

SUMMARY

- There are certain medications that inhibit iron absorption.
- Other medications are affected by iron.
- Certain medications cause Mean Corpuscular Volume greater than 100fL.

Which medications inhibit iron absorption?

- **Proton Pump Inhibitors**
 - Omeprazole (Prilosec®)
 - Lansoprazole (Prevacid®)
 - Pantoprazole (Protonix®)
 - Esomeprazole (Nexium®)
 - Rabeprazole (Aciphex®)
- **Histamine-2 receptor antagonists (H2RAs) [H2 blockers]**
 - Famotidine (Pepci®)
 - Cimetidine (Tagamet®)
 - Nizatidine (Axid®, Tazac®)
 - Ranitidine (Zantac®)
- **Calcium carbonate**
- **Calcium antacids**
- **Anti-inflammatory drugs**
 - Upadacitinib (Rinvoq®)
 - Turmeric/Curcumin
- **Antibiotics**
 - Tetracycline
 - Doxycycline
 - Ciprofloxacin

Which medications are affected by iron?

- **Decreased absorption**
 - Tetracyclines
 - Quinolones
 - Angiotensin-converting enzyme (ACE) inhibitors
- **Reduced effectiveness**
 - Levothyroxine
 - Levodopa
 - Carbidopa

Which medications cause Mean Corpuscular Volume (MCV) greater than 100fL?

Directly or indirectly interfere with Vitamin B12 or Folate absorption

- **Anticonvulsants**
 - Phenytoin
 - Primidone
 - Topiramate
 - Valproic acid
- **Anti-hyperglycemic agents**
 - Metformin
- **Anti-inflammatory drugs**
 - Sulfasalazine

Medication Considerations



- **Antimicrobials**
 - Pyrimethamine
 - Sulfamethoxazole
 - Trimethoprim
- **Antiretrovirals**
 - Zidovudine
 - Stavudine
- **Antivirals**
 - Valacyclovir
- **Chemotherapeutics**
 - Cyclophosphamide
 - Hydroxyurea
 - Methotrexate
 - Azathioprine
 - Mercaptopurine
 - Cladribine
 - Cytosine arabinoside (Cytarabine®)
 - 5-Fluoruracil (5-FU®)
- **Diuretics**
 - Triamterene
- **Bone Health (Parathyroid hormone analog)**
 - Teriparatide (Forteo®)

References

1. Cancelo-Hidalgo, M. J., Castelo-Branco, C., Palacios, S., Haya Palazuelos, J., Ciria-Recasens, M., Manasanch, J., & Pérez-Edo, L. (2013). Tolerability of different oral iron supplements: A systematic review. *Current Medical Research and Opinion*, 29(4), 291–303.
2. Houston, B. L., Hurrie, D., Graham, J., Perija, B., Rimmer, E., Rabbani, R., ... & Zarychanski, R. (2018). Efficacy of iron supplementation in patients with non-anemic iron deficiency: A systematic review and meta-analysis. *Blood Advances*, 2(13), 1330–1340.
3. Klip, I. T., Comin-Colet, J., Voors, A. A., Ponikowski, P., Enjuanes, C., Banasiak, W., ... & van Veldhuisen, D. J. (2013). Iron deficiency in chronic heart failure: An international pooled analysis. *European Journal of Heart Failure*, 15(3), 304–312.
4. Zoller, H., Schaefer, B., Gludovacz, E., & Kurz, K. (2023). Comparative efficacy of ferric carboxymaltose and ferric derisomaltose in PHOSPHARE-IBD. *Journal of Crohn's and Colitis*. <https://doi.org/10.1093/ecco-jcc/jjad004>

Disclaimer

This content is covered by an important disclaimer that can be found at sabm.org/iron-corner. Please read this disclaimer carefully before reviewing this content.