



**ACADEMICS &
BREAKFAST
CONNECTION
PILOT**

Final Report on New York's
Classroom Breakfast Project



Nutrition Consortium of NYS
235 Lark Street
Albany, NY 12210
website: www.HungerNYS.org
Email: hungerNYS@aol.com

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Misha R. Marvel, M.S.W., Program Analyst
Edie Mesick, Executive Director
Paulette A. Miller, NOEP Program Facilitator
Cathy Roberts, Food Stamp Specialist
Patricia Vidoni, NOEP Program Facilitator

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EXECUTIVE SUMMARY

During the 2003-2004 school year, twenty schools in upstate New York implemented the Academics & Breakfast Connection (ABC) Pilot – a program designed to produce replicable classroom breakfast models that reduce childhood hunger and improve academic performance. Funded by a grant from the Nutrition Consortium of New York State, elementary and secondary students of varying income levels participated in the Pilot in rural, urban and suburban schools throughout the state. Funding for the Academics & Breakfast Connection Pilot was secured from the Indirect Vitamins Purchases Antitrust Litigation Settlement administered by the New York State Attorney General. As ABC Pilot participants, Pilot schools served breakfast to all students at no charge (regardless of income) and students consumed their meals in the classroom setting.

The following are some highlights of ABC Pilot results:

School Breakfast Program participation increased dramatically:

- Program participation more than doubled -- the percentage of enrolled students eating breakfast at school increased from 23% to 58%
- During the ABC Pilot school year, over 5,000 students received breakfast on an average day compared to the 1,883 who ate breakfast during the previous year

School-wide data on student performance showed improvement in all areas studied:

From the year before Pilot implementation to the year of Pilot operation:

- Tardiness declined from 3.0 to 2.6 days per student per year, a statistically significant difference
- Disciplinary office referrals decreased significantly, from 1.3 to 1.1 referrals per student per year
- Absenteeism rates fell from 7.9 to 7.4 days per student per year, though this result did not reach statistical significance
- Visits to the school nurse declined from 9.3 to 8.7 per student per year, though this difference did not reach statistical significance

The ABC Pilot had a positive impact on education:

- 100% of the Principals of ABC Pilot schools believe the Pilot made an important contribution to the education process
- Nearly all Principals (87%) reported that they believed the ABC Pilot classroom breakfast program contributed to improvements in academic performance
- Teachers (nearly 80%) agreed that the Pilot made an important contribution to the education process
- 72% of teachers reported that the Pilot *did not* interfere with teaching
- Most teachers (85%) reported fewer complaints of hunger from students

Teachers and principals expressed strong support for the ABC Pilot:

- 79% of teachers supported continuation of the Pilot
- 75% of principals reported plans to continue the Pilot in the next school year.

I. School Breakfast Program Overview

The School Breakfast Program is a federal nutrition assistance program administered by USDA's Food and Nutrition Service at the national level and by the State Education Department in New York State. Established by Congress as a permanent program in 1975, the School Breakfast Program provides schools and residential child-care institutions with reimbursement funds for the costs associated with providing children with breakfast.

As a result of state legislation in 1993, New York State requires that all elementary and severe-need schools operate a school breakfast program, unless they apply for a waiver through the State Education Department. (Severe need schools are defined as those in which 40% of school meals had been served to free/reduced price eligible children two years prior to the current year.) Today, nearly 90% of New York State's public schools operate the School Breakfast Program.

Every student can participate in the school breakfast program and some may receive breakfast for free or at a reduced-price. Students from households with income below 130% of poverty (\$24,505 per year for a family of four in 2004) qualify to receive free breakfasts, and those from households with incomes between 130% and 185% of poverty (between \$24,506 and \$34,873 per year for a family of four in 2004) qualify to receive breakfast at a reduced-price, set at 25 cents in New York State schools. All other students must pay full price for breakfast at school – generally between \$0.50 and \$1.00.





Why Breakfast is Important

Nutrition is critical to a child's ability to learn. According to the Center on Hunger, Poverty and Nutrition, the body must use its energy reserves to keep organs functioning whenever the body is unable to obtain energy from food. This means that a hungry child has less energy available for cognition and social activities, resulting in learning difficulties¹.

Recent national surveys indicate that 3% to 7% of children in the United States experience hunger, and another 7% to 16% live in families where food insecurity is a major concern. These studies also show that 10% of families with incomes at or below the poverty level experience hunger and another 30% experience food insecurity. Figures for New York State are similar to the national average.^{2,3} These numbers are important because studies conducted over the past decade show that hunger and food insecurity are related to poorer health and mental health, and poor academic outcomes for children.⁴⁻⁷

Breakfast consumption, in particular, is linked to learning and academic performance. In a 1989 article, researchers documented the impact of breakfast on academic achievement. By tracking changes in school achievement scores before and after the implementation of a free school breakfast program, the researchers documented increases in language, reading and math aptitude test scores among breakfast program participants⁸. Similarly, researchers in Minnesota found that students increased their math and reading test scores when they had access to universal school breakfast programs where breakfast is available to all students free of charge^{9,10}.

