

Thyroid Level Test/Thyroid Profile Tests/Canine Hypothyroidism

- A thyroid level test is a blood test that allows the veterinarian to evaluate the function of the thyroid gland.
- Blood is drawn from the pet and sent to a laboratory for the measurement of thyroid hormone levels.
- In dogs, thyroid testing is most commonly used to diagnose and monitor the treatment of hypothyroidism.
- Diagnosis of hypothyroidism can help your veterinarian alleviate signs of disease such as weight gain, sluggishness, and skin changes.

What Is Thyroid Testing?

A thyroid level test is a blood test that allows the veterinarian to evaluate the function of the thyroid gland. Thyroid tests measure the amount of thyroid hormones in the blood. Thyroid hormones are responsible for the regulation of cell metabolism in the body. The body's metabolism slows down when thyroid hormone levels are low and speeds up when they are too high.

What Is Hypothyroidism?

One of the most common hormonal imbalances in dogs is hypothyroidism, or low thyroid hormone levels. When there is not enough thyroid hormone, several body systems may be affected. Signs of hypothyroidism may be subtle or obvious and can include:

- Weight gain
- Dry skin/excessive shedding
- Hair loss
- Lethargy (sluggishness)/sleeping more often
- Skin darkening/thickening
- Low heart rate
- Heat-seeking behavior due to feeling cold

How Is Thyroid Testing Done?

Thyroid testing is performed during routine blood tests, when your veterinarian suspects a hormone imbalance, or when monitoring of treatment is

needed. A visit to your veterinarian that includes blood work does not have to be stressful for you or your pet. Every effort will be made to keep your pet calm and safe. Blood is drawn by the veterinary team either in the examination room or in a treatment area within the hospital. Your pet will be gently but firmly held still in order for a trained technician or your veterinarian to insert a sterile needle into a vein in one of the legs or the neck. The amount of blood drawn depends on the test or tests being ordered.

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In most cases, the amount of blood needed is very small (1 to 3 teaspoons). The blood is drawn into a syringe, then placed in sterile tubes. In many cases, veterinarians can run common tests in-house and results are known immediately. For more complex tests, the blood is packaged and shipped to a diagnostic laboratory, where the requested tests are performed. In these cases, your veterinarian will call you as soon as the results are available.

Types of Tests

The **total T₄ (TT₄) test** is frequently used as a screening test. This test measures the amount of thyroid hormone that the thyroid gland is producing. When the TT₄ is low, many veterinarians recommend either a **free T₄ test** or a **full thyroid profile** to confirm hypothyroidism and help determine the cause. These tests are also used when the TT₄ level is normal but your veterinarian still suspects hypothyroidism. Your veterinarian may also test for levels

Tests and Procedures

of other hormones (e.g., T3, thyroid stimulating hormone). The TT4 test is usually sent to a diagnostic laboratory.

Once hypothyroidism is confirmed and treatment is started, the TT4 test will be used regularly to determine if the prescribed dose of medication provides enough hormone for your dog's cells to function normally or needs to be adjusted.

Benefits of Testing

Thyroid tests help veterinarians diagnose and treat what can be a debilitating disease. Hypothyroidism shares clinical signs with many other ailments, and thyroid testing can help pinpoint the cause of what are often very subtle symptoms. Proper diagnosis and treatment can restore your pet to his or her best possible health.