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**Project Title**

Association of Inflammation, Nutrition and Physical Activity on Change in Mobility and General Health: Data from the Canadian Longitudinal Study on Aging

**Project Summary**

The prevalence of osteoarthritis is expected to increase dramatically among Canadian seniors over the coming decade. Obesity is a potent risk factor for osteoarthritis; however, it is poorly understood how obesity contributes to osteoarthritis pathology. Potential obesity-related mechanisms that worsen osteoarthritis likely include malnutrition (excess or deficiency in essential nutrients), inactivity, and inflammation. This study aims to determine if poorer nutrition and physical activity can predict worsening physical capacity, function and general health among Canadian seniors living with osteoarthritis. We will also examine whether inflammation mediates or moderates the influence of nutrition and physical activity on physical capacity, function and general health in Canadian seniors with osteoarthritis. These data are necessary to design effective weight-management programs to produce long-term improvements in health outcomes in older adults with osteoarthritis.

**Keywords**

Inflammation, Mobility, Nutrition, Physical capacity, C-reactive protein