



NEED
WEB SITE LINK

Is Arginine a "Magic Bullet" for the Heart?

Printer Friendly Version

To print this page, please select File/Print from your browser's menu.

CLOSE

Champions of a dietary supplement called arginine claim that this naturally occurring amino acid may be the answer to an ailing heart. It appears that for some people with mild hypertension, arginine alone can restore normal blood pressure. The supplement may allow others to cut back on their prescription drugs, reducing or eliminating such side effects as depression and impotence.

But that's not all. According to its proponents, arginine can also lower cholesterol, open clogged arteries, reduce the chest pain of angina, reverse impotence, boost immunity, increase mental acuity, and lessen the complications of diabetes.

How could one supplement accomplish all this? Arginine's purported health benefits may stem from its conversion to nitric oxide (NO) in cells that line the inside of your blood vessels. Nitric oxide is a simple gas and a main ingredient in smog. Ironically, it is also the body's most potent blood vessel expander and main blood pressure regulator. The discovery of nitric oxide's crucial role in heart health earned three American scientists the Nobel Prize for Medicine in 1998.

Helping your heart

In their current book, *The Arginine Solution*, Drs. Robert Fried and Woodson C. Merrell note that as people age and develop such disorders as hypertension, elevated cholesterol, and atherosclerosis, their ability to make sufficient amounts of nitric oxide from arginine is impaired, contributing to a further decline in their cardiovascular health. Drs. Fried and Merrell contend that increasing one's arginine intake can alleviate various disorders linked to decreased nitric oxide synthesis.

In his own practice, Dr. Merrell, assistant clinical professor at Columbia University Medical School, often includes arginine supplementation in a comprehensive treatment program for such disorders as hypertension, elevated cholesterol, cardiovascular disease, and impotence.

Reducing blood pressure

Several recent studies confirming arginine's antihypertensive effect have piqued public curiosity about this supplement. For example, in a 1998 Italian study, daily oral doses significantly reduced systolic blood pressure in patients with borderline hypertension.

Lowering cholesterol

Arginine also appears to benefit individuals with high cholesterol. In 1997, Stanford researchers showed that in people with elevated cholesterol, arginine reduced the tendency of blood platelets to clump, potentially lessening the risk of heart attacks and strokes. An earlier study at Sinai Hospital in Baltimore

found that two weeks of arginine therapy reduced total and LDL ("bad") cholesterol but had no effect on HDL ("good") cholesterol in healthy elderly volunteers.

Relieving angina

A 1998 Mayo Clinic study found that patients with early heart disease who took arginine supplements for six months had better blood flow to the heart and less angina compared with a placebo group. And Polish scientists showed that arginine increased the exercise capacity of patients with angina who had had a heart attack.

Improving function in heart disease

Arginine apparently can also help people with heart failure or blood vessel disease. For instance, University of Minnesota researchers reported that taking arginine for six weeks improved blood flow and walking distance in people with heart failure, and a 1998 German study found that it helped those with severe intermittent claudication (leg pain associated with atherosclerosis of arteries in the leg).

Other potential benefits

Preliminary evidence suggests that the supplement may also boost immunity, reverse impotence, and forestall many of the complications of diabetes. For example, it is known that the immune system can kill infectious microbes, from Salmonella to Chlamydia, by emitting a puff of nitric oxide. Several studies have now shown that arginine supplements can activate the immune system and spur wound healing after surgery or trauma.

In addition, impaired nitric oxide production has been identified as a factor in impotence, and arginine has been reported to restore erectile function in some men.

Finally, arginine blood levels are often reduced in diabetes, and some evidence suggests that arginine can slow the progression of atherosclerosis in those with the disease. It should not, however, be taken by people with diabetic retinopathy.

Cautions

As with any product, caution is advised. You should probably avoid arginine if you are taking Viagra or nitroglycerin, because these drugs also widen blood vessels. There is a theoretical risk that it might worsen some conditions, such as migraines, rheumatoid arthritis, Crohn's disease, kidney disease, cirrhosis, and breast cancer, particularly at higher than recommended doses. But overall, arginine is generally considered very safe. Consult your doctor before taking it.

Suggested dose:

Arginine is sold as L-arginine, the naturally occurring form of the amino acid. Begin with 1 gram 3 times a day, taken morning, noon, and night. Results should begin to appear in a month or two. If needed, increase the daily dose to a maximum of 6 grams (in three divided doses). Ingest with carbohydrates rather than protein, which can hinder absorption. Because arginine can interfere with the action of lysine, another amino acid and an effective herpes virus fighter, Dr. Merrell recommends that those at risk for cold sores or genital herpes also take the amino acid lysine (500 mg) daily.

Further reading:

Robert Fried, Ph.D., and Woodson C. Merrell, M.D., *The Arginine Solution*
(Warner Books, 1999)

Copyright 1998-2004 WholeHealthMD.com, LLC. All rights reserved. Reproduction in whole or in part without permission is prohibited. [Privacy Policy](#)

Disclaimer: All material provided in the WholeHealthMD website is provided for educational purposes only. Consult your own physician regarding the applicability of any opinions or recommendations with respect to your symptoms or medical condition.