*Abstract*

# Gender Differences in Adherence to Dietary Recommendations and Guidelines among Community-Dwelling Older Italian Adults [†]

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**Abstract:** Background and objectives: Adhering to healthy dietary guidelines plays an essential role in maintaining population health, but data on older people exploring the gender dimension are scarce. We aimed to investigate the gender differences in adherence to dietary recommendations among an Italian population of older men and women. Methods: We included participants aged $\geq$ 65 years from the cross-sectional NutBrain study, recruited in 2019–2023 in northern Italy. Dietary habits were assessed using a 102- semi-quantitative food frequency questionnaire. Adherence to recommendations was allocated for the intake of 23 food groups as described in the Italian Healthy Eating Guidelines-CREA. Variables were dichotomized as 0 = no adherence and 1 = adherence. The 'Italian Dietary Recommendations Adherence Score (IDRAS)' was calculated as an indicator of overall adherence to the dietary guidelines, by summing up each food group and then dividing them into tertiles. We compared the adherence to the recommendations and the IDRAS between men and women using the Chi-squared test. Results: A total of 802 participants were analysed (mean age 73.4 years $\pm$ 6.2 SD, 59.2% women, 60.3% at least high education). Consumption of legumes (67.5%), fish (51.4%), bread (66.7%), milk and yoghurt (71.8%), fruit and vegetables (63.0%), and water (56.7%) was significantly lower than recommended values in the total sample. In contrast, consumption of cheese (54.1%), animal fats (54.0%), sweets and snacks (90.9%), red (54.0%) and processed meat (84.2%), and bakery products (85.9%) exceeded the recommendations. Women were more likely than men to meet the recommendations for non-alcoholic (70.5% vs. 57.8%) and alcoholic beverages (81.1% vs. 51.4%), red (32.8% vs. 26.3%) and processed meat (18.3% vs. 12.2%), potatoes (65.3% vs. 57.8%), and sugars (70.5% vs. 62.7%) and less likely to meet the recommendations for bread (26.3% vs 42.8%) and pasta (60.2% vs 64.5%). Overall, only 19,3% had high adherence to IDRAS (highest tertile); women had higher adherence than men (22.1% vs 15.3%). Discussion: Overall adherence to recommendations was low in the total sample, with women more likely than men to adhere to recommended dietary guidelines. Identifying gender differences in dietary intake and adherence to dietary recommendations is crucial for tailoring interventions and improving population nutrition strategies.

**Keywords:** dietary guidelines; gender differences; older adults; population health; cross-sectional study

**Institutional Review Board Statement:** The study was conducted in accordance with the Declaration of Helsinki, and approved by the Medical Ethics Committee Area of Pavia (protocol code 20180036036, 9 April 2018 and further amendments).

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

**Data Availability Statement:** Data are available under request.

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