What are Proton Pump Inhibitors (PPIs)?

Proton Pump Inhibitors, or PPIs, are a class of drugs that are used to treat problems such as heartburn or stomach ulcers.

There are many different types of PPI drugs:

- Lansoprazole (Prevacid [°])
- Omeprazole (Losec[®])
- Pantoprazole (Tecta[°], Pantoloc[°])
- Rabeprazole (Pariet^{*})
- Esomeprazole (Nexium[®])
- Dexlansoprazole (Dexilant[°])
- Omeprazole (Olex^{*})

Why use less of, or stop using a Proton Pump Inhibitor?

While PPIs are effective at treating many stomach problems, such as heartburn, they are often only needed for a short period of time.

Despite this, many people take PPIs for longer than they may need.

Research shows that for some people, doses can be safely lowered or the drug used just when needed for symptom relief.

PPIs are generally a safe group of medications; however, they can cause headache, nausea, diarrhea and rash. They may also increase risk of:

- Low vitamin B12 and magnesium blood levels
- Bone fractures
- Pneumonia
- Intestinal infections such as C. difficile

Stopping a Proton Pump Inhibitor is not for everyone

Some people need to stay on a PPI for a long time. However, others only need this medication for a short period of time.

When the ongoing reason for using a PPI is unclear, the risk of side effects may outweigh the chance of benefit.

People who should continue on a PPI include those with any of the following:

- Barrett's esophagus
- Long-term use of nonsteroidal anti-inflammatory drug (e.g. Advil[®])
- Severe inflammation of the esophagus
- Documented history of bleeding stomach ulcer

How to safely reduce a Proton Pump Inhibitor

People over the age of 18 who have been taking a PPI for more than 4 to 8 weeks should talk to a doctor, nurse practitioner or pharmacist about whether stopping a PPI is the right choice for them.

Doctors, nurse practitioners or pharmacists can help to decide on the best approach to using less of a PPI. They can advise on how to reduce the dose, whether to stop it altogether, or how to make lifestyle changes that can prevent heartburn symptoms from returning.

Reducing the dose might involve taking the PPI once daily instead of twice daily, lowering the number of mg (e.g. from 30mg to 15mg, or 40mg to 20mg, or 20mg to 10mg depending on the drug), or taking the PPI every second day for some time before stopping.

© Use freely, with credit to the authors. Not for commercial use. Do not modify or translate without permission. This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License. Contact deprescribing@bruyere.org or visit deprescribing.org for more information.

Farrell B, Pottie K, Thompson W, Boghossian T, Pizzola L, Rashid FJ, et al. Deprescribing proton pump inhibitors. Evidence-based clinical practice guideline. *Can Fam Physician* 2017;63:354-64 (Eng), e253-65 (Fr).







What to monitor after reducing a Proton Pump Inhibitor

After reducing or stopping a PPI with the help of a physician, nurse practitioner or pharmacist, it is important to check for, and report signs of:

- Heartburn
- Reflux
- Stomach pain

If the patient is not able to speak, check for, and report signs of:

- Loss of appetite
- Weight loss
- Agitation

Other ways to reduce heartburn, reflux or stomach pain

Lifestyle changes:

- · Avoid triggers (e.g. coffee, alcohol, spicy foods, chocolate)
- Avoid food 2-3 hours before bedtime
- Elevate the head of the bed
- Lose weight

Manage occasional heartburn with over the counter drugs such as:

- Tums[®]
- Rolaids[®]
- Zantac[®]
- Olex[®]
- Gaviscon[®]

© Use freely, with credit to the authors. Not for commercial use. Do not modify or translate without permission. This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License. Contact deprescribing@bruyere.org or visit deprescribing.org for more information.

Farrell B, Pottie K, Thompson W, Boghossian T, Pizzola L, Rashid FJ, et al. Deprescribing proton pump inhibitors. Evidence-based clinical practice guideline. *Can Fam Physician* 2017;63:354-64 (Eng), e253-65 (Fr).

What to do if stomach problems continue

If heartburn, reflux, or stomach pain continues after 3-7 days and interferes with normal activities, please talk to a doctor, nurse practitioner or pharmacist. They can help decide whether to return to a previous PPI dose or whether to use the PPI 'on-demand' (daily until your symptoms stop). They may also suggest a test for a treatable condition called *H. pylori*.

Personalized PPI dose reduction strategy:

This pamphlet accompanies a deprescribing guideline and algorithm that can be used by doctors, nurse practitioners, or pharmacists to guide deprescribing.

> Visit deprescribing.org for more information.





