

# Building a Healthy Wissahickon School District

2005-2012





**Wellness Initiative for the School Environment:  
Smart Nutrition and Activity Collaborative**

**ACKNOWLEDGEMENTS**

The successes of the WISE SNAC initiative could not have been attained without the generous cooperation of school administrators, faculty, staff, student, parents, and community partners in the Wissahickon School District. We are grateful for the time and commitment they gave to the partnership to help build a healthier Wissahickon School District.

WISE SNAC<sup>®</sup> would not have been possible without the generous financial support from the North Penn Community Health Foundation.



## BUILDING A HEALTHY WISSAHICKON

### BACKGROUND

Childhood obesity is a critical health concern. During the 2005-2006 school year 29% of WSD elementary students (K-4) were overweight or obese.<sup>1</sup> Childhood obesity threatens the health of youth, putting them at greater risk for other chronic conditions, such as high blood pressure, Type 2 diabetes, asthma, heart disease, and other costly, debilitating chronic diseases that once affected primarily adults.

The North Penn Community Health Foundation (NPCHF) has long recognized that establishing healthy eating and physical activity habits among youth has the power to counteract the increasing prevalence of obesity and associated chronic conditions. In 2005, NPCHF committed \$1 million over several years towards childhood obesity prevention efforts in the greater North Penn region of Montgomery County, PA. At the time, NPCHF identified Health Promotion Council (HPC), with its long-term strategic goal to prevent and reduce the negative impact of childhood obesity through community-based programs, as an ideal partner.

In 2005, with sole funding from NPCHF, HPC launched the *Wellness Initiative for the School Environment: Smart Nutrition and Activity Collaborative (WISE SNAC)*. With a primary focus on elementary schools, WISE SNAC aims to reduce the prevalence of childhood obesity by fostering collaboration among school and community partners, providing training and capacity-building opportunities, and supporting the development of policies, practices, and environments that encourage healthy eating and physical activity.

Guided by the Centers for Disease Control and Prevention's (CDC) Coordinated School Health Program model (CSHP), WISE SNAC addresses healthy eating and physical activity by engaging stakeholders from eight key areas within the school environment (See Figure 1). CSHP also points to the importance of extending wellness efforts beyond the schools' doors to include families and community-based organizations in the wellness journey. As schools, community organizations, and parents adopt healthier habits, children become increasingly exposed to healthy eating and physical activity in all areas of their lives—where they live, learn, and play.

In 2005, Wissahickon School District (WSD) partnered with HPC to implement the WISE SNAC initiative in all seven district schools, with a primary focus on the five elementary schools.

In its role through WISE SNAC, HPC conducted a comprehensive needs assessment at WSD during the 2005-2006 school year. The needs assessment examined knowledge, attitudes, and behaviors among students, parents, and school staff regarding healthy eating and physical activity. Through the needs assessment, HPC identified the following assets and needs within the district<sup>1</sup>:

- Students recognize parents and classroom teachers as role models for healthy behaviors;
- Students, parents, and staff would benefit from improvements in daily health behaviors, such as breakfast consumption, and snack and beverage choices;
- More opportunities for physically activity were needed throughout the school day;
- Parents and school staff needed resources and tools in order to serve as role models and integrate healthy messages into the home and school environment; and
- A collaborative effort between home, school, and community had the potential to impact student behaviors and many of the challenges faced.

**Figure 1.**  
Coordinated School Health Program Model





In response to the WISE SNAC needs assessment and the 2004 Child Nutrition Act, a federal mandate requiring school districts to establish school wellness policies, WSD administrators spearheaded the development and adoption of the WSD student wellness policy and administrative guidelines in 2006. The policy and guidelines created specific requirements for school foods and physical activity and led to the establishment of a district-wide wellness committee. The wellness committee, comprised of 20 members representing district administrators, school nurses, parents, students, and community members, meets semi-annually to discuss the status of WSD wellness strategies and activities, address concerns with policy implementation, and advance the district's wellness program.

