Levothyroxine
(lee-voie-thye-rox-in)

Description: Thyroid Hormone

Other Names for this Medication: Levosyn®, Levothroid®, Levoxyl®, L-thyroxine, Synthroid®, T4, Thyro-Tabs®

Common Dosage Forms: Veterinary: 0.1 mg, 0.2 mg, 0.3 mg, 0.4 mg, 0.5 mg, 0.6 mg, 0.7 mg, 0.8 mg, & 1 mg tablets; 0.22% powder.
Human: 0.025 mg, 0.05 mg, 0.075 mg, 0.088 mg, 0.1 mg, 0.112 mg, 0.125 mg, 0.137 mg, 0.15 mg, 0.175 mg, 0.2 mg, & 0.3 mg tablets. Compounded dosage forms may be available.

This information sheet does not contain all available information for this medication. It is to help answer commonly asked questions and help you give the medication safely and effectively to your animal. If you have other questions or need more information about this medication, contact your veterinarian or pharmacist.

Key Information

- Used to treat animals that don’t make enough thyroid hormone.
- Dogs require much higher doses than humans. Cat doses may be similar to what an adult human would take.
- Side effects are associated with giving too much of the drug and include fast or racing heart rate, greater appetite with weight loss, thirst and urination, excitability or nervousness, and panting (in dogs). Cats may appear withdrawn or apathetic (uncaring).
- May be given with or without food, but give the same way every day.

How is this medication useful?

Levothyroxine is a thyroid hormone used to treat animals that don’t make enough thyroid hormone. The FDA (U.S. Food & Drug Administration) has approved levothyroxine (Thyro-tabs®) for use in dogs for thyroid hormone replacement therapy. The FDA allows veterinarians to prescribe and use products containing this drug in different species or for other conditions in certain situations. You and your veterinarian can discuss why this drug is the most appropriate choice.

What should I tell my veterinarian to see if this medication can be safely given?

Many things might affect how well this drug will work in your animal. Be sure to discuss the following with your veterinarian so together you can make the best treatment decisions.

- Other drugs can interact with levothyroxine, so be sure to tell your veterinarian and pharmacist what medications (including vitamins, supplements, or herbal therapies) you give your animal, including the amount and time you give each.
- Tell your veterinarian about any conditions or diseases your animal may have now or has had in the past.
If your animal has been treated for the same disease or condition in the past, tell your veterinarian how well the treatment did or didn’t work.

If your animal is pregnant or nursing, talk to your veterinarian about the risks of using this drug.

Tell your veterinarian and pharmacist about any medication side effects (including allergic reactions, lack of appetite, diarrhea, itching, hair loss) your animal has developed in the past.

**How long until I will know if this medication is working, and how long will the effects of this medication last?**

This medication takes several doses before you will see any effect. The medication’s full effects may not be evident until your animal has taken it consistently for several weeks. However, you may not see any improvement of clinical signs outwardly, so your veterinarian may need to run further tests to determine if the drug is working appropriately. The effects of this medication are short-lived, meaning they will stop working within 24 hours, although the benefits may be prolonged if your animal has decreased kidney and/or liver function.

**When should this medication not be used or be used very carefully?**

No drug is 100% safe in all patients, but your veterinarian will discuss with you any specific concerns about using this drug in your animal.

This drug **SHOULD NOT** be used in patients:
- That are allergic to it.
- With thyrotoxicosis (producing too much thyroid hormone) or untreated Addison’s disease (adrenal insufficiency).

This drug should be used **WITH CAUTION** in patients:
- With diabetes. If your animal is diabetic and being treated with insulin, the insulin dose may need adjusting.
- With treated Addison’s disease (condition associated with the body not making enough stress hormones; condition also known as hypoadrenocorticism).
- With heart disease.
- That are old, weak, or frail.

If your animal has any of these conditions, talk to your veterinarian about the potential risks versus benefits.

