

# *Thyroid Health*



Prevention and Health Education Unit  
Prepared by Licensed Health Educators

# Objectives

Identify at least 3 thyroid diseases.

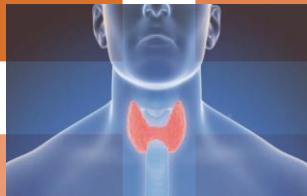
Describe at least one cause and symptom of the diseases.

Know some prevention measures.

# What is the thyroid?

It is a butterfly-shaped gland, which is located in front of the neck.

It is responsible for producing hormones that control the way the body uses energy.



Hormones affect most of the body's organs and major functions.

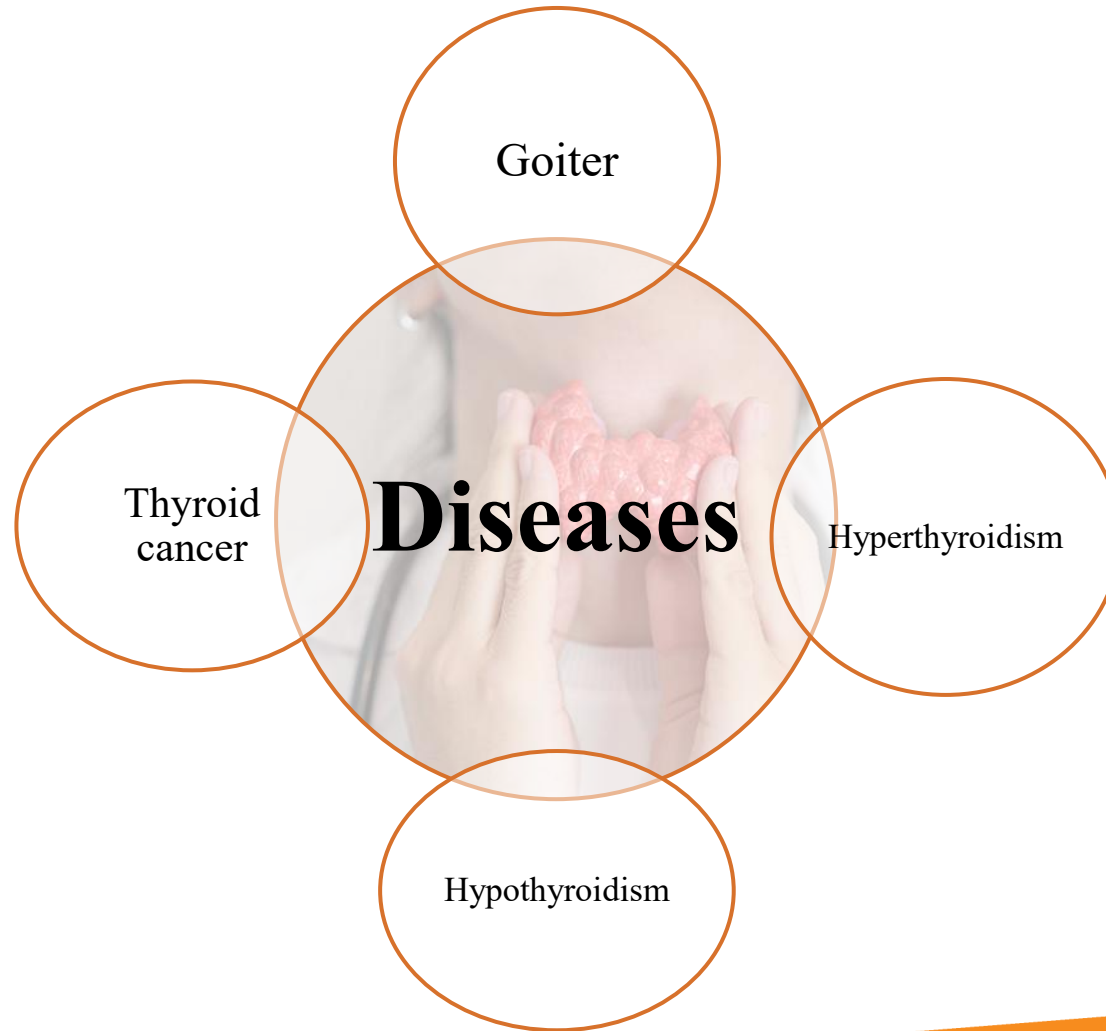
For example: mood, breathing, heart rate, etc.

