LIVING WITH HYPERTHYROIDISM

The thyroid gland is a small, butterfly-shaped gland at the base of your neck. This small gland has a big effect on your body. The hormones it produces affect almost all bodily processes, including metabolism, fertility and sexual function, internal thermostat, mood, and more.

The American Thyroid Association estimates that more than 12% of Americans will develop a thyroid condition at some point in their life, although up to 60% of those with thyroid disease are unaware of their condition. Women are more likely than men to have thyroid problems, with around one in every eight women developing a problem at some point in her life.

Hyperthyroidism, in which too much thyroid hormone circulates in the body, is a common thyroid condition, affecting more than one in every hundred Americans. While there are many effective treatments for hyperthyroidism, uncontrolled hyperthyroidism can lead to serious, even life-threatening problems. Read on to learn more about what hyperthyroidism is, what the symptoms are, and how to live with this condition.

How the Thyroid Works

The thyroid gland is part of your endocrine system. The endocrine system is the network of glands throughout your body that produces hormones – powerful chemicals that help to turn on or off all of the various functions in the body. The thyroid is a particularly important element of the endocrine system, producing hormones that affect brain, heart and kidney function, as well as skin maintenance, digestion, fertility, temperature regulation, muscle strength, and more.

In order to produce thyroid hormones, the thyroid uses iodine from our food to create two hormones: triiodothyronine (T3) and thyroxine (T4), which affect the function of all the cells in the body. The thyroid also produces a more targeted hormone, calcitonin, which helps regulate the amount of calcium in your blood.

The pituitary gland, which is located in the brain, tells the thyroid how much hormone to produce by releasing thyroid-stimulating hormones (TSH). When everything is functioning as it should, the hypothalamus and the pituitary gland carefully monitor hormone levels in the body. The pituitary releases TSH to stimulate the thyroid to produce just the right amount of thyroid hormone. These hormones then circulate in the blood and are taken up by various organs to help run just about every system in the body.

Symptoms of Hyperthyroidism

While the thyroid gland usually keeps our metabolism and other functions humming along correctly, sometimes it goes haywire. When the thyroid produces too little hormone, it causes hypothyroidism, in which everything in the body slows down. People with hypothyroidism gain weight, feel cold, fight fatigue and depression, and more.

In contrast, with hyperthyroidism, too much thyroid hormone is present in the body, causing bodily functions to speed up. Symptoms include:

- Weight loss, despite increased appetite
- Diarrhea
- Lighter or missed periods
- Rapid heartbeat (tachycardia), irregular heartbeat (arrhythmia), and/or a pounding heart (palpitations)
- Anxiety, irritability and/or nervousness
- Uncontrolled sweating and heat intolerance
- Difficulty sleeping
- Thin, brittle hair
- Fatigue
- Red, swollen skin on the shins and feet

In some cases, people with hyperthyroidism caused by an autoimmune condition known as Graves' disease will develop an eye condition known as Graves' ophthalmopathy. In this condition, the same autoimmune antibodies that cause the thyroid to overproduce thyroid hormone also cause inflammation in the tissues behind the eye. This can cause bulging eyes, dry eyes, watery eyes, and eye pain and inflammation.

Graves' ophthalmopathy usually develops soon after hyperthyroid symptoms, but it can develop years later. In some people, eye irritation will be the first sign of a thyroid problem. Many cases of Graves' ophthalmopathy will resolve on their own, but all cases should be monitored by an eye doctor, as it can cause vision loss in extreme cases.

If hyperthyroidism goes untreated, a number of complications can result, including:

- Heart problems - Hyperthyroidism increases the heart rate. Over time, this stresses the heart, increasing the risk of heart disease, stroke and congestive heart failure.

- Brittle bones - When your body has high thyroid hormone levels, your bones can't properly absorb calcium, which can lead to osteoporosis.

- Thyroid storm (thyrotoxic crisis) - In rare cases, the body produces far too much thyroid hormone, leading to a potentially life-threatening condition marked by rapid heart rate, sweating, high fever, and confusion. Thyroid storm requires immediate medical treatment.

Who Gets Hyperthyroidism?

