

A Program Evaluation of *4 for Lunch: A Healthy Lunch Challenge*

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Niagara Public Health Summit
October 2008

Presentation Outline



- Background
- Evaluation
- Preliminary results
- Lessons learned
- Next steps



About the Program



- *4 for Lunch: A Healthy Lunch Challenge* consists of:
 - Curriculum-matched lessons that meet the Healthy Eating Expectations - *1998 Ontario Health and Physical Education* curriculum
 - A one-week challenge to students and their families to pack and consume healthy lunches
 - Parent nutrition resources
 - An incentive draw

About the Program



- ❑ Provides students with the education and skills needed for behaviour change
- ❑ Adapted from the former Muskoka Parry Sound District Health Unit
- ❑ Teachers are encouraged to implement the curriculum-matched lessons throughout the month prior to the challenge week
- ❑ The challenge week aims to reinforce the learning and lead to behaviour change

The 4 for Lunch Kit



□ Teachers

- Curriculum-matched lessons
- Nutrition websites to support Healthy Eating lessons
- Discover Healthy Eating! (nutrition backgrounder)
- Resource for Educators and Communicators Eating Well With Canada's Food Guide
- Teacher's Guide to Physical Activity for Children
- 4 for Lunch: A Health Lunch Challenge Poster
- Order form for school nutrition resources

□ Parents and Students

- Nutrition Matters fact sheets
- Canada's Physical Activity Guide for Children
- Eating Well With Canada's Food Guide
- Tips for Classifying Foods According to Canada's Food Guide
- 4 for Lunch bookmarks



