

Nutritional status of Anabaptist Women in Southwestern Ontario

T Hartwig¹, N Ridgeway², L Wilson¹, J Leach², J Tam², C Soulliere³, E Roth³, V Siu⁴, M Purdy², A Watt⁵, J Randall Simpson¹

¹University of Guelph, Guelph, ON, ²Perth District Health Unit, Stratford, ON, ³Countryside Midwifery Services, Milverton, ON, ⁴Western University, London, ON, ⁵Healthy Start, Milverton, ON

Introduction: The Old Order Amish and Mennonite communities, who use horse-and-buggy transportation, are two of the most conservative Anabaptist groups in rural Southwestern Ontario. Traditional attire limits sun exposure, as women wear head coverings and long sleeve dresses with full skirts. Health care professionals have expressed concerns about the nutritional status for women of childbearing age.

Objective: To determine the nutritional status, particularly vitamin D, folate, vitamin B₁₂, and iron, by assessing dietary intake (3-day records, ESHA analysis) and lab values in this descriptive study.

Results: Fifty-one women (18 pregnant) (55% OOA) (31±6 years) were recruited; nutrient intake from food and biochemical analyses are available for 48 and 46 women, respectively. Serum 25(OH) vitamin D was low (<75 nmol/L) for 63% of women. Vitamin D intake was 3±1 mcg/day with 100% of intakes <EAR (10 mcg/day). Milk and alternatives servings were 2.1±1.4/day (2/day recommended); most (80%) consumed farm milk with no added vitamin D. Three pregnant women had hemoglobin less than reference values for their childbearing status; none had low (<5 ug/L) ferritin. Iron intake was 15±4 mg/day (RDA, 18-27 mg/day); 7 of the pregnant women had iron intake < EAR (22 mg/day). Most women (90%) had high (>2500 nmol/L) red blood cell folate. Food folate intake was 335±136 mcg/day (RDA, 400-600 ug/day); 90% took folate-containing prenatal supplements. Serum vitamin B₁₂ was high (>652 pmol/L) for 10 and low (<138 pmol/L) for one woman. Vitamin B₁₂ intake was 4.9±4 mcg/day (RDA, 2.4-2.6 mcg/day).

Conclusion: Of the nutrients evaluated, vitamin D is the only one for real concern due to the low intake and insufficient status assessed.

Significance to Dietetic Practice: The results of this study will be used to inform practices related to routine laboratory testing, nutritional assessment and education, and recommendations for supplementation, particularly for vitamin D.

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