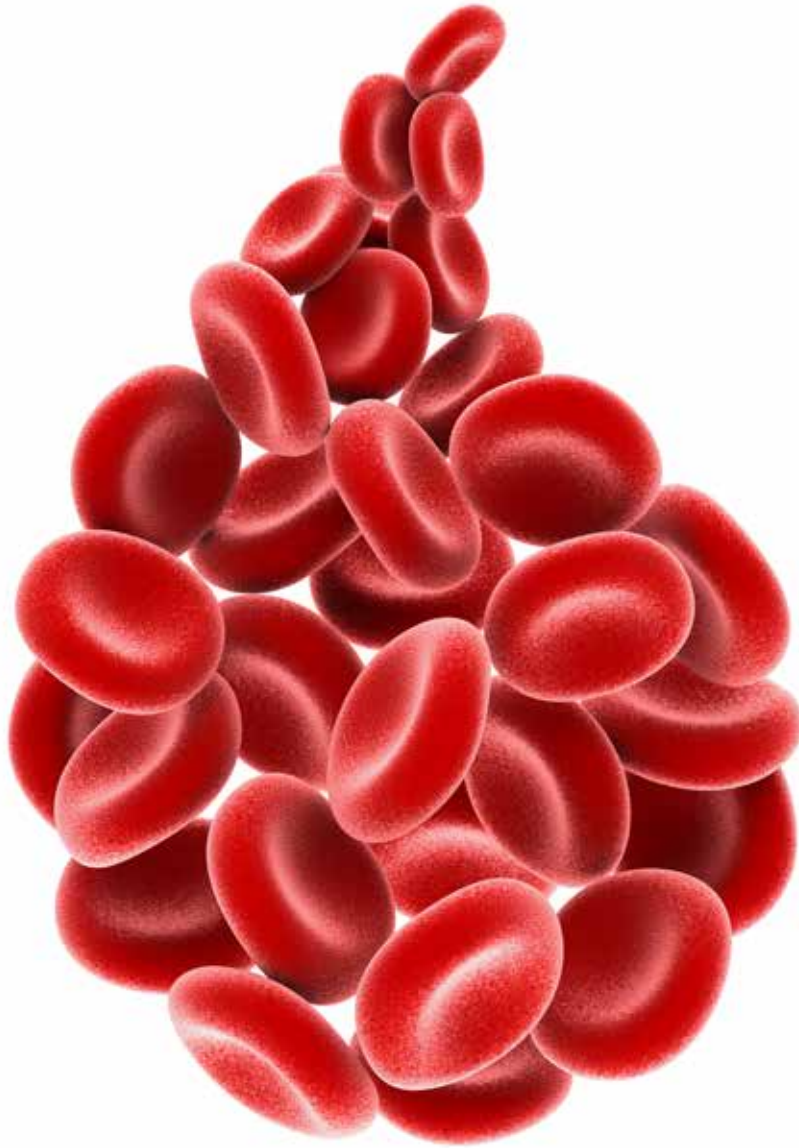


# Anemia

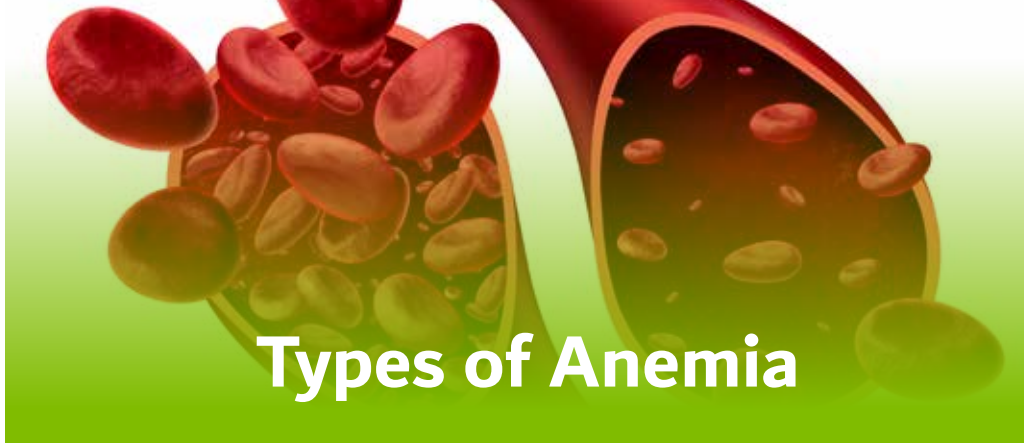




Anemia is a condition in which the blood does not contain enough healthy red blood cells to carry the adequate amount of oxygen to the body's tissues, can make you feel tired and weak.

