

CENTRA CARE Laboratory Services

MEMO

TO: CCLS Clients

FROM: CentraCare Laboratory Services - River Campus

DATE: 7/14/16

SUBJECT: Ketone Bodies – Testing Change, Effective July 19, 2016

CentraCare Laboratory Services has been notified that our Acetest (Ketone) test has been discontinued.

We are offering in its place Beta-Hydroxybutyrate assay. Beta-hydroxybutyrate (BHB) is 1 of 3 sources of ketone bodies. Its relative proportion in the blood (78%) is greater than the other 2 ketone bodies, acetoacetate (20%) and acetone (2%). During carbohydrate deprivation (starvation, digestive disturbances, frequent vomiting), decreased carbohydrate utilization (diabetes mellitus), glycogen storage diseases, and alkalosis, acetoacetate production increases. The increase may exceed the metabolic capacity of the peripheral tissues. As acetoacetate accumulates in the blood, a small amount is converted to acetone by spontaneous decarboxylation. The remaining and greater portion of acetoacetate is converted to BHB.

Testing information:

Beta-Hydroxybutyrate:

EPIC Ordering – LAB0214903
Sunquest Ordering Code – BOHB
Reference Range: <0.3 mmol/L

Specimen type: Heparinized plasma or Serum

Interpretation information:

The beta-hydroxybutyrate (BHB)/acetoacetate ratio is typically between 3:1 and 7:1 in severe ketotic states.

Serum BHB increases in response to fasting, but should not exceed 0.3 mmol/L following an overnight fast (up to 12 hours).

Please contact Jerome Schlabsz, Chemistry Technical Specialist at ext 57325 with any questions.