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## **Adverse effects of long-term proton pump inhibitor therapy.**

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### **Source**

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### **Abstract**

Proton pump inhibitors have an excellent safety profile and have become one of the most commonly prescribed class of drugs in primary and specialty care. Long-term, sometimes lifetime, use is becoming increasingly common, often without appropriate indications. This paper is a detailed review of the current evidence on this important topic, focusing on the potential adverse effects of long-term proton pump inhibitor use that have generated the greatest concern: B12 deficiency; iron deficiency; hypomagnesemia; increased susceptibility to pneumonia, enteric infections, and fractures; hypergastrinemia and cancer; drug interactions; and birth defects. We explain the pathophysiological mechanisms that may underlie each of these relationships, review the existing evidence, and discuss implications for clinical management. The benefits of proton pump inhibitor use outweigh its risks in most patients. Elderly, malnourished, immune-compromised, chronically ill, and osteoporotic patients theoretically could be at increased risk from long-term therapy.

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