

Thyroid Disease Epidemic – How is Yours Doing?

Is your hair thinning or falling out? When you look in the mirror, does it seem that the outer edges of your eyebrows have disappeared? Have you gained or lost weight without changing your diet? Are you tired all the time? You may be one of the millions of Americans with undiagnosed thyroid disease.

Thyroid disease has become epidemic in the United States with numbers of confirmed cases at more than 12 million and estimates of undiagnosed cases doubling that number. Radiation exposure from Fukushima, perchlorate contamination of municipal and well water (trace amounts of this chemical used to make rocket fuel damage the thyroid), damage to the thyroid due to prescription drug use, and the explosion of auto-immune disease, which is a high risk factor for thyroid disease all suggest thyroid disease is on the rise.

Often, thyroid disease is misdiagnosed, especially in the elderly, as clear symptoms of the disease are passed off as aging, while doctors neglect to administer diagnostic tests.

So how do you know your thyroid may not be functioning properly? Who is at risk? And what are the symptoms?

Risk Factors for Thyroid Disease

Risk Factors include: race (Caucasian), gender (female), age (over 60), family history (family history of auto-immune disease or thyroid disease), an existing auto-immune disease (including Celiac disease), iodine deficiency or taking medications with high levels of iodine, heavy caffeine use, radiation exposure, smoking tobacco, pregnancy, or within six months of giving birth.

Thyroid Diseases and Thyroid Dysfunction

The two primary malfunctions of the thyroid gland are overproduction of hormones (hyperthyroidism) or underproduction of hormones (hypothyroidism). Graves' disease is an autoimmune disease where the immune system attacks the thyroid tissue in such a way it causes hyperthyroidism, whereas, Hashimoto's thyroiditis is an autoimmune disease that causes hypothyroidism. These two diseases are responsible for the vast majority of hyper and hypothyroidism.

Symptoms of Hyperthyroidism

Symptoms of Hyperthyroidism include: weight loss, nervousness, moodiness, weakness, fatigue, rapid heartbeat, shaky hands, shortness of breath, excessive sweating, hair loss, and red, itchy skin.

Symptoms of Hypothyroidism

Symptoms of Hypothyroidism include, weight gain or difficulty losing weight, fatigue, thinning hair, thinning eyebrows or loss of outer edges of eyebrows, difficulty concentrating, mood swings, impaired memory, adult onset ADHD, slow healing, feet or hands that get cold easily, insomnia, poor sleep habits, poor sleep quality, daily sleepy spells, menstrual irregularities, anxiety, nightmares, dry skin, and yellow skin (due to difficulty converting beta carotene to vitamin A. Muscle and joint pain (which can be severe and may be misdiagnosed as fibromyalgia) may also be experienced.

Six percent of the American population suffer from one of these two conditions; 78.7% suffer from hypothyroidism, while 21.3% suffer from hyperthyroidism.

Other diseases and conditions of the thyroid include: thyroiditis, an overall inflammation and swelling of the thyroid gland caused by a viral infection or an autoimmune

disease; goiter, a singular non cancerous swelling that can be associated with Hashimoto's or an iron deficiency; thyroid nodule, a small, abnormal, non-cancerous mass or lump that may secrete excess hormones causing hyperthyroidism; thyroid storm, a rare form of extremely high hyperthyroidism that causes extreme illness, and thyroid cancer.

Structure and Purpose of the Thyroid Gland

The thyroid gland is a part of the endocrine system, a network of glands that make and secrete hormones directly into the bloodstream. The thyroid, which is located in the front of the neck, above the clavicle, directly below the Adam's apple, is a butterfly shaped organ with tissue that traverses the windpipe and lobes that rest on either side.

Generally we only think of the thyroid gland in relation to metabolism: an underactive thyroid causes weight gain and an overactive thyroid causes weight loss. However, hormones from the thyroid gland regulate the growth and activity of many of the body's systems and activities including: the synthesis and breakdown of proteins, the metabolism of carbohydrates and fats, growth and development, heart rate, body temperature, vitamin metabolism, calcium levels in the blood, bone growth and density, and the individual cells' ability to take in nutrition and oxygen and dispose of waste.

Hormones of the Thyroid and Connection to Other Hormones

The pituitary gland releases the hormone TSH to stimulate the thyroid gland to produce thyroxine (T4) and triiodothyronine (T3). T3 is used throughout the body affecting nearly every psychological process. T3 is 20 times more potent than T4. However, most of our T4 is converted into T3 by the body's organs, if the body has the correct nutrients to convert it.

Calcitonin is also produced by the thyroid gland. This hormone's function is to maintain the proper homeostasis of calcium in the bloodstream, reducing calcium levels when they become too high. It prevents calcium loss in the bones at times such as pregnancy and lactation.

