

# Hypothyroid (Diagnosis code 244.9)

## **Why do I need to take vitamins?**

The thyroid requires multiple nutrients to function well. Among these are B vitamins, Selenium (100 mcg daily), Zinc (10-20 mg daily) and Iodine. These nutrients are needed for enzymes to function in both the formation of T4 and in the conversion of T4 into T3. The vitamins also reduce the damaging effects of Hashimoto's autoimmune thyroid disease by reducing the effects of oxidation. The quantity of vitamins in a quality multivitamin is usually sufficient for all nutrients except iodine. Iodine is explained later.

## **What are my options for administering thyroid hormone?**

There are many types and brands of thyroid medication. No one method is best and is dependent on the patient's individual picture. The most common methods include the following:

- Synthetic T4 hormone: Levothyroxine, Synthroid and Levoxyl
- Natural T4/T3 hormone combinations: Westroid, Nature-throid, Armour, and Thyroid USP. These all include T4 and T3 in a ratio of 4 to 1. The only difference in these brands is the binders. They are measured commonly in grains instead of mg.
- Compounded T4 and T3: These can be used if a sustained release or a physiologic dose (ratio of 3:1) is needed
- Synthetic T3: Cytomel can be used with T4 or instead of T3.

## **Why is natural thyroid sometimes a better option?**

Many patients have difficulty in converting T4 into T3. This may be due to nutritional deficiencies, stress or due to unknown causes. T3 has 4 times the potency of T4. Since it is stronger, it has a more rapid and dramatic effect on the body.

## **What are the side effects of thyroid over-medication?**

Some people are overly sensitive to T3. These patients experience flushing, perspiration and palpitations in the first few hours after taking their medication. After this time passes, they feel normal again. . In this case, a sustained release form or only the use of T4 is required.

In general, if you experience tremors, palpitations, sweats or feel overly warm, then you are likely over-medicated. If you experience this please contact the office. You will likely need to repeat blood work, so that changes can be made in your treatment plan.

## **How do I take my thyroid medication?**

When taking your thyroid, ideally it should be taken in the morning on an empty stomach. The drug insert recommends that you fast for 4 hours after taking the medication. This is not feasible for most people. Dr Gentry recommends taking the medication first thing in the morning on an empty stomach. You may eat and take other supplements one hour later. Take supplements that contain minerals like iron, magnesium and calcium as far apart from thyroid medication as possible. You may not absorb as much by only waiting an hour, but if you are consistent, and your labs normalize then that is ok.

## **How often should I test my thyroid?**

It takes around 30 days for thyroid to have an effect on the TSH. Dr Gentry recommends a 12-week follow up test any time a change is made in either the strength or the type thyroid medication. If at 3 months, all tests are in normal range, Dr Jen recommends a 6-month test. If at 6 months, the tests are normal, and you feel well, yearly follow-ups are recommended. If at any point you feel your dose is off, Dr Gentry recommends repeating your labs. If the thyroid is normal, then other causes of your symptoms need to be evaluated.

## **I have Hashimoto's Hypothyroid. How does this affect my care?**

If you have Hashimoto's hypothyroid, then it is often more difficult to regulate your thyroid. This requires patience on your part. Hashimoto's is an autoimmune disease in which your body is attacking your thyroid. This attack causes oxidation, which damages the thyroid gland. When your body is actively attacking your thyroid, the damage to the thyroid causes fluctuations in the amount of thyroid released. You may feel over-stimulated when there is an attack and you may feel symptoms of under-treatment in the aftermath of the attack. Stress, low-iodine, and low anti-oxidant status is highly correlated with the frequency and degree of active disease. Dr Gentry recommends regular follow-up and the use of relaxation techniques like yoga or tai chi.

Patients with Hashimoto's also have an increased risk for thyroid lymphoma. For this reason regular follow up exams including thyroid ultrasounds are recommended.

## **Are there instructions on what to do before testing my thyroid?**

- You do not need to fast unless other tests are performed at the same time, such as cholesterol.
- You should not take your thyroid until after your blood has been drawn. If you are taking T3 then it is released rapidly and will alter your test results.