An anatomical illustration of the human neck and chest area. The thyroid gland is highlighted in a bright red color, positioned in the center of the neck, just below the larynx. The surrounding structures, including the trachea, esophagus, and major blood vessels, are shown in a light gray, semi-transparent style. The background is a plain white color.

# **Thyroid diseases**

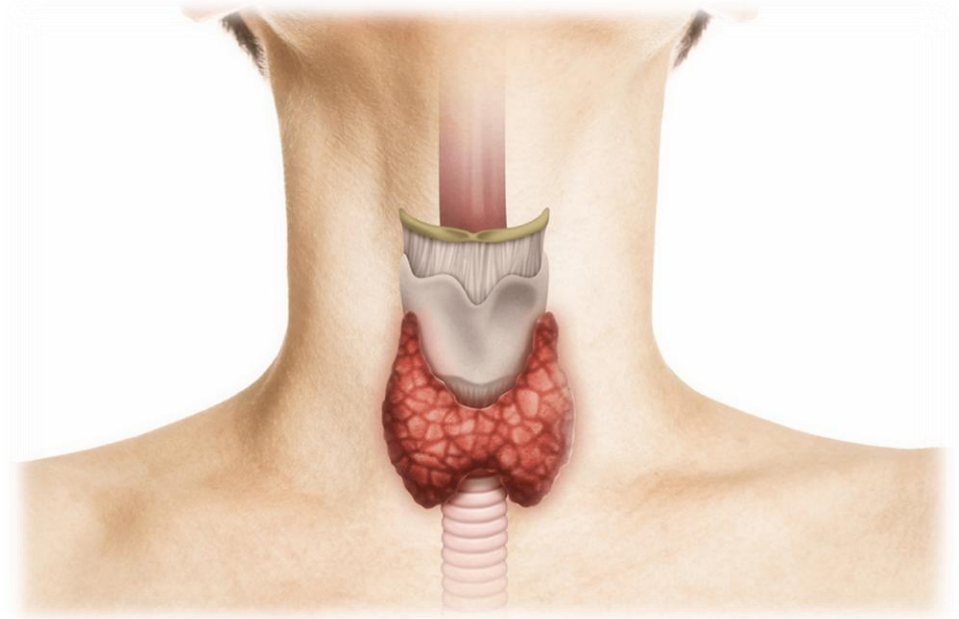
These cause too many or too few hormones to be produced.

# Thyroid diseases




# Hyperthyroidism

- Also, called an overactive thyroid.
- This occurs when the thyroid produces more hormones than the body needs.



# What causes hyperthyroidism?



**Graves' disease:** This is the most common cause. It is an autoimmune disorder in which the immune system attacks the thyroid, causing it to produce too much hormone

**Thyroid nodules:** These are growths on the thyroid. They are usually benign, but some can become hyperactive and produce excess thyroid hormone.

**Too much iodine:** Intake can overstimulate the thyroid, and this can occur through some medications and supplements

**Too much thyroid medicine:** It can develop if excess thyroid medication is used for hyperthyroidism.

**Thyroiditis:** Inflammation of the thyroid that causes stored thyroid hormone to leak into the bloodstream.

# Who is most at risk?

Women

Over 60 years of age

Type 1 diabetes

Family history

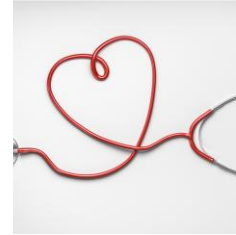
Pregnancy

Pernicious anemia

# Symptoms:



Weight loss

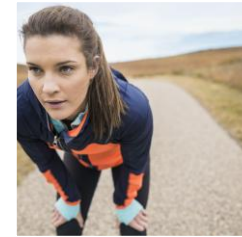


Irregular or fast heartbeat

Mood swings



Fatigue and muscle weakness



Nervousness or irritability



Trouble sleeping



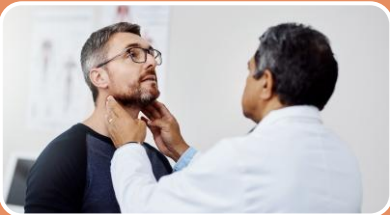
Diarrhea



# Diagnosis



Medical history: Your doctor will ask about your symptoms and any medications you take



Physical exam



They will perform TSH, T3, T4, and thyroid antibody blood tests.

Imaging tests such as ultrasound or a thyroid scan may also be used.

