Parathyroid Gland

Fact Sheet

Location

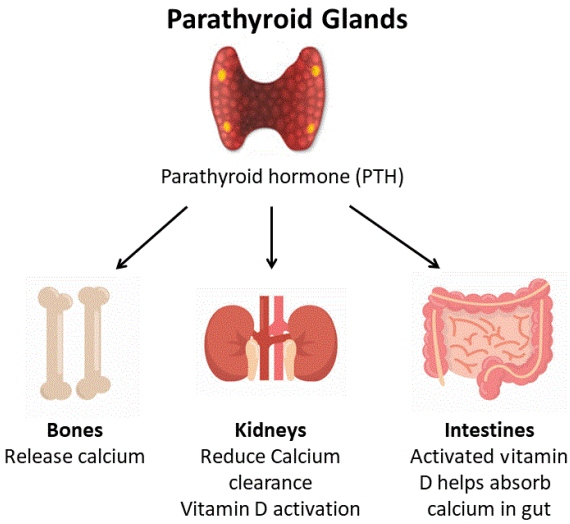
The parathyroid glands are four, very small glands found in the neck behind the thyroid gland. Each gland is about 3-4 mm in size.

Functions/Roles

The main role of the parathyroid glands is to produce hormones that regulate calcium levels in the blood. Calcium is critical for bone development, bone strength and density, muscle contractions, kidney and heart function. Calcium is also needed by the brain to help nerve cells communicate with each other.

Hormones produced by the parathyroid glands

Parathyroid hormone (PTH) signals to the bones to release calcium. PTH also signals the kidneys to reduce the amount of calcium that passes into urine. In the kidneys, PTH also plays an important role in the activation of Vitamin D, which helps calcium be absorbed in the gut.



Keeping parathyroid hormones in balance

The parathyroid glands self-monitor the levels of calcium in the blood. When calcium levels drop too low, the parathyroid glands make more PTH. If calcium levels get too high, the parathyroid glands make less PTH. This keeps calcium levels in the blood within a tight range.

Common problems and conditions of the parathyroid glands

Primary hyperparathyroidism

Hypoparathyroidism

Hypercalcaemia

More information about hormones and the hormone system is available at https://www.hormones-australia.org.au

More Hormones-Australia factsheets are available at https://www.hormones-australia.org.au/patient-resources/

To find an endocrinologist near you, visit: https://www.hormones-australia.org.au/find-an-endocrinologist/

This information is designed to support, not replace, the relationship that exists between a person and their existing health care professional/s. Please discuss any health concerns with your doctor or specialist.

Hormones Australia aims to improve the health of Australians through increasing understanding about hormones and hormone-related conditions. Hormones Australia is an initiative and governed by the Endocrine Society of Australia (ESA).