

In-Classroom Breakfast Programs: Best Practices



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National Food Service Management Institute The University of Mississippi

Building the Future Through Child Nutrition

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PURPOSE

The purpose of NFSMI is to improve the operation of Child Nutrition Programs through research, education and training, and information dissemination. The Administrative Offices and Divisions of Technology Transfer and Education and Training are located in Oxford. The Division of Applied Research is located at The University of Southern Mississippi in Hattiesburg.

MISSION

The mission of the NFSMI is to provide information and services that promote the continuous improvement of Child Nutrition Programs.

VISION

The vision of the NFSMI is to be the leader in providing education, research, and resources to promote excellence in Child Nutrition Programs.

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IN-CLASSROOM BREAKFAST PROGRAMS: BEST PRACTICES

EXECUTIVE SUMMARY

In an effort to improve student access to the underutilized U.S. Department of Agriculture (USDA) School Breakfast Program, some school districts are adopting distribution and service models for in-classroom breakfast. These models include distribution of breakfasts to each classroom by students and/or school nutrition employees and use mobile breakfast carts in hallways. The purpose of this study was to determine the best practices of providing an in-classroom breakfast.

Using case study research methodology, the National Food Service Management Institute, Applied Research Division conducted the study. After a pilot visit in a Southeast USDA Region district, three districts of varying sizes in the Mid-Atlantic West, and Midwest USDA regions were selected based on recommendations from their state agency for operating an exemplary in-classroom breakfast program. A case study approach was used and the preparation, distribution, and service of in-classroom breakfast were observed. Interviews with school nutrition directors, principals, teachers, and other school personnel were conducted.

The planning process for implementing an in-classroom breakfast program involved school nutrition personnel, school administrators, teachers, custodians, and parents. The distribution and service of in-classroom breakfast were customized to each school within the districts; therefore, the initial development of the in-classroom breakfast model was time-consuming. Directors ranked high the following menu planning considerations: nutritive value,

student preference, food cost, and food safety. Additional considerations were prepackaging, heating and cooling requirements, labor cost, packaging requirements, and teacher requests.

The school nutrition program (SNP) directors and managers showed exceptional planning, organizational, and communication skills. The SNP directors and supervisors maintained good communication with school principals. All SNP managers used color coding for labels to organize foods and deliveries, forms designed for in-classroom breakfast, and regular communication with school personnel, students, and parents. The school nutrition personnel followed food safety and sanitation procedures and detailed schedules for breakfast deliveries. Accurate records for production and meal reimbursement categories were maintained.

All three districts and the pilot district reported increased student participation in the breakfast program after implementation of in-classroom breakfast. Teachers and school administrators had positive impressions of in-classroom breakfast based on fewer tardy students, fewer disciplinary referrals, student focus on academics, and creation of a positive school culture. It can be concluded that improved nutrition intake for students does have an impact on student success and readiness for learning.

The planning for in-classroom breakfast should include menus, logistics of distribution and service including staffing, and record keeping. Continuous quality improvement techniques should be applied after implementation. The planning and implementation of in-classroom breakfast can be successful if a school team representing school nutrition, administration, teachers, custodians, students, and parents uses the best practice results from this study.

The results of this study were used to develop a best practices resource and checklist. These will be useful for SNP directors who wish to implement in-classroom breakfast programs

or improve existing in-classroom breakfast programs in schools. The resource and checklist are included in the back of this report.

INTRODUCTION

Many of America's neediest children are not participating in the School Breakfast Program (SBP). In Fiscal Year 2005, the National School Lunch Program (NSLP) served more than 29.6 million children daily (USDA, 2006). During the same fiscal year, the SBP served 9.3 million children daily with 7.6 million receiving free or reduced price breakfast (USDA, 2006). Far fewer students are taking advantage of the SBP as compared to the NSLP. An evaluation of the SBP using the National Health and Nutritional Examination Survey III (Bhattacharya, Currie, and Haider, 2004) showed that the SBP is beneficial for children. They found children who have a SBP available consume a better overall diet, consume a lower percentage of calories from fat, are less likely to have a low intake of magnesium, and are less likely to have low serum levels of vitamin C and folate.

In discussions with students regarding participation in the SBP, it was found that they prefer additional sleeping time in the morning in place of eating breakfast (McDonnell, Probart, Weirich, Hartman, and Birkenshaw, 2004). Students also reported not being hungry in the early morning or not wanting to eat at school because their friends don't eat at school (Reddan, Wahlstrom, and Reicks, 2002). When teachers were asked their perceptions regarding participation in the SBP, they believed the SBP had a positive influence on their students' behavior and academic performance (Ragno, 1994). Teachers were happy with the program, but felt poor food choices, a poor social stigma associated with participation, a lack of awareness of the SBP by parents, and time constraints, were preventing many students from participating in the program (Ragno, 1994).

Most districts offer breakfast in the school cafeterias before the start of the school day. A recent national trend to improve school breakfast participation is integration of breakfast within

the school day and in-classroom breakfast. Several states and districts have been leaders in offering in-classroom breakfast programs. These in-classroom breakfast programs dramatically increase student access to school breakfast.

The Maryland State Department of Education (Maryland Department of Education [MSDE]) started in-classroom breakfast in 1998 in six schools. Students were offered a breakfast at no charge and students ate at their desks while teachers took attendance and conducted morning routines. By the start of the 2001-2002 school year, more than 90 schools were participating in the Maryland Meals for Achievement (MMFA). Participating schools offer school breakfast in the classroom each morning. No one pays to eat, regardless of family income. Researchers found decreases in tardiness and student suspensions. When MMFA schools were matched with comparison schools in the same school systems, researchers found significant improvement in composite index scores on the Maryland School Performance Assessment Program (Murphy and Pagano, 2001). Also, MMFA schools had an increase in the percentage of students who scored at or above the satisfactory level. Ninety-nine percent of parents who responded to a survey said the program helped their family and provided a good start to the day for children, improved attention and learning among children, and relieved parents' worries about children getting breakfast. Eighty-one percent of students surveyed liked in-classroom breakfast and said it provided an opportunity for everyone to eat and that fewer students were hungry.

In the 2006-2007 school year, 189 schools in Maryland offered MMFA in-classroom breakfasts (MSDE). Under Maryland state law, any school that participates in the SBP and has at least 40% of its enrollment approved for free and reduced-price meals can apply to be a MMFA

school, provided that funding is available. The 2006-2007 Maryland state budget included over \$3.1 million for MMFA.

In 2002 a project team pilot tested a "grab 'n go" breakfast program in a Pennsylvania middle school where students ate breakfast in the classroom (Conklin, Bordi, and Schaper, 2004). Breakfast was served from a portable serving line as students walked to their classrooms. Access to breakfast was improved and breakfast participation increased by 9%. Sixty-nine percent of teachers agreed that grab 'n' go breakfast should be continued. The authors described issues to consider and suggestions for payment systems, portable serving carts, trash cans, menus, administration's support, teaching and custodial staff's support, and data collection for evaluation. The authors concluded that development of service systems and communication channels were two barriers to overcome when starting an in-classroom breakfast program.

In 2003-2004, elementary and secondary schools in upstate New York were chosen for a pilot program designed to produce replicable models for in-classroom breakfast (Nutrition Consortium of New York State [NCNYS]). Twenty schools in rural, urban, and suburban locations with low or high percentages of students eligible for free and reduced price meals received grants from the Nutrition Consortium of New York State. The grants ranged from \$4,000-\$10,000. All but two schools utilized pilot funds to purchase equipment for start-up of an in-classroom breakfast program. The equipment included food service carts, hot/cold food carriers, coolers, counter slant units, juice dispensers, heat lamps, trays, sheet pans, and garbage cans. Some schools used pilot funds to supplement state meal reimbursements and some purchased paper goods.