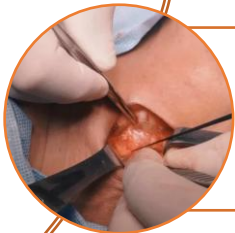
# Treatment



Medications



Radioactive iodine therapy



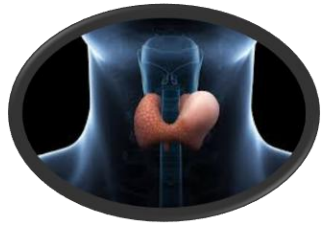
Surgery

# Hypothyroidism

- Also, called an underactive thyroid.
- This is when the thyroid gland does not produce enough thyroid hormone to meet the body's needs.



# What causes hypothyroidism?



**Hashimoto's disease:** It is the most common cause and is an autoimmune disorder in which the immune system attacks the thyroid

**Congenital hypothyroidism:** Hypothyroidism present at birth.

Surgical removal of part or all the thyroid.

Thyroid radiation treatment.

Certain medications.

**Thyroiditis:** inflammation of the thyroid.

# Who is most at risk?

Women

Over 60 years of age

Type 1 diabetes,  
rheumatoid arthritis,  
and/or lupus

Family history

Pregnancy

Turner syndrome

# Symptoms:

They may develop slowly, sometimes over several months or years.



Fatigue

Sensitivity to cold

Constipation

Dry skin

Dry and thin hair

Joint or muscle pain

Heavy or irregular menstrual periods

Depression

# Diagnosis



Medical history: Your doctor will ask about your symptoms and what medications you are taking.



Physical exam



They will perform TSH, T3, T4, and thyroid antibody blood tests.

Imaging tests such as ultrasound or a thyroid scan may also be used.

# Treatment

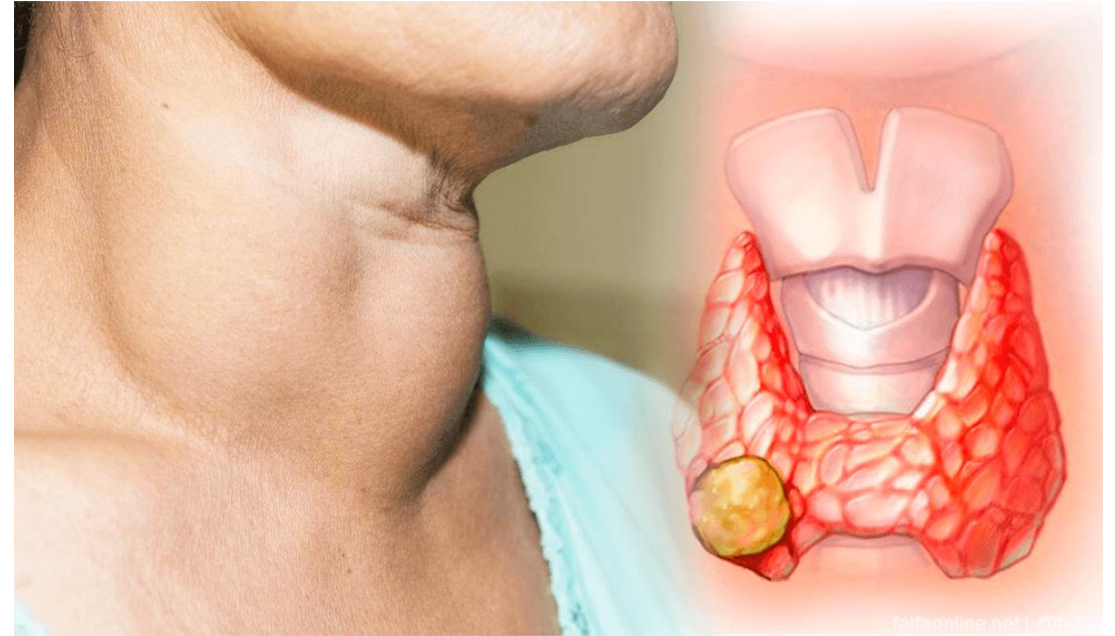


- It is treated with medication, with the aim of replacing the hormone that the thyroid cannot produce.
- Once you find the right dose, you will likely have another blood test in 6 months.
- Then, you'll need the test once a year.

# Thyroid cancer

It begins in the tissues of the thyroid. There are three types, these are:

1. Medullary thyroid cancer
2. Differentiated thyroid cancer
3. Anaplastic thyroid cancer



# Who is most likely to develop thyroid cancer?

Women

Between 25 and 65  
years old

Exposure to certain  
types of radiation

Family history

Goiter (enlarged  
thyroid)

Asian ethnicity

# Symptoms

At first, it may not cause symptoms. However, you may then experience the following:



Trouble breathing

Pain when swallowing

Lump in  
the neck

Hoarseness

Trouble  
swallowing

And other  
voice  
changes

# Diagnosis



Medical history.