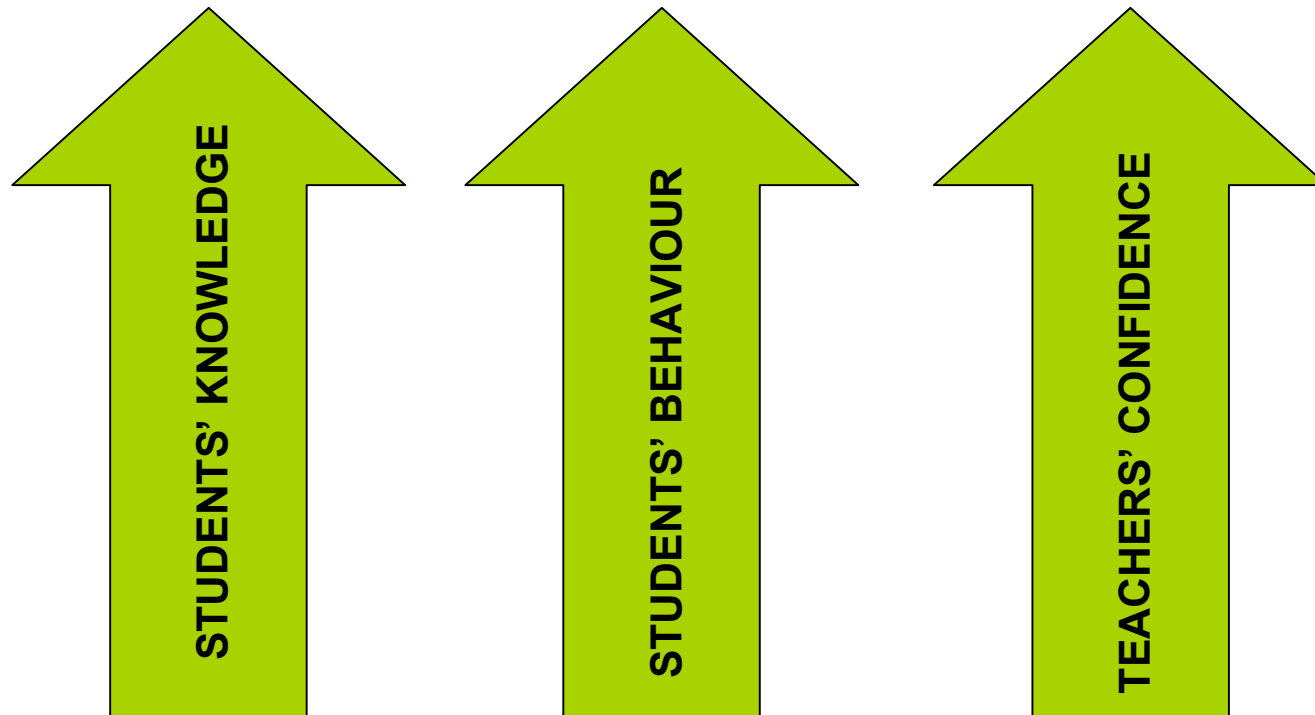
History of the Program

- Prior to the 2007-08 school year:
 - In both Public and Catholic elementary schools in York Region
 - 3 years running
 - 10,000+ grade 3 students registered
 - Previous evaluation focused on satisfaction surveys (teacher and parent)

Outcome Evaluation



Determine effectiveness of 4 for Lunch:





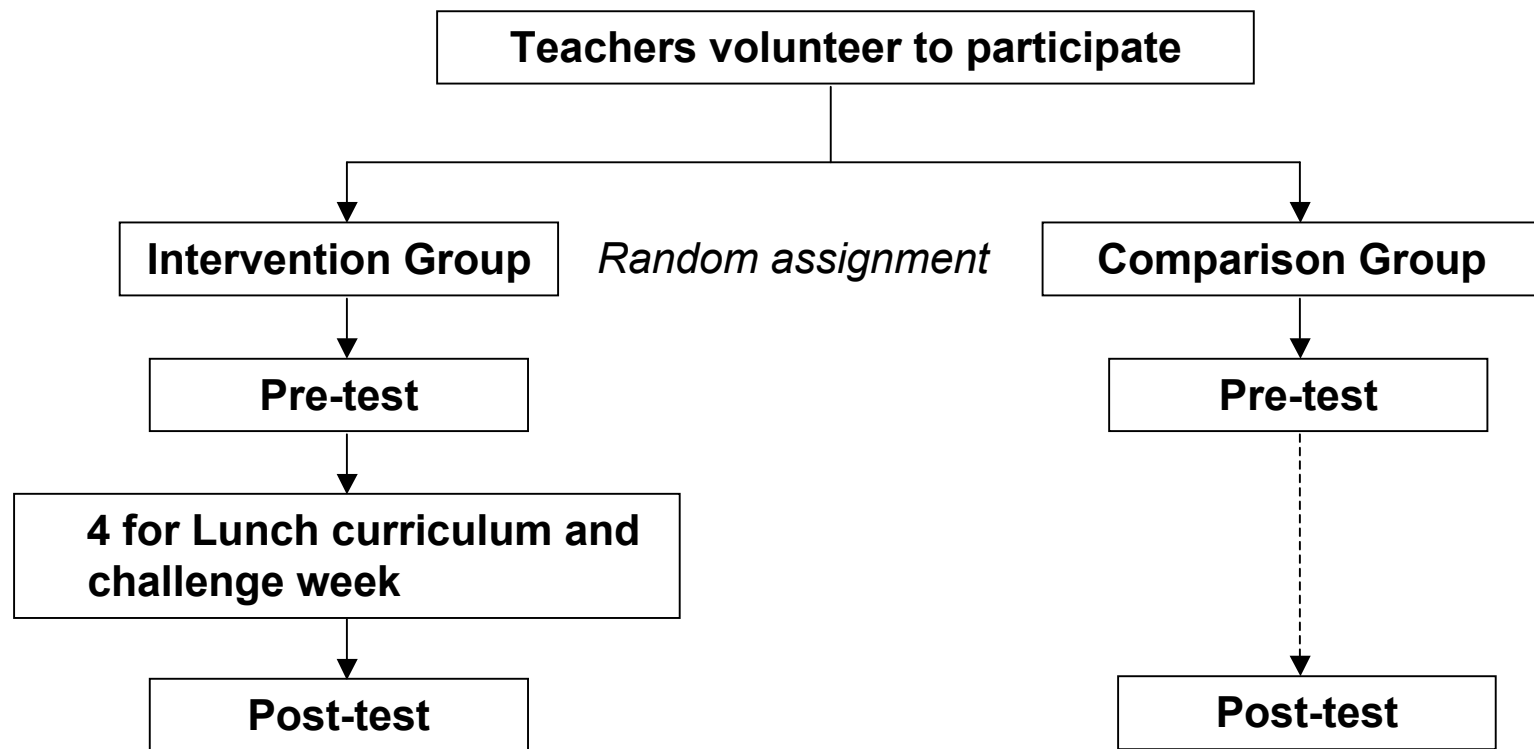
Evaluation Methods

- ❑ Quasi experimental design
- ❑ Grade 3 teachers volunteered to participate in the study
- ❑ Classes were randomized by school into intervention or comparison groups
- ❑ Pre-test measures taken one week prior to program implementation
- ❑ Post-test measures taken one week following the challenge week

Diagram



Target Population: Grade three students in York Region





Measurement Tools

- Student completed questionnaires:
 - Food Fun and Me (FFM)
 - Adapted from Rabe, Ohri-Vachaspati & Scheer, 2006
 - Day in the Life (24-hour dietary recall)
 - Adapted from Edmunds & Ziebland, 2002
- Teacher questionnaire:
 - The Nutrition Teaching Self-Efficacy Scale (NTSES)
 - Adapted from Brenowitz & Tuttle, 2003



Preliminary results (unweighted)





Preliminary results

- ❑ 79 teachers from 42 schools registered for the program (85 classes) (19% of all elementary schools)
- ❑ 25 schools (47 classes) completed both pre and post test measures (school response rate of 60%)
- ❑ 613 students with complete data (254 intervention, 359 comparison)
- ❑ 40 teachers with complete data (18 intervention, 22 comparison)