Each school designed their own distribution and service model (NCNYS). Eleven schools had breakfasts delivered to the participating classrooms. Two schools had breakfasts distributed

to students in the cafeteria line and students took their meal back to the classroom. Three schools set up hallway stations so that students could pick up breakfasts on the way to class. Four schools used a combination of distribution methods. For example, one school delivered breakfast to grades K-2 while older students came to the cafeteria to pick up their breakfast. Eight schools offered both hot and cold breakfasts; nine schools served only cold breakfast menus; and one school served only hot breakfasts. Menus were assessed and adjusted after implementation.

Researchers collected data on student participation, incidences of absenteeism, tardiness, disciplinary referrals, and visits to the school nurse (NCNYS). Principals, teachers, and SNP directors were surveyed. Every school had increased participation and overall participation increased from an average of 23% in March, 2003 to 58% in March, 2004. Tardiness, disciplinary referrals, and visits to the school nurse were decreased. Principals reported hesitance among staff before implementation of in-classroom breakfast but reported support from staff after implementation. Almost 80% of teachers stated they hoped that in-classroom breakfast would continue after the pilot; 76% reported that in-classroom breakfast did not interfere with their ability to teach. All of the principals and almost 80% of teachers believed that in-classroom breakfast made an important contribution to the education process. Most teachers reported fewer complaints of hunger from students.

The Hunger Task Force has worked with the Milwaukee Public Schools to improve the nutrition status of children through free breakfasts in some schools (Wong and Hunger Task Force, 2006). In the fall of 2005, six schools began serving all students free breakfast and lunch under Provision 2 which allows schools participating in the SBP to provide meals to children at no charge for up to four consecutive years (USDA, 2002). In the two pilot schools that offered in-classroom breakfast, participation doubled; the four schools with traditional breakfast had

only marginal increases and some decreases in breakfast participation. The success of this pilot led to recruitment of schools that would offer in-classroom breakfast in the following school year. Schools also had to achieve a 95% meal application return rate by the third Friday of the school year and agree to cooperate with the Hunger Task Force on outreach and evaluation.

In the 2006-2007 school year, 61 Milwaukee schools offered Universal Free Breakfast; the breakfasts were pre-packaged and included cereal, juice, graham crackers. Milk was added to complete the breakfast (Lent and Hunger Task Force, 2007). They used heavy trash bags that were tied and placed outside the classroom doors for custodian pick-up or taken by a student, teacher, or classroom assistant to a central location for custodians to pick-up. The preliminary survey results from school personnel in 30 schools showed that 73% of school staff responded that in-classroom breakfast had a positive or very positive impact on learning readiness; 57% of staff responded that in-classroom breakfast had a positive or very positive impact on students' attendance; and 72% of staff responded that in-classroom breakfast had a positive or very positive impact on students' health. A survey of school nurses found fewer complaints of stomachaches, hunger, and headaches.

The Expanding Breakfast Kit from the Child Nutrition Foundation (2002) has a self-study manual designed to help schools expand their breakfast program through in-classroom breakfast, breakfast after first period, and grab 'n' go breakfast. The manual includes background information, budget information, reproducible worksheets and forms, sample letters, and videotape that can be used for planning, logistics of implementing, and marketing in-classroom breakfast. The Food Research and Action Center (www.frac.org) publishes an annual School Breakfast Scorecard to document the current state of the SBP as well as promote successful initiatives to increase participation. The "got breakfast?" Foundation (www.gotbreakfast.org) has

a Classroom Breakfast Playbook that can assist school districts in planning and implementation of an in-classroom breakfast program.

METHOD

Research Design

This research project used a case study method to explore best practices of in-classroom breakfast. The study utilized multiple-case designs that followed a replication format in which the conclusions from each study site contributed to the “whole” study. This type of methodology can be used to conduct a detailed contextual analysis of a program in which a review of documentation and archival records, direct observation, and structured interviews are used to collect, analyze, and interpret data (Yin, 2003). In this research project, structured and informal interviews, examination of documents, and direct observations were used to collect and analyze data.

Informed Consent

The University of Southern Mississippi and the Eastern Michigan University Human Subjects Committee approved the protocol and interview questions. Each school nutrition program (SNP) director signed a consent form indicating their willingness to participate in the study, each located in one of four USDA regions.

Site Selection

State agencies in four states were contacted via electronic mail for recommendations of three to four districts in their state operating an exemplary in-classroom breakfast program. The school nutrition program (SNP) directors were contacted via telephone and/or electronic mail to describe the study and asked whether they would be willing to participate. Four SNP directors were contacted by the researchers and all four agreed to participate in the study.

Data Collection Instrument

A two-part research instrument, *In-Classroom Breakfast Best Practices Data Collection Instrument* (Appendix A) was developed using case study methods outlined by Yin (2003). Research using case study methods emphasizes detailed contextual analysis in which a review of documentation and archival records, structured interviews, and planned direct observations are used to collect, analyze, and interpret data. Part I of the data collection instrument was designed to collect demographics and general information about the school district and breakfast program. Part II of the data collection instrument included a structured interview guide with pre-determined questions designed to collect data about in-classroom breakfast. The interview guide included questions for SNP directors, principals, and teachers.

Data Collection Procedures

Dates for site visits were established with school nutrition directors. Follow-up letters (Appendix B) were mailed to SNP directors, superintendents, and principals verifying the visit and arranging for the SNP director to assist the NFSMI researchers with data collection prior to and during the visit. A brief discussion of the types of data important for the case study research were included, along with a copy of Part I of the data collection instrument. This allowed participants time to gather the appropriate data and ensure accuracy. All documents requested for review were for the school year 2005-2006.

Pilot Study

The researchers field tested the data collection instrument and procedures for direct observation of in-classroom breakfast during a one-day site visit to the pilot school district. The pilot case study site in the Southeast USDA region was chosen based on convenience, access, and geographic proximity. These criteria allowed the researchers flexibility and more personal

contact with the pilot case study school officials. In addition to easy access and convenience, the site was also judged by the researchers to have characteristics typical of most in-classroom breakfast programs. The pilot case study included collection of data, structured interviews with the SNP director and superintendent and informal interviews with the principal and teachers. Based on the pilot study, minor modifications were made to the data collection instrument.

Site Visits

On-site data collection and direct observation of the in-classroom breakfast occurred during a one day visit in each school district. Site visits included the following research activities:

- Overview of the in-classroom breakfast by the SNP director;
- Structured formal interviews conducted by NFSMI researcher(s);
- Document and records review;
- Review and discussion of the demographics portion of the data collection instrument;
- Informal discussion with the SNP director;
- Direct observation of the in-classroom breakfast at one school in each district including food preparation, delivery, and service; and
- Informal discussion with school nutrition manager and nutrition staff.

Data Analysis

After completion of the site visits, the researchers examined all raw data using several analytical strategies outlined by Yin (2003). Interview responses and field notes were organized, categorized, and when appropriate, clarified with a follow-up electronic mail correspondence. Documents and reports were examined according to their content and purpose using content analysis techniques. Data were tabulated and cross-checked from each site visit. After the

individual case studies were analyzed for pertinent data, a cross-case search for patterns was conducted. In the cross-case analysis, the data was analyzed across all three districts and then data about each site's activities were compared to determine commonalities and differences in the in-classroom breakfast programs.

The draft report was sent via electronic mail for participants to corroborate the facts and information in the report. This enhanced the accuracy of the case study, increasing the construct validity of the study (Yin, 2003).