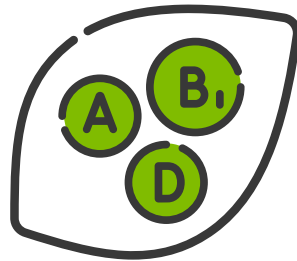
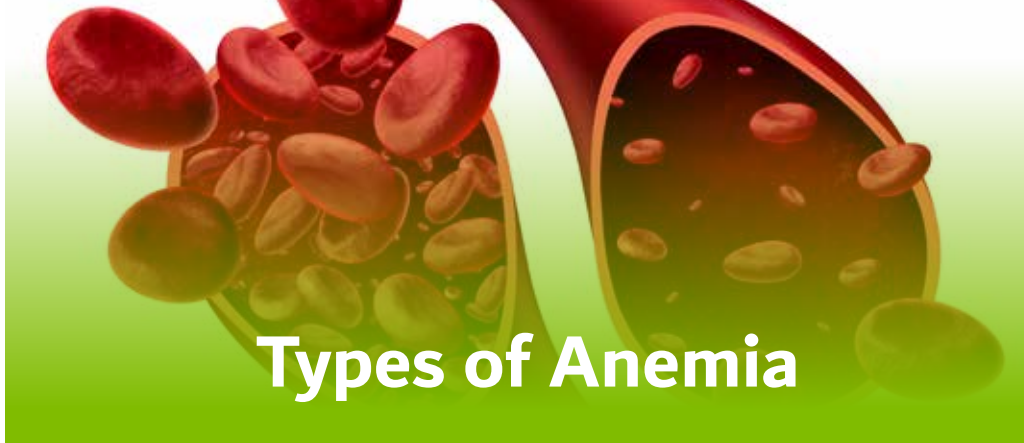
Anemia can be temporary or long term, and it can range from mild to severe.

There are many types of anemia, and each has its causes. Iron deficiency anemia might be temporary or long term, and it may range from mild to severe.



### **Anemia caused by iron deficiency:**

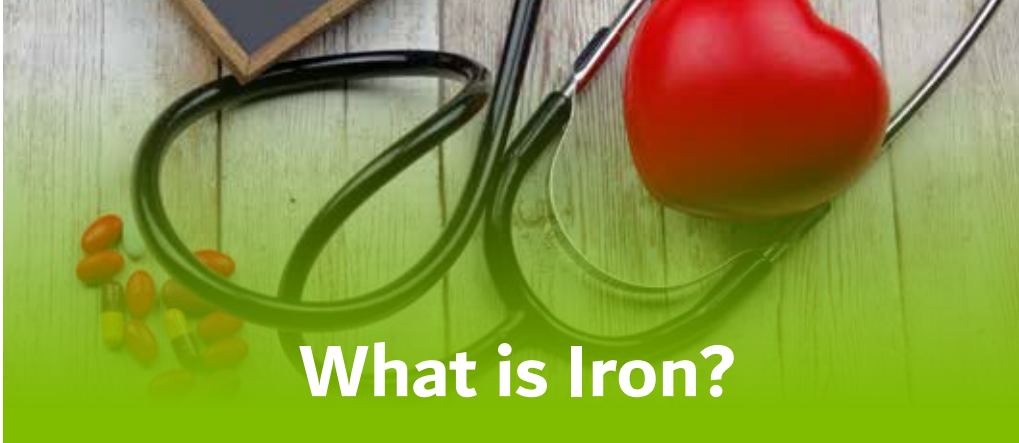
This sort of anemia, which is the most common, is caused by a lack of iron in the body. Bone marrow needs iron to make hemoglobin, and without enough iron, the body cannot produce enough hemoglobin for red blood cells. This type of anemia happens in many pregnant women, and due to blood loss, such as heavy menstrual bleeding, ulcers, cancer, and regular use of some pain relievers. Especially aspirin, which can cause inflammation lining, leading to blood loss.



