Prevention Generation

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The monthly Navigator is your way of reading about the national health subject of the month and "navigating" your way through what you should know to get and stay healthy. Enjoy!

Navigator

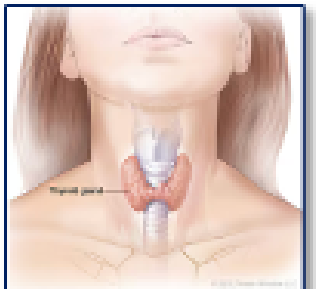
January 2025

January is Thyroid Awareness Month

DISCLAIMER. Representations in the Navigator issues are based on information gathered from multiple healthcare websites and advisors. The content is for Informational purposes only. We have not implied any representation confirming this information as accurate or complete. Readers are responsible to consult with their own healthcare advisors regarding their specific healthcare needs.

Understanding the Thyroid Gland

The thyroid is part of your endocrine system, which is responsible for regulating many of the body's internal functions of the body including controlling temperature, metabolism and other processes. Your thyroid gland is located at the base of your neck. It's a small, butterfly-shaped gland.



The thyroid is small but mighty. It produces hormones that function in:

- Metabolism
- Muscle control
- Heart function
- Digestive function
- Mood
- Brain development
- Bone health

Background. Is thyroid disease a serious illness? Thyroid diseases affect many parts of your body and health. If you follow your treatment plan, it's usually not serious. But, if thyroid disease is undiagnosed or not treated properly, it can cause complications. Complications from untreated thyroid conditions can include:

Untreated hyperthyroidism include:
- Atrial fibrillation
- Stroke
- Congestive heart failure
- Osteoporosis

Untreated hypothyroidism include:
- Mood disorders (depression)
- Peripheral neuropathy (numbness)
- Increase heart disease or failure risk
- Infertility, coma, sudden, life-threatening complications

Can I live a normal life with thyroid disease? Thyroid disease is often a lifelong medical condition that you'll need to manage consistently. This often involves daily medication. Your healthcare provider will monitor your treatments and adjust them over time. It may take some time to find the right treatment plan for you to manage your hormone levels. But, you can usually live a normal life with thyroid disease.

When should I see a healthcare provider? If you have symptoms of hypothyroidism or hyperthyroidism or notice a change in your neck's appearance where your thyroid is, see a healthcare provider. It's important to get a diagnosis and start treatment. If you learn that a biological family member has a thyroid disease, be sure to update your provider so they can add that to your medical record. Thyroid diseases often run in families. It's good to know your history in case you ever develop symptoms of thyroid disease.

Thyroid diseases are common conditions. The good news is that medication and other treatments can help manage them well. If you have symptoms of hypothyroidism or hyperthyroidism or have known risk factors for thyroid disease, talk to your healthcare provider.

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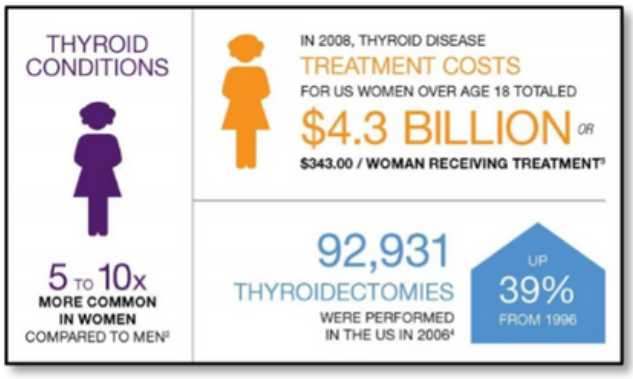
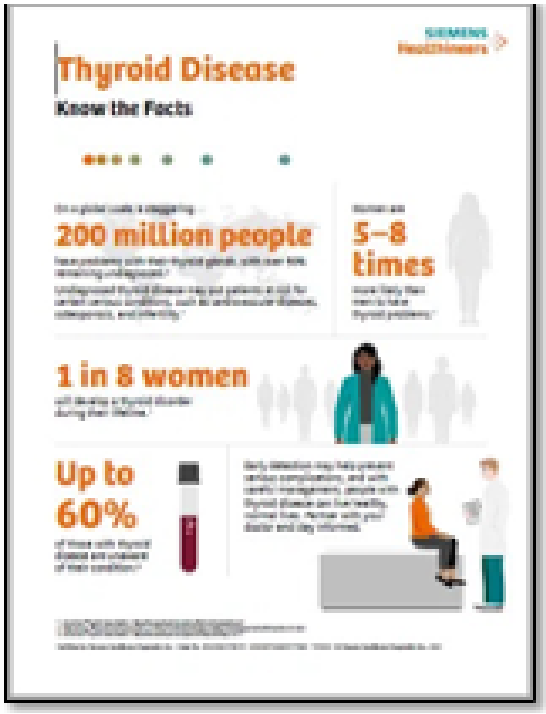
FACTS ABOUT THYROID DISEASE



