



Iron-deficiency anaemia and the gut

Why we look for a cause, and how iron is replaced

PE-GIC-14

Iron-deficiency anaemia means low haemoglobin because the body does not have enough iron. In men and in women after the menopause, the gut is the most common source of the problem, so tests of the digestive system are usually needed. Replacing iron is important, but finding the cause matters just as much.

What is it?

Haemoglobin carries oxygen in red blood cells, and it needs iron. When iron stores run out, haemoglobin falls. A low ferritin blood test confirms iron deficiency, although ferritin can look normal when there is inflammation.

In Oman and the Gulf, small red blood cells can also be caused by inherited thalassaemia trait, which is common and is not treated with iron. Your doctor will confirm low iron before starting treatment.

Symptoms

- Tiredness, low energy and poor concentration
- Breathlessness on exertion, or a pounding heartbeat
- Headache or dizziness
- Pale skin
- Hair thinning, brittle nails, a sore tongue or cracks at the corners of the mouth
- Craving ice, or restless legs at night

Some people have no symptoms, and the anaemia is found on a routine blood test.

Why does the gut matter?

Iron is lost through slow bleeding, which is often invisible in the stool, or is not absorbed properly. Gut causes include:

- Ulcers or inflammation of the gullet or stomach, including from anti-inflammatory painkillers or aspirin
- Polyps or cancer of the bowel or stomach, sometimes without any other symptoms
- Coeliac disease, which reduces iron absorption
- Inflammatory bowel disease
- H. pylori infection or long-standing stomach inflammation
- Previous stomach surgery, including weight-loss surgery
- Abnormal small blood vessels in the bowel lining (angiodysplasia)

In women before the menopause, heavy periods and pregnancy are common causes, but the gut may still need checking.

Which tests are needed?

- A coeliac disease blood test for everyone with iron-deficiency anaemia
- For men and women after the menopause: a gastroscopy and a colonoscopy, often on the same day
- For women before the menopause: gut tests if there are gut symptoms, if you are aged 50 or over, if your periods have stopped (for example after a hysterectomy), if there is a strong family history of bowel cancer, or if the anaemia keeps returning or does not improve without a clear cause
- A urine test for blood, to look for a source in the kidneys or bladder
- Small bowel tests, such as capsule endoscopy, if both endoscopies are normal and anaemia persists
- A test for H. pylori is usually advised, especially if no other cause is found. If it is found and treated, a repeat test, at least 4 weeks after finishing treatment, confirms that it has gone

A normal haemoglobin after iron treatment does not mean these tests can be skipped.

Replacing iron

Iron tablets are the usual first treatment:

- One tablet a day or every other day; every other day may be absorbed as well and is often better tolerated
- Take it on an empty stomach if you can, or with food if it upsets your stomach
- Avoid tea, coffee, karak, milk and laban for 1 to 2 hours around each dose, as they reduce absorption
- Iron can stop some medicines working properly, including thyroid tablets (levothyroxine), some antibiotics and osteoporosis tablets. Take them at least 2 hours apart (4 hours for thyroid tablets), and avoid antacids around your iron dose. Ask your pharmacist
- Common side effects are nausea, constipation and dark or black stools; the colour change is expected and harmless
- Your haemoglobin is usually checked within the first 4 weeks to make sure it is rising. Continue iron for about 3 months after it returns to normal, to refill your stores
- Keep iron tablets out of the sight and reach of children. Even a few tablets can be dangerous for a young child; if a child swallows any, go to the emergency department straight away

Intravenous (IV) iron is given through a drip when tablets are not tolerated or not working, when the gut cannot absorb iron well (for example in active inflammatory bowel disease), or when iron is needed quickly, such as later in pregnancy or before surgery. Serious allergic reactions are rare, and you are observed during and after the infusion.

Iron in your diet

Food alone rarely corrects established anaemia, but a good diet helps stop it returning:

- Iron from meat, chicken, fish and liver is the most easily absorbed (avoid liver if you are pregnant, because of its high vitamin A content)
- Plant sources include lentils, chickpeas, beans, dark green leafy vegetables and fortified cereals; dates contain smaller amounts
- Eat plant sources of iron with vitamin C-rich foods, such as tomato, lemon, citrus fruit or peppers
- Drink tea, karak and coffee between meals rather than with them

Get urgent medical care if you have

- Vomiting blood or material like coffee grounds
- Black, tarry stools or blood in the stool
- Breathlessness at rest, chest pain or fainting
- Weight loss without trying
- Difficulty swallowing
- A persistent change in bowel habit

Common questions

My haemoglobin is normal now. Do I still need the endoscopies?

Yes. Iron corrects the blood count but does not treat the cause, which still needs to be found.

How do I know whether black stools are from iron or from bleeding?

Iron makes stools dark but formed. Bleeding from the stomach causes sticky, tar-like, strong-smelling stools, often with feeling faint. If in doubt, seek medical advice the same day.

Can I just take a multivitamin?

Most contain too little iron to treat anaemia. Use the preparation your doctor recommends.

Is IV iron better than tablets?

It works faster and avoids stomach side effects, but tablets work well for most people who can take them. Your doctor will choose based on your situation.

This leaflet is general information and does not replace advice from your own doctor. Version 1.0, October 2026. Next review October 2028.

ZAD Health, PE-GIC-14