Hyperthyroidism can develop in anyone at any age, but it occurs most often in women, and the risk rises after age 60. In older people, the symptoms of hyperthyroidism can be subtle, and doctors sometimes mistake it for depression or dementia. If someone has

uncontrolled hyperthyroidism and gets pregnant, hyperthyroidism can sometimes affect the baby.

Risk factors for hyperthyroidism include:

- A family history of thyroid problems, particularly Graves' disease
- Health problems including pernicious anemia (a vitamin B12 deficiency), type 1 diabetes, and primary adrenal insufficiency, a disorder that affects the hormones
- Being female
- Being older than age 60
- Consuming large amounts of iodine from medications or food
- Recent pregnancy
- Extreme stress or trauma, which can trigger Graves' disease in people with a genetic susceptibility

While some people may be more at risk of hyperthyroidism than others, it's possible for anyone to get it. Hyperthyroidism has a number of causes, including:

- Graves' disease, mentioned above – an autoimmune disorder in which the immune system attacks the thyroid, causing it to overproduce T4. Graves' disease is the most common cause of hyperthyroidism.

- Hyperfunctioning thyroid nodules, which occur when a small piece of the thyroid malfunctions, creating small, benign (non-cancerous) nodules or lumps. These nodules pump out thyroid hormones, and do not respond to TSH levels.

- Thyroiditis, or inflammation of the thyroid, which can occur after pregnancy. Thyroiditis can also be caused by an infection or virus. In thyroiditis, the inflamed thyroid begins to leak stored thyroid hormone into the bloodstream.

- Excess iodine consumption. The thyroid makes thyroid hormones out of iodine. If someone consumes too much iodine, it may spur the production of excess thyroid hormone. Iodine is present in some medications, including some heart medications and cough syrups. Seaweed and seaweed supplements also contain iodine, as does table salt with added iodine.

- Excess thyroid medication. People who take medication for hypothyroidism (low levels of thyroid hormone) can experience hyperthyroid symptoms if their dose of medication is too high. It's important that if you are taking medication for hypothyroidism that you have your thyroid levels checked from time to time, as your levels – and the dose of medication that you require – can change over time.

Diagnosis and Treatment of Hyperthyroidism

Hyperthyroidism is diagnosed by a simple blood test that gauges your thyroid hormone levels. Usually, your level of T4 will be high and TSH will be low. Once your doctor has confirmed that your thyroid hormone levels are too high, they will conduct further tests to find out why. These tests involve various methods of imaging the thyroid. Tests include:

- Radioiodine uptake test, in which you swallow a small amount of radioactive iodine, and your thyroid is checked at intervals over the next day to see how much collects in your thyroid gland.

  If your thyroid takes up a large amount of iodine, it shows that your thyroid is overactive, suggesting either Graves' disease or thyroid nodules. If your thyroid doesn't absorb much of the iodine, then your thyroid isn't in hyperdrive. Instead, the cause of your hyperthyroid symptoms might be thyroiditis, or inflammation of the thyroid, causing thyroid hormone to leak into your bloodstream.

- Thyroid scan, in which a small amount of radioactive iodine is injected into your arm, and then a special camera takes pictures of your throat. This produces pictures that show your doctors exactly what is happening within your thyroid.

- Thyroid ultrasound, which uses an ultrasound machine to take images of your thyroid. This test doesn't involve any radiation, which may be important for some patients – particularly those who are or who may become pregnant in the near future.

The treatment for hyperthyroidism depends on what is causing the problem, as well as your age, health history, and preferences. Treatments include:

- Radioactive iodine. Radioactive iodine will be absorbed by the thyroid gland, causing it to shrink. This treatment will help your symptoms disappear within a few months. In some cases, though, patients are left with low levels of thyroid hormone (hypothyroidism) and must take thyroid hormone pills.

  While the idea of radioactive iodine may sound scary, this is a very safe treatment. Any excess radiation will disappear from your body within months. However, there are some people, including those who are pregnant or trying to become pregnant, who should not be treated with radioactive iodine. In these cases, there are other treatments.

