September 2006
Final Needs Assessment Report

WISE SNAC©
Building Healthy Schools & Communities

Health Promotion Council - 260 South Broad Street - Philadelphia PA 19102

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

ACKNOWLEDGEMENTS

This report could not have been produced without the generous cooperation of school administrators, faculty/staff, students and parents/guardians in the Wissahickon and Souderton Area School Districts. We are grateful for the time and commitment they gave us during this assessment phase of WISE SNAC and look forward to partnering with them again during the implementation phase.

This initiative would not have been possible without the financial backing and support from the North Penn Community Health Foundation. The research and evaluation team at the University of Pennsylvania provided essential assistance to carry out project objectives. We would also like to thank the many community organizations who have supported our efforts in the North Penn Community and look forward to future partnerships and efforts to create a healthier population. Lastly, we would like to thank the Pennsylvania Advocates for Nutrition and Activity (PANA) for lending their resources and expert guidance.

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EXECUTIVE SUMMARY

Purpose: Overweight children carry a greater risk of becoming obese adults and developing adverse health effects, such as heart disease and diabetes. The purpose of this initiative is to combat childhood obesity **by creating conditions that promote healthy nutrition and physical activity as a lifelong commitment particularly for faculty, students and families through integrated activities in schools and communities.** An initial fifteen-month needs assessment was conducted to gather information to determine the most effective way to achieve this long-term goal.

Methodology: As part of the needs assessment; surveys, focus groups and key-informant interviews were conducted with students, parents/guardians, faculty/staff and school administrators in the Wissahickon School District (WSD) and the Souderton Area School District (SASD). This report is based upon an intensive examination of results from 3,168 surveys, 20 focus groups and 15 key informant interviews. Data was gathered between August 2005 and April 2006. The evidence-based Coordinated School Health Program Model developed by the Centers for Disease Control, provided the framework for the needs assessment.

Key Findings: Our findings address two key questions: 1) What are the attitudes and behaviors of students parents/guardians, faculty/staff and administrators on nutrition and physical activity, particularly in the school environment and 2) How can messages about healthy eating and physical activity be successfully integrated into the school environment.

Students can improve upon healthy behaviors by eating breakfast everyday, making consistently healthy food choices between meals and selecting water and milk/milk substitute beverages everyday. Likewise, students can reduce the frequency of consuming chips, sweets, soda and juice. Findings indicate that all cohorts have an accurate understanding of what constitutes good nutrition and physical activity; however, knowledge does not always translate into behavior. For instance, SASD students were significantly more likely to report choosing chips and sweets between meals than students of WSD. In addition, the majority of students in both districts view parents/guardians and faculty/staff, especially physical education/health teachers, as their role models for healthy lifestyles.

Student snacking behaviors appear to be related to shopping behaviors of parents/guardians. This is demonstrated by nearly half of the parents/guardians stating that they buy chips or sweets on a regular basis when they shop. Also, parents/guardians from SASD were more likely to say that time constraints make it difficult to prepare healthy meals for their family and less likely to say that they choose meals when eating out based on what they believe is healthy. Parents/guardians want to reinforce the positive health messages provided in the schools and, in order to implement this, they need resources and strategies. Newsletters and the school web site are the preferred methods for receiving information from the schools. In contrast, students indicate that their parents/guardians do not exercise with them because they are “too busy doing adult things”.

The capacity and interest of faculty/staff to integrate nutrition and physical activity into the school day was highlighted in the needs assessment. Overall, faculty/staff agree that integrating

nutrition and physical activity messages into the current curricula is possible. While two thirds of faculty/staff indicated that they do not currently have access to curricula on nutrition and physical activity, nearly half said they had already made changes to their classroom teaching plan to focus on healthy eating habits, exercise and fitness. Additionally, the majority of faculty/staff are willing to participate in training to learn more about teaching nutrition and physical activity in the classroom, with a preference for school-based in-service training, followed by off-site seminars and on-line self-study. Faculty/staff responded that they would need materials/supplies (94%), time (91%), training (80%), and teaching assistance (39%) to effectively teach nutrition and physical activity in the schools.

School administration was generally supportive of incorporating and enhancing nutrition and physical activity messages in the schools. In order to assist faculty/staff efforts to integrate nutrition and physical activity in the classroom, nearly all administrators were willing to support on- and off-site seminars and ACT 48 continuing education credits. This support also extends to purchasing resources and materials for curricula integration. Differences in the policies and procedures of each district require tailored approaches.

Conclusions: The needs assessment in both school districts revealed opportunities for promoting good nutrition and physical activity in both the home and school environments. A number of significant differences in attitudes and behaviors of students, parents/guardians, faculty/staff, and administrators were identified between the two school districts, which suggests that any approach to implement change must be tailored to the specific needs of each community.

When it comes to specific pathways to promoting healthy eating and exercise habits among students, there were two areas of agreement for parents/guardians and faculty/staff: 1) students need more opportunities to be physically active throughout the school day and 2) readily available resources and tools are needed to assist parents/guardians and faculty/staff in helping children.

A predominant theme throughout the needs assessment was that school administrators are willing to provide proper materials, resources and training for faculty/staff to integrate nutrition and physical activity into the curricula, as well as, partner with parents/guardians in a coordinated effort to improve the habits of their students. Further, this supports faculty/staff beliefs that they cannot impact the health of children on their own.

The Coordinated School Health Program model encourages community involvement, however, the assessment highlighted that further investigation and discussion are needed to determine how and with whom to partner. While there were a number of general positive comments made about potential community resources, such as the YMCA and local grocery stores, specific ideas about how to partner with those entities were not made evident. Overall, as viewed by the schools, the key partnership to successfully promoting healthy behaviors among students is the one between parents/guardians, faculty/staff and administrators where there are opportunities for reinforcing consistent messages to create a coordinated and meaningful effort in promoting a healthy school environment.

INTRODUCTION

As childhood obesity rates in the United States reach an unprecedented high, the Surgeon General has declared that our country may be raising the first generation of children who will not live as long as their parents. Overweight children carry a greater risk of becoming obese adults and developing adverse health effects, such as heart disease and diabetes. A long-term strategic goal of the Health Promotion Council of Southeastern Pennsylvania (HPC) is to prevent and reduce the negative impact of childhood obesity through community-based programs. Also committed to combating childhood obesity, the North Penn Community Health Foundation provided funding to HPC for a fifteen-month pilot initiative titled, *Wellness Initiative for the School Environment: Smart Nutrition and Activity Collaborative (WISE SNAC).* The long-term goal of this initiative is to create conditions that promote healthy nutrition and physical activity as a lifelong commitment for students, families, and faculty through integrated activities in schools and communities.

The first phase of this initiative entailed conducting a comprehensive needs assessment followed by the development of an implementation plan. This pilot project targets a total of seven elementary schools in Montgomery County, Pennsylvania with four main proposed objectives:

- Assist in establishing a foundation for the *School Advisory Health Council*
- Provide technical assistance and resources for the development of the district's *Local Wellness Policy*
- Utilize the Coordinated School Health Program (CSHP) model to assess, coordinate and enhance nutrition and physical activity messages in the school environment and activities outside of the school day;
- Develop the capacity of administration, faculty, staff and parents to become role models for students.

In order to support these objectives, the needs assessment aimed to:

- Identify general knowledge, behaviors and attitudes of students and parents/guardians as they relate to good nutrition and physical activity.
- Examine attitudes and behaviors of faculty/staff and school administrators toward integration of wellness messages focused on nutrition and physical activity into the school curriculum.
- Discover barriers and facilitators to implementing the Local Wellness Policy and nutrition/physical activity programs in the school environment as identified by students, parents/guardians, faculty/staff and school administrators.

Answering these questions is an essential first step to designing and implementing successful programs that will aid school districts in creating healthier schools and communities. This document is organized to reflect the WISE SNAC needs assessment process and to report the findings in the order in which they were collected.

METHODS

Sample

The needs assessment was conducted with a sample of 5,790 students, parents/guardians, faculty/staff and administrators from five elementary schools in the Wissachickon School District (WSD) and two elementary schools in the Souderton Area School District (SASD). The pilot schools were chosen by the administration of each district and included Lower Gwynedd, Mattison Avenue, Blue Bell, Shady Grove and Stony Creek Elementary Schools in WSD and E. Merton Crouthamel and West Broad Street Elementary Schools in SASD.

Data Collection

Qualitative and quantitative methods were used to gather baseline data between August 2005 and April 2006. HPC staff obtained all data within school district policies and protocols. This report is based upon an intensive examination of results from 15 key informant interviews, 3,168 surveys (2,442 student surveys, 608 parent/guardian surveys, 118 faculty/staff surveys, 15 administration surveys), and 20 focus groups (six student focus groups, six parent/guardian, seven faculty/staff focus groups, one principal focus group).

Another measure included in this report is the Body Mass Index (BMI) of students, which was collected and reported by school districts, as mandated by the Pennsylvania Department of Health- starting with K-4th grades in the 2005-06 school year. BMI provides a reasonable index of adiposity that is based on a calculation of the ratio of weight to height that is reliable, non-intrusive and has been validated against measures of body density[1]. In children, the BMI is plotted on the Centers for Disease Control and Prevention Growth Charts to obtain a percentile ranking that is specific to age and gender[2]. BMI provides a consistent screening and tracking tool used to determine whether a child is within a normal growth pattern, underweight, at risk for overweight or overweight.

