

[Center for Integrative Medicine](#)

Dietary Supplements: Vitamin B3 (Niacin)

Vitamin B3 (Niacin, niacinamide, nicotinic acid; inositol hexanicotinate). Frank deficiency is known as pellagra, which has three main symptoms: skin rashes (dermatitis), dementia/depression, and diarrhea. If the deficiency is not corrected, it can lead to a 4th D: Death.

Needs for niacin may be increased in patients with alcohol dependence, cirrhosis, and diabetes and in patients taking isoniazid to treat tuberculosis.

Niacin may be especially helpful for patients with hyperlipidemia (high triglycerides, high LDL, and low HDL cholesterol). Data are mixed for its effectiveness for patients with Alzheimer's disease, atherosclerosis, heart disease, macular degeneration, cognitive decline, depression, headaches, intermittent claudication, osteoarthritis, skin rashes, and diabetes and schizophrenia.

Dietary sources of niacin include: meat, fish, poultry, milk, eggs, green vegetables, whole grains, yeast and Brewer's yeast. Some processed foods are fortified with niacin. See the US National Library of Medicine site for more information: <http://www.nlm.nih.gov/medlineplus/druginfo/natural/patient-niacin.html>

US Recommended Daily Allowance (RDA) for Niacin for

Infants: 2 -4 milligrams	Children: 6-8 milligrams
Adolescents: 12 – 16 milligrams	Adults: 14 - 16 milligrams daily
Pregnancy and lactation: 17-18 milligrams	Upper intake level is 35 mg daily

Under physician supervision, some patients take 50 mg to 6 grams daily.

Typical doses used for patients with cholesterol problems have been 50 mg to 3 grams daily.

Side effects. Niacin supplementation can cause liver problems; those who take doses higher than 35 milligrams daily should have their liver function checked periodically. Niacin can cause flushing and itching within 30 minutes of taking a dose; this usually subsides within 2 weeks of daily use. Large doses may cause upset stomach and nausea. Taking niacin with food can help reduce nausea and flushing. Sustained release preparations usually cause less flushing and fewer liver problems. Aspirin and antihistamines may also reduce the flushing and itching. Niacin may aggravate gout symptoms. It can trigger ulcers in patients with peptic ulcer disease.

Usual dose in adult multivitamin preparations are 1 – 2 milligrams. Some B-complex vitamins contain 50 – 100 mg per serving. Patients whose diets are deficient in one B-vitamin are likely to be deficient in several B-vitamins and some B vitamins have complementary effects. This is why many clinicians recommend taking a B-complex if needs are not met through food alone.

The products listed below are a *selection* of some that have met quality testing standards set by ConsumerLab. For more information, see <http://www.consumerlab.com/results/vitaminb.asp>?

Product Name/Distributor	Capsule/Tablet Strength	Manufacturer/Distributor
B3 - Niacin	Milligrams = mg	
Nature's Bounty® Flush Free Niacin	500 mg	Nature's Bounty
Puritan's Pride® Flush Free Niacin	500 mg	Puritan's Pride
Sundown® Flush Free Niacin	500 mg	Sundown, Inc
Vitamin World® Naturally Inspired® Flush Free Niacin	500 mg	Vitamin World
B-complex		
GNC B- Complex 50	50 mg	General Nutrition Corp.
Natrol™ B-100 Complex	100 mg	Natrol, Inc
Now® B-50 Vitamin B-complex	50 mg	Now Foods
Puritan's Pride B-50 and B-100 B-complex	50 and 100 mg	Puritan's Pride

www.wakehealth.edu/CIM - See Quick Link to Dietary Supplements