

Vitamin B12 deficiency

Patient Information Leaflet

The White House Surgery



What does Vitamin B12 do?

Vitamin B12 helps keep the nervous system and blood cells healthy and prevents a type of anaemia called megaloblastic anaemia. In megaloblastic anaemia the red blood cells are bigger than they should be and there are fewer of them, so they do not carry oxygen around the body as well as they should. What is Vitamin B12 deficiency? Vitamin B12 deficiency is when your vitamin B12 levels are too low.

What are the symptoms of Vitamin B12 deficiency? Symptoms related to anaemia include - extreme tiredness (fatigue); lack of energy (lethargy); breathlessness; feeling faint; headaches; pale skin; noticeable heartbeats (palpitations); hearing sounds coming from inside the body, rather than from an outside source (tinnitus); loss of appetite and weight loss.

It is also possible to have vitamin B12 deficiency without having anaemia. You may have B12 deficiency if you have symptoms such as pins and needles; disturbed vision; a sore and red tongue; mouth ulcers; muscle weakness; psychological problems such as depression and confusion; problems with memory, understanding and judgement. Because the body stores of vitamin B12 can last for 2-4 years it can take a long time for symptoms to develop so they can happen very gradually and can go unnoticed until levels in the body are quite low.

Where do I get vitamin B12?

Vitamin B12 is only naturally found in animal products including fish, meat, poultry, eggs, milk, and milk products. Vitamin B12 is not generally present in plant foods, but many foods are fortified with B12 including breakfast cereals, soya drinks, and yeast extracts such as marmite.

Who is at risk of vitamin B12 deficiency?

Older adults are more at risk of low vitamin B12 levels. Around 5% of 65 to 74 year-olds, and more than 10% of people over 75 have low vitamin B12 levels. Causes of Vitamin B12 deficiency Some people are not able to absorb vitamin B12 from food and some people have a dietary deficiency of vitamin B12, especially if they do not eat meat. Some medications can also reduce absorption of vitamin B12 from the stomach e.g. the antidiabetic medicine metformin, or medicines for stomach problems such as omeprazole or lansoprazole. Your doctor will explain what the cause of your vitamin B12 deficiency is.

Treatment of Vitamin B12 deficiency

The treatment for low levels of vitamin B12 is, as you might expect, vitamin B12. You might hear your treatment called **hydroxocobalamin**. It's a form of vitamin B12. Another form of vitamin B12 is called **cyanocobalamin**. How you take vitamin B12 will depend on the symptoms you're getting and how bad they are. If you have severe anaemia or nerve problems you'll need vitamin B12 injections. You'll have these around three times a week for two weeks or so. The injections will build up a store of vitamin B12 in your body. After that, you'll need injections every few months to stop the problem coming back. **If your symptoms aren't severe or if a blood test shows you're low on vitamin B12 before you've started getting any symptoms, your doctor may suggest buying vitamin B12 supplements as pills over the counter in your community pharmacy or health shop. If the pills don't help after three months you'll need to switch to injections.**

Examples of cyanocobalamin available to purchase (other products are available)



- 100mcg vitamin B12 tablets x 100
- Take ONE tablet daily
- £7.49 (price at time of writing, also included in buy one get one half-price offer)



- 100mcg vitamin B12 tablets x 100.
- Take ONE tablet daily
- £4.99 (price at time of writing, plus £1 delivery charge)



- 1000mcg vitamin B12 tablets x 60
- Take ONE tablet daily (dose is more than is necessary but will not cause harm)
- £4.49 (price at time of writing)