Sociodemographic Predictors of University Students’ Food Insecurity: Insights From a Large University in Canada

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Executive Summary

Approximately 13% of Canadian households experience food insecurity, defined as “the inability to obtain sufficient, nutritious, personally acceptable food through normal food channels or the uncertainty that one will be able to do so.” A recent study investigating food security at 5 universities across Canada reported rates of food insecurity ranging from 29% to 46%. Given the potential associations between food insecurity, reduced academic achievement, and negative health-related outcomes, the objectives of this study were to (1) estimate the prevalence of food insecurity among undergraduate students in the Faculty of Land and Food Systems (LFS) at the Vancouver campus of the University of British Columbia, and (2) investigate socio-demographic predictors of students’ food security status.

In March of 2016, LFS undergraduate students enrolled in 6 core curriculum courses ranging from first year to fourth year were invited to complete a survey about their food security experiences (N=836, 55.0% of students enrolled in LFS). The survey included the 9-item Household Food Insecurity Access Scale as well as 15 questions about socio-demographic factors previously associated with food insecurity among young adults. Correlations between food insecurity and socio-demographic categories were determined using chi-square tests for categorical factors and t-test for continuous variables, and we conducted a stepwise multiple binary logistic regression analysis to predict food insecurity among respondents.

Among the 138 respondents (a 16.5% response rate), 55% were food secure and 45% food insecure. Each additional year of education was associated with a 39% decrease in food insecurity risk, while having a parent as the primary food purchaser was associated with an 80% decrease in risk. Having moved to Vancouver within 3 years was associated a 279% increase in food insecurity risk. Only 6 food insecure students used emergency food programs.

Forty-five percent of our sample was classified as food insecure, which is more than 3 times the national prevalence, suggesting that food insecurity is more common among LFS students than among the general population. The use of campus food banks is increasing in Canada, but few of our respondents accessed the campus food bank or other emergency food programs, highlighting a need to increase awareness of or improve access to food resources among those at risk. Food insecurity is a topic that student advisors should consider addressing with undergraduate students to ensure that those in need are connected with appropriate support services. There is a need for public support, such as the Guaranteed Income Supplement (GIS) credited for lower rates of food insecurity among low income seniors in Canada, to better support food security among undergraduate students. Longitudinal research should be conducted to assess food insecurity in representative samples at multiple universities, to better characterize its prevalence, provide more conclusive evidence of who is particularly vulnerable, and to identify when those at risk would benefit most from food security interventions.

We would like to express our sincere thanks to SEEDS for supporting this project, and to Rashedul Hoque and SCARL for statistical advising.
# Food Insecurity at UBC: Prevalence and Correlates Among Undergraduate Land and Food Systems Students

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## Background

In 2016, 39% of post-secondary students surveyed at 5 Canadian institutions experienced food insecurity, which was defined as only being able to consume a limited quality and quantity of food [1].

- **2 in 5** students were food insecure
- **1 in 4** food insecure students reported negative health impacts

Student loans are meant to cover the cost of food, but research from Alberta suggests that the amount is insufficient for a nutritious diet, no matter how economically it is obtained [2].

## Our Study’s Purpose:

To estimate the prevalence of food insecurity among undergraduate students enrolled in the Faculty of Land and Food Systems (LFS) at UBC and identify factors that may predict students’ food security status.

## Based on Our Survey of 138 Undergraduates...

<table>
<thead>
<tr>
<th>Food Security Status</th>
<th>Students classified as food insecure did not often use services such as the campus food bank: only 6 reported using emergency food programs.</th>
<th>LFS Students are:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food secure</td>
<td>55%</td>
<td>39% less likely to be food insecure for every additional completed year of post-secondary education</td>
</tr>
<tr>
<td>Mildly food insecure</td>
<td>14%</td>
<td>80% less likely to be food insecure if their parents purchase food for them</td>
</tr>
<tr>
<td>Moderately food insecure</td>
<td>21%</td>
<td>279% more likely to be food insecure if they moved to Vancouver recently (within the last 3 years)</td>
</tr>
<tr>
<td>Severely food insecure</td>
<td>10%</td>
<td></td>
</tr>
</tbody>
</table>

## Moving Forward, We Need...

1. Longitudinal research at post-secondary institutions for more conclusive evidence about who is most vulnerable to food insecurity and when food security interventions would be most effective

2. Research and funding for initiatives that better support food security among post-secondary students

3. Outreach to enhance awareness and use of emergency food programs, such as campus food banks

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