

## Wilson's Thyroid Syndrome

When all the blood work comes back “normal”...what next? Wilson's Thyroid Syndrome was identified by Dr. Wilson. He observed that many patients are experiencing hypothyroid (low thyroid) like symptoms, but all blood tests are normal. Some symptoms of low thyroid include: cold intolerance; weight gain; fluid retention in the hands, ankles, and around the eyes; skin is dry, coarse, and wrinkled; hair is dry and thinning; nails are soft, splitting, and brittle; physical and mental fatigue; thinning of lateral one-third of eyebrows; voice is hoarse and speech is slow; and facial expression is dull.

The explanation for this low thyroid-like picture with normal labs is found outside of the thyroid gland. It is the body's inability to convert T4 to T3. First, your thyroid gland produces protein structures---T4 and T3---that “turn on” and regulate systems throughout your body. However, T3, the active form of this substance, is mostly produced outside the thyroid gland in the tissues of the body. This is accomplished by the enzymatic deiodination of T4. If there is a problem with this conversion, your thyroid “messengers” are not able to do their job. Thus, you experience the same symptoms as a person whose thyroid gland does not produce enough T4. A person with an under active thyroid gland is diagnosed with a simple blood test and then given thyroid as treatment. However, a person whose thyroid gland is functioning, but doesn't convert the active form of thyroid will have normal blood work and will often be turned away without any form of treatment.

Why does this syndrome occur? Well, the process is complex and technical. However, essentially the condition is brought on by stress! Stress, such as childbirth or the death of a loved one, can especially bring on the symptoms. Around 80% of Wilson's Thyroid Syndrome(WTS) patients are women. Also, WTS appears to be more common in patients whose ancestors survived famine(e.g. Irish and American Indian).

How is WTS diagnosed? A patient's personal history with physical exam are key diagnostic tools. First, if someone appears to have any of the signs of low thyroid, a simple blood test can determine if the thyroid gland is functioning or not. If the labs are normal, than WTS is considered. Second, a person has to have consistently low basal body temperature, which is taken in the morning upon waking and throughout the day. Third, the patient responds to a trial run of T3 therapy.

T3 therapy is the method used to treat Wilson's Thyroid Syndrome. In most cases this therapy, which is relatively easy for a patient to do, can reverse the problem of T3 conversion and restore a person to good health. This means a person feels “good” again, without any on going treatment. The only time a patient who has recovered might relapse is with intense stress, which would require additional T3 therapy.