

Applicant

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Project Title

Examining the role of menopause and hormone replacement therapy on diet, physical activity, and metabolic health among aging females in Canada

Project Summary

Menopause is the natural decrease in sex hormones that occurs in females during aging. During and after menopause, there is a higher risk of developing obesity and poorer physical function and metabolic health, which can increase the risk of conditions like heart disease, diabetes, and cancer. Hormone replacement therapy can help lessen the symptoms of menopause and reduce the risk of some chronic diseases. Hormone replacement may also impact dietary intake, physical activity, and sleep - called 'modifiable health behaviors', MHBs. However, it is not clear if MHBs (and their relationship to health outcomes) differ according to menopausal status and hormone replacement use. To address this knowledge gap, the research team will use data collected from females in the Canadian Longitudinal Study on Aging - a large study that measures several aspects of health using robust tools to identify predictors of healthy aging. The proposed research project will characterize MHBs, their relationship to health outcomes that are important for aging, and how these relationships change across time among four groups of females: 1) pre- or peri-menopausal, 2) post-menopausal who have never used hormone replacement, 3) post-menopausal who currently use hormone replacement, 4) post-menopausal who have previously used hormone replacement. MHBs will be measured from self-reported information on diet, physical activity, and sleep. Health outcomes will include lean and fat tissue, physical function, and metabolic health using objective measurements. This will be the first study to investigate MHBs with a large number of objective health outcomes according to menopausal and hormone replacement status. It will provide a better understanding of the potential short- and long-term effects of menopause and hormone replacement. Therefore, the findings may help inform decision making regarding hormone replacement use and the design of personalized health interventions to support healthy aging.

Keywords

aging, dietary intake, health behaviors, menopause, metabolic health, physical activity, public health, sex hormones