

## H2 Receptor Blocker

H<sub>2</sub> blockers are antagonists at the histamine H<sub>2</sub> receptor, which are found within the parietal cells of the stomach. These medications can be recalled easily, because of the common suffix found in their drug names, "itidine." These drugs may help to treat GI disorders including indigestion and heartburn (GERD), and promote the healing of ulcers. This drug class exerts its action by blocking histamine H<sub>2</sub> receptors in parietal cells of the stomach, leading to reduced acid secretion.



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### "-tidine" Suffix

[Teddy](#)

Drugs in this category have a "tidine" suffix, with examples such as cimetidine, ranitidine, famotidine and nizatidine.

### Indications

#### Gastroesophageal Reflux Disease (GERD)

[Girdle-girl](#)

These drugs decrease parietal acid secretion to treat gastroesophageal reflux disease (GERD). GERD typically presents as regurgitation, dysphagia, heartburn when lying down, and patients may also experience night-time cough with dyspnea.

#### Peptic Ulcer

[Pepper Ulcer-volcano](#)

These drugs are effective against peptic ulcer disease. They promote the healing of duodenal and gastric ulcers, although recurrence is common when used alone.

### Mechanism

#### Block Histamine H2 Receptors

[Blocking History-man in \(2\) Tutu Receptor](#)

These drugs work by reversibly blocking H<sub>2</sub> receptors as competitive inhibitors. This leads to a reduction of histamine-stimulated gastric acid secretion. Histamine is one of the primary stimulators of parietal cell acid secretion, in addition to gastrin and acetylcholine. These drugs are rapidly absorbed and effects are observed quickly.

#### Parietal Cells

[Pirate Cell](#)

Gastric parietal cells have a number of receptors, including the histamine H<sub>2</sub> receptor at which these drugs are competitive inhibitors.