

Dietary patterns in the adult Portuguese population and its association with health

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Introduction: There is an increasing interest in understanding the association of dietary patterns (DPs) and health. We aimed to examine the association of dietary patterns and socioeconomic, demographic and other lifestyle factors, non-communicable diseases, anxiety and depression and quality of life in the adult Portuguese population.

Methods: We used follow-up data from 7591 Portuguese adults from the EpiReumaPt population-based study. A follow-up wave was performed from March 2013 to July 2015 with a structured interview, which aimed to collect dietary intake and health outcomes. Trained research assistants collected data by a computer assisted telephone interview. DPs were identified by cluster analysis, based on questions regarding the number of meals, weekly frequency of soup consumption, vegetables, fruit, meat, fish, dairy products and daily water intake. Estimates were computed as weighted proportions, taking the sampling design into account. Factors associated with DP were identified through logistic regression models.

Results: We identified two DPs: the “lower fruit and vegetables intake” DP, characterized by a reduced number of meals per week, lower frequency of consumption of soup, vegetables, fruit, fish, dairy products, less water intake and a higher frequency of meat consumption and the “higher fruit, vegetables and fish intake” DP, with a higher number of meals per week, higher frequency of consumption of soup, vegetables, fruit, fish, dairy products, high water intake and a lower frequency of meat consumption. After multivariable adjustment, women (OR=0.52; $p<0.001$), young adults (OR=0.97; $p<0.001$), lower years of education (OR=0.96; $p=0.025$), job insecurity and unemployment (OR=1.49; $p=0.013$) and living in Azores (OR=1.40; $p=0.026$), were significantly associated with the “lower fruit and vegetables intake” DP. Present smoking (OR=1.58; $p=0.001$), daily alcohol intake (OR=1.46; $p=0.023$) and physically inactive (OR=1.86; $p<0.001$) were significantly associated with this DP. Individuals with depression symptoms were more likely to report this DP (OR=1.50; $p=0.018$). Subjects with

“lower fruit and vegetables intake” DP report lower medical appointments in the previous year (OR=1.50; p=0.018).

Conclusion: Our results suggested that unhealthy DPs are part of a lifestyle behaviour that includes physical inactivity, smoking habits and alcohol consumption. Moreover, depression symptoms and lower medical follow-up might influence unhealthy DPs.