RESULTS AND DISCUSSION

Demographics

After a pilot visit in a Southeast USDA region district, three districts of varying sizes in the Mid-Atlantic, West, and Midwest USDA regions were visited. The demographic characteristics of the school districts chosen are presented in Table 1. To protect the anonymity of study participants, school districts were designated as A, B, and C in this report. School districts chosen for the case study ranged in size from a district with 15 schools and an enrollment of 7,208 students to a very large district with 199 schools and 137,798 students. Table 2 shows the average daily participation for in-classroom breakfasts served in 2005-2006 ranged from 628 in the smallest district to 5,334 in the largest district.

Table 1

Selected Demographic Information for School Districts Chosen as Case Study Sites

Variables	District A (Mid Atlantic)	District B (West)	District C (Midwest)
Student Enrollment	137,798	10,603	7,208
Number of Schools	199	16	15
Revenue for 2005-2006	\$39,275,322	\$3,880,833	\$3,736,567
Number of Schools with In-classroom Breakfast	23	3	6
Percentage of Students Approved for Free Meals	17.8%	48.3%	37.8%
Percentage of Students Approved for Reduced Price Meals	7.6%	10.0%	8.8%

Table 2

Average Daily Participation (2005-2006) in School Meals for School Districts Chosen as Case Study Sites

Meals	District A (Mid Atlantic)	District B (West)	District C (Midwest)
Student In-classroom Breakfast	5,334	631	628
Student Breakfast	9,385	3,969	2,265
Student Lunch	51,903	6,807	4,757

Description of Service in Pilot District

An elementary school in the Southeast USDA region was visited in November, 2006 where approximately 680 breakfasts are served each day. Plastic “market” baskets (19” length x 13” width x 10” height) that contained cold menu items and a small trash bag were lined up on cafeteria tables. One student and/or teacher from each classroom stopped by the cafeteria to pick up a basket for delivery to the classroom. Then, school nutrition employees added the hot menu items to the basket in the service area. Each basket also contained a roster, and students and/or the teacher highlighted the names of students who ate breakfast. The breakfast count for the next day was added to the bottom of the roster. Students ate breakfast while beginning their work. The teacher or a student placed the small trash bag in a large garbage container in the hallway. The school nutrition employees picked up the baskets and emptied the garbage containers.

Description of Service in District A

An elementary school in District A in the Mid Atlantic USDA region was visited in January, 2007 where an average of 260 in-classroom breakfasts is served each day. Pre-preparation and counting of menu items was done the day before delivery. Trays were tagged with a colored tag that had the teacher’s name, grade, and room number. Delivery carts with five

shelves (three wire shelves on top for menu items on trays and two solid shelves on the bottom for milk crates) were loaded and delivered to 26 classrooms by three school nutrition personnel. Straws and napkins were kept in the classrooms. Cards with children's names and barcodes were kept in the classroom and when a child took a breakfast, the card was placed in a clear plastic bag.

Students quietly ate while starting morning work. Students were responsible for taking wrappers and milk cartons to garbage containers in the hallways. Custodians were responsible for taking the garbage out. School nutrition personnel picked up the carts, trays and milk crates and counted remaining menu items. The cards were scanned into the point of sale register by the school nutrition manager after breakfast and placed in teacher mailboxes. Counts for remainders were recorded on a daily sheet so that forecasts could be adjusted.

Description of Service in District B

A middle school in the West USDA region was visited in February, 2007. The school had morning announcements first and breakfast immediately following. Approximately 631 students were served in six minutes from three mobile carts that were taken to three hallways within the school. Pre-preparation and counting of menu items was done the day before service. Figure 1 shows the placement of menu items on the top shelf of each mobile cart. The mobile carts were built to hold additional menu items on the lower shelves. Teachers led their classroom students and students lined up on both sides of the carts and chose menu items to take back to class. The school nutrition programs are operating under Provision 2 so school nutrition employees had hand-held counters to keep track of the number of students and students served. Per the state agency, teachers were given breakfast too since they were assisting with service.

Students ate while the teacher began the first lesson. Students who had physical education in the first period of the day were served last. Each classroom had a small trash bag that was picked up by the custodian.

Figure 1:

Placement of Menu Items on Top of Mobile Cart in District B

Tray with Apple Slices in Individual Bags	Tray with Burritos in Individual Bags		Milk Crate
		Napkins	
		Hot Sauce	Milk Crate

Description of Service in District C

A middle school in the Midwest USDA region was visited in February, 2007, where approximately 245 students are served in 26 classrooms. The afternoon before delivery, plastic bins and stainless steel half pans were tagged with masking tape that had the teacher name and number of menu choices written with a marker. Cold menu items were counted and placed in the bins along with a roster of students who had ordered breakfast the week before. The bins were loaded onto two delivery carts and placed in the walk-in cooler. The next morning, bins were delivered to 26 classrooms before school started by two school nutrition personnel. One student from each classroom came to the cafeteria serving area to pick up the correct number of hot menu items on a small plastic serving tray.

Students who ate in-classroom breakfast were marked on the roster. Students who had physical education in the first period of the day were served in the cafeteria serving area. The trash went into the classroom wastebasket and was picked up at the end of the day. The school

nutrition manager entered the reimbursable breakfasts into the point of sale register after breakfast service.

Team Approach for Planning

All three districts used a team approach for planning and implementation of the in-classroom breakfast service. Principals, teachers, school nurses, custodians, and school nutrition personnel were involved in planning. In District B, the middle school health improvement team suggested in-classroom breakfast to the SNP director as a means of improving student health. In all three districts, the distribution and service of breakfast were customized to each school within the district; therefore, the planning was time-consuming. Table 3 contains principals' comments on a team approach for planning.

Table 3

Principals' Comments on a Team Approach for Planning In-Classroom Breakfast

"Use a team approach and effectively communicate the benefits."

"Get a group of staff involved early."

"Visit a successful in-classroom breakfast program."

"I sold it (in-classroom breakfast) to the teachers. They were skeptical but once they experienced it, they liked it."

Menus and Menu Planning

All three districts used traditional food-based menu planning for in-classroom breakfast. Nutritive value and student preference were the top ranked considerations for in-classroom breakfast menu planning by SNP directors (Table 4). Food safety and food cost were also highly ranked. Prepackaged portions, heating and cooling requirements, and labor cost were ranked

third, fourth, and fifth respectively. Packaging requirements and teacher requests were ranked lowest. Districts A and C had one week cycle menus with two daily options. District B had three week cycle menus that varied by school. The average food cost for in-classroom breakfasts was \$.578 in District A, \$.708 in District B, and \$.607 in District C. All three SNP directors were actively searching for additional menu items and working with food manufacturers to find foods and beverages appropriate for in-classroom breakfast.

Table 5 contains the most five popular menu items for in-classroom breakfast by district, as identified by SNP directors. The varied menu items chosen shows that menu planning must be customized to the school and student preferences within schools and regions vary greatly. Table 6 contains sample in-classroom breakfast menus from all districts. Most menu items were individually packaged but some were prepared and wrapped by school nutrition personnel. Muffin batter was prepared in the central kitchen in the District A but baked in each school. Muffins prepared in District C were baked and wrapped by school nutrition staff over a period of several days.

In District B the logistics of receiving, storage, and preparation required careful planning because the volume of food and supplies needed for in-classroom breakfast was greatly increased. The food and milk deliveries were scheduled so that there would be adequate space for refrigeration.

