Describing Food Literacy Among Canadian Adults and Identifying Sociodemographic Predictors

Salma Bafagih, Lesley Andrade, Rola Al Ghali, Katherine Jefferson, Michael Prashad, JoAnne Arcand
Ontario Tech University, Faculty of Health Science, Oshawa, Canada

BACKGROUND

- Canadian diets demonstrate high consumption of sodium, sugar, and saturated fats, contributing immensely to the **national burden of death and disability**.[1,2]
- **Food literacy** (FL) describes how individual dietary knowledge, skills, and practices influence interactions with the broader food environment to make dietary choices.[3]
- **FL** has broad influences on **dietary behaviours**,[4] but has not been well characterized, nor have social determinants been investigated at the population level.

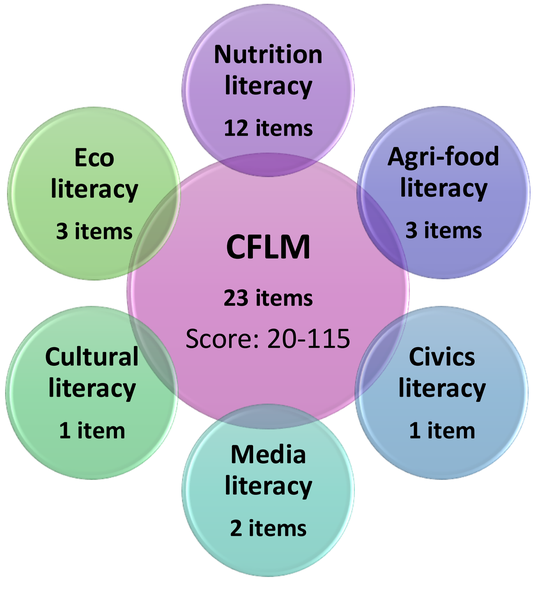
OBJECTIVES

To **describe levels of FL** among Canadian adults and **determine sociodemographic predictors** of FL.

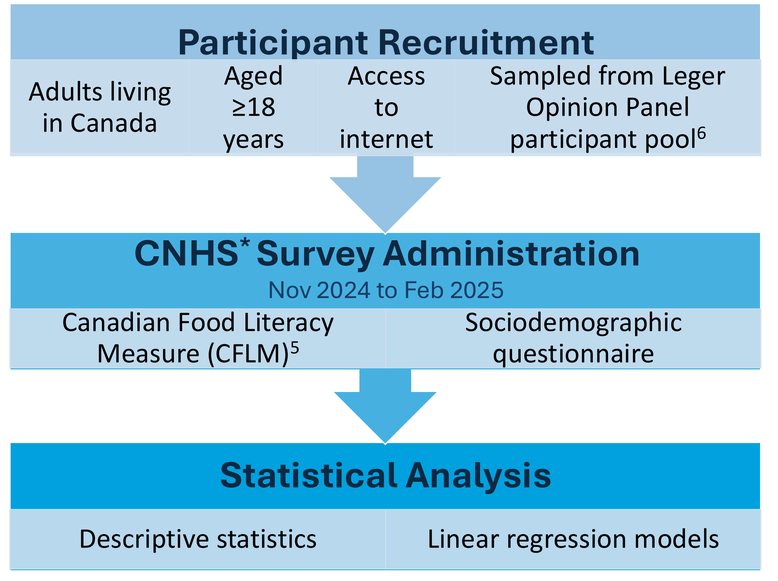
- Hypothesis: women, people with higher education and income, those who live in urban areas, and white individuals will display higher FL.

METHODS

Figure 1. Canadian Food Literacy Measure (CFLM) Scoring[5]



Scoring system:
- 5-point Likert scale x20 items
- Binary scale x2 items
- "Select all that apply" x1 item



