

B Vitamins

B Vitamins are responsible for energy production and stress reduction by creating optimal nervous system function. The various chemical forms determine the utilization and absorption of these nutrients. Biologically active forms are ideal since they are more readily available. We use the active forms of B2 (Riboflavin 5' Phosphate), B6 (Pyridoxal 5' Phosphate and Pyridoxine HCl), B12 (Methylcobalamin) and Folic Acid.

Vitamin B1 (thiamine)

Vitamin B1 is required to process carbohydrates, fats and proteins. In addition, it is necessary to complete ATP, the vital fuel our body runs on. Nerve cells also require thiamine in order to function normally (6).

Vitamin B2 (Riboflavin 5' Phosphate)

Vitamin B2 is required for tissue respiration, processing amino acids, converting carbohydrates into ATP, and the activation of B6 and folic acid.

Vitamin B3

Vitamin B3 comes in two forms, niacin and niacinamide. For niacin we used the no-flush Inositol Hexanicotinate form that consists of six molecules of niacin (nicotinic acid) chemically linked to an inositol molecule. This coenzyme assists in the breakdown and utilization of fats, proteins, and carbohydrates. Niacinamide is required for lipid metabolism, tissue respiration, and glycogenolysis.

Vitamin B6

We use two forms of vitamin B6, pyridoxine HCl and pyridoxal-5-phosphate, which both aid in the formation of several neurotransmitters and is the master vitamin in the processing of amino acids, which are the building blocks of proteins and hormones.

Vitamin B12 and Folic Acid

Vitamin B12 and folic acid convert carbohydrates into energy and are key components in the metabolism of fats and proteins. Both forms used in this formula are the most bioavailable.

Digestive Enzymes

Digestive enzymes are important since many people have compromised digestive tracts that make the absorption of key nutrients more difficult. **Ultra High™** uses vegetarian plant/fungal enzymes protease, amylase, and lipase to improve overall digestion.

Probiotic Mix

Probiotic mix contains twelve viable forms of microorganisms to support a healthy balance of intestinal flora.

DMG (Dimethylglycine)

DMG enhances oxygen uptake, increases ATP levels and strengthens the immune system by stimulating both the humoral (antibody) response and the cellular mediated response (7).

Calcium

Calcium is essential for nerve transmission, muscle contraction, vascular contraction, vasodilation, glandular secretion, cell membrane and capillary permeability, enzyme reactions, respiration, renal function, and blood coagulation (8). The bones and teeth contain greater than 99% of the calcium in the human body.

Magnesium

Magnesium performs myriad physiological roles that include cardiac function, neuromuscular contractions and the regulation of acid-alkaline balance in the body (9). It is vital for energy production and the metabolism of carbohydrates, amino acids and fats. It also helps utilize calcium, which helps support healthy bones.

Potassium

Potassium is essential to cardiovascular function by regulating heart rhythm, water balance and normal nerve and muscle activity.

Manganese

Manganese activates numerous enzymes that are necessary for the uptake of biotin, vitamin C and thiamine. Manganese benefits skeletal development, connective tissue structure and cellular integrity. It is a necessary cofactor in the detoxification of ammonia to urea.

Copper

Copper is an essential trace mineral. The majority of copper in the body is in the skeleton and muscles; the liver maintains plasma copper concentrations.

Zinc

Zinc is a biologically essential trace element. Methionate is one of the premier bioavailable forms. Zinc promotes a stronger immune system and is fundamental in collagen formation and healthy tissue development (10). It also plays a vital role in fetal and reproductive development and healthy prostate function.

Boron

Boron optimizes the normal utilization of many vitamins and minerals (improves metabolism of calcium, magnesium and phosphorus). Boron aids in the synthesizing of estrogen, vitamin D and other steroidal hormones.

Vanadium

Vanadium is a trace mineral that promotes the formation of osteoblasts for stronger bone and teeth integrity.

Chromium

Chromium is an essential trace mineral that supports lipid and glucose metabolism and enzyme activation. Some athletes might be at risk for low chromium levels since strenuous aerobic exercise seems to increase urinary excretion of chromium (11).

Molybdenum

Molybdenum is an essential trace mineral and a key component of several enzymes involved in detoxification, including sulfite and xanthine oxidation.

Selenium

Selenium is a metallic substance that is available in a variety of chemical compounds. In the highly absorbable selenomethionine form, a natural antioxidant, selenium helps maintain the elasticity of tissue and supports the immune system.

Patients: Consult with your healthcare professional for the proper use of this formula.

For more information about this and other Condition Specific Formulas® please visit our website at:

mountainpeaknutritionals.com
email us: support@mtnpeaknutrition.com

**9953 SW Arctic Drive
Beaverton, OR 97005**

REFERENCES

1. Food and Nutrition Board, Institute of Medicine. Dietary Reference Intakes for Vitamin A: National Academy Press: 2002
2. J Clinical Endocrinol Metab 2005;90:3215-24
3. Am J Clin Nutr 2004;80:1194-200
4. Am J Clin Nutr 2001;73:1052-7
5. Arch Intern Med 2006;166:1256-1261
6. Acta Physiol Scand Suppl 1978;459:1-35
7. J Int Disease 1981;143:101
8. Nat Medicines Comprehensive Database 2006;238
9. J Hypertens 2000;Jul:18:919-26
10. J Toxicol 1999;37:279-92
11. Am J Clin Nutr 1996;63:954-65