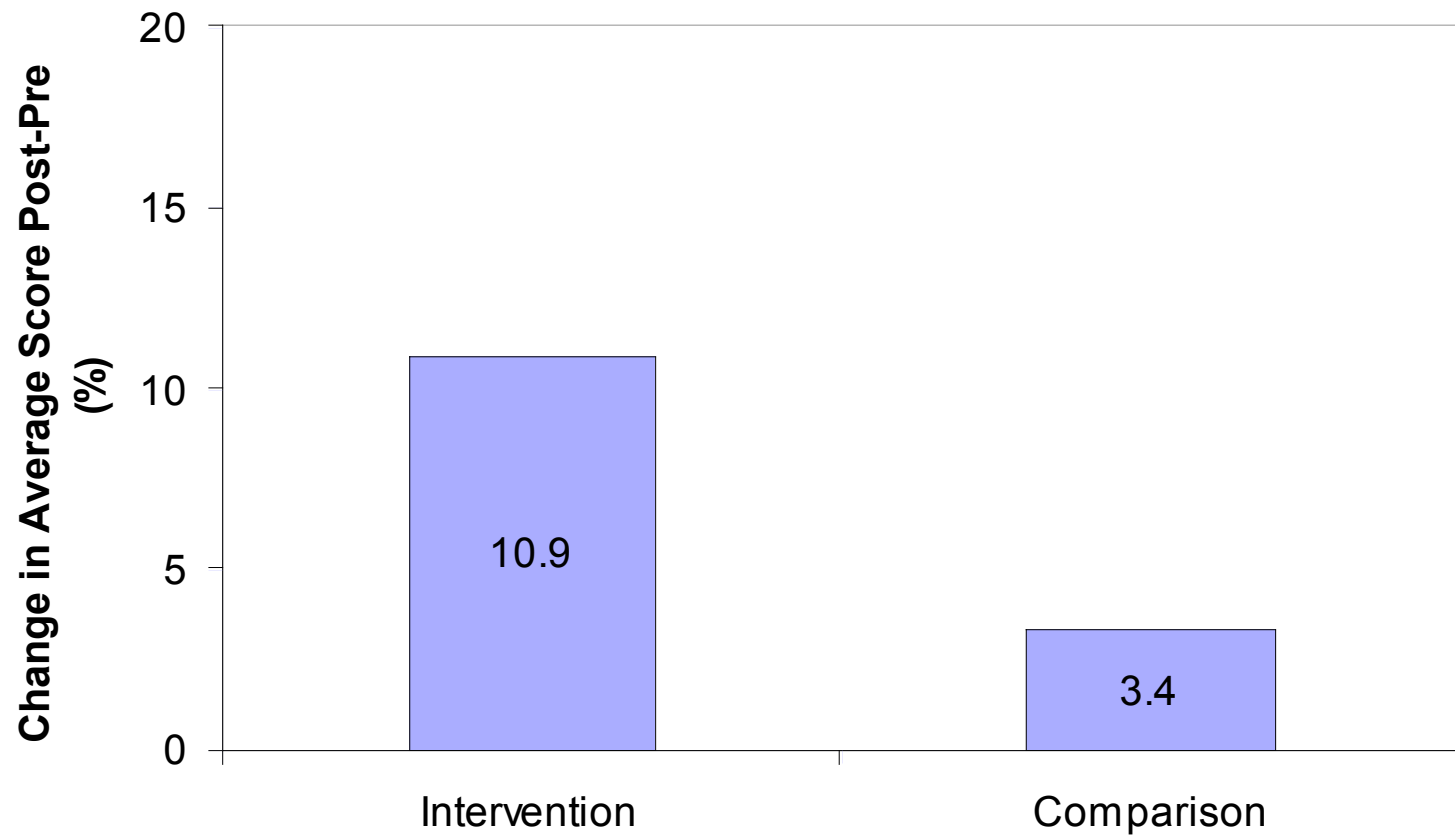
Preliminary results

- ❑ Only grade 3 students were included in analysis
- ❑ Age range: 7-9 years old
