The Great Plains Laboratory, LLC

Iron + Total Iron-Binding Capacity

Requisition #:	9900001	**Physician Name:**	NO PHYSICIAN
Patient Name:	Sample	**Date of Collection:**	Nov 25, 2021
Date of Birth:	Sep 19, 1981	**Time of Collection:**	10:00 AM
Gender:	F	**Print Date:**	Dec 1, 2021

Iron and Total Iron Binding Capacity Profile

Test	Patient value (mcg/dL)		Reference range (mcg/dL)
Total iron	**300.00**	**High**	**40 - 190**
Total iron binding capacity	**270.00**		**250 - 450**
% Saturation	**12.00**	**Low**	**16 - 40**

Interpretations

Low iron
Low serum iron is associated with microcytic anemia in which the mean corpuscular volume (MCV) is low or low normal. The most common reasons for iron deficiency is low dietary intake of iron or vitamin C, chronic blood loss, achlorhydria (deficiency of stomach acid), severe milk allergy, defective absorption, increased demand as in pregnancy, and anemia due to chronic illnesses such as rheumatoid arthritis, infections, and cancer. Common symptoms of iron deficiency include fatigue, shortness of breath, headaches, hair loss, and other symptoms.

High iron
High serum iron is associated with excessive dietary intake or accidental overdose by children who mistake sweetened iron-fortified vitamins as candy. Other causes include excessive absorption due to genetic hemochromatosis, anemias which impair erythropoiesis, alcoholic cirrhosis, excessive blood transfusions, and liver disease associated with portacaval anastomosis.

Low total iron-binding capacity
Low total iron-binding capacity may be due to anemia of chronic disorders, hemochromatosis, sideroblastic anemia, protein deficiency, or genetic transferrin deficiency.

High total iron-binding capacity
High total iron-binding capacity may be due to iron deficiency anemia, pregnancy, or the use of supplemental estrogen as an oral contraceptive or hormone replacement.

Low percent saturation
Low percent saturation may be associated with iron deficiency anemia, pregnancy, or anemia of chronic disorders.

High percent saturation
High percent saturation is common in genetic hemochromatosis, sideroblastic anemia, and genetic transferrin deficiency.

Testing performed at Quest Diagnostics, Lenexa, KS.