



THYROID TEST REPORT

Patient Name Jane Doe	Patient ID JD731122	Non-smoker	BMI 22.5	Waist 29 in
DOB 11/22/1973 (43 yrs)	Report Date and Time 3/10/2017 17:00	Medications Levothyroxine Oral 100 microgram 1/day, used for 11 Years		
Gender F	Received Date and Time 3/6/2017 11:30	Provider ID: 0000 Doctor T 17387 63rd Ave Lake Oswego, OR 97035 Ph: xxx-xxx-xxxx		
Systolic blood pressure 83 mmHg	Specimen Collection Date and Time Blood Spot 3/1/2017 6:00			
Menopausal Status Premenopausal	Hours of Fasting 7.00			
	Family History of Heart Disease Yes Diabetes Yes Cancer Yes			

YOUR TEST RESULTS

Normal Range Low or High Range Your Levels

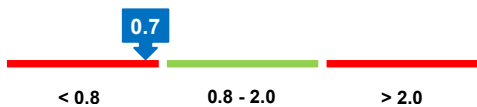
TSH (μIU/mL)



ft3 (pg/mL)



ft4 (ng/dL)



a-TPO (IU/mL)



What do your test results mean?

Thyroid-Stimulating Hormone (TSH):

In primary hypothyroidism, thyroid-stimulating hormone (TSH) levels are elevated. In primary hyperthyroidism, TSH levels are low. The ability to quantitative circulating levels of TSH is important in evaluating thyroid function. It is especially useful in the differential diagnosis of primary (thyroid) from secondary (pituitary) and tertiary (hypothalamus) hypothyroidism. In primary hypothyroidism, TSH levels are significantly elevated, while in secondary and tertiary hypothyroidism, TSH levels are low or normal.

Elevated or low TSH in the context of normal free thyroxine is often referred to as subclinical hypo- or hyperthyroidism, respectively.

T3 (Triiodothyronine), Free:

Normally triiodothyronine (T3) circulates tightly bound to thyroxine-binding globulin and albumin. Only 0.3% of the total T3 is unbound (free); the free fraction is the active form. In hyperthyroidism, both thyroxine (tetraiodothyronine; thyroxine: T4) and T3 levels (total and free) are usually elevated, but in a small subset of hyperthyroid patients (T3 toxicosis) only T3 is elevated.

T4 (Thyroxine), Free:

Free thyroxine (fT4) comprises a small fraction of total thyroxine. The fT4 is available to the tissues and is, therefore, the metabolically active fraction. Elevations in fT4 cause hyperthyroidism, while decrease causes hypothyroidism.

Thyroperoxidase (TPO) Antibodies:

Disorders of the thyroid gland are frequently caused by autoimmune mechanisms with the production of autoantibodies. Anti-TPO antibodies activate complement and are thought to be significantly involved in thyroid dysfunction and the pathogenesis of hypothyroidism. In patients with sub-clinical hypothyroidism, the presence of TPO antibodies, predicts a higher risk of developing overt hypothyroidism, 4.3% per year versus 2.1% per year in antibody-negative individuals. Such patients may be at risk of developing other autoimmune diseases, such as adrenal insufficiency and type 1 diabetes.