Topic Area: School Nutrition

Abstract Title

Exploring school day food intake in Southwestern Ontario elementary schools with student nutrition programs

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Abstract

Introduction: Proper childhood nutrition is important for optimal growth, development, and learning. School nutrition programs (SNPs) offering healthy options have the potential to positively influence children's eating habits since children consume one-third of their daily intake at school. Currently, the food intake of children receiving SNPs is not known.

Objective: To explore food intake during the school day in elementary schools where SNPs were implemented.

Methods: Children (n=549) in Grades 4-8 from 22 schools in Southwestern Ontario recorded their intake during the school day using the self-administered Pupils Eating At School (PEAS) questionnaire. PEAS was created by modifying a previously-validated tool for this age group. Reported intake in PEAS was quantified into Eating Well with Canada's Food Guide (CFG) servings and compared to one-third of CFG recommendations for children 9-13 years old. Fruit juice, sugar sweetened beverages (SSB), and snacks were counted separately.

Results: Median (interquartile range) intake of servings were as follows: milk and alternatives (Mi) 0.5 (0.0, 1.5); meat and alternatives (Me) 0.5 (0.0, 1.0); grain products (G) 2.0 (0.0, 2.0); vegetables 0.0 (0.0, 1.0) and fruit 1.0 (0.0, 2.0) (VF); snacks 1.0 (0.0, 2.0); fruit juice 0.0 (0.0, 0.0); and SSB 0.0 (0.0, 1.5). In comparison to one-third of CFG recommendations, children met 50% for Mi; 152% for Me; 100% for G; and 50% for VF.

Conclusions: Children did not meet the CFG recommendations for Mi and VF. Since VF intake can be indicative of overall diet quality, promoting increased servings at school should be a primary focus of SNPs. It is unknown if SNP offerings added to or displaced items packed in lunches.

Significance to the field of dietetics: Exploring school day intake in children receiving SNPs provides context for evaluating these important programs.