- Anti-thyroid medications. These medications can bring down your thyroid hormone levels within a few weeks or months. Some people may need to take the pills for a year or more. In many cases, one course of pills is enough to resolve hyperthyroidism, but some people may have recurring symptoms and require ongoing treatment.

- Thyroid surgery. Thyroid surgery involves removing thyroid tissue. Surgery used to be common, but other treatments such as medication and radioactive iodine are safer. Still, surgery is still used in some cases where other treatments can't be used.

  The risks of surgery include damage to the vocal cords or other delicate parts of the throat. After surgery, most patients will require thyroid hormone medication for life.

- Beta blockers. Beta blockers don't cure hyperthyroidism, but they can make the symptoms resolve quickly. For that reason, they are sometimes given to patients to make them feel better while other treatments are working on solving the underlying problem.

While family doctors can diagnose and treat hyperthyroidism, sometimes they will refer patients to an endocrinologist. Endocrinologists specialize in the endocrine system and can help with conditions caused by glandular problems or hormonal imbalances.

Dietary Changes That Can Help Your Thyroid

You can't cure hyperthyroidism by changing your diet, but some foods can help soothe symptoms. Other foods can make symptoms worse. In addition, some foods can interfere with common thyroid medications. By optimizing your diet, you can support your recovery and feel better faster.

Foods to Avoid

With hyperthyroidism, it's important to avoid the following:

Iodine-Rich Food

Your body makes thyroid hormones out of iodine. Limiting iodine can help calm hyperthyroidism. Foods high in iodine include:

- Iodized table salt
- Seaweed and seaweed supplements, including the food additives carrageenan, agar-agar, and alginate
- Fish and shellfish
- Dairy products (including, sadly, milk chocolate)
- Eggs and egg yolks
- Commercially baked breads and pastries made with iodate dough conditioners
- FD&C red dye #3, found in maraschino cherries and other pink- or red-tinted foods and drinks
- Blackstrap molasses (but unsulfured molasses is fine)
- Many vitamin pills and herbal supplements

Soy and Soy Foods

Soy doesn't contain iodine, but soy has been shown to interfere with the uptake of radioactive iodine (a hyperthyroidism treatment) in animal studies, so it is best to avoid it during treatment.

Soy foods include soybeans (edamame), tofu, soymilk, vegetarian meats made with soy, soy sauce, and foods containing these ingredients. Soy is a common allergen, and most packaged foods that contain soy will list it clearly on the label.

Caffeine

Caffeine is a stimulant. With hyperthyroidism, your body is already revved up to unhealthy levels, and you don't need more stimulation. Avoid coffee, green and black tea, cola, energy drinks, and chocolate. A variety of painkillers and cold medicines also contain caffeine, so read labels carefully on your over-the-counter medications or ask a pharmacist for help.

Foods That Support Recovery

When you have hyperthyroidism, your whole system is in overdrive. This is very taxing and it can take some time for your body to heal. Healthy, nutrient-rich foods can help nourish your body, and assist in healing. Eat plenty of the following:

Cruciferous Vegetables

Cruciferous vegetables such as broccoli and kale may help lower thyroid hormone levels and reduce iodine uptake by the thyroid. While eating cruciferous vegetables won't treat your hyperthyroidism, they can help you feel better. Besides any thyroid-specific benefits, cruciferous vegetables are chock-full of vitamins, minerals, antioxidants, and fiber.

Cruciferous vegetables include broccoli, cauliflower, kale, Brussels sprouts, cabbage, boy choy, radishes, and collard greens.

Foods Rich in Selenium

Selenium is a mineral that the body requires in very small amounts. It's needed to help metabolize thyroid hormones, and it may help soothe some of the symptoms of autoimmune thyroid disorders. Brazil nuts are a rich source of selenium. It can also be found in most meats, rice, eggs, beans, oatmeal and spinach.

Berries

Berries are rich in antioxidants, and they may help your body recover from stress. They are also low-calorie, high in fiber, and tasty! Eat a variety of raspberries, blackberries, blueberries, and strawberries.

