

# Proton pump inhibitors



## What are proton pump inhibitors?

**P**roton pump inhibitors, or PPIs for short, are medications that are used to decrease the amount of acid produced in the stomach. The most commonly used PPIs are: Prilosec®, (omeprazole), Prevacid®, (lansoprazole), Aciphex®, (rabeprazole) and Nexium®, (esomeprazole).

The acid made in the stomach is important for breaking down food before digestion. Normally, the lining of the stomach tolerates this acid environment. The acid will cause an ulcer only when there is a break in the protective lining. Ulcers and irritation can also occur in the esophagus as a result of gastro-esophageal reflux.

## How do PPIs work?

A proton is part of *hydrochloric acid (HCl)*, the strong acid made by the stomach. The “pump” is the name of chemical reaction that brings the H together with the Cl to create the acid. Blocking, or inhibiting, the “pump” prevents acid from being produced. PPIs are the most effective medicines used to decrease stomach acid.

## Are these medicines safe?

All medicines can have side effects in some people. However, PPIs are usually well tolerated and side effects are rare. The most common reported side effects are headaches and diarrhea. Such symptoms go away once the medicine is stopped. As far as we know, it is safe to take these medicines for many years.

Since acid is needed to digest food, you might wonder if taking a PPI means you won't digest food normally. Since PPIs do not turn off acid production completely, there is still enough acid to help digest the food.

## Are these medicines hard to take?

PPIs come as pills, capsules, and powder. The capsules contain tiny beads that can be given in apple sauce or yogurt. The beads should not be chewed. A pharmacy can prepare a liquid form. PPIs should be taken 30 minutes before a meal.

## Are there other medicines that decrease stomach acid?

Maalox®, Mylanta® or Gaviscon® are mild liquid or chewable antacids that neutralize acid for a short time. They are used when symptoms are mild and infrequent.

“H2-blockers”, such as Zantac, Tagament, and Pepcid, are also effective in decreasing acid production in the stomach and are used widely to control symptoms of heartburn and gastroesophageal reflux. They are not as strong as PPIs.

Sometimes your child's insurance may ask for a different brand than the one originally prescribed. This change should be discussed and approved by your child's health care provider.

For more information or to locate a pediatric gastroenterologist in your area please visit our website at: [www.naspgghan.org](http://www.naspgghan.org)

**IMPORTANT REMINDER:** This information from the North American Society for Pediatric Gastroenterology, Hepatology and Nutrition (NASPGHAN) is intended only to provide general information and not as a definitive basis for diagnosis or treatment in any particular case. It is very important that you consult your doctor about your specific condition.

## SPECIFIC INSTRUCTIONS:



NASPGHAN • PO Box 6 • Flourtown, PA 19031  
215-233-0808 • Fax: 215-233-3939