



Proposal to use the 18-item Household Food Security Survey Module in the CCWS

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PROPOSED CHANGE

Replace the current 6-item short form version of the Household Food Security Survey Module (HFSSM) with the 18-item HFSSM to improve validity of the assessment of food insecurity without notably adding to participant burden.

RATIONALE FOR THE 18-ITEM HFSSM

1. Primary tool used in both Canadian and US population surveys.
2. Provides assessment of the food insecurity status of students with children.
3. Does not increase survey time burden for the majority of respondents.
4. Is better equipped to capture the true prevalence of food insecurity.
5. More effective than 6-item HFSSM when food insecurity prevalence is high.

BACKGROUND

Household food insecurity is defined as “the inadequate or insecure access to food due to financial constraints” (PROOF, 2020). Among many methods used to estimate household food insecurity status and severity, the 18-item HFSSM has been widely adopted in Canada and the U.S (Marques et al. 2015) and is now considered the gold standard measurement for household food insecurity in Canada (Tarasuk et al. 2018).

The HFSSM is a validated, standardized, scale developed by the U.S Department of Agriculture (USDA) to assess the presence and severity of food insecurity at the household level. The questions included in the 18-item HFSSM are organized into three groups. The first group consists of three questions that apply to all members of a household, the next group of seven questions are for adults only, and the last group of eight questions relate only to households with children.

The questions capture a range of food insecurity experiences from the lowest level of severity (i.e. anxiety over the quantity of food available) to the most severe (i.e. adults or children not eating for a whole day due to lack of financial resources).

The abbreviated 6-item HFSSM was introduced to measure household food insecurity where the adoption of the full 18-item HFSSM is not logistically feasible (Blumberg et al. 1999). The 6-item HFSSM does not include questions related to children, and excludes 4 additional questions to assess the severity of food insecurity experiences among adults.



EXPANDED RATIONALE FOR USE OF THE FULL 18-ITEM HFSSM

Primary tool used in Canadian and US national population surveys

The 18-item HFSSM is the primary tool used to measure household food insecurity at the population level in both the American [Current Population Survey](#) and the [Canadian Community Health Survey \(CCHS\)](#). The Canadian HFSSM is very similar to the original USDA survey however terminology and classification of food insecurity differs. It is worth noting that PROOF (PROOF 2018) has an additional classification level of food insecurity of “marginally food insecure,” which has not until recently been reported by Health Canada.

Assessment of the food insecurity status of students with children

From 1976 to 2005 students with children accounted for between 11% and 16% of all post-secondary enrollment. As a minority population, there has been limited research exploring factors that impact their access, experience, and success (van Rhijn et al. 2011). The 18-item HFSSM includes questions needed to support an increased understanding of the prevalence of food insecurity for student parents and their children, including if experiences are severe enough that parents are unable to shield children from experiencing food insecurity.

The 18-item HFSSM does not increase respondent burden

The USDA guide (Bickel et al. 2000) for measuring household food insecurity notes that on average, it takes about four minutes for severely food insecure households to answer the 18-item HFSSM. For all other households, the amount of time required to respond is about two minutes. As the majority of respondents to the CCWS are food secure, the respondent burden for this group will be similar to the 6-item HFSSM. Respondent burden for severely food secure students will increase by approximately 2 minutes, but more thoroughly capturing their experiences is a valuable addition to fill critical gaps in knowledge.

The 18-item HFSSM is better equipped to measure prevalence

While the 6-item HFSSM overall has been shown to have high sensitivity, specificity, and minimal bias in assessing food insecurity prevalence (Blumberg et al.1999), the 18-item HFSSM is recommended as additional questions provide more opportunity to capture those who are food insecure (PROOF, 2017), including the severity of their experience.

The 18-item module is more effective than the 6-item module where prevalence is high

Blumberg et al. (1999) found the 6-item HFSSM to be a robust measure of household food insecurity status overall when both modules were compared using a national-level survey (i.e. “Current Population Survey”-1995). Blumberg et al. (1999) however, identified that the 6-item HFSSM will underestimate prevalence of household food insecurity when the sample prevalence is high. As high levels of food insecurity have recently been reported among post-secondary students (Silverthorn 2016), the 18-item HFSSM is the most robust measure for this population.



CONCLUSION

The adoption of the full 18-item HFSSM provides a more accurate, robust, and informative estimation of household food insecurity among post-secondary students with limited added respondent burden. It additionally provides an opportunity for insight into a higher risk population (students with children) that we currently have no information on.

REFERENCES

- Bickel, Gary, Mark Nord, Cristofer Price, William Hamilton, and John Cook: Guide to Measuring Household Food Security, Revised 2000. *U.S. Department of Agriculture, Food and Nutrition Service*, Alexandria VA. March, 2000. Or in short form as USDA, Guide 2000..
- Blumberg, Stephen J, Karil Bialostosky, William L Hamilton, and Ronette R Briefel. 1999. "The Effectiveness of a Short Form of the Household Food Security Scale." *American journal of public health* 89(8): 1231–34.
- Marques, Emanuele S et al. 2015. "Household Food Insecurity: A Systematic Review of the Measuring Instruments Used in Epidemiological Studies." *Public health nutrition* 18(5): 877–92.
- PROOF, Canada. 2017. Webinar Food Insecurity Measurement in Canada: Interpreting the Statistics [Internet]. <https://proof.utoronto.ca/resources/webinar/> (September 16, 2020)
- PROOF, Canada. 2018. "Household Food Insecurity in Canada - A Guide to Measurement and Interpretation." <https://proof.utoronto.ca/wp-content/uploads/2018/11/Household-Food-Insecurity-in-Canada-A-Guide-to-Measurement-and-Interpretation.pdf> (September 16, 2020)
- PROOF, Canada. 2020. "Household Food Insecurity in Canada." <https://proof.utoronto.ca/food-insecurity/> (August 6, 2020).
- Silverthorn, Drew. 2016. *Hungry for Knowledge: Assessing the Prevalence of Student Food Insecurity on Five Canadian Campuses*. Meal Exchange. <https://www.mealexchange.com/what-we-do/hungryforknowledgereport> (August 7, 2020).
- Tarasuk, Valerie, Li Timmie, Andrew, Mitchell, and Dachner Naomi. 2018. "Commentary - The Case for More Comprehensive Data on Household Food Insecurity." *Health Promotion and Chronic Disease Prevention in Canada: Research, Policy and Practice* 38(5): 210–13.
- van Rhijn, Trica. M., T. S. Quosai & D. S. Lero, 2011. "A profile of undergraduate student parents in Canada." *Canadian Journal of Higher Education*, Volume 41, No.3, 2011, pages 59 - 80

