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National Institutes of Health / National Library of Medicine



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URL of this page: <https://medlineplus.gov/bvitamins.html>

B Vitamins





The B vitamins are:



- B1 (thiamine)
- B2 (riboflavin)
- B3 (niacin)
- B5 (pantothenic acid)
- B6
- B7 (biotin)
- B12
- **Folic acid** [<https://medlineplus.gov/folicacid.html>]

These vitamins help the process your body uses to get or make energy from the food you eat. They also help form red blood cells. You can get B vitamins from proteins such as fish, poultry, meat, eggs, and dairy products. Leafy green vegetables, beans, and peas also have B vitamins. Many cereals and some breads have added B vitamins.




Not getting enough of certain B vitamins can cause diseases. A lack of B12 or B6 can cause anemia [<https://medlineplus.gov/anemia.html>].

Start Here


- **Niacin** [<https://ods.od.nih.gov/factsheets/Niacin-Consumer/>]
 (National Institutes of Health, Office of Dietary Supplements)
- **Pantothenic Acid** [<https://ods.od.nih.gov/factsheets/PantothenicAcid-Consumer/>]
 (National Institutes of Health, Office of Dietary Supplements)
Also in Spanish [<https://ods.od.nih.gov/factsheets/PantothenicAcid-DatosEnEspanol/>]
- **Riboflavin** [<https://ods.od.nih.gov/factsheets/Riboflavin-Consumer/>]
 (National Institutes of Health, Office of Dietary Supplements)
Also in Spanish [<https://ods.od.nih.gov/factsheets/Riboflavin-DatosEnEspanol/>]
- **Thiamin** [<https://ods.od.nih.gov/factsheets/Thiamin-Consumer/>]
 (National Institutes of Health, Office of Dietary Supplements)
Also in Spanish [<https://ods.od.nih.gov/factsheets/Thiamin-DatosEnEspanol/>]

- **Vitamin B12** [<https://ods.od.nih.gov/factsheets/VitaminB12-Consumer/>]
 (National Institutes of Health, Office of Dietary Supplements)
 Also in Spanish [<https://ods.od.nih.gov/factsheets/VitaminB12-DatosEnEspanol/>]
- **Vitamin B6** [<https://ods.od.nih.gov/factsheets/VitaminB6-Consumer/>]
 (National Institutes of Health, Office of Dietary Supplements)
 Also in Spanish [<https://ods.od.nih.gov/factsheets/VitaminB6-DatosEnEspanol/>]

Diagnosis and Tests

- **Homocysteine Test** [<https://medlineplus.gov/lab-tests/homocysteine-test/>]
 (National Library of Medicine)
 Also in Spanish [<https://medlineplus.gov/spanish/pruebas-de-laboratorio/prueba-de-homocisteina/>]
- **Methylmalonic Acid (MMA) Test** [<https://medlineplus.gov/lab-tests/methylmalonic-acid-mma-test/>]
 (National Library of Medicine)
 Also in Spanish [<https://medlineplus.gov/spanish/pruebas-de-laboratorio/prueba-de-acido-metilmalonic/>]
- **Vitamin B Test** [<https://medlineplus.gov/lab-tests/vitamin-b-test/>]  (National Library of Medicine)
 Also in Spanish [<https://medlineplus.gov/spanish/pruebas-de-laboratorio/prueba-de-vitamina-b/>]



Related Issues




- **Niacin to Improve Cholesterol Numbers** [<https://www.mayoclinic.org/diseases-conditions/high-blood-cholesterol/in-depth/niacin/ART-20046208?p=1>] (Mayo Foundation for Medical Education and Research)
 Also in Spanish [<https://www.mayoclinic.org/es/diseases-conditions/high-blood-cholesterol/in-depth/niacin/art-20046208?p=1>]
- **Vitamin B-12 and Depression: Are They Related?** [<https://www.mayoclinic.org/diseases-conditions/depression/expert-answers/vitamin-b12-and-depression/FAQ-20058077?p=1>]
 (Mayo Foundation for Medical Education and Research)
 Also in Spanish [<https://www.mayoclinic.org/es/diseases-conditions/depression/expert-answers/vitamin-b12-and-depression/faq-20058077?p=1>]
- **Vitamin B12-Deficiency Anemia** [<https://www.nhlbi.nih.gov/health/anemia/vitamin-b12-deficiency-anemia>]  (National Heart, Lung, and Blood Institute)
 Also in Spanish [<https://www.nhlbi.nih.gov/es/salud/anemia/anemia-por-deficiencia-de-vitamina-b12>]
- **Vitamin Deficiency Anemia** [<https://www.mayoclinic.org/diseases-conditions/vitamin-deficiency-anemia/symptoms-causes/syc-20355025?p=1>] (Mayo Foundation for Medical Education and Research)
 Also in Spanish [<https://www.mayoclinic.org/es/diseases-conditions/vitamin-deficiency-anemia/symptoms-causes/syc-20355025?p=1>]

Genetics

- **Transcobalamin deficiency: MedlinePlus Genetics**
<https://medlineplus.gov/genetics/condition/transcobalamin-deficiency>  (National Library of Medicine)

Clinical Trials

- **ClinicalTrials.gov: Biotin** [<https://clinicaltrials.gov/search?intr=%22Biotin%22&aggFilters=status:not%20rec>]  (National Institutes of Health)
- **ClinicalTrials.gov: Niacin** [<https://clinicaltrials.gov/search?intr=%22Niacin%22&aggFilters=status:not%20rec>]  (National Institutes of Health)

