



# The Learning Connection

What You Need to Know to Ensure Your Kids are Healthy and Ready to Learn



*When I see my own kids passing on healthy habits to their kids, I realize the impact that the adults of today have on the adults of tomorrow.*

– Dr. David Satcher,  
16th U.S. Surgeon General  
and Founding Board Chair  
of Action for Healthy Kids



*It isn't always easy to find time to get my three kids active or to serve the perfect foods, but since we know that healthy kids learn better, my wife and I do everything we can to give them this advantage. Even small changes can produce big results.*

–Rob Bisceglie, CEO,  
Action for Healthy Kids



# Dear Friends,

Look around a kindergarten classroom. Unless we take action today, about half of these kids will be obese adults and counted among the millions of new cases of diabetes, heart disease, stroke, and cancer – chronic diseases which are largely preventable. We need to improve our kids' nutrition and get them moving – not just to improve their health, but to get them ready to learn.

As you will see in this report, healthier kids perform better on tests, are more focused in class, behave better, are absent less and have higher self-esteem.

Before we take action together, we must understand the challenge we face. Our kids spend an average of more than seven hours in front of the TV or computer every day for non-school purposes – nearly an hour and a half more than just a few years ago. We have reduced students' time in PE classes or recess for increased academic instruction, and we continue selling unhealthy foods and beverages in our schools. We, as busy parents, often grab quick, unhealthy meals or snacks for our kids. We offer fatty, sugary treats to children's gatherings and sporting events. Collectively and over time, our seemingly innocuous practices take a toll on our kids' health and learning. We must do better.

Fortunately, we also have some great news to share. Many schools already are taking far-reaching strides. Millions of students get most of their physical activity and eat and drink as much as half of their total calories in the healthy options offered during the school day. Schools that now offer kids healthier food and more time to be active are seeing increasing fitness levels, better student behavior and even higher test scores.

This report features model programs in which superintendents, principals, teachers, parents, community members and students themselves are working together to make all kids healthier.

We include resources for further information and ideas for funding. The pieces are all here. So, there are just two questions we challenge you to ask yourself. How will you help your school put them into place? How will your community rally to ensure its kids are healthy and ready to learn?

We know first-hand that changing kids' habits is never easy, but change is possible and necessary. We must have the courage to take action today and to persevere until ***every child in America is healthy and has equal opportunities to be academically successful***. We owe it to our children.



**David Satcher, M.D., Ph.D.**

Father and Grandfather of Eight  
16th Surgeon General of the United States  
Founding Chair, Action for Healthy Kids



**Rob Bisceglie, M.A.**

Father of Three  
CEO, Action for Healthy Kids





# 55 MILLION SCHOOL KIDS

Each one of us can help improve the eating and activity habits of the 55 MILLION school kids in this country and, in the process, improve their health so they can succeed in the classroom.



**GOOD FOOD**

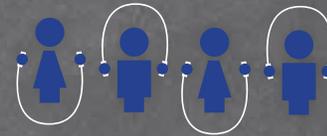


**ACTIVE BODIES**



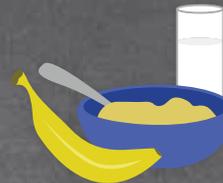
**KIDS EQUIPPED FOR SUCCESS!**

Kids who attend "healthy" schools have fewer absences, higher academic achievement and self-esteem and are more likely to graduate from high school.



**PHYSICAL ACTIVITY SUPPORTS ACHIEVEMENT**

Even moderate exercise, like walking, increases brain activity.



**KIDS WHO EAT WELL, LEARN BETTER**

Students who eat school breakfast have been shown, on average, to attend 1.5 more days of school per year and score 17.5% higher on standardized math tests.



**HEALTHIER PRACTICES CAN INCREASE SCHOOLS' BOTTOM LINES**

Schools can get a financial boost by offering more nutritious meals & snacks. Students will buy and eat healthier foods and beverages.



**EVERY  
KiD  
HEALTHY**

Visit [ActionforHealthyKids.org](http://ActionforHealthyKids.org), where, in under 1 minute, you can take the *Every Kid Healthy Pledge*. You'll have access to our free programs, volunteer opportunities and school grants.





# Good Food + Active Bodies = Kids Equipped For Success!

*Healthy children = better learners.*

The equation is simple, and we all must do the math. One-third of our kids are overweight or obese, putting them at risk for a variety of health complications and chronic diseases, including heart disease, gallbladder disease, asthma, Type 2 diabetes and cancer. Alarming, obesity contributes to one-fifth of all cancer deaths in the United States.

