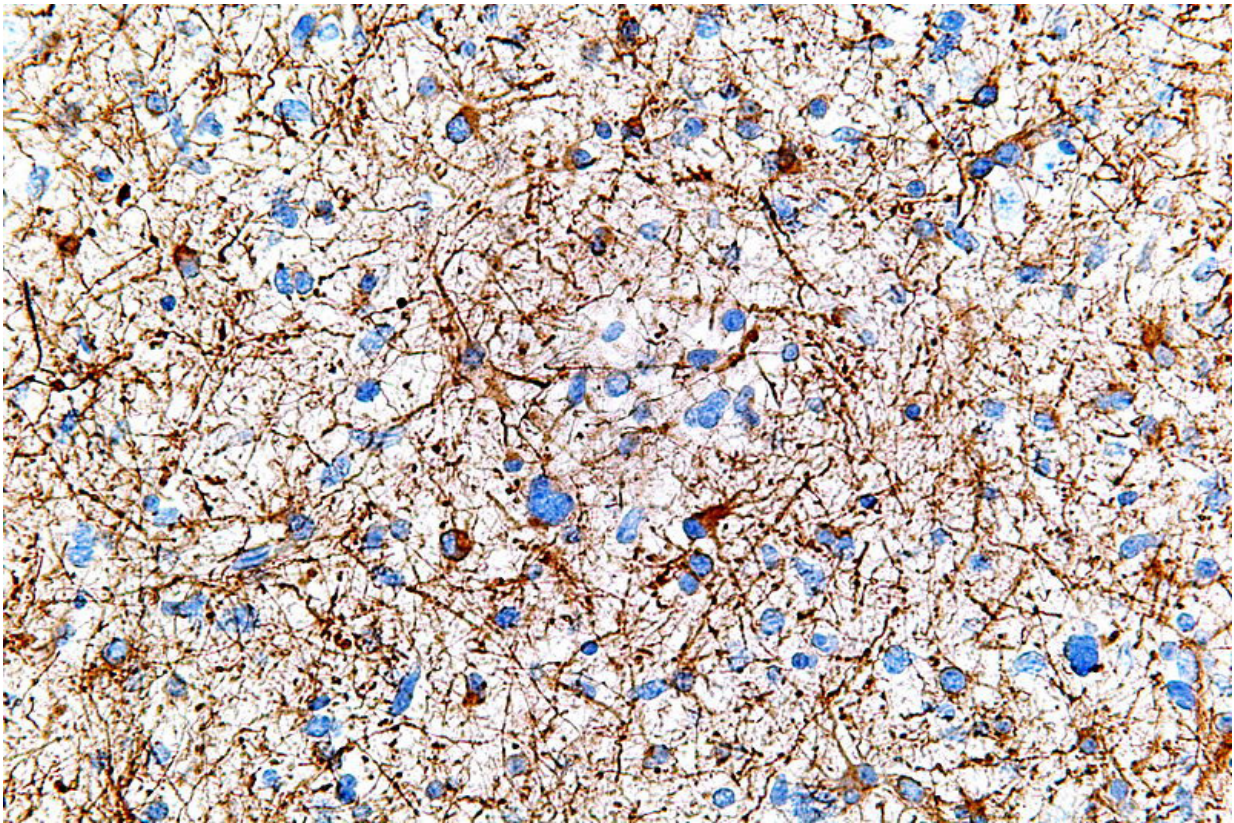


Olive oil nutrient may help prevent brain cancer

June 2 2017



A microscope image of brain cancer cells, a glioma tumor type known as anaplastic astrocytoma. Credit: Wikimedia/ CC BY-SA 3.0

A compound found in olive oil may help to prevent cancer developing in the brain, a study shows.

Research into [oleic acid](#) – the primary ingredient in [olive oil](#) – has shown how it can help prevent cancer-causing genes from functioning in cells.

The oily substance – one of a group of nutrients known as [fatty acids](#) – stimulates the production of a cell molecule whose function is to prevent cancer-causing proteins from forming.

The study team says it is too soon to say whether dietary consumption of olive oil may help prevent brain cancer.

Their findings, however, point towards possible therapies based on the oil to prevent brain cancer from occurring.

Tumour prevention

Scientists from the University analysed the effect of oleic acid on a cell molecule, known as miR-7, which is active in the brain and is known to suppress the formation of tumours.

They found that oleic acid prevents a cell protein, known as MSI2, from stopping production of miR-7.

In this way, the olive oil component supports the production of miR-7, which helps prevent tumours from forming.

Researchers made their discoveries in tests on human cell extracts and in living cells in the lab.

The study, published in the *Journal of Molecular Biology*, was funded by the Medical Research Council and the Wellcome Trust.

"While we cannot yet say that olive oil in the diet helps prevent [brain cancer](#), our findings do suggest that oleic acid can support the production

of tumour-suppressing molecules in [cells](#) grown in the lab. Further studies could help determine the role that olive oil might have in brain health," says Dr Gracjan Michlewski.

More information: Santosh Kumar et al, Oleic Acid Induces MiR-7 Processing through Remodeling of Pri-MiR-7/Protein Complex, *Journal of Molecular Biology* (2017). [dx.doi.org/10.1016/j.jmb.2017.05.001](https://doi.org/10.1016/j.jmb.2017.05.001)

Provided by University of Edinburgh

Citation: Olive oil nutrient may help prevent brain cancer (2017, June 2) retrieved 25 April 2024 from <https://medicalxpress.com/news/2017-06-olive-oil-nutrient-brain-cancer.html>

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