- *Key Informant Interviews*

Key informant interviews included a purposive sampling of key decision-making administrators serving the two school districts before data collection began and continued throughout the needs assessment phase. These interviews were critical in establishing effective communication systems, procedures, logistics and the coordination of the needs assessment within each school district. Key informants revealed additional staff, such as physical education/health teachers, school nurses and food service personnel. These interviews served to create further buy-in from the school districts and gain further insight into ideas and strategies for future WISE SNAC development. Each district's local wellness policy committee also contributed meaningful data.

All meetings were recorded and transcribed by HPC's WISE SNAC Project Coordinator as a part of the data collection and maintenance process. Specific details about how key informant

[1] Pennsylvania Department of Health (2004). "Procedures for the Growth Screening Program for Pennsylvania's School-age Population." Retrieved on September 7, 2006 from: www.dsf.health.state.pa.us/health/lib/health/schoolhealth/growthmanual061604.pdf

[2] Centers for Disease Contol and Prevention (2006). "BMI — Body Mass Index: About BMI for Children and Teens." Retrieved on September 7, 2006 from: http://www.cdc.gov/nccdphp/dnpa/bmi/childrens_BMI/about_childrens_BMI.htm

interviews were instrumental in the need assessment process are described throughout the sections below.

- *Surveys*

Health Promotion Council (HPC) staff developed the surveys using existing models and resources within the organization and those found through an exhaustive literature search. Key informant interviews were conducted through well-coordinated meetings, emails and phone calls with administration and technology staff from WSD and SASD to finalize and approve surveys, procedures and methods. Surveys were collected anonymously, identifying only the school and grade level for students and parents/guardians and the school building for faculty/staff. WISE SNAC entailed a significant "kick-off" period to bring awareness about the project and recruit survey participants within all cohorts. Survey recruitment methods are summarized in Table 1.

Table 1. Survey Recruitment Methods

Target Population	Souderton Area School District		Wissahickon School District				
	E Merton Crouthamel	West Broad Street	Blue Bell	Lower Gwynedd	Mattison Avenue	Shady Grove	Stony Creek
Students (K-2)	Classroom Teacher		Physical Education / Health Teacher				
Students (3-5)	Technology Teacher		Physical Education / Health Teacher				
Parents / Guardians	Flyers home[1] School Newsletter Home and School Meeting Indian Valley Boys & Girls Club Parent-Teacher Conferences		Flyers home Parent-Teacher Conferences				
Faculty/Staff	Letter in mailbox Email Presentation at Faculty Meeting		Email				
Administration	Letter		Email				

[1] Flyers were also translated into Vietnamese and Spanish.

Key informant interviews in each district identified which faculty and classroom settings would be utilized for administering student surveys. In both school districts, parents/guardians received a flyer via school packets sent home with students that provided a web site link for completing the surveys. At SASD, parents/guardians received an email with an invitation to complete the survey through a web site link. HPC staff also encouraged parents/guardians to complete surveys by distributing flyers at two family events, E. Merton Crouthamel's "Family Fun Night" at the Indian Valley Boys and Girls Club and the West Broad Street's Home and School Association's "Bingo Night." Locally grown apples and WISE SNAC pencils were provided by the HPC staff to support these events. Key informant interviews at WSD determined that opportunities to capture additional parents/guardians beyond those identified, as indicated in Table 1, were unavailable. In both districts, key informant interviews identified the optimal mechanisms to recruit faculty/staff and critical administrative personnel. Surveys were distributed in either paper or online format based on each district's policies and events, as summarized in Table 2.

Table 2. Survey Distribution Methods

Target Population	Souderton Area School District		Wissahickon School District				
	E. Merton Crouthamel	West Broad Street	Blue Bell	Lower Gwynedd	Mattison Avenue	Shady Grove	Stony Creek
Students (K-2)	Paper		Paper				
Students (3-5)	Online		Paper				
Parents / Guardians	Online / Paper		Online / Paper				
Faculty / Staff	Paper		Online				
Administration	Paper		Online				

All students in grades K-5 were surveyed and received WISE SNAC pencils as incentives. It was most feasible for grades K-2 at both districts and grades 3-5 at WSD to complete paper surveys. Technology class enabled online surveys for SASD students in grades 3-5. To help ensure consistency and reliability in data collection, classroom teachers were provided with a script for facilitating surveys.

In recognition that not all parents/guardians have computer access or skills, the districts offered both paper and online surveys. Opportunities for parents/guardians to complete surveys were provided at both districts during Parent-Teacher Conferences. At the two SASD schools, parents/guardians were invited to complete the survey on paper or use computers for online participation. HPC staff were available at SASD schools to encourage participation and assist Hispanic and Vietnamese families through translated surveys and the assistance of an interpreter.

Almost all faculty members in SASD participated in the survey, which was administered by HPC staff during their faculty meetings. Through an email that included a web link, principals at WSD invited their faculty members to complete the survey online. Nearly half of WSD faculty participated.

As determined by key informant interviews, SASD administrators received a survey with a corresponding letter by mail, with a self-addressed, stamped envelope for anonymous return to HPC. WSD administrators completed surveys by an email that included a web link. Surveys are available in Appendix A.

- *Focus Groups*

Focus groups were held to further expand upon survey findings and to identify areas of need and effective communication methods for nutrition and physical activity messages. Focus group guides were developed by HPC using responses to surveys and with input from district administration through key informant interviews. Focus group guides are located in Appendix B. Key informant interviews took place via verbal, written and online communication systems and guided focus group recruitment methodology summarized in Table 3.

Table 3. Focus Group Recruitment Methods

Target Population	Souderton Area School District		Wissahickon School District				
	E. Merton Crouthamel	West Broad Street	Blue Bell	Lower Gwynedd	Mattison Avenue	Shady Grove	Stony Creek
Students (Grades 2-5)	-Flyers home -IVBGC[1] staff assisted in picking random sample in after-school program		-HPC staff spoke directly with PE/Health Teacher (2) or Student Council faculty sponsor (2)				
Parents / Guardians	-Flyers home -School newsletter -Elementary School Homepage -Email invitations -HPC staff obtained sign-ups at IVBGC		-District Web Site -Elementary school Home Page -One (1) H&SA presentation for recruitment -One (1) school newsletter insert				
Faculty / Staff	-Flyers in mailboxes -Email announcement	-Faculty Meeting Presentation (HPC staff)	-Flyers in mailboxes -Email sent by each school's principal				
Administration	N/A[2]		Agenda item at monthly Principal's Meeting				

[1] IVBGC = Indian Valley Boys and Girls Club

[2] Administrators concerns were sufficiently addressed at key informant interviews.

Student focus groups targeted grades 2-5. Separate focus groups were conducted with students in four of the WSD schools. As a result of key informant interviews, SASD students from E. Merton Crouthamel and West Broad Street Elementary Schools were combined into two focus groups. A student focus group was not conducted at Mattison Avenue (WSD) due to limited time and school personnel to gather a group of students.

Parent/guardian focus groups were offered to all seven schools; focus groups were held for the two SASD schools and four schools in WSD. Paper and online announcements invited faculty/staff and parents/guardians to focus groups. For both districts, parent/guardians and faculty/staff were self-selected and confirmed attendance via email or phone to HPC staff. SASD utilized the facilities of the Indian Valley Boys and Girls Club (IVBGC) to recruit parents/guardians and students of the two pilot schools and to conduct focus groups. Parents/guardians of SASD's two elementary schools were combined in the two groups, also determined by the key informant process. In WSD, separate focus groups were held for Stony Creek and Shady Grove parents/guardians, while parents/guardians representing Lower Gwynedd and Mattison Avenue schools were combined into one group. Blue Bell was excluded due to scheduling conflicts and limited parent response to recruitment.

Faculty/staff focus groups were held at each of the seven schools. An additional focus group was held with WSD elementary school principals, as determined by key informant interviews, to identify differences between faculty and principal responses. This focus group also served as an opportunity to gather ideas for future programming and garner further buy-in for the initiative.

HPC's WISE SNAC Project Coordinator was the focus group moderator for all of the student, parent/guardian and faculty/staff focus groups, with the exception of WSD principals' focus group and one SASD parent/guardian group, which were moderated by the HPC Project Director. Exclusive of the students and one SASD parent/guardian group, focus groups were recorded with audiotape and an assistant accompanying the moderator took handwritten notes. Students were not audiotaped due to school district policies. Focus groups were transcribed by one person and verified by the focus group moderator. One parent/guardian group at SASD did not have audio recording due to equipment malfunction; however, the focus group moderator transcribed notes immediately following the session.

Incentives were provided to all focus group participants. Students received a "Certificate of Completion" and nutrition-related coloring book. Provision of incentives was announced in recruitment materials to parents/guardians and faculty/staff. Parents/guardians of both districts were provided with a Clemens $20 gift card. In addition to the Indian Valley Boys and Girls Club hosting the focus groups at SASD, they provided parent/guardian participants with a free, one-month membership for their children as an in-kind incentive. Participants in the faculty/staff and administration focus groups received a $20 gift certificate to a local restaurant that offers a selection of healthy food choices. Light refreshments were provided during all sessions.

Data Management

Key informant interviews identified each school district's online survey and data collection system. WSD's Technology and Data Analysis Supervisor employed the Zoomerang™ online survey software and SASD's Web Development Specialist programmed their Web-based surveys in ColdFusion. HPC was able to manage data from both school districts through communication with technology staff.

Responses from paper surveys were entered into Zoomerang™ by HPC staff. All online survey responses were compiled into each district's database. Data was reported in Microsoft® Excel spreadsheet format and provided to the University of Pennsylvania for statistical analysis.

