Metabolic Syndrome and the Components of the Mediterranean Diet

Maria Luz Fernandez

Department of Nutritional Sciences, the University of Connecticut
3624 Horsebarn Road Extension, Storrs, CT 06269, USA

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Corresponding author: Maria Luz Fernandez, PhD, Professor

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Abstract
Metabolic Syndrome (MetS) is a cluster of metabolic abnormalities known to increase heart disease risk by two-fold and type 2 diabetes risk by five-fold. These disturbances include dyslipidemias, hypertension, hyperglycemia and central adiposity in addition to insulin resistance and low grade inflammation. The prevalence of MetS is about 34% in the United States with variations according to ethnicity and race. Lifestyle factors including smoking, lack of exercise, poor dietary habits as well as low socioeconomic status are associated with the development of MetS. Diet is considered one of the major contributors to MetS. Adherence to the Mediterranean diet (high intake of whole grains, fruits and vegetables, olive oil, fish, low-fat dairy products, and moderate wine consumption) has been associated with lower prevalence of MetS. Interventions utilizing this dietary approach have proven to be successful in reducing some of the associated metabolic abnormalities. In this review, evidence from epidemiological and clinical studies showing the benefits of the Mediterranean diet is presented. The effect of the specific components of the Mediterranean diet is also discussed.