

# Managing Anemia Before Surgery

## Anemia

Anemia is a condition in which your body doesn't make enough red blood cells to carry the oxygen your body needs.

Oxygen acts like a fuel. It provides energy for your muscles and organs to work. Anemia causes your body to work harder to deliver the oxygen. For example, it makes your heart beats faster.

## Symptoms of Anemia

Anemia can cause you to:

- feel tired, weak or dizzy
- have a rapid heartbeat
- have shortness of breath
- have headaches
- have problems sleeping

Your skin may also look pale in color.

## Causes of Anemia

A number of things can affect your body's supply of red blood cells, such as:

- lack of vitamins and minerals (such as iron, vitamin B12 and folic acid)
- blood loss from an injury
- blood disorders that run in your family (such as sickle cell anemia)
- cancer or cancer treatments.

The most common type of anemia is called iron-deficiency anemia (caused by low iron).

Iron is a mineral found in hemoglobin. If your body does not have enough iron, your body cannot make hemoglobin, and you may develop anemia.

Your body's iron supply can be lowered by:

- blood loss
- eating foods that are low in iron
- an increase in your body's need for iron (such as pregnancy).

## Confirming Anemia

When you are scheduled for surgery, you will have a blood sample drawn. The lab staff can tell if you have anemia based on the results of a test called a complete blood count (CBC).

The CBC measures:

- red blood cells, white blood cells and platelets
- hemoglobin (also known as Hgb): a protein that determines how much oxygen the red blood cells can carry throughout your body

If your hemoglobin count is low, your doctor will create a treatment plan with you to improve your anemia before surgery. (It is best to treat anemia 4 weeks before surgery.)

More lab tests will be needed to tell the cause of your anemia and the best way to treat it.

## How to Treat Anemia

You and your health care team will decide which option is best for you. Options include:

- eating foods that are high in iron
- taking iron pills
- receiving liquid iron through an IV (intravenous) line in your hand or arm (You will likely need more than one treatment.)

- receiving a shot or an IV of vitamins (folic acid or vitamin B12) that are essential for growth and production of blood cells
- receiving a shot or IV of a hormone that helps your body make more red blood cells.
- seeing a specialty doctor.

Treating your anemia by building up your blood counts before surgery is important because it will help your recovery.

After surgery, your blood levels will be measured. If you need other treatment, your doctor will talk with you about your options.