



GROWING SCHOOL BREAKFAST PARTICIPATION

**New Ways to Deliver
Breakfast to Students
On-the-Go**



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SNA On-the-Go School Breakfast Research

The importance of breakfast and the rapid growth in national school breakfast participation prompted the School Nutrition Association to conduct a research study on the innovative ways school nutrition programs are expanding breakfast, especially in middle and high schools. By conducting a survey with school nutrition directors, SNA has identified the keys to success for implementing on-the-go school breakfast venues that can help to increase participation.

This report includes information on the characteristics, logistics and keys to success of on-the-go breakfast venues in middle and high schools. By understanding these elements of on-the-go breakfast venues, school nutrition programs can learn ways to increase breakfast participation in their own schools.



Challenges &

School Breakfast is Important

Breakfast really is the most important meal of the day for children, as it provides the necessary energy for a day of learning and achievement. Eating a nutritious breakfast at school can give children an extra edge. Research has shown many benefits of school breakfast, including:

- Academic Achievement—Students who eat school breakfast have greater gains in standardized test scores and show improvements in math, reading and vocabulary scores.^{1,2,3}
- Improved Behavior—Students who participate in the School Breakfast Program (SBP) are late or absent from school less often.⁴

School Breakfast Program Basics⁵

- 11.6 million children served daily
- More than 1.9 billion breakfasts served annually
- 87% of schools participate in SBP⁶
- Congress appropriated \$2.8 billion for SBP in FY 2010



Opportunities

Challenges of School Breakfast

- National participation in the School Breakfast Program is approximately 36% of participation in the National School Lunch Program based on USDA participation numbers. Therefore, just over 1 in 3 students who participate in lunch are also participating in breakfast.
- Timing issues and lack of school staff support were the primary barriers to student participation in the school breakfast program as identified by school nutrition directors in a study conducted on the perceptions of school breakfast participation.⁷

School Breakfast Opportunity

- Since 2002, participation in the school breakfast program has increased 43%!
- School nutrition programs are overcoming some of the timing challenges offering breakfast to students in more portable, on-the-go venues. These types of innovations are helping to fuel the increases in school breakfast participation nationally.

How to Use the Information in This Report

- Learn about different ways to serve breakfast in middle and high schools.
- Understand common practices for implementing alternate school breakfast venues.
- Gain insights into the keys to a successful breakfast program at middle and high schools.

SNA Survey Details:

- Online survey assessment
- Sent to 4,080 school nutrition directors in November 2010
- 733 school nutrition directors responded to the survey (18% response rate)
- 95% of respondents had breakfast programs operating in middle or high schools.
- Of those with breakfast programs in middle or high schools, about half offered school breakfast through alternate venues (grab 'n' go, breakfast in the classroom, hallway breakfast kiosks or breakfast vending).

1. Vaisman N., Voet H., Akivis A., Vakil E. "Effects of Breakfast Timing on the Cognitive Functions of Elementary School Students." *Archives of Pediatric and Adolescent Medicine* 1996 150:1089-1092.

2. Powell C.A., Walker S.P., Chang S.M., Grantham-McGregor S.M. "Nutrition and education: a randomized trial of the effects of breakfast in rural primary school children." *American Journal of Clinical Nutrition* 1998;68:873-9.

3. Murphy J.M., Pagano M., Nachmani J., Sperling P., Kane S., Kleinman R. "The Relationship of School Breakfast to Psychosocial and Academic Functioning: Cross-sectional and longitudinal observations in an inner-city sample." *Archives of Pediatric and Adolescent Medicine* 1998; 152:899-907.

4. Murphy J.M. "Breakfast and Learning: An Updated Review." *Journal of Current Nutrition and Food Science* 2007; 3(1): 3-36.

5. U.S. Department of Agriculture, Food and Nutrition Service. Children Program Data. <http://www.fns.usda.gov/pd/cnmain.htm>

6. Food Research and Action Center. (2011) The School Breakfast Scorecard: 2011

7. Lambert L.G., Raidl M., Carr D.H., Safaii S., Tidwell D.K. "School Nutrition Directors' and Teachers' Perceptions of the Advantages, Disadvantages, and Barriers to participation in the School Breakfast Program." *Journal of Child Nutrition and Management*; Fall 2007.

