

**Have we forgotten the children?
A study of health & nutrition issues in
immigrant & refugee newcomer children**

**Christine Nisbet, MSc Candidate
Supervisor: Dr. Hassan Vatanparast
College of Pharmacy and Nutrition,
University of Saskatchewan**

Outline

- Introduction
 - Background
 - Purpose
 - Methodology
- Results
 - Food Security
 - Education
 - Income
- Discussion
- Future Work

Immigration Status

- Immigrant

- Comes to a new country to take up permanent residence

- Refugee

- Persecuted for reasons of race, religion, nationality, member of a social group or political opinion”..., unable or unwilling to return to country of birth due to fear for safety



Importance-Immigrants & Refugees

- The number of immigrants & refugees migrating to Canada continues to rise
 - In 2008, Canada welcomed 21,860 refugees & 22,583 immigrants
 - In 2008, SK welcomed: 4,836 immigrants/refugees
 - 63% provincial nominees (SINP)
 - 28% are in the 0-14 age group



Importance-Immigrants & Refugees

- Health declines most in first 5yrs post-migration related to chronic diseases in adults, primarily due to decreased physical activity & poor nutrition.
- Recent immigrants & refugees are at greater risk of poor health due to:
 - Language barrier
 - Lack of knowledge, unfamiliar foods & lifestyle changes
 - Deskilling
- Refugees also experience
 - Pre-migration trauma
 - Lower/No income & education

Importance-Children



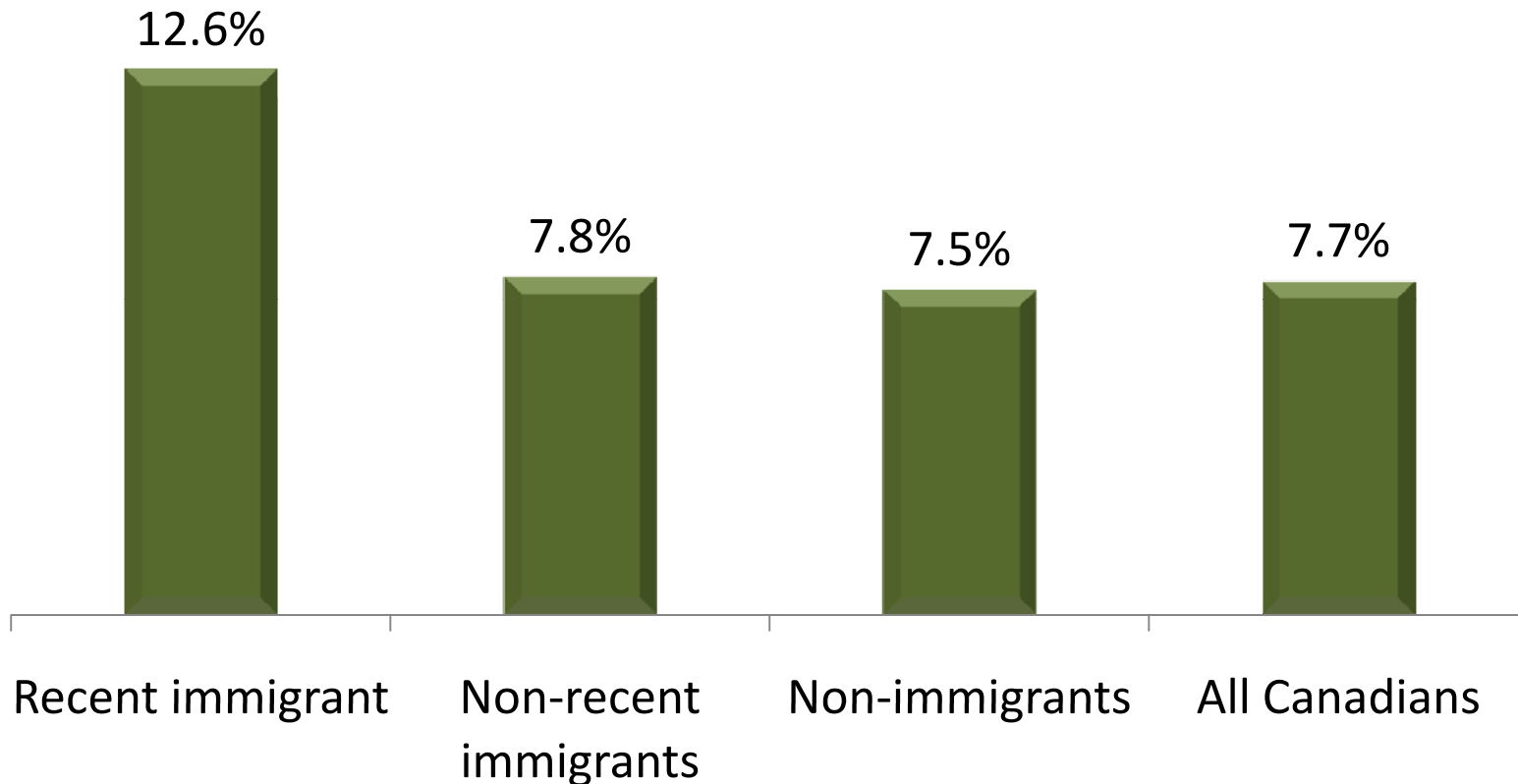
- Children are a vulnerable population & most studies regarding health issues in immigrants & refugees focus on adults.
- Chronic diseases including obesity, DM & HTN are beginning to develop in childhood & adolescence
- Diet & exercise habits are formed in early childhood & can be maintained through adolescence & adulthood
- To our knowledge, no recent Canadian study has a comprehensive approach to the nutrition & health status of immigrant & refugee children