- ClinicalTrials.gov: Riboflavin [<https://clinicaltrials.gov/search?intr=%22Riboflavin%22&aggFilters=status:not%20rec>]  (National Institutes of Health)
- ClinicalTrials.gov: Thiamine [<https://clinicaltrials.gov/search?intr=%22Thiamine%22&aggFilters=status:not%20rec>]  (National Institutes of Health)
- ClinicalTrials.gov: Vitamin B Complex [<https://clinicaltrials.gov/search?intr=%22Vitamin+B+Complex%22&aggFilters=status:not%20rec>]  (National Institutes of Health)

Journal Articles

References and abstracts from MEDLINE/PubMed (National Library of Medicine)

- Article: Dietary fibers boost gut microbiota–produced B vitamin pool and alter host... [<https://www.ncbi.nlm.nih.gov/pubmed/39307855>]
- Article: Molecular Mechanisms Linking Genes and Vitamins of the Complex B Related... [<https://www.ncbi.nlm.nih.gov/pubmed/39125744>]
- Article: A Comparative Study Evaluating the Effectiveness of Folate–Based B Vitamin Intervention... [<https://www.ncbi.nlm.nih.gov/pubmed/39064642>]
- B Vitamins -- see more articles [<https://pubmed.ncbi.nlm.nih.gov/?term=%22Vitamin+B+Complex%22%5Bmajor%3Anoexp%5D+AND+humans%5Bmh%5D+AND+english%5Bla%5D+AND+%22last+1+Year%22+%5Bedat%5D+NOT+%28letter%5Bpt%5D+OR+case+reports%5Bpt%5D+OR+editorial%5Bpt%5D+OR+comment%5Bpt%5D%29+AND+free+full+text%5Bsb%5D+>]

Find an Expert

- Find a Nutrition Expert [<https://www.eatright.org/find-a-nutrition-expert>]
(Academy of Nutrition and Dietetics)
- Food and Drug Administration [<https://www.fda.gov/>]
- Food and Nutrition Information Center [<https://www.nal.usda.gov/programs/fnic>]
- National Institutes of Health, Office of Dietary Supplements [<https://ods.od.nih.gov/>] 

Patient Handouts

- Beriberi [<https://medlineplus.gov/ency/article/000339.htm>] (Medical Encyclopedia)
Also in Spanish [<https://medlineplus.gov/spanish/ency/article/000339.htm>]
- Niacin [<https://medlineplus.gov/ency/article/002409.htm>] (Medical Encyclopedia)
Also in Spanish [<https://medlineplus.gov/spanish/ency/article/002409.htm>]
- Pantothenic acid and biotin [<https://medlineplus.gov/ency/article/002410.htm>] (Medical Encyclopedia)
Also in Spanish [<https://medlineplus.gov/spanish/ency/article/002410.htm>]
- Pellagra [<https://medlineplus.gov/ency/article/000342.htm>] (Medical Encyclopedia)
Also in Spanish [<https://medlineplus.gov/spanish/ency/article/000342.htm>]
- Riboflavin [<https://medlineplus.gov/ency/article/002411.htm>] (Medical Encyclopedia)
Also in Spanish [<https://medlineplus.gov/spanish/ency/article/002411.htm>]
- Thiamin [<https://medlineplus.gov/ency/article/002401.htm>] (Medical Encyclopedia)
Also in Spanish [<https://medlineplus.gov/spanish/ency/article/002401.htm>]
- Vitamin B12 [<https://medlineplus.gov/ency/article/002403.htm>] (Medical Encyclopedia)

Also in Spanish [<https://medlineplus.gov/spanish/ency/article/002403.htm>]

- **Vitamin B12 deficiency anemia** [<https://medlineplus.gov/ency/article/000574.htm>] (Medical Encyclopedia)
Also in Spanish [<https://medlineplus.gov/spanish/ency/article/000574.htm>]
- **Vitamin B12 level** [<https://medlineplus.gov/ency/article/003705.htm>] (Medical Encyclopedia)
Also in Spanish [<https://medlineplus.gov/spanish/ency/article/003705.htm>]
- **Vitamin B6** [<https://medlineplus.gov/ency/article/002402.htm>] (Medical Encyclopedia)
Also in Spanish [<https://medlineplus.gov/spanish/ency/article/002402.htm>]



MEDICAL ENCYCLOPEDIA

Beriberi [<https://medlineplus.gov/ency/article/000339.htm>]

Niacin [<https://medlineplus.gov/ency/article/002409.htm>]

Niacin for cholesterol [<https://medlineplus.gov/ency/patientinstructions/000788.htm>]

Pantothenic acid and biotin [<https://medlineplus.gov/ency/article/002410.htm>]

Pellagra [<https://medlineplus.gov/ency/article/000342.htm>]

Pernicious anemia [<https://medlineplus.gov/ency/article/000569.htm>]

Riboflavin [<https://medlineplus.gov/ency/article/002411.htm>]

Schilling test [<https://medlineplus.gov/ency/article/003572.htm>]

Subacute combined degeneration [<https://medlineplus.gov/ency/article/000723.htm>]

Thiamin [<https://medlineplus.gov/ency/article/002401.htm>]

Vitamin B12 [<https://medlineplus.gov/ency/article/002403.htm>]

Vitamin B12 deficiency anemia [<https://medlineplus.gov/ency/article/000574.htm>]

Vitamin B12 level [<https://medlineplus.gov/ency/article/003705.htm>]

Vitamin B6 [<https://medlineplus.gov/ency/article/002402.htm>]

Related Health Topics

[Folic Acid](https://medlineplus.gov/folicacid.html) [https://medlineplus.gov/folicacid.html]

[Vitamins](https://medlineplus.gov/vitamins.html) [https://medlineplus.gov/vitamins.html]

National Institutes of Health

The primary NIH organization for research on *B Vitamins* is the NIH Office of Dietary Supplements [https://ods.od.nih.gov/]

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Last updated September 23, 2021