

PANTETHINE

Supports Cholesterol Wellness



Pantethine, a form of vitamin B-5, enhances the entire body; in fact, its name is a derivative of “pan” the Greek word for “every” or “all.” And while it surely benefits all of the body’s systems, it is most appreciated for its support of healthy cardiovascular function, particularly because of its role in balancing cholesterol and triglyceride levels.

In numerous studies, pantethine has repeatedly shown a positive influence on the normalization of fats in the blood. It maintains LDL cholesterol and triglyceride levels already in the normal range while subsequently, it raises HDL (“good”) cholesterol count. Pantethine supports clear blood flow.

PANTETHINE also plays a beneficial role in energy production, reduction of stress, and liver detoxification.

Using the available tools to support your health is a prime aspect of the Wellness Revolution. In fact, of the dozen deep metabolic systems outlined in the SystemiCare™ health model, PANTETHINE supports five: Energy, Inflammation Response, Hormones/Metabolism, Circulation, and Liver/Detox. Take charge of your well-being with this dietary supplement that is truly pan-systemic, of great benefit to many of your body’s systems.



*Strategies for Wellness*SM

What is Pantethine?

Pantethine is the biologically active form of vitamin B-5 (pantothenic acid) and it is metabolized in the body. Pantothenic acid is a water-soluble B vitamin essential for energy metabolism. Because of the water-soluble nature of B-5, the body processes the needed amount and flushes excess out of the body. In comparison, pantethine varies in chemical structure from pantothenic acid: it is a disulfide form (or a double bond) of pantothenic acid and it is converted into an enzyme called “Co-Enzyme A (Co-A).” One of pantethine’s benefits is that it stays in the bloodstream for up to 16 hours. This extended period of time maximizes its effects in supporting energy and lipid metabolism. Even more, CoA regulates many fat-related chemical reactions, including clearing fat-soluble toxins from the blood and brain and promoting healthy overall metabolism.

Cholesterol and Triglycerides

Pantethine moderates plasma lipoproteins like cholesterol and triglycerides as well as other lipids. Very simply, dietary fats are taken from the intestinal cells to the liver. Very low density lipoproteins (VLDL) carry them through the blood to peripheral tissues. This accumulates and becomes LDL, low density lipoprotein. High density lipoproteins (HDL), on the other hand, act to scavenge surplus cholesterol from the tissues and organs and bring the lipids back to the liver. From the liver, in the presence of Co-Enzyme A, the fat can be converted into energy. In clinical trials, pantethine is shown to support balanced LDL and HDL levels. Triglycerides are a form of fat stored by the liver. When the breakdown of fats in the liver is disrupted, the fat cells are dispersed. Pantethine returns the lipids to the liver where they can be used in producing energy.

Co-Enzyme A

CoA develops from pantethine and is critical in the metabolism of all fats and carbohydrates; it is a tremendously important enzyme, which converts the food we digest to energy on a cellular level. It is the first step in the Krebs’s

Cycle that produces ATP, the source of cellular energy. CoA is a primary energy catalyst in over 70 enzymatic pathways.

Pan-Systemic Benefits

Along with its support of cardiovascular health and energy metabolism, pantethine supports other important functions. It fuels the production of all adrenal hormones, which—among many things—regulate the body’s response to stress. Pantethine helps the liver detoxify, specifically Phase II detoxification, enabling the liver to metabolize and clear toxic chemicals. Because of this function, many people take pantethine to help with the effects of over-indulgence of alcohol; it clears the formaldehyde, the main causation of the symptoms of excess alcohol. Pantethine also protects against some of the damaging effects of environmental pollutants.

Wellness Revolution

As part of the Wellness Revolution, Source Naturals PANTETHINE is an excellent means of helping and nourishing many of your body’s functions. It is a single tool with far-reaching benefits. It is a key to cardiovascular health and energy metabolism, two areas that positively influence the health of the entire body.

References:

- Arsenio L, et al. (1986). Effectiveness of long-term treatment with Pantethine in patients with dyslipidemia, *Clinical Therapy* 8(5): 537-545.
- Prisco D, et al. (1987). Effect of oral treatment with Pantethine on platelet and plasma phospholipids in hyperlipoproteinemia, *Angiology* Mar, 38(3): 241-247.
- Gensini GF. (1985). Changes in fatty acid composition of the single platelet phospholipids induced by Pantethine treatment. *Int J Clin Pharmacol Res*, 5(5): 309-318.
- Osono Y, et al. (2000). Effects of Pantethine on Fatty Liver and Fat distribution, *Journal of Atherosclerosis and Thrombosis* 7 (1):55-58.
- Tahiliani AG. (1991). Pantothenic acid in health and disease, *Vit Horm* 46:165-227.



Strategies for Wellnesssm

www.sourcenaturals.com



The above information has not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.

© 2009 Source Naturals, Inc., P.O. Box 2118, Santa Cruz, CA 95063

REVA0906

LC3391