Gac Sanit. 2026;40(S4):281

Gaceta Sanitaria

https://www.gacetasanitaria.org

65 - METABOLIC AND ENVIRONMENTAL BENEFITS OF FOLLOWING THE HEALTHY AND SUSTAINABLE DIETARY RECOMMENDATIONS FOR THE SPANISH POPULATION: THE AWHS STUDY

C. Torrijo Belanche, S. Gimeno Ruiz, P. Guallar Castillón, A. Muñoz Cabrejas, B. Moreno Franco

Departamento de Medicina Preventiva y Salud Pública, Universidad de Zaragoza; Departamento de Medicina Preventiva y Salud Pública, Universidad Autónoma de Madrid; IMDEA-Nutrición, CEI UAM+CSIC; Department of Epidemiology, New York University School of Global Public Health; Instituto de Investigación Sanitaria Aragón, Hospital Universitario Miguel Servet; CIBERCV (CIBER de Enfermedades Cardiovasculares).

Resumen

Background/Objectives: Emerging approaches aim to protect both human and environmental health. Therefore, we aim to evaluate the association between adherence to the Healthy and Sustainable Dietary Recommendations for the Spanish Population Index (HS-DRSI) and the occurrence of Metabolic Syndrome (MetS), as well as to assess its environmental sustainability.

Methods: A cross-sectional analysis was performed with 2,286 middle-aged men, with no previous cardiovascular disease and belonging to the Aragon Workers Health Study (AWHS). Diet was collected with a 136-item food-frequency questionnaire. Adherence to the recommendation was assessed with the HS-DRSI, which assigns one point for each of 19 food categories. The National Cholesterol Education Programme-Adult Treatment Panel III (NCEP-ATP III) definition was used to define MetS. Logistic regressions were used to estimate the association between adherence to the HS-DRSI and presence of MetS. Environmental assessment was calculated based on the 2016 European database.

Results: Higher adherence to the HS-DRSI was inversely associated with MetS and elevated waist circumference. The odds ratio (OR) of having MetS for participants in the highest (9-13 points) vs. lowest (1-5 points) quartile of adherence to the HS-DRSI was 0.72, 95%CI 0.52-0.99 and the OR of elevated waist circumference was 0.69, 95%CI 0.48-0.99, with consistent results per 1 SD increase (2 points). In addition, green-house gas emissions (GHGE) decreased progressively across adherence quartiles (from 6.10 to 5.70 kg CO_2-eq/day).

Conclusions/Recommendations: In middle-aged men, adherence to the healthy and sustainable dietary recommendations for the Spanish population was associated with a lower risk of MetS and may contribute to lower GHGE production. Adherence to the index was also shown to reduce the risk of elevated waist circumference. These findings suggest that public health policies based on these recommendations could simultaneously promote cardiovascular health from early stages and contribute to environmental protection.

Funding: Health Research Fund FIS PI24/00479 and PI23/00240 (State Secretary of R+D and FEDER/FSE Instituto de Salud Carlos III., Spain).

0213-9111 © 2026 SESPAS. Publicado por Elsevier España, S.L.U. Todos los derechos reservados