Following dissemination of the WISE SNAC needs assessment report in September 2006, HPC worked closely with WSD administrators and staff to implement the WISE SNAC initiative, which sought to enhance the district's capacity to successfully implement the student wellness policy and administrative guidelines.

Since WISE SNAC's inception, HPC and WSD have worked together to:

- Identify and prioritize school wellness goals;
- Increase opportunities for healthy eating and physical activity on school grounds;
- Build teacher and staff capacity to integrate healthy messages into the school environment;
- Apply evidence-based resources to support a healthier school environment; and
- Foster school and community partnerships to reinforce and expand efforts beyond the school walls.



In the 2011-2012 school year, HPC conducted a comprehensive reassessment to measure changes in eating and activity behaviors, knowledge and attitudes among students, parents, and school staff since the baseline assessment was conducted seven years earlier. HPC also conducted an environmental scan to identify policy and practice changes implemented in the school environment since the inception of the WISE SNAC initiative. The reassessment and environmental scan showed that WSD implemented a number of new policies and practices in order to establish and maintain a healthier school environment for students and faculty.

This report highlights just a few of the many successes WSD has achieved in partnership with HPC's WISE SNAC initiative, including the food environment, physical activity, and community engagement, as well as the impact each has had in changing students' behaviors, knowledge, and overall health.



## **PRIORITY AREA #1: THE FOOD ENVIRONMENT**

Since adoption of the student wellness policy, WSD and its food service provider, Chartwells Dining Services, have identified students' daily eating habits as a priority area for its health and wellness efforts. With assistance from the WISE SNAC initiative, WSD developed and implemented numerous strategies to support a healthy school food environment. Improvements to the food environment are noticeable, with 56% of parents reporting increased promotion of healthy eating at school, and 49% of faculty reporting increased opportunities for healthy eating.<sup>4,5</sup> These and other improvements in the school food environment are discussed in the following pages.

### *Food Services*

Chartwells supports the district's wellness goals through its Balanced Choices program. Chartwells' website notes, "Balanced Choices is Chartwells' award-winning program that provides healthy meal options, nutrition education and a meal guidance system for students which assist them in making the most nutritious options when selecting meals, snacks, and beverages at school. Each selection meets precise nutrition criteria and incorporates more whole grains, low-fat dairy, fruits, vegetables and low-fat options into the menu."<sup>6</sup>

Changes in the school cafeteria over the past seven years include:

- Increased vegetarian lunch options;
- Increased fresh fruits and vegetables, including entrée salads, salad bars, and school garden tastings;
- Reduced portion sizes on a la carte snack items; and
- Elimination of soda on the serving line and vending machines.

In addition to the cafeteria serving line, Chartwells worked with HPC through the WISE SNAC initiative to ensure vending machine food and beverage options included a mix of Balanced Choices options. Product placement techniques, such as placing water as the first and most visible choice, were applied to ensure healthy choices were the most convenient choice for students and school staff.

### *Student engagement and nutrition education*

WSD recognized that offering healthy food options alone would not lead to healthier students—students must *choose* to eat the healthy options available to them at school. To capture input from students, Chartwells established Youth Menu Committees at all seven schools, allowing students to taste test healthier products and share opinions and suggestions for healthy foods and meals that students would be willing to purchase and eat in the cafeteria.

At the elementary level, Chartwells provided nutrition education materials to connect the cafeteria to the classroom, including highlighting a fruit or vegetable each month. Students are taking notice to these nutrition messages, with 72% of elementary students at follow-up reporting that they have seen messages about healthy eating in the cafeteria at their school.<sup>2</sup>



Photos courtesy of Chartwells Dining Services, Blue Bell Elementary School 2010.

