What are PPIs?

Proton pump inhibitors, or PPIs, are medications that are used for treating stomach problems such as heartburn and ulcers. They are also sometimes used to prevent ulcers in those at high risk.

<table>
<thead>
<tr>
<th>PPIs include:</th>
<th>Dexlansoprazole DEXILANT</th>
<th>Esomeprazole NEXIUM</th>
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<tbody>
<tr>
<td>PPIs range in price from $18-87 per month:</td>
<td>Lansoprazole PREVACID</td>
<td>Omeprazole LOSEC, OLEX OTC</td>
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<td>Pantoprazole PANTOLOC, TECTA</td>
<td>Rabeprazole PARIET</td>
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Why stop?

PPIs are very helpful and well tolerated when used in the right way. However sometimes treatment goes on for longer than is needed. Recent research suggests that there are potential risks when staying on a PPI for long periods of time. Some of these risks include:

- Intestine infections (caused by C. difficile)
- Bone fractures
- Low magnesium, iron & vitamin B12 levels
- Pneumonia (lung infections)

In addition, PPIs may cause or contribute to side effects such as headache, nausea, diarrhea, rash and interactions with other medications.

Should YOU stop?

Some people should stay on a PPI, even for long periods of time. The choice to stop a PPI needs to be made by understanding the benefits and risks for YOU. Your doctor or healthcare professional can help you decide whether stopping your PPI is the right choice for you.

Those who should continue a PPI, or seek a medical consult if considering stopping include:

- those who need ulcer prevention therapy due to having a high risk of stomach ulcers
- those with a high ulcer risk who are also on drugs, e.g. NSAIDS, that increase risk of ulcers
- those with Barrett’s esophagus
- those with severe or uncontrolled esophagitis
- those with persistent heartburn symptoms

How will you stop?

If you have been on a PPI for a long time, you may be hesitant about stopping it. Most of the time you do not need to rush to stop your PPI. Having a “stop strategy” and stopping gradually may increase your chance of success.

Step 1. Get ready to stop your PPI

Certain foods and lifestyle habits can make stomach symptoms worse. Be sure you are doing what you can!

- Avoid eating meals within 2-3 hours of bedtime
- If needed, include a weight loss/control strategy

Check out our Tips for Coping with Heartburn for ideas. (See other side of this page.)

Step 2. Lower your PPI dose for 2-4 weeks

- If you were taking one PPI pill a day, take one pill every other day.
- If you were taking two PPI pills a day, take one pill a day for 1-2 weeks, and then take one pill every other day for another 1-2 weeks.

If tapering off over 2-4 weeks feels too fast, you may taper more gradually. It is okay to follow this plan for 8-12 weeks. You may wish to use a calendar or pill box to help you remember when to next reduce your dose.

Step 3. Stop your PPI

If you have stomach symptoms:

- Try an antacid, like TUMS, or generic calcium carbonate for fast relief (onset in 5-15 minutes).
- Try an H2 blocker, like ranitidine ZANTAC, which will begin to work in about an hour. (May take 1 hour prior to meals that trigger heartburn &/or at bedtime.)
- Go back to Step 1 for ideas about how to manage symptoms without medications.

Be careful buying anything over-the-counter (OTC). Don’t buy a PPI by mistake as some are now available without a prescription (eg. OLEX). Ask a pharmacist if you need help, especially if you take other medicines. Your current medicines may interact with what you are buying. If you take something for your stomach, write down the day, time, and amount you took. Bring your notes to your next healthcare visit.

Step 4. Check-in with your provider

Let your healthcare provider know if your symptoms return or if you have questions.

To manage occasional symptoms:

a) You may only need to use a medication once in a while when needed. Such medication options include:
- an antacid (such as TUMS, ROLAIDS) OTC
- or H2 blocker such as ranitidine (ZANTAC) OTC

b) Alternatively, on-demand PPI therapy may be prescribed. This is when a PPI is temporarily restarted and used daily for recurrent reflux-related symptoms, & stopped only after symptoms resolve. (PPIs are not very effective if only used now & then.)
Tips for Coping with Heartburn or Reflux Disease
Changing some daily habits may help reduce or prevent stomach symptoms. Try as many of these ideas as you can and see what changes below might help your symptoms.

Avoid Foods that Trigger Heartburn
Be aware the following foods and drinks may trigger your heartburn:
- Alcoholic beverages
- Fried/fatty foods
- Peppermint
- Chocolate
- Coffee (decaffeinated and regular)
- Citrus fruits
- Carbonated drinks
- Spicy foods

Stop smoking
Smoking decreases sphincter pressure, letting stomach acid leak up into your esophagus.

Avoid alcohol
Alcohol increases stomach waves and stomach contractions, letting stomach acid leak up into your esophagus.

Wear loose clothing
Tight-fitting clothes put extra pressure on your stomach and can contribute to your symptoms.

Watch your weight
Extra body weight causes pressure on your stomach which can worsen symptoms.

Eat small meals
Large meals can make your stomach too full and force stomach contents back up into the esophagus. Try eating 4 to 5 small meals during the day instead of one to two large meals.

Avoid lying down directly after eating
Don't lie down within 3 hours of eating. Lying down too soon after eating can cause the acids that are working to digest your food to flow up and cause heartburn. Plan an earlier evening dinner.

Elevate the head of your bed
If you suffer from heartburn while you sleep, you may try elevating the head of your bed at least six to eight inches. To do this, use blocks and/or sleep on a foam wedge under your body. This will keep you in a partial upright position as you sleep, and may help to keep stomach acids from backing up.

Avoid using extra pillows to raise your head as this causes bending at the waist which increases risk of heartburn

Trustworthy websites for information
- To learn about heartburn/GERD: https://www.healthwise.net/saskhealthlineonline/Content/StdDocument.aspx?DOCHWID=hw99177
- To learn more about PPIs: http://www.consumerreports.org/health/best-buy-drugs/heartburn_ppi.htm (Note: this is a USA article and some brand names and costs differ from Canada)
- To learn about individual medications: http://chealth.canoe.ca/drug_info.asp?relation_id=1196

References
- Detail-Document; Pharmacist's Letter 2009; 25(11):251113

Note:
- Evidence is limited for the effectiveness of non-drug strategies as well as the need for tapering PPIs when stopping.
- Weight loss has the most evidence of all non-drug options.