





THRYROID GLAND: PATIENT EDUCATION

What IS A THYROID GLAND?

The thyroid gland is a relatively small but vital butterfly-shaped gland located just below the laryngeal prominence (Adam's apple). This little gland secretes two hormones (thyroxine and triiodothyronine). These hormones are responsible for regulating basal metabolic rate, neurotransmitter production, and release (e.g., dopamine, serotonin, norepinephrine), neural development, and it protects against arrhythmias (abnormal heartbeat).

WHAT FORMS OF THYROID MEDICATION ARE AVAILABLE?

These medications are available in a capsule or tablet form, typically taken 1-2 times daily.



HYPOTHYROIDISM OVERVIEW:

Many patients with clinical or sub-clinical hypothyroidism may experience symptoms such as fatigue/lethargy, depression, memory loss, anxiety, constipation, dry skin and hair, cold sensitivity, insomnia, and unexplained weight gain or inability to lose weight. Causes of hypothyroidism include failure of the pituitary gland, failure of the hypothalamus, failure of the thyroid gland, poor conversion of Thyroxine (T4) to Triiodothyronine (T3), thyroid resistance, and adrenal insufficiency (adrenal fatigue). Traditionally, physicians implement T4 only to treat hypothyroidism. Unfortunately, many factors contribute to poor conversion of T4 to T3, including fasting, diet, stress, malnutrition, vitamin and mineral deficiencies, certain drugs, cancers, growth hormone deficiency, high blood glucose/insulin, hormonal birth control, and liver/kidney dysfunction. Given these factors, a combination of both T3 and T4 is often essential for thyroid optimization.







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BENEFITS OF THYROID OPTIMIZATION:

- -Improved energy
- -Better skin quality/less dry skin
- -Normalized bowel movements
- -More effective weight loss
- -Better tolerance to temperature changes
- -Decreased water retention
- -Better sleep
- -Resolved body aches
- -Improved memory
- -Reduced anxiety/depression symptoms

PATIENT BENEFITS OVER TIME

Some benefits for patients on thyroid optimization:



IMPROVES ENERGY



BETTER SKIN QUALITY



NORMALIZED
BOWEL MOVEMENTS



MORE EFFECTIVE WEIGHT LOSS



RESOLVED BODY ACHES



IMPROVED MEMORY



REDICED ANXIETY/
DEPRESSION



BETTER SLEEP

WHAT ARE THE SIDE EFFECTS OF THYROID MEDICATION?

Side effects associated with thyroid medication are typically due to under or overdosing the medication. Side effects include but are not limited to chest pain, shortness of breath, palpitations, anxiety, flushing, sweating, headaches, nausea/vomiting, diarrhea, weight loss, abnormal menstrual cycle, and sleep disturbances.