



The Mediterranean diet is associated with a lower risk for all-cause dementia | 1

The identification of effective dementia prevention strategies is a major public health priority, due to the enormous and increasing societal costs of dementia. This large prospective cohort study, conducted by researchers from the United Kingdom, Sweden, and Australia investigated the association between adherence to the Mediterranean diet and the incidence of dementia. They also examined how this diet interacts with genetic risk for dementia.

Diet is a major risk factor for dementia that could be targeted to prevent the disease. Healthier dietary patterns, in particular the Mediterranean diet, were proposed as a strategy to reduce the risk of dementia. The Mediterranean diet is characterized by increased consumption of legumes, whole grains, vegetables, fruits, nuts, seeds, and olive oil, moderate consumption of fish, poultry, and dairy foods, and low consumption of processed foods and red meat. The combination of high levels of dietary fiber, phytochemicals, and fat blend (high monounsaturated fat) confers beneficial anti-inflammatory and antioxidant properties.



About the Study and Results

The study included 60,298 participants, who were followed for an average of 9.1 years. Participants were taken from UK Biobank, a multicenter prospective cohort study with more than half a million participants. The authors noted that their study involved a much larger cohort (over 60,000 participants) with more dementia cases ($n = 882$) than most previous investigations.



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In the assessment centers, participants completed a questionnaire and verbal interview. They were also asked to complete dietary assessments, imaging, and assessments of multiple health-related outcomes.

The authors used two different scores, the Mediterranean diet (MedDiet) Adherence Screener (MEDAS) score, and the MedDiet PYRAMID score to quantify adherence to the Mediterranean diet. These scores define adherence to the Mediterranean diet using different dietary targets and food components. The MEDAS is a 14-point score developed as part of the “Prevencion con Dieta Mediterranea trial”, widely used in trials and observational studies. The PYRAMID score is a 15-point MedDiet score, used in epidemiological studies.

The genetic risk of dementia was assessed with the polygenic risk score developed by Lourida et al., who demonstrated that higher values of this score were associated with a higher risk for all-cause dementia in the UK Biobank cohort.

The results showed that participants with the highest adherence to the Mediterranean diet had a 23% lower risk of developing dementia than those with the lowest level of adherence. The continuous MEDAS score was a more sensitive predictor of dementia risk than a binary MEDAS score or PYRAMID score. According to the authors, the continuous MEDAS score could be prioritized as a tool that defines adherence to the Mediterranean diet in future observational studies.

There was no significant interaction between adherence to the Mediterranean diet, defined by both, the continuous MEDAS and PYRAMID scores, and polygenic risk of dementia.

Conclusion

This study showed that higher adherence to the Mediterranean diet was associated with a lower risk for all-cause dementia, confirming the importance of dietary interventions in future dementia prevention strategies, regardless of genetic predisposition.

This article was published in BMC Medicine.

Journal Reference

Shannon et al. BMC Medicine 2023; 21: 81. (Open Access)
<https://doi.org/10.1186/s12916-023-02772-3> 21:81



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