

Nutritionist offers advice on iron supplementation

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Taking your supplement alongside foods rich in vitamin C, like orange juice or kiwifruit, can help your body absorb the iron. Credit: <u>Anete Lusina/Pexels</u>

Iron deficiency is common and can be debilitating. It mainly affects women. One in three premenopausal women <u>are low in iron</u> compared to



just 5% of Australian men. Iron deficiency particularly affects teenage girls, women who do a lot of exercise and those who are pregnant.

The <u>body needs iron</u> to make new red blood cells, and to support <u>energy production</u>, the immune system and cognitive function. If you're low, you may experience a range of symptoms including fatigue, weakness, shortness of breath, headache, irregular heartbeat and reduced concentration.

If a <u>blood test</u> shows you're iron deficient, your doctor may recommend you start taking an oral iron <u>supplement</u>. But should you take a tablet or a liquid? With food or not? And when is the best time of day?

Here are some tips to help you work out how, when and what iron supplement to take.

How do I pick the right iron supplement?

The iron in your body is called "elemental iron." Choosing the right oral supplement and dose will depend on how much elemental iron it has—your doctor will advise exactly how much you need.

The sweet spot is between <u>60–120 mg of elemental iron</u>. Any less and the supplement won't be effective in topping up your iron levels. Any higher and you risk <u>gastrointestinal symptoms</u> such as diarrhea, cramping and stomach pain.

In Australia, iron salts are the most common oral supplements because they are cheap, effective and come in different delivery methods (tablets, capsules, liquid formulas). The iron salts you are most likely to find in your local chemist are ferrous sulfate (~20% elemental iron), ferrous gluconate (~12%) and ferrous fumarate (~33%).



These formulations <u>all work similarly</u>, so your choice should come down to dose and cost.

Many multivitamins may look like an iron supplement, but it's important to note they usually have too little iron—usually less than 20 mg—to correct an <u>iron deficiency</u>.

Should I take tablets or liquid formulas?

Iron contained within a tablet is <u>just as well absorbed</u> as iron found in a liquid supplement. Choosing the right one usually comes down to personal preference.

The main difference is that liquid formulas tend to contain less iron than tablets. That means you might need to take more of the product to get the right dose, so using a liquid supplement could work out to be more expensive in the long term.

What should I eat with my iron supplement?

Research <u>has shown</u> you will absorb more of the iron in your supplement if you take it on an empty stomach. But this can cause more gastrointestinal issues, so might not be practical for everyone.

If you do take your supplement with meals, it's important to think about what types of food will boost—rather than limit—iron absorption. For example, taking the supplement alongside vitamin C improves your body's ability to absorb it.

Some supplements already contain vitamin C. Otherwise, you could take the supplement along with a glass of orange juice, or other <u>vitamin C-rich foods</u>.



On the other hand, tea, coffee and calcium all <u>decrease the body's ability</u> to absorb iron. So you should try to limit these close to the time you take your supplement.

Should I take my supplement in the morning or evening?

The best time of day to take your supplement is in the morning. The body can <u>absorb significantly more</u> iron earlier in the day, when concentrations of hepcidin (the main hormone that regulates iron) are at their lowest.

Exercise also affects the hormone that regulates iron. That means taking your iron supplement after exercising can <u>limit your ability to absorb it</u>. Taking your supplement in the hours following exercise will mean significantly poorer absorption, especially if you take it between two and five hours after you stop.

Our research has shown if you exercise every day, the best time to take your supplement is in the morning before training, or immediately after (within 30 minutes).

My supplements are upsetting my stomach. What should I do?

If you experience gastrointestinal side effects such as diarrhea or cramps when you take iron supplements, you may want to consider taking your supplement every second day, rather than daily.

Taking a supplement every day is still the fastest way to restore your iron levels. But a recent study <u>has shown</u> taking the same total dose can be just as effective when it's taken on alternate days. For example, taking a



supplement every day for three months works as well as every second day for six months. This results in fewer side effects.

Oral iron supplements can be a cheap and easy way to correct an iron deficiency. But ensuring you are taking the right product, under the right conditions, is crucial for their success.

It's also important to check your iron levels prior to commencing iron supplementation and do so only under medical advice. In large amounts, iron can be toxic, so you don't want to be consuming additional iron if your body doesn't need it.

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