Higher adherence to the Mediterranean Diet is associated with weight loss maintenance: the MedWeight study

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Abstract

Introduction: Adherence to the Mediterranean dietary pattern has been associated with numerous health benefits in non-communicable diseases, including obesity management. However, the associations of the Mediterranean Diet with weight loss maintenance remain to be evaluated.

Methods: We analyzed data from 500 participants (61% women) of the MedWeight study. Eligible volunteers were men and women 18–65 years old, reporting an intentional weight loss of at least 10%, starting from a BMI ≥ 25 kg/m². Based on their current weight, participants were characterized as maintainers (current weight ≤ 90% of maximum weight), or regainers (current weight > 95% of maximum weight). Socio-demographics, lifestyle measurements and weight history were recorded. Dietary intake was assessed by 2 telephone 24-hour recalls. Adherence to the Mediterranean Diet was assessed with the MedDietScore (range 0–55, greater scores showing higher adherence). Physical activity levels were assessed with the International Physical Activity Questionnaire-short form. Results are expressed as means ± SD, frequencies (%) or Odds Ratio [OR; 95% Confidence Interval].

Results: Compared to regainers (31%), maintainers were younger (31.4 ± 10.0 vs. 36.6 ± 10.8 years, p < 0.001), had lower BMI (25.7 ± 4.3 vs. 31.4 ± 5.1 kg/m², p < 0.001), and had greater initial body weight loss (25.5 ± 8.6% vs. 18.4 ± 6.9%, p < 0.001). Sex and years of formal education were not significantly different between maintainers and regainers (p > 0.05). Being in the highest MedDietScore quintile (vs. the lowest) was associated with 91% higher odds of being a maintainer [crude OR = 1.91; 1.05–3.45]. This association remained significant after adjusting for sex, age, physical activity level (MET-minutes/week) and energy intake (kcal/day) [adjusted OR = 2.01; 1.05–3.83].

Discussion: Higher adherence to the Mediterranean Diet was independently associated with 2-fold increased likelihood of weight loss maintenance. Our results highlight the favorable effects of a prudent dietary pattern in long-term obesity management, as well as novel targets for diet planning during weight loss maintenance.

Conflict of Interest
There is no conflict of interest.