Table 4

Menu Planning Considerations Ranked by School Nutrition Program Directors

Criteria	District A	District B	District C	Mean	Ranking
Nutritive Value	7	1	2	3.33	1 (tie)
Student Preference	4	3	3	3.33	1 (tie)
Food Safety	2	8	1	3.67	2 (tie)
Food Cost	5	2	4	3.67	2 (tie)
Prepackaged Portions	1	4	7	4.00	3
Heating and Cooling Requirements	3	6	6	5.00	4
Labor Cost	6	7	5	6.00	5
Packaging Requirements	8	5	8	7.00	6
Teacher Requests	9	9	9	9.00	7

Table 5

Most Popular In-Classroom Breakfast Menu Items

District A	District B	District C
Whole Grain Cinnamon Roll	Breakfast Burrito	Cold Cereal
Breakfast Sandwich	Ham and Cheese on English Muffin	Muffin
Whole Grain French Toast	Egg and Cheese Bagel	Hot Ham and Cheese Sandwich
Bageler TM	Fruit Bar	Breakfast Pizza
Muffin and Yogurt	Hot Pretzel and Cheese	Peanut Butter and Jelly Sandwich

Table 6

Sample In-Classroom Breakfast Menus

Cinnamon Bagel with Cream Cheese Orange Juice Milk	Breakfast Burrito Cinnamon Apple Cup Milk	Peanut Butter and Jelly on Grahams Apple Slices Milk	Ham and Cheese on English Muffin Apple Slices Milk
Hot Ham and Cheese Sandwich Fruit Juice Milk	Muffin Fruit Yogurt Apple Juice Milk	Bageler TM Apple Juice Milk	Whole Wheat Cinnamon Roll Orange Juice Milk
Cereal Cheese Snack Fruit Juice Milk	French Toast Orange Juice Milk	Cheese Pizza Pocket Fruit Juice Milk	Peanut Butter Sandwich Fruit Juice Milk
Omelette Tropical Fruit Milk	Muffin Fruit Juice Milk	Breakfast Bites Fruit Juice Milk	Soft Taco Apple Juice Milk

Logistics of Distribution and Custodial Duties

The SNP directors and managers showed exceptional planning and organizational skills and communication skills. The SNP directors and supervisors maintained good communication with school principals. All SNP managers used color coding for labels to organize foods and deliveries, forms designed for in-classroom breakfast, and regular communication with school personnel, students, and parents.

The timing of distribution and service was important and therefore, school nutrition personnel followed precise time schedules that were designed to provide service to hundreds of students within defined time constraints. The SNP Director in District B uses blueprints of schools to identify traffic patterns that will be most beneficial for distribution and service of in-classroom breakfasts.

The school nutrition personnel in all three districts had routines and procedures to ensure food safety. Milk was added to carts immediately before delivery. Hot menu items were prepared just before service and kept warm until delivery. Menu items were wrapped or packaged to ensure safety. Equipment was cleaned and sanitized daily.

Custodial duties for in-classroom breakfasts varied by district. In District B, the custodian was initially opposed to in-classroom breakfast but after implementation, was one of the strongest supporters. The principal in District B stated that in-classroom breakfast saved custodial time because custodians do not have to clean the cafeteria following breakfast service. However, the SNP Director in District C stated that gaining support from custodial staff is one of the barriers to implementation in additional schools. Instead of food and beverages confined to one location, the cafeteria, in-classroom breakfast means that food and beverages are distributed throughout the school. There are many variables that affect custodial time required and support

including physical layout of the school and carpeting in classrooms. Observations of in-classroom breakfast in the three schools revealed small trash volumes.

SNP directors and principals suggested visiting schools that have an in-classroom breakfast program to see the program in action and gain valuable logistics and distribution information from school personnel. Table 7 contains quotations from the SNP directors regarding planning, logistics of distribution, and service.

Table 7

School Nutrition Directors' Advice for Planning In-Classroom Breakfast

“Market in-classroom breakfast through the superintendent and teachers. They are the ones who need to get excited about it.”

“Go see someone’s successful program and ask questions. Bring your principal and custodian.”

“Do a thorough check of equipment, storage space, logistics, and work with custodial staff.”

“Remove all obstacles. Don’t get stuck on the little things. Build success into every step.”

“It has initial hurdles but the program is so beneficial to academic success. It is worth the effort.”

“If you can work through the implementation, you’re the hero.”

“It (in-classroom breakfast) sells itself once it is up and running.”

“I feel valued. They (principals and teachers) appreciate what we do.”

“We need to do what is best for the child.”

Record Keeping/Labor Costs

The districts had varied methods for counting reimbursable breakfasts. Accurate counts of reimbursable breakfasts served was dependent on accuracy of cards placed in plastic bags in

District A, counters in District B, and rosters in District C. In District C, a checklist for students who picked up the hot menu items from the serving area was used to keep track of the pick up system. Teachers had oversight over reimbursable breakfasts in Districts A and C. School nutrition staff had oversight over reimbursable breakfasts in District B. Point of sale systems were used to record reimbursable breakfasts in all three districts after breakfast service. In the near future, District C will be implementing software for a paperless system that will allow teachers to record the reimbursable student breakfasts served from the computer in their classroom.

Labor costs varied by district. Table 8 contains labor costs for in-classroom breakfast by District. The Central Office labor costs were more difficult to quantify because in-classroom breakfast is one of many programs that the Central Office staff is responsible for, including traditional breakfast, lunch, afterschool snacks, and other programs. A 2006 study of the in-classroom breakfast program conducted in District C reported the meals per labor hour as 44.5.

Table 8

Labor Costs (Without Fringe Benefits) for In-Classroom Breakfasts in School Districts and Schools Chosen as Case Study Sites

MISSING HEADER	District A (Mid Atlantic)	District B (West)	District C (Midwest)
Central Office	\$1,697/year for 23 schools	\$301/year for 3 schools	\$2,030/year for 6 schools
School Nutrition Manager	\$190/week in an elementary school	\$88/week in a middle school	\$36/week in a middle school
School Nutrition Staff	\$477/week in an elementary school	\$370/week in a middle school	\$293/week in a middle school

Student Issues/School Culture

All three districts and the pilot district reported increased student participation in the breakfast program after implementation of in-classroom breakfast; improved nutrition intake for students does have an impact on student success and readiness for learning. In Districts A and B, the principals mentioned that students were getting to school on time; students had fewer referrals to the school nurse; and fewer students were hungry.

In District A, the flow of the morning routine was smoother after implementation of in-classroom breakfast. In District B, four minutes were added to the first period so that in-classroom breakfast would not decrease instructional time. In the District C middle school, the principal stated that students depend on in-classroom breakfast for sustenance and convenience; students who are not hungry can concentrate.

Districts B and C reported decreased disciplinary referrals, a sense of community in the school, and increased student responsibility. The principal of the middle school in District B predicted better learning for students but was pleased to also see a decrease in disciplinary referrals. The principal of the middle school in District C found that in-classroom breakfast gave students a reason to come to school on time. Table 9 contains comments from a superintendent, a school nurse, principals, and teachers regarding the effects of in-classroom breakfast on students and school culture.

Table 9

*School Personnel Comments on Student Issues and School Culture
Related to In-Classroom Breakfast*

Superintendent

“Once we got the (in-classroom breakfast) program off the ground, teachers and custodians saw the positive effects.”

“Teachers have more time in the classroom.”

“Our school nutrition director has done an outstanding job.”

Principals

“Kids are getting to school on time.”

“The number of tardy students has decreased.”

“We have children who come on time for breakfast. They might otherwise come late.”

“There are fewer hungry children.”

“It meets the needs of our students and our students depend on it.”

“We have appetizing, healthy foods that are individually wrapped.”

“We’re so committed to it (in-classroom breakfast) because we’ve seen the benefits.”

“Referrals for negative behavior have decreased and I didn’t anticipate that.”

“We develop a sense of community when we eat together.”

“It (in-classroom breakfast) brings more order to the day.”

“It helps in getting the children to their classrooms and keeping them there. (Children don’t have to go the cafeteria.) It keeps the children safe and they begin learning.”

“Adults had concerns about clean up but the students have been responsible. It has empowered our students.”

“It saves custodial time.”

“Noise levels are down.”

“I’ve had positive comments from parents.”

(table continues)

Table 9 (*continued*)

*School Personnel Comments on Student Issues and School Culture
Related to In-Classroom Breakfast*

Teachers

“Children aren’t eating at home so they need school breakfast.”