The solution, though, to this national epidemic is within reach. Parents, grandparents, educators and caring people everywhere can all play a part instilling kids with the lifelong habits they'll need for health and academic success. From feeding the children in our lives nutritious breakfasts each morning to encouraging them to play actively for 60 minutes every day, *each one of us* can improve the eating and activity habits of the 55 million school kids in this country and, in the process, improve their health so they can succeed in the classroom.

Already, there are many indications schools that integrate student wellness may be giving their students an academic advantage. We know, for instance, that students who attend such schools are likely to have fewer absences, higher academic achievement and self-esteem, and are more likely to graduate from high school. Why then wouldn't every parent and every adult who wants what's best for our kids not play a part in giving students the greatest opportunities?

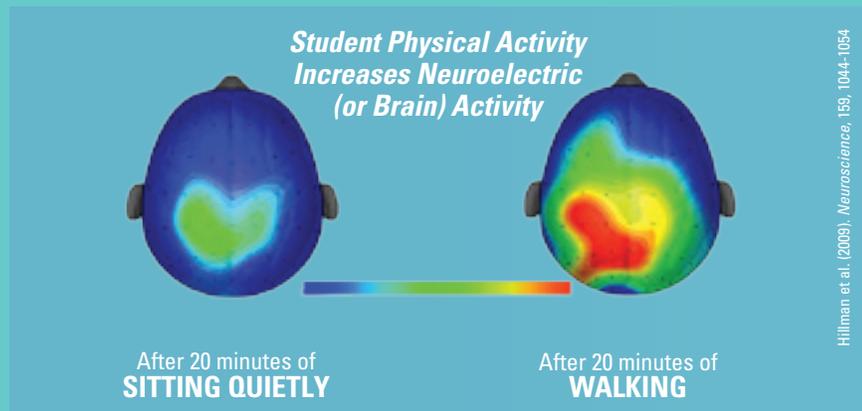
# Physical Activity Supports Academic Achievement

Study after study shows kids who get regular physical activity experience improvements not just in their fitness levels but in brain function too. Just walking or biking to school can prime the brain for learning. It makes sense - kids need to move more. When they do, they are better positioned to succeed in the classroom.

***Simply put, physical activity will help kids learn better. There's nothing magical going on. Physical activity causes changes in the brain. As a result, we're seeing changes in behavior.***

That's certainly the implication of a 2010 report on recent research by the Centers for Disease Control and Prevention, which examined the relationship between school-based physical activity – primarily through recess and classroom activities – and academic achievement. Report authors found that slightly more than 50.5 percent of the 50 selected studies noted a positive relationship between physical activity at school and academic performance while 48 percent found no significant relationship. The take home then for school administrators and parents is clear: school time spent on physical activity will improve fitness, will not negatively influence academics and may actually boost academic performance.

There's even evidence now that exercise actually *helps* brains think. Charles Hillman, Ph.D., associate professor in the Department of Kinesiology and Community Health at the University of Illinois Urbana-Champaign, and his colleagues studied whether cardiovascular exercise would change brain function in preadolescent children. The answer is yes. The researchers found that for their 9 and 10-year-old participants (20 in all), moderate activity - akin to a brisk walk around the school building - increased neuroelectric (or brain) activity. This, in turn, translated into better and faster test performance. "Simply put, physical activity will help kids learn better," says Hillman. "There's nothing magical going on. Physical activity causes changes in the brain. As a result, we're seeing changes in behavior."



Fortunately, school administrators across the country are recognizing this connection and running new and innovative physical activity programs before, during and after school. In Harleysville, Pa., for example, Colleen Wegimont, PE teacher at Oak Ridge Elementary School, introduced the *Wake Up Club* four years ago as an opportunity for kids to play in the gym for 30 minutes before school. Today, 200 students participate. "Sometimes we forget that kids just need to play. They're having fun and getting fit," Wegimont says, adding she believes the program has also improved student attendance.

Wegimont also helped parents start the *Jump Rope Club* to address the recess limitations of Oak Ridge's small green space. Once a week, parents turn jump ropes for kids during lunch recess. Parent Pollie Rodrigue, who now coordinates the program, notes it gives working parents – who participate during their own lunch hours – an easy opportunity to help kids be more active during school. "It is incredible to see the kids' positive energy, and how they encourage each other," she says.



