

Vitamin B12 Deficiency

You have been given this leaflet because your Health Care Professional has advised you to increase your B12 levels.



Patient Information Leaflet

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.

Where do I get vitamin B12?

Vitamin B12 is 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.



What is vitamin B12 deficiency?

Vitamin B12 deficiency is when your vitamin B12 levels are too low. This is measured with a blood test however the blood test is not always reliably able to measure the true levels of vitamin B12 in your body. Typically a B12 level of below 150 nanograms per litre (150ng/l) would mean that you are deficient.

Causes of vitamin B12 deficiency

Some people are not able to absorb vitamin B12 from food and some people do not have enough vitamin B12 in their diet, especially if they do not eat meat. Some medications can also reduce the absorption of vitamin B12 e.g. the antidiabetic medicine metformin, or medicines for stomach problems such as omeprazole or lansoprazole.

Who is at risk of vitamin B12 deficiency?

Vegans, vegetarians and older adults are more at risk of low vitamin B12 levels.

What are the symptoms of vitamin B12 deficiency?

Some symptoms related to B12 deficiency are also common in other conditions, as well as from lifestyle factors such as stress, poor sleep and diet. Therefore your GP may want to explore this with you before testing your B12 levels or suggesting treatment.

Some people who have vitamin B12 deficiency will develop anaemia and may have symptoms such as extreme tiredness (fatigue), lack of energy (lethargy), and breathlessness. It is also possible to have vitamin B12 deficiency without having anaemia.

Symptoms such as pins and needles, disturbed vision, a sore and red tongue, mouth ulcers, muscle weakness and problems with balancing and walking, psychological problems such as depression and confusion, problems with memory, understanding and judgement could also be related to B12 deficiency. 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 un-noticed until levels in the body are quite low.

Treatment of vitamin B12 deficiency:

Your GP may prescribe you injections or tablets to correct your B12 levels, this depends on your symptoms and why your B12 levels were low in the first place. After this, you may need to purchase B12 tablets to make sure that you don't become deficient again.

Your GP will have discussed with you why your B12 levels became low. If your B12 deficiency was thought to be related to your diet or medicines then your GP may suggest some changes to these that might help raise your B12 levels. You should also purchase a tablet to take each day that contains 100mcg (micrograms) of vitamin B12. These tablets can be purchased cheaply on-line or from most supermarkets, pharmacies or health-food shops. The cost of these is between £4 and £8 for 100 tablets which should last you over 3 months. This is cheaper than the £9.65 NHS prescription charge.



If your B12 levels were low because you have problems absorbing B12 from food then you will need a higher dose of vitamin B12. You should take a tablet containing 1000mcg every day. These can also be bought on-line or from most supermarkets, pharmacies or health-food shops from between £7 and £14 for a 3 month's supply.

Monitoring of B12 levels:

Most people who are being treated for B12 deficiency will not need ongoing monitoring unless their symptoms return or their treatment is ineffective.

Where do I get more information about vitamin B12 deficiency?

Speak to your GP practice if you have any concerns about the level of vitamin B12 you get from your diet or you are concerned that you may have symptoms of B12 deficiency.

www.NHS.uk has further information on vitamin B12 deficiency and the Vegan Society website www.vegansociety.com offers good advice on getting enough vitamin B12 in your diet.

