

Effects of the Mediterranean diet on the prevention and treatment of metabolic syndrome and associated disorders

Vesna Dimitrijevic Sreckovic

Clinic for Endocrinology, Diabetes and Metabolic Diseases, University Clinical Center of Serbia,
Faculty of Medicine, University of Belgrade

Three decades ago, the Unit for Nutrition and Diabetes Prevention, Institute of Endocrinology, Diabetes and Metabolic Diseases assembled Mediterranean menus rich in complex carbohydrates, dietary fiber, monounsaturated fats and omega-3 polyunsaturated fats, and low in saturated fat. The menus have shown to be of great success in obese individuals and patients with metabolic syndrome, prediabetes, diabetes and other chronic complications.

The effects of the Mediterranean diet are manifested through the beneficial effects of monounsaturated fatty acids of olive oil, omega 3 fatty acids, increased intake of dietary fiber from fruits, vegetables and legumes and reduced intake of saturated fats of animal origin. Olive oil has beneficial effects on regulating blood pressure and lowering cholesterol levels. Omega-3-polyunsaturated fatty acids have anti-inflammatory and antithrombotic effects, lower triglycerides and increase insulin sensitivity. Reducing saturated fatty acids lowers serum lipids and reduces the risk of thrombosis. Fruits, vegetables and legumes are a source of antioxidants, potassium, which regulates blood pressure, folic acid, which has a beneficial effect on homocysteine, soluble fiber, which reduces reduced fat absorption, lowers cholesterol and increases HDL-cholesterol.

Our results show that the Mediterranean diet has a statistically significant effect on body mass index, reduction of obesity, insulin resistance, glycoregulation, lipid status, blood pressure, prevention and treatment of vascular complications, non-alcoholic fatty liver, sexual dysfunction, polycystic ovary syndrome, infertility, depression and cancer.