## *Breakfast*

Expansion of the Wissahickon School Breakfast Program led to more students starting their day with a healthy breakfast. Studies show that, compared with students who do not eat breakfast, students who eat breakfast maintain improved nutrition, are less likely to be overweight, and are likely to perform better on standardized tests.<sup>7</sup> At the time of WISE SNAC's baseline assessment in 2005, approximately one in five WSD students reported that they were not eating breakfast on most days of the week<sup>1</sup>. At that time, only one school in the district offered a breakfast program. Recognizing the value of a healthy breakfast, WSD and Chartwells subsequently expanded the school breakfast program to include three district schools – Mattison Avenue, Shady Grove, and Wissahickon Middle School. In addition to traditional school breakfast programs, Grab n' Go breakfast programs were implemented to accommodate students arriving to school on later busses. Grab n' Go programs allow students to pick up breakfast and eat it when and where they want, within school guidelines, making it easier for students to eat breakfast at school. Today approximately 5% of the student population at Mattison Avenue, Shady Grove, and Wissahickon Middle School participate in the school breakfast program. Further, follow-up assessment revealed that more students across the district are eating breakfast everyday. During the 2011-2012 school year, 86% of Wissahickon students reported eating breakfast on most days of the week, a 7% increase from baseline assessment.<sup>2,3</sup>



### **Shady Grove Elementary School Promotes Healthier School Breakfasts**

Shady Grove elementary school maintains a model school breakfast program. The three components to Shady Grove's success have been (1) healthy options, (2) convenience, and (3) education.

#### *Healthy Options*

Breakfasts served in schools as part of the National School Breakfast Program must meet federal nutrition standards based on the latest Dietary Guidelines for Americans. While revised nutrition standards and meal patterns for school breakfast programs will become mandatory beginning in 2013-2014 school year, Shady Grove elementary took a proactive approach by working with Chartwells to identify healthier breakfast options to offer students during the 2011-2012 school year. Items such as fruit juice were replaced with healthier alternatives such as fresh fruit, and reduced sugar, whole-grain cereals replaced cereals with a higher sugar content.

#### *Convenience*

Not only have Shady Grove elementary and Chartwells worked to change the nutritional quality of breakfast items offered, but they have made changes to the breakfast operations too. Shady Grove elementary was the first school in the district to adopt the Grab n' Go breakfast model. Recognized by Share Our Strength as a best practice strategy to increase student participation in school breakfast programs, a Grab n' Go Breakfast Program is an alternative meal service model that allows students to obtain breakfast on their way to the classroom.<sup>8</sup> This model provides added convenience to students and results in higher consumption of breakfast among students.

#### *Education*

Raising awareness and educating students about the importance of breakfast was also critical to Shady Grove's success. In 2011, Chartwells and HPC, in its role through WISE SNAC, partnered with Shady Grove staff to host a school breakfast resource table at the annual Shady Grove Health Fair. At the health fair, Chartwells and HPC provided a mini-lesson on the importance of breakfast, as well as some tasty breakfast samples.

### *Classroom Parties and Celebrations*

The WSD student wellness policy encourages classroom parties to offer healthy food choices and integrate opportunities for physical activity. Healthy food options include fresh fruits and vegetables, water, low-fat dairy choices, and a selection of peanut/tree-nut free choices. Further, Chartwells developed a Healthy Classroom Party program that offers parents the opportunity to order healthy options and have them prepared and delivered directly to the classroom by Chartwells. Changes in policy and access to resources led to noticeable changes in classroom celebrations. During the 2011-2012 school year, 51% of students reported that classroom parties included healthy food options most of the time, and 39% of faculty reported that at least half of all classroom parties offer healthy choices.<sup>2,3,5</sup>

### *Fundraisers*

Many WSD student groups and clubs, parent organizations, and sport teams rely on fundraising activities to support events and purchase equipment and program supplies that are not included in the schools' budget. The WSD student wellness policy encourages school groups to explore creative opportunities to raise funds with healthy and/or non-food items. As a result of communicating the student wellness policy fundraising guidelines to school staff, students, and parents, WSD fundraisers have evolved to incorporate more non-food items, such as spirit wear, candles, and wrapping paper.