Studies also indicate that the School Breakfast Program has a positive impact on behavior, attendance and overall health. An article in the Archives of Pediatric and Adolescent Medicine explored the effects of universal breakfast programs in Baltimore and Philadelphia and found reductions in student absenteeism, tardiness and behavior problems¹¹. In addition, a study of a free breakfast program in Minnesota documented a link between breakfast program participation and improved student attention and declines in discipline problems^{9,10}.

Why Classroom Breakfast?

Barely 1 in 5 low-income students participate in the School Breakfast Program in New York State, despite the program's availability in nearly 90% of our public schools¹².



Low participation is primarily due to the fact that very few schools make breakfast part of the official school day. While a student's daily schedule typically includes a lunch period, this is not true of breakfast. Most school districts provide breakfast prior to the start of the school day when bus schedules often make it difficult for students to get to the cafeteria in time to eat and back to classrooms before the bell rings. Furthermore, many school districts only set aside 10-15 minutes for the breakfast program. This makes it impossible for food service staff to serve all of the students that may want and need to participate. And unfortunately, studies show that stigma continues to play a role in preventing students from getting a school breakfast¹³. Unlike lunch, where nearly every student goes to the cafeteria, students have to choose to go to the cafeteria for breakfast in the morning. Many choose not to go in order to avoid being labeled as poor.

By making breakfast part of the school day, classroom breakfast removes these barriers to participation and increases program access for students that need it most. Over the past few years, multiple studies have shown that more students participate in the breakfast program when breakfast is offered at no charge, and that schools allowing students to eat in the classroom experience even greater gains in breakfast program participation. In a large national demonstration project conducted by the United States Department of Agriculture, participation more than doubled in schools that provided free breakfast in the classroom, while schools that provided free breakfast in the cafeteria saw more modest gains of about 50%². In addition, demonstration projects in Boston, Baltimore and the state of Maryland have shown a doubling (and even tripling) of participation rates when breakfast is served in the classroom¹⁵⁻¹⁶.

Most importantly, classroom breakfast ensures that children are in classrooms and ready to learn when lessons start.

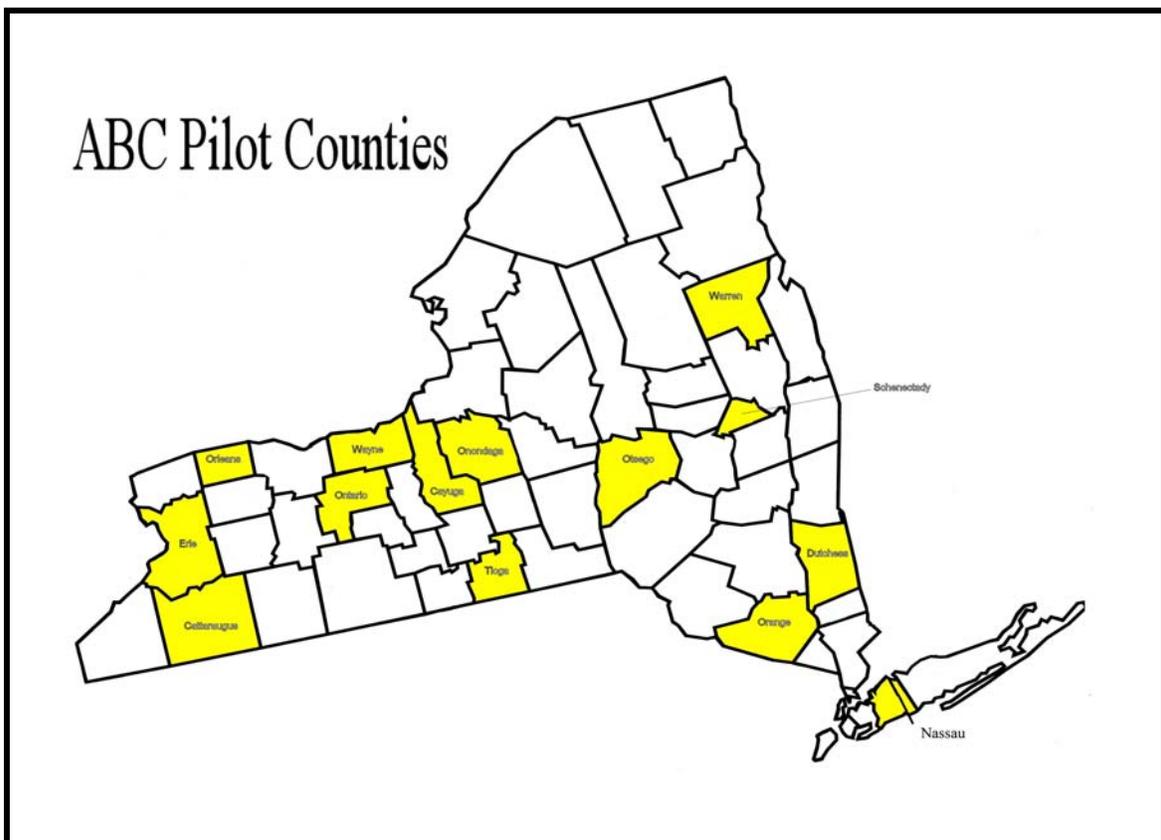


II. The Academics & Breakfast Connection (ABC) Pilot

Seeking to combat childhood hunger and to improve a child's ability to learn in school, the Nutrition Consortium of NYS created the Academics & Breakfast Connection (ABC) Pilot. Funding for the Academics & Breakfast Connection Pilot was secured from the Indirect Vitamins Purchases Antitrust Litigation Settlement administered by the New York State Attorney General. Twenty schools participated in the Pilot and received funding to assist with the implementation of classroom breakfast program during the 2003-2004 school year.

