

Mediterranean Diet Found Again to Play Significant Role in Reducing Heart Disease Risk Factors

By Greg Arnold, DC, CSCS, July 20, 2006, abstracted from "Effects of Mediterranean-Style Diet on Cardiovascular Risk Factors" in the July 4, 2006 issue of the *Annals of Internal Medicine*

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Even though it's the main cause of death in industrialized countries, deaths resulting from heart disease "differ markedly" across geographic regions¹ and have been at least "partly ascribed to dietary habits."² Results from recent large European studies^(3, 4) suggest that "a high degree of adherence to the Mediterranean diet is associated with a reduction in mortality".

The health benefits of the Mediterranean Diet have been shown to be very diverse, including helping maintain normal blood pressure levels,⁵ improving blood lipid profiles,⁶ and supporting normal blood vessel function.⁷ Mediterranean Diets have also been found to [increase antioxidant levels](#)⁸ and [play no role in obesity](#).⁹ Finally, a recent cross-sectional study¹⁰ and a two-year feeding trial¹¹ have shown that adherence to the Mediterranean diet is associated with reduced markers of vascular inflammation.

Now a new study¹² has found that the Mediterranean diet still outperforms low-fat diets in helping reduce the risk of heart disease.

In the study, researchers recruited over 900 patients enrolled in the PREDIMED study¹³ 55 to 80 years of age who had three or more heart disease risk factors: current smoking, high blood pressure (above 140/90 mm Hg), high LDL cholesterol (above 160 mg/dL), low HDL cholesterol (below 40 mg/dL), high body mass index (above 25 kg/m²), or family history of heart disease.

They were then assigned to one of three different diets for three months. The first diet was a low-fat diet where participants were told to reduce intake of all types of fat and given a leaflet with written recommendations according to the American Heart Association guidelines.¹⁴ The other two diets were variations of the Mediterranean Diet in terms of fat content. Whereas patients in the first diet were given one liter of virgin olive oil per week, participants in the other diet were given free sachets of walnuts (1350 g per week), hazelnuts (675 g per week), and almonds (675 g per week). Throughout the study, all participants had free and continuous access to their dietitian for advice and consultation.

The researchers found that compared with the low-fat diet, the two Mediterranean diets produced "beneficial changes" in most of the risk factors for heart disease, including significant decreases in blood sugar, as much as a 7.1 mm Hg drop in systolic blood pressure (the top number), improvements in the ratio of total cholesterol to HDL cholesterol, and a significant decrease in C-reactive protein, a marker of inflammation, by 0.54 mg/L.

For the researchers, "our results suggest that the healthy effects of the Mediterranean diet are exerted partly through...improved lipid profiles and reductions in blood pressure, insulin resistance, and systemic markers of inflammation."

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