

# Nitric Oxide Formula

Support for Healthy Nitric Oxide Levels  
and Vascular Health



## DESCRIPTION

Nitric Oxide Support Formula is a combination of ingredients designed to support healthy nitric oxide levels and to support the integrity of the blood vessel wall.

## FUNCTIONS

Arginine, a semi-essential amino acid, is involved in numerous areas of human biochemistry, including ammonia detoxification, hormone secretion, and immune modulation. Arginine is also well known as a precursor to nitric oxide (NO), a key component of endothelial-derived relaxing factor, an endogenous messenger molecule involved in a variety of endothelium-dependent physiological effects in the cardiovascular system. Because of arginine's NO-stimulating effects, it can be utilized in therapeutic regimens for angina pectoris, congestive heart failure, hypertension, coronary heart disease, preeclampsia, intermittent claudication, and erectile dysfunction. In addition, arginine has been studied in the treatment of HIV/AIDS, athletic performance, burns and trauma, cancer, diabetes and syndrome X, male and female infertility, interstitial cystitis, immunomodulation, and senile dementia.

Dietary intake remains the primary determinant of plasma arginine levels, since the rate of arginine biosynthesis does not increase to compensate for depletion or inadequate supply. In adults, most endogenous arginine is derived from citrulline, a by-product of glutamine metabolism in the gut or liver. Citrulline is released into the circulation and taken up primarily by the kidney for conversion into arginine. Significant adverse effects have not been observed with arginine supplementation. It has been postulated that arginine supplementation is contraindicated in persons with herpes infections. The assumption is that arginine might stimulate replication of the virus and/or provoke an outbreak. However, this caution has not been validated by controlled clinical trials.

L-citrulline is the natural precursor of L-arginine. However, unlike L-arginine, L-citrulline is not metabolized in the intestine or liver and does not induce tissue arginase. Rather L-citrulline inhibits the activity of arginase. L-citrulline entering the kidney, vascular endothelium and other tissues can be readily converted to L-arginine, thus raising plasma and tissue levels of L-arginine and enhancing NO production. L-citrulline is a valuable therapeutic adjunct when treating disease states associated with L-arginine deficiency. Proline and lysine are included in the formulation for their roles in supporting the integrity of the blood vessel wall.

## INDICATIONS

As described previously, the ingredients found in Nitric Oxide Support Formula can provide a valuable support function in various NO-dependent pathways of human biochemistry.

## CLINICAL NOTES

Persons with kidney or liver disorders or individuals taking blood thinning, blood pressure or erectile dysfunction medications should consult with their healthcare practitioner prior to using this product.

## FORMULA (WW #10365)

### One Scoop Contains:

L-citrulline .....	3,000 mg
L-arginine.....	3,000 mg
L-proline .....	1,000 mg
L-lysine .....	250 mg
Stevia leaf extract.....	180 mg

Other Ingredients: Citric acid, pineapple juice powder, tropical fruit punch flavor, silica, beet juice powder.

## SUGGESTED USE

As a dietary supplement, mix one scoop (10.3 gm) per day in 8 oz juice or water and take on an empty stomach or as directed by a healthcare practitioner.

## CAUTION

Discontinue use 2 weeks prior to surgery. Jar contains desiccant to reduce moisture and clumping. Do not eat desiccant. If inner seal is broken, do not use. This product is packaged by weight, not by volume. Some settling may occur.

## STORAGE

Store in a cool, dry place, away from direct light. Keep out of reach of children.

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## REFERENCES

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- Wu G, Meininger CJ. Arginine nutrition and cardiovascular function. *J Nutr* 2000; 130: 2626-2629.
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- Elam RP. Effect of arginine and ornithine on strength, lean body mass and urinary hydroxyproline in adult males. *J. Sports Nutr* 1989;29:52-56.
- Zorgniotti AW, Lizza EF. Effect of large doses of the nitric oxide precursor, L-arginine, on erectile dysfunction. *Int J Impot Res* 1994;6:33-36.
- Chen J, Wollman Y, Chernichovsky T, et al. Effect of oral administration of high-dose nitric oxide donor L-arginine in men with organic erectile dysfunction: results of a double-blind, randomized study. *BJU Int* 1999;83: 269-273.

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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.