ABC Pilot schools included elementary and secondary schools from rural, urban and suburban areas of sixteen upstate counties, with schools having different levels of low-income student enrollment. Students at Pilot schools received breakfast at no charge regardless of income and consumed the meal in their classrooms.

Ultimately, the ABC Pilot resulted in several replicable New York State-based models for classroom breakfast program implementation. The remainder of this report provides an overview of the most important findings. A technical report with more detailed statistical analyses is available through the Nutrition Consortium¹⁷.



ABC Pilot School Selection Process

In planning for the ABC Pilot, Nutrition Consortium staff convened meetings with State Education Department representatives, school food service directors and individuals involved in classroom breakfast projects in other states. Insight from these meetings proved instrumental in developing our ABC Pilot.

Food service directors at each of New York's nearly 700 public school districts received an ABC Pilot application packet. The application collected general information about the schools such as current enrollment and program participation, and some specific details about their Pilot implementation plan and estimated program costs. The application also required principal and superintendent signatures to demonstrate commitment to Pilot implementation. The Nutrition Consortium received 87 letters of intent from 50 school districts in upstate New York, and thirty-six districts submitted complete applications. Note: The Consortium did not receive any New York City school applications.

To select ABC Pilot schools, the Nutrition Consortium's *Board of Directors Vitagrunt Subcommittee* and agency staff developed scoring criteria. In addition to scoring the individual applications from each school district, the Consortium created an 18-cell matrix to help ensure that a diverse sample of schools participated in the ABC Pilot. Each matrix cell identified an applicant as rural, suburban or urban; as small, medium or large; and as having high or low percentages of low-income students enrolled in the school. With a goal of including one school from each of the 18 cells in the ABC Pilot, the Consortium chose to fund the highest scoring applicant school in each cell. Overall, the ABC Pilot schools selected represent 15 of the 18 cells in the matrix. (The Appendix to this report includes this 18-cell matrix.)

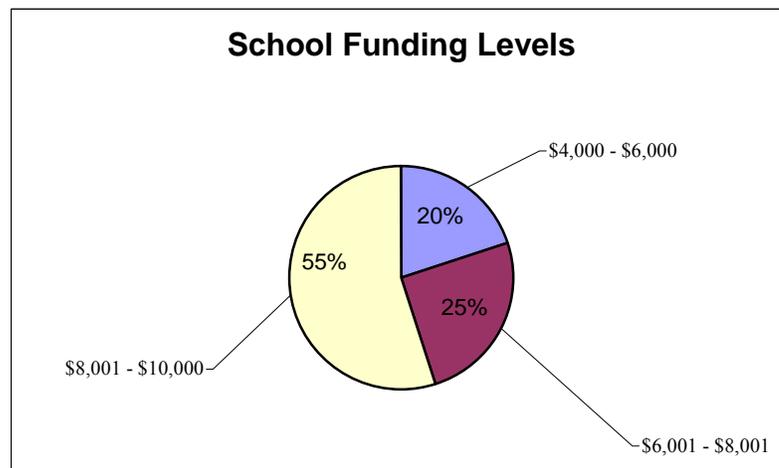
To select ABC Pilot schools, the Nutrition Consortium scored Pilot applications based on the following goals and criteria:

- Goal: To serve breakfast daily to a minimum of 4,000 children (total) through the ABC Pilot
- Goal: To select a variety of school-types from throughout the state, preferably at least one school from each matrix cell, to ensure that models will be replicable throughout the state.
- Criteria:
 - Principal and superintendent commitment to implementing the ABC Pilot and tracking Pilot results
 - Soundness of implementation plan
 - Scope of service (including number of grades/classrooms or school-wide and also menu options)
 - Anticipated increase in participation
 - Soundness and efficiency of proposed budget

This selection process resulted in nineteen ABC Pilot schools receiving Pilot funding from the Nutrition Consortium, with a twentieth school added at the half-year point.

ABC Pilot Implementation

To implement the ABC Pilot, schools received grants from the Nutrition Consortium averaging \$8500, although individual Pilot grants ranged from \$4,000 to \$10,000. Pilot schools continued to operate the School Breakfast Program according to USDA regulations as administered by the New York State Education Department. Although ABC Pilot students received breakfasts at no charge, the schools' reimbursement process through the State Education Department did not change. Schools received reimbursements based on the number of meals served within each payment category: students eligible for free meals, students eligible for reduced-price meals, and students that pay for their meals. As participation by students eligible for free and reduced-price breakfast increased, school reimbursements increased. In most ABC Pilot schools, this economy of scale increase in reimbursement funds sustained the free classroom breakfast program.



