A PRIORI-DEFINED MEDITERRANEAN-LIKE DIETARY PATTERN PREDICTS CAROTID INTIMA MEDIA THICKNESS PROGRESSION AND VASCULAR EVENTS IN A LARGE EUROPEAN COHORT

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Mediterranean Diet is a dietary pattern known to be protective against cardiovascular events but whether this dietary pattern is associated with carotid atherosclerosis progression is still debated. The aim of this study is to investigate the association between the degree of adherence to a Mediterranean-like dietary pattern (MLDP) and 15 month carotid intima media thickness (cIMT) progression. The IMPROVE is an observational longitudinal prospective cohort study involving 3,703 high-risk individuals from five European countries (Finland, Sweden, Netherlands, France and Italy). At baseline, a food-frequency questionnaire about the usual intake during the year preceding the enrollment was administered. Based on seven nutritional items, a MLDP score was constructed. The validity of our MLDP score was confirmed by the significant inverse association with the incidence of vascular events (hazard ratio = 0.75, p<0.001 for one step increase in the score). Concerning the main endpoints, the MLDP score strongly associated with several measures of cIMT progression, even after adjustment for confounders (Ptrend from 0.05 to 0.001). The MLDP effect was greater in the North than in the South Europe. We conclude that the MLDP score based on a simple food frequency questionnaire detects changes of cIMT progression. North Europeans appear as the best candidates for intervention programs based on Mediterranean Diet.