

Iron deficiency anaemia

Anaemia remains an important global public health concern affecting both developed and developing countries. Iron deficiency is the most common cause of anaemia worldwide and affects more than a quarter of the world's population. The most common cause of iron deficiency world-wide is blood loss from the gastrointestinal tract, due to hookworm infestation.

What is iron deficiency anaemia?

Iron-deficiency anaemia means that the body does not have enough iron. The body needs iron to help carry oxygen through the blood to all parts of the body. Iron deficiency anaemia may be caused by a diet consistently low in iron; blood loss due to heavy menstrual bleeding; poor iron absorption and pregnancy.

Signs and symptoms

- Unusual tiredness
- Pale skin and pale colouring of the inside of the lower eyelids
- Shortness of breath
- Headaches and dizziness
- Heart palpitations
- Dry and damaged hair and skin
- Swelling and soreness of the tongue and mouth
- Restless legs (unpleasant and strange crawling or itchy sensations in the feet and legs).
- Brittle nails that chip and crack easily can be an indicator of more severe iron-deficiency anaemia.
- Strange cravings to eat ice, clay, dirt, chalk or paper
- Feeling anxious
- Cold hands and feet
- Decreased appetite (especially in children)
- Lack of concentration

What are the risk factors of iron deficiency anaemia?

- Age – Babies born prematurely; babies between age 6-12 months; toddlers between ages 1 and 2-years; teenagers and adults over 65 years.

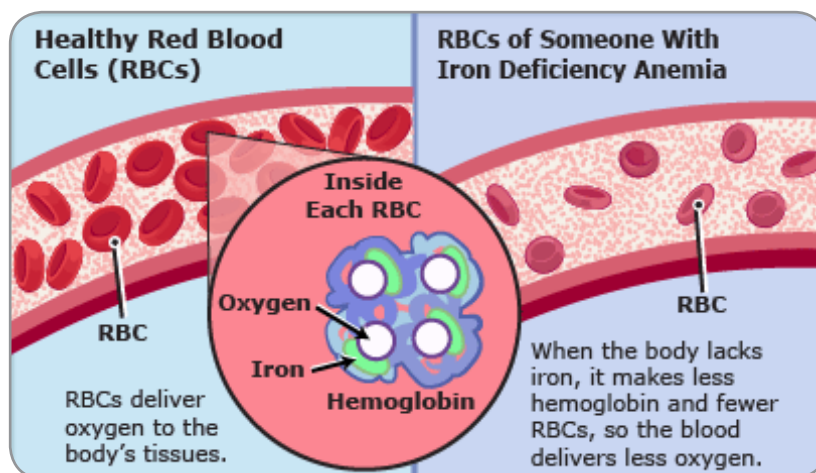


Figure 1: Anemia from slow production of red blood cells

- Bleeding disorders make it harder to stop bleeding and can increase the risk of iron-deficiency anemia from trauma, surgery, or heavy menstrual periods.
- Vegetarians and vegans that do not eat iron-rich food like red meat and fish may get less than the recommended daily amount of iron.
- People who donate blood often may be at risk for iron-deficiency anemia.
- Women of childbearing age, especially if they do not eat a healthy balanced diet and have heavy blood loss during their menstrual periods.
- Pregnant women are at risk of developing anaemia and requires iron supplements to prevent iron deficiency.

How is iron deficiency anaemia diagnosed?

Iron deficiency anaemia is diagnosed based on history taken by the health practitioner, a physical examination, and the results from certain tests and procedures.



Figure 2: Super Foods to Combat Anaemia. The above diagram shows examples of foods that can be taken to prevent iron deficiency anaemia.

- A full blood count (FBC) is done to see if the red blood cells, hemoglobin or hematocrit levels are lower than normal.
- Iron test is done to measure the amount of iron in the blood.
- Ferritin (a protein that helps store iron in the body) is tested to find out how much iron is stored in the blood.
- and vitamins the body needs from food.
- Eat foods with iron like red meat and chicken, dark, leafy vegetables, and beans.
- Eat and drink foods that help the body absorb iron, like orange juice, strawberries, broccoli, or other fruits and vegetables with vitamin C.

Once iron deficiency anaemia is diagnosed with the blood results, further tests may be performed to identify the underlying cause. Gastrointestinal investigations are performed to rule out internal bleeding.

- An upper endoscopy is performed to look for bleeding in the esophagus, stomach, and the first part of the small intestine. A tube with a tiny camera is inserted through the mouth down to the stomach and upper small intestine to view the lining of the upper digestive tract.
- A colonoscopy is performed to look for bleeding or other abnormalities, such as growths or cancer of the lining of the colon. A small camera is inserted into the colon under sedation to view the colon directly.
- An ultrasound may be performed on women with heavy menstrual bleeding to look for the cause.

How do you prevent iron deficiency anaemia?

