

Nutristasis changes

Date: 29/8/24

The Nutristasis unit provides analysis of endogenous vitamins in body fluids.

Nutristasis reference range changes:

Test	Change
Serum B12	<p>Serum B12 – age related reference ranges apply. Ethnicity and pregnancy (trimester specific) ranges are incorporated into comments where applicable</p> <p>0 – 1 yr old: 215 – 1389 ng/L (all ethnicities)</p> <p>2 - 5 yr old: 374 – 1494 ng/L (all ethnicities)</p> <p>6 – 9 yr old: 332 -1081 ng/L (all ethnicities)</p> <p>10 – 13 yr old: 253 – 871 ng/L (all ethnicities)</p> <p>>14 yr: 225 – 1091 ng/L (Black and Black British ethnic group)</p> <p>> 14 yr: 182 – 692 ng/L (White and Asian ethnic group)</p> <p>For pregnancy, trimester specific serum B12 reference ranges apply:</p> <ul style="list-style-type: none"> • First trimester 168-574 ng/L • Second trimester 154-516 ng/L • Third trimester 112-465 ng/L
Serum ferritin	<p>Serum ferritin – sex and age related reference ranges apply</p> <p><u>Females cut-offs</u></p> <p>0-5 yrs – 12-150 ug/L</p> <p>≥6 yrs- 15-150 ug/L</p> <p><u>Males cut-offs</u></p> <p>0-5 yrs – 12-200 ug/L</p> <p>≥6 yrs- 15-200 ug/L</p>
Serum folate	Reference range 3.1 -20.5 µg/L

Nutristasis critical phoning limit changes:

Test	Change
Vitamin D	Vitamin D (25-OH Vitamin D) results >500 nmol/L will be communicated

Nutristasis test profiles and name changes:

Test	Change
Combined panels for serum B12, Ferritin, Folate	Combined panels for serum B12, Ferritin, Folate will no longer be available – these tests must be ordered separately
Vitamin B12	Vitamin B12 will be renamed as Vitamin B12 Total
Vitamin D	Vitamin D will be renamed as 25-OH Vitamin D

Nutristasis changes to automated comments and reflex rules:

Test	Comment
Serum B12	<p>Samples with serum B12 <150 ng/L will be referred for intrinsic factor (IF) and gastric parietal cell (GPC) antibodies assay. The following comment will apply</p> <p><i>Vitamin B12 deficiency. Determine cause and give parenteral vitamin B12 replacement. Sample sent for IF and GPC antibodies assay.</i></p> <p>Indeterminate B12 status (age dependent) will trigger the following comment</p> <p><i>Indeterminate B12 status. For vitamin B12 values between <this will be adjusted for age> ng/l in this age group we recommend confirmatory analysis with serum methylmalonic acid (MMA), a functional marker of vitamin B12 deficiency, providing that renal function is normal. If you would like to proceed using the same specimen please contact us asap - 0204 513 7300. If MMA is raised, B12 deficiency can be confirmed. Determine cause and give oral or parenteral vitamin B12 replacement.</i></p> <p>Replete comment</p> <p><i>Vitamin B12 replete.</i></p> <p>Elevated B12 comment</p>

	<p><i>Elevated B12 concentration.</i></p> <p>Comment for all females between 15-50 yrs. of age Please note, in pregnancy, trimester specific serum B12 reference ranges apply: first trimester 168-574 ng/L, second trimester 154-516 ng/L, third trimester 112-465 ng/L</p>
Vitamin D (25-OH Vitamin D)	<p>Samples with results >150 nmol/L will be sent for confirmatory analysis using LC-MS/MS technology (results for these samples will be available within 10 days). The following comment will apply.</p> <p><i>Result confirmed by LC-MS/MS.</i></p>
Ferritin	<p>Comment for results within the reference range <i>Serum ferritin within the reference interval cannot exclude iron deficiency in the context of raised inflammatory markers or a history of acute or chronic disease; if applicable further investigation may be warranted. In individuals with infection or inflammation, a ferritin concentration below 70 µg/L may indicate iron deficiency.</i></p> <p>Comments for results above the reference range but ≤1000 ug/L <i>Elevated ferritin concentration. Consider iron overload and other causes of elevated ferritin e.g. inflammation or infection. If asymptomatic, consider repeat serum ferritin and transferrin saturation in 3-6 months.</i></p> <p>Comments for results above the reference range but ≤10000 ug/L <i>Grossly elevated ferritin concentration indicative of iron overload or other disease. Further clinical and laboratory evaluation is indicated to establish the diagnosis and underlying cause of the ferritin concentration.</i></p> <p>Comments for results above the reference range but >10000 ug/L <i>Grossly elevated ferritin concentration, can be associated with renal or liver disease, infection or malignancies. Consider also rare conditions such as Still disease or haemophagocytic lymphohistiocytosis.</i></p> <p>An additional comment for females 15-50 yrs old and ferritin result between 0-150 ug/L (Female) <i>Ferritin concentration below 30 ug/L in pregnancy should prompt treatment in anaemic (Hb <110g/L in first trimester, <105g/L in second and third trimesters) pregnant women, non-anaemic pregnant women identified to be at increased risk of iron deficiency and in women with known haemoglobinopathy.</i></p>
Folate	<p>Comment for low results Low serum folate concentration. This requires a cause investigation and treatment with folate supplements.</p> <p>Comment to results with serum folate between 3.1 - 5.9 ug/L</p>

	<p><i>Folate close to the lower limit of the reference range (3.1 to 5.9 µg/L) may require folate supplementation. Suggests a cause investigation and additional analyses e.g. serum/plasma homocysteine if renal function is normal or red cell folate.</i></p> <p>Comment to results with serum folate between 6.0 – 20.0 ug/L <i>Folate replete.</i></p> <p>Comment to results with serum folate >20 ug/L <i>High folate status.</i></p>
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