

INTRODUCTION: Further evidence of the impact of the economic crisis on diet behaviours and its association with children's weight is needed in order to understand the (un)healthy patterns of consumption and health outcomes in times of crisis. This is of particular importance given that a new, severe and global economic crisis is taking place due to the economic impact of the ongoing covid-19 pandemic.

OBJECTIVES: To explore the direct and indirect relationship of the 2008's economic recession with children's food patterns and body mass index (BMI), using food patterns as mediators.

METHODOLOGY: A total of 8,472 Portuguese children aged 3-10-year-old participated in this cross-sectional analysis. We collected data on children's consumption frequency of unhealthy foods, healthy foods, and parents self-reported effects of the economic crisis on the family, which were used to create an economic crisis impact score (ECIS). Children's height and weight were objectively measured and used to calculate the BMI. Structural equation modelling was used to estimate the associations between the ECIS, food consumption and child's BMI.

RESULTS: Families more affected by the crisis had higher consumption of unhealthy food items and a decreased in the consumption of healthy foods. Also, children whose parents scored higher in ECIS had higher BMI and the diet patterns (higher consumption of cakes, cookies and chocolates and lower intake of vegetable soup and salads) were a significant mediator of that relationship. The study shows that the 2008 economic crisis directly and indirectly impacted children's BMI, by influencing diet quality.

CONCLUSIONS: The importance of the study increases given that the world is facing a new economic crisis caused by the Covid-19 pandemic. We highlight that disparities in food intake are influenced by economic crisis, even after controlling for family socioeconomic status which is likely to pose important threats to the general commitment to ensure equal access to the health advantages associated with healthy dietary behaviours.

CO26. WHICH FOOD GROUPS SHOULD BE PROMOTED TO INCREASE ADHERENCE TO THE MEDITERRANEAN DIET? A CONTRIBUTION TOWARDS TARGETING INTERVENTIONS FOR SPECIFIC GROUPS IN THE PORTUGUESE POPULATION

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INTRODUCTION: Adherence to the Mediterranean Diet (MD) is positively related to life quality and health outcomes.

OBJECTIVES: To assess the adherence to MD and its relationships with sex, age and educational level.

METHODOLOGY: This cross-sectional observational study had 313 participants (12 to 86 years). Besides sociodemographic data, the adherence to MD was assessed with the Portuguese version of the Prevention with Mediterranean Diet tool (PREDIMED). The relationships between sociodemographic characteristics and MD adherence were analyzed through logistic regression analysis.

RESULTS: The adherence to MD was 31%, and increased with age ($p < 0.001$). Women had lower odds of fulfilling the MDP criteria related to wine ($\text{Exp}\beta = 0.26$; 95%CI: 0.13 to 0.54) but more likely to comply regarding fruit (1.74; 1.07 to 2.84), vegetables, (2.14; 1.32 to 3.47), white meat (1.99; 1.17 to 3.40) and olive oil as main fat (2.54; 1.07 to 6.07). Compliance with the MDP criteria for wine (1.04; 1.03 to 1.06), fruit (1.02; 1.00 to 1.03) and sweet beverages (1.02; 1.00 to 1.03) tends to increase with age. Furthermore, compliance with the MDP criteria for

nuts and sweet beverages were higher among participants with higher education when compared to those with those with less than 9 years of education (3.79; 1.76 to 8.18 and 2.63; 1.23 to 5.62, respectively). The preference for white over red meat was lower for those with secondary education (0.43; 0.19 to 0.98).

CONCLUSIONS: More than two thirds of the sample did not adhere to MD. This study identified which food groups should be promoted according to sex, age and education level, and intends to contribute towards targeting interventions to increase the adherence to MD in Portugal.

CO27. ADHERENCE TO THE PLANETARY HEALTH DIET INDEX AND LOWER ODDS FOR OVERWEIGHT: A CROSS-SECTIONAL ANALYSIS OF ELSA-BRASIL

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INTRODUCTION: The EAT-Lancet Commission has proposed a healthy and sustainable diet model to promote human and planetary health. The Planetary Health Diet Index (PHDI) was recently developed and validated based on these recommendations. However, associations with adherence to PHDI with health outcomes have not been evaluated already.

OBJECTIVES: To assess whether higher adherence to the PHDI is associated with a lower odds for overweight in participants in the Longitudinal Study on Adult Health (ELSA-Brasil).

METHODOLOGY: Cross-sectional study that used data from 14,516 participants from ELSA-Brasil. Food intake was obtained using a 114-item food frequency questionnaire and, based on these data, the PHDI was applied. PHDI has 16 components and a gradual score that can reach an overall score ranging from 0 to 150 points. Weight and height data were used to calculate BMI, which was categorized as adequate ($< 25 \text{ kg/m}^2$) and overweight ($> 25 \text{ kg/m}^2$). Multiple logistic regression models were used to investigate the associations between exposure and outcome, with adjustment for age, sex, self-reported race, *per capita* income, smoking, alcohol consumption, physical activity, chronic diseases (diabetes, hypertension and dyslipidemia) and total energy intake. Statistical analyses were evaluated using the Stata software version 14.0.

RESULTS: The PHDI mean was 60.3 (95% CI 60.1: 60.5). Among the participants, 63% were overweight. After adjustments, higher adherence (5th quintile) to PHDI decreased the odds of overweight by 23% (OR 0.77 95% CI 0.69: 0.86; $p < 0.001$) when compared to those in the 1th quintile.

CONCLUSIONS: The results showed that higher adherence to PHDI was responsible for decreasing the odds of overweight.

CO28. INCREASES IN PHYSICAL ACTIVITY AND REDUCTIONS IN SEDENTARY TIME ARE ASSOCIATED WITH A FASTER RATE OF WEIGHT LOSS DURING DIETARY ENERGY RESTRICTION IN WOMEN WITH OVERWEIGHT AND OBESITY

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