

Last week we talked about how hormones are regulated in the body. I gave an example of the Thyroid hormone system. Here, again, to refresh your memory: The hypothalamus senses more thyroid hormone is needed so it tells the pituitary. The pituitary sends an order for thyroid hormone called Thyroid Stimulating Hormone or TSH. The thyroid gland receives the order and releases a bunch of T4 (the less active form) and a small amount of T3 (the more active form). T4 is coupled with (TBG) Thyroid Binding Globulin and it is sent out into the bloodstream. (Without a binding globulin the hormone would be immediately used so it would not reach its target). T4 and its chaperone then travel to target cells, mostly in the liver where the T4 is separated from the TBG leaving the T4 in its “FREE” form. It can then be converted to the more active T3 so it can do its job. When there is enough T4 in the blood the hypothalamus recognizes this and will then tell the pituitary to slow down or stop the orders for thyroid hormone to be released.

Most often in conventional medicine only TSH is tested. If the TSH is too high then your Thyroid is hypo, or underactive. If TSH is too low then your Thyroid is hyper, or overactive. The insurance companies pay for TSH testing and believe that is all that is needed to adequately treat people. (Due to space constraints I'll only be discussing hypothyroid issues. (You can contact me if you'd like to discuss hyperthyroid conditions.

In recent years the testing of “Free” T4 has become more prevalent in conventional medicine. (Years after we in “alternative” health care have been testing for it.) The use of Free T4 plus TSH to evaluate the Thyroid has helped more women who in the past would not have had satisfactory results but using these tests are still very limiting. A big issue is that the “normal” range of TSH on lab tests is usually between 0.5 and 4.5 or 5.5. That means that you would not even be considered as having a problem if your TSH was between that range despite having any or all the symptoms of hypothyroidism. (Dry skin & hair, brittle nails, overweight/ hard to lose weight, fatigue, poor sleep, depression, menstrual/ menopause problems, constipation sometimes alternating with diarrhea.) The conventional philosophy is- with hypothyroid give synthetic thyroid hormone and bring the TSH down and the problem is solved.

Unfortunately, despite the TSH coming into “normal” range people may get a bit better but are often still suffering with the symptoms since the lab test is being treated and not the patient. I have had patients who had TSH values of 2.5 and still had symptoms. When we addressed other issue the patients felt better and decreased their need for Thyroid hormone because we were addressing the cause and making their Thyroid glands work better.

Other tests can give a more complete picture so the core problems may be addressed. There can be problems converting T4 into T3. There can also be problems with not having enough “Free” or unbound T4 or T3 so the hormones do their jobs inefficiently. These problems are sometimes due to nutritional deficiencies or other hormonal imbalances as all hormones have effects on other hormones. For instance, when a woman's estrogen levels change it can change the amount of Thyroid Binding Globulin and change the “Free” T4 levels. Another, more complex issue occurs when the target cells themselves limit access to the hormone. This often happens when a person is taking external hormone. The cells are exposed to higher levels of circulating hormone than they were used to and the cell receptors or doorways used by the hormone shut down making the hormone replacement less effective. Another issue that deals with the body making the hormone less effective is a more serious issue know as Hashimoto's Autoimmune Thyroiditis. It is where the body sees the thyroid gland and hormone as an enemy and attacks. This causes the thyroid to work poorly if at all. Stress, nutritional and Adrenal imbalances can also cause a conversion of T4 to another hormone called “Reverse T3” which worsen hypothyroid symptoms.

All of these things can be dealt with in most cases but unfortunately the tests needed are not being done except by some broad-minded MDs, Endocrinologists and alternative practitioners. A complete panel for the Thyroid should include TSH, Free T4, T3 uptake (this is inversely related to Thyroid Binding Globulin), Free T3 and Reverse T3 are nice to have and Anti-Thyroid antibodies and TPO peroxidase will tell if there is an autoimmune condition. Iodine status testing should also be performed.

Just be aware that there are more tests and treatments out there than being offered by

conventional medicine or paid for by your insurance. If you want an opportunity to get better you should make sure you are getting the best care whether or not insurance pays for it. Anyway, next week we'll hear about the Adrenals and how it affects stress, sleep, moods, etc. Until then... It's your life. It's your health! (You decide whether you're worth the investment!)

Doc Visconti's office is located near the Citrus Tower. If you have any questions regarding this or any other health related topics, please contact him on his website at WWW.DOCVISCONTI.COM