

Topic Area: Nutritional Assessment and Therapy

Abstract Title

Beyond DASH: Examining the efficacy of the Mediterranean diet as a nutritional strategy for overweight or obese hypertensive children A systematic review.

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Abstract

Introduction: The Mediterranean diet (MedDiet) is believed to be one of the healthiest dietary patterns and is associated with reduced cardiovascular risk and better weight management. For these reasons, consideration for its use as a therapeutic option for primary pediatric hypertension (PPH) is warranted.

Objectives: a) to update research in PPH and b) to provide Registered Dietitians (RD) with evidence-based therapeutic guidelines for treatment.

Methods: A literature search, using Summons and PubMed databases, was conducted from November 2018 to February 2019 using the keywords: *hypertension, high blood pressure, overweight, obese**, *Mediterranean diet, child**, *adolescent**, *youth**. Additionally, a manual review of reference lists of each article was conducted. One hundred and thirty-six original research articles were considered. Including: English publications (2009-2019); specific reference to MedDiet; children, adolescents, and youth between 9-21 years of age; comorbidities including obesity, diabetes, and metabolic syndrome. Exclusion criteria: animal studies; use of MedDiet for medical conditions other than those stated above and adult studies. Twelve full-text articles were obtained and included in the review.

Results: In those with greater adherence to the MedDiet there is lower indices of arterial stiffness; prevalence of metabolic syndrome; lower BMI; visceral adiposity and obesity; lower BP; better lipid and blood glucose profiles and healthier metabolic profile overall.

Conclusions: Research supporting the use of the MedDiet as a therapeutic strategy for PPH remains limited. There is convincing evidence for cardiometabolic risk reduction and weight management with the inclusion of fruit and vegetables, whole grains, legumes, nuts and seeds, fish as well as olive oil, key components of the MedDiet.

Significance to Dietetics Practice: An RD-supervised nutrition care plan that focuses on the Mediterranean diet may prove to be an effective tool for overweight or obese PPH patients.