Focus groups and key informant interviews were transcribed into Microsoft® Word. Key informant interviews were not recorded with audiotape; however, transcribed notes were verified for accuracy by all those interviewed.

Data Analysis

- *Survey Data*

Data from parent/guardian and student surveys was received from school districts free of identifying information. Responses to open-ended survey questions were coded and grouped using common key terms, which were then analyzed for frequency. An independent quantitative research consultant from the University of Pennsylvania used SPSS to run frequencies on each separate school district and comparisons between the two school districts using Chi Square and means/T-test, where a p value of $<.05$ indicates a significant observable difference between two groups.

Data from the faculty/staff and school administrator surveys was analyzed by a second quantitative research consultant, from University of Pennsylvania, using the statistical software package SAS. The same statistical tests were used to describe frequencies in each separate school district and to make comparisons between the two districts.

- *Focus Group Data*

Analysis of the focus group data followed a series of systematic steps in order to provide a structured approach to ground the flexible, exploratory nature of qualitative research. In order to protect confidentiality of subjects, transcripts of focus groups were "cleaned" of all identifying information. The "clean" electronic copy of each transcript was converted to plain text format and entered into Atlas-ti as 'primary documents' in the study database (called a 'hermeneutic unit'). Atlas-ti is a software program designed to assist in the management and analysis of qualitative data. Although the software can be used for operations such as theoretical modeling, for the purposes of this exploratory study Atlas-ti was used primarily to store and retrieve individual responses from focus group participants and interpretive memos written by the investigators to:

- Develop codes and definitions of codes.
- Compare coded material within and across focus groups.
- Search for specific use of language relevant to the study aims.
- Organize transcripts into "families" in order to compare the presence or absence of themes across and within focus groups.

The analytic process involved developing a coding scheme, coding the text, identifying primary themes, and finding connections among themes. The project team developed a coding tree structure, an important step in the analytic process. We used two methods of code development: *a priori* coding and *in vivo* coding. We developed *a priori* codes based on the research questions that drove the project. We also added *in vivo* codes, or new codes that emerged (that we had not thought of previously) as we read through the transcripts.

The qualitative consultant, contracted by the University of Pennsylvania, developed a working 'code book' for the project. This was done through a review of the codes created and used across and within transcripts to eliminate redundant codes, collapse multiple related codes into fewer codes, re-naming and defining codes to improve their conceptual meaning related to study aims, adding new codes as needed, and grouping associated codes into code 'families.'

Transcripts were sorted into “families” according to assigned variables (i.e. students/parents and SASD/WSD). This allowed for comparisons of relationships and concepts present in each family and between families.

Constant comparative method was used for data analysis, involving meticulous inspection of each line of text. Text is then tagged with appropriate codes. Codes are then grouped together into themes and then the relationships among themes are explored.

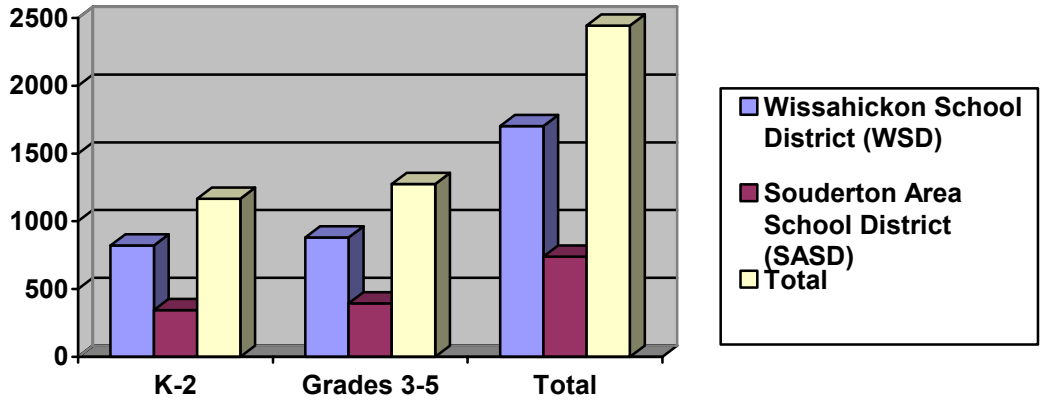
RESULTS

Sample

- *Survey Respondents*

Figure 1 displays a breakdown of the number of student respondents by grade level and school district.

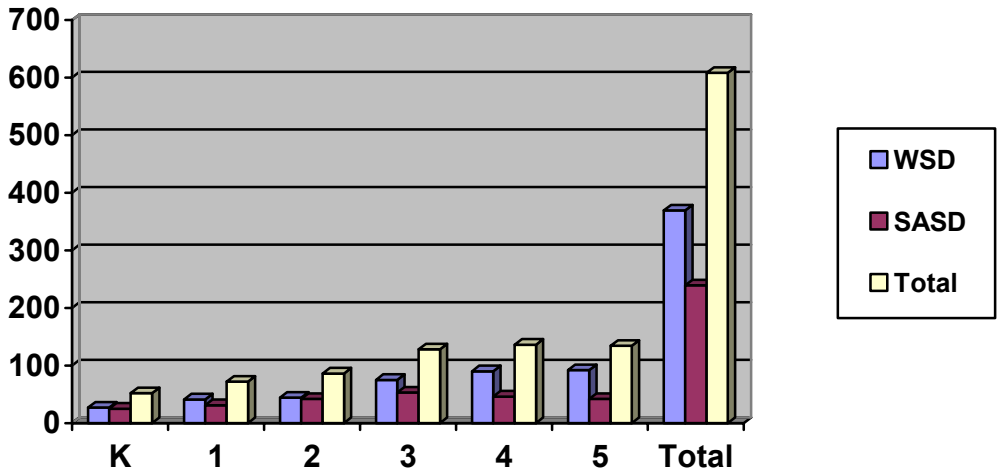
Figure 1. Number of Student Survey Respondents



In grades K-2, WSD had 822 students complete a survey and SASD had 345 (n=1167). In grades 3-5, 881 WSD students and 395 SASD students completed a survey (n=1276). WSD had a total of 1,703 students complete the survey; SASD had a total of 740 students (N=2,443).

Six hundred and eight parents/guardians of students in grades K-5 in WSD and SASD completed a survey (N= 608). Figure 2 shows the number of parent/guardian respondents in each district according to the grade of the oldest elementary school-aged child.

Figure 2.Number of Parent/Guardian Survey Respondents



Three hundred sixty-nine surveys were completed by WSD parents/guardians, and 239 were completed at SASD. Participation varied by grade. WSD had a minimum of 27 parent/guardian

respondents for grade K and a maximum of 92 for grade 5. SASD had a minimum of 25 parent/guardian respondents for grade K and a maximum of 53 for grade 3.

One hundred and eighteen faculty/staff completed the survey (N=108), 56 from SASD and 62 from WSD. Nine administrators completed the survey in WSD and 6 in SASD.

- *Focus Group Respondents*

Table 4 shows a summary of the number of focus group participants in each cohort for each school district.

Table 4. Focus Group Numbers Reached

School		Parent/Guardian	Faculty/Staff	Students
WSD	Blue Bell	0	10	8
	Lower Gwynedd	4	10	21
	Mattison Avenue	4	6	0 [a]
	Shady Grove	5	8	11
	Stony Creek	5	5	15
	TOTAL:	**18**	**39**	**55**
SASD	E Merton Crouthamel	8	5	9
	West Broad Street	5	10	5
	TOTAL:	**13**	**15**	**14**
TOTAL WSD & SASD:		**31**	**54**	**69**

[a] A student focus group was not conducted at Mattison Avenue (WSD) due to limited time and school personnel to gather a group of students

A total of 69 students participated in six focus groups. Five focus groups included 31 parents/guardians. Fifty-four faculty/staff participated in seven focus groups, and an additional focus group was conducted with five elementary school principals from WSD.

- *BMI Data*

In accordance the PA Growth Screening Program, all seven elementary schools reported Body Mass Index (BMI) data for a total of 4,772 students. This includes 3,082 children in SASD grades K-5 and 1,690 children in WSD grades K-4. Overall, an average of 29.5% had a BMI at or above the 85th percentile, which is the "at risk for overweight" or "overweight" category. Thirty percent of SASD students fell within these categories. More specifically, the target schools, E. Merton Crouthamel and West Broad Street, had 35% and 37% students above the 85th percentile, respectively. Tables 5 and 6 show BMI data for each of the two school districts in the 2005-2006 school year.

