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Complementary and Alternative Medicine

Vitamin B6 (Pyridoxine)

Pyridoxine

Vitamin B6, also called pyridoxine, is one of 8 B vitamins. All B vitamins help the body convert food (carbohydrates) into fuel (glucose), which is used to as B-complex vitamins, also help the body metabolize fats and protein. B-complex vitamins are needed for healthy skin, hair, eyes, and liver. They also

All B vitamins are water soluble, meaning the body does not store them.

Vitamin B6 helps the body make several neurotransmitters, chemicals that carry signals from one nerve cell to another. It is needed for normal brain dev the hormones serotonin and norepinephrine, which influence mood, and melatonin, which helps regulate the body clock.

Along with vitamins B12 and B9 (folic acid), B6 helps control levels of homocysteine in the blood. Homocysteine is an amino acid that may be associate to absorb vitamin B12 and to make red blood cells and cells of the immune system.

It is rare to have a significant deficiency of B6, although studies indicate many people may be mildly deficient, especially children and the elderly. Certain body. Symptoms of serious deficiency include:

- Muscle weakness
- Nervousness
- Irritability
- Depression
- Difficulty concentrating
- Short-term memory loss

Heart disease

It is not clear how vitamin B6 might affect heart disease. People who do not get enough B6 in their diet have a higher risk of heart disease. And B6 plays blood. High levels of homocysteine appear to be associated with heart disease. But scientists do not know exactly what the relationship is. They also do will reduce your risk of heart disease. Until more is known, the best action is to get enough B6 through food, and to take supplements if your doctor reco

Nausea and vomiting during pregnancy (morning sickness)

Several studies, including one large double-blind, placebo-controlled study, found that a daily dose of 30 mg of B6 may help reduce morning sickness. If are pregnant, be sure to ask your doctor before taking any supplements, including vitamin B6.



Age-related macular degeneration (AMD)

One large study found that women who took 50 mg of vitamin B6 daily, along with 1,000 mcg of cyanocobalamin (vitamin B12) and 2,500 mcg of folic acid, had a lower risk of developing age-related macular degeneration (AMD), a disease that can cause vision loss.

Depression

Vitamin B6 helps your body make serotonin, a chemical that influences mood. Low levels of serotonin are associated with depression, and some antidepressants increase serotonin. Some researchers think that vitamin B6 might help reduce symptoms of depression. More research is needed.

Premenstrual syndrome (PMS)

Although some studies show that vitamin B6 may help improve PMS symptoms, most of these studies were poorly designed. Studies that were well designed, talk with your doctor about whether taking B6 is right for you. Some people who believe B6 is effective for PMS say it may take up to 3 months to see results.

Carpal tunnel syndrome

Early studies suggested that B6 might help reduce inflammation and symptoms of carpal tunnel syndrome, however, most well-designed studies have found no benefit.

Rheumatoid arthritis (RA)

Low levels of vitamin B6 have been associated with RA. Some studies also suggest that people with RA may need more vitamin B6 than healthy people. Eating a healthy, balanced diet, and taking a multivitamin is a good idea for anyone who has a chronic illness, such as RA. Talk to your doctor before taking any supplements.

Tardive dyskinesia

A few small studies have found that vitamin B6 may improve symptoms of tardive dyskinesia compared to placebo. Tardive dyskinesia is a side effect of long-term use of certain antipsychotic medications, characterized by involuntary movements of muscles, such as in the tongue, lips, face and jaw, arms, legs, fingers, or toes.

Dietary Sources

Good food sources of vitamin B6 include:

- Fortified ready-to-eat cereal
- Chicken
- Turkey
- Tuna
- Salmon
- Shrimp
- Beef liver
- Milk
- Cheese
- Lentils
- Beans
- Spinach
- Carrots
- Brown rice
- Bran
- Sunflower seeds
- Wheat germ
- Bananas
- Whole-grain flour

Available Forms

Vitamin B6 can be found in multivitamins, including children's chewable and liquid drops, B complex vitamins, or can be sold separately. It is available in tablets, capsules, and lozenges. Vitamin B6 is also sold under the names pyridoxal, pyridoxamine, pyridoxine hydrochloride, and pyridoxal-5-phosphate.



