

# Identifying and diagnosing thyroid disorders in patients

## Common symptoms of hypothyroidism<sup>1</sup>

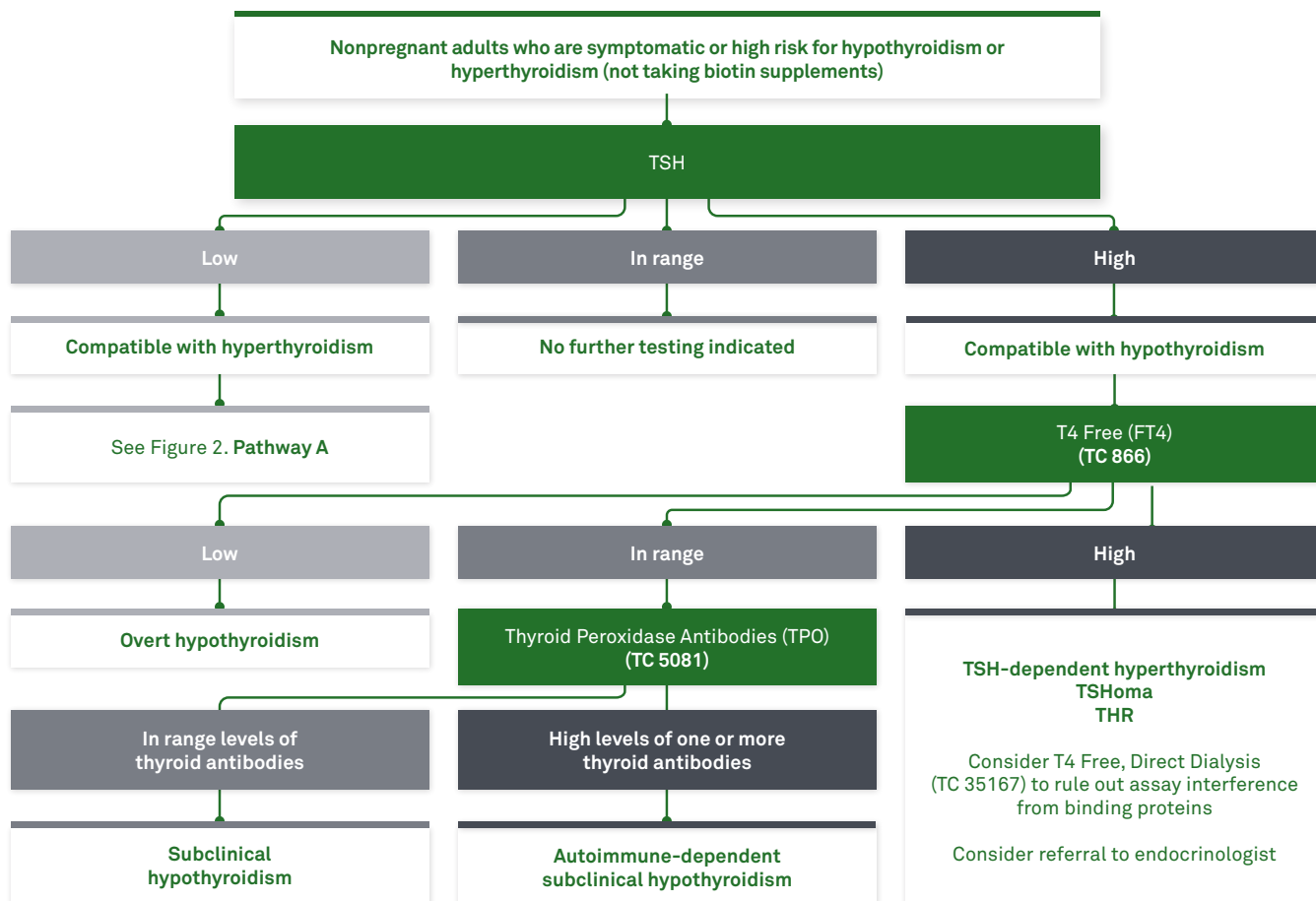
- Fatigue
- Depression
- Thinning hair
- Dry skin
- Weight gain

## Common symptoms of hyperthyroidism<sup>1</sup>

- Increased heart rate
- Anxiety
- Insomnia
- Increased perspiration
- Weight loss

**Figure 1. Testing algorithms for thyroid dysfunction in nonpregnant adults**

Testing algorithms have been identified to help determine the presence and type of thyroid conditions in nonpregnant adults. If thyroid dysfunction is suspected, ordering TSH with Reflex to Free T4 (TC 36127) or Thyroid Cascading Reflex (TC 15102) may facilitate a quicker differential diagnosis.