- ❑ Sex distribution similar between groups

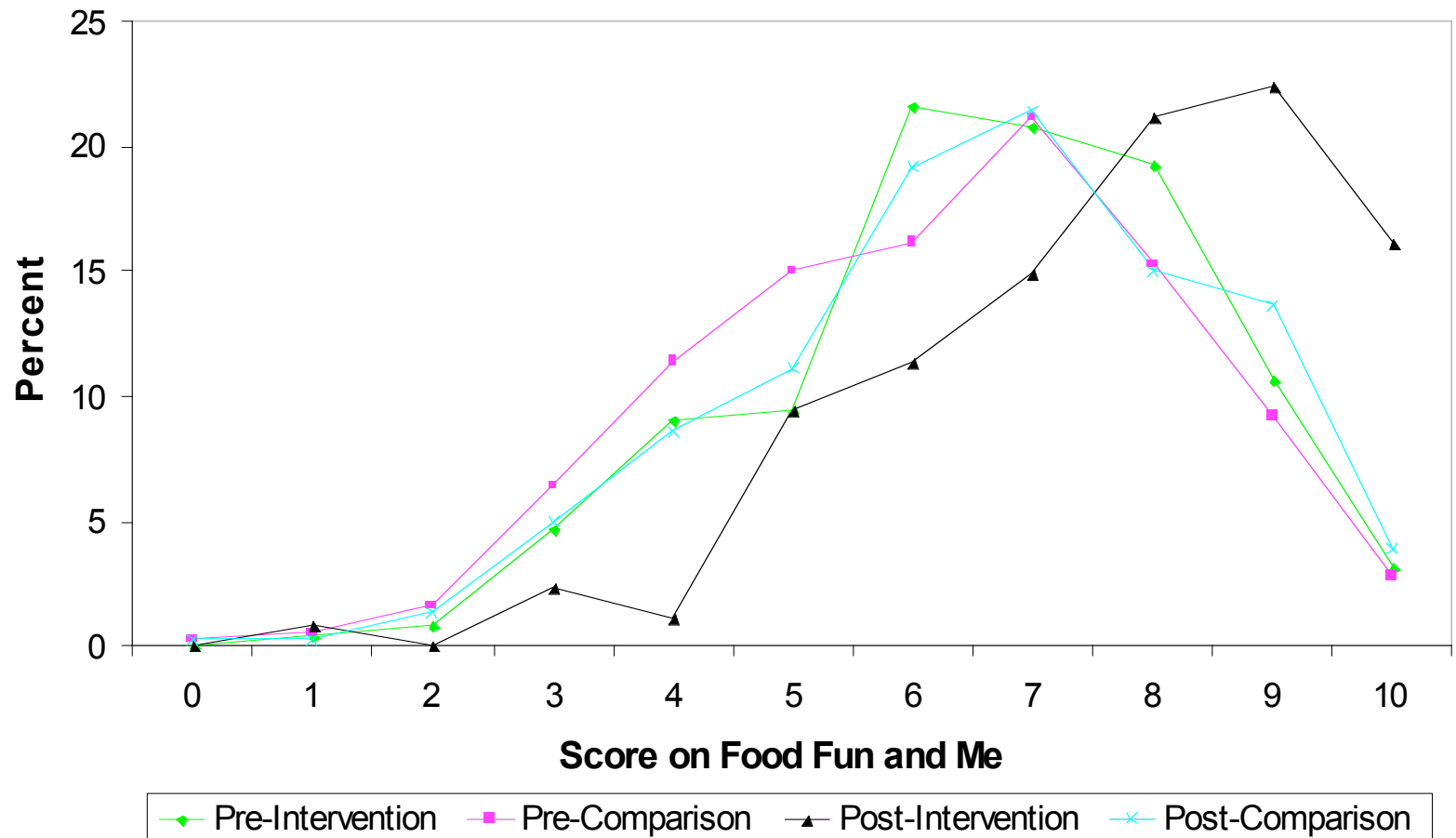
Age	Percent	
	Intervention	Comparison
7 years	1.2%	0.3%
8 years	90.6%	88.9%
9 years	8.3%	10.9%

