

# Iron deficiency anemia

Iron deficiency anemia occurs when there is a low amount of hemoglobin, a protein that is in red blood cells (in blood tests it appears as red blood cells or erythrocytes). Hemoglobin, which requires iron, serves to transport oxygen through the entire body (muscles, heart, brain...). If we are lacking in iron, then we have anemia and we notice increased fatigue, hair loss, brittle nails and some people even have pica, which is a disorder characterized by a desire to eat stone or slate plaster.

### When do we need more iron?

More iron is needed during childhood, adolescence, menstruation, pregnancy, and breastfeeding. Also, people who participate in rigorous physical activity, whether that be occupational or athletic, need more iron.

## Causes of iron deficiency

There can be a lack of iron because of poor intake (vegetarian diet, alcoholism...) or due to blood losses.

#### Iron rich foods

Red meat (horse, beef or lamb) are the foods that have the highest quantity of iron. The internal organs, like the liver, contain a lot of iron, but they are not recommended to be eaten because they also have a great deal of cholesterol. The WHO recommends an intake of red meat 2-3 times per week.

Other foods such as legumes, nuts or spinach, also have iron, although in a lower quantity.



## What affects iron absorption?

Iron is absorbed when it exits the stomach, in the first part of the small intestine, called the *duodenum*. There are some foods that can help its absorption, like fresh squeezed orange juice. But there are also others which limit absorption, such as dairy products or stomach protector medications.

#### Loss of iron

The most frequent cause is heavy menstrual bleeding. Other causes are blood loss in the gastrointestinal tract (celiac, *Helicobacter pylori* colonization, erosions, ulcers or tumors), which can cause evident or imperceptible hemorrhages. The doctor will know when more tests are needed to be done.

#### **Treatment**

To remedy this deficit and replenish iron levels, it is possible that, along with the recommendation of improving our dietary habits, we need to orally take iron supplements for 3-4 months.

To better absorb this medication, we need to take it on an empty stomach, just after waking up. We should not eat any food for 30 minutes. Breakfast needs to start with freshly squeezed orange juice, which has Vitamin C to aid in iron absorption.

This medication can cause diarrhea or constipation. The stools are black and oil-like in appearance. The medication does not cause weight gain and in a few weeks we will regain our vitality, good mood, nail strength and shiny hair; this happens because there is an increase in oxygen delivery to the tissues.

To assess the progress, it is routine to have blood tests completed every 4-6 weeks and 4 months after initiating treatment, to review the level of iron deposits.

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