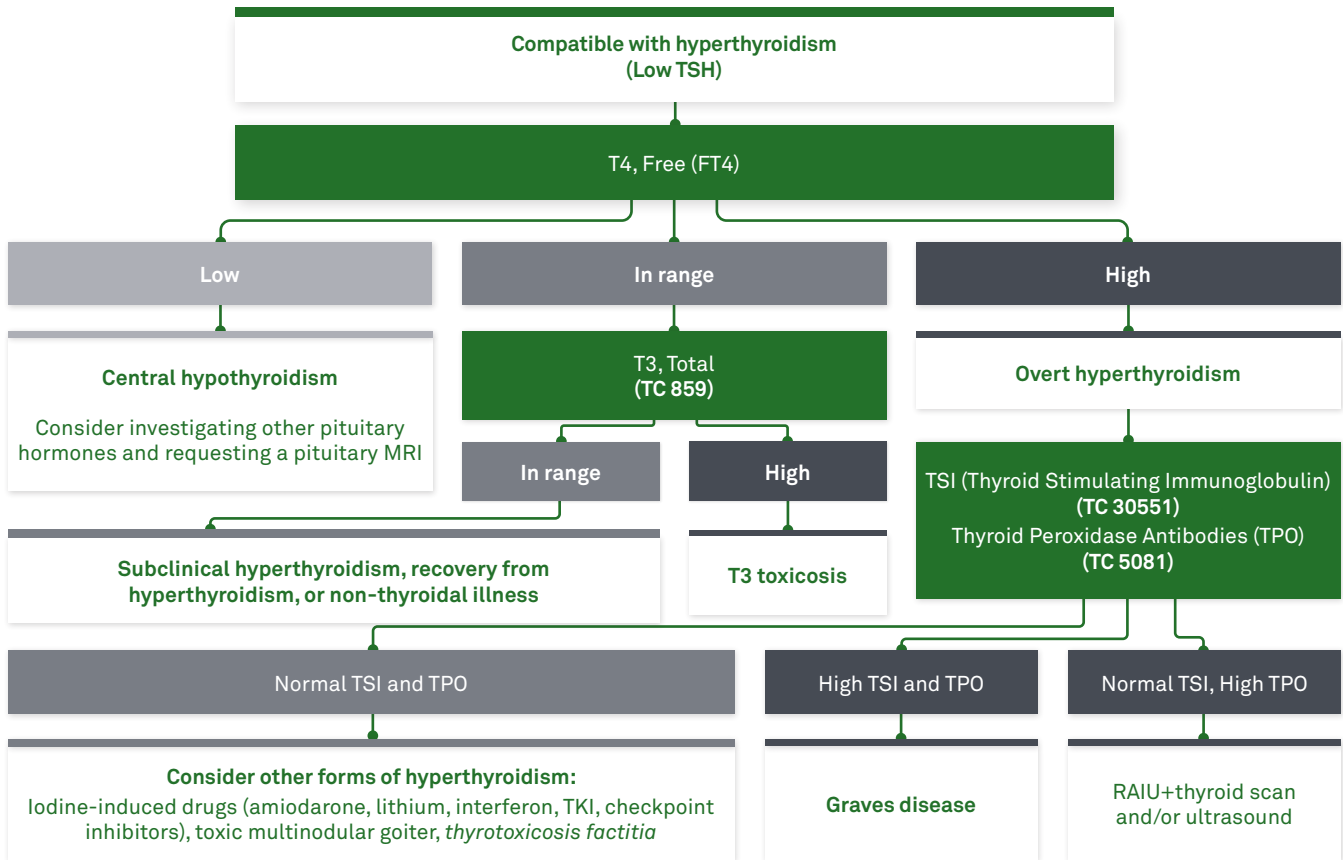


TC, test code; THR, thyroid hormone resistance; TPO, thyroid peroxidase antibodies; TSH, thyroid stimulating hormone; TSHoma, thyrotropinoma.

