

Drug Information Table

Thyroid replacements – levothyroxine (Synthroid)

Therapeutic Use	Administration	
<ul style="list-style-type: none"> • Hypothyroidism 	<ul style="list-style-type: none"> • Give orally to treat hypothyroidism and IV to treat myxedema coma. • Give daily on an empty stomach (at least 30 min before breakfast). • Measure baseline vital signs, weight, and height, and monitor periodically thereafter. • Monitor for cardiac excitability (angina, chest pain, palpitations, dysrhythmias). • Monitor T₄ and TSH levels. • Be aware that the various formulations of thyroxine are not interchangeable; instruct patients to notify the provider if a pharmacy dispenses a different levothyroxine product. • Expect lifelong replacement therapy. 	
Side/Adverse Effects	Interventions	Patient Instructions
<ul style="list-style-type: none"> • Hyperthyroidism (from excessive doses) 	<ul style="list-style-type: none"> • Monitor thyroid function. • Monitor for indications of hyperthyroidism (anxiety, tachycardia, palpitations, tremors, altered appetite, abdominal cramping, diarrhea, heat intolerance, fever, diaphoresis, weight loss, menstrual irregularities) 	<ul style="list-style-type: none"> • Watch for and report anxiety, rapid heart rate, palpitations, tremors, altered appetite, abdominal cramping, diarrhea, heat intolerance, fever, sweating, weight loss, and menstrual irregularities.
Contraindications	Precautions	Interactions
<ul style="list-style-type: none"> • Thyrotoxicosis • Recent myocardial infarction 	<ul style="list-style-type: none"> • Cardiovascular disorders (hypertension, angina pectoris, ischemic heart disease) • Renal impairment • Diabetes mellitus • Older adults 	<ul style="list-style-type: none"> • Cholestyramine (Questran), antacids, iron and calcium supplements, and sucralfate (Carafate) reduce absorption, so patients should not take levothyroxine within 4 hr of these drugs. • Food reduces absorption. • Many antiseizure and antidepressant drugs, including carbamazepine (Tegretol), phenytoin (Dilantin), phenobarbital, and sertraline (Zoloft), decrease levels. • Anticoagulant effects of warfarin (Coumadin) increase. • Cardiac response to catecholamines (such as epinephrine) increases.