Is your dog losing hair? Going bald? Gaining weight? Slowing down? Maybe your dog has a thyroid problem. These are all commonly encountered signs in a dog that has low amounts of thyroid hormone in the blood.

What is thyroid hormone and where does it come from? Thyroid hormone comes from the thyroid gland, which is found in the middle of the neck next to the wind pipe. All organs in the body require thyroid hormone to work correctly. Secretion of thyroid hormone from the thyroid gland is controlled by a small gland at the base of the brain called the pituitary gland. The goal of the pituitary gland is to keep the amount of thyroid hormone constant in the blood stream.

What happens if the amount of thyroid hormone in the blood drops below normal? It depends on whether the drop is transient or permanent. A transient drop in the amount of thyroid hormone in the blood usually does not cause any problems and actually happens a lot in response to sickness. A permanent drop in thyroid hormone causes a disease called hypothyroidism.

Is hypothyroidism common? What causes hypothyroidism in dogs? It depends on whether the dog is a puppy or an adult. Hypothyroidism is common in adult dogs and is caused by destruction of the thyroid gland. The destruction is usually slow and progressive and ultimately leads to a permanent deficiency of thyroid hormone. In many dogs the destruction in caused by a problem involving the immune system. For some reason, the dog’s immune system believes its thyroid gland is foreign and attacks it; an attack which ultimately leads to total destruction of the thyroid gland. A similar disease occurs in people with hypothyroidism and is called Hashimoto’s thyroiditis. Unfortunately, there is nothing that can be done to stop the attack. Hypothyroidism is not common in puppies and is caused by a birth defect that results in failure of the thyroid gland to develop or a birth defect leading to an inability of the thyroid gland to produce thyroid hormone. Puppies with hypothyroidism do not grow properly and are often called dwarfs.
When should I suspect hypothyroidism in my dog? Unfortunately, there are a lot of ways that hypothyroidism can show itself. It just depends on which organ system in the body is affected the most in your dog. Most dogs develop problems with metabolism, the skin or the nerves and muscles. Problems with metabolism include lethargy, sluggish behavior, inactivity, and weight gain. Problems with the skin include thinning of the hair coat, hair loss and balding, especially of the body and tail, development of a dry and brittle hair coat, increased pigmentation of the skin, oily skin, pimples, skin infections, and inflammation of the ear. Problems with the nerves and muscles include weakness, knuckling of the feet, tilting of the head, paralysis of the muscles of the face, and even seizures. Problems with reproduction, the eye, the heart and even behavioral problems such as aggression can also develop with hypothyroidism but these are not very common. The problems of hypothyroidism usually occur in dogs between 2 and 6 years of age although they can occur at any age. The development of signs of hypothyroidism is often gradual and subtle because destruction of the thyroid gland is a slow process, often taking over a year to complete. As a result, owners often unknowingly adapt to their dog’s decreased activity, subtle weight gain or thinning of the hair coat. This creates a challenge for your veterinarian because these signs are often what first lead the veterinarian to suspect hypothyroidism. Many times owners don’t realize how much their dog has changed until after their dog is treated.

What does my veterinarian have to do to determine if my dog has hypothyroidism? The decision to evaluate the thyroid gland will be based on the problems you have identified concerning your dog’s health and your veterinarian’s findings during their physical examination of your pet. If hypothyroidism is suspected, your veterinarian will draw a blood sample to measure the amount of thyroid hormone in the blood. The thyroid hormone that is measured is called thyroxine or T4. If the amount of thyroid hormone is normal hypothyroidism is unlikely and your veterinarian will look for another explanation for the problems that have developed in your dog. If the amount of thyroid hormone is low your veterinarian will begin treatment for hypothyroidism. Sometimes the results of the thyroid hormone test are not definitive. This problem often occurs when there are other illnesses present or when the dog is receiving medications that may affect the level of thyroid hormone in the blood. In these situations, additional
blood tests are needed to clarify whether your dog has hypothyroidism or not. These blood tests are performed by commercial veterinary diagnostic laboratories, the blood samples usually have to be mailed to the laboratory, and it may take several days before the results of the tests are known.

Is hypothyroidism difficult or expensive disease to treat? Hypothyroidism is an inexpensive disease to treat and all of the problems caused by hypothyroidism are reversible, although it may take several months. Treatment involves the oral administration of a synthetic thyroid hormone supplement once or twice a day. Most thyroid hormone supplements have to be given twice a day at approximately 12 hour intervals. However, new products have recently become available that only need to be given once a day. Periodic measurement of the amount of thyroid hormone in the blood is recommended to ensure that the amount of thyroid hormone remains in the normal range. A blood sample is obtained from your dog 4 to 6 hours after the morning administration of the thyroid hormone supplement. This information allows your veterinarian to assess the dose and adequacy of absorption of the thyroid hormone supplement.

Will my dog have a normal life? Yes. Dogs diagnosed with hypothyroidism have an excellent prognosis and most will lead a normal life, if given appropriate amounts of the thyroid hormone supplement.