



## Fueling Academic Performance

### *Strategies to foster healthy eating among students*

*Youth face a number of food-related concerns, such as poor nutrition, obesity, and hunger. In 2010, nearly 20 percent of 9th and 10th grade students in Minnesota were obese (Minnesota Department of Health, 2012). Youth also encounter food insecurity, or limited access to food due to an absence of money or resources. Overall, 10 percent of households in Minnesota are food insecure, while it is estimated that 1 in 6 Minnesota children are at risk of hunger (Second Harvest Heartland, 2013).*

Recent studies have demonstrated that nutrition can affect students' thinking skills, behavior, and health, all factors that impact academic performance (Brown, Beardslee, & Prothrow-Stith, 2008). Research suggests that diets high in trans and saturated fats can negatively impact learning and memory, that nutritional deficiencies early in life can affect the cognitive development of school-aged children, and that access to nutrition improves students' cognition, concentration, and energy levels.

This snapshot identifies some promising approaches to encourage students to eat healthier foods and increase student participation in school nutrition programs.

# Promising approaches to foster healthy eating in schools

Schools and states are drawing on different approaches to encourage the consumption of healthy foods and increase students' participation in school meal programs. Some of these approaches include using behavioral economics to redesign lunchroom environments or the implementation of monetary incentives to catalyze involvement in school meal programs.

## Designing spaces and crafting choices

A group of researchers from New York draw on the fields of behavioral economics, psychology, and marketing to study how students select foods in school lunchrooms. They designed an experiment at a high school in which they organized a convenience line in the lunchroom that served healthier foods. After 16 weeks, they found that the sales of healthier foods rose by 18 percent and the number of grams of unhealthy foods consumed decreased by almost 28 percent. In addition, the amount of healthier foods eaten as a percent of total consumption increased from 33 to 36 percent (Hanks, Just, Smith, & Wansink, 2012).

Some of the same researchers observed in a previous study that shifting the salad bar to a more prominent location in the school lunchroom led to an increase in sales and consumption of items from the salad bar (Just & Wansink, 2009).

Researchers also identified the positive impact of other strategies such as not requiring students to eat one type of vegetable, but instead having them choose between two options, such as carrots or celery. Another strategy involves having students pay cash for desserts and soft drinks, while restricting prepaid debit cards to healthier foods. In their analysis, researchers discovered this restriction did not reduce revenue or participation in school lunch, but yielded higher sales of healthier food (Just & Wansink, 2009).

These studies show that simple, relatively low-cost changes to a lunchroom's physical environment or redesigning how food is displayed or purchased can be effective tools for encouraging students to select healthier foods.

## Using a public incentive to remove unhealthy foods

Connecticut's Healthy Food Certification (HFC) offers schools participating in the National School Lunch Program a 10 cent per lunch (including paid, free, and reduced) incentive to eliminate unhealthy foods. Researchers found that the certification was associated with more students participating in school lunch programs, while annual revenue for an average school district increased by approximately \$30,000 (Long, Luedicke, Dorsey, Fiore, & Henderson, 2013).

The HFC increased participation in school meal programs and diminished students' access to unhealthy foods. In the long-term, these changes could impact levels of obesity and access to adequate nutrition. In addition, the HFC could inform other states or multi-sector, collaborative efforts that want to increase participation in school meal programs and decrease the presence of unhealthy foods.

## How are some Minnesota school districts encouraging students to eat nutritious food?

While a growing body of published information describes ways schools can enhance their nutrition programs, one Minnesota school district sought to discover the approaches that other local schools are taking regarding their nutrition programs. In 2011, the South Washington County School District, in consultation with the Minnesota School Nutrition Association, identified six schools with unique approaches to organizing their nutrition programs. Wilder Research interviewed the nutrition services directors of these schools and recorded a variety of strategies that could be used by other schools to improve their nutrition programs and encourage healthy eating among students.

### Increasing awareness about beneficial menu changes

Several school districts developed plans to provide the district, parents, and students with information about menu options and new foods, and to generate excitement around changes to school nutrition programs. The district representatives provided recommendations for districts to consider when developing their school nutrition plans, such as:

- *Focus on the message* – Send the same message to parents, staff, students, and the community. Develop a nutrition message that is the theme for all marketing efforts, and stay on message. Create an identity for the nutrition services program.

### Developing an annual marketing plan

Wayzata school district's current annual marketing plan aims to develop two new recipes a month and highlights three to four Farm to School or other local products per month. The new recipes and Farm to School or local items are indicated with a small symbol on printed and online menus. Menus are generally shared with parents through electronic school newsletters.

- *Engage parents and district staff* – Know that many families don’t understand what a comprehensive school nutrition program offers, and that school nutrition is not a priority for all families. Reach out in multiple ways to get the message to all families. School staff also helps sell your program, keep them engaged by attending principal, meetings marketing to them, and offering them a free meal.
- *Form a marketing committee* – Create a committee with representatives from nutrition services and others with interest in food marketing to help build buy-in and support for changes to the district’s nutrition program.

Districts representatives also offered several examples of marketing strategies that have found effective. Some of the more common strategies include:

- *Securing professional support* – Hire an ad agency to develop a comprehensive marketing strategy and outreach to local media.
- *Integrating social media and maintaining a webpage* – Use Facebook to post photos of prepared dishes, taste testing, and nutrition service staff. Also update the district’s website regularly to provide parents with information about menu changes and new food options.
- *Providing information at school open houses and in school publications* – Create toolkits for open houses that include a banner introducing nutrition services, brochures, incentives (apples), and possibly food for parents to sample. In addition, include brief bullet points about the nutrition services program in school newsletters.
- *Engaging district Parent Advisory Committees (PACs)* – Prepare foods for parents to sample at PAC meetings, provide tours of the facilities, and host presentations about the nutrition services.
- *Conduct outreach* – Draft articles about food service changes, including photographs of taste testing and staff preparing food in the kitchens. Also, attend principal meetings to talk about the program.

