

First line advice:

For patients with a low intake of **Vitamin B12**

This information sheet has been provided to give you basic initial information about what to do if you are suffering from low blood levels of Vitamin B12. It is also helpful for vegans or vegetarians with a low intake of animal foods. If you need more detailed advice and support, please ask your doctor to refer you to a dietitian.

Vitamin B<sub>12</sub> is needed to create red blood cells and maintain the function of the brain and nervous system. It is also needed for the body to absorb folic acid. A lack of Vitamin B<sub>12</sub> in the diet can lead to anaemia with symptoms of this including tiredness, shortness of breath or palpitations.

Vitamin B<sub>12</sub> is only found naturally in foods of animal origin however some non animal products contain added Vitamin B<sub>12</sub>. The liver can store some Vitamin B<sub>12</sub> so it may take some years before a dietary deficiency becomes apparent.

**At risk groups**

Vegans and vegetarians consuming limited dairy produce have a higher risk of developing Vitamin B<sub>12</sub> deficiency due to limited dietary intakes. The elderly population and people taking metformin for a long time can also be at increased risk of Vitamin B<sub>12</sub> deficiency due to Vitamin B<sub>12</sub> not being absorbed properly in the body.

**Sources of vitamin B<sub>12</sub>**

If you have a low Vitamin B<sub>12</sub> level or a deficiency, including B<sub>12</sub> rich foods in your diet may help to improve your status. The foods listed below are sources of Vitamin B<sub>12</sub>:

<b>Milk</b>	All types of milk. Boiling can destroy Vitamin B <sub>12</sub> so it is important to consume some milk that has not been boiled. <b>A 200ml glass of milk every day is enough to meet your Vitamin B<sub>12</sub> requirement.</b>
<b>Cheese and yoghurt</b>	All varieties
<b>Breakfast cereals with added Vitamin B<sub>12</sub></b>	Cornflakes and bran flakes. Check the labels of other products to see if they contain added Vitamin B <sub>12</sub> .
<b>Margarines or spreads with added Vitamin B<sub>12</sub></b>	Flora and pure dairy free sunflower spread. Check labels of other products.
<b>Yeast extracts</b>	Marmite and my first Vegemite, <b>not</b> normal Vegemite
<b>Soya products – milk, mince, spreads</b>	Varieties that contain added Vitamin B <sub>12</sub> only. Check product labels.
<b>Rice milk or almond milk</b>	Varieties that contain added Vitamin B <sub>12</sub> only. These are often called ‘enriched’ products but always check labels.
<b>Eggs</b>	Chicken, duck and quail

<b>Meat and poultry</b>	Beef, lamb, pork, chicken, turkey, duck
<b>Fish</b>	Shellfish, white and oily

Some tofu, tempeh, miso, other fermented products as well as algae sources such as spirulina may contain high levels of B<sub>12</sub>. However the body can not always use the Vitamin B<sub>12</sub> found in these foods properly so they are not considered reliable sources.

**If you consume very little Vitamin B<sub>12</sub> containing foods, it may be advisable to take a Vitamin B<sub>12</sub> supplement especially if you are pregnant or breast feeding and are vegan or vegetarian.**

This information leaflet was produced by the Community Dietitians at The London North West Healthcare NHS Trust, Northwick Park Hospital, Watford Rd, Harrow, HA1 3UJ

<p>This information sheet was produced by the Community Dietitians and is intended to be given by a health professional only. It is not a substitute for proper medical diagnosis or dietary advice given by a Registered Dietitian. The advice is not appropriate for certain medical conditions such as diets that require the exclusion or restriction of particular foods. If in doubt, please check with your medical practitioner. Last review January 2014 Review date January 2016</p>	<p>Reference: VitB122014</p>
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