Food Insecurity within the University Student Population
A Survey at the University of Alaska Anchorage

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Definition of food insecurity:
The state of either: having limited or uncertain access to food that is nutritionally adequate, culturally acceptable, and safe, or having an uncertain ability to acquire acceptable foods in socially acceptable ways. (Bauer, et. Al, 2012)

Justification for the survey:
There are many negative consequences of food insecurity, including:
- Easy access to cheap sugary foods
- Increased prevalence of obesity*
- Poor nutrition
- Diabetes*
- Hypertension
- Hyperlipidemia
- Aggression and anxiety
- Decreased development of social skills
- Lower mental and physical achievement

The level of food insecurity of people in the United States is 14.9%. In Alaska it’s 14.6%, Anchorage is 12.3%, and at UAA the level is unknown.

* Considered a rising epidemic in the U.S.

Research question:
What is the level of food insecurity of UAA students?

Hypotheses:
Based on previous studies of food insecurity in university student populations, we anticipate the level of food insecurity of UAA students will be higher than that of the rest of Anchorage (higher than 12.3%). We also anticipate Alaska Native students will have a higher level of food insecurity as they may be removed from family assistance available to students from the Anchorage area.
Methods:

All degree seeking students must complete GER and capstone course to graduate. The sampling pool was restricted to UAA students registered in main campus courses, which excludes students registered solely online and/or at a satellite campus (Kenai, Eagle River, Mat-Su). The course offering for GER and capstone classes have a ratio of 9:1 (for every nine GER classes, there is one capstone course). In order to gain a representative sample of UAA students, we used random cluster sampling to select 4 capstone courses and 17 GER courses to survey. The survey collected responses from a total of 454 UAA students, 404 from GER courses and 50 from capstone courses. Based off the 2011 UAA Institutional Research report of student characteristics, this is 4.82% of the UAA student population.

Survey responses:

We calculated a food insecurity value for each respondent based on their responses to six questions regarding food insecurity. The scale ranges from food secure (a score of zero) to extremely food insecure (a score of 15).

UAA student respondents’ food insecurity values:

<table>
<thead>
<tr>
<th>Food Insecurity Value</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food secure 0</td>
<td>31%</td>
</tr>
<tr>
<td>Slightly food insecure 1-3</td>
<td>42%</td>
</tr>
<tr>
<td>Moderately food insecure 4-7</td>
<td>21%</td>
</tr>
<tr>
<td>Very food insecure 8-11</td>
<td>6%</td>
</tr>
<tr>
<td>Extremely food insecure 12-15</td>
<td>4%</td>
</tr>
</tbody>
</table>

Based on this study’s food insecurity value scale, we found 31% of respondents are noticeably food insecure (moderately food insecure to extremely food insecure).
**Significant findings:**

- Respondents overwhelmingly feel that there should be changes to food services on campus. Students feel food prices on campus are too high (71%), UAA should provide a wider variety of food providers (74%), and there should be more fresh food on campus (79%).
- Minority students (with the exception of Alaska Native students) are more likely to be food insecure (p=.001).
- Students with a senior class standing were more likely to be food secure than students of lower class standings.
- Students that live with their parents -as opposed to on campus or independently- are more likely to be food secure (p<.001).
- The more food insecure a respondent is, the more likely they are to think that food prices are too high for too little value (p<.001).
- The more food insecure the student is, the more likely they are to think we should look into the issue of food pricing by UAA food providers (p=.01).
- The more food insecure the student is, the more likely they are to think we should look into the issue of more food options (p<.05).

**Additional Comments:**

The final question on the survey offered respondents the opportunity to leave additional comments. Of the 454 respondents, 100 left comments. Out of those comments, 44 were statements concerning food options, diets, and/or selection. Thirty-four comments addressed food prices on campus. Another 11 comments mentioned limited access, in terms of location and hours of operation, to UAA food sources. With only a few exceptions, these comments expressed dissatisfaction with, confusion about, and/or suggestions to change UAA food options, food prices, and food access on campus.

**Limitations:**

The study’s definition of food insecurity differs from that of other studies. This could limit the study’s ability to be compared to other, previous, studies. Also, many respondents mentioned subsistence sources of food, which was not an option on the survey. This food source, then, could be underestimated by our survey. Finally, we asked only one question regarding students’ income. Income is likely to have a significant impact on food security. However, student income is a complex issue and, therefore, could not be properly addressed in our short survey. We did not survey the issue in depth, as it exceeded the scope of our study.
Areas for further study:
Students indicated that several issues should be further investigated:
  • Food security of UAA students (43.2%).
  • Sustainable food on campus (42.5%).

Next steps:
We hope that this study will spark conversation around the issue of food insecurity of UAA students among university administrators and in the university student population. Additionally, we feel that university food programs and dining services should be evaluated to determine the most effective method of addressing student food insecurity.