Table 5. WSD BMI Data Grades K-4

School	< 5%	85-95%	>95%	Total >85%
Blue Bell	3%	13%	13%	26%
Lower Gwynedd	1%	14%	13%	27%
Mattison Avenue	3%	16%	22%	38%
Shady Grove	1%	14%	12%	26%
Stony Creek	2%	16%	12%	28%
AVERAGE:	**2%**	**14.6%**	**14.4%**	**29%**

Table 6. SASD BMI Data Grades K-5

School	< 5%	85-95%	>95%	Total >85%
E. Merton Crouthamel	1.5%	18%	17%	35%
West Broad Street	1%	20%	17%	37%
Franconia	2%	19%	9%	28%
Lower Salford	<1%	18%	14%	32%
Oak Ridge	3%	16%	9%	25%
Salford Hills	<1%	19%	12%	31%
Vernfield	3%	13%	10%	23%
AVERAGE:	**1.8%**	**17.6%**	**12.6%**	**30%**

Main Findings

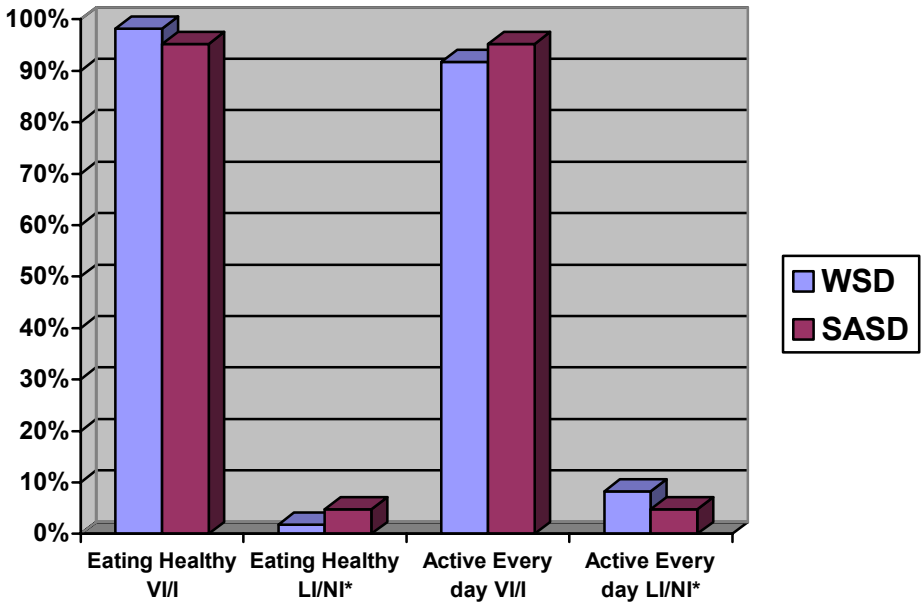
Guided by the Coordinated School Health Program model, the needs assessment was designed to focus on several cohorts in the school environment: students, parents/guardians, faculty/staff and administrators. Responses to surveys provided a broad overview of knowledge and attitudes about nutrition and physical activity, self-reported behaviors, and preferred methods of learning. Focus group discussions offered deeper insight into the challenges faced by principals, faculty/staff and parents/guardians in promoting healthy behaviors among students. They also revealed potential facilitators to creating change in the school environment. This section presents all of the survey findings followed by focus group results from each cohort – students, parents/guardians, faculty/staff, and administration. Statistically significant results that recognize a difference between the two districts are appropriately labeled.

- *Survey Results: Students*

Responses to the surveys indicate that students have an accurate understanding of what constitutes good nutrition and adequate physical activity. In surveys of students in grades K-2, 11% reported they do not eat breakfast every day. Greater than 90% were able to correctly identify a healthy food (i.e. a fruit, a vegetable vs. a cookie or hotdog) and an activity which uses the most energy (i.e. playing basketball vs. watching TV). Twenty percent were unable to correctly identify that milk "makes your bones strong." There were no significant differences between the two school districts for students in grades K-2.

Students in grades 3-5 were surveyed on attitudes about nutrition and physical activity as illustrated in Figure 3.

Figure 3. Student Attitudes on Nutrition and Physical Activity



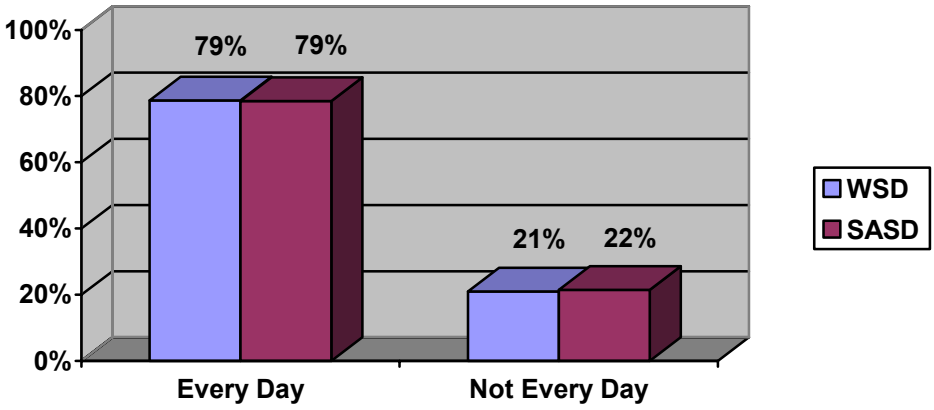
*p=.01

Survey Response Key:
VI/I = "Very Important" or "Important"
LI/NI = "A Little Important" or "Not Important"

Although the majority of students in both school districts were likely to say that "eating healthy foods" and "being active every day" were VI/I, there were differences in attitudes among students in the two districts. A significantly greater number of students in SASD responded that eating healthy foods was LI/NI as compared to students in WSD. When it comes to physical activity, the differences are reversed; a greater number of students in WSD responded that being active every day was LI/NI as compared to students in SASD. Approximately 90% of students believe it is VI/I to eat fruits and vegetables every day with no significant differences between districts.

Students in grades 3-5 were also surveyed about behaviors related to nutrition and physical activity. Figure 4 illustrates breakfast consumption patterns for students by school district.

Figure 4. Student Breakfast Patterns

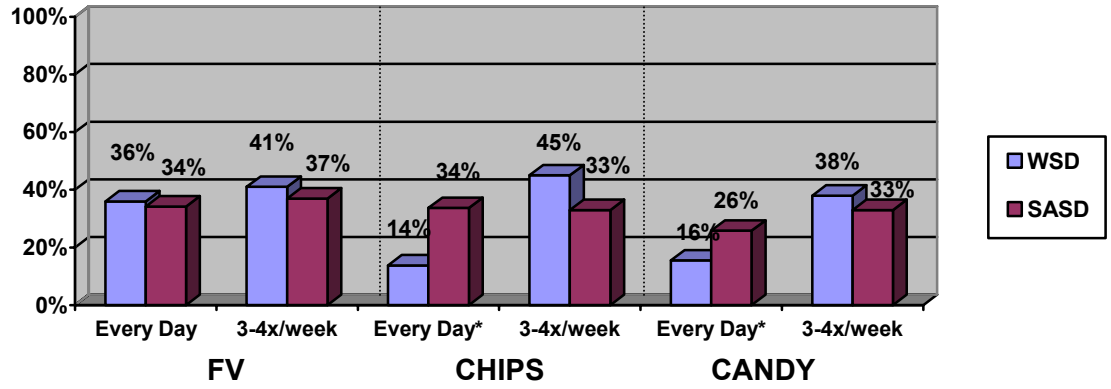


Note: "Not Every Day" combines the survey responses for "3-4x/week", "3-4x/month" and "Never."

It is important to note that while greater than 78% of students in grades 3-5 in each district reported eating breakfast every day, almost 22% are not eating breakfast every day. Students in WSD were more likely to report eating breakfast every day or 3-4 times per week, while more SASD students reported never eating breakfast (p=0.000). The focus group section elucidates student breakfast choices to provide additional insight into student eating behaviors.

These same students were asked how often they consume food between meal choices, herein referred to as "snacks" or "snacking." Figure 5 illustrates responses for "every day" and "3-4x/week" regarding food choices when asked, "If you are hungry between meals, how often do you reach for:"

Figure 5. Student Snack Food Choices



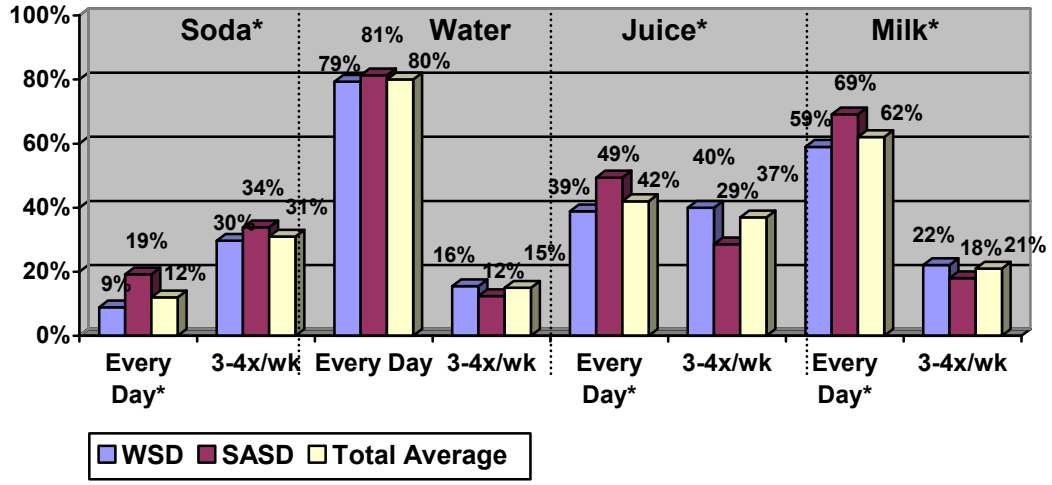
*p=.000

Survey Response Key:
FV = "Fruits, vegetables"
CHIPS = "Snack chips (like cheese curls, potato chips)"
CANDY = "Candy, cookies, cakes"

When responses are combined for every day and 3-4 times a week, 75% of students report snacking on FV every day or 3-4 times a week; 61% of students report snacking on CHIPS, and 55% on CANDY. Students in SASD were significantly more likely to report choices of CHIPS and CANDY every day than students in WSD. CHIPS and CANDY contribute calories in the form of fat and sugar with minimal nutrients.