ABC Pilot funding assisted schools with classroom breakfast start-up and implementation costs. All but two schools utilized Pilot funds to purchase equipment necessary for classroom breakfast program start-up. This equipment included: food service carts, hot/cold food carriers, coolers, counter slant units, juice airpots, heat lamps, trays/sheet pans, and garbage cans. Also, some schools used Pilot funds to supplement state meal reimbursements, and some purchased non-food supplies such as paper goods.

Implementation Approaches

Every school designed its own classroom breakfast implementation plan.

- Classroom Delivery: eleven schools elected to deliver meals directly to participating Pilot classrooms
- Cafeteria-to-classroom: two schools distributed meals to students as they came through the cafeteria line. Students then took the meals back to their classrooms.
- Hallway Stations: three schools set up distribution stations in the school hallways so that students could pick up breakfasts on their way to class.
- Mixed Service: four schools utilized a combination of methods. For example, one school delivered breakfast to the younger students in kindergarten through second grade, while older students came through the cafeteria line and took their meal back to class.



While each ABC Pilot school developed an implementation plan that worked best for them, they periodically made changes to keep the program operating smoothly. For example, one school switched from hallway cart service to classroom delivery, while another school switched from hallway service to cafeteria pick-up.

Pilot schools also differed in their approach to menu planning. Eight schools offered both hot and cold morning meals to students; nine schools served only cold breakfast items; and one school served only hot breakfasts. As with meal service, schools adjusted their menu offerings as they assessed program participation and took individuals' comments into account. Three schools switched from serving both hot and cold breakfasts to an all-cold menu, and one school added hot breakfasts to their menu in response to teacher, parent and student requests. Like all schools operating school breakfast programs, all ABC Pilot schools were required to continue to meet the nutritional requirements and meal patterns set forth by USDA.

III. Evaluating the ABC Pilot



To assess the impact of the ABC Pilot, the Nutrition Consortium developed tools to evaluate the Pilot's effect on hunger, academic performance and other outcomes. The Consortium then collected and compiled data and survey results submitted by Pilot schools at two different points in the 2003-04 school year.

Data collected from ABC Pilot schools included breakfast program participation rates and incidences of absenteeism, tardiness, disciplinary referrals, and visits to the school nurse. In addition, the Nutrition Consortium surveyed teachers, principals and food service directors to gather their assessments of the Pilot. Teachers reported on the Pilot's effect on their ability to teach, student well being, academic performance, classroom behavior, and attentiveness. Food service director surveys obtained information around Pilot operation and program costs, and principal surveys appraised the Pilot's overall impact on student behavior and academic performance. Nutrition Consortium staff also collected anecdotal information and comments from staff and students during visits to each Pilot school.

In most instances, school food service directors maintained breakfast program participation records, school administrative staff collected information on absenteeism, tardiness and disciplinary referrals, and school nurses recorded student visits. In addition, the Nutrition Consortium used New York State Education Department data to confirm school breakfast participation at each Pilot school. For school breakfast participation, absences and most other indicators, information was available for the year before the ABC Pilot and the year of Pilot implementation. This allowed for pre-post comparisons of outcomes. To assess the statistical significance of the ABC Pilot results, the Consortium retained a professional evaluation group from Massachusetts General Hospital in Boston with extensive experience in assessing universal free school breakfast programs in several other states and cities^{2,15-16}.

The Nutrition Consortium also attempted to measure academic outcomes more directly, but this proved to be extremely difficult. Each Pilot school served students of different grade levels, and in many cases, schools utilized different testing tools to monitor student academic performance. Many of the schools also did not have mechanisms in place to report year-to-year changes in academic performance. Since these problems prevented the Nutrition Consortium from being able to use test scores to directly measure academic outcomes, the Consortium developed surveys for principals and teachers to help provide an overview of perceived academic improvements.

As discussed in the next section of this report, the ABC Pilot succeeded in creating replicable New York State-based classroom breakfast models. Participation in the School Breakfast Program at Pilot schools soared; tardiness, absenteeism, disciplinary referrals and nurses visits all showed improvements; and principals and teachers expressed strong support for their classroom breakfast programs. In fact, 94% of Pilot school principals and 85% of teachers agreed that the ABC Pilot had a positive impact on students. These positive results occurred across the gamut of school types included in the Pilot, with some improvements more prominent in higher poverty schools and in those schools that experienced the largest increases in breakfast program participation.