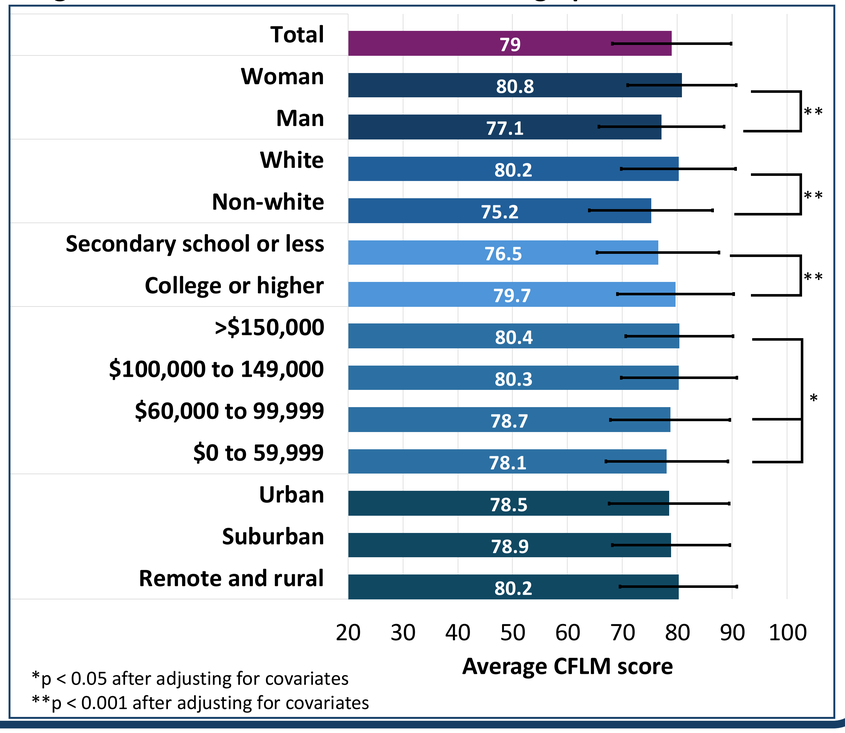
*CNHS = Canadian Nutrition and Health Survey

RESULTS

Table 1. Participant demographics (n=3277)

Mean Age (SD)	**49.4 (±17.7)**
Gender	
Woman	1689 (51.5%)
Man	1588 (48.5%)
Race	
White	2497 (76.2%)
Non-white	780 (23.8%)
Education	
Secondary school or less	749 (22.9%)
College diploma or higher	2528 (77.1%)
Annual Household income (CAD)	
$0 to 59,999	1152 (35.2%)
$60,000 to 99,999	864 (26.4%)
$100,000 to 149,000	590 (18.0%)
>$150,000	437 (13.3%)
Community Type	
Remote and rural	682 (20.8%)
Suburban	1149 (35.1%)
Urban	1446 (44.1%)

Figure 2. Mean FL score across sociodemographic variables



*p < 0.05 after adjusting for covariates
**p < 0.001 after adjusting for covariates

IMPLICATIONS

- This study identifies populations that are vulnerable to poor diet quality which have been underrepresented in current FL literature (i.e., non-white individuals, those with a secondary school diploma or less, those with an annual household income <$100,000 CAD, younger-aged individuals, men).
- These findings can inform future interventions that cater to the needs of these underserved groups to improve dietary outcomes.
- Targeted interventions must consider the intersectional relationship of these sociodemographic predictors.
- Further studies should investigate differences among gender and racial minority groups, as well as adjust annual household income and food insecurity related variables.

salma.bafagih@ontariotechu.net

This research was funded by:
CIHR IRSC Canadian Institutes of Health Research / Instituts de recherche en santé du Canada

REFERENCES

1. Alam S, Lang JJ, Drucker AM, Gotay C, Kozloff N, Mate K, et al. Assessment of the burden of diseases and injuries attributable to risk factors in Canada from 1990 to 2016: an analysis of the Global Burden of Disease Study. CMAJ open. 2019;7(1):140-8.
2. Willett W, Rockström J, Loken B, Springmann M, Lang T, Vermeulen S, et al. Food in the Anthropocene: the EAT–Lancet Commission on healthy diets from sustainable food systems. The Lancet (British edition). 2019;393(10170):447-92.
3. Health Canada. Glossary – Canada's food guide: Government of Canada; 2019. Available from: https://food-guide.canada.ca/en/guidelines/glossary/.
4. Hernandez KJ, Gillis D, Kevany K, Kirk S. Towards a common understanding of food literacy: a pedagogical framework. Canadian Food Studies. 2021;8(4).
5. Martin AE, Wallace A, Jacob R, Any M, Laila A, Hernandez K, et al. Development, validity, and reliability assessment of the Canadian Food Literacy Measure. Applied physiology, nutrition, and metabolism. 2024;49(11):1471-94.
6. Leger Opinion. FAQ for Academic Researchers 2025. Available from: https://leger360.com/wp-content/uploads/2025/03/Academics-QA.pdf.