

Assessing food security and perceived health among Memorial University students

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Introduction: The prevalence of student food insecurity at Memorial University of Newfoundland (MUN) is high (39.9%) compared to the surrounding general population (8.1% in 2012).

Objective: Our study explored the relationship between food security status and perceived health among MUN students.

Methods: We collected data using an online survey distributed to returning MUN students in the Fall 2016 semester, who were registered at a MUN campus in St. Johns, NL. The survey was circulated through e-mails, posters, and social media. We used Statistic Canada's Household Food Security Survey Module (HFSSM) to assess food security and we asked participants to rate their physical health, mental health, and stress level using validated questions from the Canadian Community Health Survey. We also collected demographic information. We used logistic regression to compare health ratings between students of different food security levels.

Results: A total of 967 students met our inclusion criteria. Of these, 39.9% were considered food insecure, with 28.2% experiencing moderate food insecurity, and 11.7% experiencing severe food insecurity. After controlling for significant predictors, students who were moderately or severely food insecure were 1.72 (95% CI = 1.20-2.48) and 2.81 (1.79-4.42) times as likely to rate their physical health as fair or poor than food secure students, and 1.66 (95% CI = 1.22-2.27) and 4.23 (95% CI = 2.71-6.60) times as likely to rate their mental health as fair or poor than food secure students, respectively.

Conclusions: Our findings suggest that food security levels of MUN students are closely related to perceived physical and mental health. Lower food security levels were associated with poorer self-reported physical and mental health.

Significance to the Field of Dietetics: Dietitians working with the university student population should screen for food security and dietitians working in public policy should consider the challenges of food insecurity among this population.