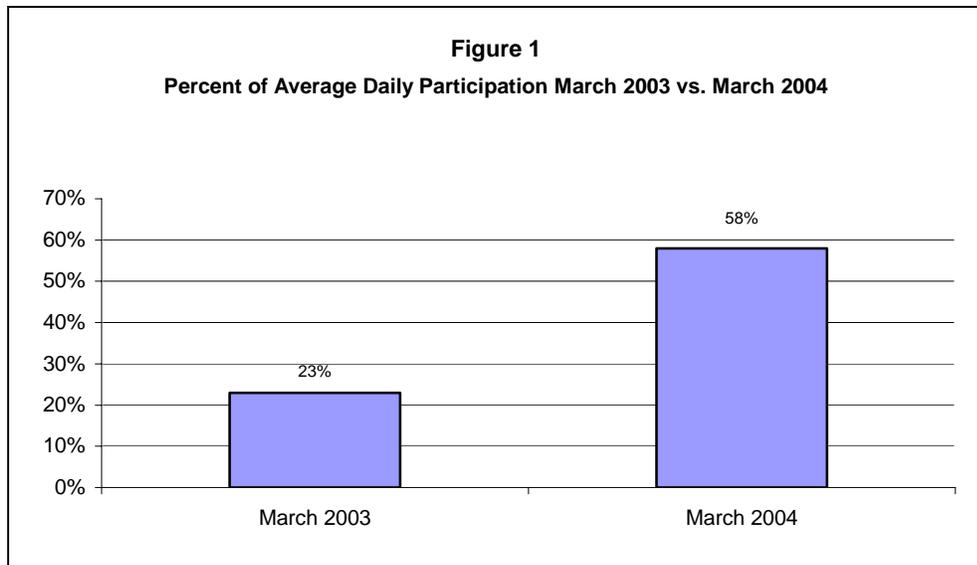


IV. Impact of the ABC Pilot

The ABC Pilot resulted in several New York State-based classroom breakfast models that can be duplicated by schools throughout the state. The Pilot dramatically increased participation in the School Breakfast Program, resulted in reductions in tardiness, absenteeism, disciplinary referrals and visits to the school nurse, and generated tremendous support among principals and teachers alike. These positive results occurred across the spectrum of the different Pilot schools, with some more substantial improvements in schools with higher concentrations of low-income students and in those schools that saw greater increases in breakfast program participation.

A. Breakfast Program Participation

When looked at as a whole, the rate of school breakfast participation in Pilot schools more than doubled. Figure 1 represents official state data showing that after ABC Pilot implementation, breakfast participation increased from an average of 23% in March of 2003 to 58% in March of 2004. In raw numbers, this means that more than 5,000 students ate breakfast daily at schools operating the ABC Pilot – up from under 1,900 in the same schools the previous year.

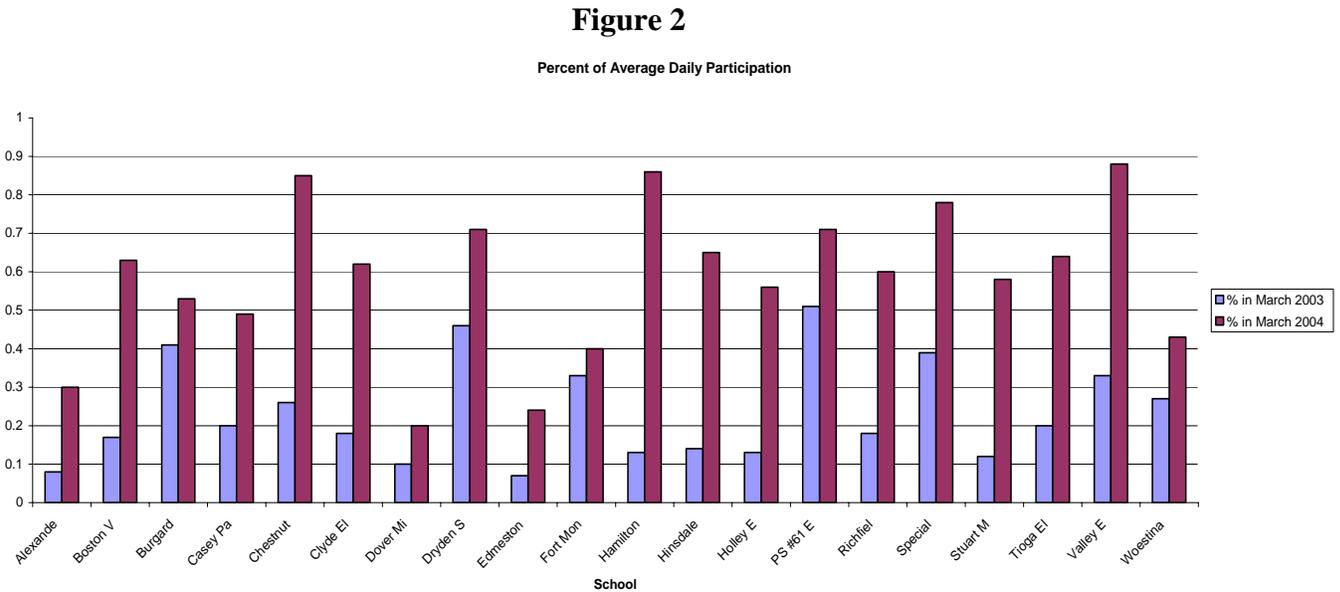


In addition, we note that participation almost doubled among the poorest students at the ABC Pilot schools (those from families certified as eligible for free or reduced-price school meals), with participation among these students increasing from 34% in March 2003 to 59% in 2004. This finding is remarkable since these are students that already qualified to receive free or reduced-price meals at schools before the ABC Pilot began, and this confirms results from other demonstrations that universal free and classroom breakfast programs together are effective ways to fight hunger as they get more food to children from the poorest families.

