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Reduction of LDL and Total Cholesterol Levels with Kalamon Table Olive Extract: A Natural Approach to Dyslipidemia

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The present study investigated the effects of a nutritional supplement derived from high-phenolic Kalamon cultivar table olives from the Sparti region of Greece on lipid parameters in individuals with mild dyslipidemia. The supplement, which corresponds to the consumption of five table olives daily, was produced through a process involving the removal of olive oil, the extraction of tyrosol, hydroxytyrosol and lactic acid, and the removal of water and salt. In a 30-day clinical analysis, volunteers with mild dyslipidemia were enrolled and instructed to take two capsules daily, while maintaining a healthy lifestyle and diet. The results revealed significant reductions in total cholesterol (4.16%) and low-density lipoprotein (LDL) cholesterol (5.67%) levels following supplementation. Although the triglyceride levels exhibited a modest reduction, the difference in these levels did not reach statistical significance. High density lipoprotein cholesterol levels were not affected throughout the study period. The individualized responses to supplementation were observed in all lipid parameters, with varying ranges in initial and final measurements among the participants. These findings suggest that the nutritional supplement may have beneficial effects on reducing total cholesterol and LDL cholesterol levels, highlighting the potential health benefits of the phenolic compounds found in table olives, particularly hydroxytyrosol and tyrosol, related to cardiovascular well-being and metabolic health. However, further research is required to confirm these results and investigate the underlying mechanisms.

Keywords: Kalamon; table olive; hydroxytyrosol; tyrosol; lipid profile; cardiovascular.