Beverage choices are illustrated in Figure 6 below, which shows "Every Day" and "3-4 times a week" responses on different drinks.

Figure 6. Grades 3-5 Student Beverage Choices "Every Day" and "3-4 times a week"

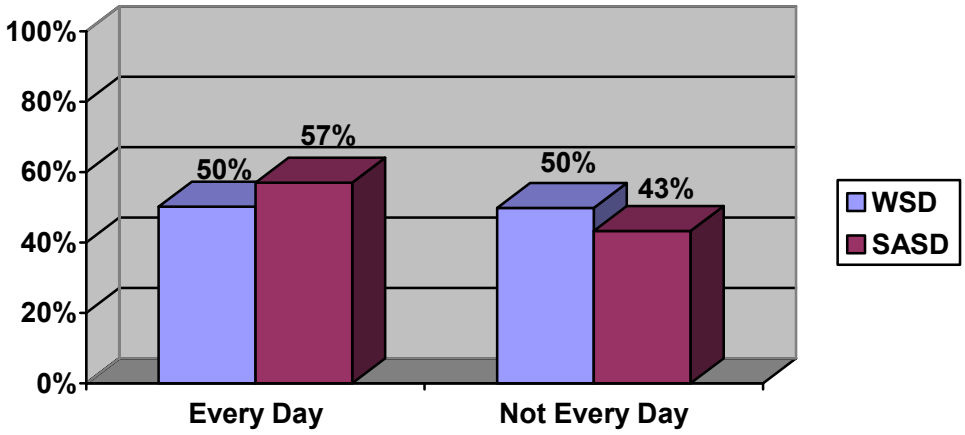


*p<.005

Healthier beverage choices for children are water and milk. For grades 3-5 students across the districts, 80% consume water and 62% drink milk every day, with SASD students drinking significantly more milk than WSD. Conversely, less healthful choices are soda and juice. Fifty-three percent of SASD and 39% of WSD students reported drinking soda more than three times a week, with daily intakes at 19% for SASD and 9% for WSD. Students reported drinking juice on average of 42% every day and 37% 3-4 times a week, with SASD representing a significantly greater daily intake than WSD.

Students were asked how often they consume "milk, cheese, and/or yogurt." Responses are depicted in Figure 7.

Figure 7. Grades 3-5 Daily Dairy Foods Consumption

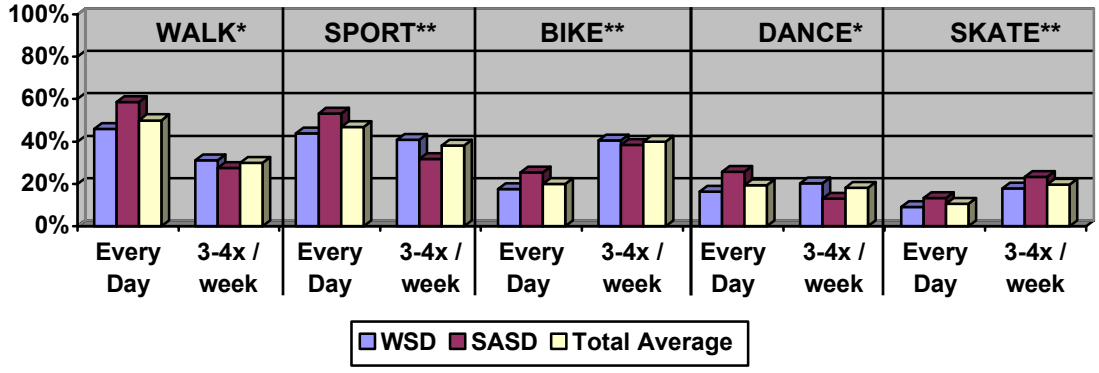


Note: "Not Every Day" combines the survey responses for "3-4x/week", "3-4x/month" and "Never."

With no significant differences between the districts, approximately one half of students report consuming milk, cheese, and/or yogurt every day. The remaining students identified that they consumed these products 3-4 times a week (36%), 3-4 times a month (7%), or never (5%). The USDA recommends that children consume 2-3 cups of "milk" every day[3].

Students also were surveyed about how often they engaged in certain physical activities: walking, playing a sport, biking, dance and skating. Figure 8 presents these activities for "Every Day" and "3-4 times a week" responses.

Figure 8. Grades 3-5 Student Physical Activity



* p=.000
** p<.01

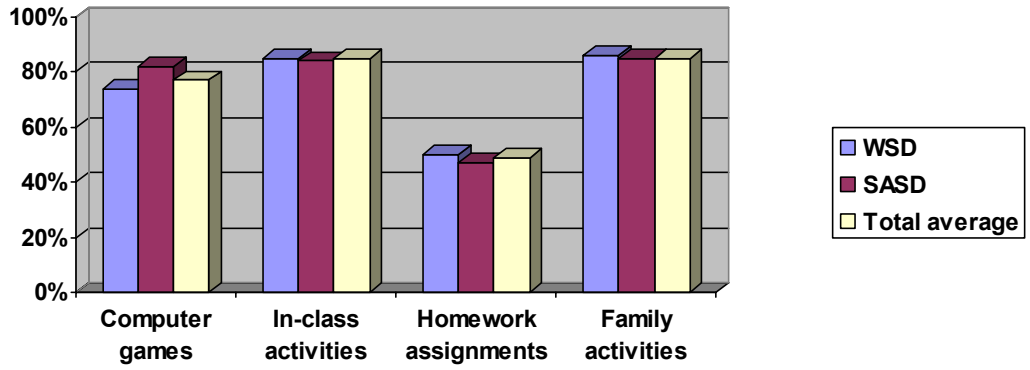
Survey Response Key:
WALK = "Walk"
SPORT = "Play sport"
BIKE = "Ride my bike"
DANCE = "Dance"
SKATE = "Rollerblade or skate"

[3] United States Department of Agriculture (USDA). (2005). Retrieved on September 7, 2006 from: http://www.healthierus.gov/dietaryguidelines/index.html

With regards to physical activity, walking and playing sports were the more popular reported choices of exercise, when compared with riding a bike, dancing and rollerblading/skating. A significantly greater number of SASD students reported participation in these activities than WSD, possibly correlating with WSD student attitudes that "being active every day is a little important or not important."

Students were asked about preferred methods of learning, as shown in Figure 9.

Figure 9. Grades 3-5 Student Learning Preferences

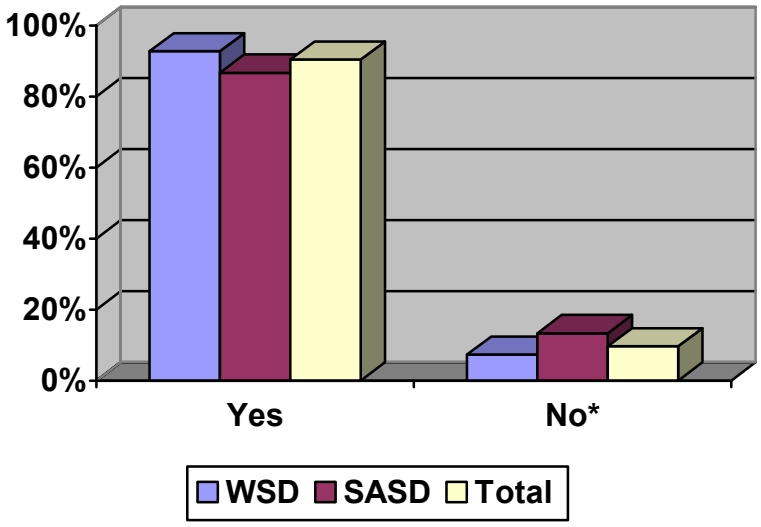


Family and classroom activities (85% for both) were the most popular ways to learn, followed by computer games (77%) and homework (49%). Students in the SASD were significantly more likely to prefer using computer games to learn than were students in the WSD (82% v. 74%, p=0.001). Students provided additional insight about their learning preferences through focus groups.

- *Survey Results: Parents/Guardians*

Parents/guardians of elementary school students were surveyed about knowledge, attitudes and behaviors related to nutrition and physical activity. Figure 10 demonstrates parent/guardian reported understanding of the term "BMI" or "Body Mass Index."

Figure 10. Parent/Guardian Understanding of the Term "BMI" or "Body Mass Index"



*p=.01

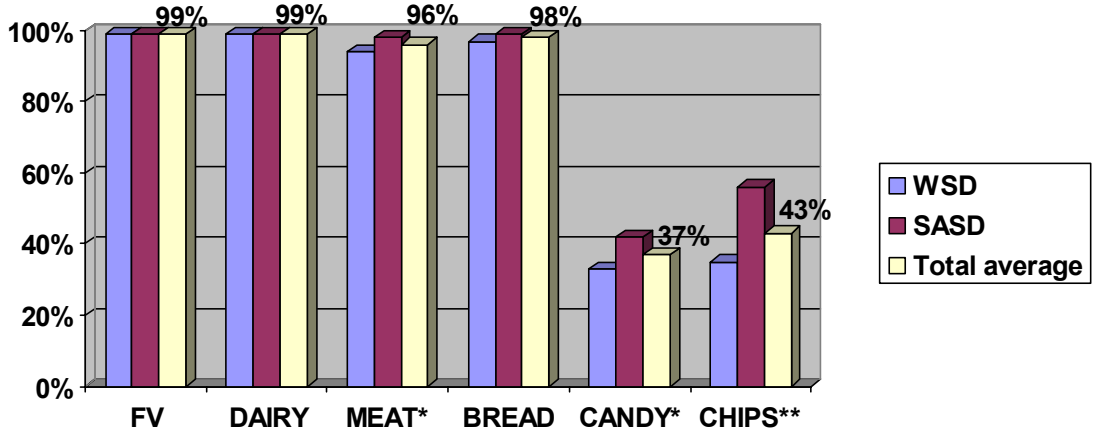
When asked whether they understood the term "BMI" or "Body Mass Index," greater than 90% of parents/guardians across the two school districts responded "yes." However, a greater number of parents/guardians from SASD said they did not understand the term.

