Notice of the Final Oral Examination
for the Degree of Master of Arts

of

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"Using food models to enhance sugar awareness among older adolescents: Evaluation of a brief nutrition education intervention"

Department of Exercise Science, Physical and Health Education

Friday, April 26, 2019
9:00am
McKinnon Building
Room 0025

Supervisory Committee:
Dr. Patti-Jean Naylor, Department of Exercise Science, Physical and Health Education, University of Victoria (Supervisor)
Dr. Sandra Gibbons, Department of Exercise Science, Physical and Health Education, UVic (Member)

External Examiner:
Meghan Day, Department of Population and Public Health, Ministry of Health

Chair of Oral Examination:
Dr. Annalee Lepp, Department of History, UVic

Dr. David Capson, Dean, Faculty of Graduate Studies

Abstract

The health implications of poor dietary habits among adolescents are increasingly evident with the high prevalence of obesity and diet-related ill health in this population. Of particular concern is the high amount of added sugar present in the adolescent diet. Nutrition education is an efficacious strategy to change sugary drink consumption particularly when including experiential strategies but sugar consumption within a more comprehensive diet has not been addressed. Food models have been incorporated as a teaching aid that support experiential activities and there is some evidence that they can be effective. However, there is a lack of evidence on the use of these strategies with adolescents and specifically for reducing sugar consumption across the diet. This study aimed to assess the impact of a two 45-minute interactive nutrition session intervention using food models on adolescent's sugar literacy (knowledge and awareness of added sugar, confidence in label reading to assess sugar content in food, and intention to limit consumption of added sugar). An experimental design with randomization into intervention and control condition and pre and post measures was used to test the efficacy of the intervention.

Two hundred and three students ages 14 to 19 from 6 schools on Vancouver Island, B.C., Canada participated in the study. The intervention group received two 45-minute interactive nutrition sessions using food models to learn about added sugar content in foods and beverages, recommendations for added sugar in the diet and food group servings in a healthy diet. A questionnaire to evaluate sugar literacy, including student knowledge, self-efficacy and intention to consume less added sugar, was completed at baseline and after the intervention.

Adolescents' knowledge of added sugar in foods and beverages and of the number of servings of food groups in a healthy diet was limited at baseline but improved significantly in the intervention condition [$F(1, 201)=104.84$, $p<.001$] compared to the controls. Intention to consume less added sugar increased significantly after the intervention [$F(1, 201)=4.93$, $p=.03$] as did label reading confidence [$F(1, 201)=14.94$, $p<.001$]. It appears that a brief nutrition education intervention using food models as an experiential learning strategy was efficacious for changing student's knowledge about sugar guidelines and sugar in food, label reading confidence and intention to change sugar consumption. Further studies are needed to analyze the impact of a sugar literacy intervention using food models on actual added sugar consumption in adolescents.