- Treat the cause of blood loss.
- Avoid drinking coffee or tea with meals as these drinks make it harder for the body to absorb iron.
- Make healthy, balanced food choices to get the iron

How is iron deficiency anaemia treated or managed?

Healthy lifestyle changes – Adopt healthy eating habits and increase the daily intake of iron-rich foods. Avoid drinking black tea as it reduces iron absorption. The most common treatment for iron deficiency anaemia is to take iron supplements per mouth. Iron supplements should be taken with vitamin C (e.g. glass of orange juice) to improve the absorption of iron. It is important to notify your doctor of any other medication that you are taking because some medication can interfere with the absorption of iron.

It usually takes at least 2 to 3 weeks of taking regular iron supplements before the symptoms start to improve. If no improvement, the following procedures may be necessary:

- Intravenous (IV) or Intramuscular (IM) iron therapy – People with severe iron deficiency anaemia may be more likely to receive intramuscular or intravenous iron therapy.
- Red blood cell transfusion – This procedure is also used for people with severe iron deficiency anaemia to

quickly increase the amount of red blood cells and iron in the blood.

- Surgery - An upper endoscopy or colonoscopy may be necessary to identify the source of, and stop ongoing bleeding.

What is covered under PMB level of care?

Iron deficiency anemia is a PMB condition only if the condition is life-threatening. Iron deficiency anaemia that is life-threatening is included in the PMBs under Diagnosis and Treatment Pair (DTP) code 236K. The treatment component specified for this DTP, according to the PMB Regulations, is medical management. The diagnosis, treatment and care should be funded by medical schemes, irrespective of the medical scheme plan option that you are covered under.

References:

1. Allil, N., Vaughan, J & Patel, M. (2017). Anaemia: Approach to diagnosis. South African Medical Journal, 107(01): 23-27. Available from: http://www.scielo.org.za/scielo.php?script=sci_arttext&pid=S0256-95742017000100016 (accessed 20.01.2019)
2. Ferrimed® Package Insert. (2013). What is iron deficiency? Available from: http://www.ferrimed.co.za/risk_ironDeficiency.html (accessed 20.01.2019)
3. Gunther, K. (2008). Diagnosing and managing iron deficiency anaemia in adults. A practical, clinical approach to iron deficiency anaemia. Continuing Medical Education, 26(5): 232-236. Available from: <file://cm-snas02/Users/Segeell/Downloads/347-3357-1-PB.pdf> (accessed 23.01.2019)
4. Home Remedy Shop. 12 Super Foods to Combat Anaemia. [image]. Available from: <https://homeremedyshop.com/12-super-foods-to-combat-anaemia/> (accessed 21.01.2019)
5. Mayo clinic. (2016). Iron deficiency anemia. Available from: <https://www.mayoclinic.org/diseases-conditions/iron-deficiency-anemia/symptoms-causes/syc-20355034> (accessed 18.01.2019)
6. Millier, R. E. (2016). Anemia. [image]. KidsHealth. Available from: <https://kidshealth.org/en/parents/anemia.html> (accessed 24.01.2019)
7. National Heart, Lung and Blood Institute. (2019). Iron-Deficiency Anemia. Available from: <https://www.nhlbi.nih.gov/health-topics/iron-deficiency-anemia> (accessed 20.01.2019)
8. Sachdev, P. (2013). Risk Factors for Iron deficiency. Blood diseases. Available from: <https://www.onlymyhealth.com/risk-factors-iron-deficiency-anaemia-1312787516> (accessed 20.01.2019)

WHAT ARE PRESCRIBED MINIMUM BENEFITS?

Prescribed Minimum Benefits (PMBs) are defined by law. They are the minimum level of diagnosis, treatment, and care that your medical scheme must cover – and it must pay for your PMB condition/s from its risk pool and in full. There are medical interventions available over and above those prescribed for PMB conditions but your scheme may choose not to pay for them. A designated service provider (DSP) is a healthcare provider (e.g. doctor, pharmacist, hospital) that is your medical scheme's first choice when you need treatment or care for a PMB condition. You can use a non-DSP voluntarily or involuntarily but be aware that when you choose to use a non-DSP, you may have to pay a portion of the bill as a co-payment. PMBs include 270 serious health conditions, any emergency condition, and 25 chronic diseases; they can be found on our [website](#)

The Communications Unit would like to thank the Clinical Unit for assisting with this edition of CMScript

Contact information:

information@medicalschemes.com
Hotline: 0861 123 267
Fax: 012 430 7644

The clinical information furnished in this article is intended for information purposes only and professional medical advice must be sought in all instances where you believe that you may be suffering from a medical condition. The Council for Medical Schemes is not liable for any prejudice in the event of any person choosing to act or rely solely on any information published in CMScript without having sought the necessary professional medical advice.

