



VITAMIN B AND IT'S ROLE IN THE HEART

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THE B VITAMIN YOU REALLY NEED

- Many people are either taking a multivitamin or some kind of B vitamin.
- Vit. B complex is sold in a variety of forms
 - Claims: boost energy, increase muscle tone, fortify nervous system...
- Don't be fooled by a long label listing Synthetic B vitamins
- Our bodies are designed to assimilate real foods for growth and repair of organs and tissues
 - Not synthetic chemicals!
- Vitamins are best derived from real foods
- Vitamins, unlike drugs, are living complexes, and it is critical to get these in a form that includes all of the enzymes, coenzymes and minerals that make up a naturally occurring vitamin.



HAVE YOU HEARD OF VITAMIN B4?

- Most people have heard of B1, B2, and B6
- Have you heard of the lesser known B4?
 - The Merck Manual, 10th edition, describes B4 as “widespread throughout plant and animal tissues.”
 - Vitamin B4 promotes the efficient nerve conductivity of the heart and helps maintain the rhythm of the heart
- Unless you derive your B vitamins from whole food sources, vitamin B4 would not be included because it cannot be synthesized by the body
- Whole B vitamin complexes are only found in foods such as nutritional yeast, liver, and wheat germ, which contain natural vitamin complexes that support many of your body systems including your heart muscle

DIFFERENCES IN B VITAMINS

B Vitamins

- Alcohol soluble fraction
- Thiamine (B1), B4 (anti-paralysis factor), Cobalmin B12, pantothenic acid (B5)
- Nerve promoting
- Acts like a vasoconstrictor
- Helps low blood pressure and blood vessels without tone

G Vitamins

- Water soluble fraction
- Riboflavin (B2), niacin (B3), Pyridoxine (B6), Biotin (B7) folic acid (B9), PABA
- Lipotropic factors: Choline, Inositol, Betaine
- Nerve relaxing
- Acts as a vasodilator
- Helps hypertensives

HEART CORRELATIONS

B vitamins- alcohol fraction

- Bradycardia
- Irregular heartbeat- Atrial fibrillation
- Heart block
- Split S1 and S2

G vitamins- water soluble fraction

- Tachycardia
- Ventricular ectopic beats (PVC)
- Pre-angina pectoralis
- Pre-myocardial infarction
- S1 and S2 equally spaced

EFFECTS OF DEFICIENCY

Vitamin B

- Beriberi
 - Discovered in 1897
- Paralysis
- Heart Block
- Neuritis
- Arrhythmias
- Fibrillation
- Tachycardia

Vitamin G

- Pellagra
 - Discovered in 1915
- Mental depression
- Vasoconstriction
 - Coronary insufficiencies
- Angina, tissue degeneration
- GI disorders- ulcers, IBS
- Disorders of fat metabolism

OTHER CONTROVERSIAL B VITAMINS

- Orotic Acid (B13)
 - Primary source is Jerusalem artichokes
 - Known to help in any chronic disease, and with heart rhythm regulation
- Pangamic Acid (B15)
 - Primary source is apricot kernels, beef, pumpkin seeds, sunflower seeds
 - Helps with muscle fatigue, excessive lactic acid, endurance, drug addiction, brain damage, stimulation of speaking ability in stroke victims
- Laetril (B17)
 - Primary sources apricot kernels, almonds, apple seeds
 - Helps with cancer elimination and prevention
 - Reduces side effects of chemotherapy, radiation, and side effects cancer surgery (the spreading of rogue cells)

TAKE AWAY

- Get whole food sources of B vitamins
- B vitamins are found in highest abundance in meat, eggs, and [dairy products](#).^[1] Processed carbohydrates such as sugar and white flour tend to have lower B vitamin than their unprocessed counterparts. For this reason, it is required by law in many countries (including the United States) that the B vitamins thiamine, riboflavin, niacin, and folic acid be added back to white flour after processing. This is referred to as "[enriched flour](#)" on food labels. B vitamins are particularly concentrated in meat such as turkey, tuna and liver.^[2]
- Sources for B vitamins also include [legumes](#) ([pulses](#) or beans), whole grains, potatoes, bananas, chili peppers, [tempeh](#), [nutritional yeast](#), [brewer's yeast](#), and [molasses](#).

