



Nutrition Labelling: Understanding and Use of Nutrition Facts Tables among Young Canadians

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➡ BACKGROUND

- Dietary patterns are associated with nutrition-related chronic diseases such as obesity, diabetes, cardiovascular disease, and cancer
- Poor dietary patterns among adolescents and young adults in Canada



➡ Adolescents and Young Adults





Nutrition Labels

Nutrition Facts	
Valeur nutritive	
Per 1 bowl (300 g) / Pour 1 bol (300 g)	
Amount	% Daily Value
Teneur	% valeur quotidienne
Calories / Calories	440
Fat / Lipides 19 g	29 %
Saturated / Saturés 4 g	21 %
+ Trans / Trans 0.2 g	
Cholesterol / Cholestérol 35 mg	
Sodium / Sodium 860 mg	36 %
Carbohydrate / Glucides 53 g	18 %
Fibre / Fibres 4 g	16 %
Sugars / Sucres 6 g	
Protein / Protéines 15 g	
Vitamin A / Vitamine A	45 %
Vitamin C / Vitamine C	4 %
Calcium / Calcium	20 %
Iron / Fer	20 %

CAUTION

MASS

CONFUSION

➡ PREVIOUS RESEARCH

- Not a single published study in Canada has examined the understanding and use of NFTs among young people



▶ **PRIMARY RESEARCH OBJECTIVE**

To investigate if and how young people in Canada comprehend and use serving size and %DV information on the current and modified Nfts when choosing and comparing foods.



STUDY 1 will consist of a quantitative survey with 2,000 participants between the ages of 16-24 years from across Canada

STUDY 2 will use qualitative methods to explore the process by which young people engage with, understand, and use serving size and %DV information on the current and modified NFTs.



STUDY 1

- Part 1: Demographic and Background Information
 - Age, gender, ethnicity, socioeconomic status, height, weight, education, shopping and label use habits, interest in nutrition and measures related to body weight concerns and attitudes towards eating using the EAT-26
- Part 2: Efficacy of NFTs on Comprehension and Use
 - Between-groups experiment to test comprehension and use of modified formats of the NFT compared to the current NFTs using a nutrition knowledge survey



EXPERIMENTAL CONDITIONS

	Current Serving Sizes	Standard Serving Sizes based on CFG servings
%DV only	Condition #1 - control	Condition #2
%DV + HIGH / LOW Descriptors**	Condition #3	Condition #4
%DV + HIGH / LOW Descriptors** + Colour	Condition #5	Condition #6

*n=~333 participants per condition

**HIGH = $\geq 15\%$ DV per serving LOW = $\leq 5\%$ DV per serving

CONDITION #6

HIGH Sodium NFt

Product A

Nutrition Facts / Valeur nutritive

Per: 7 crackers (30g) /par 7 craquelins (30g)

Amount	% Daily Value
Teneur	% valeur quotidienne
Calories / Calories 154	
Fat / Lipides 2.7g	LOW/BAS 4%
Saturated/ saturates 0.4g	LOW/BAS 4%
+ Trans / trans 0g	
Cholesterol/ Cholesterol 4mg	0%
Sodium/Sodium 266mg	HIGH/HAUT 18%
Carbohydrate/ Glucides 20g	7%
Fibre 1.75g	7%
Sugars 1.4g	
Protein 2.8g	
Vit A/Vit A	0%
Vit C/Vit C	0%
Calcium/Calcium	0%
Iron/Fer	8%

LOW Sodium NFt

Product B

Nutrition Facts / Valeur nutritive

Per: 7 crackers (30g) /par 7 craquelins (30g)

Amount	% Daily Value
Teneur	% valeur quotidienne
Calories / Calories 145	
Fat / Lipides 2.6g	LOW/BAS 4%
Saturated/ saturates 0.8g	LOW/BAS 4%
+ Trans / trans 0g	
Cholesterol/ Cholesterol 4mg	0%
Sodium/Sodium 60mg	LOW/BAS 4%
Carbohydrate/ Glucides 19g	6%
Fibre 1g	4%
Sugars 5g	
Protein 2g	
Vit A/Vit A	0%
Vit C/Vit C	0%
Calcium/Calcium	0%
Iron/Fer	6%

SURVEY

- Looking at **Products A & B**, which product do you think would be the best option for someone who was trying to reduce their risk of blood pressure by lowering their sodium intake?

