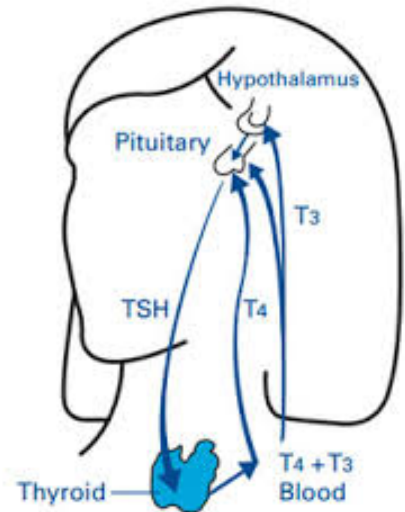
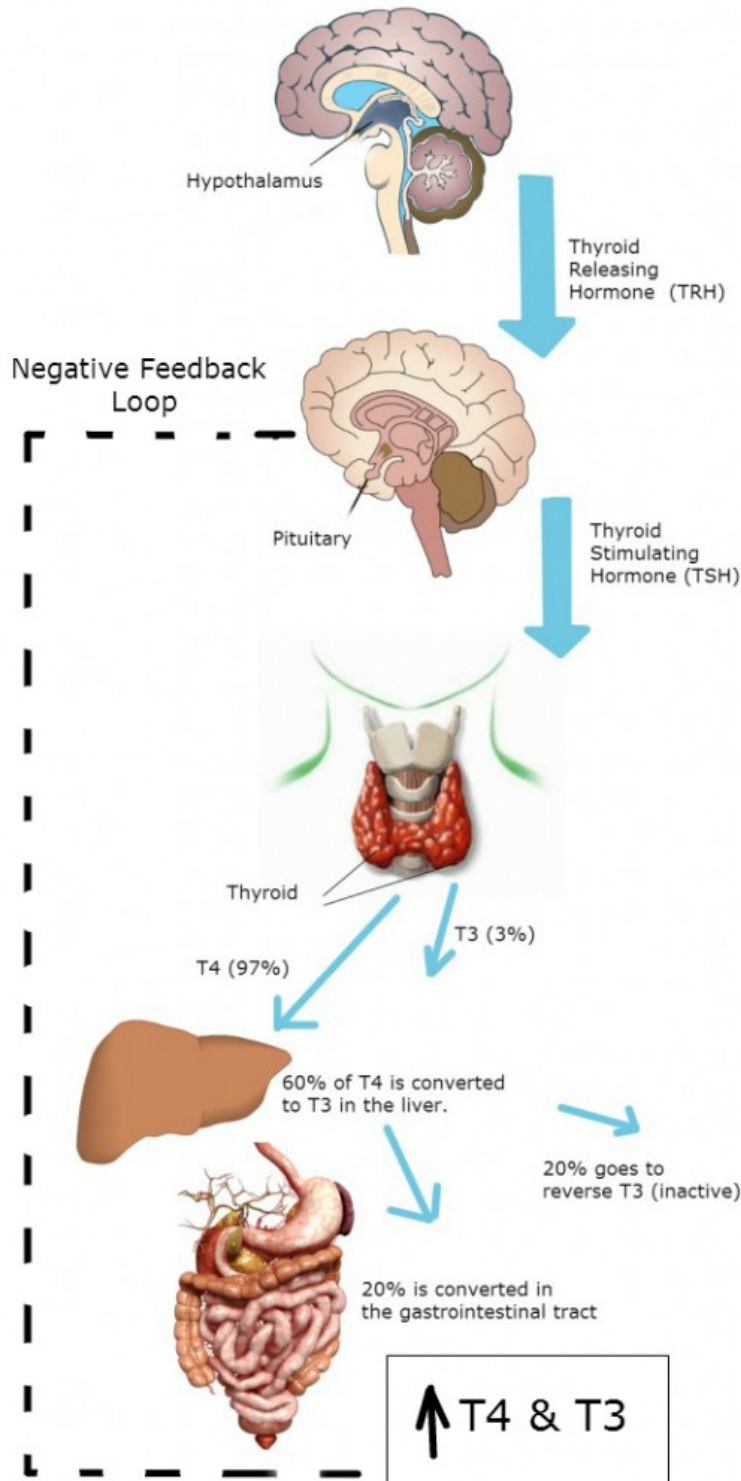


Thyroid Blood Test HANDBOOK



THYROID BLOOD TESTS

In order to understand your thyroid blood tests, it's helpful to understand how the thyroid is stimulated to produce its hormones (T4, T3). The following image should help:



A negative feedback loop tells the brain that too much or too little T4 and T3 are circulating in the body.

TRH and TSH output are then adjusted accordingly.

If you were to get a blood panel drawn by your doctor, these are the thyroid markers you would be looking for...

TEST #1

Thyroid Stimulating Hormone (TSH)

Normal values range from 0.4 - 4.0 milli-international units per liter (mIU/L).

However, most GOOD doctors will realize that a range of **0.3 to 1.5 mIU/L is a much healthier TSH range.**

A high TSH result may mean that:

- You have an underactive thyroid gland that is not responding adequately to the stimulation of TSH due to some type of acute or chronic thyroid dysfunction.
- There is a problem with the pituitary gland, which is producing unregulated levels of TSH

A low TSH result may indicate:

- An overactive thyroid gland (hyperthyroidism)
- Excessive amounts of thyroid hormone medication if you are being treated for an underactive (or removed) thyroid gland
- Damage to the pituitary gland that prevents it from producing adequate amounts of TSH

NOTE: Whether high or low, an abnormal TSH indicates an excess or deficiency in the amount of thyroid hormone available to the body, but it does not indicate the reason why. An abnormal TSH test result is usually followed by additional testing to investigate the cause of the increase or decrease.

