



OHIO
Smarter
Lunchrooms
MOVEMENT



**SMARTER
LUNCHROOMS**

Ohio Project Summary
2013-2014

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INTRODUCTION

Smarter Lunchroom strategies are low cost or no-cost evidence-based activities that are simple and easy to implement in school lunchrooms. The strategies are based upon behavior theory that student food choices can be influenced by the way that food is offered.

Strategies can be as simple as placing an extra fruit basket by the register or renaming broccoli to Sparklie Broccoli.

Goal one of the Smarter Lunchroom Project recruited partnerships with six Ohio universities to assist in the implementation of Smarter Lunchroom strategies and provide training developed by the Cornell Center for Behavioral Economics in Child Nutrition Programs.

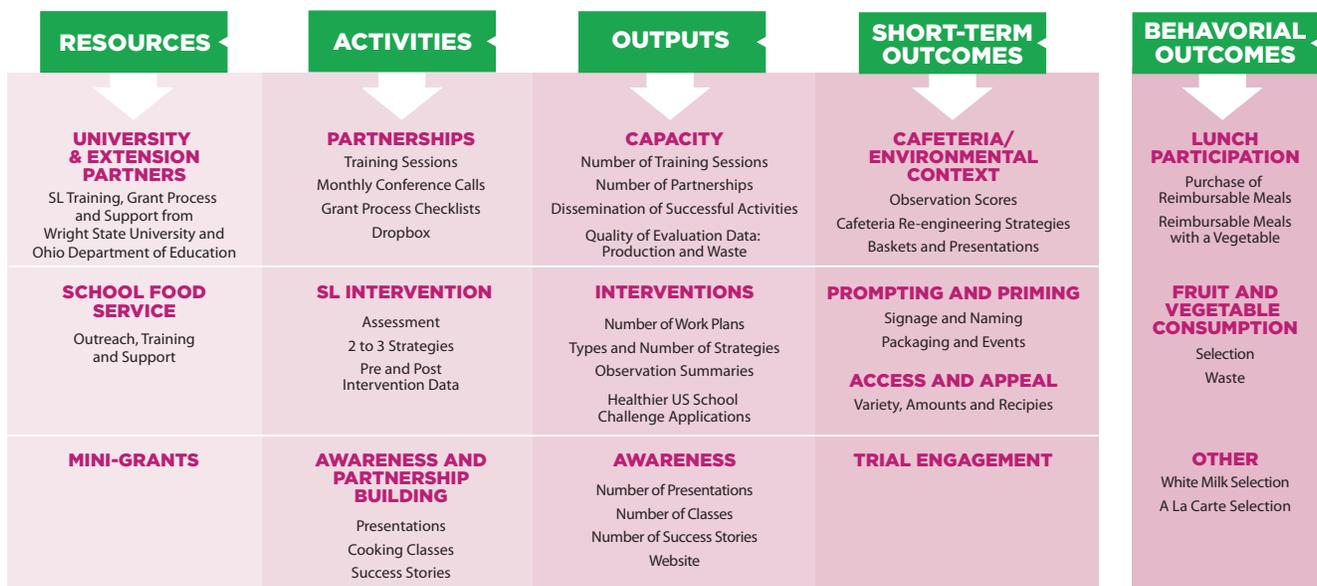
Goal two of the project collected evidence of effective Smarter Lunchroom strategies to assist with future trainings.

Ohio's Smarter Lunchroom Project began in January 2013 and was coordinated by the Ohio Department of Education – Office for Child Nutrition. A 2012-2014 United States Department of Agriculture Team Nutrition Training Grant funded this project.

Methods

Fifty-one schools from across Ohio participated in the Smarter Lunchroom project. Schools could receive up to \$2,500 per building to implement interventions in their cafeterias. In addition to funding, schools were paired with a partner organization to assist with implementation and evaluation of cafeteria changes. In return for the funding and assistance, school staff shared sales and production records and participated in pre- and post-intervention plate waste collection. Evaluation partners consisted of faculty from three universities, a health educator from a county health department and an industry consultant. Each of the evaluation partners was assigned 10 local schools. Figure 1 summarizes the project outcome logic model.

