



EUROPEAN
ACADEMY OF
DERMATOLOGY &
VENEREOLOGY

Information Leaflet
for Patients

Iron deficiency in pregnancy

The aim of this leaflet

This leaflet has been written to help you understand more about iron deficiency in pregnancy. It will discuss what it is, what causes it, and what can be done about it.

Iron deficiency in pregnancy

What is anaemia?

Anaemia is a health condition characterized by insufficient healthy red blood cells to effectively transport oxygen to your body's tissues and organs. In fact, it is the most common medical condition in pregnancy.

What can cause anaemia?

A range of factors can lead to anaemia, impacting the body's ability to generate or maintain healthy red blood cells. Haemoglobin, a protein present in red blood cells, carries oxygen from the lungs to different parts of the body. The most common cause of anaemia is a lack of iron in the body (iron deficiency), which is necessary to produce this protein haemoglobin.

Why are pregnant women more likely to suffer from iron deficiency anaemia?

Typically the symptoms of iron deficiency anaemia during pregnancy are non-specific and may not be noticeable unless the condition is severe. The most common symptom is fatigue, and other symptoms may include pallor, weakness, headaches, heart palpitations, dizziness, difficulty breathing, and irritability. In some cases, pregnant women with iron deficiency anaemia may also feel colder than usual due to impaired temperature regulation. Additionally, there is a small possibility that a pregnant woman with iron deficiency anaemia may experience pica, which is an unusual craving for non-food items.

How does the iron deficiency affect the skin, hair and nails?

Iron deficiency can have various effects on the skin due to its essential role in various physiological processes. Here are some examples of how iron deficiency can impact the skin and its appendages:

- The skin's barrier function relies on iron. When iron levels are inadequate, the skin's barrier may weaken, resulting in elevated water loss

and dryness which can cause discomfort and itching.

- Proper hair follicle growth and health are also dependent on iron. When there is not enough iron, hair follicles may prematurely enter a resting phase, leading to more hair shedding and thinning.
- Iron deficiency may also result in nail changes. When nails become dry, weak, and susceptible to easy breakage or splitting, they are considered brittle. This condition can arise when there is insufficient oxygen and nutrients reaching the nail matrix, where new nail cells form, leading to fragility and brittleness.

What are the risk factors for iron deficiency in pregnancy?

The risk factors for iron deficiency in pregnancy include previous anaemia, multiparity of three or more (giving birth three or more times), twin or higher-order multiple pregnancy, an interval of less than one-year between pregnancies, poor dietary habits, following a vegetarian or vegan diet, pregnancy in teenage years, and recent history of significant bleeding.

How will my doctor diagnose the iron deficiency during my pregnancy?

The first laboratory test that indicates a decline in iron stores is the serum ferritin test, which is not affected by recent dietary iron consumption. This test is commonly used to diagnose iron deficiency during pregnancy and is deemed the most reliable. Treatment is typically recommended when serum ferritin levels fall below 30 µg/l, as this suggests an early stage of iron depletion that may worsen if left untreated.

Can iron deficiency in pregnancy be treated?

Yes, it can be successfully treated. The recommended initial treatment for iron deficiency is usually oral iron (the dosage should be discussed with your obstetrician-gynaecologist). One option for administering oral iron is either through ferrous sulphate, with a dosage of 200mg, or ferrous fumarate, with a dosage of 210mg, once daily. To ensure optimal absorption, it should be taken early in the morning on an empty stomach, about an hour before meals, and with a source of vitamin C, such as orange juice. When taking the oral iron ingestion of tea, coffee or antacids should be avoided. For women experiencing gastrointestinal side effects, such as nausea and epigastric pain, oral iron can be taken on alternate days to alleviate the discomfort. When oral iron is not well-tolerated or absorbed, or there is limited time for oral supplementation to be effective (such as during the later stages of pregnancy), intravenous iron infusion may be necessary.

Why is it important to treat iron deficiency in pregnancy?

When you lack sufficient iron in your body during pregnancy, it can result in a range of negative health outcomes, including increased vulnerability to infections, weakness, early labour, increased risk of excessive bleeding after delivery, and postpartum depression. Timely identification and treatment of iron deficiency anaemia in pregnant women can help to prevent unnecessary blood transfusions and minimize associated risks.

Does iron deficiency affect the baby?

Yes, the baby may also be at risk of iron deficiency and may experience health problems both at birth and later in life. Babies may have a low birth weight, be premature and may have intrauterine growth restriction, the rapidly developing fetal brain is at particular risk of iron deficiency.

What can I do to prevent iron deficiency in pregnancy?

To help prevent iron deficiency during pregnancy, here are some steps that can be taken:

- Eat iron-rich foods such as leafy green vegetables, nuts, red meat (beef, pork, lamb, venison), poultry, fish, eggs, beans and lentils.
- Take vitamin C with meals and iron supplements (which can increase iron absorption).
- Avoid drinking tea and coffee with meals (which can reduce iron absorption).
- Get regular prenatal check-ups to monitor iron levels.
- Avoid smoking, which can inhibit iron absorption and increases the risk of complications during pregnancy.

While every effort has been made to ensure that the information given in this leaflet is accurate, not every treatment will be suitable or effective for every person. Your own clinician will be able to advise in greater detail.