

UNDERSTANDING ENDOCRINE HEALTH

What is the Endocrine System?

Imagine a powerful messaging system quietly working behind the scenes to keep your body running smoothly. That's your endocrine system, a complex network of glands that produce hormones, the chemical messengers that affect nearly every cell and function in your body.



These hormones influence



Mood

how you feel



Sleep

when you feel tired or awake



Metabolism

how your body uses energy



Growth and development

from childhood to adulthood



Reproduction

fertility and sexual function



Homeostasis maintains balance

like body temperature and fluid levels

Even small changes in hormone levels can trigger major shifts in your body's functioning. Understanding the signs and symptoms of endocrine disorders can help you take control of your health before problems become serious.

Common Endocrine Disorders You Should Know

Let's explore some of the most common (and often misunderstood) endocrine disorders, how they affect you, and what can be done.

01 Thyroid Disorders

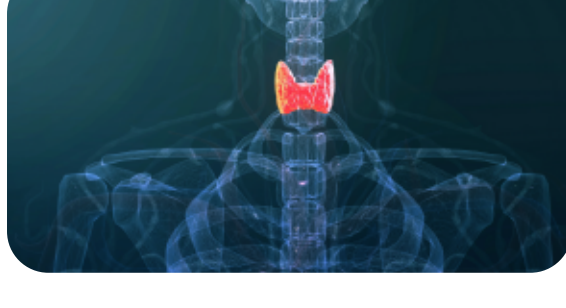
Your thyroid is a butterfly-shaped gland in your neck that plays a big role in metabolism. When it doesn't work properly, your whole body feels it.

Hypothyroidism (Underactive Thyroid)

Cause: Often autoimmune (like Hashimoto's) or due to low iodine.

Symptoms:

- Constant fatigue or sluggishness
- Unexplained weight gain
- Dry skin and hair thinning
- Cold intolerance
- Depression or mood swings
- Slow heart rate, constipation



Hyperthyroidism (Overactive Thyroid)

Cause: Often caused by Graves' disease or non-cancerous growths.

Symptoms:

- Rapid heartbeat or palpitations
- Anxiety or nervous energy
- Sudden weight loss despite normal eating
- Heat intolerance and sweating
- Shaky hands, restlessness
- Trouble falling asleep

Diagnosis:

- Blood tests (TSH, T3, T4)
- Thyroid ultrasound or radioactive iodine scan

Treatment Options:

- **Hypothyroidism:** Daily thyroid hormone (levothyroxine)
- **Hyperthyroidism:** Antithyroid meds, beta-blockers, radioactive iodine, or surgery

02 Diabetes Mellitus

This chronic condition affects how your body uses glucose- your main source of energy. The issue lies in insulin, a hormone made by the pancreas. Common types:

Type 1 Diabetes

Cause: Autoimmune destruction of insulin-producing cells

Often diagnosed in: Children or young adults

Symptoms:

- Frequent urination (especially at night)
- Extreme thirst and hunger
- Sudden weight loss
- Mood swings, fatigue
- Blurry vision

Gestational Diabetes (During Pregnancy)

Cause: Hormonal shifts that affect insulin during pregnancy

Symptoms: Often mild or hidden, but may include:

- Excessive thirst
- Frequent urination
- Fatigue

Risks: High birth weight, delivery complications, future risk of Type 2 diabetes



Type 2 Diabetes

Cause: Insulin resistance, often linked to weight and lifestyle

Symptoms:

- Slow-healing wounds
- Tingling or numbness in hands/feet
- Frequent infections
- Blurred vision
- Increased hunger/thirst

Diabetes Diagnosis Criteria (American Diabetes Association)

Fasting Plasma Glucose (FPG) Test:

- Normal: <100 mg/dL
- Prediabetes: 100–125 mg/dL
- Diabetes: ≥126 mg/dL

Oral Glucose Tolerance Test (OGTT):

- Normal: <140 mg/dL (2 hours after 75g glucose)
- Prediabetes: 140–199 mg/dL
- Diabetes: ≥200 mg/dL

Hemoglobin A1C Test (HbA1C):

- Normal: <5.7%
- Prediabetes: 5.7–6.4%
- Diabetes: ≥6.5%

Random Plasma Glucose Test:

- Diabetes is diagnosed if blood glucose ≥200 mg/dL with classic symptoms (thirst, urination, weight loss)