In terms of attitudes about nutrition, fewer than 50% of parents/guardians agreed with the statement "it is hard to cook/prepare healthy meals for the family because I'm busy." However, parents/guardians from SASD were significantly more likely to agree with this statement than WSD parents/guardians (p=.002). When asked whether their child "likes the meals provided by the school," nearly one third (32%) disagreed or strongly disagreed; parents/guardians from WSD were significantly more likely to feel this way than SASD (p=.01). While greater than 50% strongly disagreed with the statement "French fries are just as healthy as a baked potato," parents/guardians from WSD were significantly more likely to feel this way than SASD (68% v. 51%, p=.001).

A similar trend was evident regarding attitudes toward daily physical activity for children. While nearly all (99%) parents/guardians agree it is important for a child to be active everyday, WSD was significantly more likely to "strongly agree" with the statement than SASD (78% v. 69%, p=.02). Approximately 15% of parents/guardians agreed with the statement "there are not many safe places in my neighborhood for my child to play outside" and there were no observable differences between school districts.

In regards to parent/guardian behaviors relating to food choices and shopping, 80% agreed with the statement, "I make choices when eating out based on how healthy I think a food or meal is." However, parents/guardians from SASD were significantly more likely to disagree with this statement than WSD (30% v. 15%, p=.000). Overall, nearly 60% say they buy foods at the grocery store when their children make a request. Figure 11 illustrates the percentage of parents/guardians that reported buying certain foods on "a regular basis."

Figure 11. Foods Regularly Purchased by Parents/Guardians



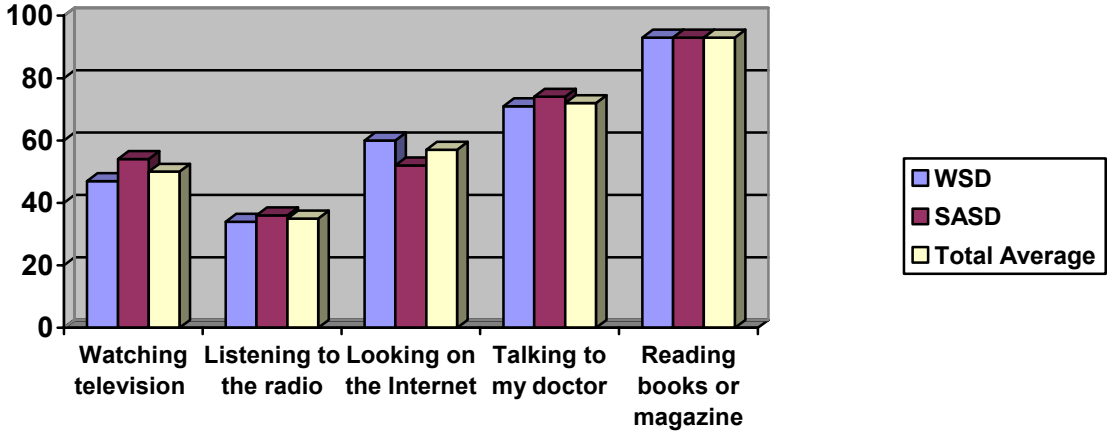
*p<.02
**p=.000
Average percentages are reported above.

Survey Response Key:
FV = Fruits and vegetables
DAIRY = "Dairy (milk, cheese, yogurt)"
MEAT = "Meat (beef, chicken, turkey, pork)"
BREAD = "Breads, pasta, rice, cereal and grains"
CANDY = "Candy, desserts, or sweets"
CHIPS = "Chips (i.e. potato chips, cheese curls)"

Overall, FV, DAIRY, BREAD and MEAT were purchased regularly in both districts. However, parents/guardians in SASD are more likely to regularly buy MEAT, CANDY and CHIPS. More than half of SASD parents/guardians regularly buy CHIPS. Previously reported student behaviors regarding between-meal food choices mirror parent/guardian food purchasing behaviors in the districts.

Lastly, parents/guardians indicated ways they learn about healthy eating and physical activity. Figure 12 illustrates the preferred methods identified in each school district.

Figure 12. Ways Parents/Guardians Learn About Healthy Eating and Physical Activity

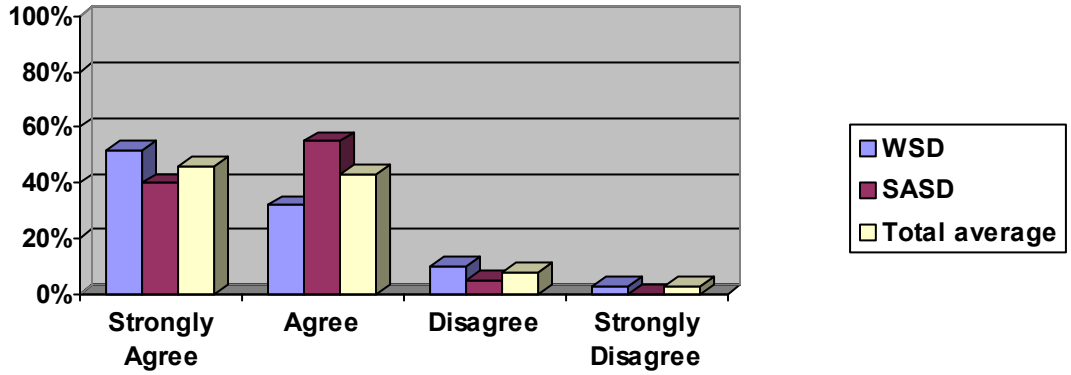


As shown above, "reading books or magazines" and "talking to my doctor" were the more common methods for parents/guardians to learn about healthy lifestyles for both districts. There were no significant differences between the districts with the exception of more WSD parents/guardians reported using the Internet as a source for information (60% vs.52%, p=.04). An additional noteworthy finding is that almost 50% identified "friends, family, and colleagues" as a written response in the "other" category for this question.

- *Survey Results: Faculty/staff*

Responses from faculty/staff and administrators revealed an overall positive attitude toward the integration of nutrition and physical activity messages into the school curriculum. Though two thirds of faculty/staff indicated that they do not currently have access to curricula on nutrition and physical activity, nearly half said they had already made changes to their classroom teaching plan to focus on healthy eating habits (47%) and exercise and fitness (40%). Faculty/staff from WSD were significantly more likely to have made changes to focus on healthy eating than SASD (56% v. 36%, p=.02). Additional analyses revealed that faculty who believe it is possible to integrate messages were more likely to have already made changes to their teaching plan to focus on healthy eating and exercise habits (p<.001). Figure 13 illustrates attitudes toward integrating nutrition and physical activity messages.

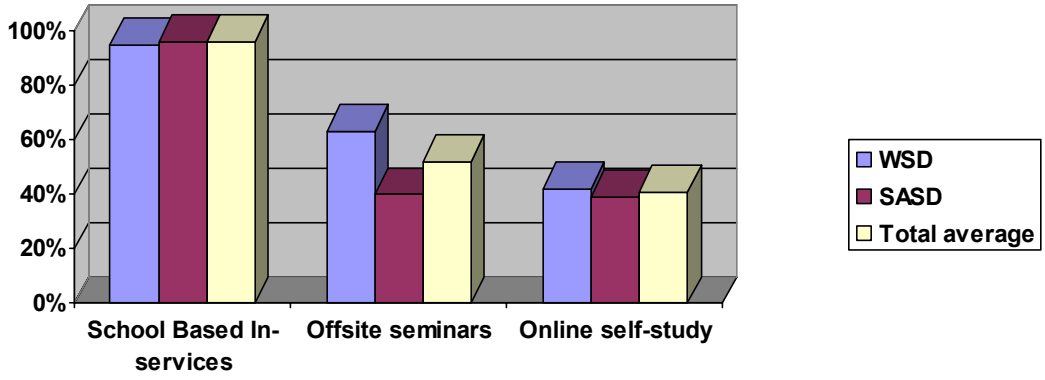
Figure 13. Faculty/staff Belief that Integrating Nutrition and Physical Activity into Current Curricula is Possible



Overall, 89% of faculty/staff "strongly agree" or "agree" with the statement "integrating nutrition and physical activity messages into the current curricula is possible." Faculty/staff in WSD were significantly more likely to "strongly agree" than SASD (52% v. 39%, p=.03). Factors that motivate faculty/staff to make changes in their teaching plan were similar across districts; "students' needs" topped the list at 95%, followed by "request from administration" (94%) and "self-motivation" (92%).

Attitudes regarding nutrition and physical activity training sessions were assessed. Eighty-five percent of faculty/staff responded that they were willing to participate in training to learn more about teaching and integrating nutrition and physical activity into the curricula. Figure 14 illustrates teachers who indicated a preference for each type of training by responding, "strongly agree" or "agree."

