

Ferritin Blood Test

- Ferritin Blood Test Facts

- The ferritin test measures the level of ferritin, the major iron storage protein in the body.
- The ferritin test is a simple blood test.
- High levels of ferritin can indicate an iron storage disorder, such as hemochromatosis, or a chronic disease process.
- Low levels of ferritin are indicative of **iron deficiency**, which causes **anemia** (a reduction in the number of red blood cells).

- What is ferritin?

Ferritin is the major iron storage protein of the body. Ferritin levels can be used to indirectly measure the iron levels in the body. Ferritin has the shape of a hollow sphere that permits the entry of a variable amount of iron for storage (as ferric hydroxide phosphate complexes).

- What is the ferritin blood test?

The ferritin test uses venous blood that is withdrawn as for any routine blood test. No special preparation for the test is necessary.

The test is sometimes ordered together with other tests to help evaluate the body's iron stores, such as an iron level or a total iron binding

- What are normal results for a ferritin test?

The results may vary slightly among laboratories, but in general, normal ferritin levels are 12-300 nanograms per milliliter of blood (ng/mL) for males and 12-150 ng/mL for females.

- What does an elevated ferritin level mean?

High levels of ferritin can be indicative of an iron storage disorder such as hemochromatosis. Hereditary hemochromatosis is an inherited (genetic) disorder in which there is excessive accumulation of iron in the body (iron overload). In individuals with hereditary hemochromatosis, the daily absorption of iron from the intestines is greater than the amount needed to replace losses. Since the normal body cannot increase iron excretion, the absorbed iron accumulates in the body.

- A man with hemochromatosis can accumulate 20 grams of total body iron by age 40 to 50 (the normal iron content for the body is 3-4 grams). The excess iron deposits in the joints, liver, testicles, and heart, which causes damage to these organs, and causes signs and symptoms of hemochromatosis.
- Women with hemochromatosis accumulate iron at a slower rate than men because they lose more iron than men due to iron loss from menstruation. Therefore, they typically develop signs and symptoms of organ damage due to excess iron 10 years later than men.

People with hereditary hemochromatosis may have no symptoms or signs (and have normal longevity), or they can have severe symptoms and signs of iron overload that include: sexual dysfunction, heart failure, joint pains, liver cirrhosis, diabetes mellitus, fatigue, and Darkening of skin.

The symptoms arise because iron accumulates in the organs and leads to destruction and loss of normal function.

Other causes of a high ferritin level are chronic inflammatory conditions such as liver disease or rheumatoid arthritis, or some types of cancer.

- What does a low ferritin level mean?

Low levels of ferritin are seen in iron deficiency. Without enough iron, the body cannot produce sufficient levels of hemoglobin, a component of red blood cells that allows them to carry oxygen. Iron deficiency anemia is the result. Mild anemia may not produce symptoms at all. More serious cases of anemia can produce symptoms such as:

Shortness of breath, fatigue, dizziness, pale skin, and fast heartbeat.