Always rule out biotin interference. If thyroid dysfunction is suspected, ordering TSH with Reflex to Free T4 (TC 36127) or Thyroid Cascading Reflex (TC 15102) may facilitate a quicker differential diagnosis. See footnote under Pathway A for more information.

This figure was developed by Quest Diagnostics based on references below. It is provided for informational purposes only and is not intended as medical advice. Test selection and interpretation, diagnosis, and patient management decisions should be based on the physician's education, clinical expertise, and assessment of the patient.

**Figure 2. Pathway A, Compatible with hyperthyroidism**



RAIU, radioactive iodine uptake; TC, test code; TKI, tyrosine kinase inhibitors; TPO, thyroid peroxidase antibodies; TSI, thyroid stimulating immunoglobulin.

If hyperthyroidism is suspected, ordering TSH with Reflex to Free T4 (TC 36127) concurrently with total T3 (and antibody tests if thyroid is uniformly enlarged with proptosis) or Thyroid Cascading Reflex (TC 15102) may facilitate a quicker diagnosis.



## Test availability

Quest Diagnostics offers tests and panels for the diagnosis of thyroid dysfunction and patient management.

Test name (component test codes for panels)	Test code	Description
TSH	899	Diagnose hypothyroidism and hyperthyroidism
TSH with Reflex to Free T4 <sup>a</sup>	36127	Diagnose hypothyroidism and hyperthyroidism
T4, Free	866	Diagnose hypothyroidism and hyperthyroidism; monitor LT4 treatment response
T4, Free, Direct Dialysis <sup>b</sup>	35167	
T3, Total	859	Diagnose and monitor treatment of hyperthyroidism
Thyroid Cascading Reflex <sup>a,c</sup> Includes TSH and reflexes. If TSH is abnormal, reflexes to free T4. If TSH is elevated and free T4 is normal or low, reflexes to TPO antibody. If TSH is low and free T4 is normal or low, reflexes to free T3.	15102	Diagnose hypothyroidism and hyperthyroidism, offered as a cascading reflex to expedite diagnosis
<b>Thyroid antibody</b>		
TSI (Thyroid Stimulating Immunoglobulin)	30551	Establish autoimmune thyroid disease (eg, Graves disease)
Thyroid Peroxidase Antibodies (TPO)	5081	Establish autoimmune thyroid disease, such as Graves disease or hashitoxycosis

LT4, levothyroxine; TSH, thyroid stimulating hormone.

<sup>a</sup>Reflex testing performed at an additional charge with an additional CPT<sup>®</sup> code.

<sup>b</sup>This test was developed and its analytical performance characteristics have been determined by Quest Diagnostics. It has not been cleared or approved by the US Food and Drug Administration. This assay has been validated pursuant to the CLIA regulations and is used for clinical purposes.

<sup>c</sup>Panel components (test code) may be ordered separately.



For further information,  
visit [QuestDiagnostics/thyroid](https://www.questdiagnostics.com/thyroid)  
or scan the QR Code.

## References

1. Nussey S, Whitehead S. Chapter 3: The thyroid gland. *Endocrinology: an integrated approach*. Oxford: BIOS Scientific Publishers, 2001.
2. Hennessey JV, Garber JR, Woeber KA, et al. American Association of Clinical Endocrinologists and American College of Endocrinology position statement on thyroid dysfunction case finding. *Endocr Pract*. 2016;22(2):262-270. doi:10.4158/EP151038.PS
3. Chaker L, Razvi S, Bensenor IM, et al. Hypothyroidism. *Nat Rev Dis Primers*. 2022;8(1):30. doi:10.1038/s41572-022-00357-7
4. LeFevre ML, US Preventive Services Task Force. Screening for thyroid dysfunction: US Preventive Services Task Force recommendation statement. *Ann Intern Med*. 2015;162(9):641-650. doi:10.7326/M15-0483

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