About Your Thyroid – Nutrition, Supplements, and More

The thyroid gland is located in the lower front part of the neck. Thyroid hormones are best known for regulating the body's metabolism, which is your body's ability to break down food and convert it to energy. It also plays a role in breathing, heart rate, central and peripheral nervous systems, muscle tone, muscle control, menstrual cycles, body temperature, cholesterol levels, bone growth, body growth rate, nervous system development, brain, reproductive functions, and more.

Thyroid hormone receptor sites are found in every cell of the body. Every single cell of our body depends on thyroid hormones. If your thyroid doesn't operate optimally, neither will the rest of your body.

This is an excerpt from the ridiculously long article, *Holistic Guide to Healing the Endocrine System and Balancing Our Hormones* I believe that it's easier to heal the body when you understand how the body works, but understanding the endocrine system is big a task. It's a long article, but I think it's worth it and I hope you'll check it out.

Three Thyroid Hormones

Thyroglobulin is a protein (not a hormone) that's produced by the thyroid, synthesized from amino acids and an iodide, and stored in the follicular lumen as colloid. This protein is used only within the thyroid gland for production of thyroid hormones. T3 and T4 are the two most well-known hormones the thyroid produces, and there's also calcitonin.

Triiodothyronine or T3

T3 affects almost every physiological process in the body. The thyroid produces about 20% of the T3 in our body. The rest is

converted to T3 from T4 in our cells throughout the body.

Thyroxin or T4

T4 (AKA tetraiodothyronine) is a prohormone (a committed precursor of a hormone, usually having minimal hormonal effect by itself) that the body converts to T3, a much more active and viable hormone. T4 is synthesized from residues of the amino acid tyrosine. A normal thyroid gland produces about 80% of the body’sT4 and about 20%of the body’s T3.

Calcitonin

Calcitonin lowers blood calcium and phosphorus levels by decreasing the rate of re-absorption of these minerals to bone.

Hyperthyroidism

Hyperthyroidism occurs when the thyroid makes too much T3 or T4 (or both). This leads to elevated blood pressure, rapid heart rate, hand tremors, and many other symptoms. Graves’ disease is an autoimmune disorder that is the most common cause of hyperthyroidism. Graves’ disease causes antibodies to stimulate the thyroid to produce and secrete too much.

Other causes of hyperthyroidism can include:

- Excess iodine
- Thyroiditis – inflammation of the thyroid gland (causes T4 and T3 to leak out of the gland)
- Benign tumors of the thyroid or pituitary gland (causes pressure, hormones leak out)
- Large amounts of tetraiodothyronine taken through dietary supplements or medication
- A tumor of the ovaries or testes

Hyperthyroidism can’t last forever; it’s sure to wear out a thyroid eventually, leading to hypothyroidism.

Hypothyroidism

Around 20 million Americans and about 250 million people worldwide have low thyroid function. Up to 90% of all thyroid problems are autoimmune in nature. Hashimoto’s is the most common thyroid disorder. In people with Hashimoto’s, the immune system attacks the thyroid.

List Of Hypothyroidism Symptoms

- Allergic rhinitis
- Asthma
- Angina pectoris
- Atherosclerosis
- Bursitis
- Conditions related to the cardiovascular system
- Carpal tunnel syndrome
- Carotenodermia (slight orange tinge to the skin, usually on the palms of the hands and soles of feet)
- Cold extremities, intolerance to the cold
- Coarse, dry, or thinning hair
- Constipation
- Decreased libido
- Dry, rough, and/or itchy skin
- Edema
- Erectile dysfunction
- Fallen arches
- Fatigue
- Fibrocystic breast changes
- Fibromyalgia symptoms
- Headaches
- Hoarseness
- Infertility
- Hypercholesterolemia
- Hyperhomocysteinemia
- Hypertension
- Itchy and/or flaky scalp

- Memory loss
- Mood swings, irritability
- Muscle aches
- Menstrual irregularities (amenorrhea, oligomenorrhea, menorrhagia)
- Neck pain, stiffness, aches (especially in the back of the neck)
- Knee pain (due to fallen arches)
- Pallor (an unhealthy pale appearance)
- Pain in the trapezoid and/or neck area
- Psoriasis
- Poor mental concentration
- Polycystic ovary syndrome
- Postpartum depression
- Premenstrual syndrome
- Reactive hypoglycemia
- Recurrent infections
- Sluggishness, tiredness
- Shoulder pain
- Tinnitus
- Urticaria
- Vasomotor rhinitis
- Vertigo
- Weakness
- Weight gain

How to Heal the Thyroid

Learning about the endocrine system is one the best ways to understand how incredibly connected each and every part of the body is and how imperative a holistic approach to healing is to repair the body. You can’t really heal the thyroid gland without taking care of the adrenals, the pituitary – the whole endocrine system.

