

INTRODUCTION: Cardiovascular diseases (CVD) remain the leading cause of morbidity and mortality worldwide, presenting significant public health and economic challenges. Diet quality seems to be a key modifiable factor in CVD prevention.

OBJECTIVES: This study aimed to explore the impact of diet quality within vegetarian (VEG) and omnivorous (OMN) dietary patterns on cardiometabolic markers and the 10-year cardiovascular risk.

METHODOLOGY: Diet quality was assessed using the Mediterranean Diet Adherence Screener for the OMN group and the Healthful Plant-Based Diet Index for the VEG group. Blood pressure and heart rate were measured. Metabolic markers including glycated hemoglobin (HbA1c), fasting blood glucose, triglycerides, total cholesterol (TC), high-density lipoprotein cholesterol (HDL-c), low-density lipoprotein cholesterol, very-low-density lipoprotein cholesterol, TC/HDL-c ratio, and non-HDL-c levels, were analyzed from capillary blood samples collected after overnight fasting. The 10-year CVD risk was estimated using the Framingham risk score.

RESULTS: A total of 234 participants were analyzed, including 140 in the OMN group and 94 in the VEG group. The VEG group exhibited greater adherence to a high-quality diet compared to the OMN group. However, HbA1c levels were significantly higher in the VEG group than in the OMN group (OR 4.865, 95% CI 1.410–16.792). No significant differences were found within dietary groups when comparing low- and high-quality diets. Nonetheless, in the low-quality diet subgroup, the VEG group showed higher HbA1c levels (OR 4.935, 95% CI 1.073–22.696) than the OMN group. No significant differences were found in the estimated 10-year CVD risk.

CONCLUSIONS: The VEG diet was associated with higher HbA1c levels compared to the OMN diet, particularly in the low-quality diet subgroup. These findings suggest that, despite the potential benefits of plant-based diets, inadequate diet quality may contribute to poorer metabolic control, reinforcing the need for nutritional guidance to optimize health outcomes.

PO70. ADHERENCE TO THE MEDITERRANEAN DIET DURING CHILDHOOD AND ASTHMA RISK IN ADOLESCENCE: A PROSPECTIVE BIRTH-COHORT STUDY

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INTRODUCTION: The Mediterranean diet (MD) is recognized for promoting both planetary sustainability and human health. Asthma – a disease characterized by airway inflammation – has been suggested to be influenced by diet. Although individual foods and nutrients have shown results in countering oxidative stress and inflammation, relatively few studies have explored how dietary patterns, like the MD, may protect against asthma.

OBJECTIVES: Considering this, we aimed to study the association between adherence to the mediterranean dietary pattern during childhood with asthma diagnosis in adolescence.

METHODOLOGY: This study includes a total of 2778 participants from Generation 21, a prospective population-based birth cohort. Adherence to the MD was measured by the alternate Mediterranean score (aMED, range 0–8, with higher scores indicating healthier diets) based on 3-day food diaries at age 7. To classify adherence to the MD, the median value of the sample was used (≤ 4 – low adherence; > 4 – high adherence). Asthma at age 13 was assessed based on a

parent reported medical diagnosis. Associations between adherence to the aMED at age 7 with asthma diagnosis at 13 years old were assessed using adjusted logistic regression models (odds ratio and confidence intervals, OR, 95%CI).

RESULTS: A total of 47.4% of the participants were girls and 52.6% were boys. Asthma prevalence was 9.1%. Regarding adherence to the aMED, 30.8% of children had a high adherence (> 4 points) and 69.2% were considered to have low adherence (≤ 4 points). A higher adherence to the MD at age 7 was associated with lower odds of asthma at 13 years old (aOR=0.73; CI95% 0.54–0.996; p-value=0.047).

CONCLUSIONS: In summary, children with higher adherence to the MD had significantly lower odds of having asthma by age 13. These findings suggest that a higher adherence to the Mediterranean diet during early childhood may help protect against the development of asthma in adolescence.

PO72. DIET QUALITY IN OMNIVOROUS AND VEGETARIANS: IMPACT ON CARDIOVASCULAR RISK, LIPID PROFILE AND BODY COMPOSITION

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INTRODUCTION: Diets with reduced or no consumption of animal products have been associated with better body composition and lipid profile values, and consequently, with a lower cardiovascular risk.

OBJECTIVES: To evaluate 10-year cardiovascular risk (RCV10) and its risk factors in Vegetarian (VG) and Omnivorous (OM) individuals.

METHODOLOGY: A cross-sectional study including 44 individuals (23 VG and 21 OM) was performed. Body composition was assessed using dual-energy X-ray absorptiometry (DXA), biochemical parameters were obtained using capillary blood and RCV10 was calculated using SCORE2. The diet quality was calculated with the MEDAS questionnaire for OM and the healthy plant-based diet index (hPDI) for VG individuals.

RESULTS: No differences were observed in the 10-year cardiovascular risk between groups ($p = 0.617$). However, OM individuals with a Mediterranean diet adherence score ≥ 10 exhibited lower body fat mass (OM: 25.79% vs. VG: 32.12%; $p = 0.003$) and visceral adipose tissue (OM: 338.76 cm³ vs. VG: 609.04 cm³; $p = 0.023$) compared to VG individuals with high diet quality (hPDI ≥ 52). Conversely, VG individuals showed lower total cholesterol levels (OM: 198.05 mg/dL vs. VG: 173.48 mg/dL; $p = 0.013$) and slightly lower values of LDL cholesterol (OM: 110.65 mg/dL vs. VG: 173.48 mg/dL; $p = 0.062$) and non-HDL cholesterol (OM: 133.43 mg/dL vs. VG: 115.39 mg/dL; $p = 0.063$).

CONCLUSIONS: This study allows us to conclude that optimal cardiovascular health does not seem to be primarily determined by a specific dietary pattern, as both diets demonstrated distinct benefits. Instead, it appears to be determined by diet quality.

PO73. FOOD AND COOKING SKILLS AND MEDITERRANEAN DIETARY PATTERN IN ADULTS AND OLDER-ADULTS: A CROSS-SECTIONAL ANALYSIS

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