

Vitamin B12 Deficiency in Pregnancy



1. Purpose

Vitamin B12 is essential for infant neurodevelopment. Undiagnosed maternal vitamin B12 deficiency during pregnancy or lactation may result in irreversible neurological damage to the infant. Although maternal vitamin B12 deficiency is uncommon, the majority of women with deficient B12 levels are asymptomatic.

This clinical guideline outlines the requirement for clinical management of Vitamin B12 deficiency in Pregnancy at the Women's and is related to other nutritional deficiency guidelines

2. Definitions

Not applicable.

3. Responsibilities

Not applicable.

4. Guideline

Routine measurement of vitamin B12 is not required unless there are risk factors present, or other laboratory tests indicate possible B12 deficiency.

These circumstances include:

- increased MCV (mean corpuscular volume)
- long standing vegetarian or vegan diet. Also consider referral to dietitian
- gastrointestinal surgery or pathology (coeliac disease, Crohn's disease, gastric banding/bypass etc)
- family history of vitamin B12 deficiency or pernicious anaemia.

The preferred test in pregnancy is holotranscobalamin (active B12) as total serum B12 levels fall during pregnancy in the absence of B12 deficiency.

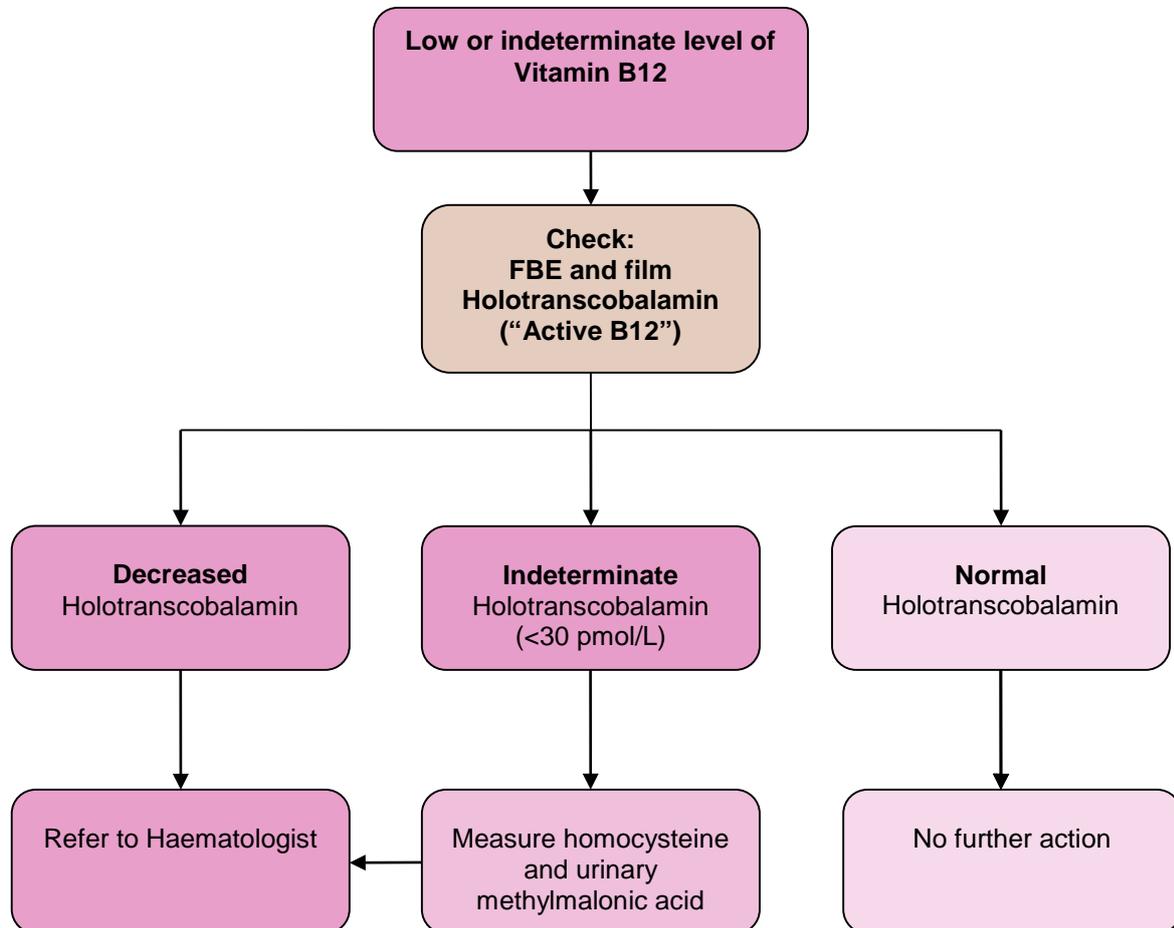
If low or indeterminate total serum B12 is detected by testing through the woman's general practitioner, holotranscobalamin (active B12) should be measured before any B12 supplementation occurs.

[See over the page for flow chart.](#)

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Flowchart 1



5. Evaluation, monitoring and reporting of compliance to this guideline

To be developed.

6. References

Non applicable.

7. Legislation/Regulations related to this guideline

Non applicable.

8. Appendices

Non applicable.

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