# Article information:

Observational study of population level disparities in food costs in 2021 in Canada: A digital national nutritious food basket (dNNFB) - ScienceDirect
<https://www.sciencedirect.com/science/article/pii/S2211335523000530>

# Article summary:

1. The cost of food is a critical determinant of consumer purchases and diet, and disproportionately high inflation in food prices relative to other goods has the potential to seriously amplify existing inequities in healthy food purchasing and consumption.

2. Market basket measures typically include the cost of food through an indicator 'basket' of commonly consumed retail groceries to meet minimum dietary standards, but interpreting the relationship between market baskets and public health outcomes remains difficult.

3. Researchers have turned to two main methods of ad-hoc food cost data collection: secondary analyses of commercial datasets, and/or in-store auditing procedures, but both methods lack standardization, provide low spatial coverage, require large outlays of financial and human resources, and limit potential for post-hoc diet cost analyses.

# Article rating:

Appears moderately imbalanced: The article provides some useful information, but is missing several important points or pieces of evidence that would be required to present the discussed topics in a balanced and reliable way. You are encouraged to seek a more balanced perspective on the presented issues by exploring the provided research topics and looking at different information sources.

# Article analysis:

The article presents an observational study of population-level disparities in food costs in Canada, using a digital national nutritious food basket (dNNFB) to collect data on food prices. The authors argue that the cost of food is a critical determinant of consumer purchases and diet, and that high inflation in food prices relative to other goods can amplify existing inequities in healthy food purchasing and consumption.

The study design is cross-sectional, collecting online food price data over a two-day period during the pandemic. The data source is Loblaw's, Canada's largest food retailer corporation by market share, and the web scraper was built with Python using selenium and beautifulsoup4 for scraping and parsing respectively. Search keywords were generated from the 61 items included in the 2019 NNFB, reflecting the most recent 2019 Canada’s Food Guide and intakes from the 2015 Canadian Community Health Survey—Nutrition.

While the study provides valuable insights into population-level disparities in food costs across provinces and territories, there are several potential biases and limitations to consider. Firstly, the study only collects data from one retailer corporation, which may not be representative of all retailers or regions. Secondly, the study only collects data over a two-day period during the pandemic, which may not reflect typical pricing patterns or consumer behavior. Thirdly, while web-scraping technology presents an innovative solution to existing cost-of-living surveillance limitations, it may also introduce errors or biases if not designed carefully.

Furthermore, while the authors acknowledge that their approach has limitations compared to traditional market basket measures calculated by national statistics offices or public health units, they do not explore these limitations in depth or provide evidence for why their approach is superior. Additionally, while they highlight the importance of accurate regional consumer price and cost of living measurements for policymaking purposes, they do not explore how their findings could inform policy decisions or address existing inequities.

Overall, while this article provides valuable insights into population-level disparities in food costs across Canada using a novel approach to data collection through web-scraping technology, it is important to consider its potential biases and limitations when interpreting its findings. Further research is needed to validate these findings across multiple retailers and time periods and explore how they could inform policy decisions aimed at addressing existing inequities in healthy food purchasing and consumption.

# Topics for further research:

* Limitations of market basket measures in calculating regional consumer prices
* Factors influencing food prices in Canada
* Impact of COVID-19 on food prices and consumer behavior
* Strategies for addressing food insecurity and inequities in healthy food access
* Comparison of web-scraping technology to traditional data collection methods
* Role of government policies in regulating food prices and promoting healthy food choices

# Report location:

<https://www.fullpicture.app/item/656868eea0078b11fa852357aa7b524f>