

Patient Information Leaflet – Oral treatment of Vitamin B12 (cobalamin) deficiency

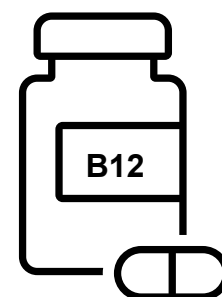
This information has been given to you as you have been diagnosed with a Vitamin B12 deficiency. It can be caused by a lack of vitamin B12 in the diet, or problems with the way the body processes or absorbs the vitamin. This could be linked to certain medications, operations, medical conditions or the recreational use of nitrous oxide (sometimes called 'laughing gas'). Some people with Vitamin B12 deficiency can be effectively treated using tablets, though some will need injections. This will depend on how well your body absorbs and processes the vitamin.

Vitamin B12 deficiency can cause a range of symptoms, see table 1 below for examples. Symptoms should start to improve in as little as 2 weeks, but may take up to 3 months, after starting treatment. Seek medical advice if your symptoms do not improve, worsen, or you have new symptoms during this time.

Table 1

Symptoms of anaemia (reduced number of red blood cells or haemoglobin in red blood cells) caused by Vitamin B12 deficiency	Symptoms that affect the brain and nervous system caused by Vitamin B12 deficiency
<ul style="list-style-type: none"> • Rapid breathing or shortness of breath • Headaches • Indigestion • Loss of appetite • Palpitations • Problems with your vision • Feeling weak or tired • Diarrhoea • A sore or red tongue, sometimes with mouth ulcers • Problems with memory, understanding and judgment 	<ul style="list-style-type: none"> • Numbness • Muscle weakness • Problems with balance and coordination • Pins and needles • Incontinence • Problems with memory, understanding and judgment

Vitamin B12 is found naturally in animal products including meat, eggs, fish, and dairy products. Some plant-based foods are also fortified with the vitamin. If your Vitamin B12 deficiency is caused by a diet low in Vitamin B12, then it is important to ensure your diet contains enough to prevent the deficiency coming back. If this is not possible, then over-the-counter Vitamin B12 supplements should be taken alongside your diet.



The amount of vitamin B12 needed every day by children over 15 years and adults is **1.5 micrograms per day**. The British Dietetic Association (BDA) recommends that people with a diet low in Vitamin B12 take **at least 10 micrograms of vitamin B12 per day** to stay healthy, and no more than 2 milligrams (2000

micrograms) per day. High intakes of vitamin B12 are not dangerous. Please see table 2 for examples of vitamin B12 sources in the diet.

Table 2

Foods containing Vitamin B12	Amount of B12 provided in micrograms (mcg)
150g serving of a fortified plant-based alternative to yoghurt (plain or fruit)	0.6
150g serving of plain Greek style yoghurt	0.3
Marmite or yeast extract spread on two slices of toast (~4g)	0.6
90g serving of roast chicken	0.9
70g serving of beef	1.4 - 2.1
200ml semi skimmed milk	1.8
200ml fortified plant-based milk alternative	0.8
Small bowl (30g) of fortified breakfast cereal served with 150ml of fortified plant-based milk	1.1
100g serving of grilled salmon	5
30g serving of cheddar cheese	0.7
1 medium boiled egg (approx. 50g edible portion)	0.6

If you have been advised to buy vitamin B12 supplements to treat your deficiency or maintain your vitamin B12 levels, please see table 3 for suitable options. Vitamin B12 tablets are usually safe to take with other medicines, including painkillers.

Table 3: Suitable over-the-counter Vitamin B12 preparations, depending on cause of deficiency. Please note- the following are suitable forms of vitamin B12: cyanocobalamin, methylcobalamin, adenosylcobalamin. List is not exhaustive. Prices checked July 2025

Section one:

If you have been told your B12 deficiency is related to your **diet or nitrous oxide use**: you will need approximately 50-150 micrograms per day to **treat** your deficiency (most are available at 100 micrograms); this should be taken for 3 months. After 3 months you can stop **IF** your dietary intake is sufficient, ensure to have **at least 1.5 micrograms of vitamin B12 from dietary sources per day (see table 2)**. If you are unable to meet your B12 requirements with your diet, then you should continue to take vitamin B12 supplements at a dose of at least 10 micrograms per day (10 microgram supplements are available- see examples below).

Holland and Barrett 100 microgram tablets (methylcobalamin)

- 100 microgram vitamin B12 tablets x 60
- Take ONE tablet daily between meals
- £6.25 (part of 3 for the price of 2 offer)



Nature's Best 100 microgram tablets (methylcobalamin)

- 100 microgram vitamin B12 tablets x 100
- Take ONE tablet daily between meals
- £4.95



Asda 100 microgram tablets (methylcobalamin)

- 100 microgram vitamin B12 tablets x 30
- Take ONE tablet daily between meals
- £1.51



Superdrug 10 microgram tablets (cyanocobalamin)

- 10 microgram tablets x 60
- **Low dose** may be suitable to supplement diets which naturally low in vitamin B12 such as vegetarian/vegan diets
- Take ONE tablet daily between meals
- £2.99 (part of 3 for the price of 2 offer)



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Section two:

If you have been told your B12 deficiency is related to **malabsorption** (such as after abdominal surgery or radiotherapy), or **medications** (where the medication **has not** been stopped or changed): your deficiency should have been treated using **prescribed tablets or injections** from your GP. To maintain your B12 levels and prevent reoccurrence of the deficiency, you should take **1mg (1000 micrograms) of vitamin B12 per day which should be bought over the counter**- see examples below.

Holland & Barrett 1000 microgram tablets (cyanocobalamin)

- 1000 microgram vitamin B12 tablets x 180 (6 months supply)
- Take ONE tablet daily between meals
- £20.99 (part of 3 for the price of 2 offer)



Natures best 1000 microgram tablets (methylocobalamin)

- 1000 microgram vitamin B12 tablets x 180 (6 months supply)
- Take ONE tablet daily between meals
- £11.95