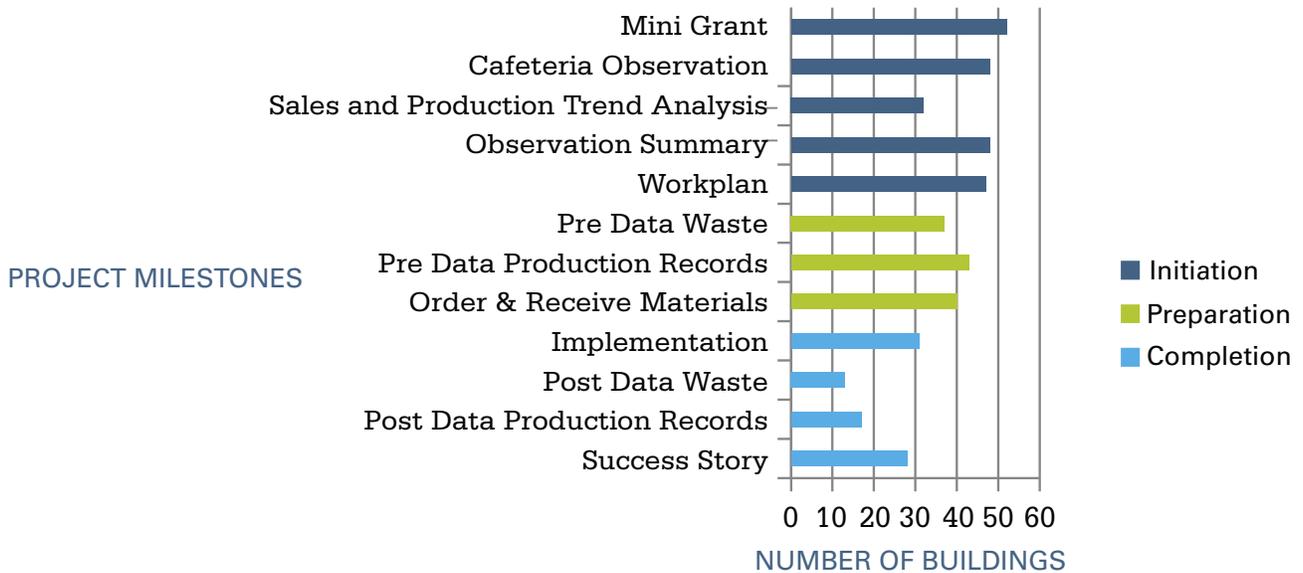
Figure 1. Smarter Lunchrooms Ohio – Program Model



Key Outcomes

This Smarter Lunchroom project achieved a high degree of reach and moderate levels of implementation and evaluation. Overall, school nutrition staff from 51 buildings, responsible for feeding over 28,000 children, enrolled in the project and completed pre data collection. There were 12 milestones in the process of project completion (See Figure 2). Completers were defined as school buildings that implemented cafeteria strategies and completed some type of post data collection. Slightly more than half (55 percent) of building cafeterias completed planned reengineering lunchroom strategies. Another one-third of the building cafeterias (35 percent) reached a stage of preparation; they completed pre data collection, developed a work plan, may have received materials, but did not implement the reengineering strategies. The remaining five schools initiated, but did not progress beyond the initiation stage.

Figure 2. Project milestones achieved by each school cafeteria in Ohio cohort



Three other notable successes of the project activities include the establishment of an infrastructure for training, communication and data sharing; measurement of outputs in every participating school; and evaluation of short-term behavior changes at the building level. The remaining section highlights specific school success stories.

SCHOOL SUCCESS STORIES

Leggett and Mason Elementary School, Akron Public Schools

STEM High School, Akron Public Schools

Little Miami Elementary, Intermediate and Junior High Schools, Little Miami Local Schools

Meigs Elementary, Middle and High Schools, Meigs Local Schools

Timberlane Learning Center, Northridge Local Schools

Northridge Middle and High School, Northridge Local Schools

Brush High School, South Euclid-Lyndhurst City School District

Mayfield Middle School, Mayfield City Schools

Bogan, Kramer and Marshal Elementary Schools, Talawanda School District

Talawanda Middle and High Schools, Talawanda School District

Trinity Lutheran School, Toledo Charter School

Marion Elementary and Middle Schools, Marion City Schools

Leggett and Mason Elementary Schools, Akron Public Schools Summit County

CREATING APPEAL WITH DESCRIPTIVE NAMES

Smart Strategies at Work

Smarter lunchroom strategies prime students to make healthy choices, place the healthy options in strategic locations, and make the healthy food appealing.

Prime: Enhance the visual display of vegetables and fruits with kid-friendly names.

Place: Place prepackaged items in attractive containers.

Appeal: Display colorful posters and menu boards to draw kids' attention.

Tip Box

Place colorful posters of fruits and vegetables in the cafeteria.



Challenge

Leggett and Mason elementary schools are new schools with bright, clean and well-planned kitchens. School meals are prepared at the Akron High School cafeteria and transported to these elementary schools. The meals are packaged for proper storage and handling before the lunch service. Here is the challenge—the food items are not easily recognizable through the packaging.

Solution

The prepackaged food items were placed in eye-catching containers. Colorful tags described the contents.

Kid-friendly names such as Apple Strong, Super Salad, Biking Banana, Muscular Mashed Potatoes and Body-building Broccoli described the food items.

Posters of scrumptious-looking fruits and vegetables encouraged their selection. Fruit and vegetable picture posters reflected the food actually served in the cafeteria.

Large, colorful menu dry erase boards highlighted each day's selections on the cafeteria walls.

