

Vitamin B1 100 mg Tablets



Product Summary:

Vitamin B1 (Thiamine) is a vitamin that is essential to energy production. It is required in the metabolism of carbohydrates, proteins and fats. Thiamine deficiency can lead to serious diseases such as beriberi and Wernicke-Korsakoff's syndrome.

Properties/Uses:

The claim as approved by the *Natural Health Products Directorate* (NHPD): Helps with normal growth, to maintain good health, and metabolize carbohydrates.



GENERAL HEALTH
& WELLNESS



Pharmacology:

Vitamin B1 (Thiamine) is a water-soluble vitamin that is essential in the metabolism of carbohydrates. Thiamine is also needed to work in conjunction with other B vitamins for the metabolism of proteins and fat. Vitamin B1 is therefore needed for proper energy production. It is also needed to ensure proper nerve impulse transmission and it has been suggested this vitamin can have a positive effect on mood.¹

Thiamine supplementation is mostly used to treat or prevent a deficiency. Thiamine deficiency is most common in individuals with malabsorption conditions such as alcoholism, cirrhosis, and gastrointestinal diseases. Thiamine deficiency most notably leads to Wernicke-Korsakoff's syndrome (a brain disorder) and beriberi. Beriberi can lead to digestive issues, fatigue and weight loss.²

Vitamin B1 has also been investigated for other uses. It has been suggested that supplementation can act as a mosquito and insect repellent. Thiamine supplementation has been studied for use in congestive heart failure and hyperglycemia. A recent randomized, double-blind study of 12 hyperglycemic patients study found that 100mg of thiamine 3 times a day improved glucose tolerance in patients with hyperglycemia. The researchers concluded that thiamine supplementation may prevent or slow down the progression of hyperglycemia towards diabetes mellitus in individuals with impaired glucose regulation.³

It is best to take this supplement in conjunction with a B complex supplement. The B vitamins work together synergistically. They also compete for absorption therefore it is always important to increase your intake of other B vitamins when supplementing with a single B vitamin.



Manufactured product information:

Manufacturer:

WN Pharmaceuticals® Ltd

Size / UPC:

100's 7 77747 10318 8

NPN:

80000352

Expiry Date:

36 months from date of manufacture

Active Ingredient:

Each tablet contains:

Vitamin B1 (thiamine hydrochloride)..... 100 mg

Non-Medicinal Ingredients (in descending order):

Dibasic calcium phosphate dihydrate, microcrystalline cellulose, magnesium stearate, croscarmellose sodium.

Appearance:

White round tablet.

Packaging:

175 cc white round bottle with safety seal under a 38 mm white induction sealed cap with vented interior seal and a label applied to the bottle. Lot number and expiry date are printed on the label applied to the exterior of the bottle.

Storage:

Preserve in tight, light resistant containers.





Dose:

As per the NHPD Monograph, the dose for children and adolescents aged 1-13 years old is 0.04 -100mg/day. The dose for adults 14 years and older is 0.07-100mg/day.¹

Directions:

(Adults): 1 tablet daily with meals or as recommended by a physician.

Caution:

The caution as approved by the *Natural Health Products Directorate* (NHPD): KEEP OUT OF THE REACH OF CHILDREN. STORE AT ROOM TEMPERATURE IN A DARK, DRY PLACE. DO NOT USE IF SEAL UNDER CAP IS BROKEN OR MISSING.

Deficiency Symptoms:

Thiamine deficiency can lead to several syndromes, most notably beriberi and Wernicke-Korsakoff syndrome, but also including peripheral neuritis associated with pellagra, and neuritis of pregnancy.² Thiamine deficiency can occur in people with malabsorption conditions such as alcoholism, cirrhosis, and gastrointestinal (GI) diseases.

Drug Interactions/Contraindications:

Aluminium-based antacids may inactivate thiamine.⁴

Thiamine depletion plays a role in the development of Wernicke-Korsakoff syndrome, a neurological disorder associated with long term alcohol abuse.⁴

Alpha-lipoic acid may exacerbate an existing thiamine deficiency.⁵

Increased urinary thiamine excretion and biochemical evidence of thiamine deficiency may occur in some people treated with diuretics, especially in high dose.²

Toxicity/Adverse Reactions:

Orally, thiamine is generally well tolerated, but in rare cases can cause dermatitis and other hypersensitivity reactions.²



Allergen Content/Ingredient Sensitivity:

NO	YES
Artificial Colors	
Artificial Flavors	
Artificial Sweeteners	
Corn Products	
Egg Products	
Fish	
Gluten	
Hydrolyzed Plant Protein	
Lecithin	
Milk Products	
Peanuts	
Preservatives	
Sesame Products	
Shellfish	
Soy Products	
Starch/Modified Starch	
Sulphites	
Tartrazine	
Tree Nuts	
Wheat Products	
Yeast	

ACCEPTABLE FOR THE FOLLOWING DIETARY RESTRICTION:

Free of animal products

NOT ACCEPTABLE FOR THE FOLLOWING DIETARY RESTRICTION:

Kosher





References:

1. Health Canada, *Thiamine Monograph*, Accessed October 2013 [Available from: <http://www.hc-sc.gc.ca>]
2. Natural Medicine Comprehensive Database (NMCD). *Monograph*, Accessed October 2013 [Available from: <http://www.naturaldatabase.com/>]
3. Alaei Shahmiri, F. et al. (2013 Oct) High-dose thiamine supplementation improves glucose tolerance in hyperglycemic individuals: a randomized, double-blind cross-over trial, *European Journal of Nutrition*, 52(7): 1821-4.
4. Graedon, J. & Graedon, T. (1995) *Deadly Drug Interactions*. New York: St. Martin's Griffin.
5. Gal, E.M. (1965) Reversal of selective toxicity of (-)- α -lipoic acid by thiamine in deficient rats, *Nature*, 205: 535.

Revision #: 00