On-the-Go Breakfast: Overview of Popular Breakfast Venues for the Secondary Level*

Breakfast Venue	Prevalence	Types of Schools/Districts	Impact on Participation	Keys to Success
Grab 'n' Go in the Cafeteria	37%	All sized school districts, especially prevalent in smallest sized districts Available in both middle and high schools	Over 70% experienced an increase in participation —more than 1 in 4 programs had an increase of more than 15%	<p>Support of school administration and teachers</p> <p>Offering a variety of foods that students like</p> <p>Speediness of the process</p> <p>Good marketing and promotion</p>
Hallway Breakfast	10%	Available in a range of different sized districts as well as free and reduced price eligibilities Available in both middle and high schools	Almost 1 in 3 experienced an increase of 20% or more	<p>Offering a variety of foods that students like</p> <p>Support of school administration</p> <p>Finding the right locations for kiosks</p>
Breakfast Delivered to the Classroom	7%	More common in districts with at least 50% of students that are eligible for free or reduced price meals More common in middle schools than high schools	Most programs experienced an increase in participation —the largest increases were in districts that offer breakfast in classroom at no charge to students	Teacher acceptance and buy-in
Breakfast Vending	Less than 1%	Only available at high schools	To be determined (most programs are in their pilot year)	<p>Right location of the vending machine</p> <p>Keeping the vending machine stocked</p> <p>Teaching students to use the machine</p> <p>Support of staff, administration, and janitors</p>

* Information based on results of SNA's survey on alternate school breakfast in middle and high schools.

Grab 'n' Go in the Cafeteria

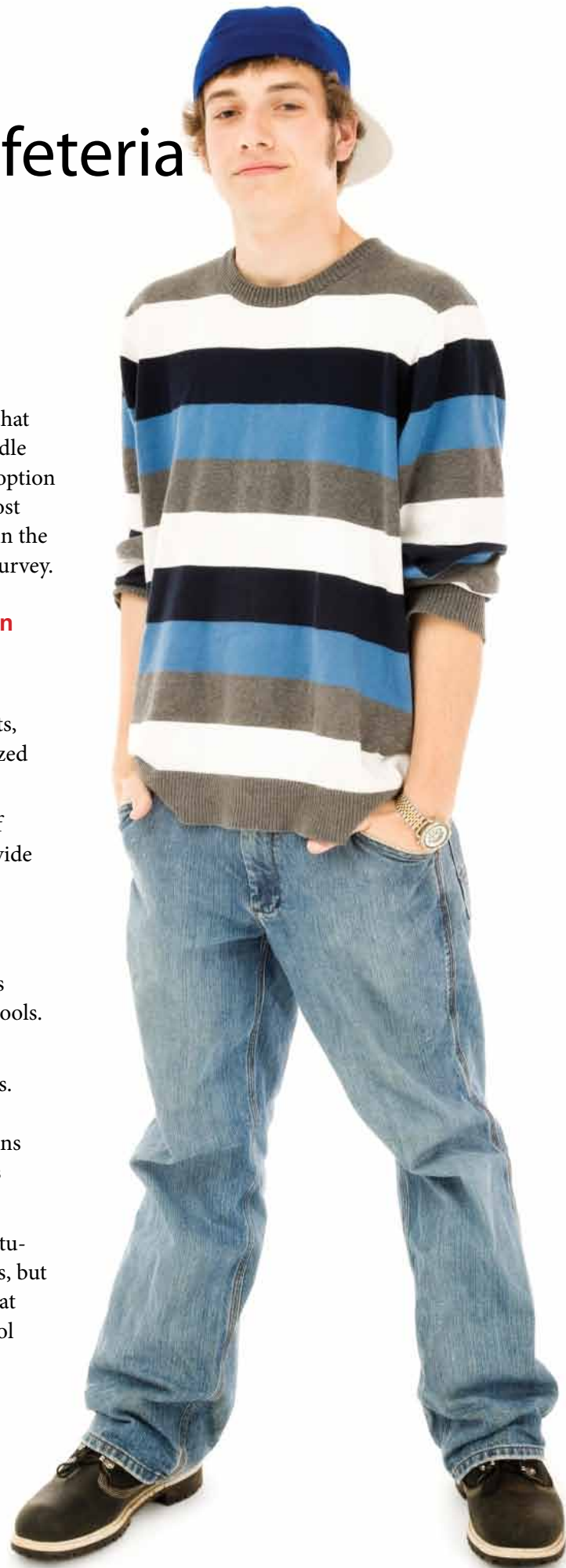
SNA identified 268 school nutrition programs that provide a reimbursable school breakfast to middle and high school students through a grab 'n' go option available in the cafeteria. This was by far the most prevalent on-the-go breakfast option available in the middle and secondary schools assessed in the survey.