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APPENDIX

18-item HFSSM – Updated to align with Canadian Community Health Survey 2020 [with introduction from CCWS, edited to (I/we), unless specified]

These next questions are about the food eaten in the last 12 months, and whether you were able to afford the food you need. For these statements, please select whether the statement was often true, sometimes true, or never true for you in the last 12 months. If you are in first-year or a new student, please only think about the time since you enrolled at your current post-secondary institution.

Q1. (I/we) worried that food would run out before (I/we) got money to buy more.

1. Often true
2. Sometimes true
3. Never true
4. Don't know
5. Prefer not to answer

Q2. The food that (I/we) bought just didn't last, and there wasn't any money to get more.

1. Often true
2. Sometimes true
3. Never true
4. Don't know
5. Prefer not to answer

Q3. (I/we) couldn't afford to eat balanced meals.

1. Often true
2. Sometimes true
3. Never true
4. Don't know
5. Prefer not to answer

IF CHILDREN UNDER 18 IN HOUSEHOLD, ASK Q4 AND Q5; OTHERWISE, SKIP TO FIRST LEVEL SCREEN

Q4. (I/we) relied on only a few kinds of low-cost food to feed the child(ren) because (I/we) were running out of money to buy food.

1. Often true
2. Sometimes true
3. Never true
4. Don't know
5. Prefer not to answer



Q5. (I/we) couldn't feed the child(ren) a balanced meal, because (I/we) couldn't afford it.

1. Often true
2. Sometimes true
3. Never true
4. Don't know
5. Prefer not to answer

FIRST LEVEL SCREEN (screener for Stage 2): If AFFIRMATIVE RESPONSE to ANY ONE of Q1-Q5 (i.e., "often true" or "sometimes true") then continue to STAGE 2; otherwise, skip to end.

STAGE 2: Questions 6-10 - ask households passing the First Level Screen

IF CHILDREN UNDER 18 IN HOUSEHOLD, ASK Q6; OTHERWISE SKIP TO Q7

Q6. The child(ren) were not eating enough because (I/we) just couldn't afford enough food.

1. Often true
2. Sometimes true
3. Never true
4. Don't know
5. Prefer not to answer

The following few questions are about the food situation in the past 12 months.

Q7. Did you ever cut the size of your meals or skip meals because there wasn't enough money for food?

1. Yes
2. No (Go to Q8)

Q7b. How often did this happen?

1. Almost every month
2. Some months but not every month
3. Only 1 or 2 months
4. Don't know

Q8. Did you ever eat less than you felt you should because there wasn't enough money for food?

1. Yes
2. No
3. Don't know

Q9. Were you ever hungry but didn't eat because you couldn't afford enough food?

1. Yes



2. No
3. Don't know

Q10. Did you lose weight because you didn't have enough money for food?

1. Yes
2. No
3. Don't know

SECOND LEVEL SCREEN (screener for Stage 3): If AFFIRMATIVE RESPONSE to ANY ONE of Q7-Q10, then continue to STAGE 3; otherwise, skip to end.

STAGE 3: Questions 11-15 - ask households passing the Second Level Screen

Q11. Did you not eat for a whole day because there wasn't enough money for food?

1. Yes
2. No (IF CHILDREN UNDER 18 IN HOUSEHOLD, ASK Q12; OTHERWISE SKIP TO END)
3. Don't know
4. Prefer not to answer

Q11b. How often did this happen?

1. Almost every month
2. Some months but not every month
3. Only 1 or 2 months
4. Don't know
5. Prefer not to answer

IF CHILDREN UNDER 18 IN HOUSEHOLD, ASK Q12-15; OTHERWISE SKIP TO END

NOTE: THIS SECTION HAS NOT BEEN EDITED TO CONFORM WITH CCWS WORDING (e.g. I/WE)

Now, a few questions on the food experiences for children in your household.

Q12. In the past 12 months, did you or other adults in your household ever cut the size of any of the children's meals because there wasn't enough money for food?

1. Yes
2. No
3. Don't know
4. Prefer not to answer

Q13. In the past 12 months, did any of the children ever skip meals because there wasn't enough money for food?

1. Yes



2. No
3. Don't know
4. Prefer not to answer

Q13b. How often did this happen?

1. Almost every month
2. Some months but not every month
3. Only 1 or 2 months
4. Don't know
5. Prefer not to answer

Q14. In the past 12 months, were any of the children ever hungry but you just couldn't afford more food?

1. Yes
2. No
3. Don't know
4. Prefer not to answer

Q15. In the past 12 months, did any of the children ever not eat for a whole day because there wasn't enough money for food?

1. Yes
2. No
3. Don't know
4. Prefer not to answer

End