Another significant result of the ABC Pilot is that School Breakfast Program participation rates at Pilot schools approached and exceeded the statewide participation rate for the School Lunch Program. This is especially interesting because School Lunch Program participation traditionally exceeds breakfast program participation for many of the reasons mentioned earlier in this report – most students have lunch period as part of the official school day, more time is set aside for the lunch program, and stigma is less prevalent. During the 2003-04 school year, school lunch participation averaged 53% of students enrolled in public schools. That same year, participation in the breakfast program at ABC Pilot schools reached 58%.

Breakfast program participation increased in all twenty ABC Pilot schools.

Figure 2 below shows average daily breakfast program participation for each of the Pilot schools for the same index month (March) of the year before the Pilot (2002-03) and of the year of Pilot implementation (2003-04).

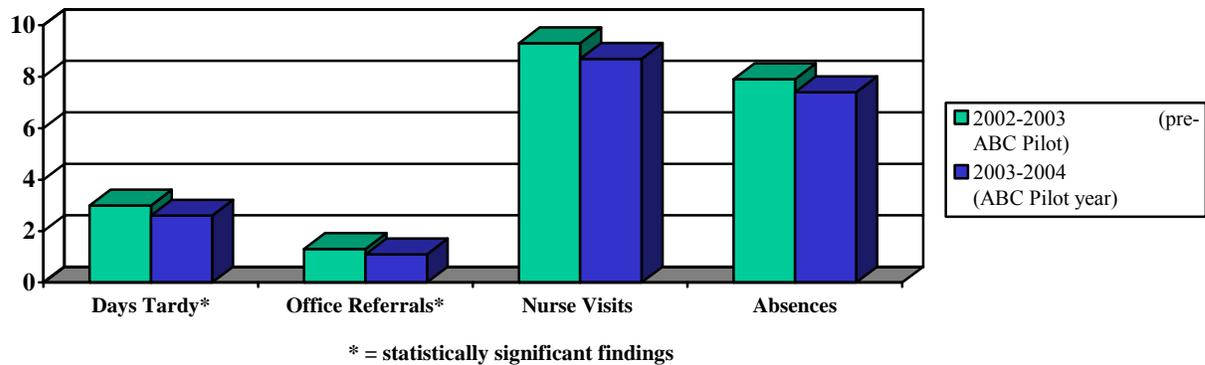


Any school can successfully implement a classroom breakfast program regardless of its socioeconomic characteristics. Additional analyses showed that participation increases were roughly the same for urban versus rural schools, high versus lower poverty schools, and elementary versus secondary schools. In all groups, participation was relatively low prior to Pilot implementation (around 20%) and doubled after the start of the Pilot.

B. Academic Performance Indicators

For the 2002-03 and 2003-04 school years, ABC Pilot schools provided the Nutrition Consortium with monthly totals of tardiness, disciplinary office referrals, absenteeism, and visits to the school nurse – all factors that contribute to a student’s ability to achieve their academic potential. This allowed for analysis of what happened to these outcomes prior to and during the ABC Pilot. For each school, data on each outcome variable were averaged across the ten months of school pre-ABC implementation and post-ABC implementation. Then, statisticians evaluating the ABC Pilot determined the statistical significance of each outcome.

Figure 3: Student outcomes for ABC Pilot
(per student/per year)



1) Tardiness

“Kids are in class on time, not marked tardy because they’re in the cafeteria.”
- Teacher, Edmeston Central

Figure 3 shows that the average number of days tardy per student decreased from 3.0 in the school year prior to ABC Pilot implementation to 2.6 during the Pilot school year. The Pilot evaluation team found this change to be statistically significant, indicating that this decrease in tardiness is not likely to have been due to chance. This finding is further supported by the fact that 63% of teachers surveyed attributed their students’ on-time arrivals to the classroom breakfast program.

2) Disciplinary Office Referrals

“There was an immediate change in rowdiness in the upper grades.”
Principal, Casey Park Elementary

Figure 3 also shows a statistically significant change in disciplinary referrals. Prior to ABC Pilot implementation, disciplinary office referrals at ABC Pilot schools averaged 1.3 referrals per student per year. This average fell to 1.1 during the ABC Pilot school year. Again, these findings were supported by reports from the schools: 75% of the Pilot school principals surveyed stated that the classroom breakfast program contributed to a decline in disciplinary office referrals.

Also, as mentioned earlier in this report, hungry children may exhibit behavior problems and it is difficult for these children to pay attention to lessons. Of the 265 teachers surveyed at ABC Pilot schools, 85% of teachers agreed that there were fewer complaints of hunger in the mornings since implementation of the Pilot. Furthermore, 75% of teachers reported that their students were better able to pay attention when they participated in the classroom breakfast program and 55% of teachers noted improvements in student classroom behavior since the Pilot began.