### *Outcomes*

Efforts to transform the school food environment to support healthy eating have led to many positive changes within WSD schools, including:

- Increased fresh fruit and vegetable options, including a monthly salad bar in elementary schools;
- Decreased portion sizes for a la carte snack items;
- Increased school breakfast programs;
- Healthier classroom party practices, including healthier food options and physical activities; and
- Elimination of sugar-sweetened soda in all schools.

In 2011-2012, students acknowledged healthier options are available at their school:<sup>2,3</sup>

- 48% of elementary students reported more fruit choices are available;
- 42% of elementary students reported more breakfast options are available;
- 52% and 42% of elementary students reported classroom parties frequently include healthy foods and physical activities, respectively; and
- 40% of secondary students reported fewer soda options available.

### **Wissahickon Health Careers and Awareness Club Promotes Healthy Eating**

In 2009, Wissahickon High School's Health Careers and Awareness Club hosted the first annual Healthy Food Banquet fundraiser. The banquet grew from the leadership of a WSD student and funding support from the North Penn Community Health Foundation's Health Education Mini-grant Program. The annual fundraiser event serves to promote healthy eating and educate high school students, their families, and school staff about healthy choices. Chartwells Dining Services prepares a healthy dinner, and provides a brief overview of preparation methods and health benefits of the meal that is served. Students prepare healthy appetizer and dessert options for attendees to taste test at the event.

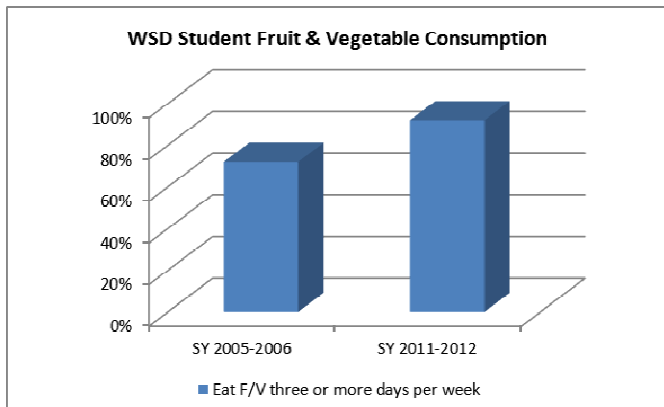
In addition, the Club creates and distributes recipe books which feature their appetizers and desserts served at the event. Participation in the event has grown since its inception in 2009, with over 100 students, parents, and staff participating in the third annual Healthy Food Banquet on April 28, 2011.



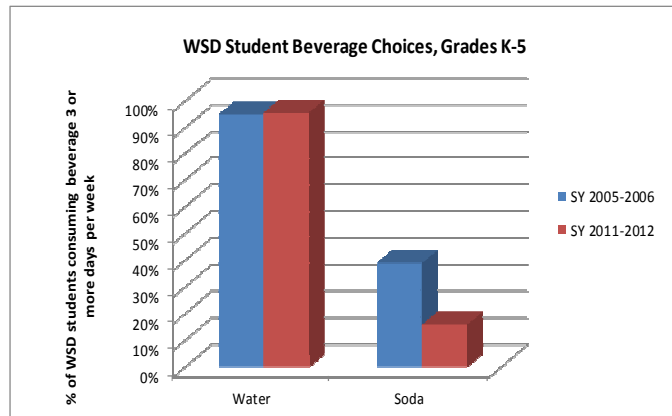
As a result of WSD’s wellness efforts at school and complementary efforts at home and in the community, WSD students reported adopting healthier eating habits:<sup>2,3</sup>

- 92% reported eating fruits and vegetables at least three days per week - up from 72% at baseline (Figure 2);
- 86% reported eating breakfast daily - up from 79% at baseline; and
- 16% reported drinking soda three or more days a week - down from 39% at baseline (Figure 3).

