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Review Article: L-Arginine as a Nutritional Prophylaxis Against Vascular Endothelial Dysfunction With Aging

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Abstract

With advancing age, peripheral conduit and resistance arteries lose the ability to effectively dilate owing to endothelial dysfunction. This vascular senescence contributes to increased risk of cardiovascular disease (CVD) with aging. L-arginine plays a role in numerous physiological processes including nitrogen detoxification, immunocompetence, growth hormone (GH) secretion, and insulin secretion. Recently, a considerable amount of attention has been placed on the ability of this amino acid to affect vascular endothelial function. The purpose of this review will be to examine the use of L-arginine as a novel nutritional strategy to potentially stave progression of vascular dysfunction with aging and CVD. Emphasis will be placed on the ability of L-arginine to modulate the vascular inflammatory and systemic hormonal milieu, which in turn may have a positive effect on vascular endothelial function.

[vascular](#) [endothelial](#) [inflammation](#) [growth hormone](#)