

About Iron



Every red blood cell in your body contains a type of large metalloprotein called hemoglobin. Hemoglobin is an important protein in that it carries oxygen to your cells, which is vital to your survival. Iron is incorporated into the hemoglobin molecule and is what gives it the special ability to carry oxygen from one place to another.

In a perfect world, your red blood cells are loaded with the perfect amount of hemoglobin to do this efficiently. Often, though, we don't have as much iron as we like to keep things running efficiently. When the system does not get enough iron, less oxygen is carried to the cell,s and less energy is produced within the cells.

Symptoms of Low Iron

People with low iron experience...

- Fatigue
- Weakness
- Pale skin
- Chest pain, fast heartbeat or shortness of breath (if you think you are having a heart attack, go to the ER)
- Headache, dizziness or lightheadedness
- Cold hands and feet
- Inflammation or soreness of your tongue
- · Brittle nails
- Unusual cravings for non-food substances, such as ice, dirt or starch
- Poor appetite, especially in infants and children



How Do People End Up Iron Deficient?

Low iron is usually caused by one of three categories of problems, though these categories tend to overlap each other a bit.

- Low intake: Not consuming enough iron-rich foods or absorbing it can lead to low iron stores.
- Blood loss: Losing blood causes us to lose iron. Some causes of blood loss include...
 - a. Menstruation (even normal menstruation)
 - b. Digestive system bleeds (like ulcers or IBD)
 - c. An acute blood loss event, like childbirth or accidents
- Chronic disease: Chronic diseases that cause inflammation can lead to anemia.

Investigation: Lab work

- Usually, a blood test (CBC and Ferritin) will show us what we need to know about your iron levels and how the iron is being incorporated into your red blood cells.
- There are other labs we may choose to order depending on the results of these two tests, if further exploration is needed.

Older adults and men who suddenly have anemia should have their stool tested for blood to rule out a digestive bleed.



Treatment Overview

If iron stores are low and you have symptoms of iron deficiency, we will explore the option of higher-dose supplements for 3 months.

The higher dose supplements have evidence to support their effectiveness at raising iron levels. It takes 3 months for new red blood cells to mature and reach circulation, so we don't expect a drop in symptoms until around that point. After 3 months, we retest your levels to make sure they have risen. If they have, we can talk about lower-dose supplements and diet. If they have not, we need to investigate why.

The potential side effects of iron supplements are nausea, vomiting, stomach pain and constipation. Not everyone has side effects with iron, but some patients do. Having lots of fibre in the diet can help reduce some of these issues.

Iron supplementation is not for everyone. If you cannot tolerate iron supplements, we have to focus on increasing dietary iron consistently. This approach tends to take longer but has fewer side effects and sets you up for long-term success.

Iron Content in Food

The attached table includes the iron content of a select grouping of foods that are considered high in iron.

The milligram and percentage values are given, but keep in mind, the percentages are different based on individual needs. It is better to determine how many milligrams you need from the previous page and try to achieve that value.

To increase absorption of iron from foods, it is often advised to consume vitamin C-rich foods with your iron-rich foods. There is a chart of vitamin C-rich foods included as well.



Dietary Iron: The Goal

To avoid the need for high-dose supplements again, it is a good idea to ensure you are getting the recommended amount of iron in your diet each day. How much iron you should aim for depends on your age and menstrual status. People who menstruate lose iron monthly and thus require more iron to keep their levels adequate.

Children

7-12 months → 11 mg/day 1-3 years old → 7 mg/day 4-8 years old → 10 mg/day

Women

9-13 → 8 mg/day 14-18→ 15 mg/day 19-50→ 18 mg/day >50→ 8 mg/day Pregnant→ 27 mg/day Nursing→ 9-10 mg/day

Men

9-13 → 8 mg/day 14-18 → 11 mg/day >19 → 8 mg/day

The recommended daily intake of iron information located here was sourced from the Dietary Reference Intakes listed on the Government of Canada website. https://tinyurl.com/32cv5vp5









QUESTIONS, HURDLES, ROADBLOCKS?

Contact Dr. Ali McMillan ND if you need any help gentlemedicine.ca

236-970-7661



