

Study firms up diet and depression link

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Does fast food contribute to depression? Can a healthy diet combat mental illness?

In an unusual experiment, James Cook University researchers in Australia have found that among Torres Strait Islander people the amount of fish and processed food eaten is related to depression.

A JCU research team led by Professors Zoltan Sarnyai and Robyn McDermott looked at the link between depression and diet on a Torres Strait island, where [fast food](#) is available, and on a more isolated island, which has no fast food outlets.

Dr. Maximus Berger, the lead author of the study, said the team interviewed about 100 people on both [islands](#).

"We asked them about their diet, screened them for their levels of depression and took blood samples. As you'd expect, people on the more isolated island with no fast food outlets reported significantly higher seafood consumption and lower take-away food consumption compared with people on the other island," he said.

The researchers identified nineteen people as having moderate to severe depressive symptoms: sixteen were from the island where fast food is readily available, but only three from the other island.

"People with major depressive symptoms were both younger and had higher take-away food consumption," said Dr. Berger.

The researchers analysed the blood samples in collaboration with researchers at the University of Adelaide and found differences between the levels of two [fatty acids](#) in people who lived on the respective islands.

"The level of the fatty [acid](#) associated with depression and found in many take-away foods was higher in people living on the island with ready access to fast food, the level of the fatty acid associated with protection against depression and found in seafood was higher on the other island," said Dr. Berger.

He said it was important to remember that contemporary Western diets have an abundance of the depression-linked fatty acid (n-6 PUFA) and a relative lack of the depression-fighting fatty acid (n-3 LCPUFA).

"In countries with a traditional diet, the ratio of n-6 to n-3 is 1:1, in industrialised countries it's 20:1," he said.

Professor Sarnyai said depression affects about one in seven people at some point in their lives and Aboriginal and Torres Strait Islander [people](#) are disproportionately affected by psychological distress and mental ill-health compared with the general population.

"Depression is complex, it's also linked to social and environmental factors so there will be no silver bullet cure, but our data suggests that a diet that is rich in n-3 LCPUFA as provided by seafood and low in n-6 PUFA as found in many take-away foods

may be beneficial," he said.

Professor Sarnyai said with the currently available data it was premature to conclude that [diet](#) can have a lasting impact on [depression](#) risk but called for more effort to be put into providing access to healthy [food](#) in rural and remote communities.

"It should be a priority and may be beneficial not only to physical health but also to mental health and wellbeing," he said.

More information: Maximus Berger et al, Cross-sectional association of seafood consumption, polyunsaturated fatty acids and depressive symptoms in two Torres Strait communities, *Nutritional Neuroscience* (2018). [DOI: 10.1080/1028415X.2018.1504429](#)

Provided by James Cook University

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