Smarter Lunchrooms: Does Changing Environments Really Give More Nutritional Bang for the Buck?

Brian Wansink Ph.D., 1 David Just Ph.D., 1 Jamie Dollahite Ph.D., 2 Alisha Gaines Ph.D., 2 Tisa Hill MPH, 2 Adam Brumberg, 1 Katherine Greene MPH, 1 Gnel Gabrielyan, Ph.D., 1
1 Cornell University, Charles H. Dyson School of Applied Economics and Management 2 Cornell University, Division of Nutritional Science

Project Overview
The Smarter Lunchroom Movement utilizes the principles of behavioral economics to make small, low, or no-cost environmental changes that have been shown in pilot studies to improve selection of healthy food choices in school lunchrooms. The current project aims to improve the food choices made by middle school children by helping make healthier choices easier and more salient for youth and their parents.

- Year 2: Test single lunchroom changes in rural and urban middle schools
- Year 3: Test combination lunchroom changes in rural and urban middle schools, and develop nutrition messages for parents and students

Year 2: Single Smarter Lunchroom Intervention Results
- Testing of single Smarter Lunchroom treatment conditions to determine effect size of each condition separately.
- Outcome measures included pre- & post-intervention plate waste observations and production records.
- Process evaluation tools included measures of fidelity & contamination. (See Years 2-3 Process Evaluation.)

Spring 2014
- Single interventions included:
  1. Promotion of fruits: locating fruits first on the line, at multiple locations, using primer bowls of fruit, and giving fruit creative names; or
  2. Promotion of vegetables: locating vegetables after main entrees, multiple locations, using primer bowls of fruit, and giving vegetables creative names.
- Seven intervention schools (4 urban, 3 rural), and three control schools participated.

Results:
- Fruit Intervention: T-test results demonstrated a statistically significant increase in fruit selection in both urban and rural schools (See Figure 1). Difference in difference analysis showed overall fruit selection increased by 17%, and waste of fruit decreased by 9%.
- Vegetable Intervention: T-test results demonstrated a statistically significant increase in vegetable selection for both urban and rural schools (See Figure 2). Difference in difference analysis showed overall vegetable selection increased by 11%; however, waste of vegetables increased by 12%.

Year 3: Healthy Food Choices in Schools

Community of Practice
- Designed as an online eXtension resource for stakeholders and community agencies concerned with helping schools to encourage healthy eating by students in school food environments.
- Currently hosts over 200 content items focused on encouraging students to choose and eat healthy foods, promoting parent-school-student dialogues about healthful eating, and the business of school food.
- Currently has 94 active members from a variety of fields, including: nutrition, food service, extension, and community groups.
- Features two free online courses, and an “Ask an Expert” forum that allows visitors to ask questions related to school food.
- Provides monthly webinars by school food and food environment experts.

Year 3: Parent Messaging Development
- Purpose: To develop nutrition messages that will help parents engage with their children around food in a positive way, and encourage their middle school aged children to make healthier food choices at home and at school.
- Seven focus groups with 46 parents identified food/nutrition-related concerns used to inform development of messages and goal setting strategies.
- Currently underway: Additional interviews with parents (n=17) and middle school children (n=21) are being used to refine messages and solicit information about desired food/nutrition information and preferred message delivery platforms.
- Results to guide development of a food/nutrition message package and a forthcoming investigation of parent-child dyad research.

Year 3: Combination Smarter Lunchroom Interventions Implementation
- Testing of combination of Smarter Lunchroom conditions to determine cumulative effect.
- Outcome measures included pre- & post-intervention plate waste observations and production records.
- Process evaluation tools included measures of fidelity & contamination. (See below and Years 2-3 Process Evaluation.)
- Combined intervention components included:
  1. Promotion of fruits: locating fruit first, using large fruit bowl, attractive serving cups for fruits, creative names, fruit factoid posters;
  2. Promotion of vegetables: locating vegetables after main entrees, attractive serving cups for raw/cut vegetables, creative names, vegetable factoid posters; and
- Six intervention schools (3 urban, 3 rural) and six control schools participated.

Fall 2014
- Process evaluation revealed varying compliance with intervention protocol associated with limitations of cafeteria line structures and staff motivation. Post-intervention audits also revealed varied maintenance of intervention elements, highlighting opportunities to increase cafeteria staff buy-in.
- Intervention outcome results are not yet available.

Spring 2015
- Intervention is currently in progress, and efforts to increase staff buy-in and enhance fidelity to treatment protocol are underway.

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For More Information
Contact Katherine Greene at Cornell University, kng29@cornell.edu http://www.smarterlunchrooms.org