**Figure 2.**



**Figure 3.**



**PRIORITY AREA #2: PHYSICAL ACTIVITY**

While changes to the food environment have primarily been initiated at the district level, individual schools have spearheaded efforts to increase physical activity before, during and after the school day.

Many schools have increased opportunities for physical activity by taking advantage of the NPCHF’s Health Education Mini-grant Program. Between 2005 and 2012, NPCHF awarded 19 health education mini-grants to WSD schools totaling \$13,380 to support school-based wellness activities. Mini-grants supported a variety of projects at all seven of the district’s schools including establishment of walking paths and before-school walking clubs, indoor recess programs, healthy eating and physical activity assembly programs, school gardens, and health fairs.

Recognizing that parents play an important role in their child’s eating and physical activity habits, several schools have utilized mini-grant funds to engage families in wellness activities, including family walks and fitness programs.

*Outcomes*

According to the WISE SNAC reassessment in 2012, 33% of parents reported an increase in promotion of physical activity at school between 2010 and 2012.<sup>4</sup> During the 2011-2012 school year, 83% of students reported that they participate in at least 30 minutes of physical activity on three or more days a week.<sup>2,3</sup> Further, more than half of parents reported an increase in their families’ interest in healthy eating and physical activity.<sup>4</sup> Increased parent and student interest in physical activity provides an opportunity for WSD to expand current efforts to ensure more opportunities are available before, during, and after school for students and their families to engage in physical activity.





### **Mattison Avenue Elementary Supports Healthy & Active Families**

On April 29, 2010, Mattison Avenue Elementary School hosted its first annual Family Fun and Fitness Night. The event transformed Mattison Avenue school into an “active zone,” with opportunities for students and their families to turn off the television and play schoolyard games, learn about nutritious snack options, and participate in a community walk around the neighborhood. Each school year the event draws more participation from students, parents, and community partners, with more than 50 students and parents participating in the 2011 Family Fun and Fitness Night.

Community partners have contributed to the success of Family Walk Night in a variety of ways. The Ambler YMCA and Montgomery County Health Department led a variety of kid-friendly games and made healthy snacks with the families. Abington Health’s Community Services and the North Penn Visiting Nurses Association offered health screenings, such as blood pressure screenings, for parents. Partnership TMA assisted with mapping a one-mile community walking route, engaged local police to ensure a safe walking route, and led the one-mile family walk around Ambler Borough. Lastly, the Wissahickon Valley Public Library has served as a mid-walk rest stop, providing entertainment, music, and dancing for kids and their families.



### **PRIORITY AREA #3: COMMUNITY ENGAGEMENT AND CROSS-DISTRICT COMMUNICATION**

The Coordinated School Health Program model highlights community involvement as an essential component of creating a healthy school environment. To this end, WSD administrators participate in health and wellness collaborative groups, including the Montgomery County Health Alliance and Greater North Penn Collaborative for Health and Human Services, to leverage resources for continued support of WSD wellness efforts and to stay abreast of community-based wellness services and programs available to the WSD community. Nutrition and wellness resources are made available to parents, staff, and community members through the WSD Nursing section of the WSD website.

Through the WISE SNAC initiative, WSD participated in cross-district wellness meetings with Souderton Area and North Penn school districts. Throughout the initiative, wellness teams comprised of administrators from each school district have convened quarterly to share best practices and evidence-based resources to support school wellness, and communicate district successes and challenges related to wellness policy implementation. For example, prior to expanding the Grab N’ Go Breakfast model at WSD, WSD administrators had the opportunity to visit neighboring Souderton Area School District to observe their successful Grab N’ Go program and learn best practices from Souderton’s implementation experience. Additionally, WSD shared its Healthy Classroom Party Program concept, facilitating adoption of similar programs at North Penn and Souderton Area school districts.

