

ENHANCING FOOD IN LONG-TERM CARE: STRATEGIES TO IMPROVE MICRONUTRIENT QUALITY OF FOOD ON THE MENU

Ivy Lam¹, Heather Keller¹, Ken Stark¹, Lisa Duizer². ¹University of Waterloo, ²University of Guelph.

Contact: ivy.lam@uwaterloo.ca

Brief Description of Research or Project: This study aims to determine: If Canadian LTC menus meet micronutrient recommendations, and whether nutrient-dense DRI-based Super-menus are feasible to meet recommendations. Week one of menus, recipes, and portion sizes from 5 LTCs were analyzed for micronutrient content using Food Processor and validated by site dietitians. Five micronutrient-focused Super-menus were created. Nine micronutrients were commonly low in menus. Super-menus met all recommendations excepting vitamin D, E, and potassium, yet volume and calorie content remained the same, suggesting other solutions (e.g. fortification) should be considered. Greater awareness of micronutrient qualities of food is needed by menu planners to address micronutrient needs. **Why is this research important to profile at the Research Day 2014?** Low micronutrient intake is prevalent in LTC, negatively affecting residents' health and quality of life. Adequate intake of a varied diet is needed to meet micronutrient requirements, but physiological factors often hinder residents' food intake, rendering them nutritionally vulnerable. Most LTC menus are planned using Canada's Food Guide, but inconsistencies with DRI recommendations may mean that menus do not meet micronutrient recommendation. Current strategies to address potential micronutrient deficiencies in LTC include use of oral nutritional supplements and vitamin/mineral pills, yet both are reactive approaches, and poor compliance by residents has been documented. Research suggests that families and providers prefer a 'food-first' approach in addressing nutritional problems. With the current interest in limiting medication in LTC, this work offers a timely potential preventative solution to help meet residents' micronutrient needs. Creative incorporation of herbs and spices along with nutrient-dense foods may meet micronutrient needs, as demonstrated by the Super-menus. However, the strategy's feasibility is in question due to food-cost implications, as well as caloric and volume of food required to be consumed. This exploratory analysis is part of a larger study focused on developing a fortification strategy for LTC. This analysis confirms findings identified in a literature review; micronutrient intake is problematic in the LTC population. It is possible to plan a menu with the potential of meeting most micronutrient recommendations. But current menu planning practices fall short and greater awareness of micronutrient qualities of foods and of best practices in food-preparation methods through better training and education is needed.