Who Is Offering Grab 'n' Go Breakfast in the Cafeteria?

- Grab 'n' go breakfast options served in the cafeteria are prevalent across all sized districts, but are especially prevalent in the smallest sized school districts.
- School nutrition programs across all levels of free and reduced price eligibility tend to provide grab 'n' go breakfast options in the cafeteria.

Where Is It Available?

- Grab 'n' go breakfast served in the cafeteria is widely available in both middle and high schools.
- More than 90% of these programs offer this type of breakfast before the school day begins. While less prevalent, more than 20% offer grab 'n' go breakfast after the school day begins either between class periods, during wellness or snack breaks or study halls.
- The cafeteria is the most common place for students to eat their grab 'n' go breakfast options, but many programs (more than 35%) indicate that students also eat these breakfasts in the school hallways or in their classrooms.



What Is the Impact?

- Of programs that had tracked the impact of grab 'n' go breakfast, 70% had experienced an increase in breakfast participation with over a quarter experiencing an increase in participation of more than 15% at the secondary level.

How Does It Work?

Breakfast Preparation:

- Almost all of the programs that served grab 'n' go breakfast in the cafeteria (more than 95%) prepare or assemble the breakfast at the school where it is served. About one-fifth of the programs use pre-packaged breakfasts, and only a few prepared or assemble breakfasts at a central kitchen.



Grab 'n' Go Breakfast Foods

1. Low-Fat/Fat-Free Milk*
2. Juice
3. Fruit
4. Muffins/Breads/Pastries
5. Yogurt
6. Cereal
7. Breakfast Sandwiches/Burritos



All served by more than 75% of the programs with grab 'n' go breakfast in the cafeteria.

** Required element of a reimbursable school breakfast*

Equipment:

- Unlike many of the other breakfast venues assessed in this report, relatively few programs purchased special equipment to implement this type of breakfast service (less than 15% compared to 50-70% of programs with hallway or classroom breakfast venues). The equipment most commonly purchased includes carts, toasters, and computer or POS stations.

What are the Keys to Success?

- **Schedules and timing**, as well as **student satisfaction**, were indicated by more than 30% of programs with grab 'n' go breakfast as being one of the biggest challenges. Other challenges noted by at least 20% of programs include **teacher acceptance**, **support of administration**, **trash control** and **forecasting the number of meals**.
- School nutrition programs shared that the following are key elements to a successful grab 'n' go breakfast program in the cafeteria:
 - **Support of school administration and teachers**
 - **Offering a variety of foods that students like**
 - **Speediness of the process**
 - **Good marketing and promotions**

Hallway Breakfast

SNA identified 75 school nutrition programs that provide a reimbursable school breakfast to middle and high school students through hallway kiosks or carts.

Who Is Offering Hallway Breakfast?

- School nutrition programs that offered hallway breakfast represented a range of different sized school districts.
- School nutrition programs with varying levels of free and reduced price eligibility offered hallway breakfast options.

Where Is It Available?

- School breakfast served through hallway kiosks or carts are commonly available at **both middle and high schools**.
- Breakfast hallway kiosk or carts are **mainly available to students before school begins**. However, more than **one-quarter of these programs have hallway kiosks or carts available between class periods or after the school day begins**.
- School nutrition programs with hallways kiosks or carts report that **students eat these breakfasts in a number of different places**—most commonly in classrooms and in hallways (indicated by more than 50% of programs), but also outside or in an auditorium or common area (indicated by more than 40% of programs).