Fresh, raw, organic produce heals. Produce heals everything. Other than that, foods high in iodine and foods that are high

in selenium are known to aid in thyroid function.

The thyroid gland requires iodine to function. Iodine taken by itself or ingested through fortified salt can be problematic. Good food sources include the usual: meat, seafood, yogurt, milk, and eggs, but there are vegan sources as well:

- Blackstrap molasses
- Seaweed
- Himalayan sea salt
- Navy beans
- Cranberries

Selenium is required for the body to convert T3 into T4. Without enough selenium in the diet, the thyroid suffers. Seafood and meat are high in selenium, but there are also some vegan choices:

Vegan Food Sources of Selenium

- Brazil nuts
- Shiitake/white button mushrooms
- Lima/pinto beans
- Chia seeds
- Brown rice
- Seeds (sunflower, sesame, and flax)
- Broccoli
- Cabbage
- Spinach

Supplements For Hypothyroidism

A number of vitamins and minerals are critical to thyroid health, and many herbs can help boost thyroid function as well.

B Vitamins

Vitamin B12 is found in every cell of the body. It is required for cellular metabolism and energy production, so obviously,

without B12, the thyroid can’t function optimally. B12 deficiencies are very common with hypothyroidism. A lack of B12 can cause and worsen hypothyroidism. Even though most people actually consume enough vitamin B12 in their diets, a deficiency occurs in many due to an inability to absorb the nutrient in the blood. This goes back to gut health. The body cannot absorb and assimilate nutrients properly with a poorly functioning digestive system.

In addition, a poorly functioning liver radically inhibits the body’s ability to utilize B12. Unless a knowledgeable naturopath recommends it for a limited amount of time, do not take vitamin B12, or any one B vitamin, without the entire B complex.

Vitamin D

Over a billion people worldwide do not get enough vitamin D. A recent study showed that vitamin D levels were significantly lower in people suffering from hypothyroidism than the general population. While vitamin D deficiencies and hypothyroidism do tend to take place together, a lack of vitamin D and pretty much every other disease (including cancer) coincide as well. It’s unlikely anyone’s hypothyroidism is primarily caused by a lack of vitamin D, but it’s a certainty that the body will not fully heal without enough vitamin D.

Vitamin A

We all know vitamin A is required for good vision. We also need vitamin A for the immune system, hormone synthesis, and the production of T3. Without enough vitamin A, thyroid hormone levels quickly drop.

Bromelain

Bromelain is the enzyme that makes pineapple the superfood that it is. Bromelain helps reduce inflammation.

Ashwagandha

Ashwagandha is an adaptogenic herb that has many benefits, including the ability to significantly improve liver function, and it can help stabilize cortisol levels. This helps stimulate T3 and T4 hormone synthesis.

Licorice Root

Licorice root can benefit the thyroid and adrenal glands for people who have low cortisol (adrenal fatigue).

Reishi Mushroom

Reishi mushroom is a good source of selenium, and it has a ton of other benefits including boosting the immune system.

Schisandra Chinensis

This is another adaptogenic herb that helps the thyroid and has many other health benefits.

Ginseng

There are many varieties of ginseng, all with their different strengths, but Siberian ginseng root, Brazilian ginseng root, Korean or Asian ginseng, American ginseng, and Chinese ginseng all benefit the endocrine system, and therefore the thyroid.

Selenium

Selenium is the major cofactor for the key thyroid enzyme 5’deiodinase. This enzyme converts T4 into T3 and can help normalize the thyroid hormone balance.

Zinc

A zinc deficiency has been shown to inhibit T3 production. Zinc also contributes to immune modulation, which may reduce thyroid antibody levels. Additionally, like selenium, zinc contributes to 5’deiodinase activity.

Iodine

A lack of iodine inhibits the body’s natural detoxification, leads to cancer cell growth, and causes hypothyroidism. The thyroid absorbs iodine and, in doing so, replaces other toxins it has accumulated.

It’s also important to avoid excessive iodine intake for anyone with Hashimoto’s or hyperthyroidism. As stated above, we highly recommend that any iodine consumed come from whole food sources unless otherwise recommended by a knowledgeable, competent professional.

