

Levothyroxine sodium

- Drug Information

Brand Names:

Soloxine®, Thyro-tabs®, Thyrozine®, Thyro-Form®, Thyro-L®, Synthroid®, Levothroid®, Levoxine®, T-4 Powder, Levotabs, Levo-Powder, NutriVed™ T-4, Thyrosyn , ThyroMed®, Thyrokare™, Thyro-L®, Thyrovet, Thyroxine L , Levocrine™

Pharmacology:

Synthetic thyroxine

Indications:

Treatment for hypothyroidism

Contraindications:

- General

Contraindicated in patients with acute myocardial infarction, thyrotoxicosis and untreated adrenal insufficiency.

Use with caution at low dose in treated cases of adrenal insufficiency, heart disease, diabetes and geriatrics.

Interactions:

- General Interactions

Many drugs have effects on thyroid function tests. See specialized reference material for more specific information.

- Category Interactions

- Corticosteroid

May cause low T4 and T3 in euthyroid animals.

- Estrogen agent

Estrogens may increase thyroid requirements.

- Sympathomimetic

Increases action of sympathomimetics.

- Drug Interactions

- Digoxin

May decrease effect of digoxin.

- EPINEPHrine

Increases action of EPINEPHrine and norEPINEPHrine.

- Insulin

May alter insulin requirements of diabetics.

- Ketamine

Ketamine may increase tachycardia and hypertension.

- PHENobarbital

May cause low T4 and T3 in euthyroid animals.

- Warfarin sodium

May increase the anticoagulant effects of warfarin.

Adverse Effects:

- General

Overdose as evidenced by tachycardia, P/U, P/D, polyphagia, decreased heat tolerance, hyperactivity, personality change, excitability, nervousness and panting.

Dosages:

- General

Clients should be cautioned that the veterinary version of these products are formulated to be palatable to pets. This can increase the likelihood for inadvertent overdose of the medication if the container is not stored with this in mind.

- Small Animal**- Dog**

Use a trade name product. Initially give 0.02 mg/kg body weight by mouth twice daily with a maximum dose of 0.8 mg twice daily. Four to eight weeks later evaluate clinical response and draw a T4 level 4 - 6 hours post dosing.

If positive clinical response and 1) low normal T4: increase dose and recheck in 4 weeks;
2) high normal to slightly higher than normal T4: no change in dosing and recheck in 6 months;
3) 40% or more greater than high normal: decrease dose or consider once a day therapy and recheck in 4 weeks (if once a day dosing get a level prior to dosing as well).

If a negative clinical response and 1) low normal T4: increase dose and recheck in 8 weeks (may need to: increase dose again; change to 3 times a day dosing or reevaluate diagnosis)

2) high normal to 40% or more greater than high normal: re-evaluate diagnosis.

- Cat

0.05 - 0.1 mg/ PER CAT. Adjust dose based on follow-up bloodwork in 6 - 8 weeks.

- Birds (small)

0.1 mg in 30 - 120 mL water daily, stir and offer for 15 minutes and remove.

- Turtle

0.02 mg/kg by mouth every other day.

- Large Animal**- Horse**

10 mg in 70 mL corn syrup once daily. Monitor T4 in 1 week.

Special Notes:

None