Naturally, kids don't have to be star athletes to benefit from regular physical activity. Researchers in Georgia, for example, determined a vigorous after-school exercise program with time-specific requirements improved executive function (or overall ability to organize thoughts) prioritize tasks, manage time efficiently, and make decisions among overweight kids.

During the three-year study of 171 overweight, inactive 7 to 11-year-olds, the team assigned the kids to either 20 or 40 minutes of after-school aerobic activity, of equivalent intensity, each day or no exercise at all. Their findings, published in the January 2011 issue of *Health Psychology*, indicated support that kids' mathematics performance also improved. The bottom line? Aerobic exercise may well be a key to improving aspects of kids' mental functioning that are important to their overall cognitive development. "It's not that we turned any of the children into little Einsteins. But we did see a measurable, and what I think is a meaningful, improvement on their scores," says Catherine L. Davis, Ph.D., Professor of Pediatrics, Physiology, & Graduate Studies, Georgia Prevention Center, Medical College of Georgia, Institute of Public and Preventive Health, of the research she led. "I do think additional research should be done. One study does not prove a hypothesis. But it is strong evidence that the exercise the children were doing caused improvements in their cognitive functions and in their mathematics sequence."

And, the news gets better: improving student physical activity can impact test scores. Paul Zientarski, recently retired *Learning Readiness PE* coordinator at Naperville School District in Illinois, for one, has seen first-hand the benefits that physical activity can have on kids. Of 16 high school students in a remedial reading class, nine came to work out in a *Learning Readiness PE* class beforehand.

Zientarski reports that at the end of the semester, participating students' reading scores had improved half a year more than the scores of students not attending the class. Results were even more startling for math. Algebra readiness students taking *Learning Readiness PE* improved standardized test scores 20 percent - compared with 3.6 percent improvement in the group of students not being active through the class.

There's also evidence physical activity doesn't have to be in a recess or PE setting to be effective. One review of 44 studies of various groupings of school-aged children demonstrates that when educators introduce physical activity lessons to the classroom, such as hopscotching math facts or skipping outside to form geometric shapes, students' overall performance on standardized tests improved. The review, printed in the January 2011 issue of *Preventive Medicine*, also indicated mounting evidence connecting physical activity, cardiovascular fitness and cognitive function during childhood and adolescence, suggesting these factors are linked to academic achievement. They're all strong indicators that physical activity can be incorporated anywhere and anytime at school with positive academic results.



# Kids Who Eat Well, Learn Better

Parents and educators want kids primed to learn. That's enough incentive for all adults to come together to ensure all kids have in-school access to nutritious foods and beverages – particularly since many children consume half of their calories at school. This is such an important issue that in 2010, the Academy of Nutrition and Dietetics (then known as American Dietetic Association), School Nutrition Association and Society for Nutrition Education jointly called for comprehensive, integrated nutrition services for students from kindergarten through high school as a means of not only improving students' nutritional status and health, but also their academic performance. In other words, the organizations maintain it's key for schools to provide students with nutritious foods and beverages and also to teach them why eating well is important.

School nutrition is especially important for kids from low-income families that cannot afford the generally more expensive nutritious foods and beverages or kids who live in food deserts, where full-service grocery stores are non-existent and fast food restaurants and convenience stores are abundant. For these children, consuming healthy foods and beverages simply is not an option. Nutritious foods and beverages may literally be out of reach for their families due to cost or location. Some children face both problems and must rely on cheaper, less nutritious fare to try to fill their hungry stomachs.

We've certainly long known that a nutritious start each day can lead to positive academic outcomes. A review of 50 studies, which appeared in the September 2011 issue of the *Journal of School Health*, points to growing research that reveals that skipping breakfast hurts kids' overall

cognitive performance as demonstrated through their levels of alertness, attention, memory, problem solving and mathematics skills.

According to a 2013 national report by Share Our Strength's *No Kid Hungry* campaign, done in collaboration with Deloitte, on average students who eat school breakfast have been shown to attend 1.5 more days of school per year *and* score 17.5 percent higher on standardized math tests. The study, *Ending Child Hunger: A Social Impact Analysis*, highlights the link between breakfast and academic performance with a snapshot of results in Maryland, where schools serving breakfast in their classrooms experienced as much as a 7.2% lower rate of chronic absenteeism and students in schools serving breakfast in their classrooms were up to 12.5% more likely to achieve proficiency on standardized math tests.