Results

Students enjoyed the menu descriptor signs on the fruits and vegetables. Posters of the fruits and vegetables were stunning on the newly painted colorful walls. Many students mentioned the additions as they came through the lunch line.

Next Steps

Both Leggett and Mason schools intend to replace the current white serving trays with reusable, colorful trays. New trays will be sturdier than the present trays and will solve the balancing and crowding problems that occur with a flimsier foam tray.

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Akron City Schools
Akron, Ohio

STEM High School, Akron Public Schools Summit County

TASTINGS INCREASE VEGETABLE CONSUMPTION

Smart Strategies at Work

Smarter lunchroom strategies prime students to make healthy choices, place the healthy options in strategic locations and make the healthy food appealing.

Prime: Hold a tasting event to introduce new dips and dressings.

Place: Bundle dips with vegetables.

Appeal: Use spices and seasonings to update flavor.

Tip Box

Do not be afraid to try spices with dips and dressings, as well as entrées and vegetables to update flavors.



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Akron City Schools
Akron, Ohio

Challenge

STEM High School serves approximately 135 students at lunch. The vegetable bar in the cafeteria offered at least six fresh vegetables, but vegetable selection was only 3 percent of the total offerings. The vegetable bar and main serving lines are not connected. About 20 students visited the vegetable bar area, usually to get condiments.

Solution

A food bar that had been in storage for some time became the solution for relocating the vegetable bar. This bar was portable and positioned in the main serving area.

The staff tried new recipes for dips and dressings. Poblano and adobe seasonings added to ranch and hummus dips spiked the flavor profile.

Garbanzo beans were roasted and seasoned with ranch and chipotle flavorings to feature a new flavor and positioned on the salad bar beside the dips and dressings.

A week before the unveiling of the new vegetable bar, students had the opportunity to sample the dips and dressings in soufflé cups. Fresh carrot sticks, broccoli and celery accompanied the dressings. Roasted and seasoned beans and chickpeas with hummus added to the taste-testing excitement.

Promotional signage in the cafeteria directed students through the lunch line. Creative name cards attracted attention to the new selections of dressings and dips. School staff used social media to announce the unveiling of the new vegetable bar. The principal tweeted about the tasting event and the new flavors.

Results

During the opening week, the vegetable bar usage increased by 1,900 percent. Vegetable selection increased from three vegetable servings each day to an average of 32 servings. The students were very interested in trying the new offerings. Honey mustard dip was the most popular dip. A couple of students asked for the recipes for the dressings and hummus dip.

Tastings were extremely successful and students appreciated the opportunity to provide input on food selections.

Next Steps

Staff will continue to develop the recipes with tastings and student engagement. While daily staffing of the salad bar is challenging, the staff is working to determine the best arrangement for providing fresh vegetables and how to nudge students to choose the vegetables with the current resources.

Little Miami Elementary, Intermediate and Junior High Schools Little Miami Local Schools, Warren County

USE COLOR CONTRAST TO MAKE FRUITS AND VEGETABLES POP

Smart Strategies at Work

Smarter lunchroom strategies prime students to make healthy choices, place the healthy options in strategic locations, and make the healthy food appealing.

Prime: Slice whole fruit to make it more convenient for young students to handle.

Place: Colorful, sturdy trays make it easier to transport food selections.

Appeal: Stock salad bar with vegetables of complementary colors.

Tip Box

Complementary colors are any two colors that are directly opposite each other on a color wheel. Examples include red-green and blue-orange. The high contrast of complementary colors creates a vibrant look.



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Maineville, Ohio

Challenge

Under new school meal guidelines, students are offered a variety of fruits and vegetables, as well as whole grains and low-fat milks. Cafeterias are busy places and some of the healthier options can get lost in the many food options. Cheeseburgers, pizzas and starchy sides dominated student selection at Little Miami cafeterias. At Salem Elementary, 91 percent of the served apples ended up in the trash.

Solution

School nutrition staff looked for a variety of ways to use color contrast to draw attention to the bright fruits and vegetables being served.

At Salem Elementary, a commercial sectionizer was purchased and used to cut up whole apples and oranges into bite-size pieces. Fruit slices were easier to pick up and consume by young students. The cut fruit, with the different colors from the skin and inside fruit, was also visually more appealing.

At the junior high and intermediate school buildings, colorful reusable trays were introduced. The new green trays were sturdier than the previous white disposable trays.

The salad bars were stocked daily with a minimum of three contrasting colored vegetables.

Results

Whole fruit consumption increased at Salem Elementary. Students selected more apples and oranges when they were pre-sliced. School staff ordered twice as many whole fruits after the purchase of the sectionizer.

The new food trays also increased fruit and vegetable consumption. Junior high and intermediate school students commented that the new trays were sturdier and easier to handle. School staff reported that students selected additional servings of fruits and vegetables instead of the minimum one-half cup, and as a result, less food was dropped on the floor and wasted.

