

**We are here to
support you**



B12 deficiency

What does Vitamin B12 do?

Vitamin B12 helps to keep the nervous system and blood cells healthy. Vitamin B12 deficiency is when your vitamin B12 levels are too low.

What are the symptoms of low vitamin B12?

Low vitamin B12 can cause anaemia which can cause tiredness; lack of energy; breathlessness; dizziness and headaches.

It is also possible to have low vitamin B12 without anaemia which may cause symptoms such as pins and needles; disturbed vision; mouth ulcers; tongue soreness; memory difficulties and muscle weakness.

Causes of Vitamin B12 deficiency

For many people, the cause of their deficiency is not taking enough in their diet especially if they do not eat animal products. Some people are unable to absorb Vitamin B12 from food and some take medications which can reduce the absorption of Vitamin B12 from the stomach e.g. metformin (which is used for diabetes) or omeprazole (which is often prescribed for indigestion).

Checking your B12 levels

We advise that you should arrange to have your B12 levels rechecked 6 to 12 months after completing the 6-month course of oral B12.

If your B12 levels are back within a normal range after completing a 6-month course of oral B12, a decision has to be made as to whether you need to continue to take oral B12 in the longer term. If you are feeling much better, please stop the oral B12 after six months and focus on eating B12 rich foods (see below).

If any of the following apply to you, you may be best to take oral B12 long term and continue to monitor your B12 levels every 12 months or so (more frequently if you continue to have symptoms of low B12):

- If you continue to feel very tired or have multiple symptoms of low B12.
- If you are vegetarian or vegan.
- If you have over the years dropped your B12 levels on multiple occasions.
- If you are on medication that can affect the absorption of B12 (like stomach acid lowering drugs like Omeprazole, ranitidine) or other drugs like Metformin.

Stomach acid lowering drugs should ideally be discontinued if possible and we would advise you to book an appointment with the doctor or clinical pharmacist to discuss this.

Which foods are rich in vitamin B12?

It is only naturally found in animal products including meat, eggs, fish, milk and dairy products. Plants do not make B12 and so will not provide this vitamin. Foods richest in B12 include:

- Liver and organ meats
- Shellfish
- Clams
- Oysters

If you are sea-food averse, B12 can also be found in:

- Lamb
- Beef
- Eggs
- Cheese

Treatment of Vitamin B12 deficiency

- The good news is that there is evidence that shows that oral B12 supplements are just as effective intramuscular injections of B12.
- Please purchase over the counter either Cyanocobalamin or Methylcobalamin (1 mg daily) – from either pharmacy, health food shop (like Holland and Barrett's) or on-line (Amazon has some very competitively priced good quality products).
- Please recheck your B12 and full blood count levels in 6 months' time.

- When you have completed the course, we would advise that you try to include foods that are rich in B12 in your diet (see above) and recheck your levels again in 12 months' time, or sooner if you start to feel your original symptoms returning.
- If you are a vegan, you may need to purchase oral B12 over the counter from the pharmacy or from a reliable source on the internet. We would recommend ongoing B12 supplementation. As you do not consume any animal foods as a vegan, you are at high risk of your B12 levels dropping again without ongoing use of an oral supplement.

On completing the six-month course

If your B12 levels are still low after completing a six-month course of oral B12, you need to have intramuscular B12 every three months, please discuss this with your doctor or clinical pharmacist.

B12 on prescription

The practice no longer gives oral B12 on prescription as we expect patients to buy this over the counter.

Buying oral B12 over the counter

- **What to buy** – Methylcobalamin or Cyanocobalamin 0.5mg (500micrograms) to 1mg (1000micrograms) daily
- **Where to buy oral B12** – currently it does not appear to be readily available at pharmacies, but this may be obtained from health food stores like Holland and Barrett. Amazon offers very competitive prices for good quality oral B12.
- **What is the cost?** – on Amazon, you can purchase a 365-day supply of Methylcobalamin for between £10-£15.

Please arrange an appointment with your doctor or clinical pharmacist if you have any problems obtaining oral B12 over the counter.

Rarely your symptoms may mean that a GP needs to prescribe B12 injections. In this case you will need to have a loading dose of six injections over two weeks on non-consecutive days.

If your GP feels you need injections, they will be authorised and added to your repeat medication list ready for your appointment. Once you have completed the loading dose, you will require three monthly injections, thereafter.