

# **The 2006 Mississippi School Wellness Principal Survey**

*Prepared for:*

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Overweight and obesity not only threaten the future health of youth, but also may affect their learning capacity, productivity and academic success (School Nutrition Association [SNA], 2005). Ninety-five percent of American children and adolescents are enrolled in school, where they spend the majority of their waking hours (Wechsler, McKenna, Lee, & Dietz, 2004). Many children consume two meals at school, and some may consume all of their meals at school. Outside of the family, schools have the most contact and, potentially, the most influence on children in the first 18 years of life

Through nutrition education, healthy school meals, snacks and beverages, and opportunities for physical education and activity, schools have the opportunity to instill healthy life-long habits in children and adolescents. Furthermore, research indicates a relationship between nutritional adequacy and physical activity in children and adolescents resulting in less absenteeism and increased academic performance (Kleinman et al., 2002; Jarrett et al., 1998). A healthy school environment with strong administrative leadership can impact the obesity trends among children and adolescents.

Recognizing the importance of the aforementioned coordinated effort, Congress enacted the Child Nutrition and Women, Infants and Children (WIC) Reauthorization Act of 2004, mandating that all Local Education Agencies (LEAs) participating in the National School Lunch Program establish a local wellness policy by July 2006 (Pub. L. No. 108-265, § 204). Wellness policy components include goals for nutrition education, physical activity, and extra-curricular school-related activities promoting student wellness. Additionally, all foods served and sold on campus during the school day must follow nutrition guidelines that promote student health with the intent on reducing childhood obesity. Schools must ensure that reimbursable school meals are

in compliance with the Child Nutrition Act and Richard B. Russell National School Lunch Act.

Districts need to establish procedures to measure implementation of the policy and appoint an individual to oversee the implementation of and adherence to the policy. Finally, each district is required to have a committee consisting of parents, students, school foodservice personnel, the school board, school administrators, and the public to develop and implement a school wellness policy. However, funding was not allocated to the policy to help LEAs implement these goals.

Qualitative studies have demonstrated that principals' primary focus is on the No Child Left Behind Act of 2001, which makes schools accountable for meeting statewide objectives and criteria for math and reading scores (Shahid, 2003). However, research has indicated that healthy behaviors are essential to the learning environment and have the potential to improve test scores (Kleinman et al., 2002). Without the leadership from principals and administrators, instilling wellness and the associated practices into the student body will be a difficult task. Shahid (2003) found principals perceived their leadership role regarding the promotion of nutritional health as an "overseer." Principals desired to be involved in the development of nutritional policies. Principals have the primary role as leaders to promote a healthy school environment where student learning and achievement can take place by becoming actively involved in setting policies for competitive foods sold on campus (Meyer, Conklin, & Turnage, 2002).

## **Purpose**

In response to the mandate from the USDA for all schools to implement a Local Wellness Policy, the Mississippi State Department of Education developed a guide to assist LEAs in implementing the policy. The guide outlines a three-step approach to developing the policy.

First, schools should gather input and assess the current situation; second, a policy should be developed and approved; and last, the policy should be implemented and evaluated. The focus of this research is aimed at the first step of the process, assessing the current situation.

Therefore, the 2006 Mississippi School Wellness Principal Survey assessed policies and programs related to implementation of the Local Wellness Policy in elementary, middle, and high schools. It was intended to answer the following questions:

- To what extent are principals, school faculty, students, parents and others in the community knowledgeable of the Local Wellness Policy?
- To what extent has the Local Wellness Policy been implemented in Mississippi Public Schools?
- What are the characteristics of nutrition, health, and physical education, as well as nutrition quality of foods at schools in Mississippi?
- Who is responsible for delivering nutrition, health, and physical education in the schools?
- What policies, programs, or legislation would principals support regarding school health?

## **Methods**

The 2006 Mississippi School Wellness Principal Survey was conducted from October 2006 to December 2006 by the University of Southern Mississippi, College of Health. The data were collected by self-administered mail questionnaires completed by principals or designees of public schools in Mississippi. The questionnaires were sent to all 882 public school principals in Mississippi.

A total of 369 school principals or designees (41.8%) participated the survey. Among those, 39.5% were from elementary schools, 15.5% were from middle- or junior high schools, 21.3% were from high schools, 16.6% were from K-6 or K-8, and 6.9% were from K-12. About

half (50.7%) of schools surveyed had an enrollment size of 500 or less, 40.1% of schools had between 500 and 1000 students, and only 6.9% of schools had more than 1,000 students.