***I was overwhelmed by the number of studies linking a healthy breakfast to kids doing better in school.***

Unfortunately, not all hungry kids take advantage of in-school access to healthy meals. Food Research and Action Center reports, for instance, that only 12.5 million of the nation's 55 million public and private school kids participated in the national School Breakfast Program during the 2011-2012 school year. Meanwhile, the U.S. Department of Agriculture notes that during the 2011 fiscal year, 31.8 million participated in the National School Lunch Program. This could mean that nearly 20 million hungry children start their day without a healthy breakfast.





That's not the case at Irish Elementary School in Fort Collins, Colo., where all students now eat a free healthy breakfast in the classroom thanks to the efforts of a concerned parent who made it her mission to ensure children are nourished and ready to learn.

"I was overwhelmed by the number of studies linking a healthy breakfast to kids doing better in school," says Irish Elementary parent Linda Miller. "As soon as I learned about universal breakfast, I knew it was what we needed to do."

Before Irish Elementary instituted a universal (free) breakfast program, one of several effective school breakfast models, only a quarter of its students were eating breakfast in the cafeteria before school, even though nearly 80 percent qualify for the federally reimbursable breakfast program. Now, all of the school's students begin each day nourished and ready to learn.

Just as it is important to ensure that all kids have healthy food options to start out their day, it's also critical to ensure that kids have the information they need to make healthy eating decisions. Although this is an area of research that is still developing, we are beginning to see some hopeful signs. For example, a 2005 pilot study of 84 sixth-graders in Tulare County, California, who participated in *EatFit*, a nutrition education program designed to increase students' consumption of healthy morning meals and iron-rich food (while also promoting physical activity), shows such interventions can and *do* work.

Specifically, researchers found that during a five-week intervention period, when students received nine *EatFit* lessons, their scores were statistically higher in listening and speaking, mathematical reasoning and algebra functions (as measured by their standardized test performance) than during a five-week control period, when they received their usual classroom education. In short, a program which taught students about the importance of nutrition had the additional benefit of improving their math and English skills.

Yet, a hard reality in this country is many students don't have daily access to nutritious meals at home. In fact, the USDA found that during 2011, children in 3.9 million U.S. households did not always have adequate access to nutritious meals. Moreover, in 2011, 16.7 million children lived in households where nutritious food wasn't always available. Those children then, were likely at an academic disadvantage.

Given these circumstances, what can we do to increase the number of children eating healthy meals so they are ready to learn? One important avenue is extending the availability and participation in the National School Lunch and School Breakfast programs. Researchers examining the diets of 2,314 school children (K-12) throughout the United States found that school meals are important for ensuring children consume an adequate diet. Fortunately, the Healthy, Hunger-Free Kids Act of 2010 and the corresponding USDA updates to school meal nutrition standards, which took effect during the 2012-2013 school year, further improve the impact of school meals by requiring schools to offer kids fruits and vegetables every day, low-fat and non-fat dairy products and more whole-grains.

The USDA also has proposed new standards for competitive foods and beverages sold in schools for the 2014-2015 school year that, if approved, would mean low-nutrient sweetened beverages, salty chips and fatty snacks would not be stocked in school vending machines, or sold in school stores or a la carte. Instead, schools would offer more snacks with low-fat dairy, whole grains, fruits and vegetables, more water and lower calorie beverages. Although there is more work to be done, schools are making progress on student nutrition. That progress may prove not only to benefit students academically, but schools financially. In some school districts, that's already happening.



In recent years, the School District of Philadelphia increased nutrition education, swapped low-fat milk for sodas and sugar-sweetened drinks, implemented strict snack policies and got rid of deep-fat fryers. The local government supported the schools' efforts by launching *Get Healthy Philly*, a public-private campaign to educate business owners and citizens about measures they can take to improve children's health. Although childhood obesity is still at an alarming high (one in 12 Philadelphia kids is still severely obese), the obesity rate in Philadelphia schoolchildren dropped 5 percent from 2006-2010. (Similar efforts also have been successful in Boston and New York City.)





# Healthier Practices Can Increase Schools' Bottom Lines



Even before she had children herself, Emily Maynard of Taylorsville, Kentucky vowed to have a positive impact locally. In 2003, the jewelry designer launched her company, Elva Fields, pledging to donate \$3 of every online jewelry purchase to *Backpack Buddies*, a local charity that provides home snacks and meals for kids who don't always have access to nutritious food. Even as sales soared, she honored her commitment. Her company has since donated thousands of dollars, contributing to the year-round nourishment of about 200 local children annually. "My husband, a second grade teacher, would come home with stories about hungry kids who couldn't perform their best. I wanted to be a part of the solution," Maynard explains. And, she is.

