

Abstract

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A multifaceted approach to maximize erectile function and vascular health.

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OBJECTIVE: To review the role of various factors influencing vascular nitric oxide (NO) and cyclic GMP, and consequently, erectile function and vascular health.

METHOD(S): Pertinent publications are reviewed.

RESULT(S): Daily moderate exercise stimulates vascular NO production. Maintenance of normal body weight and waist/hip ratio allows NO stimulation by insulin. Decreased intake of fat, sugar, and simple carbohydrates rapidly converted to sugar reduces the adverse effects of fatty acids and sugar on endothelial NO production. Omega-3 fatty acids stimulate endothelial NO release. Antioxidants boost NO production and prevent NO breakdown. Folic acid, calcium, vitamin C, and vitamin E support the biochemical pathways leading to NO release. Cessation of smoking and avoidance of excessive alcohol preserve normal endothelial function. Moderate use of alcohol and certain proprietary supplements may favorably influence erectile and vascular function. Treatment of any remaining testosterone deficit will both increase erectile function and reduce any associated metabolic syndrome. After production of NO and cyclic GMP are improved, use of phosphodiesterase-5 inhibitors should result in greater success in treating remaining erectile dysfunction. Recent studies have also suggested positive effects of phosphodiesterase-5 inhibitors on vascular function.

CONCLUSION(S): A multifaceted approach will maximize both erectile function and vascular health.

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