Pinpointing the connection between diet and dementia

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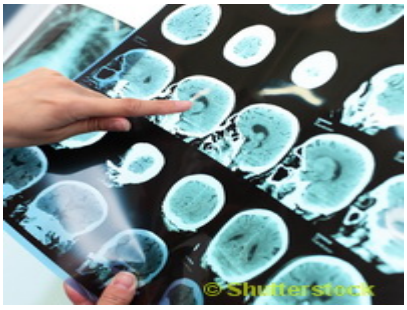

Alzheimer's disease is a degenerative disorder affecting between 50 percent and 70 percent of all dementia sufferers. As neurons are killed slowly yet progressively, sufferers experience memory loss and confusion, which worsens over time.

One European research project is making headway in determining how to reduce incidences by focusing on diet.

The EU-funded project LIPIDIDIET ('Therapeutic and preventive impact of nutritional lipids on neuronal and cognitive performance in ageing, Alzheimer's disease and vascular dementia') is developing a lipid-based diet that could delay or prevent the onset of the disease and other dementia-related disorders.

A diet focused on lipids such as omega-3 would also help maintain and support normal cognitive function as a person ages, and cut the risk of developing a cerebrovascular disorder, according to the project's partners.

Launched in 2008, LIPIDIDIET has since identified detailed dietary, lifestyle and genetic risk factors, as well as combinations of these, which correlate with an increased or decreased risk of dementia.

The non-protein amino acid homocysteine, as well as obesity, coffee, tea and alcohol were typical of the factors investigated.

The project partners, coordinated by Saarland University in Germany, have also made huge headway in understanding the molecular and cellular pathways resulting in dementia. Genes, lipid metabolism and inflammation have been identified as factors.

Attacking the problem from a different angle, the team has also isolated new mechanisms by which amyloid molecules, known for triggering dementia, interfere with synaptic transmission (the passage of a neural impulse from one nerve fibre to another), cellular differentiation and function. Of major interest are their findings on how dietary lipids could potentially reduce this interference.

The results generated in this study have helped the LIPIDIDIET team establish dietary approaches and formulations that could prove beneficial in lowering the risk of age-related cognitive decline.

The data obtained by LipiDiDiet will help not only patients and doctors, but also relevant for the food industry, as researchers are able to back up health claims with scientific data. A healthier diet will also have the welcome side effect of boosting wellbeing as people get older.

The team is currently working on another round of experimental diets and finished recruiting test subjects for the next clinical trial.

The project received almost EUR 6 million in funding from the EU.For more information, please visit:

LIPIDIDIET
http://www.lipididiet.eu

Project factsheet

Saarland University
http://www.uni-saarland.de/en/

Countries

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