## **Overall Impact**

After seven years of WISE SNAC implementation, HPC worked with WSD during the 2011-2012 school year to evaluate changes in eating and activity behaviors, knowledge and attitudes among students, parents, and school staff since WISE SNAC's inception in 2005. HPC also conducted an environmental scan to identify school district policy and practice changes. Lastly, HPC analyzed aggregate student Body Mass Index (BMI) data, measured and reported annually by WSD nurses, to track changes in the prevalence of overweight and obesity among WSD students. The reassessment and environmental scan showed positive changes related to healthy eating and physical activity knowledge, attitudes, and behaviors, and identified opportunities, or next steps for fostering a healthy school environment.

As a result of WSD's wellness efforts at school and complementary efforts at home and in the community, more than half of students, parents, and staff reported an increase in knowledge and interest in healthy eating and physical activity.<sup>2,3,4,5</sup> Further, students reported adopting healthier habits.<sup>2,3</sup>

Most notably, however, is the decline in prevalence of overweight and obesity among students, supporting the notion that environmental support for healthy habits can help to turn the tide in the fight against childhood obesity.



Photos courtesy of Shady Grove Elementary Gallery, Wissahickon School District website

## **Wissahickon Gardens Expand Nutrition Education Beyond the Classroom**

Wissahickon Gardens, a collaborative project between WSD and Whole Foods Markets in North Wales, brings hands-on, experiential nutrition education to WSD students through a district-wide school garden project. Initiated through WISE SNAC, the partnership offers students, parents, and staff the opportunity to learn sustainable gardening skills, grow and taste healthy foods, and expand cooking skills.

School gardens range in size and variety of crops grown based on each school's interests and priorities. Many schools have integrated the school garden into classroom curriculum and the school meal program, while others have engaged students and their families to harvest produce for donation to Mattie Dixon Food Cupboard in Ambler.

Whole Foods Market also provides support for the production of *Wissahickon Cooks*, a monthly cooking show featuring WSD students and staff preparing garden-fresh recipes. In addition to Whole Foods Markets, the district has engaged additional community partners to enhance and expand garden-related programming, including "Garden Chat" workshops through Penn State Cooperative Extension. Additional support has been leveraged through generous community partners such as Montgomery County Health Department and the North Penn Community Health Foundation, as well as local businesses like Lowe's. The success of the Wissahickon Gardens and *Wissahickon Cooks* project led to state and national recognition. In 2010 Rachael Ray's YUM-O organization recognized Wissahickon Gardens and *Wissahickon Cooks* nationally as a best practice on its "How Cool is That" website. The following year, WSD, HPC, and Whole Foods were accepted to co-present at the Pennsylvania Nutrition Education Network's Annual Conference in Harrisburg, PA, raising awareness about the project to nutrition professionals across Pennsylvania.

### Wissahickon Student Weight Status

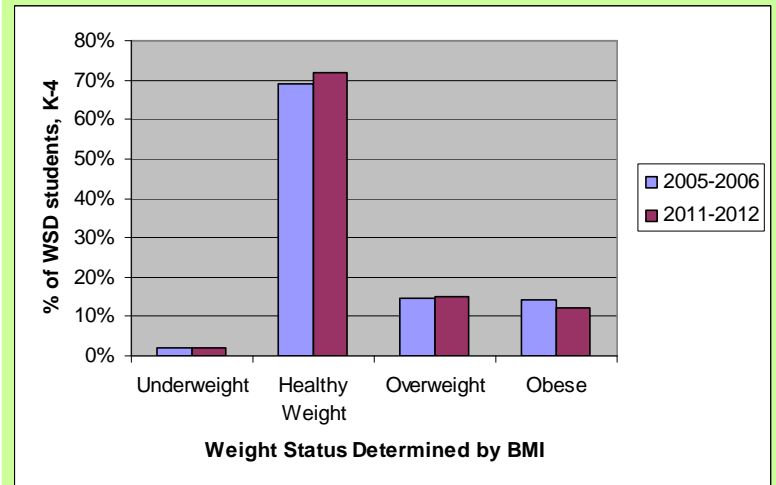
Beginning in the 2005-2006 school year, the Pennsylvania Department of Health required schools to measure and report student Body Mass Index (BMI) data as part of the Pennsylvania Growth Screening Program. BMI is a measure of weight in relation to height used to determine weight status. The Centers for Disease Control and Prevention acknowledges that BMI provides a reliable indicator of body fatness for most people and is used to screen for weight categories that may lead to health problems.<sup>9</sup> BMI is the most widely accepted method used to screen for overweight and obesity in children and adolescents.

