

# IRON PROFILE + FERRITIN

## LAB RESULT EXPLANATION

These screenings are intended to provide information to be used by health care professionals to detect potential problems and help make you more aware of your health. If, after reading this pamphlet, you still have questions concerning your results, please call your personal health care professional.

### YOUR BLOOD TESTS

You and your doctor can learn a great deal about your health from a sample of your blood. Sometimes test results will be abnormal before you have any symptoms. If symptoms have developed, laboratory tests help confirm that a problem does exist. A normal test result is just as significant as an abnormal result. When a result is normal, it not only helps you rule out disease, but it also establishes a baseline for you. Each person has their own baseline "normal". A person's own results are the best baseline for monitoring any change that takes place in the future. If any of your values are significantly different than previous results, contact your health care professional.



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### MEDICATIONS AND FASTING

Fasting is not required for accurate test results. Speak with your physician if you have concerns about medication interference with result values.

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**IRON** is required for the body to make hemoglobin and to help transfer oxygen to the muscles around the body. If the body is low in iron, all cells, particularly muscles in adults and brain cells in children, do not function well. Too much iron in the body can cause injury to the heart, pancreas, and reproductive organs. Iron excess is found in the hereditary disease hemochromatosis, which occurs in about 3 in every 1,000 people. Any value outside the specified reference range should be evaluated by your health care professional.

Iron levels are significantly increased by hemolysis. Hemolysis is the breakdown of red blood cells. This can be caused by injury or damage to the cells when the blood is drawn. If your specimen is too severely hemolyzed during collection, the laboratory will contact you to advise a recollection for accurate results. If your blood draw is difficult, and your results are elevated consider retesting.

**FERRITIN** is used as an aid in the distinction of iron deficiency anemia from other types of anemia. Serum ferritin levels are generally proportional to the body's iron store and reflects cellular iron stores. Serum ferritin is the best single test for diagnosis of iron deficiency. It is also used to support diagnosis and to follow therapy of patients with hemochromatosis.

**IRON SATURATION %** refers to the amount of iron present in the blood. Iron is vital for muscle metabolism and oxygen transport. Iron binds in the blood to a protein called transferrin, and then iron is transported throughout the body.

**TOTAL IRON BINDING CAPACITY (TIBC)** measures how well iron is able to be transported throughout the body by the carrier protein, transferrin. This test is reflective of your body's iron storage capability, and the amount of transferrin available to transport iron in the body. A low TIBC will prevent adequate usage of iron in the body, even if iron levels are within range.

### *What is anemia?*

Anemia is defined as a decreased amount of red blood cells and hemoglobin in the blood. Symptoms include fatigue, lightheadedness, shortness of breath, and headaches. Several factors can cause anemia, including low iron levels or poor iron transport throughout the body (iron-deficiency anemia). Effective treatment can be initiated when the cause of anemia has been determined. Additional tests may be required to determine the exact cause of anemia.

### *I suspect I have anemia, should I take iron supplements?*

Your health care professional will determine if iron supplements are necessary. In some cases, too much iron can negatively affect the liver and cause irreversible damage. Speak to your health care team before starting any new supplements based on laboratory test results.

## YOUR SCREENING RESULTS

***IT IS NOT POSSIBLE TO DIAGNOSE OR TREAT ANY DISEASE OR HEALTH PROBLEMS WITH THIS BLOOD SCREEN ALONE.***

It can help you learn more about your body and detect potential problems in early stages when treatment or changes in personal health habits can be most effective.

Screening results that fall outside of Sheridan Memorial Hospital's reference range (range of expected screening values) are separated out from the rest of the results to highlight them. They are printed with an **H (high)** or **L (low)** on the report. The reference range for each test is listed on the right side of your blood report, or by clicking the result value in your Patient Portal.