

SUSTAINED RELEASE

L-ARGININE



Promotes healthy blood vessel function

WHAT IS IT?

L-Arginine is a sustained-release dietary supplement providing the amino acid L-arginine. The vegetable-based, wax-matrix tablet is formulated for a slow, steady release of L-arginine over 4 to 6 hours. This gradual release promotes optimal absorption and tissue retention of L-arginine without the need to consume excessive amounts typically required with regular immediate-release forms.

HOW DOES IT WORK?

L-Arginine is one of the body's most metabolically versatile amino acids, supporting immune health, detoxification, protein synthesis, hormone regulation, fertility, nitric oxide production and more.

Interestingly, L-arginine in sustained-release form has recently been suggested to have neuroprotective benefits for the treatment of patients with Parkinson's disease.¹

WHO CAN BENEFIT?

Adults interested in nutritional support for blood vessel health, including endothelial function and optional blood flow.

PRODUCT AVAILABILITY

Bottle Size(s):
180, 400 tablets

PRACTITIONER DISTRIBUTION

- Emerson® Ecologics (www.emersonecologics.com)
- Fullscript™ (www.fullscript.com)
- WholeScript™ (www.wholescript.com)



Supplement Facts

Serving Size 3 Tablets

Amount Per 3 Tablets	% DV
L-Arginine (as arginine alpha-ketoglutarate)	1050 mg *

* Daily Value (DV) not established.

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

Suggested Use: For adults, take three (3) tablets twice daily, preferably with meals, or as directed by your healthcare practitioner.

1. Van Dyke K. *Clin Res Hematol*. 2018;1(1):1-7.

RESEARCH HIGHLIGHTS

L-Arginine supplementation improves endothelial dysfunction, meta-analysis shows

Highlights

- Meta-analysis of 13 randomized, placebo-controlled clinical trials
- Changes in endothelial function measured by fasting flow-mediated dilation (FMD)
- L-Arginine significantly increased FMD in presence of endothelial dysfunction (FMD less than 7%)

Study Aim

This meta-analysis² was designed to investigate the effect of oral L-arginine supplementation on endothelial function, as measured by fasting flow-mediated dilation (FMD).

Summary

Eligible for inclusion were randomized, placebo-controlled L-arginine supplementation trials evaluating endothelial function. Trials were identified in PubMed, Cochrane Library, Embase, reviews, and reference lists of relevant papers.

The weighted mean difference (WMD) was calculated for net changes in FMD by using random-effect models. Subgroup analyses and meta-regression analyses were performed to explore the influence of study characteristics.

Thirteen trials met the inclusion criteria and were included in the analysis. Studies had significant heterogeneity largely explained by the baseline FMD. The average age of the patients varied from 12 to 74 years, dosages of L-arginine ranged from 3 to 24 g/day, typically in split doses 2-3 times daily. Treatment duration varied from 3 days to 6 months. Because there was only one long-term study (3 g/day for 180 days), the researchers focused on short-term effects of L-arginine (12 studies, 492 participants).

Results

In an overall pooled estimate, L-arginine significantly increased FMD (WMD: 1.98%; 95% CI: 0.47, 3.48; $P=.01$).

Meta-regression analysis reveals baseline FMD was inversely related to effect size. A subgroup analysis indicates L-arginine supplementation significantly increased FMD when the baseline FMD levels were less than 7% (WMD: 2.56%; 95% CI: 0.87, 4.25; $P=.003$), but had no effect when baseline FMD levels were greater than 7% (WMD: -0.27%; 95% CI: -1.52, 0.97; $P=.67$).

Conclusion

These findings suggest short-term supplementation with L-arginine effectively improves fasting vascular endothelial function when baseline FMD is low.

2. Bai Y, et al. *Am J Clin Nutr*. 2009;89(1):77-84.