Sex	Percent	
	Intervention	Comparison
Boy	51.4%	51.1%
Girl	48.6%	48.9%

Food Fun and Me (FFM)



Distribution of FFM scores

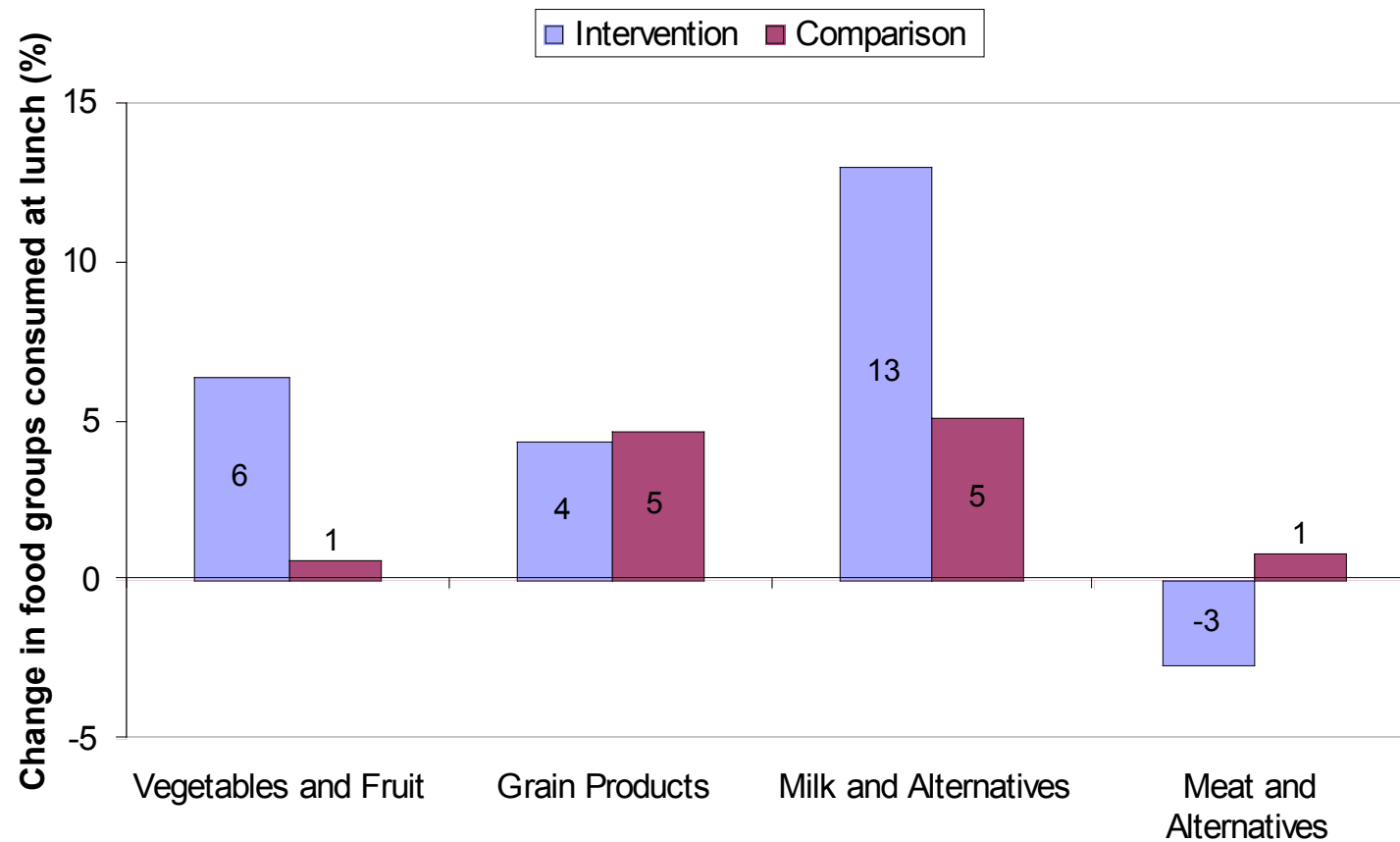


Day in the Life

