



PHARMACIST FORMULATIONS

Nattokinase

CLINICAL APPLICATIONS

- Supports Healthy Blood Flow and Circulation
- Supports Healthy Fibrin Levels
- Helps Maintain Healthy Blood Pressure
- Supports Overall Cardiovascular Health

What is Nattokinase?

Nattokinase is a powerful enzyme used to support normal blood flow, circulation, and blood pressure levels. Derived from a highly purified extract of the traditional Japanese food natto, nattokinase is a natural, highly active enzyme that helps promote normal levels of fibrin. Fibrin is a filamentous protein formed in blood, which can accumulate along blood vessel walls and affect blood flow. Research has shown nattokinase closely resembles plasmin, the only endogenous enzyme that directly dissolves fibrin. It is thought to increase the body's production of plasmin. Nattokinase has been shown to support activation of many of the body's 3,000 endogenous enzymes. In addition, while many of the agents involved in promoting healthy blood flow and coagulation either have limitations, and/or serious side effects, this formulation of Nattokinase has a potent support activity that lasts for an 8-12 hour period and is safe for long-term use. Each capsule of Nattokinase contains 100 mg of nattokinase.

Overview

Maintaining healthy blood circulation and balanced coagulation is a key part of supporting cardiovascular health. Fibrinolytic enzymes, such as plasmin, produced in the endothelial cells are responsible for ensuring proper blood flow. However, production of these enzymes decreases with age, which can result in increased fibrin levels.¹ Nattokinase also inhibits a key enzyme resulting in arterial dilation to help maintain healthy blood pressure levels, and can generate tissue plasminogen activators helping to promote blood flow.^{2,3} Because it is a highly purified extract derived from

soybeans, supplementing nattokinase differs from consuming soybeans in that nattokinase escapes the typical breakdown by digestive enzymes, and is absorbed and taken into the body directly from the small intestine to exert its effects in the plasma.^{4,5}

Research†

Discovered by Dr. Hiroyuki Sumi, nattokinase has been shown to help keep blood flowing normally.¹ In a study on the effect of nattokinase on blood flow in the common carotid artery, animals treated with nattokinase regained 62% of their blood flow, while animals given plasmin regained 15.8%, and 0% was regained with elastase. Researchers concluded that in this in vivo model, the circulation supporting activity of nattokinase was stronger than that of plasmin or elastase.^{6,7} Other in vitro studies revealed nattokinase caused a significant, dose-dependent decrease of red blood cell aggregation and low-shear viscosity, effects which were evident at concentrations similar to those achieved with in vivo animal trials.⁷ Researchers have also confirmed the presence of unique compounds that inhibit angiotensin converting enzymes (ACE) within nattokinase, which supports healthy arterial blood pressure.⁸ In a recent eight-week, randomized, double-blind, placebo-controlled trial of 73 subjects given oral nattokinase supplementation, a healthy effect on blood pressure and blood flow was seen.⁹

Directions

1 soft gel capsule two times per day or as recommended by your health care professional.

Does Not Contain

Gluten, corn, yeast, artificial colors or flavors.

Cautions

If you are pregnant or nursing, consult your physician before taking this product.

Supplement Facts ^{v2}		
Serving Size 1 Soft Gel Capsule Servings Per Container 60		
	Amount Per Serving	% Daily Value
Nattokinase	100 mg (2,000 Fibrinolytic Units)	*
* Daily Value not established.		

References

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8. Nattokinase. <http://lifeenthusiast.com//enzyme/natokinase.htm>
9. Kim JY, Gum SN, Paik JK, et al. Effects of nattokinase on blood pressure: a randomized, controlled trial. *Hypertens Res*. 2008 Aug;31(8):1583-88. [PMID: 18971533].