SUSTAINED RELEASE

PANTETHINE

FROM PANTESIN

Promotes heart health & cholesterol balance

endurance products COMPANY
Since 1978

WHAT IS IT?

Pantethine from Pantesin® is a sustained-release dietary supplement featuring 300 mg of pantethine per tablet. The dissolution rate of the wax-matrix tablet results in a slow, steady release of pantethine over several hours for optimal absorption.

Pantesin is backed by clinical research and over 30 years of safe and effective use in Japan for heart health.

HOW DOES IT WORK?

Pantethine is the metabolically active form of pantothenic acid (vitamin B5). In the body, it converts into pantetheine, the functional part of coenzyme A (CoA). CoA is considered the most active metabolic enzyme in the human body, serving as a cofactor in over 70 enzymatic pathways with diverse functions. About 95% of CoA is located in the mitochondria. In this way, pantethine supports a wide range of biochemical reactions, including those involved in cardiovascular health and cholesterol balance as well as liver health and detoxification.[1]

WHO CAN BENEFIT?

For adults who need targeted nutritional support for healthy cholesterol balance, lipid metabolism, and liver health.

PRODUCT AVAILABILITY

Bottle Size(s):
90, 120 tablets

PRACTITIONER DISTRIBUTION

■ WholeScript™ (www.wholescript.com)

Supplement Facts		
Serving Size 1 Tablet		
Amount Per Tablet		**% DV**
Pantethine (from Pantesin®)	300 mg	*
* Daily Value (DV) not established.		

Other Ingredients: Vegetable wax (rice bran and/or carnauba), cellulose, stearic acid (vegetable), magnesium stearate (vegetable), and silica.

Suggested Use: Take one (1) tablet with morning and evening meals, or as directed by your healthcare practitioner.

1. Anonymous. *Altern Med Rev.* 2010;15(3):279-82.

RESEARCH HIGHLIGHTS

Pantethine has been clinically shown to be effective and well tolerated for the treatment of dyslipidemia.

One systematic review[2] of 28 clinical trials with 646 participants with hyperlipidemia offers insight into dosing and expected outcomes. For this review, the average study included 22 subjects, average age 53 years, and lasted 13 weeks. The median dose of pantethine was 900 mg/day with a range of 600 to 1,200 mg/day. The most common dosage was 300 mg, three times daily.

Significant improvements in all blood parameters, except HDL cholesterol, were reported by month 4. Significant improvements in blood lipids include a 15.1% reduction total cholesterol, a 20.1% reduction in LDL cholesterol, and a 32.9% reduction in triglycerides. Treatment was well tolerated with an adverse event rate of 1.4 per 100 subjects, mostly mild digestive complaints.

Pantethine lowers CVD risk markers in people with low or moderate CVD risk

In one clinical trial,[3] pantethine was found to lower cardiovascular disease (CVD) risk markers in people with low or moderate CVD risk. This trial involved 32 middle-aged men and women at low- or moderate-risk of CVD and eligible for statin therapy based on the National Cholesterol Education Program (NCEP) guidelines. Participants followed a Therapeutic Lifestyle Change (TLC) diet for 4 weeks before starting the study and maintained the diet throughout a 16-week study period. Participants were randomly assigned to take Pantesin HF pantethine (600 mg/day from weeks 1 to 8 and 900 mg/day from weeks 9 to 16) or a placebo. Compared to placebo, treatment significantly (P<.05) reduced total cholesterol (at 16 weeks), LDL cholesterol (at 8 and 16 weeks), and non-HDL cholesterol (at 16 weeks). A significant between-group difference in LDL cholesterol was found as early as week 8.

Effective dosing is 300mg, twice daily; no added value with higher dosing

One controlled clinical trial[4] found pantethine improved blood lipid parameters in adults at low or moderate risk for heart disease. This trial involved 120 men and women and had a study design similar to that used by Evans et al. described previously. By week 16, pantethine significantly (P<.05) reduced total cholesterol (6 mg/dL, 3%), LDL cholesterol (4 mg/dL, 4%), and apolipoprotein B (4 mg/dL, 5%), compared to placebo. As early as week 2, pantethine produced significant decreases in total and LDL cholesterol, TC/HDL ratio, non-HDL, and apo-B, which were sustained throughout the 16-week study period. No significant between-group differences were found for apo-A, HDL cholesterol or triglyceride levels.

Interestingly, the dosage increase from 600 to 900 mg/day did not appear to provide any additional or measurable benefit, suggesting the optimal benefit in these low- to moderate-risk people is achieved at a 300 mg, twice daily, dosing schedule. Pantethine was well tolerated with a low frequency of side effects, primarily mild digestive complaints.

Supports liver function & Phase II detoxification

As a precursor to coenzyme A (CoA), pantethine plays a role in phase II detoxification acetylation reactions.[5] These reactions are catalyzed by acetyltransferases present in the cytosol of various tissues, particularly liver. In these reactions, acetyl-CoA (active acetate) donates an acetyl group to a drug, pesticide, or other compound that is foreign to the body (i.e., a xenobiotic). The result is a more water-soluble (polar) molecule that can be excreted by the body rather than persist in fat tissue.[6]

2. McRae MP. *Nutr Res.* 2005;25:319-333.
3. Evans M, et al. *Vasc Health Risk Manag.* 2014;10:89-100.
4. Rumberger JA, et al. *Nutr Res.* 2011;31(8):608-15.
5. Liska DJ. *Altern Med Rev.* 1998;3(3):187-98.
6. Murray RK, et al., eds. *Harper's Illustrated Biochemistry.* 26th ed. McGraw-Hill Companies, Inc; 2003: 626-32.