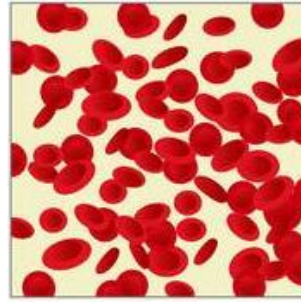


# Anemia

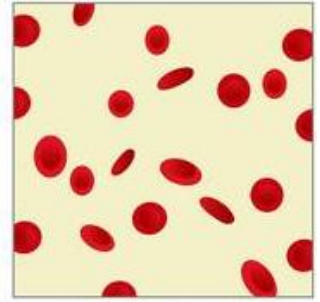
## What is Anemia?

Anemia is a low number of red blood cells or a low amount of hemoglobin in red blood cells.

Hemoglobin is a protein that helps carry oxygen throughout body. Red blood cells use iron to create hemoglobin. Anemia may develop if body does not have enough iron. It may also develop if body does not make enough red blood cells or they die faster than body can make them.



Normal amount of red blood cell



Anemic amount of red blood cell

## Risk factors

- Trauma or surgery that causes massive blood loss
- Gastrointestinal bleed
- Woman's monthly period
- Family history of blood disease or anemia
- Alcohol abuse
- Lack of foods that contain iron, folic acid, or vitamin B12

## Signs and symptoms

- Chest pain or a fast heartbeat
- Lightheadedness, dizziness, or shortness of breath
- Cold or pale skin
- Tiredness, weakness, or confusion

## Diagnosis:

- Complete blood count (CBC)
- Vitamin B12 and folate deficiency
- Finding the cause such as diet, medicines, menstrual pattern, other medical conditions

## Treatment:

- Iron or folic acid supplements help increase red blood cell and hemoglobin levels.
- Vitamin B12 injections may help boost red blood cell count and decrease symptoms.
- A blood transfusion may be needed if body cannot replace the blood lost during surgery.

## Clinical teaching:

- Eat healthy foods rich in iron and vitamin C.
- Nuts, meat, dark leafy green vegetables, and beans are high in iron and protein.
- Vitamin C helps your body absorb iron. Foods rich in vitamin C include oranges and other citrus fruits.

**Reference:** Micromedex's Care Notes System Online 2.0