Gac Sanit. 2025;39(S2):110

Gaceta Sanitaria

https://www.gacetasanitaria.org

604 - EXPLORING DIETARY PATTERNS IN VEGANS, VEGETARIANS AND OMNIVORES USING AN UNSUPERVISED CLUSTERING METHOD

E. Casas-Albertos, A. Alcalá-Santiago, E. Ruiz-Moreno, I. Alonso-Ledesma, M. Rodríguez-Barranco, A. Castelló, E. Molina-Montes

Departamento de Nutrición y Bromatología, Universidad de Granada; Instituto de Investigación Biosanitaria ibs.GRANADA; Instituto de Nutrición y Tecnología de los Alimentos "José Mataix Verdú" (INYTA); Centro Nacional de Epidemiología, Instituto de Salud Carlos III; Escuela Andaluza de Salud Pública (EASP); CIBER Epidemiología y Salud Pública (CIBERESP).

Resumen

Background/Objectives: In the last decade, plant-based diets including vegetarian and vegan diets have reached a prevalence of 10-15% in Spain. No study has attempted to characterize the food intake of current plant-based dietary patterns. This study aims to explore the dietary habits and patterns of people who self-identify as omnivores, vegetarians: ovolacto-vegetarians (OVE) and pesco-vegetarians (PVE); or vegans (VGN).

Methods: OMIVECA is a cross-sectional study that collected dietary information with a 175-item food consumption frequency questionnaire. Intake transformed into grams/day (g/d) and adjusted for total caloric intake (2,000 kcal per day) was grouped into 28 categories. Food intake by type of diet was compared with ANOVA tests (significance level: 5%). Hierarchical clustering analysis (HCA) was applied to explore differences in dietary patterns further.

Results: A total of 737 participants were included (73.3% women, mean ± SD age: 25.6 ± 8.9 years); 144 identified as non-omnivores (45 VGN, 70 OVE, 29 PVE). Daily consumption of vegetables and mushrooms was higher in the plant-based groups (> 428 g/d) compared to omnivores ($p < 0.001$). Vegans reported consuming fewer ($p < 0.001$) precooked meals (14.5 g/d) than the rest (> 25 g/d). In HCA, three main clusters were observed. The first cluster, featuring a plant-based diet, included

0213-9111 © 2025 SESPAS. Publicado por Elsevier España, S.L.U. Todos los derechos reservados

individuals with vegan, vegetarian diets and a group of omnivores. This pattern was characterized by a low intake of meat, fish and seafood, refined cereals, sugary foods and a high consumption of legumes, vegetables, spices, and nuts. In contrast, the second cluster represented an unhealthy omnivorous diet, characterized by a high intake of meat and its derivatives, refined cereals, sauces, sugar, and non-alcoholic beverages (bottled juices and soft drinks), alongside a low consumption of fish and seafood, vegetables, legumes, nuts, and whole grain cereals. A third intermediate cluster grouped individuals with a lower intake of sugar, sweets, pastries, cookies, and sauces, while exhibiting a moderate consumption of both refined and whole grain cereals, legumes, vegetables, and fish and seafood.

Conclusions/Recommendations: Preliminary results of the OMIVECA study reveal significant differences in dietary habits between omnivores, vegetarians and vegans, beyond the exclusion of foods of animal origin.

Financiación: MCIN/AEI/CNS2022-135794. AEI-I3 and ESP23PI03/2024. CIBERESP Proyectos Intramurales.

0213-9111 © 2025 SESPAS. Publicado por Elsevier España, S.L.U. Todos los derechos reservados