

AGING RESEARCH SPOTLIGHT on DIET & NUTRITION

Dr. Jaclyn Hurley recently co-authored a study entitled “Diet and Nutrition Risk Affect Mobility and General Health in Osteoarthritis: Data from the Canadian Longitudinal Study on Aging, and published in the Journals of Gerontology: Series A. It shows how aspects of diet and nutrition risk are associated with physical capacity and general health in Canadian adults with hand, hip and/or knee osteoarthritis (OA). Using baseline data from the Canadian Longitudinal Study on Aging (CLSA), this research demonstrates that nutrition risk was associated with mobility and general health, with higher nutrition risk related to poorer mobility and general health. Further, greater fiber intake was associated with better mobility. This suggests that it may be important to develop nutritional interventions for osteoarthritis (OA) to lessen impairments to health and mobility.



Dr. Hurley is a member of **YU-CARE** and an Assistant Professor in the School of Kinesiology and Health Science at York University. Her area of expertise is musculoskeletal biomechanics. Her research interests include investigating mechanisms of musculoskeletal injury and developing effective exercise rehabilitation strategies for chronic musculoskeletal conditions that commonly accompany age, including osteoarthritis and rotator cuff pathologies.

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Abstract

Background

This study examined whether aspects of diet and nutrition risk explain variance in physical capacity and general health, after controlling for covariates, in Canadian adults with osteoarthritis (OA).

Methods

This was a cross-sectional study of baseline data from the Canadian Longitudinal Study on Aging (CLSA). Data from 1,404

participants with hand, hip, and/or knee osteoarthritis (OA) were included. A series of regression analyses were conducted with independent variables of food intake (fiber and high calorie snack intake) and nutrition risk; and dependent variables of physical capacity and general health. Physical capacity was characterized through grip strength and a pooled index of four mobility tests. General health was characterized through an index of self-reported general health, mental health, and healthy aging.

Results

Higher fiber intake was related to greater mobility ($p = .01$). Food intake was not related to any other outcome. Nutrition risk was significantly associated with mobility ($p < .001$) and general health ($p < .001$); those with a high nutrition risk classification had poorer general health ($p < .001$, $d = 0.65$) than those at low nutrition risk. As well, those with moderate nutrition risk had poorer general health than those with low nutrition risk ($p = .001$, $d = 0.31$).

Conclusions

Nutrition risk screening for older adults with osteoarthritis (OA) provides insight into behavioral characteristics associated with reduced mobility and poorer general health. Also, those consuming greater amounts of fiber demonstrated better mobility. Thus, this research suggests that quality of diet and nutritional behaviors can impact both physical and mental aspects of health in those with osteoarthritis (OA).

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