Next Steps

Color and placement will continue to be used to highlight healthy meal selections. In the fall, a royal blue salad bar will replace a more industrial-looking bar at the intermediate school. School staff also will explore bundling vegetable-based toppings with popular entrée items.

Meigs Elementary, Middle and High Schools Meigs Local Schools, Meigs County

MAKING FRUITS AND VEGETABLES APPEALING

Smart Strategies at Work

Smarter lunchroom strategies prime students to make healthy choices, place the healthy options in strategic locations and make the healthy food appealing.

Prime: Engage students with LED signs displaying the next day's meal selections.

Place: Add additional fresh fruit and vegetable options and a third tray line at the high school.

Appeal: Use colorful serving utensils and baskets to attract students to the fruits and vegetables.

Tip Box

Introduce an entrée salad with a premium grain, such as a baked breadstick, gourmet croutons or stone wheat crackers, packaged with it. Then place it in a prime location!



Photo I:



Photo II:

Challenge

New school meal pattern guidelines encourage the introduction of a variety of fruits and vegetables. Meigs Local Schools' elementary, middle and high schools collectively focused on increasing fruit and vegetable consumption. The majority of the fruits offered at each of the schools were canned, and the vegetable selection was limited to two options. Additionally, the fruits and vegetables looked unappealing in their serving dishes.

Solution

The three schools focused on making the fruits and vegetables more appealing to the students.

First, the schools purchased colorful baskets to showcase fruits and vegetables while new sheet pans displayed cupped fruits.

In addition, new fresh fruit and vegetable options appeared on the lunch line in two different locations. Cafeteria cooks recognized students by name and verbally prompted them to choose fruits and vegetables.

Both the middle and high schools displayed LED signs outside the cafeteria informing students of the next day's lunch options.

Finally, a third lunch line in the dining area of the high school featured entrée sized popcorn chicken salad, fresh fruits and milk.

Results

Cafeteria staff observed an increase in consumption of entrée salads with the introduction of the third lunch line in the dining area. At all three schools, fresh fruit selection also increased and staff reported a decrease in waste.

Next Steps

Meigs Local Schools will continue to explore new fruit and vegetable offerings for the cafeterias. The high school will include a third line with new food options.

Photo I

Third lunch line at Meigs High School featuring an entrée salad with other meal components.

Photo II

Fruits offered in baskets at Meigs Middle School.

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Pomeroy, Ohio

Timberlane Learning Center (PreK–K), Northridge Local Schools, Montgomery County

RENAMING VEGETABLES INCREASES STUDENT CONSUMPTION

Smart Strategies at Work

Smarter lunchroom strategies prime students to make healthy choices, place the healthy options in strategic locations and make the healthy food appealing.

Prime: Student-generated names engage students in their food selections. Signage with the new names peaks interest.

Place: Place the featured vegetable first in the serving line with second servings offered to seated students in the cafeteria.

Appeal: Kid-friendly names draw attention to the featured vegetable.

Tip Box

Involve teachers and building administrators in your cafeteria redesign.



Contact Judi Hunter
Food Service Supervisor

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Northridge Local Schools
Dayton, Ohio

Challenge

New school lunch guidelines encourage the inclusion of a variety of vegetables. Despite being offered regularly, waste for dark green and legume vegetables can be high.

At Timberlane Learning Center, broccoli was offered three times per month, and about two-thirds (64 percent) of it was thrown away uneaten. Baked beans, also offered three times each month, had similar results (68 percent waste).

Giving vegetables creative names can capture students' attention, set taste expectations and increase consumption.

Cornell University researchers found that X-ray carrots were more popular than carrots, and food service directors in southwest Ohio found their students preferred Sparklie Broccoli to broccoli.

Solution

Pre-kindergarten and kindergarten students at Timberlane Learning Center of Northridge Local Schools chose to create a mixed medium art project to rename their broccoli and legumes.

Classroom teacher Donna Bronner shared pictures of the food items and facilitated a discussion of the food properties.

Students used a variety of dried beans (legumes), cotton balls, glitter, colored pom-poms, markers, and crayons to create the art project and rename both the broccoli and legumes. On the November 5th Election Day, students voted on their favorite names.

After voting, the names Sparklie Broccoli and Super Beans won. The new names were unveiled with announcements, postings of the students' vegetable pictures entries in the cafeteria, and highlights of the renamed vegetables on the monthly menus.

Additionally, 'seconds' of the featured vegetable was offered to students in the dining room daily. The students received their appropriate portion in the serving line, but received a 'second chance' for seconds. A café staff employee went into the cafeteria and offered 'seconds' of the featured vegetables to students seated at their tables.

Results

Students ate more Sparklie Broccoli and ate slightly more Super Beans. An equal number of students selected broccoli, yet 23 percent fewer students threw out the dark green vegetable. Twelve percent fewer students threw away their baked beans. More students asked for second servings of the vegetables.

