

**Applicant**

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**Project Title**

Investigating relationships between nutrition, exercise, mood and hippocampus-dependent cognition in older adults in the Canadian Longitudinal Study on Aging

**Project Summary**

Major depressive disorder affects 5.8% of Canadians aged 15-64, contributing to mental and physical decline, and increasing the risk of death by 2-3 times. Although community dwelling older adults show lower rates of major depression, their levels of depressive symptoms are much higher than those of younger adults. There is a pressing need to investigate lifestyle factors that promote resilience against depression and healthy aging. Our past research in rodents found synergies between exercise and dietary factors in promoting stress resilience and brain health. The goal of our proposed research is to translate these findings to humans. Specifically, we will examine the association between anti-oxidant and anti-inflammatory dietary factors, exercise and age-related levels of depressive symptoms and cognitive decline. This research will help inform public health recommendations for older adults to promote healthy aging and resilience to depression.

**Keywords**

Major depressive disorder, exercise, diet, cognition, aging