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## Gastrin blood test

The gastrin blood test measures the amount of the hormone gastrin in blood.

### How the Test is Performed

A blood sample is needed.

### How to Prepare for the Test

Certain medicines may affect the results of this test. Your health care provider will tell you if you need to stop taking any medicines. Do not stop taking any medicine before talking to your provider.

Medicines that can increase the gastrin level include:

- Stomach acid reducers, such as antacids
- H<sub>2</sub> blockers (cimetidine, nizatidine, and famotidine)
- Proton pump inhibitors (omeprazole, pantoprazole, and several others)

Some of these medicines are available without a prescription. Discuss non-prescription medicines you are taking with your provider.

Medicines that can decrease gastrin level include caffeine, corticosteroids, and the rarely used blood pressure medicines deserpidine, reserpine, and rescinnamine.

### How the Test will Feel

When the needle is inserted to draw blood, some people feel moderate pain. Others feel only a prick or stinging sensation. Afterward, there may be some throbbing or a slight bruise. This soon goes away.

### Why the Test is Performed

Gastrin is the main hormone that controls the release of acid in your stomach. When there is food in the stomach, gastrin is released into the blood. As the acid level rises in your stomach and intestines, your body normally makes less gastrin.

Your provider may order this test if you have signs or symptoms of a problem linked to an abnormal amount of gastrin. This includes peptic ulcer disease.

# Normal Results

Normal values are generally less than 100 pg/mL (48.1 pmol/L).

Normal value ranges may vary slightly among different laboratories. Some labs use different measurements or test different samples. Talk to your provider about the meaning of your specific test result.

## What Abnormal Results Mean

Too much gastrin can cause severe peptic ulcer disease. A higher than normal level may be due to:

- Chronic kidney disease
- Long-term gastritis
- Over-activity of the gastrin-producing cells in the stomach (G-cell hyperplasia)
- *Helicobacter pylori* infection of the stomach
- Use of antacids or medicines to treat heartburn
- Zollinger-Ellison syndrome, a gastrin-producing tumor that may develop in the stomach or pancreas
- Decreased ability of the stomach to produce acid
- Previous stomach surgery

## Risks

There is little risk involved with having your blood taken. Veins and arteries vary in size from one person to another and from one side of the body to the other. Taking blood from some people may be more difficult than from others.

Other risks associated with having blood drawn are slight but may include:

- Excessive bleeding
- Fainting or feeling lightheaded
- Multiple punctures to locate veins
- Hematoma (blood accumulating under the skin)
- Infection (a slight risk any time the skin is broken)

## Alternative Names

Peptic ulcer - gastrin blood test

## References

Bohórquez DV, Liddle RA. Gut sensory transduction. In: Feldman M, Friedman LS, Brandt LJ, eds. *Sleisenger and Fordtran's Gastrointestinal and Liver Disease: Pathophysiology/Diagnosis/Management*. 11th ed. Philadelphia, PA: Elsevier; 2021:chap 4.

Siddiqi HA, Rabinowitz S, Axiotis CA. Laboratory diagnosis of gastrointestinal and pancreatic disorders. In: McPherson RA, Pincus MR, eds. *Henry's Clinical Diagnosis and Management by Laboratory Methods*. 24th ed. Philadelphia, PA: Elsevier; 2022:chap 23.

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Updated by: Sandeep K. Dhaliwal, MD, board-certified in Diabetes, Endocrinology, and Metabolism, Springfield, VA. Also reviewed by David C. Dugdale, MD, Medical Director, Brenda Conaway, Editorial Director, and the A.D.A.M. Editorial team.

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