What Is the Impact?

- Almost one-third of the school nutrition programs indicated that breakfast **participation increased by 20% or more** as a result of offering breakfast through hallway kiosks or carts.



How Does It Work?

Payment/Recording:

- For programs that offer universal free breakfast, the focus is on recording the number of breakfasts served. Programs mentioned different ways of doing the count, including using a clicker, a computer and a count sheet.
- For programs that do not have universal free breakfast, the most common approach to recording and payment of breakfasts served is to have a POS terminal (often wireless) at the hallway kiosks or cart. However, some programs use a less technical approach and have rosters or check lists with students' names. Following breakfast, school nutrition staff record breakfast, and payment is deducted from student meal accounts. Cash payments are also accepted in some programs.

Breakfast Preparation:

- Almost all of the programs prepare these breakfasts at the school where it is served. Only a few of these programs prepare the breakfasts at a central kitchen or purchase pre-packaged breakfasts.



Special Equipment Needs:

- About half of the programs purchased special equipment to implement hallway breakfast service. The most common type of equipment purchased were carts or kiosk to serve the food. Other types of equipment commonly purchased included technology and food storage equipment—specifically additional computers or laptops, additional POS terminals (some wireless or handheld), cash registers, coolers, warming bags and printers.

What are the Keys to Success?

When asked to identify the top challenges in operating a breakfast kiosk or cart, the responses were much less pronounced than some of the other alternate breakfast venues. **Administrative support was the top challenge**, indicated by more than one-third of those with this type of breakfast option. School nutrition staffing, janitorial and trash control, student schedules and teacher acceptance were all issues with less than one-fifth of the programs with hallway breakfast.

Hallway Breakfast Foods

The most common types of breakfast items served in hallway breakfast include:

1. Low-Fat/Fat-Free Milk*
2. Juice
3. Breakfast Sandwich/Burrito
4. Muffins/Breads/Pastries
5. Fruit
6. Yogurt
7. Cereal Bars



All of these items were served by more than 75% of the programs that have a hallway kiosk or cart for breakfast.

** Required element of a reimbursable school breakfast*

When asked to identify the keys to operating a successful breakfast kiosk or cart at the secondary level, **offering a variety of breakfast foods** that students like and **support from school administration** were the two most commonly mentioned keys to success. **Finding the right locations** for kiosks, **marketing and promoting** the program, **speediness** of the process and **good customer service** were also commonly mentioned.

Breakfast in Action

After learning that the high school students in her district weren't coming to the cafeteria to eat breakfast before school, Pam Caldwell, school nutrition director for Lincoln (Ark.) Consolidated School District, implemented a hallway breakfast program called "Second Chance Breakfast." After working with administrators at the high school, they altered the morning schedule to make time for breakfast. "The administration was fantastic! The principals made extra time between 1st and 2nd period for our breakfast program. It is a great success., she reported. During this time, students have a chance to pick up a breakfast at a hallway kiosk. With a limited serving time, students are offered both hot and cold items such as cereal, sausage biscuits and yogurt.

Breakfast Delivered to **Classrooms**

According to SNA's *2009 School Nutrition Operations Report*, 15.8% of school nutrition programs provide breakfast in the classroom to at least one grade or school in their district. However, most of the research and work promoting breakfast in the classroom focuses on this venue for elementary students. SNA's assessment focused on the use of this venue for middle and high schools. In SNA's assessment, 49 school nutrition programs (or 7% of those that responded) indicated that their program delivers breakfast to the classroom at either a middle or high school.

Who Is Delivering Breakfast to the Classroom?

- School nutrition programs that deliver breakfast to the classroom to middle or high school students represent a range of district enrollment sizes.
- These programs tend to have high free and reduced price student eligibility. Seventy-six percent of the school nutrition programs in SNA's assessment that served breakfast in the classroom to middle or high school students had at least 50% of their students eligible for free and reduced-price meals.

Where Is It Available?

- Of the programs in SNA's assessment, breakfast delivered to the classroom was more prevalent in middle schools than in high schools. Almost all of these programs offered this at a middle school, while less than half offered this at a high school.
- Almost three-quarters of these programs offered the breakfast delivered to the classroom at no charge to students.