Food Security

“Food security [is] a situation that exists when all people, at all times, have physical, social & economic access to sufficient, safe & nutritious food that meets their dietary needs & food preferences for an active & healthy life.”



Food Insecurity in Canadians



Food Insecurity in Saskatchewan in 2008 was 6.3%.

Food Insecurity in Immigrant Children (includes refugee children)

- Recent immigrants (<5 yrs in Canada): 12.4%
- Non-recent immigrants: 5.6 %
- Canadian-born: 4.9%



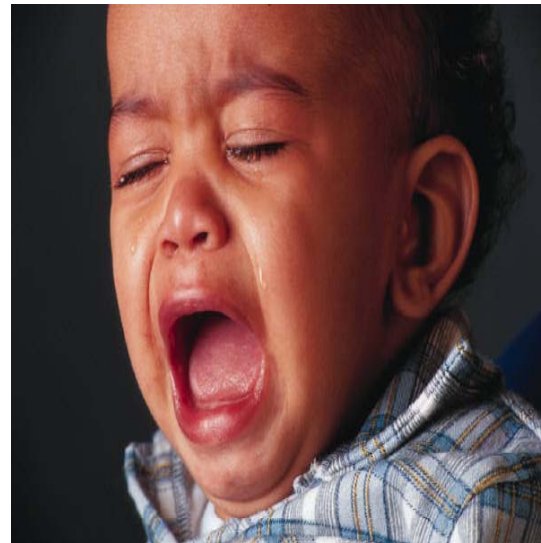
Socio-Demographics



- According to CCHS 2008, food insecurity is greater in households where:
 - The main source of income is social assistance or worker's compensation
 - Neither parent has a post-secondary graduation
 - There are young children (<6yrs)
 - There are larger numbers of children (≥ 3)

Purpose

To characterize health & nutrition issues that affect immigrant & refugee newcomer children.