School administrators across the country are finding that, despite fears to the contrary, students *will* actually buy and eat healthier foods and beverages when they have a chance. It's an indication schools that choose to sell healthy fare to bolster students' academic performance won't have to sacrifice the bottom line in the process. In fact, in some instances, schools actually get a financial boost by offering students more nutritious meals and snacks.

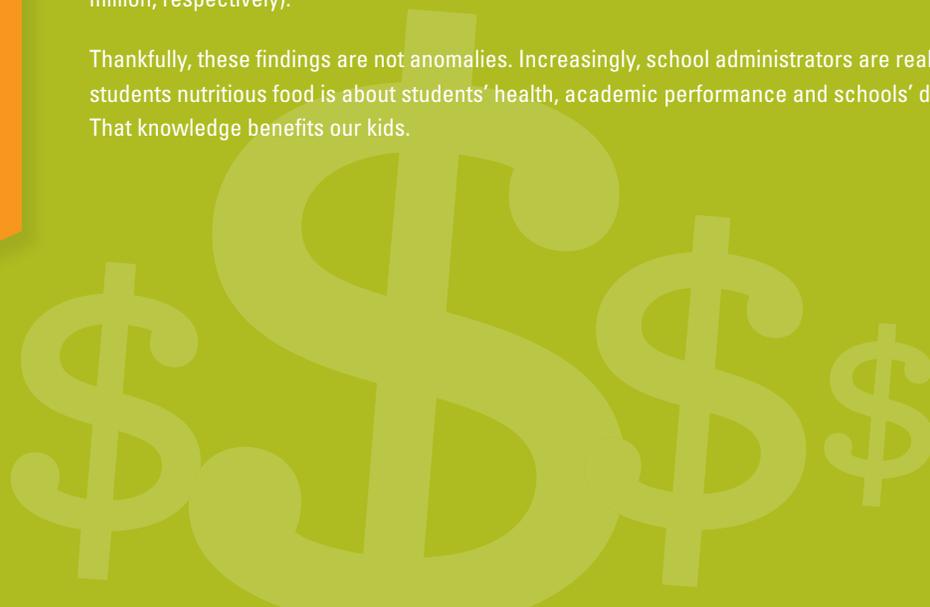
Consider this, for the 2005 report *Making it Happen! School Nutrition Success Stories*, the CDC polled 17 schools and districts around the country about their decisions to sell healthier foods and beverages and found that 71 percent experienced revenue increases while 24 percent had no change at all.

The San Francisco United School District certainly experienced the upside when it gave its school menus a nutritious overhaul. Gone were unhealthy foods, snacks and drinks from the lunch lines, snack bars and vending machines throughout the district's elementary, middle and high schools. In their places were fruits, vegetables, trail mix and the like. And the students responded positively. Administrators discovered that after the overhaul, National School Lunch Program participation increased by a mean of 640 individual school lunches per school.

In fact, a side-by-side comparison of the district's middle school that was the first to put the new nutrition standards in place and a much larger middle school in the district (50 percent more students) shows offering healthier food and beverages pays. Within two months of offering its new standards, the smaller school generated exponentially more monthly revenue from increased participation in the National School Lunch Program (more than \$2,000) than the larger school (less than \$90), where students could still buy soda and fast food.

There's even good news for school food service directors who are concerned about balancing the cost of healthier food options against federal reimbursements for school meals. A three-year (2006-2009) study of 42 middle schools in five states – reported in the September 2012 issue of *Journal of School Health* – suggests health-promoting school food service policies do not have a negative impact on food service finances. Instead, in these schools, where 50 percent of the students were eligible for free or reduced priced lunch (or belonged to a minority group), there were no significant revenue and expense differences between the buildings that received more nutritious food options (about half of the study's participants) and those that didn't. Even better, there was a trend for the schools receiving the healthier options to have more excess revenue over expenses than the schools that did not (\$3.5 million and \$2.4 million, respectively).

Thankfully, these findings are not anomalies. Increasingly, school administrators are realizing that serving students nutritious food is about students' health, academic performance and schools' dollars and cents. That knowledge benefits our kids.



# Working Together To Make Schools Healthier

At school and at home, every adult has a role to play in helping our own children, and the kids in our communities, be healthy and ready to learn. Fortunately, many committed adults around the country already are doing their part to increase opportunities for kids to play and eat well.