- While some of these programs indicated that at least one school is Provision 2, about half of the programs do not have any Provision 2 schools. Those that are not Provision 2 schools manage this in a number of different ways, such as absorbing the extra cost, getting additional funding for extra cost from school administration or through grants.
- Depending on the program, students either eat the breakfast prior to the start of the school day in their classroom or during the class period (this option is more common in programs that offer the breakfast free to all students).

What Is the Impact?

- Most programs that delivered breakfast to classrooms indicated that they have experienced an increase in breakfast participation as a result of offering this service. Participation increases were largest (more than 20% increase) in districts that offer these breakfasts at no charge to students.



Breakfast in the Classroom Foods

The most common types of breakfast items served in breakfast delivered to the classroom include:

1. Low-Fat/Fat-Free Milk*
2. Juice
3. Muffins/Breads/Pastries
4. Fruit
5. Cereal
6. Breakfast Sandwich/Burritos
7. Yogurt
8. Graham Crackers



All of these items were served by more than 70% of the programs that deliver breakfast to the classroom.

** Required element of a reimbursable school breakfast*

How Does It Work?

Payment/Recording

- For the programs that offer free breakfast to all students, recording of the number of breakfast served is often done using a class roster.
- Programs that do not offer free breakfast to all students must record and receive payment from students receiving a breakfast. Recording in the classroom is commonly done by using a class roster. Information from the class roster (either paper or laptop) is then input into the school nutrition program's system and payment is deducted from a student's meal account. Some programs also collect cash payments from students.

Breakfast Preparation

- Almost all of the programs prepare these breakfasts at the school where it is served. Only a few of these programs prepare the breakfasts at a central kitchen or purchase pre-packaged breakfasts.

Equipment

- Breakfasts are commonly delivered to the classroom using rolling carts, insulated bags and coolers. Depending on the program,

either students are responsible for picking up the food for the classroom and returning the carts, bags or coolers, or school foodservice staff deliver the food and return the information.

- More than 70% of these programs purchased special equipment to implement breakfasts delivered to the classroom. The most common types of equipment purchased include rolling carts, insulated bags, coolers and baskets or totes.

What Are the Keys to Success?

The number one challenge, as well as key to success, in delivering school breakfast to classrooms is teacher acceptance and buy-in, according to the school nutrition programs with this type of breakfast service in middle or high schools.

Breakfast in Action

Students eat their breakfast in their homeroom classes at the middle schools in Wayne County (Ga.) School District. By making breakfast easy and accessible for students, breakfast participation in one middle school doubled from about 25% to 50%.



Breakfast **Vending**



In recent years, vending technologies have advanced and are now allowing school nutrition programs to provide students breakfast through vending machines. However, based on SNA's assessment, only a handful of programs are using this venue to serve breakfast at the secondary level. SNA's assessment of secondary breakfast programs identified five school nutrition programs that provide reimbursable school breakfasts through vending machines.