“Students are hungry in the morning and classroom breakfast gives them a good start.”

“It wakes kids up.”

“It takes a little time from the day, but it is worth it.”

“It taught kids tidiness and responsibility. You throw away your own trash.”

“It doesn’t cause disruption. Kids are used to it.”

“It (in-classroom breakfast) becomes a routine and a habit.”

“It (in-classroom breakfast) keeps them on task for learning.”

“It (in-classroom breakfast) creates a sense of community within the school and in each classroom.”

“Students are healthier and happier.”

School Nurse

“Students are focused.”

“We had children with headaches and stomachaches. We hardly see any now.”

“It (in-classroom breakfast) is a fabulous program.”

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Benefits of in-classroom breakfast were increased student participation in the breakfast program; improved nutrition intakes; decreased disciplinary referrals; a sense of community in the school; and increased student responsibility. The results of this study were similar to those in previous studies. Challenges were gaining support from all school personnel; implementation of distribution and service in limited time; and planning menus that have good variety and incorporate foods that are nutritious, individually packaged, and well-accepted by students.

The distribution and service of breakfast were customized to each school within the district; therefore, the planning was time-consuming.

Students in all schools would benefit from in-classroom breakfast. It makes breakfast a normal part of the school day and removes the stigma of going to the cafeteria for breakfast. The benefits of in-classroom breakfast outweigh the challenges and the challenges can be overcome with careful planning.

Limitations

This study involved visits to four schools in four school districts in four USDA regions. It is possible that results would have been different if four districts in the same or other USDA regions were used for the study.

Education and Training Implications

- The benefits of in-classroom breakfast need to be shared with school nutrition directors, managers, and staff, superintendents, principals, teachers, school nurses, students, and parents.

- Resources from the Food Research and Action Center (www.frac.org), School Nutrition Foundation (www.schoolnutrition.org), “got breakfast?” Foundation (www.gotbreakfast.org), and Hunger Task Force (www.hungertaskforce.org) can assist school personnel in learning about in-classroom breakfast.
- A best practices resource on in-classroom breakfast was developed for SNP directors and managers and can assist in implementation of an in-classroom breakfast program (Appendix C).
- The in-classroom breakfast program involves many stakeholders in the school district, including principals, students, teachers, parents, and custodians; therefore, a continuous quality improvement approach would be valuable.
- *Continuous Quality Improvement Process Tailored for the School Nutrition Environment*, (2006) can be used to improve in-classroom breakfast after implementation.

Recommendations for Additional Research

- School personnel in this study and other recent studies have reported positive outcomes for students who participate in school breakfast programs. Additional studies documented the following positive student outcomes of daily breakfast: student academic achievement, decreased tardiness, improved attendance, improved student health, and improved student behavior.
- District-level financial analyses of in-classroom breakfast would provide quantitative evidence of the financial implications of increased revenues from increased breakfast participation.

- A study of custodial time requirements for traditional school breakfast versus in-classroom breakfast would provide objective results to address custodians' concerns. In addition, a study of teacher time requirements for in-classroom breakfast would be useful.
- In-classroom breakfast has been shown successful in elementary and middle schools. High school students would benefit from in-classroom breakfast too. Additional research studies could explore the expansion of in-classroom breakfast to high schools.
- Menu variety is a concern; there are a limited number of menu items that are appropriate and affordable for in-classroom breakfast. Food manufacturers need to increase the availability of menu items that will fit the needs of in-classroom breakfast programs. Currently the USDA does not provide commodity foods through the SBP (USDA, 2006) but there is a need for USDA to provide commodity foods through the SBP.

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Appendix A

In-Classroom Breakfast Program Data Collection Instrument

Appendix A

Implementing a Successful In the Classroom Breakfast Program Data Collection Instrument Part I

School District Profile**A. District Information**

School District: _____
 School Address: _____ City, State, Zip: _____
 Contact Person: _____ Title: _____
 Telephone: _____ FAX: _____
 Email: _____
 District Student Enrollment: _____ District Average Daily Attendance: _____
 Number of Schools in District: Elementary _____ Middle/Junior High _____
 High School _____
 Number of Schools with in-classroom breakfast: Elementary _____ Middle/Junior
 High _____ High School _____
 Number of students currently approved for free meal benefits: _____
 Number of students currently approved for reduced price meal benefits: _____

B. School Meals Provide total meals served in each category for the *school year 2005-06*

Meal Category	Free	Reduced	Paid	Total	# Days Served	*ADP
Student Breakfast						
Student Breakfast in the Classroom						
Student Lunch						
Adult Breakfast						
Adult Breakfast in the Classroom						
Adult Lunch						
Afterschool NSLP Snack						

*ADP – Average Daily Participation

C. School District Financial Information

Revenue	2005-06 Totals	Expenditures	2005-06 Totals
Student Meal Sales		Salaries	
Adult Meal Sales		Benefits	
Non-Reimbursable Food Sales		Purchased Food	
Interest		Supplies	
State Funds		Capital Equipment	
Federal Funds		Indirect Cost Paid	

In-Classroom Breakfast Programs: Best Practices

Miscellaneous (all other)		Overhead (all other)	
Commodity Value*		Commodity Value	
Total Revenue Received		Total Expenditures	

*For purposes of this study, the value of commodities received as revenue should equal the value of the commodities used (expended)

D. Meal Costs – Pre-Prepared**Worksheet for Beverages and Pre-Prepared Reimbursable Meal Components**

Using the worksheet and example below, calculate the cost per serving of beverages, pre-prepared foods and other non-recipe items served in the breakfast in the classroom service. Repeat items if served in different portion sizes.

Menu Items	Serving Size	Size of Purchase Unit	Servings per Unit Purchased	Cost per Unit Purchased	Cost per Serving
Example: Whole Milk	8 ounces				.1750
Frozen Orange Juice	6 ounces	Case	100	\$8.00	.0800

E. Meal Costs – Recipes

Worksheet for Pre-Costed Recipes for Meal Components

List recipe items served regularly in the breakfast in the classroom. Provide cost per serving.

Menu Items (Recipe)	Yield	Serving Size	Number of Servings	Total Cost	Cost per Serving
Example: Cinnamon Muffin	100	1 each	100	\$5.00	.0500
Egg Sandwich	100	½ sandwich	200	\$20.00	.1000

Attach extra sheets as needed

F. In the Classroom Breakfast Labor Cost

1. Please provide the following information regarding labor cost for implementation of the in the classroom breakfast.

Position	Monthly Salary Staff			Hourly Wage Staff		
	Salary	% of time on meal service*	Labor cost	Wages per hour	# hours per week	Labor cost
Central Office						
Administrative Central Office						
Secretary/Accounting Central Office						
Other Central Office (Specify)						
In-classroom breakfast Staff						
Site Manager						
School FS Staff						
School FS Staff						
School FS Staff						
Other (Specify)						
Volunteers (specify)						
Total						

* If the percent of time spent on in-classroom breakfast is not calculated, hold this worksheet until the interview.

2. What is the current fringe benefit rate for full-time employees of the school district? The fringe benefit rate may be a percentage of base pay, a dollar cost per person, or a combination of these factors.

- Total fringe benefits as a percentage of base pay: _____
- Average fringe benefits costs per person/month: _____

3. How are time and effort for responsibilities to the in the classroom breakfast tracked and documented?

- Time studies
- Labor allocation rate
- Percentage of meal equivalents
- Other; specify: _____

Please provide examples of time and effort documentation

- Time devoted to in the classroom breakfast is not tracked.

Implementing a Successful In the Classroom Breakfast Program Part II

(To be completed by Researcher)

Direct Observations

Observe the following procedures during breakfast service and provide a brief description of each.