Figure 14. Faculty/Staff Preferred Types of Training

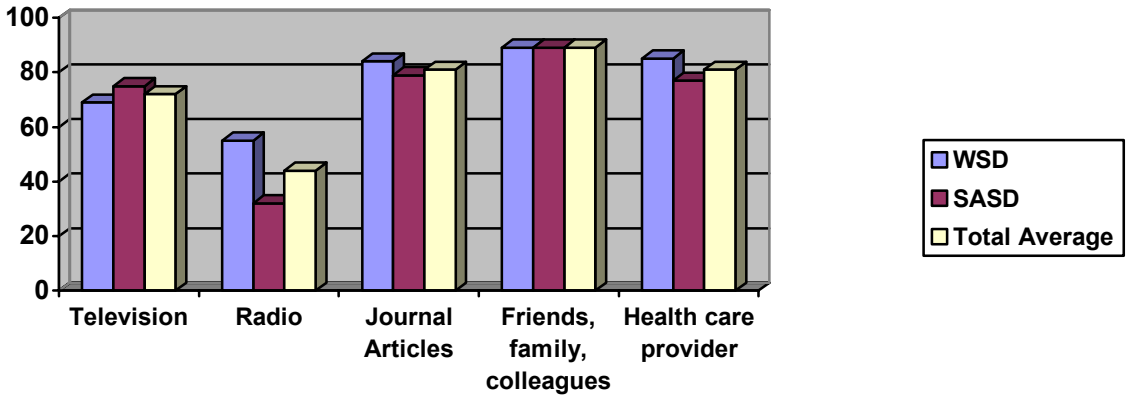


Overall responses indicated that school based in-service training is preferred (96%), followed by off-site seminars (52%) and on-line self-study (41%). Differences in training preferences were apparent between the two districts; faculty/staff from WSD were more likely than SASD to prefer off-site seminars (63% v. 40%, $p<0.01$) and online self-study training (42% v. 39%, $p<0.01$). In addition, faculty/staff who strongly agreed that it is possible to integrate nutrition and physical activity into the school curricula were significantly more likely to be willing to take part in training ($p<.01$).

When asked whether they would need specific types of support to effectively teach nutrition and physical activity, faculty/staff responded affirmatively in the following order of descending popularity: materials/supplies (94%), time (91%), training (80%), and teaching assistant (39%).

Faculty/staff indicated the sources they use for obtaining information on nutrition and exercise as illustrated in Figure 15.

Figure 15. Faculty/Staff Sources for Obtaining Information on Nutrition and Exercise

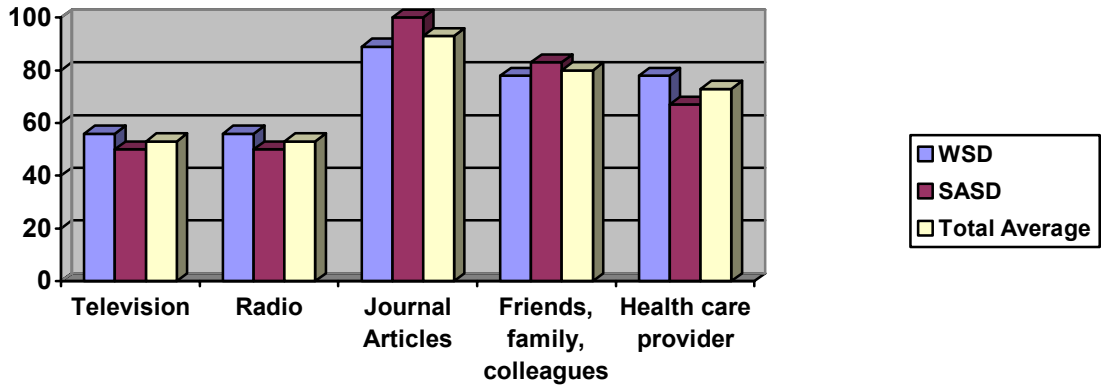


Sources of information for faculty/staff across both school districts were as follows: friends/family/colleagues (89%), journal articles and health care providers (both at 81%), television (72%) and radio (44%). There were no observable differences between the districts with the exception that faculty/staff in WSD were more likely than SASD to report radio was a source of information (55% v. 32%, $p=.01$).

- *Survey Results: Administration*

Like faculty/staff, administrators were asked about where they obtain information on nutrition and exercise as illustrated in Figure 16.

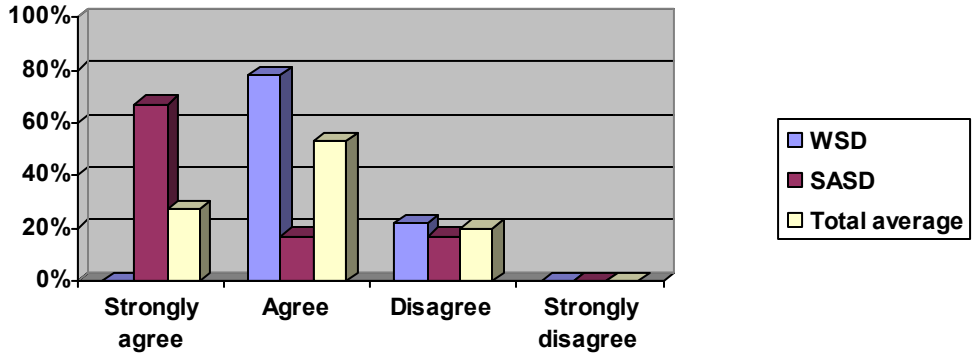
Figure 16. Administration Sources for Obtaining Information on Nutrition and Exercise



The most common sources of information were the same for both school districts with no observable differences between the two districts: journal articles (93%), friends/family/colleagues (80%), health care providers (73%), television and radio (both at 53%).

The survey assessed administrators' attitudes toward the importance of exercise and physical activity in the context of school policy, illustrated in Figure 17.

Figure 17. Administrators' Beliefs on Importance of Physical Activity in School Policy



The majority of administrators (80%) said they "strongly agreed" or "agreed" that exercise and physical activity are just as important as other educational initiatives such as No Child Left Behind and standardized testing. SASD administrators were significantly more likely to "strongly agree" with the statement than WSD (67% v. 0%, p=.01).

Nearly all (93%) administrators were willing to support teacher training on integrating messages about nutrition and physical activity through off-site seminars/continuing education (ACT 48 Credits) and on-site seminars. Eighty-seven percent were willing to support teachers by purchasing resources and materials that support curricula. When asked for their views about

opportunities to increase physical activity throughout the school day, 100% of administrators agreed that recess and before/after school programs were potential opportunities, while 67% viewed integration into class activities as a possibility. One-fifth of administrators (20%) believed there was "no time" to integrate physical activity into the school environment, with no observable differences between the districts.

Administrators believed that parents/guardians can play a role in promoting nutrition and physical activity among students in the following ways: participating in volunteer groups (100%), collaborating with other parents and with teachers (93%), organizing fundraisers (73%) and organizing student health groups (60%). One administrator wrote that parents/guardians could play a role by "sending in healthy food for snacks and lunches… helping to plan celebrations that are activity-based rather than food-based." In regards to the food offered throughout the school day, 60% of administrators responded that it is not nutritious; however, 80% of administrators agreed "using nutritionally-sound marketing in the cafeteria would effectively teach and reinforce healthy lifestyles."

According to 80% of administrators' beliefs, lack of knowledge is the biggest factor regarding why people have a hard time eating healthfully. Two-thirds (66%) believed that time constraints play a role, followed by one third (33%) agreed that healthy eating is more expensive. Administrators did not believe the taste of healthy food is a hindrance to eating healthfully.

- *Focus Group Findings: Students*

In general, students who participated in the focus groups were knowledgeable about the role of nutrition and physical activity in promoting good health. When it comes to nutrition, students were able to identify specific elements (i.e. eating fruits and vegetables, avoiding junk foods, eating a balanced diet, following the food pyramid, etc.). However, students were more likely to give vague responses regarding specific physical activity guidelines.

Students described breakfast as a "rushed" meal, and most students prepare breakfast themselves. When this is the case, it is most likely to consist of cereal (a few students specified "sugar covered cereal") or carbohydrates, such as waffles, bagels, toast or toaster pastries. A small number of students said that a family member makes or helps to make their breakfast; in these cases, the students reported eating a wider variety of foods, such as yogurt smoothies, eggs, oatmeal and fruit.

A majority of students reported eating a family dinner cooked by a parent at least three times a week. These dinners feature a variety of foods (i.e. chicken, fish, pasta, vegetables). Students from SASD were more likely to report eating dinner at a fast food restaurant than students in WSD (number of times range from once a month to one to three times a week).

Students in both school districts discussed their involvement in a variety of physical activities after school and on weekends, including organized sports and playing with friends. Only a few students reported exercising with their parents or other family members; most said their parents are "too busy with adult things." Students look up to parents/guardians and faculty/staff as role models, and many children enjoy engaging in physical activity with their families. Nearly all students said they would like to do more physical activities with their parents/families. Students

are open to messages about good nutrition and exercise from their schools; students listen to their teachers, particularly health and gym teachers, when it comes to exercise and nutrition. Only a very few students say they look to celebrities or sports figures as role models. Additionally, students are interested in special school activities such as family game nights, nutrition classes/counseling and physical contests "where everyone wins a prize".

- *Focus Group Findings: Parents/Guardians*

In focus groups with parents/guardians from both school districts, a predominant theme was confusion and concern about the practice of sending home the results of students' Body Mass Index (BMI) measurements. Nearly all parents/guardians say they received information on their child's BMI from the school and a majority expressed concern about how the information will be used and understood. Parents/guardians feel that there is a lack of information about how to interpret the results or put them in context. As one parent states, "We got a report. I am a little confused about it. If the kids find out, I can see that being a problem."

