TO: REFERRING CLIENTS  
FROM: Jeffery Cuneo, Business Coordinator  
LRC Hamilton  
DATE: January 17th, 2016  
SUBJECT: Folate, RBC and Folate, Serum

Test Update

Folate, RBC and Folate, Serum

On January 30th, 2017 we will be discontinuing red blood cell (RBC) folate measurement and will only offer serum folate testing. In doing so, we hope to improve quality as the RBC folate assay yields significantly more analytical variation (1-3) and hinders our ability to provide reliable results from different lots of folate reagent (see figure below and reference 4).

In moving to serum folate we have also adopted the World Health Organization interpretation for serum folate (5), with the deficiency and elevated concentrations in agreement with the Abbott ARCHITECT Folate reference interval (6):

<table>
<thead>
<tr>
<th>Concentration Range</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;45.3 nmol/L</td>
<td>Elevated</td>
</tr>
<tr>
<td>13.5-45.3 nmol/L</td>
<td>Normal</td>
</tr>
<tr>
<td>6.8 – 13.4 nmol/L</td>
<td>Possible deficiency</td>
</tr>
<tr>
<td>&lt;6.8 nmol/L</td>
<td>Deficiency</td>
</tr>
</tbody>
</table>

Please note that there is no serum folate cutoffs for women of childbearing age for neural tube defect risk reduction; however data has indicated that folic acid supplement use is the most significant predictor of Canadian women of childbearing age achieving optimal RBC folate concentrations (7).

References:
Test Information

Folate, Serum
There are no changes to the Folate, Serum test.

Specimen Requirement:
1mL Serum

Specimen Handling Instructions:
Protect from light. A hemolyzed sample is unacceptable. Because serum folate concentrations may fluctuate due to short-term dietary change, it is advisable to determine red cell folate in addition to serum folate to confirm the diagnosis of folate deficiency.

Reference Interval:
< 6.8 nmol/L

Turnaround Time:
10 days

Method of Analysis:
Chemiluminescent Microparticle Immunoassay - Abbott Architect

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