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A Patient's Guide to Oral Iron Supplements

If you are diagnosed with iron deficiency anemia, your doctor may recommend that you increase your iron intake. Eating an iron-rich diet and taking a multivitamin with iron may be a useful way to prevent iron deficiency anemia, but it is usually not enough to treat anemia once it has developed. Your doctor will probably recommend that you take an iron supplement. The goal of this anemia treatment is to eliminate any symptoms you may be experiencing and boost your levels of stored iron and hemoglobin.

Doctor William Ershler, a hematologist at the National Institutes of Health, believes that it is extremely important for you and your doctor to determine why you have iron deficiency anemia as well as treat the symptoms. Iron deficiency anemia may be an early sign of another disease. Finding the cause of your anemia may identify a potentially serious disease before it gets worse. While poor iron absorption from one's diet or insufficient dietary iron can be a cause of iron deficiency and iron deficiency anemia, increased loss of iron from bleeding such as menstrual bleeding or unidentified bleeding from the stomach, colon or kidneys may be the cause of iron deficiency. If so, it is important that this be identified and treated.

If your doctor wants you to take an iron supplement, you and your doctor will need to find the supplement that is best for you. Iron supplements usually do not need a prescription and are commonly sold in drug stores and supermarkets. There are many iron preparations available with different amounts of iron, different iron salts, complexes, combinations, and dosing regimens. After reading about the different types of iron, browse the shelves of your local drugstore to see all the iron products available to you. However, certain types of iron supplements are less likely to cause gastrointestinal side-effects.

Types of Iron Supplements

There are two general types of iron supplements which contain either the ferrous or ferric form of iron. There

are three types of ferrous iron supplements commonly found: ferrous sulfate, ferrous fumarate, and ferrous gluconate. These ferrous "salts" are the least expensive form of oral iron supplement. While all three come in a 325 mg tablet size, each one contains a different amount of the form of iron used by your body, called *elemental iron*. When choosing an iron supplement, it is important to remember to look at the amount of *elemental iron* in each tablet, instead of the size of the tablet.¹

Other oral iron preparations are available and have been shown to have better gastrointestinal tolerability. Ferrous glycine sulfate (ferrous glycinate) and iron protein succinylate are available without prescription in the U.S. have better overall tolerability than ferrous sulfate, gluconate and fumarate.² Relatively new to the market is oral ferric citrate which has been shown to have an improved response compared to placebo in patients with chronic kidney and end stage renal disease.

Adults will usually require a dose of 60-200 mg of elemental iron daily, depending on the severity of the anemia.³ Since the percentage of iron absorbed decreases as doses get larger, increased doses does not necessarily result in increased absorption and may increase gastrointestinal side effects. One should not take doses larger than those prescribed. For adults who are not pregnant, the Centers for Disease Control and Prevention (CDC) generally recommends taking 50-60 mg of oral elemental iron (the approximate amount of elemental iron in one 325 mg tablet of ferrous sulfate) twice daily for three months for the treatment of iron deficiency anemia.⁴ However, recent information suggests that twice daily dosing should be avoided with doses of 40-80 mg of elemental iron provided daily or even every other day. Your doctor will individually evaluate your condition and prescribe the amount of iron you need and how frequently you should take it.

Iron supplements are available in regular tablets and capsules, liquid, drops, and coated or extended release tablets and capsules. Liquid and drop iron supplements are necessary for young children and people with problems swallowing pills but may temporarily stain your teeth. Iron from coated or delayed-release preparations may have fewer side effects but are not as well absorbed and not usually recommended. Talk to your doctor about

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recommending a type of iron that is well tolerated and more likely to minimize gastrointestinal side effects, such as ferrous glycine sulfate (ferrous glycinate) and iron protein succinylate.

Controlling the Side Effects

All iron supplements will cause your stool to become dark in color, but some people may also experience side effects which make it hard to follow recommended dosages. An upset stomach and constipation are the most common side effects of iron. If iron makes you constipated, consider taking a stool softener. Here are some tips to help you take your iron more comfortably and effectively:

- Iron supplements are absorbed better if taken an hour before meals. However, your doctor may tell you to take your iron with food to reduce an upset stomach.
- Starting with half the recommended dose and increasing to the full dose over several days will help minimize these side effects.
- If iron makes you constipated, consider taking a stool softener such as docusate sodium along with your iron. Many products are available with this ingredient. Your pharmacist can help you choose the product that is best for you.
- Milk, caffeine, antacids and calcium supplements can decrease iron absorption and should not be taken at the same time as iron supplements.
- You can get the most benefit from iron pills if you take them with vitamin C or drink orange juice. Vitamin C increases the absorption of iron.¹

Dr. Ershler states, "Some patients will not be able to take an oral iron supplement, no matter how hard they try." If you are one of these patients who cannot take an iron supplement by mouth, contact your doctor after no more than a week; side effects are unlikely to get better. Your doctor may recommend an iron injection (intravenous iron). Iron injections are a safe and effective alternative when oral iron does not work or cannot be tolerated, or where there is a need to fully replace iron as quickly as possible because of symptoms or an upcoming surgery.

If you think you have anemia, please contact your doctor. Do not try to treat yourself or take iron pills without talking to your doctor. Taking too much iron can be dangerous. It is important to keep iron pills out of the reach of children.

References

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