Participants

Individuals

- 72 children age 7-11yrs
- In Canada no more than 5yrs
- 40.3% immigrants
- 59.7% refugees
- 66.7% male
- 33.3% female

Households

- 61 households
- 39.3% immigrants
- 60.7% refugees

Measures

- Socio-Demographic Status
- Dietary Assessment
- Physical Activity Status
- **Food Security Status**
- Biomarkers
 - Vitamin D
 - Blood Lipid Profile
 - Blood Glucose
- Physical Measures
 - Height
 - Weight
 - Body Mass Index
 - Waist Circumference
 - Blood Pressure
 - Bone (BMC) & Body Composition (DXA)



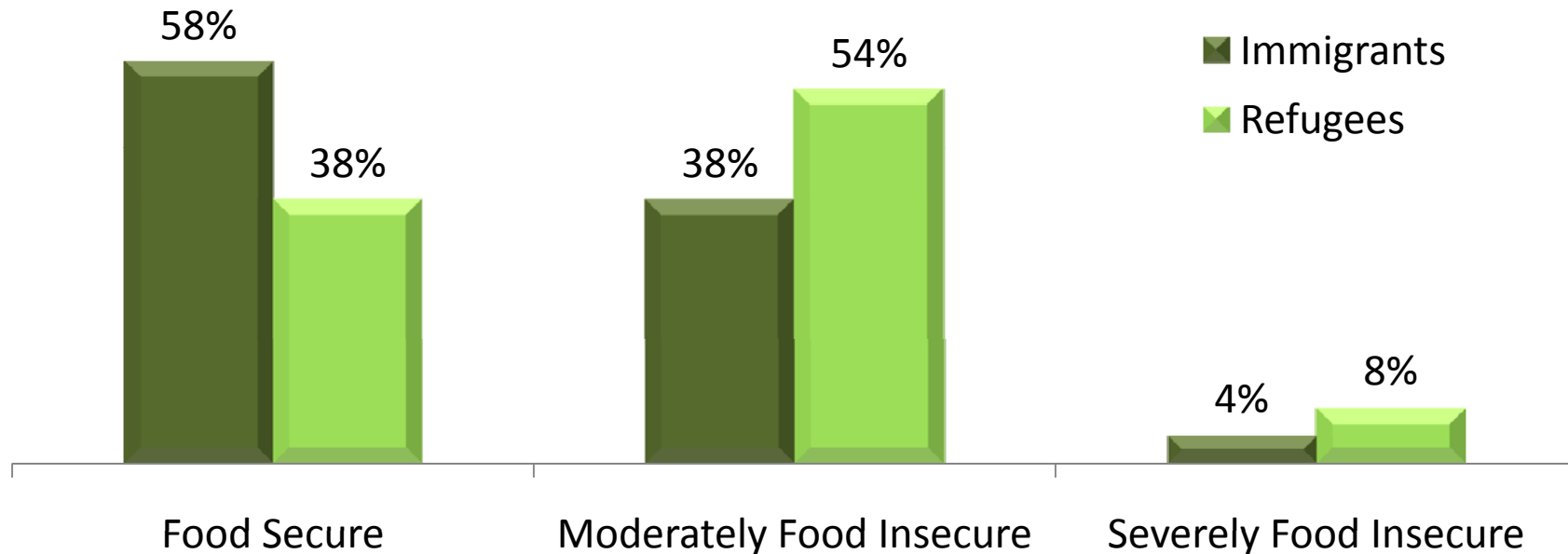
Specific Objective



- Objective
 - To evaluate income-related household food insecurity of children’s families & its impact on children’s health & nutritional status compared to Canadian children.
- Hypothesis
 - The nutritional status of newcomer children with household food insecurity will be poor compared to Canadian children.