Prevalence *

- **Population**: 12% of the population will develop a thyroid condition during their lifetime with 20% of Americans currently having thyroid disease.
- **Gender**: Women (1 in 8) are 5 to 8 times more likely to develop thyroid problems than men.
- **Age**: The prevalence of thyroid disease is highest in people aged 60 and older.
- **Race**: Non-Hispanic white people have the highest prevalence of thyroid disease.
- **Awareness**: Up to 60% of people with thyroid disease are unaware of their condition.
- **Causes**: Largely unknown.
- **Symptoms**: Symptoms of thyroid disease include unusual neck swelling, fatigue, unexplained weight gain or loss, and palpitations.
- **Undiagnosed thyroid disease** may put patients at risk for cardiovascular disease, osteoporosis or infertility.
- **Pregnancy issues** may include increased risk of miscarriage, preterm delivery, and developmental problems.
- **Treatment**: Most thyroid cancers respond to treatment, but a small percentage can be very aggressive.



Common Thyroid Disorders and Their Symptoms

Symptoms. There are a variety of symptoms you could experience if you have thyroid disease. Unfortunately, symptoms of a thyroid condition are often similar to signs and symptoms of other medical conditions and stages of life. This can make it difficult to know if your symptoms are related to a thyroid issue or something else entirely. Speak with your doctor if you feel labs or an ultrasound might be in order.

Hyperthyroidism (symptoms of overactive thyroid)
• Experiencing anxiety, irritability, and nervousness
• Having trouble sleeping
• Losing weight
• Having an enlarged thyroid gland or a goiter
• Having muscle weakness and tremors
• Experiencing irregular menstrual periods or having your menstrual cycle stop
• Feeling sensitive to heat
• Having vision problems or eye irritation

Hypothyroidism (symptoms of underactive thyroid)
• Feeling tired (fatigue)
• Gaining weight
• Experiencing forgetfulness
• Having frequent and heavy menstrual periods
• Having dry and coarse hair
• Having a hoarse voice
• Experiencing an intolerance to cold temperatures

*American Thyroid Association. https://www.thyroid.org/media-main/press-room/ - :~:text=An estimated 20 million Americans,thyroid disorder during her lifetime.

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Common Thyroid Disorders and Their Symptoms *(continued)*

Grave's Disease (autoimmune disorder)
- Bulging eyes
- Goiter (enlargement of the thyroid)
- Anxiety
- Altered menstrual cycle
- Diarrhea
- Excessive sweating
- Hand tremors
- Irregular heartbeat
- Fatigue
- Irritability

Hashimoto's Disease (symptoms may include):
- Fatigue
- Goiter (enlargement of the thyroid)
- Intolerance to cold
- Depression
- Constipation
- Mild weight gain
- Dry skin and dry, thinning hair
- Pale, puffy face
- Heavy, irregular menstruation

Thyroid Nodules (possibly be related to cancer)

Postpartum Thyroiditis (up to 1 year after birthing)

Thyroid Disease and Chiropractic Care *

How Can Chiropractic Help? Chiropractic care offers many benefits for treating thyroid disorders. First, it's safe and effective. Many patients find it a great addition to their thyroid treatment plan. It can be used in conjunction with other treatments, including medication. In some cases, people can eventually reduce or eliminate their need for medication as their thyroid and overall health improve.

Chiropractic treatments target the root cause of health problems. In the case of thyroid health issues, it promotes healing and health of the spine and the nervous system. The thyroid is located between C5 and T1 vertebrae. The nerves affecting the thyroid gland travel into the spinal cord. When there is interference with communication in this pathway, it can lead to problems with the thyroid and other parts of the body. Correcting misalignment allows for healthy communication and function, promoting overall optimal health.

Chiropractic care may benefit you. Your chiropractic team can provide several different types of chiropractic care and physical therapy techniques. The goal is to offer whole-body wellness by targeting the root cause of your discomfort, not just your symptoms. To get started, reach out to your chiropractic physician today. Also, many thyroid conditions are linked to the autoimmune system which is controlled by the nervous system. Bringing the nervous system into balance promotes a healthy autoimmune response.

