

## Understanding Proton Pump Inhibitors (PPIs): What You Need to Know

### What Are PPIs?

Proton pump inhibitors (PPIs) are medications that **reduce the amount of acid produced by the stomach.**

They are commonly used to treat or prevent conditions such as:

- Gastro-oesophageal reflux disease (GORD)
- Inflammation or ulceration of the oesophagus
- Stomach and duodenal ulcers
- Acid-related symptoms after surgery
- Protection of the stomach when using certain medications

Common PPIs include omeprazole, esomeprazole, pantoprazole and lansoprazole.

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### Are PPIs Safe for Long-Term Use?

PPIs are generally **safe and effective**, and many people use them long term without problems. For some conditions, long-term therapy is appropriate and recommended.

However, as with all medications, long-term use should be **reviewed regularly** to ensure the benefits continue to outweigh any potential risks.

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### What Are the Possible Long-Term Risks?

Long-term PPI use has been **associated** (not proven to cause) certain risks in some people, particularly when used at high doses or for many years. These may include:

- Reduced absorption of nutrients such as **vitamin B12, magnesium, calcium and iron**
- Increased risk of **bone fractures** in some individuals
- Higher susceptibility to certain **gastrointestinal infections**
- Possible association with **kidney disease**
- Rebound acid symptoms if the medication is stopped suddenly

Not everyone experiences these effects, and many people take PPIs long term without complications.

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## Should I Stop Taking My PPI?

You should **not stop taking your PPI without medical advice.**

- Stopping suddenly may cause **rebound acid symptoms**
- Some people require ongoing treatment to prevent complications
- If stopping or reducing is appropriate, this should be done **gradually and under supervision**

Your doctor can help determine whether continued use, dose reduction, or alternative strategies are suitable for you.

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## Considerations for Bariatric Surgery Patients

PPIs are commonly prescribed after bariatric surgery to:

- Reduce acid-related symptoms
- Protect the stomach and surgical connections
- Reduce the risk of ulcers, particularly after gastric bypass

Important considerations:

- PPIs may be recommended **temporarily or long term**, depending on the procedure and symptoms
- Bariatric patients may already be at risk of nutrient deficiencies, so monitoring may be required
- Decisions about long-term PPI use should be **individualised**

Your bariatric surgeon or healthcare team will advise you based on your surgery type and recovery.

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## What If I'm Pregnant or Trying to Conceive?

Some PPIs are considered **safe to use in pregnancy**, but this depends on the specific medication and your individual circumstances.

- Always inform your doctor if you are pregnant, planning pregnancy, or breastfeeding
- Do not start, stop, or change medication without medical advice

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## What You Can Do

- Take your PPI **exactly as prescribed**
- Attend regular follow-up appointments

- Discuss any side effects or concerns with your doctor
- Ask whether your dose or duration should be reviewed
- Support symptom control with lifestyle measures where appropriate (e.g. diet changes, weight management, avoiding trigger foods)

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## Evidence-Based Resources

The following reputable sources provide evidence-based information on PPIs and their use:

- **NPS MedicineWise (Australia)**  
Proton pump inhibitors – appropriate use and safety  
<https://www.nps.org.au>
- **Therapeutic Goods Administration (TGA)**  
Medicine safety updates and consumer information  
<https://www.tga.gov.au>
- **Royal Australian College of General Practitioners (RACGP)**  
Guidance on reviewing and deprescribing PPIs  
<https://www.racgp.org.au>
- **Choosing Wisely Australia**  
Recommendations on appropriate long-term PPI use  
<https://www.choosingwisely.org.au>
- **UpToDate® (Patient Education)**  
Long-term acid suppression therapy (available via healthcare providers)

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## Final Notes

PPIs are effective medications that play an important role in managing acid-related conditions, including after bariatric surgery. Long-term use is appropriate for some patients and should be guided by regular medical review.

If you have questions or concerns about your medication, please discuss them with your healthcare team.

*This information is provided for general guidance only and does not replace individual medical advice.*