Physical exam: They will check the neck for inflammation, lumps, etc.



They will perform thyroid tests, blood tests, or imaging tests.



Biopsy

# Treatment



Radiation therapy



Chemotherapy



Surgery



Thyroid hormone therapy or targeted therapy

# Goiter

It is an enlargement of the thyroid gland and is not a tumor or cancer.

## Causes

- Iodine deficiency is the most common cause.

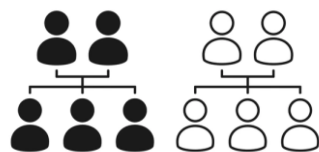
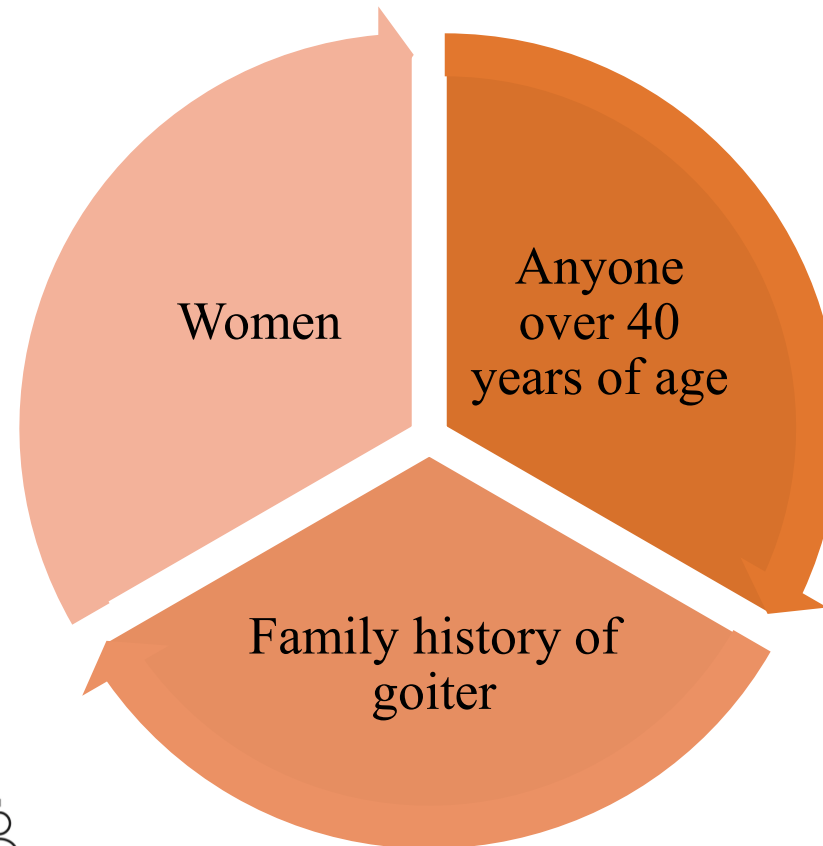
## Symptoms

- The main symptom is an enlarged thyroid gland.



# Who is most at risk?

Simple goiters are most common in:



# Diagnosis

The doctor will feel your neck as you swallow to check for swelling in the area.



He or she will ask you to raise your arms above your head.



You may have blood tests to measure thyroid activity.



Tests to identify abnormal or potentially cancerous areas in the thyroid include thyroid scintigraphy and thyroid ultrasound.



# Treatments



Thyroid hormone supplements in pill form if the goiter is due to an underactive thyroid.



Small doses of Lugol's iodine solution or potassium iodide if the goiter is due to a lack of iodine.

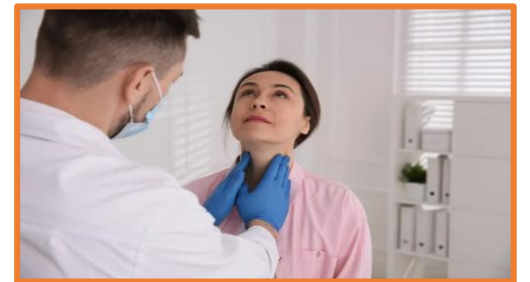
Radioactive iodine to shrink the gland, especially if the thyroid is producing too much thyroid hormone.



Surgery (thyroidectomy) to remove all or part of the gland.