Chiropractic Techniques for Thyroid Disorders. Chiropractors can use several treatment techniques to help with thyroid health. The most common is spinal adjustment. This gentle aligning of the spine brings an out-of-balance nervous system into balance. Chiropractors also provide nutritional counseling. Nutrition and supplements might not be enough to resolve thyroid problems, but used in conjunction with other treatments, healthy thyroid function may be improved. ***

*Cleveland Clinic. https://my.clevelandclinic.org/locations/stjhc/specialties
**Specific Care Chiropractic. April 1, 2024. https://sc-chiro.com/chiropractic-and-thyroid-problems/ -:~:text=While a chiropractor can't,body, including your thyroid gland.
***Dr. Eric Neumann, DC. Accident Care. September 21, 2023. https://accidentcarechiropractic.com/chiropractic-care-for-thyroid-disorders/

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Tests to Measure Thyroid Function *

Blood Tests. Health care professionals use thyroid tests to check how well your thyroid is working and to find the cause of problems such as hyperthyroidism or hypothyroidism. Thyroid hormones control how the body uses energy, so they affect nearly every organ in your body. Tests may include a "thyroid function test" which is a blood test that measures the levels of hormones produced by your thyroid gland, like T3, thyroxine (T4) thyroid-stimulating hormone (TSH), and thyroid antibody tests to assess if your thyroid is functioning properly and identify potential issues like hyperthyroidism (overactive thyroid) or hypothyroidism (underactive thyroid). Your doctor will start with one or more blood tests and may also order imaging tests to check thyroid function.

Other Tests Sometimes Included. Your health care professional may order one or more imaging tests to diagnose and find the cause of thyroid disease. A trained technician usually does these tests in your doctor's office, outpatient center, or hospital. A radiologist, a doctor who specializes in medical imaging, reviews the images and sends a report for your health care professional to discuss with you. Tests may include:

• **Ultrasound**. Ultrasound of the thyroid is most often used to look for, or more closely at, thyroid nodules. Thyroid nodules are lumps in your neck that may or may not be cancerous.
• **Thyroid Scan**. Doctors use a thyroid scan to look at the size, shape, and position of the thyroid gland. This test uses a small amount of radioactive iodine to help find the cause of hyperthyroidism and check for thyroid nodules.
• **Radioactive iodine uptake test**. A radioactive iodine uptake test, also called a thyroid uptake test, can help check thyroid function and find the cause of hyperthyroidism. The thyroid "takes up" iodine from the blood to make thyroid hormones, which is why this is called an uptake test.

Treatment Options

Treatment for thyroid disease depends on the type of condition and the cause. The goal is to return your thyroid hormone levels to a healthy range. Treatment options include:

• **Antithyroid Drugs** include methimazole and propylthiouracil. These stop your thyroid from making hormones.
• **Radioiodine** (radioactive iodine) therapy: This treatment damages the cells of your thyroid, preventing it from making high levels of thyroid hormone.
• **Beta-Blockers**: These medications don't affect your thyroid, but they help manage some symptoms like rapid heart rate.
• **Surgery**: For a more permanent form of treatment, your healthcare provider may recommend surgically removing your thyroid (thyroidectomy). This will stop it from creating thyroid hormones. However, you'll need to take synthetic (manufactured) thyroid replacement hormones (pills) for the rest of your life.
• **Thyroid Replacement Drugs**: If you have hypothyroidism, the main treatment option is thyroid replacement medication. It's a synthetic way to add thyroid hormones back into your body. One medication that providers commonly prescribe is levothyroxine.

*Henry Burch, MD. Chair of Endocrinology at NIH. https://www.niddk.nih.gov/health-information/diagnostic-tests/thyroid -:~:text=Health care professionals use thyroid tests to,thyroid hormones: thyroxine (T4) and triiodothyronine (T3).

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Supplements - Advantages & Disadvantages *

Some supplements can be beneficial for thyroid health, while others can be harmful. You should consult your doctor or healthcare provider before adding any supplements to your daily regimen. For example:

- **Iodine** helps the thyroid produce hormones, but too much can cause hyperthyroidism. Iodine supplements should only be taken with a doctor's recommendation.
- **Iron** helps generate T4 and T3, but some iron tablets can interfere with thyroid medication absorption.
- **Calcium** can interfere with thyroid medication absorption, so it should be taken at least three to four hours after levothyroxine medications are taken.
- **Biotin** can interfere with thyroid function test results but doesn't affect thyroid hormone levels.
- **Thyroid Support Supplements** often contain animal thyroid hormones, which can be dangerous.
- **High Dose Flavonoid Supplements** can interfere with thyroid function.
- **Herbs**. Some herbs, like ashwagandha, may have potential benefits, but they should be approached cautiously. Other herbs, like bladderwrack, may stimulate hyperthyroidism.
- **Green Food Supplements** may contain cruciferous vegetables (e.g., broccoli, Brussels sprouts, cabbage, cauliflower, collard greens, kale, and turnips), which can disrupt thyroid function.
- **Iron**. The thyroid needs iron to make T4 and T3. Iron deficiency can be associated with hypo-thyroidism, especially in pregnant women. Some iron tablets (e.g., ferrous sulphate) can interfere with absorption of thyroxine; therefore doctors recommend a 4-hour interval between taking thyroxine and iron.
- **Lemon balm or Melissa Officinalis** is an antioxidant like carnitine and resveratrol. It is claimed to improve sleep, skin quality and circulation. Lemon balm may be beneficial in treating Graves' disease.
- **Magnesium** can be found in legumes, nuts, seeds, and green leafy vegetables. Smaller amounts are found in meat and fish. Some studies suggest that magnesium deficiency may be associated with hypothyroidism while other studies show that increased magnesium levels can help with the control of Graves' disease. However, the data is inconclusive at this stage.
- **Selenium** is found in Brazil nuts, tuna, sardines, eggs and legumes (e.g. beans, chickpeas, lentils). It is vital in generating T3 from T4. Selenium's benefits are mainly in patients with mild thyroid eye disease. Selenium may bring thyroid antibody levels down in patients with Graves' disease.
- **Vitamin B12** deficiency is sometimes associated with patients with autoimmune thyroid disease.
- **Vitamin D**. Low levels correlate with thyroid autoantibodies, and maybe, features of thyroid cancer.
- **Zinc** is found in shellfish, beef, chicken and legumes. Studies suggests that zinc, alone or combined with other supplements, may improve outcomes in people with hypothyroidism.