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Timberlane Learning Center (PreK–K) Northridge Local Schools, Montgomery County

RENAMING VEGETABLES INCREASES STUDENT CONSUMPTION

Next Steps

Student selection and consumption of a reimbursable meal will continue to be a focus. Cafeteria redesign efforts continue. Next steps will include student education about the five meal components. Signage, bundling and food tastings are potential strategies. The goal for the 2014-2015 school year is to generate an upward trend in the number of school meals purchased.

Northridge Middle and High School, Northridge Local Schools Montgomery County

SALAD BAR RELOCATION INCREASES VEGETABLE CONSUMPTION

Smart Strategies at Work

Smarter lunchroom strategies prime students to make healthy choices, place the healthy options in strategic locations and make the healthy food appealing.

Prime: Direct students to the salad bar with floor graphics and signage.

Place: Relocate the salad bar to the first station in line.

Appeal: Display fresh selections of vegetables with color contrast in black bowls.

Tip Box

Place healthy items first in the serving line and at eye level. Research has found that the first item in line has an 11 percent advantage.



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Dayton, Ohio

Challenge

Salad bars are an efficient and healthy way to improve student fruit and vegetable consumption. Salad bars offer a variety of fresh, seasonable items and allow students to create their own side items.

Students at Northridge Middle and High School rarely used the salad bar, even though it contained 8 to 10 fresh vegetables with choice of dressings each day.

Out of more than 700 students lunching daily in the cafeteria, only about 10 students per day used the salad bar. Location appeared to be the problem. The salad bar was the last item in the serving line and metal railings separated it from the actual serving line. The remote location and physical barrier made it difficult to access.

Solution

Moving the salad bar two feet and turning it slightly made it the first item in the serving line.

New black serving bowls in the salad bar filled with colorful vegetables provided eye-catching color contrast and made the numerous fresh options stand out.

New paw print floor graphics and signage directed students to start at the salad bar.

During the kick-off week, university student volunteers staffed the salad bar and verbally prompted students. Since so few students had previously used the salad bar, they were instructed on the various ways to incorporate fresh vegetables into their lunches.

Prompts included “build a salad, grab a side of veggies and dip, or try a small sample of any item without charge.”

Results

During kick-off week, salad bar usage increased by 650 percent. On the first day of the re-launch, 113 students ate vegetables from the salad bar. For the week, usage increased from 10 students per day to an average of 75 students per day. Participation was highest on days when students walked by the salad bar and were verbally prompted to try an item off the bar. With the feature of 12 different vegetables throughout the week, six vegetables sold out!

Three students made vegetable requests for radishes, tomatoes and onions. More than 20 students requested new dressing options to include ranch and French. A number of students commented that they had not previously made a fresh salad.

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Northridge Middle and High School, Northridge Local Schools Montgomery County

SALAD BAR RELOCATION INCREASES VEGETABLE CONSUMPTION

Next Steps

Location, visual appeal and student prompting significantly increased student consumption of fresh vegetables. Students will continue to start the lunch line at the salad bar. The salad bar will peak interest with the feature of seasonal items and themed entrées such as “Mexican Day.”

Daily staffing of the salad bar is difficult, but tasting events can reintroduce prompting and suggestive selling of the salad bar.

Tasting events and announcements also will give students opportunities to be involved in vegetable selections. The food service director will add “take a taste time” to sample more healthful options to see what students like in the coming school year.

Brush High School, South Euclid School District Cuyahoga County

CREATING GRAB-AND-GO MEALS TO INCREASE MEAL PARTICIPATION

Smart Strategies at Work

Smarter lunchroom strategies prime students to make healthy choices, place the healthy options in strategic locations and make the healthy food appealing.

Prime: Feature fruit and other healthier meal components in busy traffic areas.

Place: Relocate snack items to less convenient locations.

Appeal: Display whole fruit in large attractive baskets.

Tip Box

Offer grab-and-go meal components as a reimbursable meal.



BEFORE



AFTER

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Challenge

Offering students food choice is important for maintaining lunch participation, particularly for older students. The Store at Brush High School is a designated space, adjacent to the main school cafeteria serving line that is popular with students.

The majority of student purchases were à la carte, meaning the meal did not include the three to five meal components that make a reimbursable meal. Purchases included sandwiches, pizza, breadsticks, snack items and sugar-sweetened beverages. Students missed out on the nutrition in a reimbursable meal and school meal purchases were low because of the competing snack options in The Store.

At the beginning of the school year, fewer than 61 percent of the 1,400 Brush High School students purchased a reimbursable meal.

Solution

In October, The Store's layout was redesigned to place emphasis on the meal components: fruit, vegetable, entrée and milk. The meal components appeared in the main traffic path and featured a hot entrée followed by fruits, vegetables and then premade salads. Together, the options combined to make a reimbursable school meal.