1. Ensuring food safety of in the classroom breakfast
2. Meal preparation
3. Equipment needed
4. Recording meal counts
5. Documenting of service to eligible students only
6. Removal of trash
7. Student and teacher interaction
8. Student and SNS staff member(s) interaction

Questions for School Nutrition Director

Control

1. Which USDA menu planning option do you use?
2. What procedures are used to ensure that the menus meet SBP nutritional standards?
3. Are cycle menus used?
4. Who plans the menus?
5. (Give director the separate sheet of paper so director can complete.) Rank the following nine considerations when selecting menu items for the in the classroom breakfast with #1 being the highest priority and # 9 being the least: cost, labor, food safety, packaging requirements, heating/cooling requirements, prepackaged portions, nutritive value, student preference, and teacher requests.
 - 5-1. _____
 - 5-2. _____
 - 5-3. _____
 - 5-4. _____
 - 5-5. _____
 - 5-6. _____
 - 5-7. _____
 - 5-8. _____
 - 5-9. _____
6. How do you assure that only eligible students are served the in the classroom breakfast?
7. How is confidentiality of payment status maintained?

8. What procedures are utilized to account daily for the number of breakfasts sold/served? Who is responsible for the financial records and operation of the in the classroom breakfasts?
9. What student meal payment methods are available for the in the classroom breakfast program?
10. How did you decide which schools and which grade levels to serve in the classroom breakfast?

Input

11. What resources were required to implement the in the classroom breakfast option? Please specifically describe each requirement utilized.

Labor
Skill
Supplies
Money
Facilities
Space
Equipment
Time
Utilities
Information
School Nutrition Association
USDA
Other Directors
Other Input

Procurement

12. Are any special specifications required for in the classroom menu items? If so, please provide.
13. Do in the classroom breakfasts require special or additional storage for ingredients, meals, or equipment?
14. What percentage of in the classroom breakfast menu items are purchased in pre-packaged portions? (Please attach in-classroom breakfast items and mark the items prepared in-house.)

Preparation

15. What percentage of in the classroom breakfast items is prepared in-house? Who is responsible for these tasks?
16. Are commodity foods used to prepare in the classroom breakfasts?
17. If meals have to be transported from prep site to serving site, what type of vehicle is used and how are meals stored for transport? What precautions are taken for food safety?

Marketing

18. In your opinion, what are the six most preferred menu items by students? Rank with #1 being the highest preference and #6 being the lowest.
19. What type of feedback is provided to the school foodservice director about student preferences for in the classroom menu items and service?
20. Has information about in the classroom breakfast been sent to parents?
21. Who else has received information about in the classroom breakfast?
22. Was a marketing plan developed and implemented for in the classroom breakfast? (Please attach a copy of the plan.)
23. Have you evaluated student satisfaction with the in the classroom breakfast? Please describe methods the used and summarize results.
24. What is the price of the breakfast meal and how is this determined?
25. Has in the classroom breakfast increased the breakfast program participation?

Equipment and Maintenance

26. What type of equipment is used to serve in the classroom breakfast?
27. How did you decide what type of equipment would be needed?

Distribution and Service

28. Please describe the procedures for maintaining cold temperatures for certain items and maintaining hot temperatures for other items.
29. To whom are the in the classroom breakfasts offered? If service is limited, what are the parameters for service?
30. How are unused meals handled and recorded?
31. What are the hours of operation for the in the classroom breakfast?
32. What are the teacher responsibilities for service? What are the student responsibilities for service?
33. What is the schedule for replenishing meals and unloading unused meals? Who is responsible for these tasks?
34. What payment methods are used/available?

Sanitation and Maintenance

35. How are temperatures monitored?
36. What procedures are utilized to assure the safety of the food? (i.e. temperatures, HACCP plan, SOPs) Please provide any documentation available on this issue.
37. What are the procedures for handling equipment malfunctions or breakdowns? (i.e. financial malfunctions, equipment breakdown, ineffective food safety procedures)
38. Who is responsible for cleaning the classroom?
39. Who is responsible for cleaning the desks?
40. Who is responsible for cleaning and sanitizing equipment?
41. How is trash handled? Who is responsible for trash removal?

Memory

42. What records are kept relating to the in the classroom breakfast?
43. How are production numbers forecasted? Who does this?

Output

44. What is the average number of in the classroom breakfasts sold daily/weekly since the beginning of the project?
45. What are the percentages of free, reduced, and full price breakfasts sold?
46. Do you perceive student satisfaction with in the classroom breakfasts? How do you determine this? Do you perceive teacher satisfaction with in the classroom breakfasts? How do you determine this? Do you perceive principal/administrative satisfaction with in the classroom breakfasts? How do you determine this?

Training

47. Please describe training provided on in the classroom breakfast. (i.e.who was trained, by whom, and subjects covered).

Procedures

Please provide any written procedures that address in the classroom breakfast operations.

Advice

What advice do you have for school nutrition directors who are thinking about offering in the classroom breakfast?

Questions for Teachers

1. What is your impression of the in the classroom breakfast?
2. Have you noticed any behavioral differences in the children?
3. Has the in-classroom breakfast affected morning routines?
4. What are the benefits of in the classroom breakfast?
5. What are the challenges of in the classroom breakfast?

Questions for School Principal

1. What is your impression of the in the classroom breakfast?

2. Have you gotten any feedback from parents?
3. Have you noticed any behavioral differences in the children?
4. Has the in the classroom breakfast affected morning routines?
5. What are the benefits of in the classroom breakfast?
6. What are the challenges of in the classroom breakfast?
7. Do you have any advice for principals who are thinking about implementation of an in the classroom breakfast?

For School Nutrition Director

Please rank the following nine considerations when selecting menu items for the in the classroom breakfast with #1 being the highest priority and # 9 being the lowest priority:

- _____ Food cost
- _____ Labor
- _____ Food safety
- _____ Packaging requirements
- _____ Heating/cooling requirements
- _____ Prepackaged portions
- _____ Nutritive value
- _____ Student preference
- _____ Teacher requests

Appendix B

Sample Cover Letters

Sample cover letter to school nutrition director

Date

Name and Address

Dear (Director):

We are pleased that you have agreed to participate in a research study to identify successful practices and barriers associated with serving breakfast in the classroom. As discussed on the phone, we believe that your school nutrition program offers a unique opportunity to identify the operational requirements, potential barriers, and criteria for success for developing and implementing an in the classroom breakfast option. The information from the research will identify the operational steps associated with offering an in the classroom breakfast for students. We anticipate that it will take approximately one full morning in your district to observe the process and collect data, as we will identify policy and procedures that support a successful in the classroom breakfast program.

During our visit we would like to review the following documents and records relevant to offering in the classroom breakfast to students. We are limiting our request to documents that are publicly available. The following documents/records are requested:

- menus and recipes,
- specifications and vendors for prepackaged items,
- documentation of compliance with meal pattern requirements,
- financial records relevant to costs of producing and serving in the classroom breakfast,
- school district demographics and contact information,
- meal participation,
- production schedules,
- HACCP plan and SOPs,
- special equipment specifications (if applicable),
- in-classroom breakfast sales records, and
- policies and procedures for in the classroom breakfast program.

To facilitate the research process, we are enclosing a copy of the data collection instrument to assist you in selecting the appropriate information for our visit. Feel free to complete any part or all of the instrument prior to our arrival.

Your support of this study is important and we want to assure you that your school information will be kept in strictest confidence. Information will be recorded in such a manner that the site cannot be identified directly or through identifiers linked to the site. Participation in this project is completely voluntary and participants may withdraw from the study at any time.

This project has been reviewed by the Human Subjects Protection Review Committee, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research subject should be directed to the chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5147,

Hattiesburg, MS 39406, (601) 266-6820. This project has also been approved by the Human Subjects Committee at Eastern Michigan University. Any questions or concerns about approval should be directed to Dr. Deb deLaski-Smith at (734) 487-0042 or human.subjects@emich.edu.

