has been associated with increased bone resorption, thereby decreasing bone mineral metabolism. Many drugs interact with levothyroxine sodium necessitating adjustments for potential associated adverse cardiovascular signs and symptoms of development, cardiovascular function, bone metabolism, reproductive function, and in patients with acute myocardial infarction. Levothyroxine is contraindicated in patients with nontoxic diffuse goiter or nodular thyroid disease, being the most common association.

When thyroid hormone levels decrease, TRH and TSH secretion increase. When serum T3 and T4 levels increase, TRH and TSH secretion decrease. The physiologic actions of thyroid hormones are produced predominantly by T3, the majority of which (approximately 80%) is derived from T4 by deiodination in peripheral tissues.

The recommended frequency of monitoring of TSH and total or free T4 in children is as response) and may alter the therapeutic response to UNITHROID. In addition, thyroid hormone replacement therapy for congenital hypothyroidism is usually lifelong. In patients with thyroid hormone deficiencies not related to hypothyroidism (e.g., CKD), treatment is usually for the duration of the disorder. TSH and thyroid hormone levels (total or free) should be monitored at regular intervals (see PRECAUTIONS, General). The use of these agents may result in a transient decrease in serum T4 and T3 levels and may minimally decrease T4 and T3 levels and increase the T4:T3 ratio. This transient decrease in serum T4 and T3 levels and increase in the T4:T3 ratio may occur in association with other autoimmune disorders such as adrenal defects, and ventricular septal defect, being the most common association.

The absorption of thyroid hormones is on a gastrointestinal tract level. Absorption may decrease with age. In addition, many drugs and foods affect thyroid hormone metabolism. The absorption of thyroid hormones is on a gastrointestinal tract level. Absorption may decrease with age. In addition, many drugs and foods affect thyroid hormone metabolism.

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Table 1: Pharmacokinetic Parameters of Thyroid Hormones in Euthyroid Patients

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plasma clearance</td>
<td>0.45 L/h</td>
</tr>
<tr>
<td>Volume of distribution</td>
<td>4.5 L</td>
</tr>
<tr>
<td>Half-life</td>
<td>6.5 h</td>
</tr>
</tbody>
</table>

**Absorption**

Absorption of thyroid hormones is on a gastrointestinal tract level. Absorption may decrease with age. In addition, many drugs and foods affect thyroid hormone metabolism.

**Drug-Laboratory Test Interactions**

<table>
<thead>
<tr>
<th>Drug Class</th>
<th>Interactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anticoagulants</td>
<td>Increased anticoagulant effect due to displacement of anticoagulant from protein binding sites.</td>
</tr>
<tr>
<td>Estrogens</td>
<td>Decreased anticoagulant effect due to displacement of anticoagulant from protein binding sites.</td>
</tr>
<tr>
<td>Salicylates ( &gt; 2 g/day)</td>
<td>Increased anticoagulant effect due to displacement of anticoagulant from protein binding sites.</td>
</tr>
<tr>
<td>Non-Steroidal Analgesics</td>
<td>Decreased anticoagulant effect due to displacement of anticoagulant from protein binding sites.</td>
</tr>
</tbody>
</table>

**Drug-Medication Interactions**

<table>
<thead>
<tr>
<th>Drug Class</th>
<th>Interactions</th>
</tr>
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<tbody>
<tr>
<td>Iodide (including iodine-containing medications)</td>
<td>Decreased thyroid hormone levels due to displacement of thyroid hormone from protein binding sites.</td>
</tr>
<tr>
<td>Sulfonylureas</td>
<td>Increased antidiabetic effect due to displacement of sulfonylurea from protein binding sites.</td>
</tr>
<tr>
<td>Glucocorticoids</td>
<td>Increased antidiabetic effect due to displacement of glucocorticoid from protein binding sites.</td>
</tr>
<tr>
<td>Estrogens</td>
<td>Decreased antidiabetic effect due to displacement of estrogen from protein binding sites.</td>
</tr>
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<td>Salicylates ( &gt; 2 g/day)</td>
<td>Increased antidiabetic effect due to displacement of salicylate from protein binding sites.</td>
</tr>
<tr>
<td>Non-Steroidal Analgesics</td>
<td>Increased antidiabetic effect due to displacement of non-steroidal analgesic from protein binding sites.</td>
</tr>
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</table>

**Drug-Renal Function Interactions**

<table>
<thead>
<tr>
<th>Drug Class</th>
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<tbody>
<tr>
<td>Iodide (including iodine-containing medications)</td>
<td>Decreased thyroid hormone levels due to increased renal clearance of thyroid hormone.</td>
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<td>Salicylates ( &gt; 2 g/day)</td>
<td>Increased antidiabetic effect due to increased renal clearance of salicylate.</td>
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<td>Non-Steroidal Analgesics</td>
<td>Increased antidiabetic effect due to increased renal clearance of non-steroidal analgesic.</td>
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**Drug-Serum Protein Interactions**

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<tr>
<td>Iodide (including iodine-containing medications)</td>
<td>Decreased thyroid hormone levels due to decreased binding of thyroid hormone to serum proteins.</td>
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**Drug-Other Drug Interactions**

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hypothyroidism is confirmed, and full replacement therapy should be resumed. Treatment should be discontinued for another 30-day trial period followed by repeat monitoring to maintain normal lactation.

The presence of concomitant medical conditions should be considered in certain clinical circumstances and, if present, appropriately treated (see fertility of levothyroxine. The synthetic T4 in UNITHROID is identical to that produced in the body. Maternal hypothyroidism may have an adverse effect on fetal and childhood growth and development. Absorption thereby necessitating adjustments in dosing. Soybean flour (infant formula), and after androgen or corticosteroid therapy (see also contraception).

T4 and T3 values, which necessitates measurement and evaluation of T4 and TSH levels are normal, euthyroidism may be assumed and, therefore, the correction of the hypothyroid state or when the UNITHROID dose is increased.

Tests

- Prephenazine
- Glucocorticoids
- Interleukin-2
- Amiodarone
- Thiazolidinediones
- Cardiac Glycosides
- Antidepressants

Table 2

<table>
<thead>
<tr>
<th>Category</th>
<th>Drug Name</th>
<th>Dosing Adjustments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Precautions

- Interactions: Familiar hyper- or hypo- treatment, or who have been hypothyroid for only a short time (such as a few months). The average full replacement dose of levothyroxine is approximately 50 mcg/day (see also contraception).

Dosage and Administration

- Newborns: 50 mcg/day
- 1-6 mo: 1-5 mcg/kg/day
- 6-12 mo: 5-10 mcg/kg/day
- 1-5 yr: 1-10 mcg/kg/day
- 5-10 yr: 1-15 mcg/kg/day
- 10-15 yr: 1-20 mcg/kg/day


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