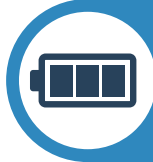


# Iron Deficiency

— AND —

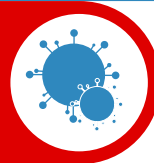
# Iron Deficiency Anaemia

Iron is an essential element in your blood. Up to 60% of your body's iron is found in the haemoglobin of your red blood cells.<sup>1</sup>



Without iron, many processes, such as energy production and DNA repair cannot happen.<sup>4, 5, 10</sup>

Iron also helps keep your immune system healthy, allowing you to fight off infection.<sup>3</sup>



Haemoglobin carries oxygen in your blood from the lungs to the tissues.<sup>1</sup> It is this oxygen that is needed in your brain for concentration and in your muscles for physical energy.<sup>2, 5</sup>



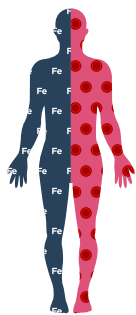
**IRON** helps your body to create healthy red blood cells containing haemoglobin.



These blood cells carry **OXYGEN** around your body.

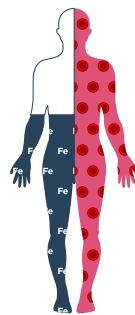


The ideal iron levels are different for everyone, depending on age and gender and health status.<sup>4, 6, 7</sup>



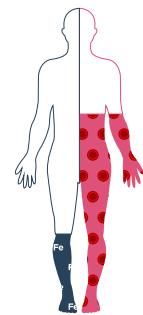
NORMALLY, THERE IS A **HEALTHY** BALANCE BETWEEN THE SUPPLY OF IRON AND WHAT THE BODY NEEDS.<sup>7, 8</sup>

When the amount of iron incorporated by the body does not meet its needs, it starts to use its iron stores.



AS THE BODY STARTS TO LACK IRON, IT PROGRESSIVELY ENTERS INTO A STAGE CALLED **IRON DEFICIENCY**. AT THIS POINT, MANY METABOLIC PATHWAYS MAY BECOME AFFECTED.<sup>1, 4, 9, 18, 19, 20</sup>

When the iron stores are exhausted, the body doesn't have enough iron to produce haemoglobin for the red blood cells.



IF IRON DEFICIENCY IS NOT MANAGED, IT CAN PROGRESS TO A MORE SEVERE STAGE IN WHICH THE BODY LACKS HAEMOGLOBIN. THIS IS CALLED **IRON DEFICIENCY ANAEMIA**.<sup>1, 4, 9, 18, 19, 20</sup>



Reduced availability of iron partly compromises the brain and muscle functions, leading to fatigue.<sup>5, 12</sup>

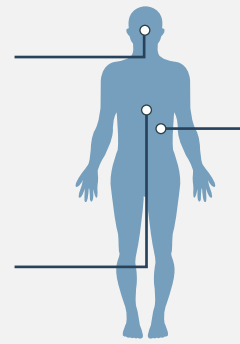
This effect is even more noticeable when there is not enough iron to produce haemoglobin, as the supply of oxygen to the body is reduced.<sup>2, 5</sup>



If you are not getting enough iron, for any reason, you might find yourself lacking in energy and feeling exhausted day after day.<sup>10</sup>

**MENTAL FATIGUE**  
Feeling mentally tired, irritable, dizzy or losing concentration quickly<sup>11, 12</sup>

**SHORTNESS OF BREATH**  
Reduced physical capacity<sup>10, 13</sup>



**PHYSICAL FATIGUE/ EXHAUSTION**  
Feeling physically tired<sup>11, 12</sup>

The causes of iron deficiency and iron deficiency anaemia include:<sup>21, 22</sup>



### BLOOD LOSS

In pre-menopausal women, menstrual blood loss is the most common cause; in men and post-menopausal women, blood loss from the gut is the most common cause.<sup>14</sup>

- MENSTRUAL BLOOD LOSS
- BLOOD LOSS FROM THE GUT
- SURGICAL PATIENTS
- KIDNEY DIALYSIS
- INFLAMMATORY BOWEL DISEASE



### INFLAMMATION

People with certain long term inflammatory conditions frequently have iron deficiency and iron deficiency anaemia as the inflammation can cause iron absorption in the gut to be blocked.<sup>15</sup>

- CHRONIC KIDNEY DISEASE
- RHEUMATOID ARTHRITIS
- CHRONIC HEART FAILURE
- INFLAMMATORY BOWEL DISEASE



### REDUCED ABSORPTION OF IRON (MALABSORPTION)

Those with damage to their gut have a reduced ability to uptake iron and are at risk of developing iron deficiency and iron deficiency anaemia.<sup>14</sup>

- CERTAIN MEDICATIONS
- PARTIAL OR TOTAL REMOVAL OF THE GUT
- CHRONIC HEART FAILURE
- INFLAMMATORY BOWEL DISEASE

Treating iron deficiency can improve your quality of life, including relief of fatigue and improvement of cognitive function. It can also prevent progression to the more severe condition of iron deficiency anaemia.<sup>12, 16, 17</sup>



Vifor Pharma, a company of the Vifor Pharma Group, is a world leader in the discovery, development, manufacturing and marketing of pharmaceutical products for the treatment of iron deficiency. The company also offers a diversified portfolio of prescription and non-prescription medicines. Vifor Pharma's operational headquarters are in Zurich, Switzerland, and the company has an increasingly global presence and a broad network of affiliates and partners around the world. For more information about Vifor Pharma, please visit [www.viforpharma.com](http://www.viforpharma.com)

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