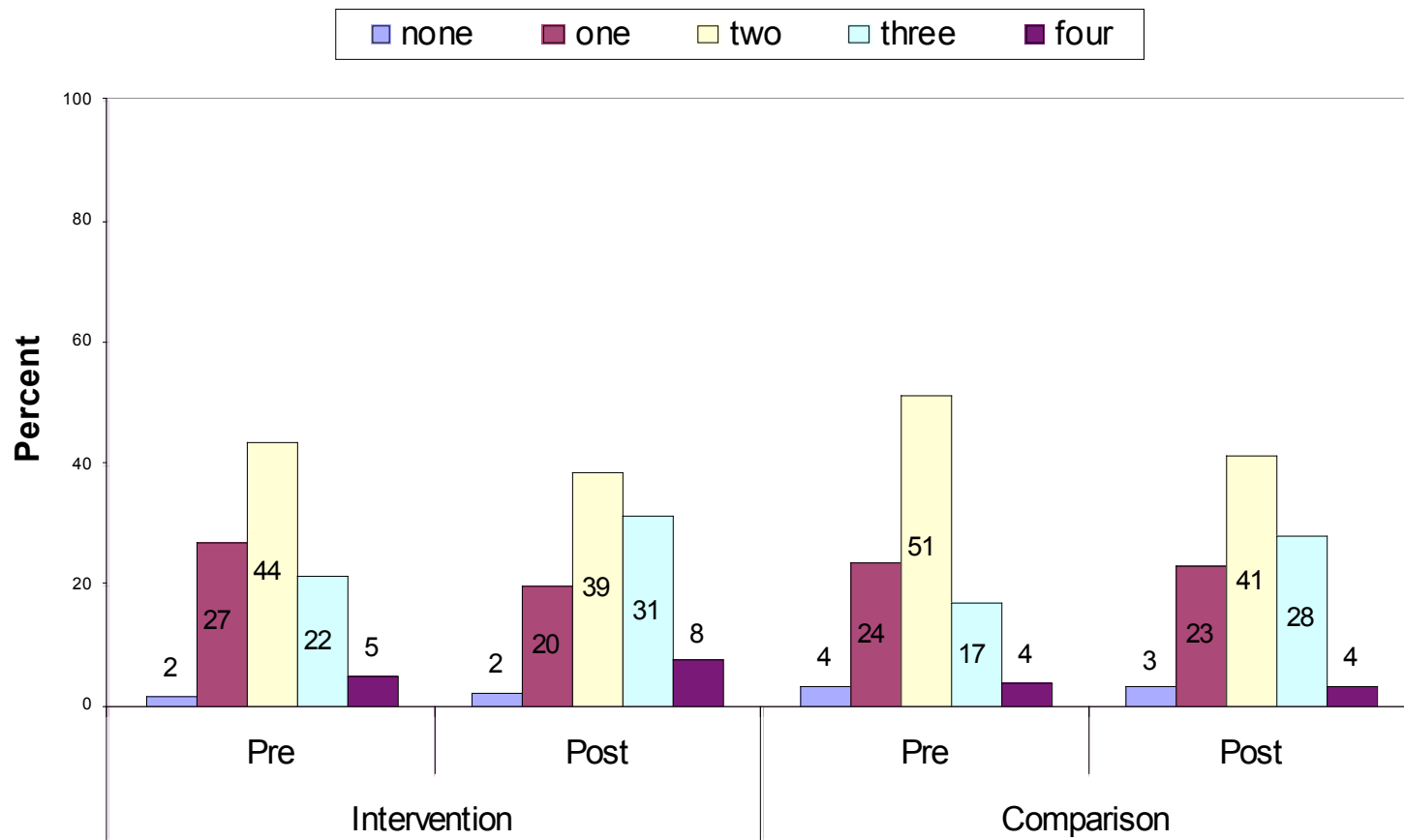


- Foods classified into four food groups (binary variable)
- Variables of interest:
 - Proportion of students consuming each food group
 - Number of food groups at lunch

