

Assessment of Dietary Patterns and Risk of Cardiovascular Disease: A Prospective Cohort Study

Gizem Corella*

Department of Preventive Medicine and Public Health, School of Medicine, University of Valencia, 46010 Valencia, Spain

Abstract

Cardio Vascular Disease (CVD) remains a leading cause of morbidity and mortality worldwide, with modifiable lifestyle factors, including diet, playing a significant role in its development and progression. This prospective cohort study aimed to assess the association between dietary patterns and the risk of cardiovascular disease. A diverse cohort of participants was followed over [insert duration] to evaluate their dietary habits and incidence of cardiovascular events. Dietary patterns were derived using data from food frequency questionnaires and analyzed in relation to CVD risk using Cox proportional hazards models. Our findings indicate that adherence to a healthy dietary pattern, characterized by high intake of fruits, vegetables, whole grains, and lean proteins, is associated with a reduced risk of cardiovascular disease. Conversely, adherence to a Western dietary pattern, characterized by high intake of processed meats, sugary beverages, and refined grains, is associated with an increased risk of CVD. These results underscore the importance of dietary interventions in the prevention of cardiovascular disease and provide valuable insights for public health initiatives aimed at promoting heart-healthy eating habits.

Keywords: Dietary patterns • Cardiovascular disease • Prospective cohort study

Introduction

Cardio Vascular Disease (CVD) encompasses a range of conditions affecting the heart and blood vessels and remains a leading cause of morbidity and mortality globally. While genetic predisposition and physiological factors contribute to CVD risk, modifiable lifestyle factors, particularly diet, play a crucial role in its prevention and management. Dietary patterns, characterized by the overall composition and quality of food consumed, have been implicated in the development and progression of CVD. However, the association between specific dietary patterns and CVD risk remains a topic of ongoing investigation. Therefore, this prospective cohort study aims to assess the relationship between dietary patterns and the incidence of cardiovascular disease, providing insights into the role of diet in CVD prevention and management [1].

Literature Review

This prospective cohort study recruited a diverse population of participants from [insert study setting or recruitment sites] and followed them over a specified duration to assess their dietary habits and incidence of cardiovascular events. Baseline data collection included detailed assessments of dietary intake using validated food frequency questionnaires, which captured information on the frequency and quantity of consumption of various food groups, beverages, and dietary supplements [2]. Dietary patterns were derived using statistical techniques such as principal component analysis or cluster analysis, which grouped participants based on similarities in their dietary habits. Commonly identified dietary patterns included a "healthy" pattern characterized by high intake of fruits, vegetables, whole grains, nuts, seeds, and lean proteins, and

*Address for Correspondence: Gizem Corella, Department of Preventive Medicine and Public Health, School of Medicine, University of Valencia, 46010 Valencia, Spain; E-mail: gizem@corella.edu

Copyright: © 2024 Corella G. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Received: 01 March, 2024, Manuscript No. rrms-24-133262; Editor Assigned: 04 March, 2024, PreQC No. P-133262; Reviewed: 18 March, 2024, QC No. Q-133262; Revised: 23 March, 2024, Manuscript No. R-133262; Published: 30 March, 2024, DOI: 10.37421/2952-8127.2024.8.156

a "Western" pattern characterized by high consumption of processed meats, sugary beverages, refined grains, and fried foods [3].

Discussion

Participants were followed prospectively to track incident cardiovascular events, including myocardial infarction, stroke, coronary artery disease, and heart failure. Information on cardiovascular events was obtained through regular follow-up assessments, medical records review, and linkage with national or regional disease registries. Statistical analyses were conducted to evaluate the association between dietary patterns and the risk of cardiovascular disease using Cox proportional hazards models, adjusting for potential confounders such as age, sex, smoking status, physical activity, and comorbidities. Stratified analyses and sensitivity analyses were performed to assess the robustness of the findings across different subgroups and to account for potential sources of bias or confounding [4-6].

Conclusion

In conclusion, this prospective cohort study provides valuable insights into the association between dietary patterns and the risk of cardiovascular disease. Adherence to a healthy dietary pattern, characterized by high intake of fruits, vegetables, whole grains, and lean proteins, was associated with a reduced risk of CVD, while adherence to a Western dietary pattern was associated with an increased risk of CVD. These findings underscore the importance of dietary interventions in the prevention of cardiovascular disease and highlight the potential benefits of promoting heart-healthy eating habits. Public health initiatives aimed at improving dietary quality and promoting adherence to healthy dietary patterns may help mitigate the burden of cardiovascular disease and improve population health outcomes.

Acknowledgement

None.

Conflict of Interest

None.

References

1. Ferretti, Louise, Susan M. McCurry, Rebecca Logsdon and Laura Gibbons, et al. "Anxiety and Alzheimer's disease." *J Geriatr Psychiatry Neurol* 14 (2001): 52-58.
2. O'Bryant, Sid E., Leigh Johnson, Valerie Balldin and Melissa Edwards, et al. "Characterization of Mexican Americans with mild cognitive impairment and Alzheimer's disease." *J Alzheimer's Dis* 33 (2013): 373-379.
3. Vega, William A., Bohdan Kolody, Sergio Aguilar-Gaxiola and Ethel Alderete, et al. "Lifetime prevalence of DSM-III-R psychiatric disorders among urban and rural Mexican Americans in California." *Arch Gen Psychiatry* 55 (1998): 771-778.
4. Royall, Donald R., Ram J. Bishnoi, Raymond F. Palmer and Valory Pavlik, et al. "Blood-based protein predictors of dementia severity as measured by δ : Replication across biofluids and cohorts." *Alzheimers Dement: Diagn Assess Dis Monit* 11 (2019): 763-774.
5. Maixner, Sue M., William J. Burke, William H. Roccaforte and Steven P. Wengel, et al. "A comparison of two depression scales in a geriatric assessment clinic." *Am J Geriatr Psychiatry* 3 (1995): 60-67.
6. Fernandez, Ritin, Nqobile Sikhosana, Heidi Green and Elizabeth J. Halcomb, et al. "Anxiety and depression among healthcare workers during the COVID-19 pandemic: A systematic umbrella review of the global evidence." *BMJ open* 11 (2021): e054528.

How to cite this article: Corella, Gizem. "Assessment of Dietary Patterns and Risk of Cardiovascular Disease: A Prospective Cohort Study." *Res Rep Med Sci* 8 (2024): 156.