

Thyine 100

Thyroxine (Levothyroxine) 100 mcg Tablet

Composition:

Each tablet contains:

- **Levothyroxine Sodium I.P.** 100 mcg
- **Excipients:** q.s.

Description:

Levothyroxine is a synthetic form of **thyroxine (T4)**, a hormone produced by the thyroid gland. It plays a critical role in metabolism, growth, and overall body function. This medication is primarily used to treat **hypothyroidism** and other thyroid-related conditions by restoring normal thyroid hormone levels.

Indications:

Levothyroxine 100 mcg is prescribed for:

- **Primary Hypothyroidism** (caused by thyroid gland failure, Hashimoto's thyroiditis, or post-thyroidectomy)
- **Secondary Hypothyroidism** (due to pituitary dysfunction)
- **Tertiary Hypothyroidism** (due to hypothalamic dysfunction)
- **Congenital Hypothyroidism (Cretinism)**
- **Goiter Management** (to reduce thyroid gland enlargement)
- **Thyroid Cancer** (as suppressive therapy to reduce TSH levels)

Pharmacology:

Mechanism of Action:

Levothyroxine is converted into its active form, **triiodothyronine (T3)**, in the liver and peripheral

tissues. T3 binds to thyroid hormone receptors and regulates:

- **Metabolism** (enhancing energy utilization and oxygen consumption)
- **Growth and Development**
- **Cardiovascular Function** (increasing heart rate and cardiac output)
- **Protein Synthesis and Enzyme Activity**

Dosage & Administration:

- **Usual Adult Dose:** 100 mcg once daily, preferably in the **morning on an empty stomach**, at least **30-60 minutes before breakfast**.
- **Dose Adjustments:** Based on **TSH (Thyroid-Stimulating Hormone) levels**; periodic monitoring is required.
- **Elderly & Cardiac Patients:** Lower initial doses may be recommended to prevent cardiovascular complications.
- **Pediatric Patients:** Dosage is weight-dependent and should be determined by a healthcare provider.

Missed Dose: Take as soon as remembered. If close to the next scheduled dose, skip the missed dose. **Do not double the dose.**

Contraindications:

- Known hypersensitivity to **Levothyroxine** or any of the excipients
- Untreated **thyrotoxicosis (hyperthyroidism)**
- Untreated **adrenal insufficiency**
- Acute **myocardial infarction (heart attack)**

Warnings & Precautions:

- **Cardiovascular Disease:** Use with caution in patients with **heart disease, hypertension, or arrhythmias**.

- **Diabetes:** Levothyroxine may alter insulin and blood sugar levels.
- **Osteoporosis Risk:** Prolonged use at high doses may reduce bone mineral density.
- **Pregnancy & Lactation:** Safe for use during pregnancy; dose adjustments may be needed.

Side Effects:

When taken at the correct dose, Levothyroxine is well tolerated. However, **excessive dosing** may cause:

- **Palpitations and rapid heart rate (tachycardia)**
- **Excessive sweating (hyperhidrosis)**
- **Weight loss despite normal diet**
- **Nervousness, tremors, and anxiety**
- **Insomnia and restlessness**
- **Headache and irritability**

In rare cases, **allergic reactions** may occur. Seek medical attention if severe side effects develop.

Drug Interactions:

Levothyroxine interacts with:

- **Antacids, calcium, iron, and magnesium supplements** (reduce absorption; take at least **4 hours apart**)
- **Warfarin and other anticoagulants** (may increase bleeding risk)
- **Diabetes medications** (may require dosage adjustments)
- **Beta-blockers and Digoxin** (may alter cardiac effects)

Always inform your doctor about any other medications being taken.

Storage Instructions:

- Store at **25°C** in a **cool, dry place**.
- Protect from **moisture and direct sunlight**.
- Keep out of reach of **children**.

Presentation:

Available in [**specify pack size**] blister packs.

For therapeutic use only. Must be used under medical supervision.

Manufactured in India for:



Cafoli Lifecare Pvt. Ltd.

(An ISO 9001: 2015 Certified Co.)

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