

*Carotenoid intake is associated with lower risk of metabolic syndrome*

Metabolic syndrome is a condition characterized by abdominal obesity, impaired glucose tolerance, abnormal cholesterol and triglyceride levels in the blood, and high blood pressure. These metabolic abnormalities increase a person's risk for cardiovascular disease and type 2 diabetes, two chronic diseases of great concern in the United States today. Carotenoids, such as beta-carotene and lycopene, are compounds found primarily in fruits and vegetables that are known to have antioxidant properties. As such, it has been hypothesized that increasing carotenoids in the diet could protect against chronic diseases.

A recent study of 374 men, 40-80 years of age, investigated the association between carotenoid intake and various markers of metabolic syndrome (1). Participants reported their food intake over the previous year, from which carotenoid intakes were calculated. Waist circumference and body fat were measured to assess abdominal obesity. Blood samples were collected to measure cholesterol, triglyceride, and glucose levels of participants. The researchers discovered that men who consumed larger amounts of carotenoids, especially beta-carotene and lycopene, were less likely to have metabolic syndrome. This study supports prior research suggesting that diets containing ample fruits and vegetables, good sources of carotenoids, may be protective against chronic diseases.

*Adapted from:*

1. Sluijs I, Beulens JWJ, Grobbee DE, van der Schouw YT. Dietary carotenoid intake is associated with lower prevalence of metabolic syndrome in middle-aged and elderly men. *J Nutr* 2009;139:987-92.