

What role does iron play in the body?

- Iron is an important nutrient in maintaining many body functions, including the production of **hemoglobin**, the molecule in your blood that carries oxygen. Iron is also necessary to maintain healthy cells, skin, hair, and nails. If your iron levels are low, your hemoglobin levels may be reduced and you may experience:
 - ◇ Tiredness
 - ◇ Shortness of breath
 - ◇ Trouble focusing
 - ◇ Pale skin
 - ◇ Unexplained general weakness
 - ◇ Rapid heartbeat
 - ◇ Craving for ice or clay
 - ◇ Trouble doing your regular activities
 - ◇ Brittle nails or hair loss
 - ◇ Sore or smooth tongue
- Anemia is when your hemoglobin is lower than normal:
 - ⇒ Less than 120g/L for women
 - ⇒ Less than 130g/L for men

What are the causes of iron deficiency anemia (IDA)?

- One of the main causes of IDA is **nutritional deficiency**, or not getting enough iron from your diet. This is common at times when your body needs more iron, such as during pregnancy, infancy, or the teen years.
- Conditions such as Crohn's disease or ulcerative colitis may also impact the body's ability to absorb iron from food.
- Blood loss from heavy menstrual periods or from unexplained blood loss in the stomach or intestines (often due to ulcers or cancer).
- Medications, that if used long-term, can lower the body's ability to absorb iron (example: pantoprazole) or that can cause stomach ulcers (example: aspirin, ibuprofen).

How will my prescriber know if I have iron deficiency anemia (IDA)?

- These are some common lab values your prescriber may order if they suspect you have IDA :

Lab Parameter	Definition	How it changes in IDA
Hemoglobin	A measure of your body's red blood cell count.	LOW
Serum iron	Measures the amount of iron in the blood.	LOW
Total iron binding capacity (TIBC)	Measures the total capacity of your blood to bind and transport iron	HIGH
Transferrin saturation (TSAT)	Transferrin is a protein that attaches iron molecules and transports iron in the blood. TSAT looks at the percentage of transferrin in the blood bound to iron.	LOW
Ferritin	Measures the amount of iron stored in your body. It will sometimes also increase in response to inflammation or infection	LOW

NOTE: Your lab values may vary from the descriptions above. When interpreting your results, your healthcare team will consider all your individual factors alongside your blood work.



What treatment options are there?

- It is important to treat iron deficiency anemia to improve symptoms, prevent the need for blood transfusions and prevent complications.
- If your prescriber determines you have iron deficiency anemia, the goal will be to replenish your body's iron stores and restore hemoglobin levels.
- To increase your body's iron, your prescriber may recommend [oral iron](#) (taken as capsules, tablets or liquid by mouth) or [intravenous iron](#) (administered through a needle in your vein)
 - Most patients can try oral iron first, but there are some situations where patients may require intravenous iron supplementation. Your prescriber will discuss the decision to start you on intravenous iron if needed.

What can I do at home to help?

- Your prescriber may recommend increasing iron-rich foods in your diet to increase iron stores. Iron-rich foods include red meat, cereals, soya, dark green vegetables, whole grains, and legumes (i.e., beans, lentils).
 - ⇒ For some patients, diet alone is not enough to restore iron levels. Talk to your prescriber or dietitian for diet related recommendations.
 - ⇒ There are two types of iron in the diet: **heme iron** and **non-heme iron**.
 - **Heme iron** is found in meat products and is absorbed 10 times better than non-heme iron.
 - **Non-heme iron** is the only available iron type in plant-based foods, making it more difficult to absorb enough iron from plant-based diets.
 - ⇒ For more information about how to increase iron in your diet, consult the Canadian Food Guide.

Other Information:

- Follow-up care will be a key part of your treatment and safety. Make sure to book and go to all appointments. Call your prescriber or HealthLine (811) if you are having problems.
- Your prescriber will continue to repeat lab tests after starting treatment to see if the therapy is working. It is important that you do all the blood tests ordered at the times you are asked to.
- It is also a good idea to know your test results and keep a list of the medicines you take. Test results can be reviewed on your MySaskHealth account.
- There are many causes of anemia other than iron deficiency. If your hemoglobin is low and you do not have iron deficiency, your doctor will order additional tests to determine why you have anemia.