TEST #2

Free Thyroxine, or FT4 (Free T4)

Clinical Levels: 0.82 - 1.77 ng/dL (optimal = 1.2 - 1.4 ng/dL)

Free T4 is a more direct measure of T4 (Thyroxine) concentration. Most of the thyroxine (T4) in the blood is attached to a protein called thyroxine-binding globulin. Less than 1% of the T4 is unattached, or free. Free thyroxine affects tissue function in the body, but bound thyroxine does not, therefore free T4 is the more sensitive test.

High free T4 = hyperthyroidism.

Low free T4 = hypothyroidism.

TEST #3

Free Triiodothyronine, or Free T3

Clinical Levels: 2.0 - 4.4 ng/dL (optimal = 3.2 - 4.4 ng/dL)

Free T3, bioavailable Triiodothyronine (T3), confirms the diagnosis of thyroid disease. T3 is the metabolically active form of thyroid hormone. Most of the T3 in the blood is attached to thyroxine-binding globulin with less than 1% of the T3 in the free, unattached form. T3 has a greater effect on the way the body uses energy than T4.

Low T3 = hypothyroidism

What It All Means

TSH	FREE T4	FREE T3	POSSIBLE INTERPRETATION
High	Normal	Normal	Mild (subclinical) hypothyroidism
High	Low	Low or normal	Hypothyroidism
Low	Normal	Normal	Mild (subclinical) hyperthyroidism
Low	High or normal	High or normal	Hyperthyroidism
Low	Low or normal	Low or normal	Non-thyroidal illness; pituitary (secondary) hypothyroidism
Normal	High	High	Thyroid hormone resistance syndrome (a mutation in the thyroid hormone receptor decreases thyroid hormone function)

BONUS BLOOD TESTS

Reverse T3: if too much, then it could be blocking T3 receptors on the cells. Goal is for you to be in “bottom of half of normal range”.

Thyroperoxidase (TPO): present in autoimmune thyroiditis (Hashimoto’s or Graves disease). Goal is for you to “be within normal range”.

Antithyreoglobulin Antibodies (ATG): Goal is to be within normal range

SELF-TEST

Sub-Clinical Hypothyroidism

Very often, hypothyroidism will not be detected by a blood test. In the case that you feel you have a sluggish thyroid that has not been diagnosed through a blood test, you can use the following “morning temperature” test to see what’s going on.

How to Do The Test:

Normal body temperature at rest (taken in the morning) is between 97.8 F (36.56 C) and 98.2 F (36.78 C). Normal active temperature taken during the day should be 98.6 F (37 C).

If the average of the three daily readings, in the morning, over a period of 10 days falls below 98.6 F (37 C) then you may suspect low thyroid function.

Action Steps For Treating Low Thyroid Function

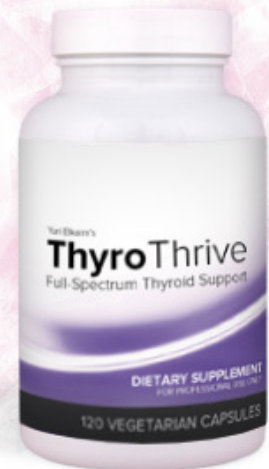
Effective treatment occurs in THREE stages:

Stage 1: Lifestyle: Eat a diet that is rich in anti-inflammatory foods (avoid gluten and soy). Manage stress. Limit exposure to heavy metals (especially mercury and lead). Ensure 7-9 hours of good sleep per night. Remain active.

Stage 2: Nourish your thyroid with “super nutrients” required for proper thyroid function, which includes the *right* levels of L-tyrosine, iodine, and selenium.

=> [Use ThyroThrive for the highest quality thyroid nutrition](#) <=
[\(CLICK HERE TO LEARN MORE\)](#)

Supplement Facts			
Serving Size: 2 capsules			
Servings Per Container: 60			
Amount Per Serving	% Daily Value	Amount Per Serving	% Daily Value
Vitamin A (as Palmitate)	2000 IU 40%	Chromium	50 mcg 40%
Riboflavin (Vitamin B-2)	5 mg 290%	(TRAACS® Chromium Nicotinate Glycinate Chelate)	
(as Riboflavin-5-Phosphate)		N-Acetyl-L-Tyrosine	200 mg *
Iodine	100 mcg 70%	American Ginseng	200 mg *
(as Potassium Iodide)		(Panax quinquefolius)(root)	
Zinc	25 mg 170%	[standardized to contain 5% ginsenosides]	
(TRAACS® Zinc Glycinate Chelate)		Forskolin Extract	50 mg *
Selenium	50 mcg 70%	(Coleus forskolii)(root)	
(as Selenomethionine)		[standardized to contain 20% forskolin]	
Copper	500 mcg 25%		
(TRAACS® Copper Glycinate Chelate)			
Manganese	5 mg 250%		
(TRAACS® Manganese Glycinate Chelate)			



Stage 3: If (and only if) stages 1 and 2 do not produce measurable results after 2 to 3 months, then you may want to consider a natural thyroid replacement therapy as bio-identical thyroid hormones. Nature-Throid is likely your best option as it's a complete hormone (not fractionized like many pharmaceuticals).