

EVALUATING THE NUTRITIONAL OUTCOMES OF A PHYSICAL ACTIVITY AND HEALTHY EATING INTERVENTION IN SASKATCHEWAN AND NEW BRUNSWICK

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Background: To address the rising trend of obesity and overweight among young children, the Healthy Start – Départ Santé (HSDS) is a multicomponent preventive intervention that was implemented in the provinces of Saskatchewan and New Brunswick with the goal of promoting physical activity, physical literacy and healthy eating among preschoolers attending early childcare centers in Saskatchewan and New Brunswick. The objective of this study is to evaluate the impact of the HSDS on nutritional outcomes of the children attending these childcare centers.

Methods/Design: The HSDS follows a cluster-randomized control design with 62 childcare centers in both provinces assigned to intervention and control arm. 897 children between ages 3 and 5 participated in the intervention after parental consent. The intervention lasted between 6 and 8 months in each center. The difference-in-differences regression analysis is used to measure the impact of the intervention on healthy nutrition related variables including calorie intake, amount of food eating, and amount of fruits and vegetables consumed from lunch meals provided at the centers. Socio-demographic characteristics of the participating children and their parents are included in the regression models as control variables.

Results: The difference-in-differences analysis reported increased overall food and calorie consumption. The impact on fruits and vegetables however varied across provinces and regions. Generally, the intervention had more positive impact on outcome variables in Saskatchewan and in urban areas.

Keywords: obesity, overweight, preschooler, childcare center, physical activity, healthy eating, fruits and vegetables