Thank you for your assistance.

Sincerely,

Alice Jo Rainville, PhD, RD, CHE, SNS
Professor of Human Nutrition and Dietetics
Eastern Michigan University
Alicejo.rainville@emich.edu

Deborah H. Carr, PhD, RD
Director, Applied Research Division
National Food Service Management Institute
Deborah.carr@usm.edu

Sample letter to the school district superintendent/principal

Date

Name and Address

Dear (school official):

The National Food Service Management Institute, Applied Research Division is conducting a case study research project to identify successful practices and barriers associated with serving breakfast in the classroom. Policies and procedures that support successful in the classroom breakfast will be identified. The Director of the School Nutrition Program in your school district, __name____, was recently identified by the State Agency Child Nutrition Program Director as offering an exemplary in the classroom breakfast program. We have discussed the research project with your school nutrition director, __name____, and believe that the information that would be gathered from this project would be of great interest and assistance to school nutrition personnel across the nation. It presents an opportunity to contribute to the health and welfare of children through offering nutritious breakfasts in the classroom.

With your permission we propose a site visit to the district on (date). During our visit we would like to review documents and records relevant to the in the classroom breakfast, observe the foodservice operations, and interview the school nutrition director and managers involved in the service and delivery of in the classroom breakfast. Only records and documents that are publicly available will be requested for review. We anticipate that it will take approximately one full day in your district to observe the foodservice operations and collect data.

The information from the case study will contribute to the information on the operational requirements for developing and offering a successful in the classroom breakfast to students. Analysis of financial data can be used to determine the distribution of costs directly traceable to in the classroom breakfast production and service. Your support of this study is important and we want to assure you that your school district information will be kept in strictest confidence. Information will be recorded in such a manner that the site cannot be identified directly or through identifiers linked to the site. Participation in this project is completely voluntary and participants may withdraw from the study at any time.

This project has been reviewed by the Human Subjects Protection Review Committee, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research subject should be directed to the chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS 39406, (601) 266-6820. This project has also been approved by the Human Subjects Committee at Eastern Michigan University. Any questions or concerns about approval should be directed to Dr. Deb deLaski-Smith at (734) 487-0042 or human.subjects@emich.edu.

Thank you for your assistance.


Sincerely,

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Appendix C

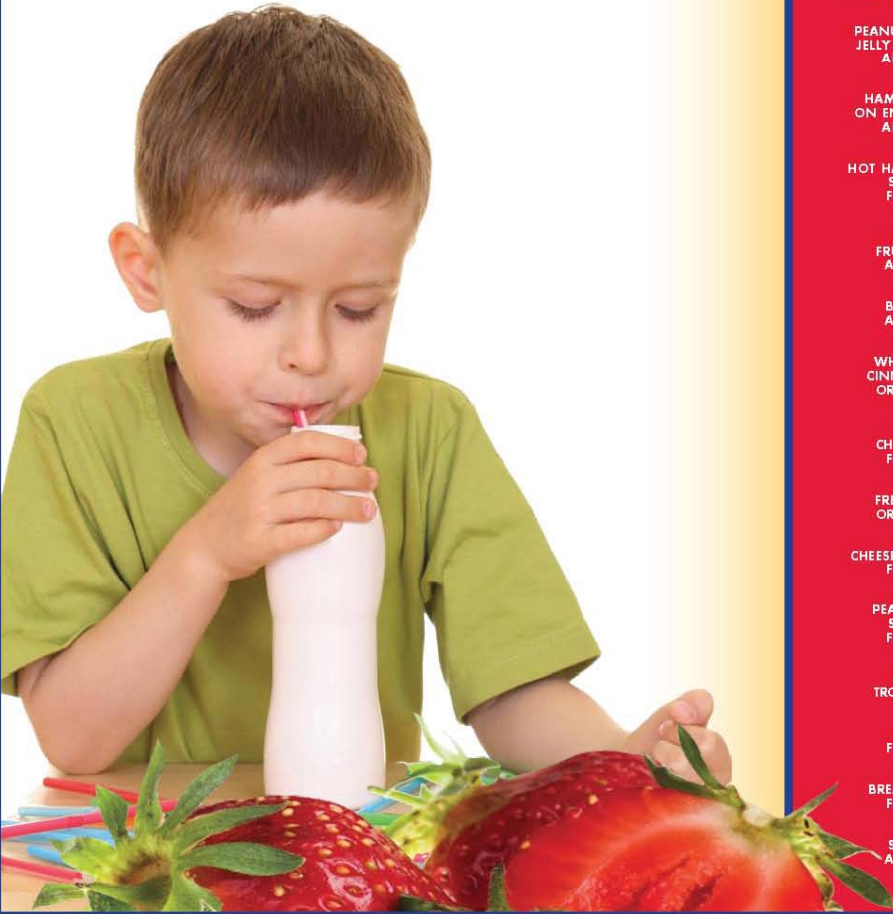
NFSMI Best Practice Guide for In-Classroom Breakfast



NATIONAL FOOD SERVICE
MANAGEMENT INSTITUTE
The University of Mississippi

NFSMI BEST PRACTICE GUIDE

for In-Classroom Breakfast



**Sample In-Classroom
Breakfast Menus**

- CINNAMON BAGEL
WITH CREAM CHEESE
ORANGE JUICE
MILK
- BREAKFAST BURRITO
CINNAMON APPLE CUP
MILK
- PEANUT BUTTER AND
JELLY ON GRAHAMS
APPLE SLICES
MILK
- HAM AND CHEESE
ON ENGLISH MUFFIN
APPLE SLICES
MILK
- HOT HAM AND CHEESE
SANDWICH
FRUIT JUICE
MILK
- MUFFIN
FRUIT YOGURT
APPLE JUICE
MILK
- BAGELER™
APPLE JUICE
MILK
- WHOLE WHEAT
CINNAMON ROLL
ORANGE JUICE
MILK
- CEREAL
CHEESE SNACK
FRUIT JUICE
MILK
- FRENCH TOAST
ORANGE JUICE
MILK
- CHEESE PIZZA POCKET
FRUIT JUICE
MILK
- PEANUT BUTTER
SANDWICH
FRUIT JUICE
MILK
- OMELETTE
TROPICAL FRUIT
MILK
- MUFFIN
FRUIT JUICE
MILK
- BREAKFAST BITES
FRUIT JUICE
MILK
- SOFT TACO
APPLE JUICE
MILK

APPLIED RESEARCH DIVISION
The University of Southern Mississippi

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The University of Mississippi**

Building the Future Through Child Nutrition

The National Food Service Management Institute (NFSMI) was authorized by Congress in 1989 and established in 1990 at The University of Mississippi in Oxford. The Institute operates under a grant agreement with the United States Department of Agriculture, Food and Nutrition Service.

PURPOSE

The purpose of NFSMI is to improve the operation of Child Nutrition Programs through research, education and training, and information dissemination. The Administrative Offices and Divisions of Technology Transfer and Education and Training are located in Oxford. The Division of Applied Research is located at The University of Southern Mississippi in Hattiesburg.

MISSION

The mission of the NFSMI is to provide information and services that promote the continuous improvement of Child Nutrition Programs.

VISION

The vision of the NFSMI is to be the leader in providing education, research, and resources to promote excellence in Child Nutrition Programs.

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NFSMI BEST PRACTICE GUIDE FOR IN-CLASSROOM BREAKFAST

To improve student access and participation in the USDA School Breakfast Program, some school districts adopted distribution and service models for serving an in-classroom breakfast. These models include distribution of the breakfast meal to each classroom by students or school nutrition employees, and also mobile breakfast carts in hallways.

