

understanding Vitamin B

with Lauren Moller-Seat, RDN

MAINTAINING A BALANCED diet that includes a wide variety of food groups is important to supporting your nutritional needs, since the vitamins in foods provide health benefits that we aren't able to gain from taking supplements, and it's nearly impossible to consume excessive levels of vitamins or minerals from food. However, there may be times when your health care provider recommends supplements.

Here are some things to keep in mind with B vitamins:

- **If you're taking a multivitamin**, you're likely already meeting the Recommended Daily Value of all the B vitamins. (Check the nutrition fact label to be sure.)
- **Know your risks:** Some B vitamins can cause toxicity (or harm) if taken in high supplemental doses. For example, niacin (B3) has an upper limit (UL) of 35 mg/day. While 1-4 g/day may help lower cholesterol, this also may cause liver damage. Folate has an UL of

"B" SMART!

A DIET THAT INCLUDES a healthy range of vitamin B foods promotes strong immunity, healthy heart and cell function, a good metabolism, normalized blood sugar and a healthy nervous system.

1,000 mcg/day and high doses can mask B12 deficiency and increase the risk of peripheral neuropathy, or weakness, numbness and pain from nerve damage. Vitamin B6 has an UL of 100 mg/day. Over time, too much B6 can increase your risk of lung and prostate cancers.

- **Always be sure** to talk about supplement use with your medical team.





“B” and Stay Healthy!

Recommended Foods and Supplements

Good Food Sources for the Range of B Vitamins	Recommended* Supplements
<p>Thiamin (B1): Wholegrains, seeds (especially sesame), legumes, wheatgerm, nuts, pork (Excessive alcohol intake can lower thiamin levels.)</p> <p>Riboflavin (B2): Dairy, wholegrains, egg whites, leafy green vegetables, meat, liver</p> <p>Niacin (B3): Meats, fish, poultry, milk, eggs, wholegrains, nuts, mushrooms, all protein-rich foods</p> <p>Pantothenic Acid (B5): Meats, milk, liver, eggs, peanuts, legumes</p> <p>Pyridoxine (B6): Grains, legumes, green leafy vegetables, seafood, meat, poultry, nuts, fruit</p> <p>Biotin (B7): Chicken, liver, cauliflower, egg yolks, peanuts, mushrooms</p> <p>Folate (B9): Green leafy vegetables, broccoli, oranges and other fruit, lean meats, most breads and cereals</p> <p>Cyanocobalamin (B12): Almost all animal products – meat, liver, milk, cheese, eggs (Strict vegans, some vegetarians and the elderly are most at risk for deficiency.)</p> <p>Vitamin B12 is one B vitamin that can be necessary to supplement for some people. B12 supplements may be good for adults over 50, as stomach acid naturally decreases as we age and high acidity is necessary for the breakdown of B12. Vegetarians/vegans may also consider a B12 supplement, as animal products are a major source (although some nutritional yeasts are fortified with B12). Those who have gastrointestinal disorders or have had GI surgery will likely need a B12 supplement to support greater digestion and overall gut health. Metformin and Proton Pump Inhibitors may also reduce absorption of B12 and lead to a deficiency.</p> <p>Unless you are deficient in Vitamin B12 (blood levels <200 pg/mL, but older adults may have symptoms with blood levels at 200-500 pg/mL), the Recommended Daily Allowance (RDA) is 2.4 mcg. If you have a vitamin deficiency, you’d want 500-1000 mcg/day. B12 absorption varies based on quantity, and smaller doses are better absorbed. Your provider may also recommend B12 injections, if needed.</p>	<p>FOR VITAMIN B COMPLEX: Nutriline Vitamin B Dual-Action – 250% DV 3 mg B1; 262% DV 3.4 mg B2; 125% DV 20 mg B3; 400% DV 20 mg B5; 235% DV 4 mg B6; 417% DV 125 mcg B7; 167% DV 400 mcg B9; 250% DV 6 mcg B12</p> <p>Garden of Life mykind Organics B-Complex Once Daily – 147% DV 5 mg B1; 769% DV 10 mg B2; 125% DV 20 mg B3; 200% DV 10 mg B5; 588% DV 10 mg B6; 1,000% DV 300 mcg B7; 100% DV 400 mcg B9; 5,542% DV 133 mcg B12</p> <p>GNC B-Complex Big 100 – 8,333% DV 100mg B1; 7,692% DV 100mg B2; 625% DV 100mg (exceeds UL) B3; 2,000% DV 100 mg B5, 5,882% DV 100 mg (exceeds UL) B6; 333% DV 100 mcg B7; 167% DV 400 mcg B9; 4,167% DV 100mcg B12</p> <p>FOR VITAMIN B12: Mason Natural B12 50mcg – 50 mcg/1 tablet (2,083% DV)</p> <p>Vitafusion B12- Natural Raspberry Flavor – 1,000 mcg / 2 gummies (41,667% DV)</p> <p>Pure Encapsulations B12 Liquid - 1,000 mcg per dropper (41,667% DV; take just 1 drop for low-dose maintenance.)</p>

**Please note:* While these doses may be excessively high, these are considered to be among the best options based on third-party testing conducted by [Consumer Lab](#). Keep in mind that a multivitamin may be a better option for meeting the RDA of all eight B vitamins.

Editor’s note: The information provided in this newsletter is for educational purposes only. Please speak with your health care team about your specific dietary and health needs.