Gac Sanit. 2026;40(S4):580

Gaceta Sanitaria

https://www.gacetasanitaria.org

95 - DIET QUALITY IN THE PROGRESSION FROM HEALTHY STATUS TO MORBIDITY, MULTIMORBIDITY AND MORTALITY

A. Vázquez-Fernández, H. Yévenes-Briones, A. Lana, A. Baylin, F.F. Caballero, E. López-García

Department of Preventive Medicine and Public Health, Universidad Autónoma de Madrid; Department of Medicine, Universidad de Oviedo/ISPA; Department of Nutritional Sciences, University of Michigan; IMDEA-Nutrition.

Resumen

Background/Objectives: Multimorbidity, defined as the coexistence of two or more chronic conditions in an individual, is associated with reduced quality of life, disability and increased risk of mortality and is one of the main determinants of health span among older adults. Diet quality may influence the progression from health to chronic disease, multimorbidity, and death, but current evidence is limited.

Methods: We aimed to assess the association between diet quality and the risk of transitioning among four health states: from a healthy status to developing one chronic disease, to multimorbidity and lastly, to death. A total of 84,293 healthy individuals (40-70 years) from the UK Biobank were included and diet quality was assessed using four well-established scores: the Alternate Mediterranean Diet Index (aMED), the Dietary Approaches to Stop Hypertension (DASH), the Alternative Healthy Eating Index 2010 (AHEI-2010), and the healthful Plant-based Diet Index (hPDI). We categorized participants into tertiles of each dietary pattern and used multi-state models with the Weibull distribution to estimate hazard ratios and their 95% confidence intervals.

Results: Over 11.2 years follow-up, 22,723 participants developed one chronic disease; 4,368 progressed to multimorbidity, and 770 died. Additionally, 1512 patients died after one disease, and 604 died without any disease. Higher adherence to the aMED, DASH, and AHEI-2010 scores was associated with a reduced risk of developing one

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

chronic disease [HR (95%CI) for highest vs. lowest tertile: 0.92 (0.89, 0.95), 0.94 (0.91, 0.98), and 0.92 (0.89, 0.95)]. The aMED was also protective for death without any disease [HR: 0.72 (0.56, 0.92)]. The aMED and DASH scores reduced the risk of progression to multimorbidity [HRs: 0.92 (0.86, 0.98) and 0.90 (0.83, 0.98)]. The aMED and hPDI scores lowered the risk of death after one disease [HRs: 0.89 (0.79, 1.00) and 0.87 (0.77, 0.98)]. All scores except hPDI were protective against death after multimorbidity [0.76 (0.61, 0.95) for aMED, 0.71 (0.59, 0.86) for DASH, and 0.80 (0.65, 0.97) for AHEI-2010].

Conclusions/Recommendations: Our findings indicate that a greater adherence to healthy dietary patterns assessed by four different scores is associated with a reduced risk of progression towards multiple disease outcomes, highlighting their protective role in long-term health.

Funding: FIS Projects (FIS 20/1040, 23/272), ISCIII, (European Regional Development Fund/European Social Fund); AVF - FPU20/06456, Spanish Ministry of Universities; UK Biobank project 109611.

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