This resource and checklist was developed through case study research that involved four school districts with exemplary in-classroom breakfast programs. The purpose of this resource is to guide school nutrition directors who wish to implement in-classroom breakfast programs that are customized for each school within a district, or to assess existing in-classroom breakfast programs in schools. The information will support efforts by capturing numerous issues that will impact the decision-making process and lead to the overall success for the in-classroom program.



Name of School _____ Date _____

1. BUILDING A TEAM

A. Has a team approach for planning been established?

Yes _____ No _____ Date _____

B. Have you formed, or do you plan to form, a team to involve representation?

Yes _____ No _____ Date _____

Use the table below to identify individuals to serve on your team.

IN-CLASSROOM BREAKFAST TEAM

Group Representative	Team Member Name
School Nutrition Personnel	
School Administrators	
Teachers	
School Nurses	
Custodians	
Parents	
Students	
School Wellness Committee Members	
Community Members	
Others	

C. Have you investigated grants to support implementation?

Yes _____ No _____ Date _____

FUNDING SOURCE CHECKLIST

Source	Yes	No
USDA Team Nutrition		
State Agency		
"gotbreakfast?"™ Foundation		
National or Regional Dairy Council		
Action for Healthy Kids		
Other(s)		



2. CUSTOMIZED MENU PLANNING FOR EACH SCHOOL

A. Are students surveyed for food preferences?

Yes _____ No _____ Date _____ Notes _____

B. Are diverse menu possibilities investigated?

Yes _____ No _____ Date _____ Notes _____

SOURCES FOR EXPLORING DIFFERENT FOOD ITEMS CHECKLIST

Sources	Yes	No
Manufacturers		
Vendors		
Trade Shows/Exhibits		
Other School Districts		

CRITERIA TO CONSIDER FOR MENU ITEMS CHECKLIST

Criteria	Yes	No
Student Preferences		
Nutrient Composition		
Meal Pattern		
Variety/Number of Choices		
Cost		
Packaging		
Temperature		
Food Safety		
Storage		
Production		

C. Are menus continually revised and updated?

Yes _____ No _____ Dates _____



3. LOGISTICS OF DISTRIBUTION AND SERVICE

A. Have you visited school districts that have successful in-classroom breakfast programs?

Yes _____ No _____ Date _____ Notes _____

B. Have you explored options for customizing distribution and service?

Yes _____ No _____ Date _____ Notes _____

ISSUES TO CONSIDER FOR SUCCESSFUL IN-CLASSROOM BREAKFAST SERVICE

Equipment

- Food Storage and Production – refrigeration, freezing and dry storage
- Food Transportation and Disposal – carts for kitchen use, carts for delivery, baskets or bins for classrooms, trash bins for classrooms or hallways

Staffing

- School nutrition manager
- School nutrition staff
- Other staff based on physical layout of school, number of students and distribution methods

Food Safety and Sanitation

- Maintenance of food temperatures
- Hand washing
- Sanitizing

Breakfast Delivery

- Options may include school nutrition employees, older students, teachers, aides or parent volunteers

Traffic Flow

- Traffic flow issues are based on whether breakfast will be served from a mobile cart or taken to each classroom

Timing of Service

- Varies based on morning routing of each school

Paper Supplies

- Napkins, straws, trash bags, wipes

Accurate Records of Students Served

- Usually teachers are asked to assist

Pick-up of Leftovers

- Usually done by school nutrition employees

Responsibilities for Trash

- Custodial responsibilities vary
- Student responsibilities vary



Other Issues Learned...

- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____

C. Do you offer, or plan to offer, training for school nutrition staff?

Yes _____ No _____ Date _____

D. Do you offer, or plan to offer, training for teachers?

Yes _____ No _____ Date _____

E. Do you offer, or plan to offer, training for custodians?

Yes _____ No _____ Date _____

F. Do you currently market, or do you plan to market, in-classroom breakfast?

Yes _____ No _____ Date _____



G. Have you investigated any of the marketing possibilities listed below?

Marketing Resources Checklist	Yes	No
Web site		
Letters to Parents		
Media Coverage		
Parent Meetings		
Other(s)		

4. FINANCIAL SUCCESS AND ACCURATE RECORDS

A. Have you investigated the Universal Free Breakfast and Provision 2 options?

Yes _____ No _____ Date _____

B. If you have not, consider designing forms for maintaining accurate records.

Forecasting _____

Production _____

Service _____

Accountability and Reimbursement _____

5. ENVIRONMENT FOR LEARNING AND SCHOOL CULTURE

A. Do you, or do you plan to, investigate the ability to track attendance, tardiness and discipline referrals?

Yes _____ No _____ Date _____

B. Do you, or do you plan to, survey principals, teachers, parents and students?

Yes _____ No _____ Date _____

C. Do you, or do you plan to, observe in-classroom breakfast?

Yes _____ No _____ Date _____



6. USE CONTINUOUS QUALITY IMPROVEMENT

A. Do you, or do you plan to, obtain feedback from stakeholders?

(Children, parents, school nutrition staff, school staff, school community.)

Yes _____ No _____ Date _____

For more information on continuous quality improvement, visit
www.nfsmi.org/Information/CQI_Resource.pdf

POSSIBLE AREAS FOR IMPROVEMENT CHECKLIST

Menus	_____	Service	_____
Food Quality	_____	Trash Handling	_____
Food Temperatures	_____	Reimbursement	_____
Production	_____	Accurate Records for	_____
Distribution	_____	Reimbursement	_____

NOTES

[illegible]

**FOR MORE INFORMATION ABOUT IN-CLASSROOM BREAKFAST
PLEASE VISIT THE FOLLOWING WEB SITES:**

Food Research and Action Center. Child nutrition fact sheet breakfast for learning. Retrieved June 29, 2007, from www.frac.org/pdf/breakfastforlearning.PDF

Food Research and Action Center. Universal school breakfast programs. Retrieved June 29, 2007, from www.frac.org/pdf/universal_sb.PDF

Food Research and Action Center. What is Provision 2? fact sheet. Retrieved June 29, 2007, from www.frac.org/pdf/provision2.PDF

Food Research and Action Center. School breakfast program fact sheet. Retrieved June 29, 2007, from www.frac.org/pdf/cnsbp.PDF

"gotbreakfast?"™ Foundation. Classroom breakfast playbook. Retrieved June 29, 2007, from www.gotbreakfast.org/media/Classroom_Breakfast_Playbook.pdf

Hunger Task Force. (2006). New options for school breakfast fact sheet. Retrieved June 29, 2007, from www.hungertaskforce.org/userimages/understandinghunger_factsheets_Alternative_Breakfast.pdf

Maryland State Department of Education. Meals for Achievement. Classroom breakfast scores high in Maryland. Retrieved Aug. 3, 2007, from www.marylandpublicschools.org/NR/rdonlyres/CA432B36-F5D2-41DA-9E0D-4D01C373AA75/1541/Classroom_Breakfast.PDF

National Dairy Council and Child Nutrition Foundation. Expanding breakfast online course. Retrieved June 29, 2007, from www.schoolnutrition.org/cnu/index.asp

Nutrition Explorations. Expanding breakfast champion success stories. Retrieved June 29, 2007, from www.nutritionexplorations.org/sfs/programs_breakfast_success.asp

Oregon Department of Education, Breakfast in the classroom. Retrieved June 29, 2007, from www.ode.state.or.us/services/nutrition/nsbp/bic_overview.aspx

University of Wisconsin-Extension. Innovative formulas for breakfast success: Breakfast in the classroom. Retrieved June 29, 2007, from www.uwex.edu/ces/flp/food/schoolbreakfast/files/formula_logan.pdf

PLEASE NOTE: The above Web sites were verified as active January 2008 and may expire without notice. The addresses are case sensitive.





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