



Hypoparathyroidism

WHAT IS HYPOPARATHYROIDISM?

Hypoparathyroidism is the condition in which you don't have enough parathyroid hormone (PTH). Without enough PTH, the level of calcium in your blood can fall and the level of phosphorus can rise, which could lead to health problems.

DID YOU KNOW?

Your parathyroid glands are four pea-sized glands located in your neck that make parathyroid hormone. They play an important role in bone development.

DEFINITIONS

Parathyroid hormone (PTH): The hormone made by your parathyroid glands. When blood calcium falls too low, PTH brings it back to normal by moving calcium from the bones, kidneys, and intestines into the blood.

Calcium: A mineral stored in your bones where it builds and maintains bone strength. It is also found in every part of the body. It helps muscles contract, helps nerves and the brain work properly, and helps regulate your heart rhythm and blood pressure.

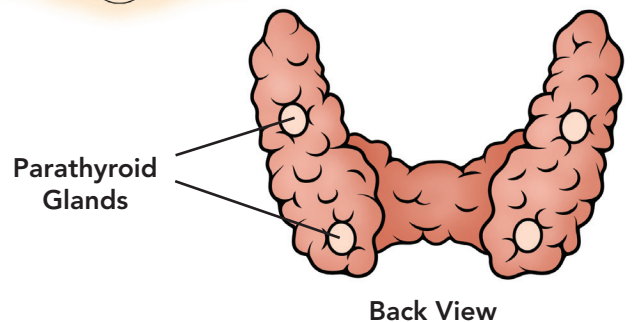
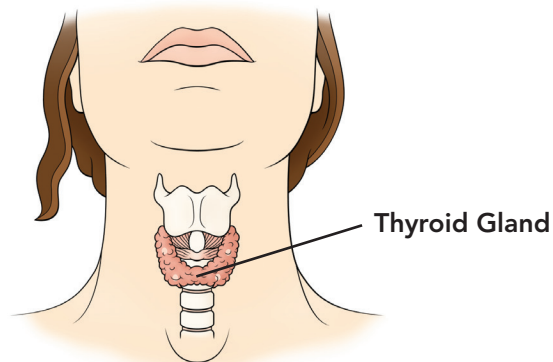
Phosphorus: A mineral found in all cells but stored mostly in your bones. It helps your body use food for energy. It also helps your kidneys, muscles, heart, and nerves work properly.

Vitamin D: A vitamin that helps your body absorb calcium from food and helps keep blood calcium levels in the normal range.

WHAT CAUSES HYPOPARATHYROIDISM?

Your parathyroid glands can be damaged during surgery on your thyroid gland, throat, or neck. Sometimes one or more parathyroid glands are removed if they're making too much PTH. Hypoparathyroidism also can be inherited. Other causes include:

- Autoimmune disease (when your body's defense system attacks your own cells)
- Radiation therapy to your head or neck
- Low levels of magnesium (a mineral) in the blood



WHAT ARE THE SYMPTOMS OF HYPOPARATHYROIDISM?

Common symptoms include

- Muscle spasms, cramps, and/or pain in your legs, feet, stomach, or face
- Weakness
- Hair loss
- Dry hair and dry skin
- Tingling in your fingers, toes, and lips
- Pain with menstrual periods
- Headaches
- Memory problems
- Depression

WHAT HEALTH PROBLEMS CAN HYPOPARATHYROIDISM CAUSE?

When children have hypoparathyroidism, they might grow poorly, have tooth problems such as delayed tooth development or a lot of cavities, and have slow mental development.

In adults, hypoparathyroidism can lead to kidney problems, heart problems, and calcium deposits in the brain. Calcium in the brain can cause tremors, slowed movement, balance problems, and seizures.

Hypoparathyroidism can be linked to other health problems, such as cataracts, Addison's disease (problems with your adrenal glands), and pernicious anemia (a shortage of vitamin B12).

HOW IS HYPOPARATHYROIDISM DIAGNOSED?

Your doctor will do a blood test to check levels of calcium, phosphorus, magnesium, and PTH. You also might have a urine test to show how much calcium you are losing in your urine.

WHAT IS THE TREATMENT FOR HYPOPARATHYROIDISM?

You will take calcium and vitamin D supplements to keep your blood calcium levels normal. Depending on the cause of your hypoparathyroidism, you may need to take the supplements for the rest of your life. Your doctor will check your blood levels regularly.

If your blood calcium level becomes extremely low, it can be dangerous for your health. Then you will be given calcium through a vein (IV) and your heart will be checked to make sure it's OK. Once your calcium level is normal, you can go back to taking oral supplements.

You might need to follow a diet high in calcium and low in phosphorus. A registered dietitian can help you plan a special diet.

Good Sources of Calcium: Milk, yogurt, cheese, collard greens, and foods with added calcium, such as cereal and soy drinks.

Good Sources of Vitamin D: Salmon, shrimp, and milk with vitamin D. Vitamin D is also made in your skin when you spend time in the sun.

Foods High in Phosphorus: Protein foods such as meat, milk, and hard cheeses; also whole grains, dried peas and beans, nuts, and chocolate.

Questions to ask your doctor

- What caused my hypoparathyroidism?
- What tests do I need?
- What are my options for treatment?
- What are the risks and benefits of each treatment option?
- How long will I need treatment?
- How often will I need check-ups?
- Should I see an endocrinologist?
- Should I see a registered dietitian?

RESOURCES

- Find-an-Endocrinologist: www.hormone.org or call 1-800-HORMONE (1-800-467-6663)
- Find a registered dietitian (a service of the Academy of Nutrition and Dietetics): www.eatright.org/programs/rdfinder/
- MedlinePlus (National Institutes of Health) information about hypoparathyroidism: www.nlm.nih.gov/medlineplus/ency/article/000385.htm
- Mayo Clinic information about hypoparathyroidism: www.mayoclinic.com/health/hypoparathyroidism/DS00952

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The Hormone Health Network offers free, online resources based on the most advanced clinical and scientific knowledge from The Endocrine Society (www.endo-society.org). The Network's goal is to move patients from educated to engaged, from informed to active partners in their health care. Distribution of this fact sheet was supported by a grant from NPS Pharmaceuticals. This fact sheet is also available in Spanish at www.hormone.org/Spanish.

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www.hormone.org