## Expanding menus to include more ethnic foods

With increasingly diverse student populations and efforts to create healthy dishes in response to federal guidelines, districts have increased efforts to include more ethnically diverse foods on their menus. District representatives offered the following tips for integrating ethnic foods:

- *Offer ethnic foods as an alternative* – Know that the recipes may not be appealing for all students.
- *Advertise and promote newer ethnic dishes* – Inform parents, teachers, and the community that nutrition services developed new recipes.

### Community insight into new recipes

Saint Paul school district staff worked with community members to develop recipes, while being clear about constraints such as budget, time, and nutritional guidelines. The district tested the new foods – if the recipe did not work to scale, they made the necessary changes.

- *Sample the new foods* – Give staff the opportunity to taste newer foods in one or two schools before making them part of a routine menu. Sometimes things change when a recipe is taken to scale, so tweak it as necessary.
- *Consider pilot testing models to gauge student feedback*– Have two garbage cans, and encourage students to put their garbage in one of two cans, depending on whether they liked the food.

## Offering more fresh fruits and vegetables

School districts are focusing on ways to offer more fruit and vegetable options in response to recent changes in federal guidelines. In addition, parents and students have increased interest in school nutrition, healthy eating, and well-being. Districts shared several different approaches to increasing consumption of fresh fruit and vegetables, including:

- *Using smaller portions to taste test* – Allow students to take a smaller “taste test” portion to encourage them to try new foods and to help the district determine which fruits and vegetables will be most popular.
- *Developing recipes and encouraging students to try new food* – Create new recipes that incorporate fruits and vegetables, and educate food service staff to encourage students to try new foods.
- *Ensuring that all serving trays have a variety of fresh fruits and vegetables* – Have trays that offer up to three fresh fruit and vegetable options rather than only one option.
- *Experimenting with how food is displayed* – Try single-serve four ounce serving bowls for fresh fruits and vegetables to encourage students to try new foods.
- *Experimenting with food placement* – Move fruits and vegetables from the back of the line to the start to encourage students to take more before selecting their hot food.
- *Sharing successes from school to school* – Take photos containing examples of the different ways schools display foods and distribute to all schools in the district.

### Site coordinators focused on nutrition

Through a Blue Cross and Blue Shield Foundation grant, Burnsville school district supports a district Smart Coordinator who works with staff in each building to initiate nutritional changes and promote physical activity. Key to this program is having a coordinator in each building to engage with staff and students and champion efforts. Coordinators may be food services staff, teachers, administrators, or other school staff. They receive a small stipend for their time, and meet quarterly to discuss challenges and successes. It is essential to have some funding to support this “extra” work for the coordinators, and to have a position charged with coordinating all efforts.

## Promoting Farm to School and the use of local food

Increasingly, districts are connecting with local and regional farms to access foods for their nutrition programs. Farm to School supports local farmers and food systems, provides education to districts about nutrition and the origin of food, and helps meet students' nutritional needs. Districts have deployed a variety of approaches to educate students about Farm to School, such as: preparing a brief video describing how the local food is grown and how it will be featured on the menu; hosting a local farmer to talk about farming and share examples of local foods; and creating a story board with pictures or examples of local food for students to learn more and connect with the farm from which the food was sourced. In addition to educational strategies, district representatives offered suggestions for operating a robust Farm to School program that integrates local foods into nutrition service programs. Their recommendations include:

- *Take time to plan* – Plan at least two months in advance for local food promotions and allocate time to develop graphics and prepare story boards to market local foods.
- *Prepare kitchen staff* – Work with each kitchen separately to determine how best to prepare new foods given their kitchens and equipment.
- *Pilot different foods* – Host tasting and sampling of new foods to identify how popular items may be with students. Have pictures of new foods on the line, and encourage students to try new foods.
- *Think beyond produce* – Feature local items such as wild rice, maple syrup, honey, or cheese at different times throughout the school year.
- *Publicize your program* – Use Farm to School as a way to gain attention for your nutrition services program, inspire parents to take an interest in the program, and encourage students to participate.
- *Focus less on meat or protein* – Encourage students, staff, and parents to focus more on fruits and vegetables and whole grains, as opposed to the meat or protein portion of the plate.

### Integration of Farm to School into nutrition services

In the Hopkins school district, one local farmer supplies all the produce for each school. Each school works directly with the farmer to get those products of most interest to them, which the farmer delivers to each individual school. This model has sparked creativity by allowing staff at each school to feature their own unique program and facilitate learning across schools.

### Approaches to promoting Farm to School

Rosemount school district staff identifies and plans for the local lunch meal items. The district features a locally grown or produced item on a specific day each month.

## Next steps

This snapshot highlights some promising approaches that encourage students to eat healthier foods and increase participation in school nutrition programs. Several approaches are relatively low-cost and easy to implement, such as shifting how food is displayed to foster healthy eating and soliciting input from students and parents regarding new menu items. Other approaches are more comprehensive (e.g., farm to school) and require significant planning and changes to how food is sourced and prepared. School nutrition programs should experiment to discover the appropriate blend of strategies that work for their student populations. They should also share their successes and learnings through publications, newsletters, and social media.

# Additional resources

The following resources were used to develop this snapshot:

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#### For more information

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Learn more about obesity and other issues that affect Minnesota's quality of life at [www.mncompass.org](http://www.mncompass.org), an indicators project led by Wilder Research.