Other Fruits and Vegetables

Only one in ten Americans get enough fruits and vegetables in their diet. Make sure to eat a serving or two of fruits and vegetables at every meal or snack. The vitamins, minerals and antioxidants in produce will help you heal.

Foods High in Calcium and Vitamin D

Hyperthyroidism can interfere with the body's ability to absorb calcium and vitamin D. These nutrients are essential for building strong bones. Dairy products, including milk, yogurt, and cheese, are an excellent source of calcium; however, dairy products also contain iodine, which may worsen your hyperthyroid symptoms. Likewise, canned salmon and sardines are excellent sources of both calcium and vitamin D, but they also contain iodine. Speak to your doctor about whether eating dairy products and fish is right for you.

Fortunately, there are also many non-dairy sources of calcium. Good sources include cruciferous vegetables (see above for a list), sunflower seeds, white beans, dried figs, almonds, brazil nuts, and fortified orange juice. Many cereals are also fortified with calcium and vitamin D.

Vitamin D, the "sunshine vitamin", is made by your body when the sun shines on your skin. It's important to limit your sun exposure, however, to avoid the risk of skin cancer from UV rays. It only takes 10-30 minutes of sun exposure per day in the summertime to get the vitamin D you need.

Other sources of vitamin D include mushrooms, fortified cereals, fortified orange juice, oily fish, and dairy foods. Some people may require a vitamin D supplement. Speak to your doctor about whether taking vitamin D is right for you.

Tips for Maintaining a Healthy Weight

Hyperthyroid disease and its treatment can play havoc with your weight. One of the key symptoms of hyperthyroid disease is unintended weight loss, accompanied by increased hunger. While you may feel as if you can eat anything and not get full, it's still important to minimize junk food and emphasize healthy food when you have cravings. Your body needs nutrients to help it heal, and junk food can harm your health in other ways.

If you are trying to regain weight with healthy food, good choices include:

- Healthy fats, including olives, olive oil, avocados and nuts, especially walnuts. These foods contain healthy omega-3 fats. Salmon and other oily fish are even better sources of omega-3 fatty acids. However, they also contain iodine, which you may need to avoid during treatment. If your doctor says it's ok, fish is a nutrient-rich source of protein and healthy fats. Otherwise, plant sources of omega-3 oils are also healthy and delicious.

- Fruits and vegetables. Unless you have diabetes (in which case you have to be careful of the sugar you consume), it's hard to overeat fruits and vegetables. Your body can use all the colorful produce you can eat.

- Healthy protein. As you recover from hyperthyroidism, your body needs plenty of protein to rebuild your muscles. Chicken, turkey, beans and nuts are all good sources of protein.

- Healthy whole grains. Whole grains such as oats, whole wheat, brown rice, barley, and more exotic grains such as teff and sorghum are all good sources of nutrients, fiber, and the healthy carbohydrates you need to regain energy.

  Note that people with celiac disease are more likely to have hyperthyroidism, and some people discover their hyperthyroidism before they realize that they are celiac. People with celiac disease must avoid gluten, found in wheat, rye and barley. If you suspect you may have issues with gluten, ask your doctor to be tested. If you are celiac, you will have to avoid all grains with gluten, but there are many healthy gluten-free grains, including oats, rice, teff and quinoa.

Once you begin treatment for your hyperthyroidism, your metabolism may shift. Your thyroid hormone levels may even drop into the hypothyroid range before you come to a new equilibrium. If your thyroid levels drop too low, you may gain weight and struggle to lose it. The key to managing your weight is to continue to eat healthy foods including fruits, vegetables, whole grains and lean protein, but in smaller portions.

If you are struggling to manage your weight and your thyroid condition, consider talking to a registered dietitian (RD). An RD can help you develop an eating plan that meets all of your nutritional needs – whether your thyroid hormone levels are too high, too low, or just right.

Living with Hyperthyroidism

Hyperthyroidism speeds up every system in your body and affects everything from your moods to your digestion. It can cause anxiety, a racing heart, and crushing fatigue, as if you have run a marathon every day (because, based on your heart rate, you have). Fortunately, once your doctor runs thyroid tests, hyperthyroidism can be cured with a number of effective treatments that will help you feel better within a few weeks or months.