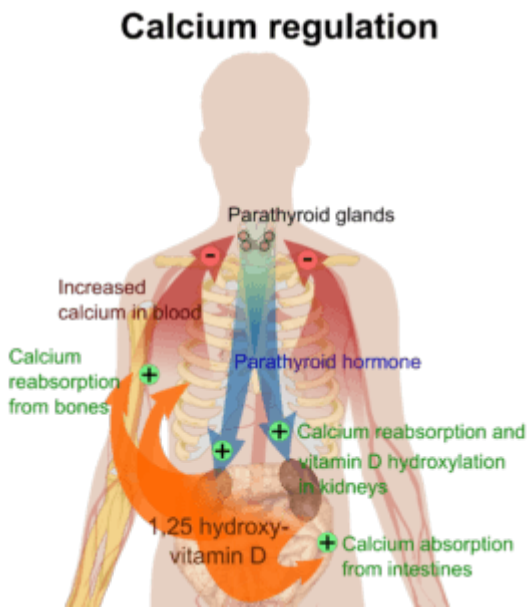
Gluten, Hashimoto’s Disease, and Leaky Gut

When the thyroid is not functioning properly, there is a good chance the gut is hyper-permeable, or “leaky.” Many suspect leaky gut to be the main cause of Hashimoto’s. In this state where the gut is too permeable, undigested food proteins leak into the bloodstream. Human tissues have proteins and antigens very similar to those in foods, bacteria, parasites, and Candida. When the body senses these foreign molecules, it develops antibodies that attack the body, hence the name “autoimmune disease.” Gluten proteins are very similar to Candida proteins and proteins that make up the thyroid. This is probably why the immune response to gluten can last up to 6 months each time you eat it.

When healing the thyroid (or the body in any way), regardless of whether or not it’s due to Hashimoto’s, modern wheat is a bad idea for a multitude of reasons.

Check out this Leaky Gut article for more information.

Parathyroid



There are four parathyroid glands; they're located two on each side of the thyroid. Although the parathyroids are attached to the thyroid gland anatomically, and the glands are connected to the thyroid, they have no related function. The parathyroid release **parathormone, or PTH, or parathyroid hormone.** PTH has the opposite job of calcitonin (the lessor known thyroid hormone); PTH increases levels of calcium and phosphorus in the blood. It accomplishes this by increasing the cells of the bone (osteoclasts), which reabsorb calcium. It also increases urinary re-absorption of calcium by the kidneys. In addition, it causes the kidneys to form calcitriol, a hormone made from vitamin D that increases absorption of calcium from the GI tract.

Parathyroid Adenoma

Hyperparathyroidism refers to increased PTH production, usually because of a benign tumor of one or more of the parathyroid glands (parathyroid adenoma). When PTH is excessively produced, calcium is reabsorbed back into the blood from the kidneys, bones, and stomach. This leads to a condition sometimes called "stones, bones, groans, and moans," which refers to the classic set of hyperparathyroidism symptoms: kidney stones, osteoporosis, groans of pain due to intestinal distress, and moans due to psychosis.

Removing a parathyroid adenoma, a fairly simple, typically successful surgery, can cause an immediate return to healthy function.

Natural remedies for hyperparathyroidism generally include anti-inflammatory, antioxidant, vitamin C, desiccated glandsg, and vitamin D supplementation (extreme caution should be taken with large dosages of vitamin D when blood calcium levels are high). A holistic approach for tumors on the parathyroid will take time, but fortunately, hyperparathyroidism has a very slow progression.

Conclusion

Diet is, as always, paramount. A slightly alkaline diet full of fresh produce detoxifies the endocrine system and keeps it healthy. Check out *Detox Cheap and Easy Without Fasting – Recipes Included.* And again, this is only an excerpt from the ridiculously long article, *Holistic Guide to Healing the Endocrine System and Balancing Our Hormones.* It's worth the read for anyone wanting to get well.

Related Reading:

- *Holistic Guide to Healing the Endocrine System and Balancing Our Hormones*
- *Gluten, Candida, Leaky Gut Syndrome, and Autoimmune Diseases*
- *Hypothyroidism – Natural Remedies, Causes, and How To Heal the Thyroid*
- *How to Cure Lyme Disease, and Virtually Any Other Bacterial Infection, Naturally*
- *How To Detoxify and Heal From Vaccinations – For Adults and Children*
- *How to Detoxify From Antibiotics and Other Chemical Antimicrobials*
- *The Power of Our Hormones and How To Balance Them*