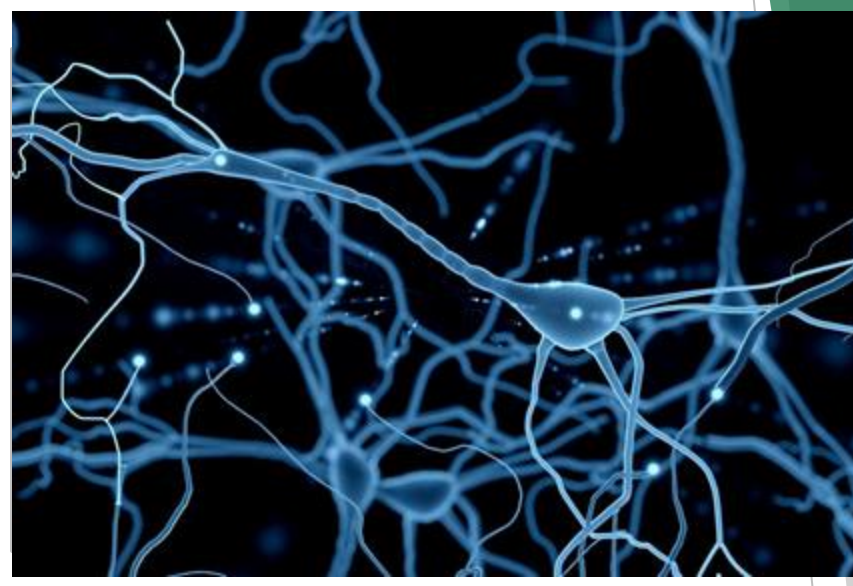
RAFFLES GIRLS' SCHOOL

Lactobacillus - A Rescue to Alzheimer's Disease

Our Technology Story

Alzheimer's Disease (AD) is hallmarked by impairment of behavioural and cognitive functions, which is believed to be caused by consumption of linoleic acid, often present in excessive amounts in heated vegetable oils. *Lactobacillus*, a bacteria found in probiotics, can convert linoleic acid to conjugated linoleic acid, which is reported to be anti-carcinogenic, anti-diabetic and anti-hypertensive. Our project investigated the effects of *lactobacillus* as an effective treatment on Alzheimer's Disease using the common fruit fly as a diseased model for humans.



Technology Features

- Dietary supplementation of linoleic acid to fruit flies with AD symptoms worsened the paralysis of diseased flies.
- Dietary supplementation of *lactobacillus* rescued AD symptoms associated with paralysis.

Potential Applications

Our research can potentially serve as a dietary support for patients suffering from Alzheimer's Disease to mitigate the progression of the illness. Clinical considerations such as provision of probiotics with suitable *lactobacillus* strains and dietary management of deep-fried food and vegetable oils will therefore be beneficial for these patients.

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