How to Take It

People who eat a balanced diet should meet the daily requirement for vitamin B6 without taking a supplement. As with all medications and supplements vitamin B6 supplements to a child.

Daily recommendations for dietary vitamin B6 are:

Pediatric

- Infants, 0 to 6 months: 0.1 mg (adequate intake)
- Infants, 7 months to 1 year: 0.3 mg (adequate intake)
- Children, 1 to 3 years: 0.5 mg (RDA)
- Children, 4 to 8 years: 0.6 mg (RDA)
- Children, 9 to 13 years: 1 mg (RDA)
- Boys, 14 to 18 years: 1.3 mg (RDA)
- Girls, 14 to 18 years: 1.2 mg (RDA)

Adult

- Men and women, 19 to 50 years: 1.3 mg (RDA)
- Men, 51 years and older: 1.7 mg (RDA)
- Women, 51 years and older: 1.5 mg (RDA)
- Pregnant women: 1.9 mg (RDA)
- Breastfeeding women: 2.0 mg (RDA)

Larger doses have been used in some studies. But you should not take doses above 100 mg per day without a doctor's supervision. Large doses of B6

Precautions

You should take dietary supplements only under the supervision of a knowledgeable health care provider because of the potential for side effects and in

Very high doses, 200 mg or more per day, of vitamin B6 can cause neurological disorders, such as loss of feeling in the legs and imbalance. Stopping h within 6 months.

There have been rare reports of allergic skin reactions to high doses of vitamin B6 supplements.

Other side effects can include:

- Sensitivity to sunlight
- Headache
- Nausea
- Abdominal pain
- Loss of appetite

Possible Interactions

If you are being treated with any of the following medications, you should not use vitamin B6 supplements without talking to your health care provider fir

Medicines that reduce levels of B6 in the body . If you take any of these medications, be sure to get enough B6 in your diet:

- Cycloserine (Seromycin), used to treat tuberculosis
- Hydralazine (Apresoline), used to treat high blood pressure
- Isoniazid, used to treat tuberculosis
- Penicillamine, used to treat RA
- Theophylline (TheoDur), used to treat asthma

Antibiotics, tetracycline: All B complex vitamins, including vitamin B6, interfere with the absorption and effectiveness of antibiotic tetracycline. You shc B6 and other B vitamins.

Antidepressant medications: Taking vitamin B6 supplements may improve the effectiveness of some tricyclic antidepressants such as nortriptyline (P antidepressants include amitriptyline (Elavil), desipramine (Norpramin), and imipramine (Tofranil).



On the other hand, antidepressants called monoamine oxidase inhibitors (MAOIs) may reduce blood levels of vitamin B6. Examples of MAOIs include p

Amiodarone (Cordarone): This drug, used to treat an irregular heartbeat, makes your skin more sensitive to sunlight. Taking vitamin B6 along with this blistering, or a rash.

Chemotherapy drugs: Vitamin B6 may reduce certain side effects of 5-fluorouracil and doxorubicin, medications used to treat cancer. Talk to your doctor undergoing chemotherapy.

Erythropoietin (EPO): Erythropoietin therapy, used to treat severe anemia, may decrease vitamin B6 levels in red blood cells.

Levodopa (L-dopa): Vitamin B6 reduces the effectiveness of levodopa, a medication used to treat Parkinson disease. However, it does not seem to have an effect on carbidopa. Your doctor may be able to determine a dose of B6 that can safely help reduce side effects of levodopa. You should only take vitamin B6 under supervision.

Phenytoin (Dilantin): Vitamin B6 makes phenytoin, a medication used to treat seizures, less effective.

Supporting Research

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Advanced Study

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Review Date: 8/5/2015



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Health Content Provider Expires 06/01/2022

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