**What are the side effects of this medication?**

Side effects are not common with levothyroxine. When side effects occur, it usually means the dose is too high.

**Side effects that usually are not serious include:**
- Faster or racing heartbeat, greater appetite with weight loss, thirst and need to urinate, excitability or nervousness, and panting (dogs). Cats may appear withdrawn and apathetic and refuse to eat.
- Some species of red-feathered birds may start growing yellow feathers after treatment with levothyroxine; this is not a matter for concern.

Contact your veterinarian if you notice any of these signs, as the drug dose likely needs to be adjusted.

**If my animal gets too much of this medication (an overdose), what should I do?**

Overdoses of levothyroxine can cause vomiting, diarrhea, hyperactivity (overly excited) to lethargy (lack of energy), racing heartbeat, shortness of breath or quick breathing. If you witness or suspect an overdose, contact your veterinarian or an animal poison control center for further advice. Animal poison control centers that are open 24 hours a day include: **Pet Poison HELPLINE** (855-764-7661) and **ASPCA Animal Poison Control Center** (888-426-4435); a consultation fee is charged for these services.

**How should this medication be given?**

For this medication to work, give it exactly as your veterinarian has prescribed. It’s a good idea to always check the prescription label to be sure you are giving the drug correctly.
- May be given with or without food, but give the same way each day. If your animal vomits or acts sick after receiving the drug on an empty stomach, try giving the next dose with food or a small treat. If vomiting continues, contact your veterinarian.
- Compounded liquid forms of this medication must be measured carefully. Your veterinarian or pharmacist can help by providing special measuring spoons or syringes.
- If you have difficulty getting your animal to take the medicine, contact your veterinarian or pharmacist for tips to help dosing and reducing the stress of medication time.
- This medication can be given for various lengths of time. Most commonly, this medication is a lifelong requirement to provide thyroid hormone that your animal’s body is unable to make. Be sure you understand how long your veterinarian wants you to continue giving this medication. Prescription refills may be necessary before the therapy will be complete. Before stopping this medication, talk to your veterinarian, as there may be important reasons to continue its use.
What should I do if I miss giving a dose of this medication?
If you miss a dose, give it when you remember, but if it is close to the time for the next dose, skip the dose you missed and go back to the regular dosing schedule. Do not double-up or give extra doses.

How should I store this medication?
- Store this medication in the original prescription bottle or an approved dosage reminder (ie, pill minder) container at room temperature out of direct sunlight. Keep away from children and other animals, especially the chewable tablets.
- If your veterinarian or pharmacist has made (compounded) a special formulation for your animal, follow the storage recommendations and expiration date for the product.

Can handling this medication be hazardous to me, my family, or other animals?
There are no specific precautions required when handling this medication unless you are allergic to it. Wash your hands after handling any medication.

How should I dispose of this medication if I don’t use it all?
- Do not flush this medication down the toilet or wash it down the sink. If a community drug “take-back” program is available, use this option. If there is no take-back program, mix the drug with coffee grounds or cat litter (to make it undesirable to children and animals and unrecognizable to people who might go through your trash), place the mixture in a sealable plastic bag to keep it from leaking out, and throw the bag out with the regular trash.
- Do not save leftover medication for future use or give it to others to use.

What other information is important for this medication?
- Your veterinarian will recommend regular blood checks to measure blood thyroid levels to monitor how well your animal’s dose is working. Talk with your veterinarian about the specific timing of the blood sampling related to when your animal takes the medication. Do not miss these important follow-up visits.
- Sometimes the effects of levothyroxine will change if you switch brands of tablets. If possible, use the same brand of tablet.
- Levothyroxine can change the results of laboratory tests. Tell your veterinarian that your animal is taking levothyroxine before any blood testing is performed.
- Use of this drug may not be allowed in certain animal competitions. Check rules and regulations before entering your animal in a competition while this medication is being administered.

If you have any other questions about this medication, contact your veterinarian or pharmacist.