It must be noted that these findings do not necessarily reflect the views or practices of all schools across the state. Multiple attempts to gather unreturned surveys were made through mail, internet and telephone calls. The surveys were designed to be anonymous and participation was voluntary. Even so, nearly 60% of the schools did not respond to the survey. Also, several of the questions had over 50% of missing values (e.g., the open-ended question). In those cases, valid percentages which are only based on the actual number of respondents rather than the total number of respondents were reported. Further, it should be noted that it is impossible to know the accuracy of the respondent on the wide array of questions asked (whether a principal or other designee).

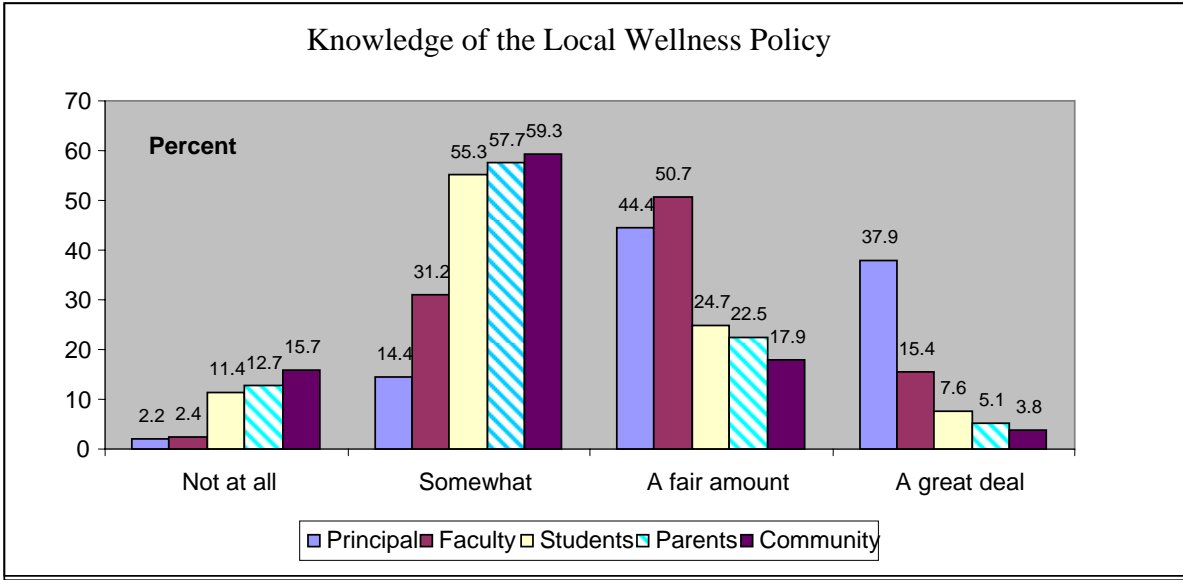
## **Selected Results**

This section begins with findings related to the knowledge and implementation of the local wellness policy and is followed by findings specific to nutrition, health, and physical education. These results do not include all data that were collected as part of the survey. Additional results are presented in a series of tables at the end of this report.