# Prevention

- Thyroid disease usually can't be prevented. Because most cases are related to genetics or caused by autoimmune diseases.
- Yes, thyroid problems related to too much or too little iodine may be prevented.
- Recommendations:
  - **Excess** = limit the consumption of foods that contain iodine, such as salmon, milk, yogurt, shrimp, eggs, iodized salt, etc.
  - **Deficiency** = receiving iodine supplements by mouth.



# Adherence to pharmacological treatment

It is based on the patient's ability to use medications as prescribed by the doctor; this considering the dose, frequency and duration of time.

In people with thyroid problems, it is important for controlling the disease and preventing complications.

Some recommendations to promote adherence to pharmacological treatment:

Use only the dose prescribed by your doctor.

Do not share your prescriptions with others.

Have some system for remembering to use your medicines, such as alarms on your phone.

Keep medicines away from heat, light, and moisture.

# Can the thyroid affect mood?

Yes, thyroid disease can affect mood, including anxiety or depression.

Generally, the more severe the thyroid disease, the more severe the mood changes.

Some mood symptoms:

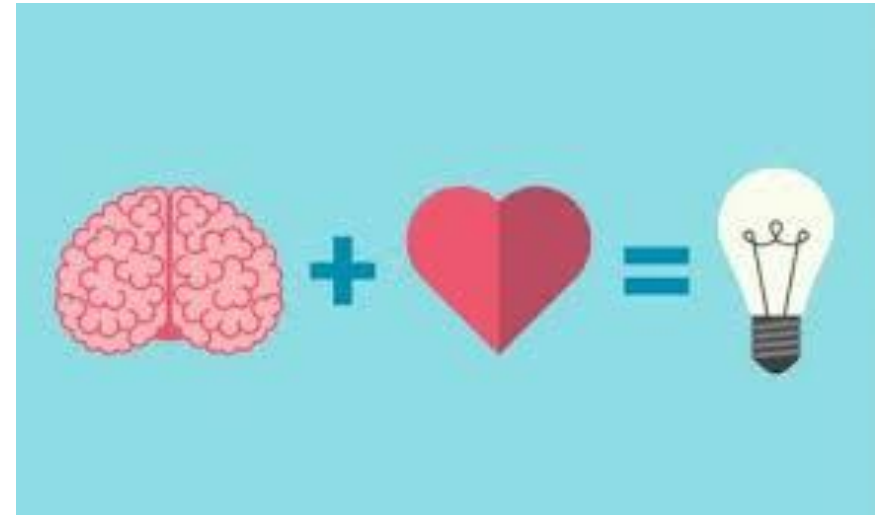
**Hyperthyroidism:**  
anxiety, nervousness and irritability

**Hypothyroidism:**  
depression and unusual tiredness

Treatment usually improves symptoms, including those that affect mood.

# Social and Emotional Aspect

For tips, tools, and resources on how you and your family can cope with the emotional and physical concerns that arise during and after your medical treatment, please visit your primary care physician or call the following phone lines.



# Available Service Lines

## **Medical Advice Line**

24 hours a day / 7 days a week


1-844-347-7801

**TTY/TDD:** 1-844-347-7804

## **Customer Service**

1-844-347-7800

**TTY/TDD:** 1-844-347-7805



**Doubts**



**Questions**



# References

- <https://medlineplus.gov/spanish/thyroiddiseases.html>
- <https://medlineplus.gov/spanish/hyperthyroidism.html>
- <https://medlineplus.gov/spanish/hypothyroidism.html>
- <https://www.mayoclinic.org/es/diseases-conditions/thyroid-cancer/symptoms-causes/syc-20354161>
- <https://medlineplus.gov/spanish/ency/article/001178.htm>
- <https://www.merckmanuals.com/es-us/hogar/trastornos-nutricionales/minerales/exceso-de-yodo>
- <https://www.merckmanuals.com/es-us/hogar/trastornos-nutricionales/minerales/carencia-de-yodo>
- <https://www.mayoclinic.org/es/diseases-conditions/hyperthyroidism/expert-answers/thyroid-disease/faq-20058228>
- <https://www.merckmanuals.com/es-us/hogar/f%C3%A1rmacos-o-sustancias/factores-que-influyen-en-la-respuesta-del-organismo-a-los-f%C3%A1rmacos/adherencia-al-tratamiento-farmacol%C3%B3gico>

*Thank  
you!*



¿Ayuda con su Plan de Salud del Gobierno?



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**TTY 787-474-3389**