Note: Diagnosis requires confirmation with a second test unless symptoms are present

Treatment:

- **Type 1:** Lifelong insulin therapy
- **Type 2:** Diet, exercise, oral meds, sometimes insulin
- **Gestational:** Healthy eating, exercise, insulin if needed

03 Adrenal Gland Disorders

Adrenal glands, sitting on top of the kidneys, release stress hormones like cortisol and adrenaline that help the body respond to challenges. Here are the most common adrenal gland disorders:

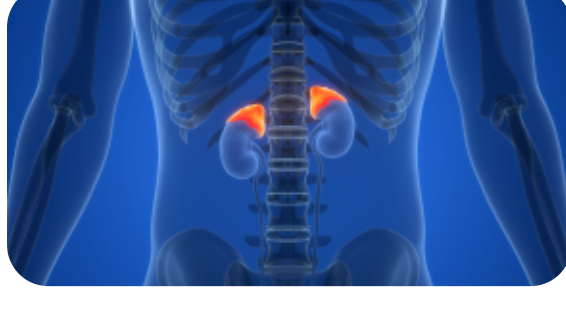
Cushing's Syndrome (Too Much Cortisol)

Cause: Tumours or long-term steroid use

Symptoms:

- Upper body weight gain, round "moon" face
- Fragile skin, easy bruising
- High blood pressure
- Mood swings, anxiety
- Purple stretch marks

[Read more >](#)



Addison's Disease (Too Little Cortisol)

Cause: Autoimmune damage to the adrenal glands

Symptoms:

- Chronic fatigue
- Darkened skin patches
- Low blood pressure
- Salt cravings
- Dizziness, nausea, weight loss

Diagnosis:

- Cortisol level tests
- Imaging (CT/MRI)
- ACTH stimulation test

Treatment:

- Hormone replacement (hydrocortisone or fludrocortisone)
- Emergency steroid shots during stress or illness

[For more information >](#)

04 Polycystic Ovary Syndrome (PCOS)

A common hormonal disorder affecting 1 in 10 women of reproductive age, PCOS, can impact both health and fertility.

Cause: Unknown, but linked to insulin resistance, inflammation, and genetics

Symptoms:

- Irregular or absent periods
- Facial/body hair growth (hirsutism)
- Acne or oily skin
- Thinning scalp hair
- Difficulty losing weight
- Trouble conceiving
- Dark skin patches (especially neck, underarms)

Diagnosis:

- Blood tests (androgen levels)
- Pelvic ultrasound
- Physical exam

Treatment:

- **Lifestyle:** Healthy diet, weight loss, regular exercise
- **Medications:** (PCOS) can be treated with medication, but the treatment largely depends on the patient's goals and the specific symptoms she is experiencing.

Healthy Hormone Tips: Everyday Actions that Matter

Supporting your endocrine system isn't just about medications.

Small lifestyle changes make a big difference.



Eat to balance hormones

- Whole foods: vegetables, lean proteins, healthy fats
- Fibre-rich foods like oats and legumes to help with blood sugar
- Flaxseeds & soy: may support hormone levels naturally
- Omega-3 fats from fish or nuts to reduce inflammation



Stay active

- Regular movement (walking, yoga, resistance training) helps improve insulin sensitivity and maintain a healthy weight.



Sleep & stress relief

- Cortisol, melatonin, and other hormones are deeply linked to your rest and stress levels. Aim for 7–9 hours per night and find time to unwind.



Monitor changes

- Don't ignore symptoms like sudden weight changes, fatigue, irregular periods, or mood swings. Your hormones could be talking to you.



Final Thoughts: Stay in Tune with your Inner Chemistry

Your endocrine system may be silent, but its impact is powerful. From the way you sleep to how you feel and function daily, hormones quietly guide it all.

Pay attention to your body's signals. A simple blood test or doctor's visit could reveal imbalances before they become serious.

Key Takeaway:

Early detection, informed choices, and a healthy lifestyle are your best tools for keeping your hormones in harmony and living your healthiest life.

[Learn more](#)

The American Diabetes Association Releases Standards of Care in Diabetes—2025 | American Diabetes Association

Diagnosis and Classification of Diabetes: Standards of Care in Diabetes—2024 | Diabetes Care | American Diabetes

<https://www.cancer.gov/publications/dictionaries/cancer-terms/def/endocrine-system>