

Anemia

What is anemia?

Anemia [uh-NEE-mee-uh] is a condition in which your blood doesn't have enough red blood cells. Red blood cells carry oxygen to your body organs. If you don't have enough red blood cells, your body doesn't get enough oxygen. This may cause you to look pale and feel tired or short of breath, or you may not have any symptoms at first.

What causes it?

Different conditions can cause anemia.

Iron deficiency is the most common cause. Many people, including about 1 in 5 women, don't have enough iron in their bodies. In some cases, they are unable to absorb enough iron from foods because of digestive tract diseases. Reasons you can get iron-deficiency anemia include:

- Blood loss, especially in women who lose a lot of blood during menstrual periods.
- Not enough iron in your diet.
- Difficulty absorbing enough iron from foods, especially in people who have digestive tract (gut) diseases, ongoing blood loss from another health condition, or have had gastric bypass surgery.
- Increased need for iron, especially in children who are growing rapidly or pregnant women who need iron for their baby.

Kidney disease can be another cause of anemia. Healthy kidneys help your bone marrow make red blood cells. When you have kidney disease, your kidneys can't do this job as well. This may cause your red blood cell count to decrease and make you more likely to get anemia.

What do I need to do next?

- Treat anemia right away to prevent other health problems.
- **2** If recommended, take iron supplements exactly as directed by your doctor.
- 3 Eat more iron-rich foods (see page 2).

Other conditions that may cause anemia include:

- · Internal bleeding
- Blood loss, especially in women who lose a lot of blood during heavy menstrual periods
- Chronic (ongoing) illness
- Sickle cell anemia
- Vitamin deficiencies

What are the symptoms?

At first, you may not have any symptoms. As your anemia worsens, your anemia may cause you to:

- **Have low energy** and feel tired, weak, dizzy, irritable, depressed, or have trouble concentrating.
- Have physical signs and symptoms such as pale skin, brittle nails, shortness of breath, chest pain, cold hands or feet, or an irregular heartbeat.
- Want to eat unusual things such as ice, paper, dirt, clay, or pure starch.

How is anemia diagnosed?

If you or your doctor think you may have anemia, you'll get a blood test called a **complete blood count (CBC)**. If the CBC test shows that you have anemia, your doctor will perform other tests to determine what's causing your anemia, how severe it is, and what the best treatment would be.

Why does my anemia need to be treated?

If your anemia goes untreated, your heart has to work harder to get enough oxygen to your organs. In fact, your heart is working harder even before you have noticeable symptoms. This extra work can make the wall of your heart muscle thicken, a condition called left ventricular [ven-TRIK-yuh-ler] hypertrophy [hi-PUR-truh-fee]—or LVH. LVH is serious and can require hospitalization and sometimes cause death. Treating your anemia right away is necessary.

How is anemia treated?

Your doctor may recommend:

- **Iron supplements.** Be sure to take your iron supplements exactly as directed.
 - Iron supplements are absorbed best if taken one hour before meals. Taking them before you eat may give you an upset stomach or constipation. Talk with your doctor about the best way to handle these side effects.
 - If you can't tolerate iron supplements taken by mouth, you may be given iron through a tube inserted into a vein (IV) or as an injection in a muscle.
 - It usually takes 2 to 3 weeks of taking regular iron supplements before your symptoms start to improve.
 - You may need to keep taking iron for several months to build up your iron reserves and keep your anemia from returning. Take your pills for as long as your doctor recommends, even if your symptoms have improved.
 - Do not drink milk or take antacids at the same time as your iron supplements. They may interfere with iron absorption.

- **Diet and nutrition**. Eating more of certain foods is an effective way to improve your anemia. Try:
 - Iron-rich foods, including red meat (especially liver), egg yolks, fish, peas and beans, dark greens and broccoli, chicken, and whole-grain bread.
 - Vitamin C, which helps get oxygen to your tissues, and may help with iron absorption.
 Ask your doctor about taking it.

If kidney disease is causing your anemia, you may also be treated with:

- **ESAs.** ESAs (erythropoiesis-stimulating agents) are medications that help your body make more red blood cells. If you're receiving an ESA medication (usually as an injection), your doctor will check your iron level regularly.
- Monitoring. While you're receiving treatment for anemia, it's important for your doctor to monitor the levels of different substances in your blood. They may need to adjust your treatment to keep your blood levels in balance.

When should I call my doctor?

Check with your doctor if:

- You experience the symptoms of anemia, such as increasing low energy or pale skin, or wanting to eat unusual things.
- You have shortness of breath, chest pain, or an irregular heartbeat.
- You think for any reason that you may have anemia.
- You notice blood in your stool.