

# Nutritional status and seasonal intake among older Métis adults in a remote northern Saskatchewan community in Canada

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## INTRODUCTION

- ❖ Health of Indigenous seniors is lower than the general Canadian population due to a complex constellation of factors including racism, discrimination, and colonization (1).
- ❖ Less is known about how to support healthy aging in this group on the nutritional status and food practices of older Métis adults and its influence on Métis healthy aging (overall and Métis seniors specifically).
- ❖ Under/over nutritional status mediates the development of preventable chronic diseases.
- ❖ Growing population of Métis seniors in Canada, may face challenges in meeting their health needs including nutritious food.
- ❖ **We aimed** to assess dietary intake of older Métis adults as one aspect of a healthy aging research collaboration with a northern Saskatchewan Métis community.

## METHODS

- ❖ Seven individuals were part of a seasonal assessment of dietary intake, summer/fall and winter/spring.
- ❖ For each season, we collected three 24-hour recalls, each 10 days apart. Usual intake was the mean of the three 24-hour recalls.
- ❖ For this sub-study, we compared the usual intake of the seven participants with recommended daily intake of the four main food groups for age and sex. Reference information was drawn from Canada's Food Guide 2019(2).
- ❖ The quality of diet was determined using Nutrient-Rich Foods Index (NRF 9.3).
- ❖ Seasonal nutrient adequacy was evaluated in groups using Estimated Average Requirement (EAR) for key nutrients (Fig 3).
- ❖ Field notes supported data interpretation.

## RESULTS

- ❖ The mean age of participants was **67.5 years (57% females)**.
- ❖ All participants had considerably **lower intake of vegetables, fruits and milk** and alternatives compared to the recommended values (Fig1).
- ❖ No significant difference in food group intakes between summer/fall and winter/spring.
- ❖ Individual consumption of **fiber, calcium, potassium, vitamin A and vitamin D** were all below the Recommended Dietary Allowance (RDA).
- ❖ Iron intake met the recommended level.
- ❖ Diet quality presented as mean **NRF score, was higher in summer/fall (635)** compared to winter/spring (542) (Fig 2).
- ❖ **Prevalence of inadequacy tended to be higher in winter/spring** compared to summer/fall for calcium, folate, vitamin B12, vitamin D and zinc (Fig 3).
- ❖ **All participants had below recommended intakes of potassium in both winter/spring and summer/fall.**
- ❖ There was a trend towards reliance on calorie dense foods in winter when fresh vegetables and fruits are less accessible and more expensive, and as land food supplies ran low.

## RESULTS (cont)

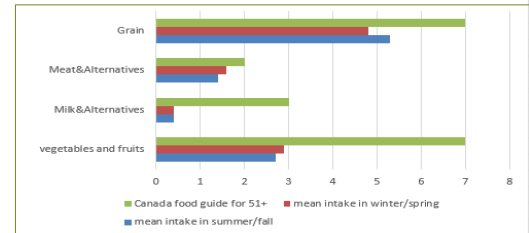


Fig 1. Food group comparison in different seasons among older Métis adults of Canada (servings/day)

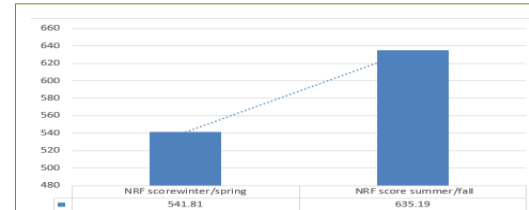


Fig 2. NRF score of diet quality in different seasons (score 300-900), in older Métis adults of Canada

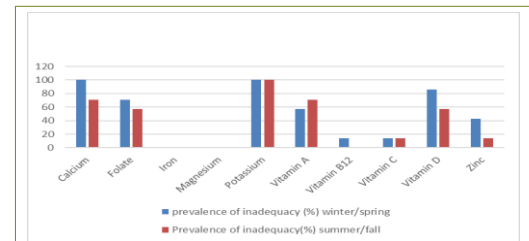


Fig 3. Seasonal nutrient adequacy of micronutrients in different seasons among older Métis adults of Canada (In percentage)

## DISCUSSION and CONCLUSION

- ❖ The diet quality of older Métis adults was in the range with the Canadian general population.
- ❖ Improving the availability and accessibility of fruits and vegetables, particularly in the cold season, can further enhance their nutritional health.
- ❖ Seniors are a highly valued population in this community with many efforts to support their well-being, including nutritionally, and to share their land-based knowledge with younger generations.
- ❖ Participants who had traditional skills to hunt, fish, garden and forage, tended to have more and better food than those who did not.
- ❖ Significant efforts in the community support nutrition wellbeing, including a large community garden and greenhouse and sharing of land resources such as fish, wild meat, and berries through the Elder's lodge, the Friendship Centre, community feasts and food hampers, as well as other initiatives.

## References:

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2. Government of Canada. Eating Well with Canada's Food Guide – First Nations, Inuit and Métis. 2019. Available from <https://www.canada.ca/en/health-canada/services/food-nutrition/reports-publications/eating-well-canada-food-guide-first-nations-inuit-metis.html>
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## Acknowledgement:

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