How to Prevent and Treat Thyroid Disease Naturally

Both iodine and selenium are necessary for the proper functioning of the thyroid gland. Without iodine, the thyroid cannot produce T3 and T4. Without selenium, the body cannot convert T4 into T3. However, too much iodine or selenium can do more damage than good. You may consider testing your levels and working with your health care professional if you decide to supplement with iodine or selenium unless you take a thyroid supplement that is properly balanced. (see below)

Foods That Benefit

The thyroid gland must have iodine to produce T3 and T4. Good food sources include the following:

- Shellfish—shrimp, scallops
- Seafood—cod, sardines, salmon, tuna
- Yogurt and milk
- Eggs

Selenium is essential to the process of the body breaking down T4 into T3. Many sources of selenium are the same as iodine:

- Seafood—cod, sardines, salmon, tuna (tuna is the highest)
- Shellfish—shrimp, scallops

But also:

- Poultry—turkey and chicken
- Meat—Lamb and beef

- Brazil Nuts (2-3 a day) ...and many other foods

Foods to Avoid

If you have hypothyroidism, medical professionals warn against eating raw cruciferous vegetables or suggest you radically limiting their intake. Foods in question with hypothyroidism include: broccoli, cabbage, Brussels sprouts, cauliflower, kale, spinach, turnips, soy, peanuts, linseed, pine nuts, millet, cassava, mustard greens, asparagus, and sweet potatoes. They also recommend we avoid alcohol and tobacco, and while we agree with that, we don't necessarily agree with the cruciferous vegetable recommendation. We believe that a varied diet of fresh, raw vegetables can fix almost anything, including any adverse reaction to the foods themselves. Though, obviously you have to use common sense; if you smoke, drink lots of coffee, or rarely get enough sleep then a large kale smoothie and a kale salad every day isn't the smartest choice.

For those with severe thyroid disorders, occasionally (depending on the thyroid disorder and the person's diet), cruciferous vegetables can be debilitating if not cooked first. It doesn't take much heat to remove the _____.

Supplements, Herbs, and Alternative Therapies

B-vitamins, Omega-3 fatty acids, a good multivitamin with minerals, vitamin C, and probiotics will all benefit your condition. For hyperthyroidism, you will need good anti-oxidant support.

For hypothyroidism: L-tyrosine (500 mg two to three times daily. Never take this without your doctor's approval if you are taking conventional hormone medication or if you have mania or high blood pressure).

For hyperthyroidism: L-carnitine decreases thyroid activity. (May thin the blood.)

The following herbs may help with hypothyroidism: Coleus (*Coleus forskohlii*), Guggul (*Commiphora mukul*), and Bladderwrack (*Fucus vesiculosus*). *Do your research on these herbs if you are taking any prescription medications or have any other medical issues. Avoid these herbs if you have hyperthyroidism.*

The following herbs may help with hyperthyroidism: caffeine free green tea (*Camellia sinensis*) standardized extract and lemon balm (*Melissa officinalis*).

Homeopathy, acupuncture, massage, and hydrotherapy may also be of benefit.

Regardless of the treatment you choose, your foundation of health will always be a diet filled with densely nutritious foods; 80% raw, organic, produce. Avoid all processed foods, artificial flavorings and colorings, MSG, GMOs and trans-fats, sugar, and caffeine. Drink plenty of clean water each day. Exercise and get plenty of sleep. Give your body the foundation that will allow it to heal. Check out *Understand Hypothyroidism – Prevention and Natural Remedies* for more on thyroid health.

Recommended Supplements:

- Thyro Complex – Progressive Labs
- Thyroid I – Wise Woman Herbals
- B-Complex #12 – Thorne Research
- Other supplements for thyroid health

Further Reading:

- *Understand Hypothyroidism – Prevention and Natural Remedies*
- *The Power of Our Hormones and How To Balance Them*

- *How to Kill Candida and Balance Your Inner Ecosystem*
- *Natural Remedies for Adrenal Fatigue*
- *Mercury Fillings, Root Canals, Cavitations – What You Need to Know*

Sources:

- Eva Cwynar, MD, Don't Overlook Your Thyroid, (excerpt from her book, *The Fatigue Solution*), published by *Life Extension*, August 2012
- Finley, K. Thomas, PhD. Thyroid Gland, *Salem Press Encyclopedia of Science*, September, 2013
- President and Fellows of Harvard College, **Thyroid Disease**. *Harvard Health Publications*, 2009 by
- American Thyroid Association
- World's Healthiest Foods: iodine, selenium, Brazil nuts for selenium
- University of Maryland Medical Center: hypothyroidism, hyperthyroidism
- Wikipedia: thyroid, triiodothyronine (T3), thyroxine (T4), Calcitonin