



IDEXX Total T4 Testing Guide User Guide

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IDEXX Total T4 Testing Guide



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Canine Hypothyroidism

Dynamic range

0.5–10.0 µg/dL
(6.4–128.7 nmol/L)

Catalyst Total T4 Results

Low	<1.0 µg/dL	(<13.0 nmol/L)
Low Normal	1.0–2.0 µg/dL	(13.0–26.0 nmol/L)
Normal	1.0–4.0 µg/dL	(13.0–51.0 nmol/L)
High	>4.0 µg/dL	(>51.0 nmol/L)
Therapeutic	2.1–5.4 µg/dL	(27.0–69.0 nmol/L)

Canine screening

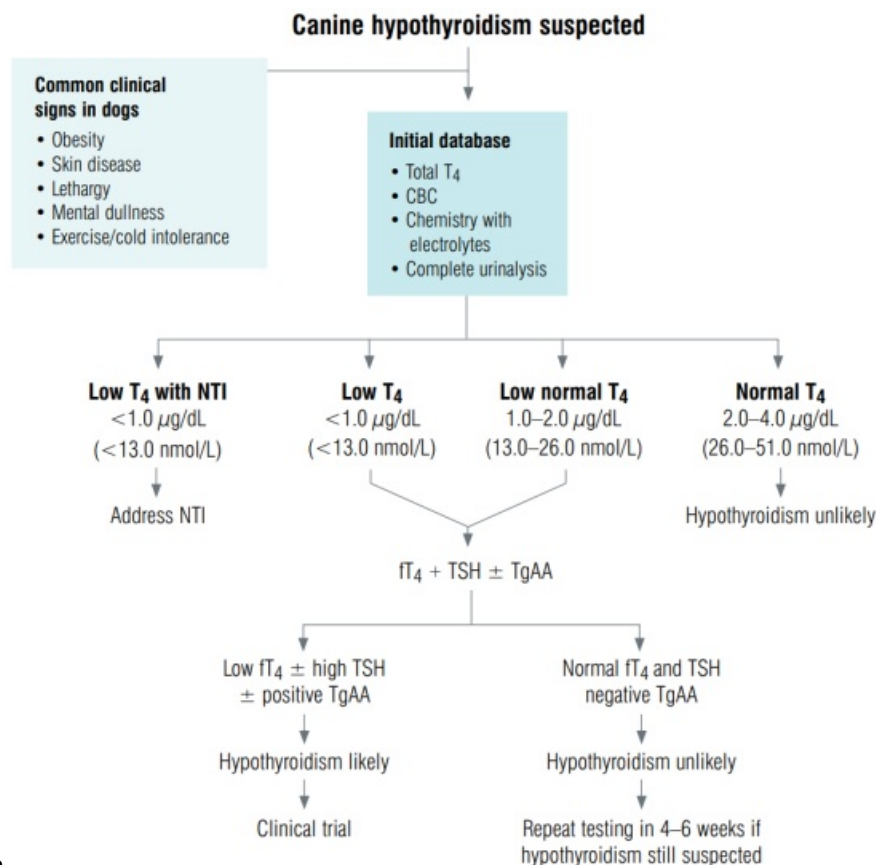
- Dogs with low total T4 (T4) and evidence of nonthyroidal illness (NTI) should have the NTI addressed.
- Dogs with T4 results in the low normal range may be hypothyroid.

In dogs with low or low normal T4 results and with consistent clinical signs, consider one or more of the following to aid in confirming hypothyroidism:

- Free T4 (fT4)
- Endogenous thyroid-stimulating hormone (TSH)
- Possible thyroglobulin autoantibodies (TgAA)

Hypothyroidism therapeutic monitoring

For dogs on thyroid supplement, acceptable 4–6-hour post-pill T4 values will generally fall in the upper end of the reference interval or slightly above.