Results-Food Security

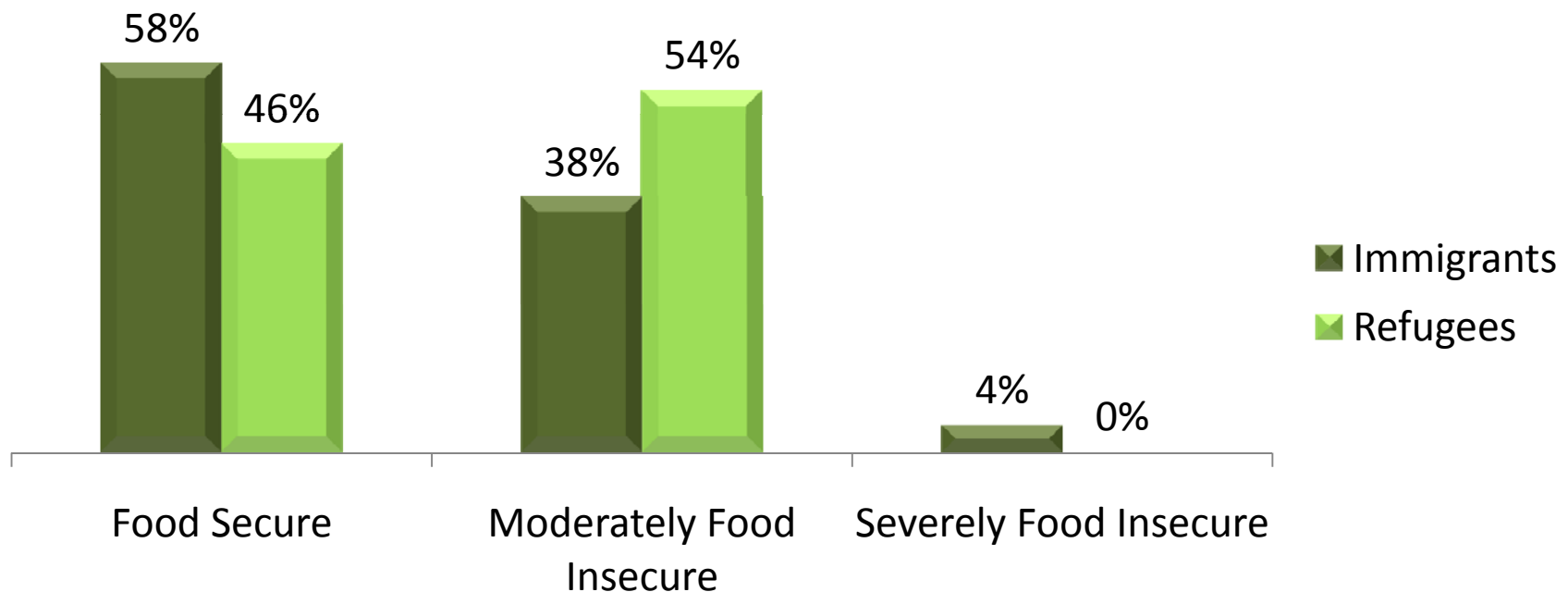
Prevalence of food security according to immigration status



- The prevalence of food insecurity is significantly higher in refugee families compared to immigrant families.
- There is a difference between our data & that of CCHS¹⁵

Results-Child Food Security

Prevalence of food security in children according to immigration status



Immigrant children were more likely to be food insecure if their household was in the 'lowest' income category, mainly from social assistance & had more children

Results-Education

- There is a significant difference in parent education status between immigrants & refugees
- 87.5% of immigrants & 29.7% of refugees had at least one parent who graduated from secondary school.
- Parent education is not significantly associated with food security status



