



Adherence to the Mediterranean Diet and Its Association with Sustainable Dietary Behaviors, Sociodemographic Factors, and Lifestyle: An Online Survey in Italian and US University Students[†]

Cinzia Franchini *[®], Beatrice Biasini [®], Giovanni Sogari [®], Rungsaran Wongprawmas [®], Giulia Andreani [®], Francesca Scazzina [®] and Alice Rosi [®]

Department of Food and Drug, University of Parma, 43121 Parma, Italy; beatrice.biasini@unipr.it (B.B.); giovanni.sogari@unipr.it (G.S.); rungsaran.wongprawmas@unipr.it (R.W.); giulia.andreani@unipr.it (G.A.); francesca.scazzina@unipr.it (F.S.); alice.rosi@unipr.it (A.R.)

* Correspondence: cinzia.franchini@unipr.it

[†] Presented at the 14th European Nutrition Conference FENS 2023, Belgrade, Serbia, 14–17 November 2023.

Abstract: Background and objectives: The declining trend of the adherence to Mediterranean Diet (MD) and shift toward Western-type dietary patterns involve different age groups across the world, including young generations. University students are particularly involved in this process as university life exposes them to the risk of developing unhealthy dietary behaviors and diet-related chronic diseases in later life. In this context, the present cross-sectional study was aimed at investigating the level of adherence to the MD and its association with sociodemographic and anthropometric variables, and lifestyle-related factors, including the adoption of sustainable dietary behaviors, in two national representative samples of university students (18-24 years) living in Italy (IT) and in the United States (US). Methods: The adherence to the MD and sustainability of dietary behaviors were assessed by applying the KIDMED questionnaires and the Sustainable-HEalthy-Diet (SHED) Index, respectively. Both instruments provide a total score. In addition, the SHED Index includes six sub-scores (i.e., Healthy Eating, Sustainable Eating, Place of Purchase of Fruits and Vegetables, Prepared Meals, Water, and Soda). Results: The final samples consisted of 1434 and 1485 Italian and American students, respectively. Most of the participants had an average adherence to the MD (IT: 55%; US: 47%). In both populations, meeting physical activity recommendations, having a high SHED Index score, mainly consuming plant-based foods, being prone to purchase and eat healthy and sustainable dishes, and regularly attending the university canteen were the most powerful predictors of having a high adherence to the MD. Discussion: In this connection, a major promotion of the MD as a sustainable dietary pattern may be an effective strategy for its revitalization. Considering the positive influence that university canteen attendance has on students' eating habits, campuses and university dining services represent a unique opportunity to build a supportive environment that educates students about the effects of their actions and fosters human and planetary health.

Keywords: Mediterranean Diet; sustainable diet; healthy eating; food-related behavior; young adults

Author Contributions: G.S. is the principal investigator. G.S. conceptualized and designed the study together with C.F., B.B., R.W., G.A., F.S. and A.R. G.S. together with R.W. and G.A. coordinated the data collection. C.F. conducted the statistical analyses under the supervision of B.B. and A.R. C.F. wrote the original draft and B.B., R.W., G.S., G.A., F.S. and A.R. reviewed and edited the original version. All authors have read and agreed to the published version of the manuscript.

Funding: This research has financially been supported by the Programme "FIL-Quota Incentivante" of the University of Parma and co-sponsored by Fondazione Cariparma.

Institutional Review Board Statement: The study was conducted according to the guidelines of the Declaration of Helsinki and approved by the local institutional review board (Research Ethics



Citation: Franchini, C.; Biasini, B.; Sogari, G.; Wongprawmas, R.; Andreani, G.; Scazzina, F.; Rosi, A. Adherence to the Mediterranean Diet and Its Association with Sustainable Dietary Behaviors, Sociodemographic Factors, and Lifestyle: An Online Survey in Italian and US University Students. *Proceedings* **2023**, *91*, 19. https://doi.org/10.3390/ proceedings2023091019

Academic Editors: Sladjana Sobajic and Philip Calder

Published: 14 November 2023



Copyright: © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/).



Board, University of Parma, 85797, and Institutional Review Board for Human Participants, Cornell University, IRB0144167) and conducted according to the ethical principles stated in the Declaration of Helsinki. Each participant provided informed consent.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: The data collection tools used, and dataset generated during the present study may be made available by the corresponding author on reasonable request.

Conflicts of Interest: The authors declare no conflict of interest.

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.