

# Patient Information Leaflet

# Vitamin B12 Diet Sheet

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## What is Vitamin B12?

An important B vitamin essential for nerve tissue health, brain function and the production of red blood cells.

## What is your daily vitamin B12 Requirement?

Daily Requirement for Children (0-14 years)	
0-1 Years	0.3-0.4ug
1-3 years	0.5ug
4-6 years	0.8ug
7-10 years	1.0ug
11-14 years	1.2ug

Adults aged  
15+:

**1.5ug**

**Note:**  
ug = micrograms

What happens if I do not get enough vitamin B12?





### Symptoms related to anaemia:

- Extreme tiredness (fatigue), lack of energy (lethargy), body ache, shortness of breath, pale skin, headaches, breathlessness, feeling faint, tinnitus (hearing sounds inside body)
- Nutritional consequences; loss of appetite, diarrhoea, weight loss

### Other Symptoms:

- Tingling and numbness of hands and feet, altered vision, mouth ulcers, muscle weakness
- Cognitive impact: confusion, reduced understanding, and memory loss

## Who is at risk of vitamin B12 deficiency?

1. Those who consume a diet with no meat or animal-based products such as vegans and strict vegetarians (ovo-vegetarians). Risk increases further in these groups during pregnancy.
2. Those who cannot absorb vitamin B12 from their food. This may be due to a condition called **pernicious anaemia** which is the most common cause of vitamin B12 deficiency in the UK
3. Those with disorders affecting absorption such as Crohn's disease or coeliac disease
4. The Elderly: due to reduced nutritional intake, mood, and physical ability to prepare food
5. Those taking medications including metformin (used for the treatment of diabetes) and omeprazole or lansoprazole (used for the treatment of stomach problems)
6. Children who are picky eaters, those who dislike / choose to avoid animal products

## Sources of Vitamin B12

Vitamin B12 is naturally found in a wide range of animal foods and is added to a range of products. Plant based products do not naturally contain vitamin B12. Those consuming a varied diet including meat and animal products should be able to obtain all Vitamin B12 from their diet.

## How to Increase Vitamin B12 in your diet

Choose fortified products where possible to increase Vitamin B12 intake from your diet.

Good Food Sources of Vitamin B12					
Animal Products			Plant-based Products		
Product	Portion Size	Vitamin B12 Content (micrograms, ug)	Product	Portion Size	Vitamin B12 Content (micrograms, ug)
<b>Meat and poultry**</b>			<b>Fortified Milk**</b>		
Chicken	100g	1-2.8	Oat	200ml	0.76
Beef, Lamb, Duck	100g	2-3	Soya		0.76
Pork	100g	1	Almond		0.76
Liver Pate	50g	4	<b>Fortified Yogurt**</b>		
<b>Fish and fish products</b>			Alpro	110g	0.38
Cod (grilled)	100g	2	Koko Dairy free	100g	0.38
Tuna (canned)	50g	3.4	<b>Fortified Cereal**</b>		
Sardines (in oil drained)	50g	7.5	Cornflakes	30g	0.57 – 0.78
Salmon	100g	3.2	Honey loops®	30g	0.63
Mackerel	100g	12	Instant Oats	30g	0.63
Kippers (boil in bag)	100g	9.5	Wholegrain Malties	40g	1
<b>Milk and dairy products**</b>			Bran Flakes (fortified)	30g	0.69-0.8
Eggs	1		<b>Yeast Products</b>		
Emmental Cheese	100g	4.1	Marmite ®	8g	1.9
Cheddar	100g	2.4	<b>Vegetables</b>		
Parmesan	100g	3.3	Dried Nori Seaweed	30g	8.25
Cow's Milk	200ml	1.8	Dried Shiitake Mushrooms	100g	5.6

\*\*Vitamin B12 content will vary between products. When choosing products check the labels to ensure a fortified option is chosen\*\*

## What can I do if I am deficient in Vitamin B12?

Contact your GP if you have concerns about your vitamin B12 intake from your diet or are concerned you are experiencing symptoms of vitamin B12 deficiency.

There are different causes of vitamin B12 deficiency. To establish the cause and treatment, blood tests will be needed. If levels are low, a supplement will be trialled, and levels monitored. If levels increase, diet is the likely cause. You will be advised to make some dietary changes or continue to take a supplement.

If levels remain low, you might have difficulties absorbing vitamin B12. You will be offered a course of vitamin B12 injections to build up levels. It is likely this treatment will be lifelong and will require frequent blood tests.

### Supplements:

If you are unable to meet your requirements through diet, you may consider taking it as a tablet. These can be sourced from supermarkets, pharmacies, or health shops. Ensure the supplement you choose does not exceed your daily requirements.

**Please note:** You should seek medical advice before taking dietary supplements and please remember they are not a substitute for a balanced diet.



To find out more about vitamin B12 visit:

The Vegan Society website:

<https://www.vegansociety.com/resources/nutrition-and-health/nutrients/vitamin-b12>

The NHS Website: <https://www.nhs.uk/conditions/vitamin-b12-or-folate-deficiency-anaemia/>

## References

Dietplan7.com. 2022. Home. [online] Available at: <http://dietplan7.com/> [Accessed 28 March 2022].

Nawaz, A., Khattak, N., Khan, M., et al., (2020). Deficiency of Vitamin B12 and its relation with neurological disorders: a critical review. The Journal of Basic and Applied Zoology. 81 (1).

nhs.uk. (2022). Vitamin B12 or folate deficiency anaemia - Symptoms. [online] Available at: <https://www.nhs.uk/conditions/vitamin-b12-or-folate-deficiency-anaemia/symptoms/> [Accessed 28 March 2022].

O'Leary, F. and Samman, S., (2010). Vitamin B12 in Health and Disease. Nutrients, 2(3), pp.299-316.

Gandy, J., Madden, A. and Holdsworth, M., (2012). Oxford handbook of nutrition and dietetics. 2nd ed. United States: Oxford University Press Inc., New York, pp.116-117.

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