Thyroid Markers in Blood Test

TSH (Thyroid Stimulating Hormone) or Thyrotrophin- is released by the pituitary gland. TSH increases when T4 drops, and TSH decreases when T4 rises.

Functional Range: 1.8-3.0 mU/L Typical Lab. Range: 0.5-5.5 mU/L

Total Thyroxine (TT4)- measures both bound and unbound T4 levels.

Functional Range: 6-12 ug/d Typical Lab. Range: 5.4-11.5 ug/d

Free Thyroxine Index (FTI)- measured by multiplying TT4 levels by the T3 uptake and determines how much active T4 is available

Functional Range: 1.2-4.9 mg/dl Typical Lab. Range: 4.6-10.9 mg/dl

Free Thyroxine (FT4)- measures the amount of free, or active, T4 in the blood. Free T4 is high with hyperthyroidism and low with hypothyroidism.

Functional Range: 1.0-1.5 ng/dL Typical Lab. Range: 0.7-1.53 ng/dL

Resin T3 Uptake- measures the amount of sites for active or unbound T3 to bind with proteins. The more binding sites open on the proteins, the lower the resin uptake result will be, and vice versa.

Functional Range: 28-38 md/dl Typical Lab. Range: 24-39md/dl

Free Triiodothyroxine (FT3)- measures free T3 hormones and is the best marker for measuring active thyroid hormones available to thyroid receptor sites.

Functional Range: 300-450 pg/mL Typical Lab Range: 260-480 pg/mL

Reverse T3 (rT3)- measures the amount of reverse T3 that is produced. The production of rT3 takes place in cases of extreme stress, such as major trauma, surgery or severe chronic stress.

Functional Range: 90-350 pg/ml Typical Lab. Range: 90-350 pg/ml

Thyroid-Binding Globulin (TBG)- measures the amount of proteins in the blood that transport thyroid hormones to the cells.

Functional Range: 18-27 ug/dl Typical Lab. Range: 15-30 ug/dl

Thyroid Antibodies- test for Autoimmune thyroid condition, could be either hypothyroidism or hyperthyroidism.

Thyroid Peroxidase (TPO Ab)- is an enzyme responsible for the production of thyroid hormones. Elevated levels indicate Hashimoto's Disease.

Thyroid stimulating immunoglobulin (TSI)- test used to identify hyperthyroidism or Graves' disease

Information gathered from the book: Why do I still have Thyroid symptoms? When my lab tests are normal By: Datis Kaharrazian, DHSc, DC, MS