Thyine 75

Thyroxine (Levothyroxine) 75 mcg Tablet

Composition:

Each tablet contains:

- Levothyroxine Sodium I.P. 75 mcg
- Excipients: q.s.

Description:

Levothyroxine is a synthetic form of **thyroxine** (**T4**), a vital thyroid hormone that regulates metabolism, growth, and overall physiological functions. It is prescribed for managing **hypothyroidism** and other thyroid-related conditions by supplementing or replacing deficient thyroid hormone levels in the body.

Indications:

Levothyroxine 75 mcg is indicated for the treatment of:

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

Pharmacology:

Mechanism of Action:

Levothyroxine is metabolized into **triiodothyronine** (**T3**), the active thyroid hormone that regulates:

- Metabolism (enhances energy production and oxygen consumption)
- Protein Synthesis and Enzyme Activation
- Growth and Development
- Cardiovascular Function (increases heart rate and cardiac output)

Dosage & Administration:

- Usual Adult Dose: 75 mcg once daily, preferably taken 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: A lower initial dose may be necessary to minimize cardiovascular risks.
- **Pediatric Use:** Dosing is weight-dependent and should be determined by a physician.

Missed Dose: Take the missed dose as soon as remembered unless it is close to the next scheduled dose. **Do not double the dose.**

Contraindications:

- Hypersensitivity to Levothyroxine or any excipients
- Untreated thyrotoxicosis (hyperthyroidism)
- Untreated adrenal insufficiency
- Recent myocardial infarction (heart attack)

Warnings & Precautions:

 Cardiovascular Disease: Caution is advised in patients with heart disease, hypertension, or arrhythmias.

- **Diabetes Mellitus:** Levothyroxine may alter insulin and **blood sugar levels**.
- Osteoporosis Risk: Prolonged high-dose use may decrease bone mineral density.
- Pregnancy & Lactation: Safe to use during pregnancy; dose adjustments may be required.

Side Effects:

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

- Increased heart rate (tachycardia), palpitations
- Excessive sweating (hyperhidrosis)
- Unexplained weight loss
- Nervousness, anxiety, and tremors
- Headache and irritability
- Insomnia and restlessness

Rarely, allergic reactions may occur. Seek immediate medical attention in case of severe side effects.

Drug Interactions:

Levothyroxine may interact with:

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

Always inform your healthcare provider about all 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:



(An ISO 9001: 2015 Certified Co.)

Plot no.: 367-FF, Industrial Area Phase-I,

Panchkula-134113

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