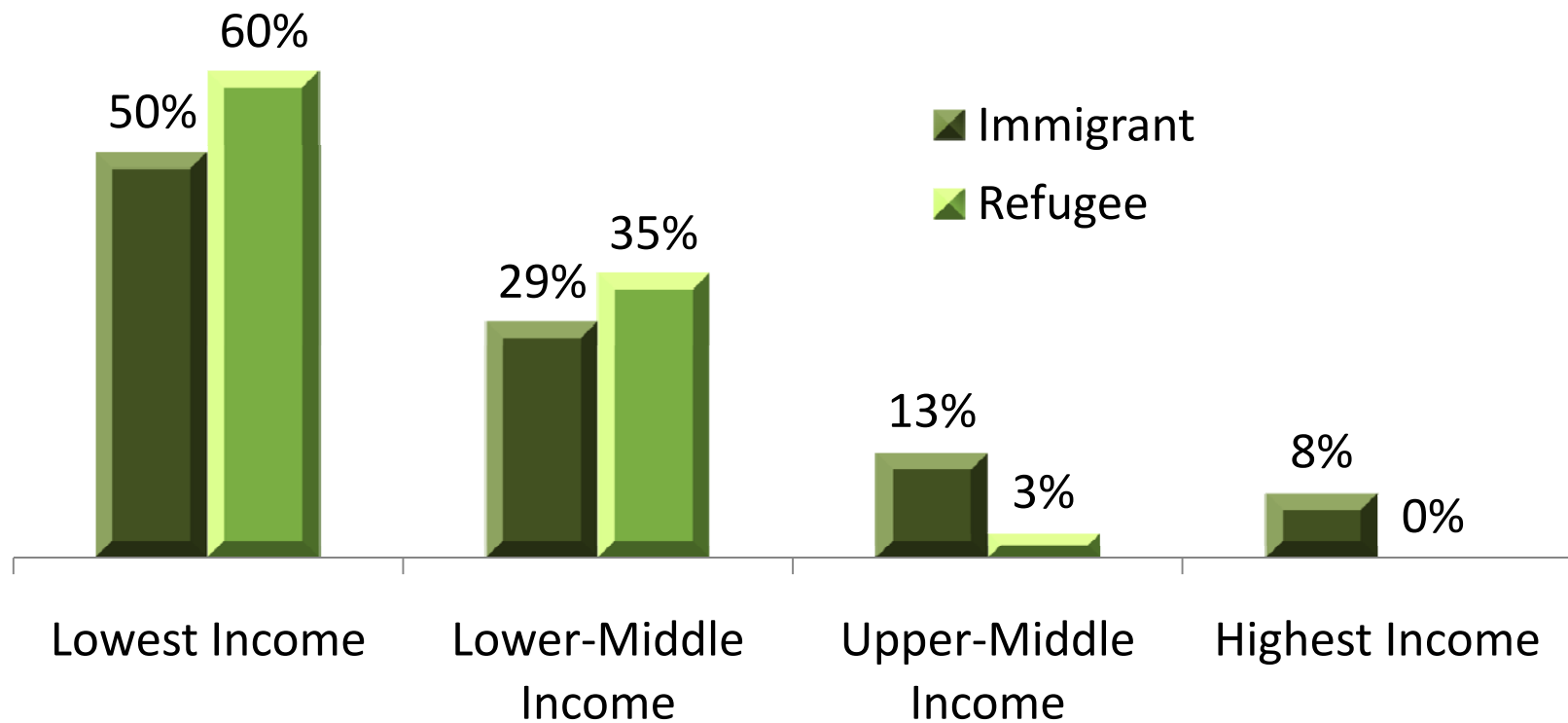
Statistics Canada, 2008

Income Categories

# ppl in hh	Lowest Income	Lower-Middle Income	Upper-Middle Income	Highest Income
1-2	<\$15,000	\$15,000-\$29,999	\$30,000-\$59,999	≥\$60,000
3-4	<\$20,000	\$20,000-\$39,999	\$40,000-\$79,999	≥\$80,00
5+	<\$30,000	\$30,000-\$59,999	\$60,000-\$79,999	≥\$80,000