# IODINE

## Why should I take iodine?

Iodine is recommended for multiple reasons. Primarily, iodine is necessary to make thyroid hormone. Secondly, there is a strong correlation between iodine deficiency and the development of thyroid cancer, especially in patients taking thyroid hormone. Other benefits of iodine use are improved breast health (reduction of cysts), improved mental clarity and attention, improved mood and energy, a reduction in Hashimoto's oxidation to the thyroid and it is in general iodine is considered anti-carcinogenic.

## Iodine use improves many typical hypothyroid symptoms:

Achieving a sense of well being	Lifting brain fog	Improved skin complexion
Feeling warmer in colder climates	Require less sleep	Achieve more in less time
Experiencing regular bowel movements	Increased energy	

## What are the symptoms of over use of Iodine?

There is concern that ingestion of iodine will cause adverse effects. When iodine is given in large doses there is a transient decrease in hormone production until the body re-establishes equilibrium with iodine. After that time, thyroid levels adjust and signs of hypothyroidism do not develop. Iodine induced hyperthyroidism is an uncommon occurrence.

Symptoms of the over use of iodine (iodism) include a metallic taste in the mouth, increased salivation, headache and acne. Use of unrefined salt minimizes iodism. With proper follow up testing, the use of iodine is considered safe. Dr Jen recommends follow up testing every year for patients on a 12 mg dose. For those on higher doses, more regular follow up is recommended. For more information Dr Jen recommends the book *Iodine why you need it, why you can't live without it* by David Brownstein, MD.

## How much Iodine should I take?

Approximately 12.5 mg of Iodine is established as the optimal daily dose for healthy breasts and a healthy thyroid gland. This is one capsule of I-thyroid or Iodorol. However, this may not be enough for the rest of the body. The dose can vary from 12-50 mg per day for most adults. To determine your needs, a 24-hour urinary iodine challenge test is recommended.

If Dr Jen recommends thyroid titration for you then take you thyroid as follows:

- Take 1 capsule of I-thyroid or Iodorol for 1 week.
- Take 2 capsules of I-thyroid or Iodorol for 1 week.
- Take 3 capsules of I-thyroid or Iodorol for 1 week.
- Take 4 capsules of I-thyroid or Iodorol for 12 weeks (retest is recommended).
- Take 3 capsules of I-thyroid or Iodorol for 1 week.
- Take 2 capsules of I-thyroid or Iodorol for 1 week.
- Take 1 capsule of I-thyroid or Iodorol as a maintenance dose.

## How do I perform the Iodine 24 hour challenge test?

To complete this test

- Take 4 capsules of I-thyroid or Iodorol. This is equivalent to 50 mg of Iodine.
- Collect your urine for 24 hours after taking the thyroid.
- Return your test kit to the lab

When we read the lab we are looking for the percent excreted, not the total found in the urine, which will be high. More than 85% excretion is considered normal.

We recommend you ask your insurance company if this test is covered before completing it with Sonora Quest or Lab corp. The **CPT code is 83789**. This lab costs \$190 if performed by these labs.

If it is not covered by your insurance, the lab used by our office charges \$75 when paid upfront.

**Table 1: Therapeutic Actions of Iodine and conditions Iodine Can Treat (Excerpt from Dr Brownstein)**

<b>Therapeutic Actions</b>	<b>Conditions Treated with Iodine</b>	
<b>Antibacterial</b>	<b>ADD/ADHD</b>	<b>Hypertension</b>
<b>Anticancer</b>	<b>Atherosclerosis</b>	<b>Infections</b>
<b>Antiparasitic</b>	<b>Breast Disease</b>	<b>Keloids</b>
<b>Antiviral</b>	<b>Dupuytren's Contracture</b>	<b>Liver disease</b>
<b>Elevates pH (Alkalinizes)</b>	<b>Excess Mucous Production</b>	<b>Nephrotic Syndrome</b>
<b>Mucolytic Agent</b>	<b>Fatigue</b>	<b>Ovarian Disease</b>
	<b>Fibrocystic Breast</b>	<b>Prostate Disorders</b>
	<b>Goiter</b>	<b>Sebaceous cysts</b>
	<b>Hemorrhoids</b>	<b>Thyroid disease</b>
	<b>Migraine Headaches</b>	