3) Absenteeism and Visits to the School Nurse

Absenteeism and visits to the school nurse also declined during the ABC Pilot school year. As Figure 3 shows, the average number of absences per student per year declined from 7.9 to 7.4, and nurse visits fell from 9.3 visits per student per year to 8.7. While neither of these outcomes reached statistical significance, these results do show a trend toward lower absenteeism rates and fewer nurses' office visits.

4) Principal and Teacher Assessments

As noted in Section II of this report, ABC Pilot schools operated their classroom breakfast programs in ways that best suited them. While principals did report some hesitance among various staff prior to starting classroom breakfast programs, a majority of principals reported great support for the program once it was up and running. Prior to implementing the ABC Pilot, 50% of principals found it difficult to generate support among janitorial staff and 37% expressed difficulty in garnering support among teachers. By the end of the Pilot school year, 77% of principals agreed that there was great support among janitorial staff, and 73% found there to be great support among teachers.

Perhaps more striking is the direct response of teachers to the ABC Pilot – almost 80% of teachers stated that they hoped their school would continue the classroom breakfast program in the next year. Also, while 58% of teachers surveyed stated that they had been hesitant about the ABC Pilot and the effect classroom breakfast would have on their teaching day, 76% reported that the program did not interfere with their ability to teach after all.

In terms of academic performance:

- 100% of ABC Pilot school principals and almost 80% of teachers stated they believed the Pilot made an important contribution to the education process
- 87% of principals believe that classroom breakfast contributed to an improvement in academic performance
- Teachers (nearly 80%) agreed that the Pilot made an important contribution to the education process
- 72% of teachers reported that the Pilot *did not* interfere with teaching
- Most teachers (85%) reported fewer complaints of hunger from students

Overall, principals expressed great satisfaction with the ABC Pilot. In fact, 75% of principals planned to continue classroom breakfast operations in the following school year.

V. Additional Analyses of Program Impact



The ABC Pilot evaluation team conducted several additional sets of analyses to further test the patterns found. Findings are summarized here briefly, but can be reviewed in greater detail in a separate technical report available through the Nutrition Consortium¹⁷. This technical report also contains more detail about the other analyses presented throughout this report.

Outcomes in Higher versus Lower Poverty Schools

The ABC Pilot evaluation team hypothesized that the impact of the Pilot would have been higher in schools with a higher concentration of low-income students. The ABC Pilot included ten higher poverty schools and ten lower poverty schools. Higher poverty schools are those with 40% or more of enrolled students eligible for free or reduced-price school meals, and lower poverty schools are those with free/reduced-price eligibility rates of 39% or less. The results of this analysis showed:

- Higher poverty Pilot schools had significantly larger decreases in tardiness
- Higher poverty Pilot schools experienced a larger decrease in disciplinary office referrals (though not a statistically significant difference)
- In terms of the Pilot's impact on student education, student punctuality and hunger complaints, teachers from higher poverty Pilot schools rated the program's impact on students significantly more positively than teachers from lower poverty schools

Outcomes by Size of Participation Increase

The ABC Pilot evaluation team also hypothesized that the impact of the Pilot on student outcomes would be stronger in schools that experienced the largest increases in breakfast program participation. However, aside from teachers' assessments of the ABC Pilot and its effect on students (which were more positive), no statistical difference existed in the impact on student outcomes in schools with varying increases in breakfast program participation.

To conduct this assessment, the evaluation team categorized the Pilot schools as follows: large gain schools are those that increased breakfast program participation rates by at least 51%; medium gain schools experienced increases between 31% and 50%; and smaller gain schools increased participation by less than 31%.

In the Pilot schools with the largest increases in participation, teachers rated the program's overall impact on students significantly more positively, including the Pilot's impact on the learning process, on student punctuality and on hunger complaints. Teachers in these schools were also significantly more likely to want the program to continue for another year, and significantly less likely to say that the program interested with their ability to teach.

VI. Conclusions

When asked what he would do if his school did not continue to offer classroom breakfast next year, one student replied:

“I would fall asleep in class like I used to.”
-Holley Elementary student



Classroom breakfast works! The ABC Pilot resulted in decreased hunger and improvements in factors critical to student learning, and teachers and principals alike took note of the important contribution classroom breakfast makes to the education process. Also, the Pilot yielded classroom breakfast models that any school can implement and reap the same benefits – primary or secondary schools in rural, suburban or urban areas, and schools with either high or low concentrations of students from low-income families.

The results of the ABC Pilot echo those of free classroom breakfast demonstration projects elsewhere in the nation. The fact that these findings are so very similar to those already reported in other demonstration projects throughout the United States provides further support for their validity and importance. Particularly striking is the doubling (and tripling) effect of free classroom breakfast on program participation. Large increases occur even among students from the poorest families who were already eligible for free and reduced-price meals prior to implementing the ABC Pilot. This emphasizes the point that serving breakfast in the classroom is a very effective way to increase breakfast eating among poor children – whom we know especially need the nutritional support.

VII. Recommendations

The ABC Pilot demonstrated that in New York State, as in other areas of the country, free classroom breakfast programs make a big difference. They are well-received by academic and food service staff, are effective in increasing the number and percentage of students who eat breakfast at school, and have a positive impact on objective indicators of student learning, behavior, and health.

