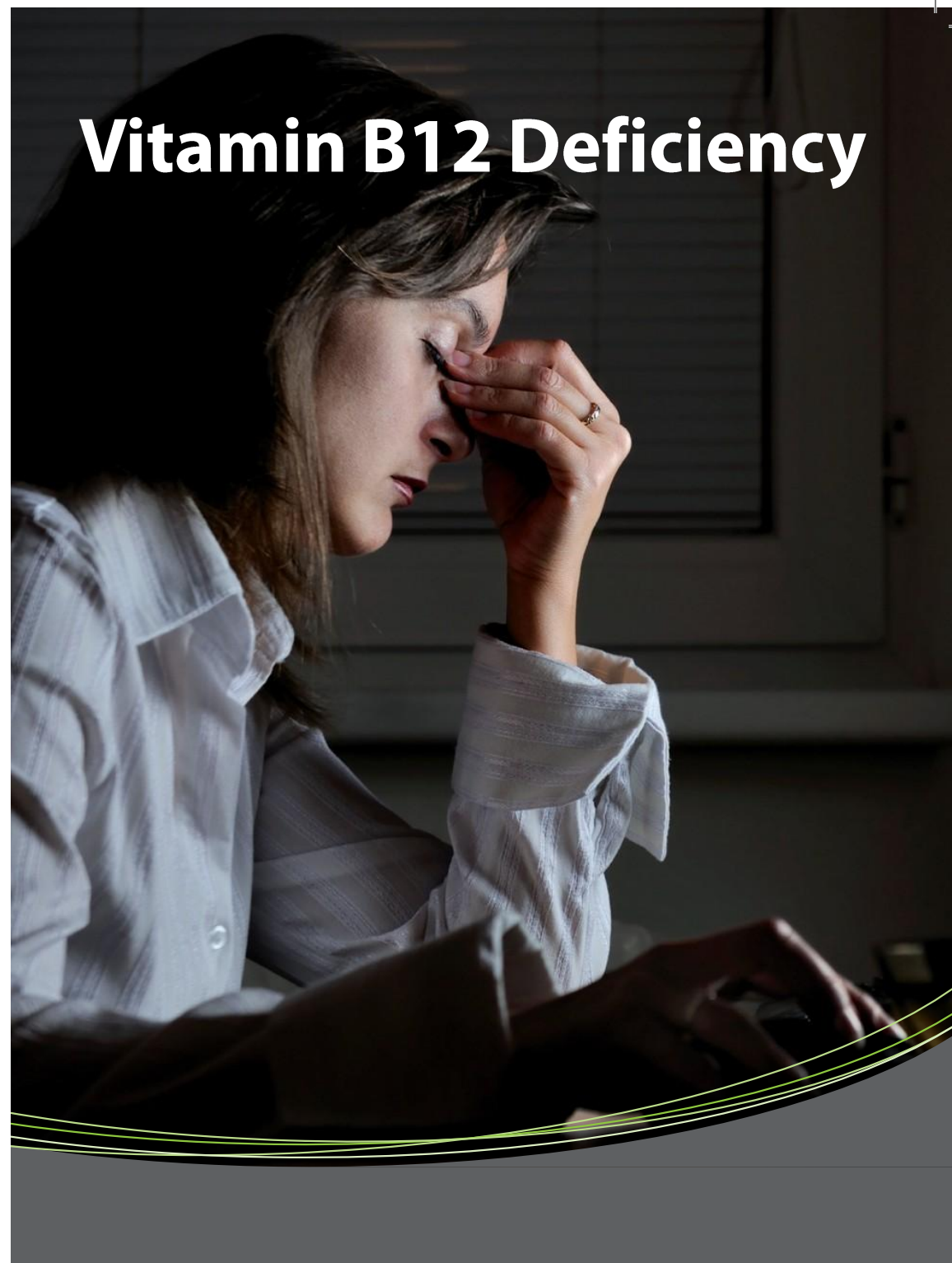


# Vitamin B12 Deficiency



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Patient Information

## What is vitamin B12?

Vitamin B12 is a water-soluble vitamin that is stored in the liver. It is crucial for the formation of red blood cells, as well as proper function of the nervous system including the brain. It is absorbed by the small bowel using a special substance called intrinsic factor, that is produced in the stomach.

## What are the signs and symptoms of a vitamin B12 deficiency?

Vitamin B12 deficiency may present with anaemia, fatigue and weakness. Additional symptoms of vitamin B12 deficiency may include soreness of the mouth or tongue, and neurological changes including difficulty maintaining balance, confusion, and numbness or tingling in the hands and feet.

## What are the risks?

The risks of vitamin B12 deficiency range from deficiency based anaemia to neuropsychiatric disorders. Many people with vitamin B12 deficiency show other signs of deficiency before they develop anaemia. Depression can sometimes be attributed to vitamin B12 deficiency. There are also some connections between vitamin B12 deficiency, memory loss and dementia.

## Testing and treatment

A lack of vitamin B12 is usually easy to correct once it is identified. Low levels of 'active B12' can be identified before major symptoms or signs develop. Deficiency can be confirmed by having a blood test. Additional tests may be needed to assess the severity and cause of the deficiency.

Foods that are rich in vitamin B12 include dairy products, chicken, meat, eggs, fish and oysters. If intake is suboptimal, oral supplements are available. Treatment may also require the use of vitamin B12 injections.

## Should you be tested?

The following groups are among those who should be tested for a B12 deficiency:

- o **Elderly individuals**

There are many reasons why people in this age group may be come deficient in vitamin B12. These include reduced dietary intake of vitamin B12, auto-immune and gastrointestinal disorders

- o **Individuals with pernicious anaemia or a family history of this disorder**

- o **Individuals with gastrointestinal disorders or who have had gastrointestinal surgery**

This includes those with stomach or small intestine disorders, including coeliac disease and Crohn's disease, and those taking acid suppressing tablets

- o **Vegetarians**

Vegetarians and vegans are at greater risk of developing vitamin B12 deficiency because natural sources of vitamin B12 are mainly animal foods

- o **Pregnant and lactating women who follow strict vegetarian diets and their infants**

The baby of a breast feeding mother with suboptimal B12 levels has a higher risk of vitamin B12 deficiency, particularly in the first 12 months of life

- o **Diabetic patients**

This is particularly true of patients who are treated with Metformin (Diabex) or require insulin

- o **Hypothyroid patients**

This is particularly true if thyroxine (Oroxine) is used to treat Hashimoto's disease

- o **Individuals with a low caloric and/or high alcohol intake**

- o **Individuals with unexplained low blood counts including anaemia**

- o **Individuals with unexplained neurological complaints**

*Ask your GP about your vitamin B12 levels today*