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150 - EFFECT OF THE MEDITERRANEAN DIET ON BMI AND BODY COMPOSITION: A PRELIMINARY PRE-POST INTERVENTION STUDY IN PEDIATRIC OVERWEIGHT PATIENTS

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Resumen

Background/Objectives: The aim of this pilot study was to assess the impact of the Mediterranean diet (MD) on anthropometric measures, including BMI, fat-free mass, fat mass, and total body water, in overweight pediatric patients.

Methods: This nutritional intervention was carried out on 33 pediatric patients (aged between 7 and 17 years (mean age = 11.88 years) with excess weight. Anthropometric measurements, a lipid profile, a glucose profile, and abdominal ultrasound data were collected during the initial visit. At the follow-up visit, anthropometric and body composition data were collected again. Adherence to the MD was assessed using the KIDMED questionnaire. The study was conducted from February 2024 to July 2024.

Results: At the start, hepatic steatosis was present in 90% of patients, 30% had abnormal cholesterol and triglyceride levels, 10% had normal HDL cholesterol, 20% were insulin-resistant, and 82% of the children were likely to become obese adults based on age- and sex-specific BMI cut-offs proposed by Cole et al., which extrapolate childhood BMI percentiles to predict adult obesity risk. After treatment, BMI decreased, primarily due to an increase in height and either a reduction or maintenance of weight. There was a small reduction in fat-free mass, but this change was minimal. In contrast, a more significant decrease in fat mass and increase in total body water were observed.

Conclusions/Recommendations: These results suggest that dietary treatment led to body recomposition. The results confirm the global concern regarding pediatric obesity. The MD led to favorable changes in body composition, but further studies with larger samples and control groups are needed to assess the long-term effectiveness of dietary treatment.