
What is Iron Deficiency Anaemia?

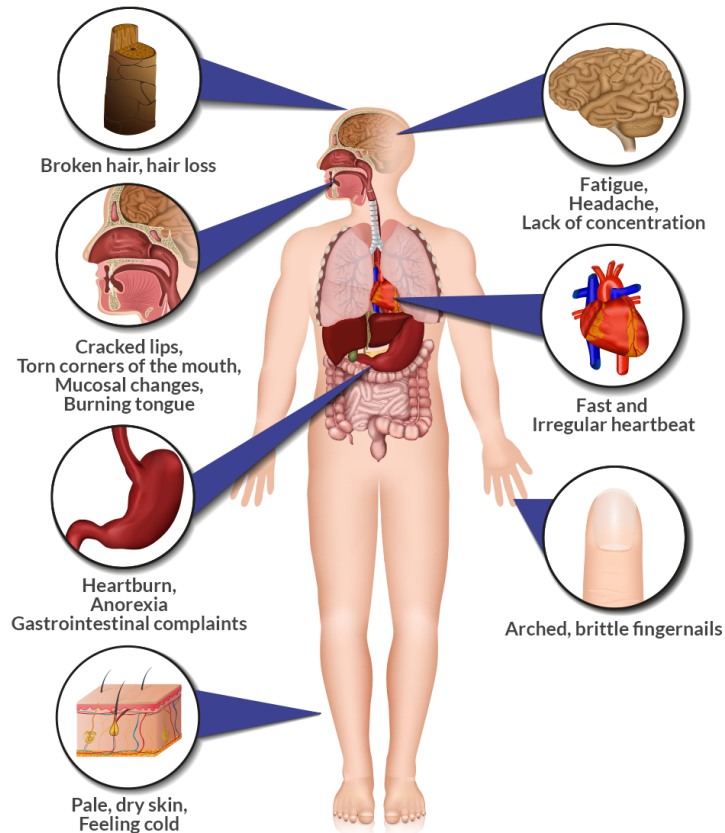
Iron deficiency anaemia is a common form of anaemia that occurs when the body has insufficient iron to produce haemoglobin. Haemoglobin is the protein in red blood cells that carries oxygen to the body's tissues and removes carbon dioxide (a waste product) from the body.

What are the causes of Iron Deficiency Anaemia?

Causes of iron deficiency anaemia include:

- **Inadequate iron intake**
Lack of adequate iron in the diet is the most common cause of iron deficiency anaemia. Vegetarians are at higher risk because meat is high in iron.
- **Pregnancy**
Iron is essential for the growth and development of the foetus. Hence, the requirement of iron increases during pregnancy. Pregnant women may develop iron deficiency anaemia when the increased demand of the body is not compensated by increasing iron intake. Excessive blood loss during childbirth can also cause iron deficiency.
- **Blood loss due to menstruation**
Women who suffer from heavy menstrual flow may develop iron deficiency anaemia.
- **Internal bleeding**
Certain conditions that cause internal bleeding may increase the risk of iron deficiency anaemia. Such conditions include peptic ulcers, polyps in the intestines, ulcerative colitis, or colon cancer. Regular use of medications such as non-steroidal anti-inflammatory drugs (eg. ibuprofen, aspirin) may also cause bleeding in the stomach.
- **Inability to absorb iron**
Disorders affecting the intestines may interfere with the process of absorption of nutrients from the food. As a result, you may develop a deficiency of vitamins and minerals including iron in spite of eating a nutritious diet.
- **Endometriosis**
Excessive blood loss caused due to uterine conditions such as endometriosis and fibroids can lead to iron deficiency anaemia.

What are the signs and symptoms of Iron Deficiency Anaemia?



The common symptoms of iron deficiency anaemia include:

- General fatigue or unusual weakness
- Shortness of breath
- Pale skin
- Tingling and crawling sensation in the legs
- Dizziness
- Coldness of the hands and feet
- Swelling and soreness of the tongue
- Brittle nails
- Fast and irregular heartbeat
- Frequent headaches

How is Iron Deficiency Anaemia diagnosed?

Full Blood Count (FBC)

A Full Blood Count determines the quantity of different components of the blood. The following parameters determine if a patient is anaemic:

- **Haemoglobin:** The normal range of haemoglobin is between 11.6 to 15.0 grams per decilitre for women and 13.2 to 16.6 grams per decilitre for men. In patients with iron deficiency anaemia, the haemoglobin levels are low.
- **Haematocrit:** A normal range of haematocrit is between 38.8% and 50% for men, and between 34.9% and 44.5% for women. Haematocrit levels are lower in patients with iron deficiency anaemia.
- Red Blood Cells are paler in colour and smaller than normal in patients with iron deficiency anaemia.

Iron Profile

Tests such as the ferritin and iron level can give an indication of your iron stores and whether you are iron deficient.

Additional diagnostic tests

Depending on your specific symptoms, our doctor may recommend additional tests to identify the underlying cause. These include:

- Testing the urine for blood or haemoglobin
- Testing for blood in the stool (faecal occult blood test)
- **Endoscopy:** This procedure involves having a thin and lighted tube with a video camera being passed gently through your throat to reach your stomach. It allows the doctor to view the oesophagus and stomach for any possible source of bleeding. This test is recommended for the diagnosis of hiatal hernia and peptic ulcers, both of which are common causes of iron deficiency anaemia.
- **Colonoscopy:** During this test, a thin and flexible tube with a video camera is inserted through the anus and guided through the rectum to reach your colon. A colonoscopy allows the doctor to view the inner part of your colon and rectum and identify any source of internal bleeding.
- A pelvic ultrasound in women may help to determine the cause of excessive menstrual bleeding such as uterine fibroids.

How is Iron Deficiency Anaemia treated?

Even if the cause of iron deficiency can be identified and treated, it is still usually necessary to increase iron intake. Click here to learn more about [iron therapy](#).

There are several ways in which to increase iron intake:

Increasing dietary intake of iron

Foods high in iron:

- Iron-fortified breads and cereals
- Beans and lentils
- Oysters
- Liver
- Green leafy vegetables, especially spinach
- Tofu
- Red meat
- Fish
- Dried fruit, like prunes, raisins and apricots

Vitamin C helps to improve iron absorption so consuming fruits high in vitamin C such as oranges will help to increase the iron level. Vitamin C supplements may be prescribed.

Oral iron supplements

Oral iron therapy offers an easy and convenient way to replenish iron stores. It is the recommended treatment for patients who suffer from mild iron deficiency anaemia where there is no urgency to replenish the iron stores quickly.

As antacids may reduce the absorption of iron, it is advisable to avoid taking iron supplements together with antacids or medications that relieve heartburn. You may take iron supplements 4 hours after or 2 hours before the doses of antacids.

Intravenous iron infusion

Intravenous iron is the recommended therapy for patients suffering from severe iron deficiency or existing intestinal conditions that affect the absorption of oral iron supplements.

Red blood cell transfusion

Red blood cell transfusions may be given to patients with severe iron deficiency anaemia who are actively bleeding or have significant symptoms such as chest pain, shortness of breath, or weakness. Transfusions are given to replace deficient red blood cells and will not completely correct the iron deficiency.

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