## **Anemia caused by lack of vitamins:**

Besides iron deficiency anemia, the body needs folate and vitamin B12 to produce enough healthy red blood cells. So focus on these nutrients in the diet and other essential nutrients to avoid decreased red blood cell production.

Also, some people who consume vitamin B12 in sufficient quantities are not able to absorb this vitamin (B12). This, in turn, can lead to vitamin deficiency anemia, also known as pernicious anemia.



## What is Iron?

Iron is an essential mineral involved in oxygen transport. It is also necessary for the regulation of cell growth and differentiation.

If you are not eating enough iron-rich foods in your diet, you may feel tired and run-down.

## Who is more likely to have an iron deficiency?



Pregnant woman



Heavy menstrual bleeding



Children eating unhealthy food



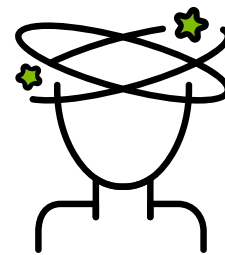
Vegetarians



## Iron deficiency symptoms:



Pale skin, brittle  
nails and hair  
loss



Headache,  
dizziness or feeling  
lethargic



Cold hands or  
feet



Heart palpitations  
or shortness of  
breath





## **Dietary causes of anemia:**

- **Lack of iron-rich foods or insufficient consumption of iron-rich foods in the diet**
- **Eating meals low in vitamin B-12 and folic acid**
- **Drinking coffee and tea with meals or immediately after, especially with foods rich in iron**
- **Eating calcium-rich food sources with iron-rich foods or with iron tablets**



**There are two types of iron:**

**Easily absorbed iron (iron from animal sources)**

**Slow absorption of iron (iron from vegetable sources)**

as the human intestine cannot absorb it easily,  
and it also needs food sources rich in vitamin C  
to help absorb the iron.



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**Foods rich in vitamin C:**

Fresh okra, green pepper, tomato, spinach, green  
onion, cabbage, cauliflower, broccoli, strawberry,  
grapefruit, guava, kiwi, lemon, orange, mango,  
melon, papaya, peach, pineapple, and pear.





## The general recommendation for healthy people is:

Age	Male	Female	Pregnancy	Lactation
Birth to 6 months	0.27 mg*	0.27 mg*		
7–12 months	11 mg	11 mg		
1–3 years	7 mg	7 mg		
4–8 years	10 mg	10 mg		
9–13 years	8 mg	8 mg		
14–18 years	11 mg	15 mg	27 mg	10 mg
19–50 years	8 mg	18 mg	27 mg	9 mg
51+ years	8 mg	8 mg		

\* Adequate Intake

\*\* The amount of iron you need each day is measured in milligrams (mg)

### Tips for raising hemoglobin level:

- Eat foods rich in iron and folic acid
- Eat more foods rich in vitamin C
- Avoid drinking tea and coffee immediately after your main meal
- Exercise regularly



## Examples of Iron-rich food sources:

Food	Amount	Amount of iron in milligrams
Cooked chicken liver	3 oz. / 85 g	8.55
Cooked lamb liver	3 oz. / 85 g	7.04
Cooked oysters	3 oz. / 85 g	4.14
Lean beef	3 oz. / 85 g	2.6
Turkey	3 oz. / 85 g	0.54
Fresh tuna	3 oz. / 85 g	1.1
Canned white tuna in water	3 oz. / 85 g	0.82
Cooked crab	3 oz. / 85 g	0.425
Cooked shrimp	3 oz. / 85 g	0.27
Roasted breast chicken	3 oz. / 85 g	0.179
Boiled soybeans	1 cup	8.84
Boiled Lentil	1 cup	6.59
Cooked canned spinach	1 cup	4.92
Boiled kidney beans	1 cup	5.2
(Cowpea with black eyes)	1 cup	5.2
Boiled black beans	1 cup	3.61
Raisins	1 cup	1.62
Boiled frozen spinach	½ cup	1.86
Whole bread	1 slice	0.59
Dates	5-6 dates	0.3



- Food Data Central; USDA;  
<https://fdc.nal.usda.gov/index.html>