Do not consume any vitamins or supplements in high doses, unless advised by your doctor. Check your healthcare provider to see whether supplements are advised or advised against.

If you have any concerns about whether you should take vitamins or other supplements, please consult your doctor or pharmacist.

*National Library of Medicine. Thyroid, Diet & Alternative Approaches. Larsen, Singh, Brito. J Clin Endocrinol Metabolism, Nov 23, 2022. https://pubmed.ncbi.nlm.nih.gov/35952387/

Prevention

Can I prevent thyroid disease? Thyroid diseases generally aren't preventable. Most cases of thyroid disease are linked to genetics and/or caused by autoimmune conditions, which you can't prevent. The two conditions you may be able to prevent are thyroid problems related to iodine excess or deficiency. Talk to your healthcare provider if you're concerned about consuming a healthy amount of iodine.

7 Proactive Steps to Maintaining a Healthy Thyroid *

1. **Eat a balanced diet**. A diet rich in nutrients is essential for thyroid health. Incorporate iodine-rich foods like seaweed, fish, dairy, and iodized salt. Selenium from nuts, seeds, and legumes supports thyroid function, while zinc from whole grains, nuts, and lean meats aids in hormone production. Recommendations:

- Eat at least 5 portions of fruit and vegetables every day
- Eat high fiber starchy foods like potatoes, bread, rice or pasta
- Have some dairy or dairy alternatives
- Eat some beans, pulses, fish, eggs, meat and other protein
- Consume unsaturated oils and spreads in small amounts
- Drink plenty of fluids (at least 6 to 8 glasses a day)
- Avoid processed foods.

2. **Monitor your iodine intake**. While iodine is crucial for thyroid function, excessive intake can also cause issues. Be mindful of your iodine consumption; excess and deficiency can both affect thyroid health. Consult your health care provider or an endocrinologist for personalized recommendations.
3. **Manage stress**. Chronic stress can negatively impact thyroid function. Activities like yoga, meditation, deep breathing exercises or hobbies to maintain healthy cortisol levels and support your thyroid.
4. **Exercise regularly**. Regular physical activity boosts metabolism and helps regulate hormone levels. Aim for a balanced exercise routine that includes cardiovascular workouts, strength training and flexibility exercises for optimal thyroid health.
5. **Get sufficient sleep**. Quality sleep is crucial for overall health, including thyroid function. Aim for 7 to 9 hours of sleep each night to support hormone production and regulate metabolism.
6. **Limit environmental toxins**. Toxins in the environment, such as pollutants, chemicals and heavy metals, can interfere with thyroid function. Minimize exposure by using natural cleaning products, filtering drinking water, consuming organic foods, and being mindful of environmental pollutants.
7. **Regular check-ups**. Periodic check-ups are essential for early detection of potential thyroid issues. If you have symptoms of an overactive or underactive thyroid, your provider may recommend a thyroid function test and other tests for measuring hormone levels to check for abnormalities.

*Inspira Health. February 21, 2024. https://www.inspirahealthnetwork.org/news/healthy-living/8-proactive-steps-aintaining-healthy-thyroid-and-preventing-complications

Making a Difference. If you notice any symptoms of thyroid dysfunction such as fatigue, weight changes or mood swings, swelling in the front area of your neck, etc., consult your health care provider. They may refer you to an endocrinologist to help you get the appropriate treatment to prevent complications.

Many thanks to the Centers for Disease Control (CDC), Cleveland Clinic, Mayo Clinic, Dr. Eric Neumann, DC, Inspira Health, Col Henry B. Burch, MD (NIH), The Journal of Clinical Endocrinol Metabolism, and the American Thyroid Association for providing some of the documentation and images for the above information relating to Thyroid Disease.