The salad bar is now immediately in front of the cash registers, encouraging last minute additions of fruits and vegetables. A large snack cart, once prominently located in the center of The Store, is now on a sidewall.

The Store now has more of a market-type environment. Vertical wire displays offer fresh whole fruit by the register, market-style wooden baskets contain fruit of various colors and vertical bins display Smart Snacks.

Results

The space redesign was a big hit with students and staff. The new flow decreased congestion around select stations. Students selected more apples, oranges and bananas. Whole fruit selection increased 21 percent. The number of reimbursable meals sold in the overall cafeteria did not change (meals sold in The Store were not tracked separately).

Next Steps

Student selection and consumption of a reimbursable meal will continue to be a focus. Cafeteria redesign efforts continue. Next steps will include student education about the five meal components. Signage, bundling and food tastings are potential strategies. The goal for the 2014-2015 school year is to generate an upward trend in the number of school meals purchased.

Mayfield Middle School, Mayfield City Schools Cuyahoga County

ENVIRONMENTAL CHANGE PROMOTES FRESH FRUIT AND VEGETABLE CONSUMPTION

Smart Strategies at Work

Smarter lunchroom strategies prime students to make healthy choices, place the healthy options in strategic locations, and make the healthy food appealing.

Prime: Add color to the cafeteria using signs and baskets.

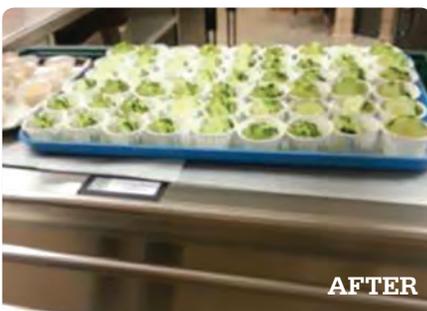
Place: Offer fruit at multiple locations.

Appeal: Display whole fruit in a bowl or basket.

Tip Box

Take pictures of your serving area. Do you see places to add color and baskets to draw attention to targeted items?

Figure 1



Challenge

Fresh fruits and vegetables provide school-aged children many of the vitamins and minerals their bodies need, without adding extra calories, fats and sugars to their diets. In addition to a hot vegetable, the Mayfield Middle School lunch program offered one fresh fruit or vegetable a day. Fresh cut produce in plastic serving cups was one option. Whole fruit was a rarity.

The serving area lacked color and signage. The space was monochromatic—grey floors with stainless steel serving trays and equipment (See Figure 1). Each day, 225 students ate lunch in the cafeteria, and the physical space was not visually appealing.

Solution

The redesign of the school cafeteria and serving line drew attention to the fruit and vegetable offerings.

New colorful trays displayed the fresh produce.

Royal blue trays provided attention-grabbing color contrast to the bright fruit and vegetables served in crisp, white cups.

Upright wire baskets filled with whole fruit by each cash register, further encouraged student selection.

New signage decorated the wall of the cafeteria. A framed menu board included the names and photos of the day's reimbursable meal selections.

Colorful banners and posters hung from the ceiling to make the space more inviting and to promote fruit and vegetable consumption.

Results

Fresh fruit selection increased by 160 percent across the school year. Most common fruit options were oranges, apples and grapes. The redesigned serving area also became much more colorful. Sixteen new signs decorated the space.

Next Steps

School nutrition staff will maintain a focus on the promotion of healthy food choices, particularly fresh fruits and vegetables. The focus for the upcoming school year will be to measure improved fruit and vegetable consumption, not just selection.

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Mayfield City Schools
Mayfield Heights, Ohio

Bogan, Kramer and Marshall Elementary Schools Talawanda School District, Butler County

RENAMING BROCCOLI INCREASES STUDENT SELECTION

Smart Strategies at Work

Smarter lunchroom strategies prime students to make healthy choices, place the healthy options in strategic locations and make the healthy food appealing.

Prime: Hold a vegetable renaming contest and display all contest entries in the cafeteria.

Place: Place renamed vegetable first in the serving line.

Appeal: Create a color theme event as a way to involve students and parents in meal selections.

Tip Box

Research indicates that renaming vegetables with creative names can double students' consumption of that vegetable.



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Talawanda School District
Oxford, Ohio

Challenge

New school meal pattern guidelines encourage the inclusion of a variety of fruits and vegetables to school meals. One of the requirements is that one-half cup of dark green vegetables be offered at least once per week. Broccoli is one of the more common dark green vegetables offered at the schools, but it is not being consumed at high rates.

Bogan, Kramer and Marshall elementary schools offered broccoli three times each month. Of the approximately 150 students in each elementary school, only about 36 students per cafeteria selected the broccoli. Students threw away about one-third (33 percent) of the broccoli.

Solution

Collectively, the three elementary schools focused on vegetable renaming and color contrast. The schools held a coloring contest in select grades. During the contest, students colored and named a picture of broccoli.