Based on these findings, the Nutrition Consortium's overarching recommendation is for all New York State schools to establish classroom breakfast programs. To achieve this goal we recommend that New York State:

- Provide classroom breakfast start-up grants to school districts
- Strengthen the state's *School Breakfast Program Expansion Law* by requiring approval of a majority of the voting public before a school district can decline to operate a School Breakfast Program
- Strengthen the state's *School Breakfast Program Expansion Law* by requiring schools to set aside a minimum of 20 minutes for breakfast program operation
- Establish free breakfast programs at all schools with 50% of students eligible for free/reduced-price school meals
- Increase availability of free meals by making students eligible for free meals if household income falls below 185% of poverty. Currently, students qualify for free meals if household income falls below 130% of poverty. Students from households with incomes between 131% and 185% of poverty must pay a reduced-price for meals.

Endnotes

1. Center on Hunger, Poverty and Nutrition Policy (1998). *Statement on the link between nutrition and cognitive development in children*. <http://www.centeronhunger.org/cognitive.html#references>
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Appendix A: Teacher Survey Results

<i>Teacher Surveys of the ABC Pilot Program (total surveys received = 265)</i>		
	% Agree	% Disagree
1) When I heard that our school would be implementing a classroom breakfast program, I was hesitant about the program and concerned about the effect it would have on my teaching day.	58%	42%
2) I hope that our school continues to offer the classroom breakfast program next year.	79%	21%
3) Overall, the ABC Pilot has had a positive impact on my students.	85%	15%
4) Due to the classroom breakfast program, my students are in class on time for the start of lessons	63%	37%
5) The ABC Pilot interferes with my ability to teach.	24%	76%
6) I have seen improvements in student classroom behavior since implementation of the ABC Pilot.	55%	45%
7) My students that participate in the breakfast ABC Pilot are better able to pay attention to lessons throughout the morning.	75%	25%
8) There are fewer complaints of hunger in the mornings since implementation of the ABC Pilot.	85%	15%
9) I believe that the ABC Pilot makes an important contribution to the education process.	79%	21%

Appendix B: Principal Survey Results

Principal Surveys (17 ABC Pilot school principals returned surveys)

	% Agree	% Disagree
1) Prior to implementation of classroom breakfast, it was difficult to generate support among the following staff:		
a. Janitorial	50%	50%
b. Teaching	37%	63%
c. Cafeteria	13%	87%
2) Now that the program has been in operation throughout the school year, there is great support for classroom breakfast among the following staff:		
a. Janitorial	77%	23%
b. Teaching	73%	27%
c. Cafeteria	80%	20%
3) Overall, the ABC Pilot has had a positive impact on students.	94%	7%
4) I believe that the ABC Pilot makes an important contribution to the education process.	100%	0%
5) I believe that classroom breakfast has contributed to an improvement in academic performance.	87%	13%
6) I believe that classroom breakfast has contributed to a decline in disciplinary office referrals.	75%	25%
7) Will you continue to operate classroom breakfast next year?	75%	25%

Appendix C: School Selection Matrix

ABOUT THE NUTRITION CONSORTIUM OF NEW YORK STATE, INC.

The Nutrition Consortium of New York State, Inc., formed in 1985, is a statewide, private, nonprofit organization dedicated to addressing problems of hunger.

Hunger is a dreadful reality for many families in New York State: children are going to bed or starting their day without having eaten; working adults are going without food in order to pay the rent and heating bills; and the unemployed, the poor and near poor individuals and families are too often going hungry.

The Consortium believes that the crippling reality of hunger in New York State and the USA is unacceptable, and that it is reversible. We contend that a governmental response to hunger through state and federal nutrition assistance programs is the appropriate first line of attack in the fight to end hunger. Full use of these programs, made possible by adequate federal and state support in the form of funds, policies and actions will significantly reduce the incidence of hunger.

The mission of the Nutrition Consortium of New York State, Inc., is to alleviate hunger for poor and near poor residents of New York State, by expanding the availability of, access to, and use of governmental nutrition assistance programs, through outreach, education and advocacy. In pursuit of this mission, the Nutrition Consortium engages in the following activities:

- ◆ **Outreach** to low income populations regarding eligibility for nutrition assistance programs, and to provide enrollment information in order to maximize the number of New Yorkers who benefit from these programs.
- ◆ **Education** regarding nutrition assistance programs to the general public, eligible populations, policy makers, existing and potential program administrators and others through the use of meetings, media, promotional materials and additional documents, research and publications.
- ◆ **Program development and implementation** aimed at designing new programs or improving and coordinating existing governmental nutrition assistance programs, as well as working to establish needed programs throughout the state.
- ◆ **Policy work** with policy makers and administrators to ensure that an adequate and integrated response to hunger is in place, and to ensure that programs are operational consistent with their intent.
- ◆ **Coalition building** to unify varied interests and coordinate the dissemination of information regarding hunger policy and programs throughout the state.
- ◆ **Research** and the publication of findings to identify emerging problems and highlight the existence of hunger in NYS, and to offer recommendations to alleviate hunger through policies and programmatic responses.