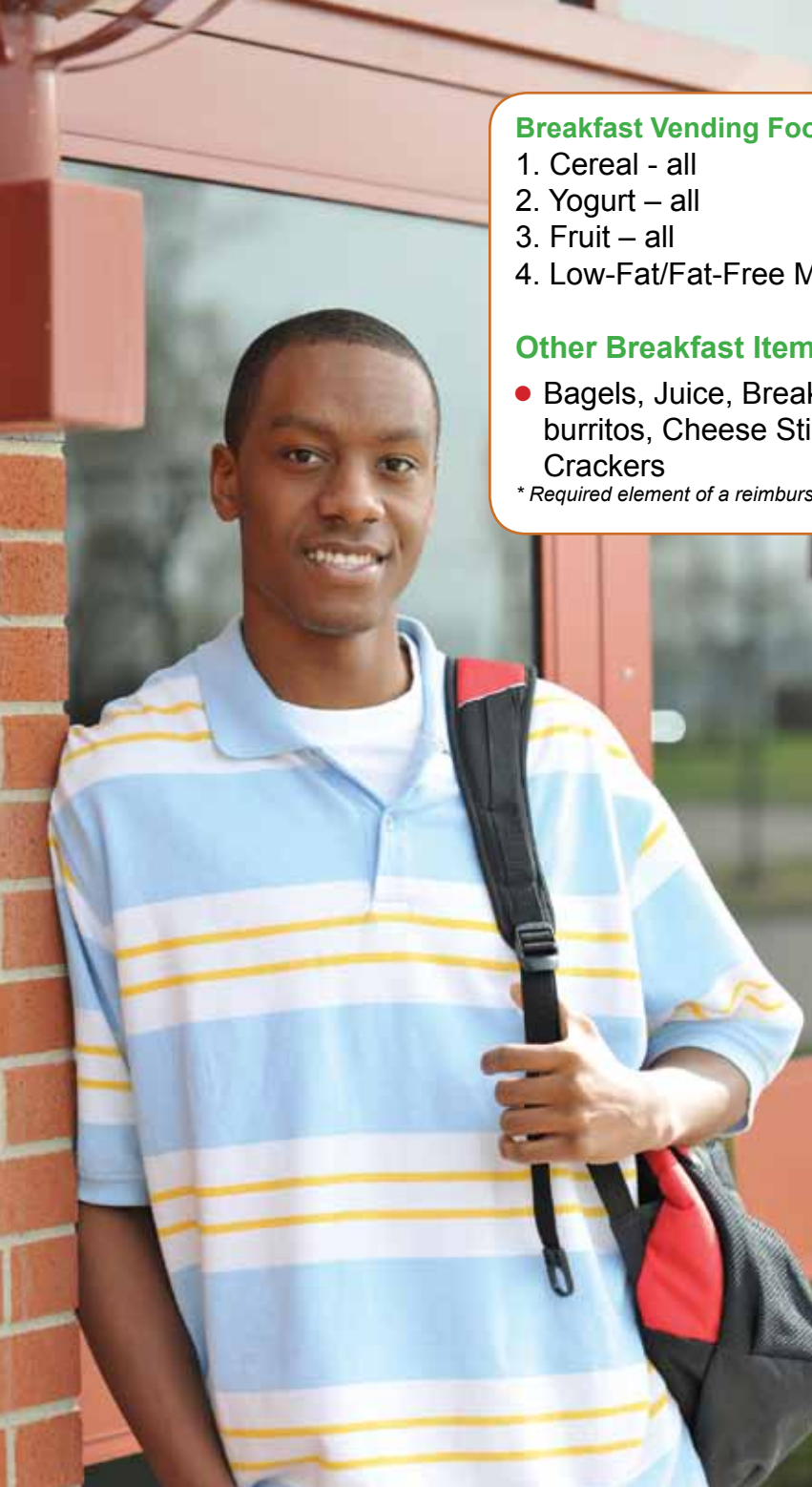
Who Is Offering School Breakfast in Vending Machines?

- The five school nutrition programs with breakfast vending have different demographic characteristics, including schools of varying enrollments, as well as different levels of free and reduced-price students.

Where Is It Available?

- Vending venues are available only at the high school level—none of the school nutrition programs had school breakfast vending in middle schools.

- In 4 of the 5 programs, students can also purchase single items from the vending machines where a reimbursable breakfast is offered. One program only allows purchases of reimbursable breakfasts from these vending machines.
- School breakfasts in vending machines are primarily available prior to the start of the school day, but a few programs also allow the reimbursable breakfast vending between class periods after the school day has begun.
- Because the location of the vending machines varied for each program, these programs reported that students tend to eat the school breakfast purchased in vending machines in a variety of locations, including hallways, outside, classrooms, common areas and the cafeteria.
- Many of the school nutrition programs that offer school breakfast through vending machines also offer other alternate venues, such as breakfast in hallway kiosks or grab 'n' go options in the cafeteria at the secondary level.



Breakfast Vending Foods:

1. Cereal - all
2. Yogurt – all
3. Fruit – all
4. Low-Fat/Fat-Free Milk* - all

Other Breakfast Items Offered;

- Bagels, Juice, Breakfast sandwiches/burritos, Cheese Sticks, and Graham Crackers

** Required element of a reimbursable school breakfast*



What are the Keys to Success?

