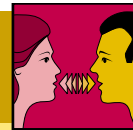


## CLIENT TEACHING GUIDELINES

## Levothyroxine



## General Considerations

- ✔ Thyroid hormone is required for normal body functioning and for life. When a person's thyroid gland is unable to produce enough thyroid hormone, levothyroxine is used as a synthetic substitute. Thus, levothyroxine therapy for hypothyroidism is lifelong; stopping it may lead to life-threatening illness.
- ✔ Periodic tests of thyroid function are needed.
- ✔ Dosage adjustments are made according to clinical response and results of thyroid function tests.
- ✔ Do not switch from one brand name to another; effects may be different.
- ✔ Levothyroxine stimulates the central nervous system and the heart; excessive stimulation may occur if it is taken with other stimulating drugs. Thus, you should consult a health care provider before taking over-the-counter drugs that stimulate the heart or cause nervousness (eg, asthma remedies, cold remedies, decongestants). In addition, you should avoid the herb ephedra (also called ma huang

and not recommended for anyone to take; it may increase blood pressure and cause heart attack or stroke) and probably limit your intake of caffeine-containing beverages to 2 to 3 servings daily.

## Self-Administration

- ✔ Take every morning, on an empty stomach, for best absorption. Also, do not take the drug with an antacid (eg, Tums, Maalox), an iron preparation, or sucralfate (Carafate). These drugs decrease absorption of levothyroxine. If necessary to take one of these drugs, take levothyroxine 2 hours before or 4 to 6 hours after the other drug.
- ✔ Take about the same time each day for more consistent blood levels and more normal body metabolism.
- ✔ Report chest pain, heart palpitations, nervousness, or insomnia. These adverse effects result from excessive stimulation and may indicate that drug dosage or intake of other stimulants needs to be reduced.

 PRINCIPLES OF THERAPY

## Thyroid Drugs

## Drug Selection

Levothyroxine is the drug of choice for thyroid hormone replacement because of uniform potency, once-daily dosing, and low cost. The goal of treatment with levothyroxine is to restore euthyroidism and normal metabolism.

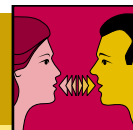
## Dosage Factors

Dosage is influenced by the choice of drug, the client's age and general condition, severity and duration of hypothyroidism, and clinical response to drug therapy. Specific factors include the following:

1. Dosage must be individualized to approximate the amount of thyroid hormone needed to make up the deficit in endogenous hormone production. As a general rule, initial dosage is relatively small. Dosage is

## CLIENT TEACHING GUIDELINES

## Propylthiouracil or Methimazole



## General Considerations

- ✔ These drugs are sometimes called antithyroid drugs because they are given to decrease the production of thyroid hormone by an overactive thyroid gland.
- ✔ These drugs must be taken for 1 year or longer to decrease thyroid hormone levels to normal.
- ✔ Periodic tests of thyroid function and drug dosage adjustments are needed.
- ✔ Ask the prescribing physician if it is necessary to avoid or restrict amounts of seafood or iodized salt. These sources of iodide may need to be reduced or omitted during antithyroid drug therapy.

## Self-Administration

- ✔ Take at regular intervals around the clock, usually every 8 hours.
- ✔ Report fever, sore throat, unusual bleeding or bruising, headache, skin rash, yellowing of the skin, or vomiting. If these adverse effects occur, drug dosage may need to be reduced or the drug may need to be discontinued.
- ✔ Consult a health care provider before taking over-the-counter drugs. Some drugs contain iodide, which can increase the likelihood of goiter and the risk of adverse effects from excessive doses of iodide (eg, some cough syrups, asthma medications, and multivitamins may contain iodide).