The Olathe Wesleyan Church in Olathe, Kan. is among them. Members of the 80-person congregation help local children by coordinating a free soccer program for a nearby elementary school. Coaches from a local team volunteer their time and the church pays for equipment and shirts. Director of Outreach Daniel Smith says it's gratifying to see the program's impact on the students. "Teachers tell us the kids are learning to behave and act better in school," he says.

The Olathe program is just one example of how citizens and schools can work together to improve kids' health so they can succeed in the classroom. Now, it's time for you to play your part by assessing what's going on in your local school.

- Does your school offer physical activity to all students?
- Does your school offer daily PE?
- Does your school offer *only* healthy food and beverages in conjunction with quality nutrition education?
- Does your school offer students daily, nutritious breakfasts?
- Does your school have an existing school health team that ensures student health is a priority?
- Is your school doing everything it can do to make sure kids are healthy and ready to learn?

## Take The *Every Kid Healthy Pledge!*

If you answered no to any of these questions, there's room for your school to improve and you can make it happen! Through our *Commitment to Change*, Action for Healthy Kids provides parents, educators, school administrators and school health volunteers with a blueprint to transform schools into healthier environments for kids by:

- Ensuring that every school is guided by a regularly updated wellness policy
- Providing all students, from pre-kindergarten through 12th grade, with culturally-sensitive physical activity and healthy eating educational programs
- Ensuring children and adolescents get at least 60 minutes of physical activity daily
- Making sure that all school foods meet the nutrition standards promoted in *Dietary Guidelines for Americans*



To read the entire *Commitment to Change*, visit [ActionforHealthykids.org](http://ActionforHealthykids.org). We'll help you prepare the students in your life so they're ready to learn. In one minute of your time, you can also take the *Every Kid Healthy Pledge* on our homepage and we'll connect you to:

### **PROGRAMS**

Numerous **free** programs and resources are available from Action for Healthy Kids and dozens of our partners – everything from a Parent Toolkit that will help you work with your local school to make healthy changes or webinars on a variety of in-school wellness issues to fun-for-kids health nutrition and physical activity programs for your school like *Game On! The Ultimate Wellness Challenge*, *Fuel Up to Play 60* and *Students Taking Charge*.

### **VOLUNTEER OPPORTUNITIES**

Action for Healthy Kids has a variety of ways you can make a difference in your school, community and the lives of students. Whether you have a few minutes a day or several hours a month, you can help create healthy changes in schools. We'll support you every step of the way!

### **OUR PARTNERS**

Action for Healthy Kids has dozens of partners that are among the most versed on issues of childhood obesity, student health and school wellness. By taking the *Pledge*, we'll keep you updated on their latest opportunities, and help you access their tools and resources through our online Resource Clearinghouse.

### **SCHOOL GRANTS**

You'll even have access to Action for Healthy Kids' *School Grants for Healthy Kids*, which provide funding to make changes happen in your school.

**The health crisis facing our kids didn't happen overnight and it certainly wasn't created in schools. But the reality is, schools are our best hope for effecting change for our kids. Yet, they can't do it alone. Individual volunteers, corporations, state and local governments and local businesses can all share their time, resources, and expertise to help schools meet this responsibility. Together, we can put the nation's 55 million school children on a healthier path.**

# Acknowledgments

***Action for Healthy Kids would like to extend a special thanks to the following education, nutrition, physical activity, childhood obesity, and other experts whose critical review, insight, and guidance helped shape this report.***

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***Sharon Adams-Taylor***

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Children's Initiatives and Program Development  
American Association of School Administrators

***Derrick W. Byrd, M.P.A.***

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Team Lead, Research Application & Evaluation Team  
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Division of Population Health  
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Senior Advisor; Division of Nutrition, Physical Activity,  
and Obesity; Centers for Disease Control and Prevention

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***This report was made possible by a generous grant from Northwestern Mutual Foundation.***

Northwestern Mutual has a long history of giving back to local communities through the financial support of our foundation and the volunteer commitment of our employees and field force. The mission of the Northwestern Mutual Foundation is to build strong, vibrant communities that serve as a legacy to future generations. From our home base in Milwaukee, WI, and all across America, for our business to succeed, the communities in which we operate need to be strong and provide a high quality of life for everyone.

Whether it's via our national childhood cancer program, our support of capacity building efforts in targeted Milwaukee neighborhoods, or our commitment to increasing the academic success for students in Milwaukee, we focus on doing what we can to present future generations with a true foundation for life.

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