Since WISE SNAC's inception, HPC partnered with school nurses to track student BMI to help determine the impact healthier school policies and practices have on student weight status. Figure 4 illustrates changes in weight status among elementary students (K-4) between the 2005-2006 and 2011-2012 school years at WSD.

Today, WSD is seeing the positive impact the WISE SNAC initiative is having across the district through a decrease in the prevalence of overweight and obesity in its student

population. In the 2011-2012 school year, 27% of WSD students (K-4) were overweight or obese – a 2% decrease since the launch of the WISE SNAC initiative seven years ago. The original cohort of K-4 students with BMI measured in 2005-2006 saw an even greater decrease from 29% to 21.5%, representing 114 sixth to tenth grade students at a healthier weight during the 2011-2012 school year than they were in the 2005-2006 school year.

Figure 4. Student Weight Status, Grades K-4, School Years 2005-2006 and 2011-2012



### Next Steps and Recommendations for Future Focus

While many positive changes have taken place during WSD's partnership with HPC, through the WISE SNAC initiative, opportunities remain to build upon current wellness efforts, including:

- Offer additional opportunities to engage students, parents, and staff in physical activity; and
- Identify strategies to increase student fruit and vegetable consumption.

#### *Offer Additional Opportunities to Engage Students, Parents, and Staff in Physical Activity*

While 83% of WSD students report participating in physical activity for 30 minutes or more at least three times per week; 87% of children across Montgomery County report a similar level of physical activity.<sup>2,3,11</sup> Further, national physical activity guidelines from the U.S. Department of Health and Human Services recommend children and adolescents participate in at least 60 minutes of moderate to vigorous physical activity daily.<sup>12</sup> Opportunities remain for WSD to expand on current efforts to integrate physical activity before, during, and after-school to ensure all students meet national physical activity recommendations.

Physical education staff are an important resource to the district and can provide guidance on how to integrate physical activity throughout the school environment. PE staff can assist the district in identifying resources for classroom teachers to integrate energizer physical activity breaks and transitional activities into the classroom; engaging staff and parents to integrate physical activity into classroom parties and celebrations; and partnering with community partners and other school staff to host family fitness and fun nights throughout the school year.

#### *Increase Student Fruit and Vegetable Consumption*

While more students are eating fruits and vegetables each week compared to WISE SNAC baseline data, only one in four students reported consuming the recommended five servings or more per day during the 2011-2012 school year.<sup>2,3</sup> Opportunities remain for the district to build upon the current efforts and expand the quantity and variety of fruit and vegetable options available to students during the school day.

School meal programs, vending machines, a la carte snack items in the cafeteria, classroom parties and celebrations, school stores, and fundraisers all provide an opportunity to add fruits and vegetables to students' diets. Schools should continue to engage students in the meal planning process, including taste testing events and menu committees, to ensure healthier options added to school meal programs are options that appeal to WSD students.

Periodic monitoring and review of the WSD student wellness policy implementation and school wellness efforts are critical to understanding the districts priorities and needs. Having a clear understanding of these priorities and needs will ensure wellness continues to be central to the WSD culture. The WSD Wellness Committee can take on this leadership role to ensure schools have the necessary support and resources to make available opportunities for healthy eating and physical activity.



Lastly, it is important to recognize that creating healthier schools, families, and communities, requires a coordinated, comprehensive approach, and that schools should not be expected to undertake wellness on their own. WSD must identify key partners, including community organizations and parents, and engage these partners to leverage resources and bolster efforts to sustain and enhance wellness efforts for years to come.

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