After voting, the names Rocklie Broccoli, Tiny Trees and Super Broccoli won in Bogan, Kramer and Marshall, respectively. The new names were unveiled with announcements, signage in the cafeteria and highlights of the renamed broccoli on the monthly menus.

The winning names became features at the annual "Class at the Court" event where local university basketball players shared the importance of eating healthy and included these names in their public announcements.

Rocklie Broccoli, Tiny Trees and Super Broccoli signs appeared on the serving lines. Other visual reminders in the cafeteria included colorful posters and vegetable-shaped plush toys.

Although the schools started with a focus on increasing dark green vegetable consumption, the effort extended to emphasize a variety of different colored vegetables. Color Week was held during April 2014. Each day of the week was designated a color, and vegetables of the corresponding color were served in the cafeteria. For example, tomato and sweet potatoes recipes stood out on red/orange day.

Parents encouraged students to dress in the designated colors during the week and students received an incentive for counting the number of fruit and vegetable servings eaten during a day. The bracelet was yet another opportunity to engage students with their vegetable selection.

Bogan, Kramer and Marshall Elementary Schools Talawanda School District, Butler County

RENAMING BROCCOLI INCREASES STUDENT SELECTION

Results

- Broccoli selection increased by 116 percent at Marshall Elementary. After the renaming, 82 students chose Super Broccoli, compared with 36 students.
- At Bogan Elementary, the number of students selecting broccoli remained the same, around 24 students per day; however, it is important to note the environmental differences between the schools. The Bogan cafeteria has a salad bar and considerably more vegetable choices than the Marshall cafeteria.
- Although selection varied by building, broccoli waste decreased to 17 percent in both schools.
- Student involvement was high during renaming and color contrast events. Approximately 1,000 students participated in the coloring contest and broccoli renaming. Each of these 1,000 students suggested a name for broccoli.
- During Color Week, 1,200 fruit and vegetable bands or stickers decorated the wrists and/or shirts of the students.

Next Steps

Engaging students in the school meal menu was a big success. Student-generated names increased students' taste expectations and drew additional attention to the often overlooked vegetable.

Efforts will be maintained to highlight Rocklie Broccoli, Super Broccoli and Tiny Trees on the serving lines and in the cafeterias. Color Week will continue and staff will explore the use of tastings to further engage students in the school meal program.

Talawanda Middle and High Schools, Talawanda School District Butler County

CONDUCT TASTE TESTS TO INTRODUCE NEW FOODS

Smart Strategies at Work

Smarter lunchroom strategies prime students to make healthy choices, place the healthy options in strategic locations and make the healthy food appealing.

Prime: Direct students to new food items and serving lines with attractive signage.

Place: Relocate cookies and chips to a less visible location.

Appeal: Place components of a complete meal in an attractive display in a convenient cooler.

Tip Box

Give yogurt parfaits and smoothies the prime location!



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Talawanda Middle and High Schools
Talawanda School District
Oxford, Ohio

Challenge

Talawanda middle and high school cafeterias provide school meals to more than 1,700 students. Both cafeterias offer a large variety of food choices. The high school cafeteria includes three hot serving areas, three cold serving areas, plus snack and beverage coolers. The middle school cafeteria includes three serving lines featuring different food items plus a large soup and salad bar and à la carte items.

A la carte sales of chips and cookies were high at both schools. Middle school food service staff wanted to increase the selection and consumption of healthy à la carte foods. High school staff focused on increasing consumption of healthier, reimbursable meals by introducing a grab-and-go station.

Solution

At the middle school, staff introduced healthier à la carte items—fruit parfaits and smoothies—to compete with popular chips and cookies. The parfaits and smoothies stood out on the top shelf (prime location) of the main snack cart. A black serving tray on the shelf provided a nice color contrast to feature these new snack items. Students sampled the new items prior to purchasing.

At the high school, staff redesigned two coolers. The first cooler offered healthy à la carte items such as yogurt, whole-grain rich bagels, fruit and water. The second grab-n-go cooler featured premade deli sandwiches and salads along with bottled water, whole fruit and yogurt. Each cooler contained attractive fruit baskets.

Signage was an important part of the cafeteria redesign to create an enticing eating environment.

Attractive new signage highlighted featured items and helped students locate the healthier options.

Smaller signage reminded students that they could take one cup of fruit and one cup of vegetable. Each food station featured labeled items and used the school mascot as a theme.

Results

Smoothies and fruit parfaits were a hit at the middle school. Each day, staff made and sold 25 parfaits. At the high school, students reported it was more convenient to grab water from the new cooler than the beverage cooler. Seven new signs in the cafeteria directed students to the new stations.

Next Steps

Students positively received the new food items and recognize the highlighted healthier à la carte items. Taste testings will continue to introduce new grab-and-go meals and à la carte items in the cafeteria.