Algorithm

CBC = Complete blood count

Note: 1 µg/dL is equal to 12.87 nmol/L. A result that falls within the low normal range of the assay should be considered ambiguous

Feline Hyperthyroidism Dynamic range

0.5–20.0 µg/dL

(6.4–257.4 nmol/L)

Catalyst Total T4 Results

Subnormal	<0.8 µg/dL	(<10.0 nmol/L)
Normal	0.8–4.7 µg/dL	(10.0–60.0 nmol/L)
Gray zone in old or symptomatic cats	2.3–4.7 µg/dL	(30.0–60.0 nmol/L)
Consistent with hyperthyroidism	>4.7 7 µg/dL	(>60.0 nmol/L)

Feline screening

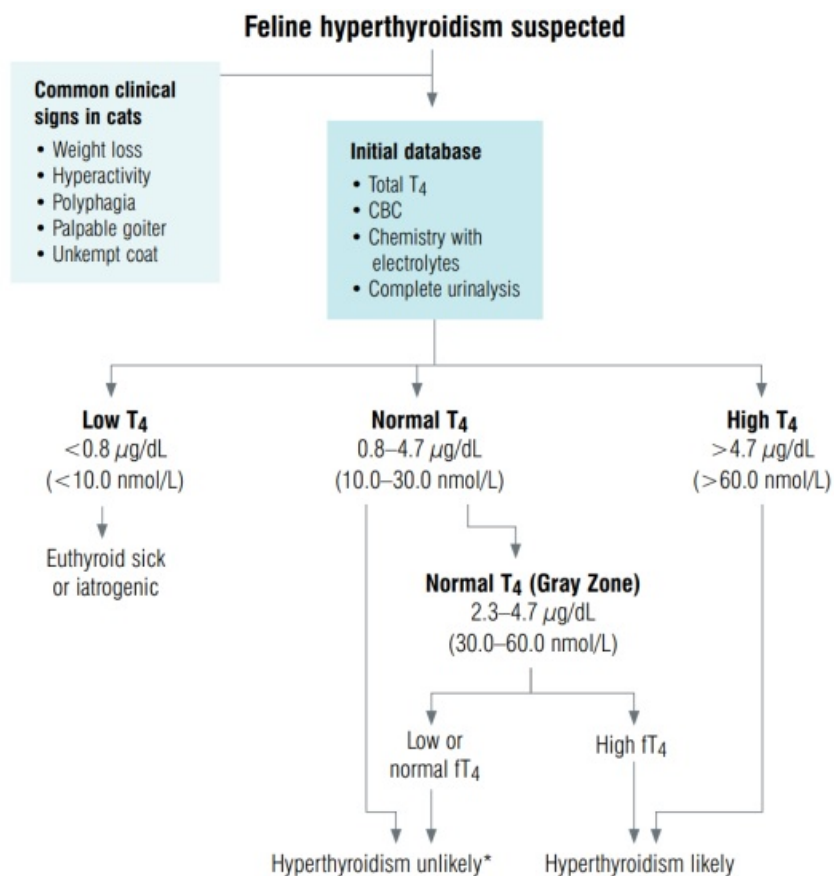
Cats with consistent clinical signs and total T4 (T4) values in the borderline high range (gray zone) may have early hyperthyroidism with a concurrent nonthyroidal illness (NTI). In these cases, consider the following to aid in confirming the diagnosis:

- Free T4 (fT4)
- T3 suppression test
- Radionuclide thyroid imaging

Hyperthyroidism therapeutic monitoring

Following treatment with methimazole (or similar), T₄ values will generally fall within the lower to mid portion of the reference interval.

Algorithm



If strong suspicion of hyperthyroidism still exists, consider retesting in 4–6 weeks or a technetium scan.

CBC = Complete blood count

Note: 1 μg/dL is equal to 12.87 nmol/L. A result that falls within the gray zone of the assay should be considered ambiguous.

Customer Support

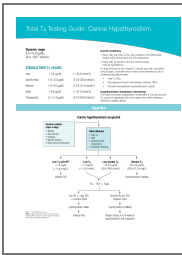
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Documents / Resources



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Total T4 Testing Guide, T4 Testing Guide, Testing Guide

References

-  [Home - IDEXX US](#)
- [User Manual](#)

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