Similar to many of the other alternate venues for school breakfast, those that offer school breakfast in vending machines indicated that **administration support** is a key challenge. However, offering breakfast in vending machines also had some unique challenges, such as keeping vending machines stocked, the costs of maintaining the machine and vending machine malfunction.

Each of the five school nutrition programs provided a different insight into the key to being able to successfully use vending for breakfast, including:

- **Right location of the vending machine**
- **Keeping the vending machine stocked**
- **Teaching students to use the machine to get a reimbursable meal, and**
- **Support of staff, administration and janitors**

How Does it Work?

- All of the programs indicated that their vending machines were linked to their POS systems. To pay without cash, students are able to use their student ID or PIN but can also pay at the machine with cash.

Breakfast in Action

This is the first year of a pilot of reimbursable breakfast vending at San Bernardino City (Calif.) Unified School District. Rose Fennell, nutrition specialist at San Bernardino City USD, explains that at one of the three sites, it is turning out to be a great supplement to their regular cafeteria breakfast. "It's a great option for kids for who are running late and need to grab breakfast quickly," she says.

Summary

On-the-go breakfast is a proven way of increasing school breakfast participation. This report highlights the characteristics, logistics, and keys to success for on-the-go school breakfast options for middle and high schools. Regardless of the type of on-the-go breakfast, school nutrition directors provided the following insights.



Interest in Expanding On-the-Go Breakfast

SNA's research found a strong interest among school nutrition directors in expanding on-the-go breakfast options in middle and high schools.

- Almost 40% of the school nutrition programs that do not currently offer on-the-go breakfast were interested in expanding their breakfast to include on-the-go options.
- Over two-thirds of school nutrition programs that currently offer an on-the-go option in middle or high schools are interested in either expanding the types of on-the-go breakfast (about 50%) or expanding the current on-the-go venue to additional middle and high schools.

Support of School Administration is Key

For each of the on-the-go venues SNA's research focuses on, the most common key to success is the support of the school administration. Many school nutrition directors added that with the support of school administrators, others in the school such as teachers and janitors, are more accepting of the breakfast program. Additionally, their support can allow for more flexibility to offer on-the-go options when it works best for students – perhaps between morning class periods.

Bring Breakfast to the Students

School nutrition directors shared that middle and high school students won't go out of their ways to get a school breakfast. So to increase participation in these schools, you have to bring the breakfast to the students. Many of the on-the-go venues included in this report, do just this.

Customize On-the-Go Options for Specific Schools

With on-the-go breakfast one size doesn't fit all. Many factors, such as student schedules and the layout and morning "traffic" flow of students can influence the type of on-the-go school breakfast option that will work best in a particular school.

The information in this report was collected from a survey of School Nutrition Association members, as well as the following sources:

- U.S. Department of Agriculture, Food and Nutrition Service, Child Nutrition Program Data
- Food Research and Action Center, School Breakfast Scorecard, January 2011.
- *Journal of Child Nutrition and Management*

Additional Resources for More Information About School Breakfast

- www.schoolnutrition.org/nsbw
- www.breakfastintheclassroom.org
- www.TrayTalk.org
- <http://beyondbreakfast.org/> - *Breakfast in the Classroom* blog
- <http://www.fns.usda.gov/cnd/breakfast/>
- www.frac.org
- <http://www.nutritionexplorations.org/>
- <http://www.meals4kids.org/sb/breakfast.html> - *Child Nutrition Outreach Program, MA*
- <http://www.breakfastfirst.org> - *California Food Policy Advocates*
- <http://dpi.state.wi.us/fns/sbp1.html> - *Wisconsin DPI School Breakfast Program*



School Nutrition Association

The School Nutrition Association is a national, nonprofit professional organization representing more than 55,000 members who provide high-quality, low-cost meals to students across the country.

Mission:

To advance good nutrition for all children.

Vision:

Healthful meals and nutrition education are available to all children.

The SNA works to ensure all children have access to healthful school meals and nutrition education by:

- Providing members with education and training
- Setting standards through certification and credentialing
- Gathering and transmitting regulatory, legislative, industry, nutritional and other types of information related to school nutrition
- Representing the nutritional interests of all children

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