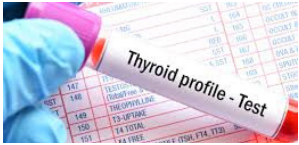




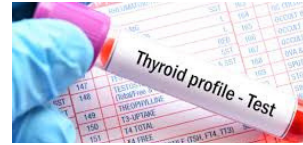
# Functional Nutrition Working Group Newsletter

July 15, 2022

Interested in Learning More about the FNWG?  
Contact Linda Hoffman at [pca@pennchiro.org](mailto:pca@pennchiro.org)



## Lab of the Month Thyroid Panel



**Basic Thyroid Panel:** will generally include a TSH, T3, T4, and sometimes free levels of T3 and T4, and uptake.

**Comprehensive Thyroid Panel:** will include the basic panel plus reverse versions of T3, T7, and antibodies specific to the thyroid such as TPO and TSI.

### What to look for: Central vs. Peripheral regulation

**Central:** function involves the hypothalamus, pituitary, and thyroid axis.

**Peripheral:** hormone regulation of T4 is converted to T3 in the liver, kidneys, and lungs.

What to observe with blood levels:

- **Primary Hypofunction**—TSH elevated, T3 and uptake will be decreased, T4 will be decreased
- **Hypofunction secondary to pituitary hypofunction**—TSH will be decreased, T3 and uptake are generally low to normal,
- **Hypofunction secondary to Adrenal Hyperfunction**—TSH generally normal, T3 and uptake can be normal, cortisol will be increased throughout the day, reverse T3 will be increased.

## Thyroid Antibodies

- Antithyroid Microsomal/Thyroid Peroxidase (TPO) - usually elevated in patients with Autoimmune Thyroiditis (Hashimoto's).
- Antithyroglobulin antibodies—may also be elevated in patients with Autoimmune Thyroiditis (Hashimoto's).
- Thyroid Stimulating Immunoglobulins (TSI) - can be seen with Grave's disease and likely cause of hyperthyroid.

### CONTACT US

The FNWG continues to work on seminars and educating our members. We have received many requests and interests about the group. If you have any seminar requests or interests please contact us at [drgraydc@gmail.com](mailto:drgraydc@gmail.com).

THANK YOU!