufficiency reduces 5-deiodinase and subsequent conversion of T-4 to T-3. Here's a clinical pearl. Correction of the decreased HGH will generally correct the thyroid issue. For those of us that can't or don't want to prescribe HGH due to the high cost, consider Cytozyme-PT/HPT at 2-3 bid, and Gammanol Forte w/FRAC at 3 BID and 2 at bedtime as this therapy has worked consistently to increase HGH.

There's a link on this page to a condensed copy of a recently published article, Degree of peripheral thyroxin deiodination, frailty, and long-term survival in hospitalized older patients. Dr. Eidenier shared with me that "Although the article speaks to older pa-

tients who were hospitalized, we can assure you we have often found this problem in younger patients who had T-4 and T-3 values within the laboratory range.

Under conversion of T-4 to T-3 is a commonly missed finding in both allopathic and alternative medicine. We will not belabor the context, methods and results of the attached study; however, the conclusion indicated a strong association between T-4 to T-3 conversion and frailty and as an independent marker of survival even in patients with supposed "laboratory normal levels of free T-3". Meda-Stim by Biotics Research Corporation was produced to address the under conversion of T-4 to T-3.

Symptoms of a subclinical thyroid include: obesity, decreased temperature, reduced initiative, sensitivity to cold, scaly or dry skin, tinnitus, reduced blood pressure, impaired hearing, constipation, loss of outside portion of the eyebrows, headaches in the a.m. that wear off as the day goes on, depression, muscle cramps, myxedema, left-handed and/or B-12 / folate anemia. If your patients have four or more of any of these symptoms, a sluggish thyroid can be a contributing cause.

The application of some of the principles covered here can change someone's life. Dr. Eidenier has literally reviewed tens of thousands of blood chemistry reports over the years and teaches a weekend class on the therapeutic values. I've provided a link to the right for more details about his class, and also a link to a Tuesday Minute covering a more expanded understanding of T4-T3 conversion.

Thanks for reading this week's Tuesday Minute, and I'll see you next Tuesday.