Trinity Lutheran School, Charter School Lucas County

INCREASE FRUIT SELECTION BY MAKING FRUIT ACCESSIBLE

Smart Strategies at Work

Smarter lunchroom strategies prime students to make healthy choices, place the healthy options in strategic locations and make the healthy food appealing.

Prime: Slice whole fruit to make it more convenient for young kids to eat.

Place: Offer fruit at multiple locations.

Appeal: Display whole fruit in baskets.

Tip Box

Offer students multiple choices of fruits and vegetables.



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Trinity Lutheran School
Toledo, Ohio

Challenge

Researchers and students at Bowling Green State University helped the food service director and volunteers at Trinity Lutheran School design and implement Smarter Lunchrooms interventions to increase student consumption of reimbursable meals, particularly fruits and vegetables.

Trinity Lutheran had two main challenges. First, only one option per food group was available each day. Second, this school has only one kitchen employee, assisted with volunteers, which can make any changes to the cafeteria much more difficult.

Solution

- The focus was to increase the fresh fruit and vegetable offerings and the number of daily fruit options and to add new foods to the menu.
- A fruit basket displayed fresh fruit in the serving line.
- A fruit/veggie mandolin made slicing and dicing fresh fruits and vegetables easier for the one kitchen employee and as a result, the produce appeared more appealing.
- A salad bar housed fresh vegetables.
- A demo table featured new foods for quick and easy taste samplings.

Results

Sliced fruit and vegetable offerings were convenient to grab and welcomed by the students.

The following changes occurred:

- Most days of the week featured fresh fruit (usually apples, bananas and oranges or some combination of the three).
- Green vegetable waste decreased from 34 percent to 11 percent.
- Prior to the redesign, 30 percent of fruit was wasted. After the changes, fruit waste decreased to 10 percent.

Next Steps

The food service director reported that she will take what she learned from this project and continue with improvements to the cafeteria.

Marion Elementary and Middle Schools, Marion City Schools Marion County

INCREASE WHITE MILK, FRUIT AND VEGETABLE APPEAL

Smart Strategies at Work

Smarter lunchroom strategies prime students to make healthy choices, place the healthy options in strategic locations and make the healthy food appealing.

Prime: Display equal amounts of white and chocolate milk in the cooler.

Place: For easier access, position white milk in front of chocolate milk.

Appeal: Pass out stickers to students that selected the white milk over the chocolate milk.

Tip Box

To increase white milk sales, place white milk in front of flavored milk in the walk-by coolers.



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Challenge

Ohio State University students conducted a Smarter Lunchrooms intervention at Marion elementary and middle schools in Marion, Ohio. This intervention aimed to increase the selection of white milk and increase selection and consumption of fruits and vegetables at all involved schools.

Solution

Here are successful interventions implemented at the elementary school:

- Creative, age-appropriate names for fruits, vegetables and entrees entice student selections.
- Label fruit, vegetable and entrée offerings with words and/or pictures.
- Use an “explain a meal” system with color-coded stickers to match lunch offerings.
- Offer fruits and vegetables in baskets.
- Increase the number of locations of fruit offerings in the cafeteria.
- Offer whole fruits daily as well as the fruit item on the menu.
- Display the next day’s menu using a sign close to the register area.
- Display equal amounts of white and chocolate milk. Place the white milk in front of the cooler closest to the children as they pass through the lunch line. Start an “A” for a day campaign. If students choose white milk, they receive an “A” stamp on their hand that is visible to parents when they return home.
- Pass out Smarter Lunchrooms stickers to children who make healthful decisions.
- Sectioned, colored and food group labeled “My Plates” for students to use at lunchtime help students identify what should be on their plates and the portion sizes.
- Attractive, fun, healthy food inspired posters throughout the lunch serving areas brighten up the walls.
- High school art students painted an age-appropriate wall mural about making healthy food choices.

Interventions for middle schools included:

- Creative, age-appropriate names for fruits, vegetables and entrees entice the high schools students to purchase.

continued on next page

Marion Elementary and Middle Schools, Marion City Schools Marion County

INCREASE WHITE MILK, FRUIT AND VEGETABLE APPEAL

- Fruit, vegetable and entrée offerings come with a fun fact about food or why the food is healthful.
- Attractive fruit baskets display whole fruit.
- Attractive, fun, healthy food posters liven up the lunch serving areas.
- Post the next day's menu on a sign close to the register area.
- Equal amounts of white and chocolate milk are now in the cafeteria, but the white milk is in the cooler, closest to the students as they walk through the line.
- The amounts of a la carte offerings are less and the prices of healthy a la carte items are lower.

Results

This intervention successfully increased student selection of plain milk as well as student consumption of entrées and vegetable. Students, however, wasted more plain milk post-intervention.

Next Steps

Further analysis is required to determine why there was no impact of this behavioral intervention on fruit waste. There is additional need to address intervention ideas that can effectively increase student consumption of plain white milk.



Smarter Lunchrooms – Ohio Evaluation Partners

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