



Partner Update

August 2024

Changes to Ferritin Reference Intervals

Audience

Healthcare providers and hospitals requesting Ferritin testing.

Overview

The Dynacare vision is to be Canada's health and wellness solutions leader. We will update the lower limit of the Ferritin reference interval for all age groups to aid in the diagnosis of iron deficiency effective September 9th in Ontario, September 16th in Quebec, and September 23rd in Manitoba.

Details

Iron deficiency is the most prevalent micro-nutritional deficiency in the world. Iron deficiency may present with or without anemia. Iron deficiency without anemia often goes unrecognized and is associated with symptoms that can negatively affect health related quality of life. Serum ferritin is the most sensitive and specific marker for iron deficiency in adults and pediatric patients. Serum ferritin has a wide reference interval and historically has varied according to biological sex, however, a ferritin result of $< 30 \mu\text{g/L}$ in adults and $< 20 \mu\text{g/L}$ in children are appropriate clinical decision limits, supported by an extensive body of scientific literature.¹⁻³ However, adult patients who have ferritin $\geq 30 \mu\text{g/L}$ and pediatric patients who have ferritin $\geq 20 \mu\text{g/L}$, in the presence of concomitant inflammation should have full iron studies ordered (serum iron, TIBC, and transferrin saturation). Interpretation of ferritin levels can be found in the table below.

Serum Ferritin ($\mu\text{g/L}$)	Interpretation
<30 (adult) <20 (pediatric)	Consistent with iron deficiency
30-50 (adult) 20-50 (pediatric)	Probable iron deficiency (in the absence of concomitant inflammation)
51-100	Possible iron deficiency, if risk factors are present (in the absence of concomitant inflammation)
101- 300	Iron deficiency unlikely (in the absence of concomitant inflammation)

The Ontario Association of Medical Laboratories has published an updated Guidelines for the Use of Laboratory Test for Iron Deficiency (CLP002)⁴ in collaboration with the Raise the Bar campaign. Dynacare will be updating the lower limit of the ferritin reference interval and adding interpretive comments to lab reports in alignment with this guideline.



Action Required

Reference intervals must be updated to reflect the changes above.

Questions about the Change?

If you have any questions regarding this change or require any further information, please contact Customer Care at 800.565.5721 or your Dynacare Account Manager.

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References

1. Raise the Bar. <https://www.hemequity.com/raise-the-bar>
2. Martens K, DeLoughery TG. Sex, lies, and iron deficiency: a call to change ferritin reference ranges. *Hematology*. 2023 Dec 8; 2023(1):617-21.
3. Naveed K, Goldberg N, Shore E, Dhoot A, Gabrielson D, Goodarzi A, *et al*. Defining ferritin clinical decision limits to improve diagnosis and treatment of iron deficiency: A modified Delphi study. *Int J Lab Hematol*. 2023 Jun; 45(3):377-86
4. Ontario Association of Medical Laboratories. Guidelines for the use of laboratory tests for iron deficiency (CLP 002). <https://oaml.com/wp-content/uploads/2016/05/Guidelines-for-the-Use-of-Laboratory-Tests-for-Iron-Deficiency-2024-FINALfor-July-distribution.pdf>