Results-Income

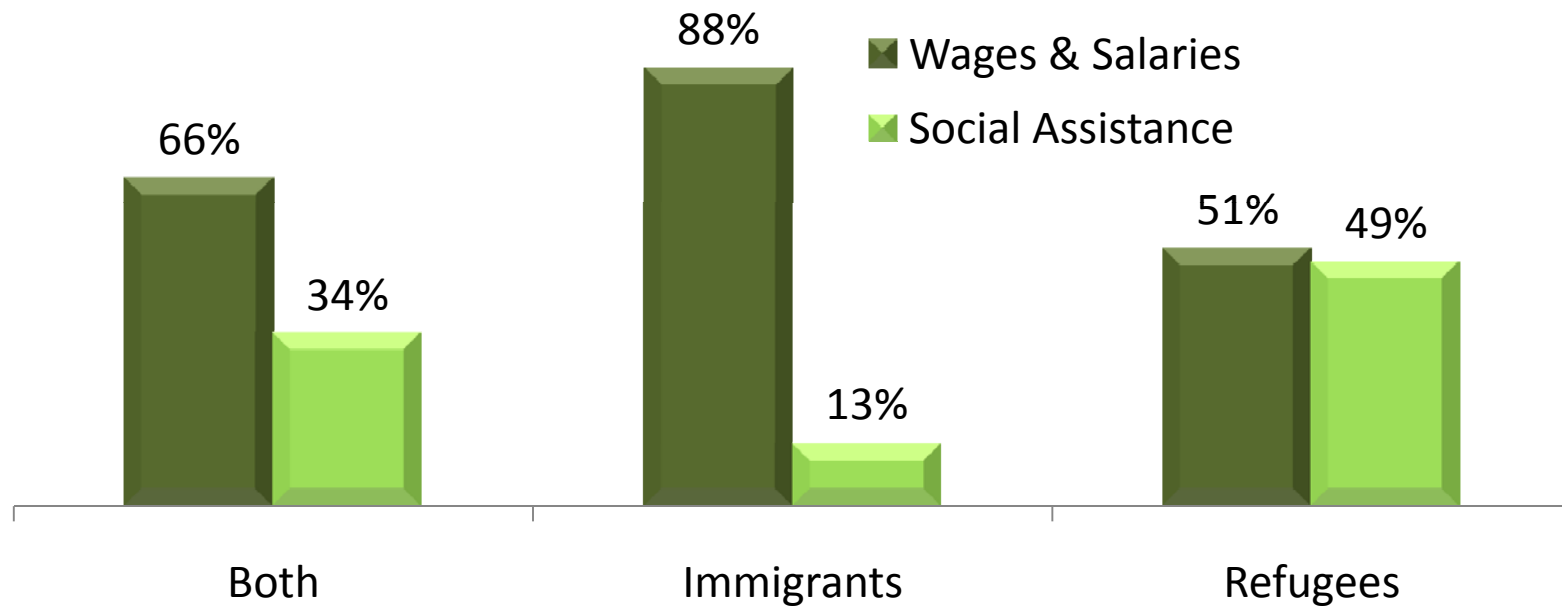
Income categories according to immigration status



Food security status was greater in immigrant households with a higher level of income

Results-Income

Main source of income according to immigration status



There is a significant difference between main source of income for immigrants compared to refugees

Conclusions



- The prevalence of food insecurity is higher among refugee newcomer families compared to immigrants.
- Although education plays a significant role in the food security status of Canadians as a whole, for immigrants & refugees, it does not

Conclusions



- Food secure immigrant households have higher income, mainly from wages/salaries, & few children
- The prevalence of food insecurity among refugees does not vary with income, education, number or age of children in the household; they are always at risk.

Recommendations

Policy

- Strategies for recognition of international credentials
- Education for refugee families
- Nutrition education programs
- Reassess current programs for those at risk

Research

- Distinguish between refugees & immigrants
 - Quantitative & qualitative research



Future Work

- Continue data analysis
- Present at Conferences
 - “Promoting Health Equity” Feb 11-12, Toronto, ON
 - Congress on Pediatric Global Health Feb 17-20, Paris, FR
 - Canadian Nutrition Society June 2-4, Guelph, ON
- Expansion of study has already begun
 - 250 children age 3-13yrs in Canada no more than 5yrs

<http://www.usask.ca/healthyimmigrantchildren/index.php>

Thank You

- Supervisor: Dr. Vatanparast
- Advisory Committee: Drs. Chilibeck, Garcea, Henry
- Research Assistants
- Family, Friends, Fellow Students

Acknowledgements

- Funded by
 - University of Saskatchewan
 - Prairie Metropolis Center
- Collaborators



Saskatoon Open
Door Society, Inc.



Ministry of Advanced Education,
Employment and Labour



Saskatchewan Health
Quality Council

Questions?

