

February 25, 2021

IMPORTANT TEST CHANGE INFORMATION
LOW-DENSITY LIPOPROTEIN (LDL) CALCULATION CHANGE

Spectrum Health Lakeland Laboratory is proud to announce the change in LDL calculation from the Friedewald calculation to one newly developed by the National Institute of Health (NIH). Because direct measurement of LDL-C is analytically complex, clinical laboratories traditionally calculate levels using the Friedewald Calculation¹. This equation, however, is limited in its accuracy calculating levels below 70 mg/dL and in determining levels when triglyceride results are >400 mg/dL. The NIH has developed an equation² that overcomes the limitations of the Friedewald equation. In addition, the NIH equation performs equally well in both fasting and non-fasting states.

The new formula will be used to calculate LDL beginning March 2, 2021 and will use triglyceride results of up to 800 mg/dL. When ordered in a reflex test, triglyceride results >800 mg/dL, will reflex to a directly measured LDL test performed at a reference laboratory.

For additional information or questions please contact Lakeland Laboratory Client Services:

- Call (269) 983-8311
- 1-800-513-9193

Or go to Lakeland Internet: www.lakelandhealth.org/lab then select laboratory catalog menu.

¹ <https://www.merckmanuals.com/medical-calculators/Friedewald.htm>

² <https://pubmed.ncbi.nlm.nih.gov/32101259/>