

# AI study uncovers olive oil's potential in combating Alzheimer's disease

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A recent study has used artificial intelligence (AI) to reveal the remarkable potential of extra virgin olive oil (EVOO) in the fight against Alzheimer's disease (AD). Researchers combined AI technology,

chemistry, and omics research to identify specific bioactive compounds in EVOO that show promising effects in treating and preventing AD.

The article titled "Alzheimer's disease: using gene/protein network machine learning for molecule discovery in [olive oil](#)" appears in *Human Genomics*.

AD imposes a significant burden on individuals and society, but EVOO's neuroprotective effects have garnered attention. The Mediterranean diet, rich in EVOO, has been associated with a reduced risk of dementia and cognitive decline. Harnessing the power of AI, researchers aimed to uncover the secrets behind EVOO's therapeutic potential for AD.

The study utilized network machine learning and graph neural networks to analyze how [bioactive compounds](#) in EVOO interact with the complex pathways involved in AD. The findings identified ten EVOO phytochemicals with the highest likelihood of impacting AD protein networks. Compounds like quercetin, genistein, luteolin, and kaempferol exhibited promising effects on AD pathogenesis.

**More information:** Luís Rita et al, Alzheimer's disease: using gene/protein network machine learning for molecule discovery in olive oil, *Human Genomics* (2023). [DOI: 10.1186/s40246-023-00503-6](https://doi.org/10.1186/s40246-023-00503-6)

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