



October 6th + 7th, 2021 | Virtual Conference

17TH ANNUAL CHILD HEALTH RESEARCH DAYS

Nutrition for a Changing World

The Science of Nourishing the Next Generation

CHRD 2021: Abstract & Poster Submission Form

Submitter Name

Olena

First

Kloss

Last

Email

umandru4@myumanitoba.ca

Research Category:

- Basic Science
- Clinical
- Community Health / Policy

What was your role in the project?

- Design
- Perform Experiments
- Analyze Data
- Write Abstract

Presenter Status:

- Undergraduate Students
- Masters Student
- PhD Student
- Post-Doctoral Fellows
- Residents
- Non-Trainee

Title

Nutrient Status and Dietary Patterns of Pregnant At-risk Women of Carrying a Child Fetal Alcohol Spectrum Disorder, living in Northern Manitoba

Background

Planning maternal programs requires a comprehensive understanding of all maternal behaviors that are associated with fetal alcohol spectrum disorders (FASD), as alcohol consumption is not the sole contributor. Maternal nutrition is identified as one of the major factors contributing to FASD due to alcohol's property of displacing nutrients and interfering with metabolism, contributing to the severity of FASD and alcohol-related developmental deficits. The information on the nutrition status of women at-risk of carrying a child with FASD is scarce, particularly in the Indigenous population living on reserve.

Objective

Nutrient Status and Dietary Patterns of Pregnant Indigenous Women: Implications for Fetal Alcohol Spectrum Disorder Prevention and Intervention

Methods

Through the partnerships with two Northern communities in Manitoba, 59 pregnant women ages 14-45 were recruited, and divided into an at-risk and non-at-risk group. Using an interactive questionnaire-“Nutrition for Two”, previously developed in our laboratory, information was obtained on participant demographics, dietary intake, substance use, and maternal health.

Results

Significant differences exist between at-risk and non-at-risk women for meeting the Dietary Reference Intakes (DRIs) for zinc (122% vs.211%), folate (57% vs. 95%), choline (92%vs.157%), vitamin C (126% vs.256%), niacin (141% vs.238%), calcium (75% vs.123%), and iron (57% vs. 100%). Significant differences ($p<0.05$) were also observed for fat intake (99 vs. 60 grams). Both at-risk and non-at-risk women were below the former Health Canada CFG's recommendations for all food groups. At-risk women also reported having poorer food access and poorer food availability.

Conclusion

These study outcomes display that pregnant at-risk women residing in Northern communities have a lower intake of micronutrients, have poorer food access and availability compared to non-at-risk women. The findings of this study are the fundamental premise for the development of best-practice policies and advocacy to benefit individuals, families, and communities in Northern Manitoba.

Authors

- For each author, please click "[+] Add Item" and provide the author's information

Name	Email	Role	Profession
Olena Kloss	umandru4@myumanito ba.ca	Presenting Author	Graduate
Marie Jebb	marie.jebb@ocnhealth. com	Co Author	Nurse Manager
Frances Potter	frances.potter@gov.mb. ca	Co Author	Nurse Manager
Michael Eskin	michael.eskin@umanito ba.ca	Co Author	Full Professor
Albert Chudley	abchudley@gmail.com	Co Author	Full Professor
Miyoung Suh	miyoung.suh@umanito ba.ca	Co Author	Full Professor