## WEEKLY PRODUCT FEATURE B6 Phosphate



Biotics Research Corporation • 6801 Biotics Research Drive • Rosenberg TX 77471 (800) 231 - 5777 • www.bioticsresearch.com • biotics@bioticsresearch.com

WPB 12/44

Vitamin B6 is required for protein and essential fatty acid metabolism, for the liberation of glycogen stores, and for the production of various neurotransmitters. It is essential for the manufacture of the hemoglobin portion of red blood cells, and it is an important cofactor in over 60 different enzymatic reactions. Vitamin B6 deficiencies have been associated with a wide variety of issues including: carpal tunnel, trigger finger, joint pain, morning sickness of early pregnancy, burning or tingling in the extremities, joint nodules, apthous ulcers, cheilosis, depression, fatigue, sore tongue, flaky skin, and sensitivity to bright light. Low liver transamines and homocystinuria are two clinical findings which may indicate a need for additional B6 supplementation. Single B-vitamin deficiencies may not be the first thing that healthcare professionals consider when they have a patient that presents with any one of a number of neuromusculoskeletal complaints. However, it would be prudent for practitioners to evaluate their patients for B-vitamin deficiencies as they can initiate or exacerbate a plethora of health issues. B6 Phosphate from Biotics Research Corporation contains the pyridoxal 5-phosphate (P5P) of vitamin B6, the most biologically active form of the nutrient. As a synergist to zinc and magnesium, if one nutrient is believed to be in a deficient state, it is prudent to check for additional nutrient deficiencies. Alcohol intake dramatically increases the need for vitamin B6. Furthermore a wide variety of drugs are known to induce deficiencies including certain antidepressants, hormone replacement therapy, oral contraceptives, diuretics,

corticosteroids, tuberculosis medications, and some drugs marketed for rheumatoid arthritis. Smoking is detrimental to B6 stores. As a water soluble nutrient, vitamin B6 is particularly susceptible to processing. It has been estimated that as much as 70% of the nutrient is lost by freezing vegetables, 50-90% is lost by processing meat, and 50-90% is lost from the milling of grains, therefore those consuming a diet high is processed foods are not likely meeting their dietary requirements for vitamin B6. Each tablet of **B6 Phosphate** supplies 20 mg of B6 as P5P along with our proprietary vegetable culture base providing 20 mcg each of superoxide dismutase and catalase. As always, you can count on Biotics Research Corporation to offer superior nutritional products supplying "The Best of Science and Nature".



## Research Pertaining to Other Topics of Interest

Omega-3s may slow aging process: Research published in Brain, Behavior and Immunity indicates that supplementation with omega-3s are associated with longer telomeres in immune system cells. During cell replication, telomeres ensure the chromosomes don't fuse with each other or rearrange. With each cell replication the telomeres shorten. Once telomeres are completely consumed, the cells are destroyed (apoptosis). Telomeres have been shown to be highly susceptible to oxidative stress, and their length may very well be a marker of biological ageing. A decreased ratio of omega-6:omega-3 was associated with longer telomeres, suggesting lower omega-6:omega-3 ratios "can impact aging." Also, the study results showed that omega-3 supplementation significantly decreased measures of oxidative stress. Inflammatory markers also decreased by 10-12% as a result of supplementation, while levels increased in the placebo group. The study strongly indicates that inflammation is driving the changes in the telomeres, and that omega-3 supplementation increased the average telomere length.

Liecolt-Glaser JK et al. Omega-3 fatty acids, oxidative stress, and leukocyte telomere length: A randomized controlled trial. Brain, Behavior, and Immunity. Published online ahead of print, doi: 10.1016/j.bbi.2012.09.004

These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.