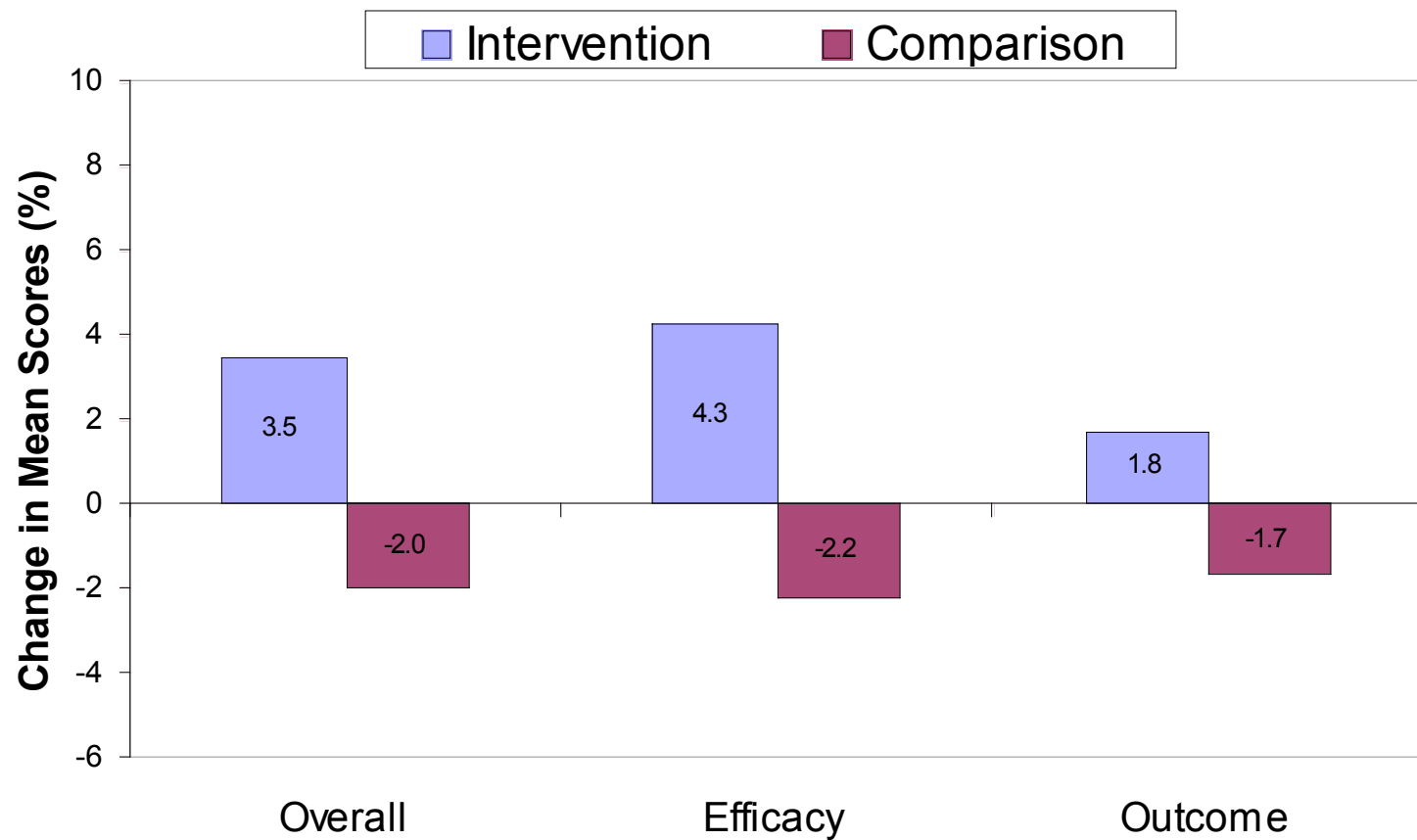
Food Groups at Lunch



Distribution of Food Groups



Nutrition Teaching Self-Efficacy (NTSES)



Summary of Preliminary Findings



- ❑ Students appear to have increased both knowledge and some behaviours relative to the comparison group
- ❑ Teachers appear to have slightly increased nutrition teaching self-efficacy
- ❑ Further analysis will determine if differences are significant



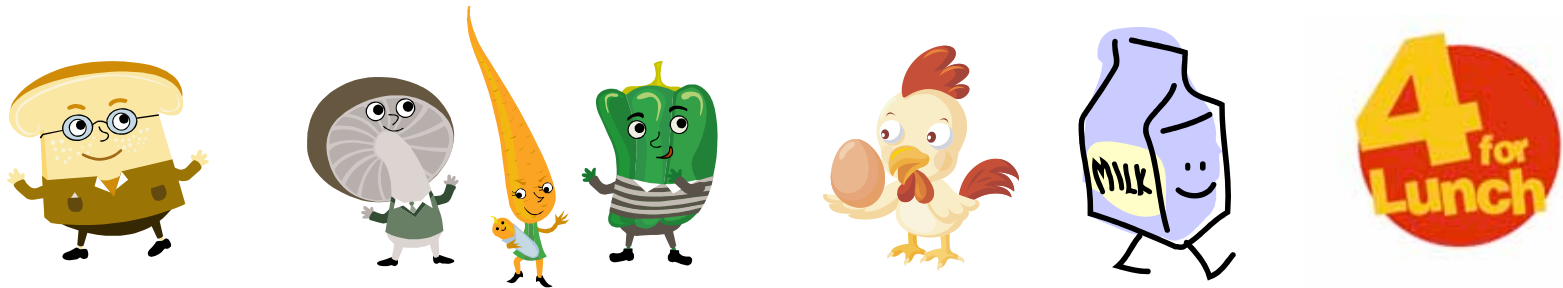
Lessons learned

- ❑ Implementing outcome evaluations in public health
- ❑ Importance of program timing
- ❑ Limitations of the evaluation
- ❑ Importance of collaboration



Next steps

- ❑ Weighted analyses incorporating covariates, accounting for clustering
- ❑ Use of results to inform program planning for the next school year
- ❑ Dissemination of results and reports to stakeholders



Questions & Answers