- Product A
- Product B
- Don't Know

- If you consumed **one box of Product A**, what percentage of your recommended **daily value of total fat** would you consume?

*Questions based on previously validated surveys from Health Canada and Mackison et al.

ANALYSES

- **Part 1**: Descriptive statistics to characterize self-reported patterns of current use and levels of comprehension
- **Part 2**: Logistic regression models to examine differences across conditions for the four outcomes: participants' ability to correctly
 1. Interpret;
 2. Define;
 3. Compare; and,
 4. Mathematically manipulate information on the NFt.

STUDY 2

Design Overview:

- Verbal Protocol + semi-structured interviews within randomized stimulus conditions and asked to “think aloud” while participating in 2 Behavioural Tasks



STUDY 2



- Behavioural Task 1:

- Purpose: explore participants' food choices in the context of other factors
- Receive \$5 and asked to purchase one of two boxes of crackers from a table replicating a grocery shelf with price indicated
- Watch video and conduct interview

- Behavioural Task 2:

- Purpose: explore how participants understand and use information on the NfT
- Complete the same nutrition knowledge survey as described in Study 1
- Discuss task and interview

➡ ANALYSES

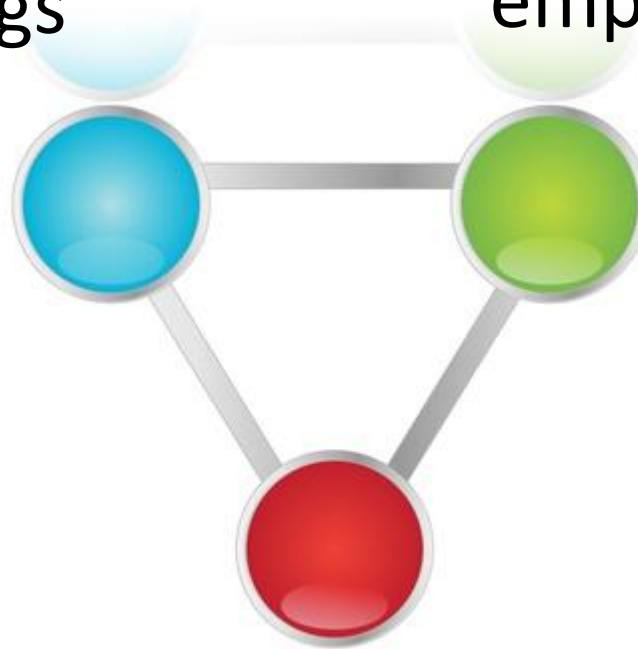


- Recordings will be used to create transcript
- Content analysis
 - Data from *Task 1* will be analyzed inductively using standardized open coding techniques to identify categories and themes
 - Data from *Task 2* will be analyzed deductively using four stages: sampling, unitizing, coding, and producing a visual representation

➡ LINKING DATA

Study 1 – quantitative
empirical findings

Study 2 – qualitative
empirical findings



**Understanding and using NFTs will support young people
in making more informed and healthier food choices**



RESEARCH TEAM

Food and Nutrition

Experimental Design and Survey Methods

Qualitative Methods and Think Aloud

Young People

- Dr. David Hammond
Associate Professor, U Waterloo
- Dr. Erin Hobin
Scientist, Public Health Ontario
- Dr. Judy Sheeshka
RD, Professor, Victoria University
- Ms. Mary Fodor O'Brien
RD, Public Health Ontario
- Dr. Gail McVey
Scientist, Hospital for Sick Kids

TIMELINE: September 2012 through to June 2014

➡ IMPLICATIONS

- Results can support the CFDR to advocate for more effective and evidence-informed regulatory changes to NfTs.
- Translate findings to communicating nutrition information on Front-of-Package and menu labelling initiatives.
- Aligned with several NfT-related recommendations made by Canada's Sodium Working Group.
- Guide school curricula.



 **Thank you**