

## Pantethine

from Pantestin®

Secure Release



Heart + Liver Health\*

### What Is It?\*

Pantethine from Pantestin® features 300 mg of Pantestin® pantethine, a high-purity, highly absorbable form of pantethine backed by clinical research and over 30 years of safe and effective use in Japan for heart health. The SmartMatrix™ Secure release tablet allows for a slow, steady release over several hours for optimal absorption.

### How Does It Work?\*

Pantethine is the stable disulfide form of pantetheine, the metabolic substrate that forms the active part of coenzyme A (CoA) and acyl carrier proteins (ACP). The key functional group in both is the sulfhydryl (SH) moiety donated from cysteine. Unlike pantothenic acid (vitamin B5), pantethine supplies the essential SH group for enzyme activity, making it a more metabolically active form. CoA is a cofactor in over 70 enzymatic pathways, including fatty acid oxidation and acetylation in phase II detoxification. ACP is an essential component of the fatty acid synthase complex, required for fatty acid elongation.<sup>1</sup>

Research indicates pantethine may help maintain blood cholesterol and lipid levels within the normal range, and its actions complement alternative therapies that support cardiovascular health.<sup>2</sup>

### Product Availability

Bottle Size(s):  
– 90 tablets

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

### Supplement Facts

Serving Size 1 Tablet	
Amount Per Tablet	%DV
Pantethine (from Pantestin®)	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.

This information is for healthcare professionals only to inform patient treatment and is not intended for consumer use.

\*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.

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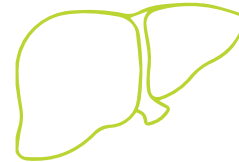
Secure Release

## RESEARCH HIGHLIGHTS



### Supports Cholesterol & Lipid Balance

One systematic review of 28 clinical trials indicates pantethine exerts consistent and significant effects on the body's ability to support healthy cholesterol metabolism and lipid balance. The median dose of pantethine was 900 mg/day with a range of 600 to 1,200 mg/day. The average duration of interventions was about 4 months, indicating a gradual effect.<sup>3</sup> Others report similar benefits with 600–900 mg/day for 16 weeks.<sup>2,4</sup>



### Supports Phase II Detoxification

Pantethine, as a precursor to coenzyme A (CoA), supports phase II detoxification by aiding acetylation reactions.<sup>5</sup> In these liver-based reactions, acetyl-CoA transfers an acetyl group to a pesticide, environmental pollutant, or other xenobiotic, making them more water-soluble so they can be excreted from the body instead of stored in fat.<sup>6</sup>

## Ingredient Spotlight: The Pantestin® Advantage

- 1 High Quality**  
A high-purity, highly absorbable form of pantethine
- 2 Research-Backed**  
Backed by more than 35 years of clinical research
- 3 Excellent Safety Profile**  
Side effects uncommon & generally mild (e.g., temporary digestive upset)

SmartMatrix is a trademark of Innovite, Inc. PANTESIN® is a registered trademark of Dalichi Fine Chemical Co., Ltd.

### References

1. Anonymous. *Altern Med Rev.* 2010;15(3):279-82.
2. Evans M, et al. *Vasc Health Risk Manag.* 2014;10:89-100.
3. McRae MP. *Nutr Res.* 2005;25:319-333.
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.

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