Parents/guardians were highly aware of guidelines on good nutrition and exercise for their children. Most acknowledged that it was primarily their duty to teach their children and "set the tone" at home. Nearly all said it was difficult to do so and tend to characterize challenges as coming from the outside. Among the main challenges discussed by parents/guardians in the focus groups were: finding time to make healthful meals and fostering good eating habits at home; controlling what their children eat outside the home; difficulty saying "no" when the child asks to eat unhealthy foods; and lack of opportunities for children to engage in physical activity during the school day.

Parents/guardians who participated in the focus groups employ a number of strategies to improve their child's diet. These strategies include: making healthy foods easy to access at home; teaching and modeling good eating habits; preparing children for making food choices outside the home and asking what they ate during the day; limiting TV time and creating opportunities for activity. While many parents sign their kids up for organized sports and other physical activities throughout the year, only a very small number of parents say they exercise with their children.

Most parents/guardians in the focus groups felt individual schools and districts are making efforts to improve kids' health; however, many parents are critical of specific policies or changes at their child's school. Recess "cut backs" were a main concern. Parents/guardians had praise for certain school sponsored programs, including making school lunch menus available to review at home and programs that provide additional opportunities and motivation to be physically active, such as providing pedometers to students, "Family Fun Nights" (SASD) and "Gym Nights" (WSD). Further, many parents wanted to see schools limit the availability of unhealthy foods in the cafeteria and vending machines and to add water to the school lunch menu.

Every parent/guardian recognized the need for additional resources to help them address challenges to good nutrition and exercise for their children. They responded positively to having resources available to them, such as the *We Can!* "Go, Slow and Whoa" tip sheet presented during the focus group. In particular, parents/guardians were interested in receiving information on nutrition and physical activity from their child's school, either through flyers sent home or

school web site postings. Additional details from the parent/guardian and student focus groups are available in the *Report on Parent/Guardian and Student Focus Group Findings* in Appendix C.

- *Focus Group Findings: Faculty/Staff and Administration*

Faculty/staff who participated in the focus groups talked about their commitment to promoting healthy eating and exercise habits among their students and discussed the efforts they already employ. Specific ways in which faculty/staff believe they can promote healthy behaviors among their students include modeling "good" behaviors for their students, such as having fresh fruit available in the classroom as a healthy snack alternative; discussing healthy snacks that students bring from home; educating parents by sending home a list of healthy snack guidelines; educating students on reading food labels and setting standards in the classroom.

Focus groups provided deeper insight into faculty/staff views on the barriers to promoting healthy behavior among their students and integrating messages about nutrition and physical activity into the school environment. Faculty/staff identify limits to what they can do as individuals and feel their efforts would be more successful with "official" support from administration. Specific barriers/limitations identified by faculty/staff included: lack of time to address health topics unless they are part of the curriculum; limited opportunities/lack of time for physical activity and healthy eating during school day; lack of control over food choices available to students; and concerns about "overstepping boundaries" or offending parents/guardians by discussing personal food choices with them.

Despite these barriers, faculty/staff focus group participants identified a number of important facilitators to implementing changes to promote healthy behaviors. Specifically, they felt that efforts must be coordinated on a school-wide and/or district-wide level. Many faculty/staff said it was essential to provide parents and families with information on nutrition topics (i.e. importance of a healthy breakfast, suggestions for healthy snack/lunch foods and healthy alternatives to sending in cupcakes and sweets for child's birthday) through the school web site and newsletter.

Participants in the faculty/staff focus groups brainstormed ways to promote nutrition and physical activity in the school environment. They suggested creating more opportunities for students and staff to engage in physical activity together, such as increasing the number of special after-school events focused on physical activity and incorporating physical activity into morning announcements. Specific suggestions for addressing nutrition and health topics in the classroom and throughout the school included: reinstating once a week health classes; incorporating nutrition messages into morning announcements; increasing the frequency of events such as "Apple Crunch Day" and special school assemblies focused on nutrition and health; and providing teachers with updated and standardized curriculum. The *Report on Faculty/Staff Focus Group Findings* is available in Appendix C.

In congruence with faculty/staff focus group findings, WSD principals revealed a number of potential facilitators to promote healthy habits among students and to integrate nutrition and physical activity messages into the school day. Specifically, these principals felt that successful efforts should be undertaken on a "district-wide" level and involve parents. They identified the

best ways to disseminate messages, including using the district wellness council, the school web site and monthly newsletters sent home to parents. These principals were eager to receive help and support from outside sources, such as "WISE SNAC" and "PANA."

Although faculty/staff and administration focus group participants generally made positive comments about the idea of having high school students as potential mentors and role models, they do not see a clear and easy way to partner with high school students because of time constraints and conflicting school schedules. In a similar vein, there were a number of general positive comments made about potential community resources, such as the YMCA and local grocery stores that they imagined might provide free healthy snacks for students; however, when asked, they could not offer specific ideas about ways to partner with those entities. Overall, faculty/staff appear to see the key partnership to successfully promoting healthy behaviors among students as being one between faculty/staff, administration and families.

Key Informant Interviews

Key informant interview data correlates with findings from surveys and focus groups and served to provide key strategies for implementation and future program development. More specifically, they determined feasible communication mechanisms for disseminating nutrition and physical activity, such school newsletters, district web site, local cable channels and bulletin boards in various areas of the school buildings. Other areas for possible program development highlighted an interest in incorporating nutrition and physical activity in before and after-school settings, which include community organizations, such as YMCA and the Boys and Girls Club. Data is summarized in Appendix D, *Key Informant Interview Data*.

CONCLUSION

The WISE SNAC needs assessment provided an overview of knowledge, attitudes, beliefs and behaviors regarding nutrition and physical activity between WSD and SASD students, parents/guardians, faculty/staff and administration. Families and school personnel are invested in the health of the students. Each cohort independently revealed common themes and suggestions for ways to promote nutrition and physical activity in the school and home, in addition to highlighting similarities and differences between districts indicating a need for tailored approaches. With over one in four elementary school-aged children in WSD and SASD found to be "at risk for overweight" and "overweight" in 2005-2006, future interventions are needed.

Overall, the cohorts included in this assessment did not have a lack of knowledge. Findings revealed specific challenges with lack of access to and awareness of resources for translating knowledge about nutrition and physical activity into behavior change. More specifically, areas of significance to be considered in shaping future interventions include: dietary balance and food intake patterns; snacking and beverage choices; role modeling; student learning preferences; building the capacity of home and school through identified mechanisms and creating sustainable partnerships.

Across districts, an improvement in daily healthy behaviors among students is warranted, such as eating breakfast and consuming high calcium foods. Although three out of four students in grades 3-5 reported choosing fruits and vegetables between meals, there was also a high daily intake of snack chips, cookies, candy and cake, with SASD showing a greater tendency toward chips and sweets. Further, interventions should aim to increase daily consumption of water and milk/milk alternatives, while reducing intakes of soda and juice. Students exhibited positive attitudes toward the importance of being physically active every day that were consistent with their reported activity rates.

Students identified methods for influencing their knowledge, attitudes and behaviors, which include learning from their role models and through activities with their families and in the classroom. Parents/guardians and faculty/staff recognize their responsibility as role models. Both advocate for consistent, factual information and resources that will help them develop their role-modeling capacity and integrate nutrition and physical activity into the classroom and home environments through a coordinated approach.

As stated throughout this report, a strengthened partnership between home, school and community has the potential to impact student behaviors and many of the challenges faced. A collaborative effort holds promise in assisting parents/guardians to foster healthy habits at home, including making nutritious food choices at the grocery store, streamlining healthful meal and snack preparation and participating in physical activity with their children. Community partnerships can provide materials, resources and training to enable faculty/staff to incorporate nutrition and physical activity into the time-constrained school day. Recess and before/after-school settings were identified as possible opportunities to increase physical activity, but require further exploration. The school cafeteria was also highlighted as venue for reinforcing positive messages. All cohorts support coordinating and linking efforts to increase the dissemination of

positive messages on nutrition and physical activity in the community to balance the responsibility across the home, school and community.

To enhance current and future partnerships, ideal mechanisms were identified to improve communication among constituencies, while addressing challenges and building capacity. The school web site, newsletters and district wellness councils were recognized as methods to address areas of concern, such as BMI interpretation and healthy snack choices; thereby incorporating families and linking them to the healthy lifestyle messages that children are learning at school. Furthermore, with family, friends and colleagues identified as a common source of health information across cohorts, it is essential to ensure that factual information is disseminated.

Based upon the Coordinated School Health Program model, community involvement is an essential piece of creating a healthy school environment. Community partnerships that would support and enhance current and future programming were not clearly outlined by this needs assessment and compels further investigation. Each district is unique and needs to identify their key community partners. Reaching out to the community can bolster efforts to sustain interventions implemented as a result of this report.

The needs assessment revealed that the resources and materials needed are consistent across districts. However, subtle, but significant differences were found. Most importantly, the WISE SNAC needs assessment highlighted that approaches need to be tailored in accordance with districts' policies, procedures and competing priorities. Creating healthier schools, families, and communities, requires a coordinated, comprehensive effort. Through a systematic approach, WISE SNAC established priorities, needs and actions as a base to create a culture within schools to foster healthy eating and physical activity behaviors and empower the population to initiate change.

APPENDICES

HPC Building Connections to Health
Health Promotion Council

WISE SNAC©
Building Healthy Schools & Communities