



## 467 - RELATIONSHIPS BETWEEN (POLY)PHENOL INTAKES AND DEMENTIA RISK IN THE EPIC-SPAIN DEMENTIA COHORT

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### Resumen

**Background/Objectives:** (Poly)phenols have been associated with both a better cognitive performance and a lower risk of cognitive decline. However, the epidemiological evidence with dementia risk is still limited. In this study, we aimed to investigate the association between the intakes of total, classes and subclasses of (poly)phenols and the dementia risk, and by subtype, in a large Spanish cohort.

**Methods:** The European Prospective Investigation into Cancer and Nutrition (EPIC)-Spain Dementia study is a subcohort of the EPIC-Spain study including 32,560 adult men and women from four Spanish centers, enrolled in the nineties. (Poly)phenol intake was assessed by combining a validated dietary history questionnaire and the Phenol-Explorer database. Incident dementia cases, including Alzheimer's disease (AD) and non-AD, were identified by linkage with health databases and validated by a group of neurologists. Multivariable-adjusted Cox proportional hazards models were used to estimate hazard ratios (HR) and 95% confidence intervals (CI).

**Results:** A total of 1,320 incident dementia cases, of which 913 were AD, were diagnosed after a mean follow-up of 21.5 years. A borderline non-significant inverse association between total (poly)phenols and dementia risk (HR<sub>Q4vsQ1</sub>: 0.85; 95%CI 0.70-1.04; p-trend = 0.09) was observed. Among the (poly)phenol classes and subclasses, a high intake of anthocyanins was inversely associated with a lower risk of dementia (HR<sub>Q4vsQ1</sub>: 0.78; 95%CI 0.64-0.94; p-trend = 0.004), AD (HR<sub>Q4vsQ1</sub>: 0.81; 95%CI 0.65-1.01; p-trend = 0.039), and non-AD (HR<sub>Q4vsQ1</sub>: 0.71; 95%CI 0.51-0.99; p-trend = 0.038).

**Conclusions/Recommendations:** Our results support that a diet rich in (poly)phenols, especially in anthocyanins (present in berries, red plums, red wine...), is associated with a lower risk of dementia, particularly in non-AD subtypes.

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