### *Knowledge and Implementation of the Local Wellness Policy*

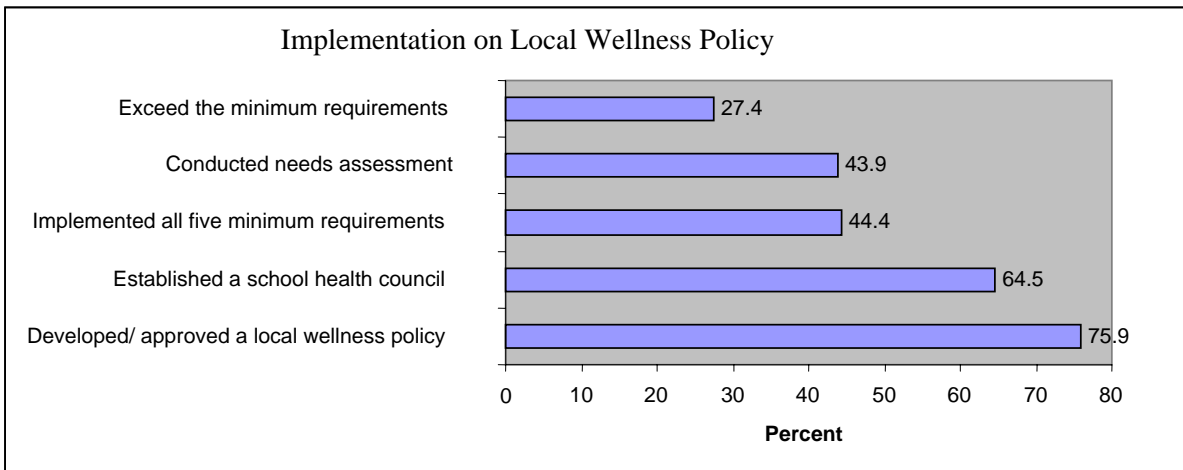
Results of this study indicated that just over a third (37.9%) of the respondents felt they knew a great deal about the local wellness policy, and another 44% knew a fair amount (refer to Figure 1). Knowledge of the local wellness policy was even less among school faculty, followed by students, then parents, and was least among the broader community.

**Figure 1: Knowledge of the Local Wellness Policy**



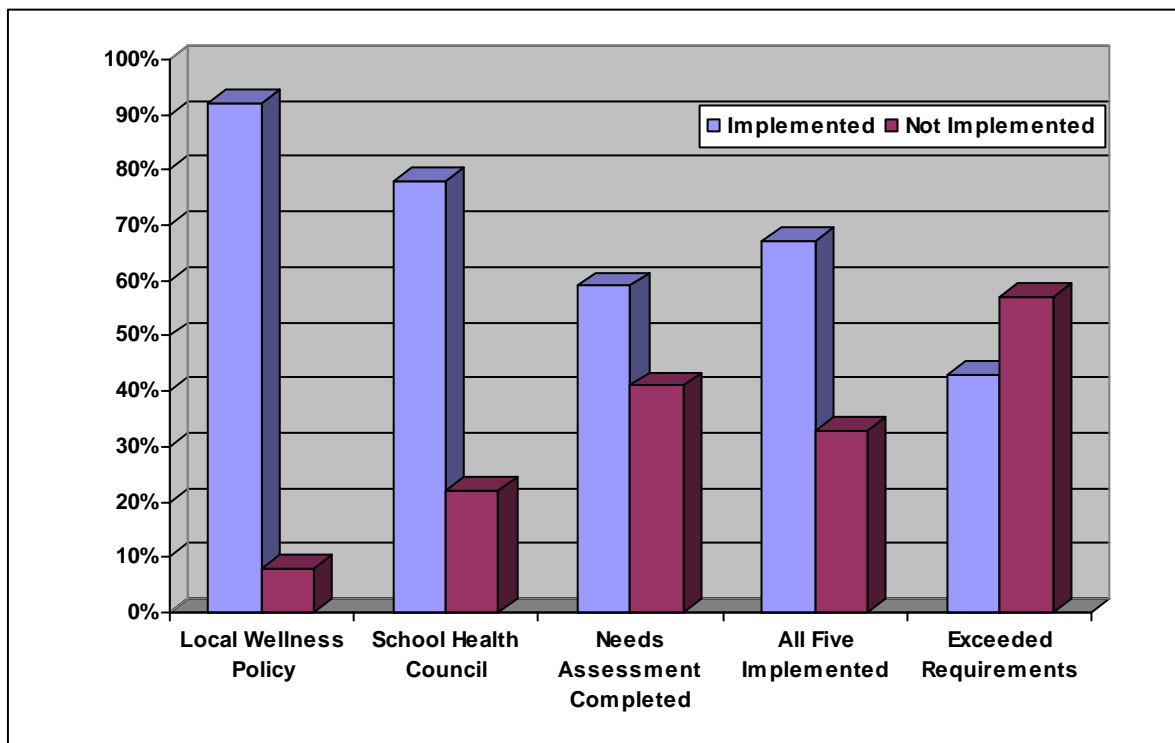
Among the respondents, 75.9% reported having developed and approved a local wellness policy (refer to Figure 2). Sixty-five percent had established a school health council. However, only 44.4% of the respondents indicated they had implemented all five minimum requirements of the standard, 43.9% had conducted a needs assessment, and 27.4% exceeded the minimum implementation standards.

**Figure 2: Implementation of the Local Wellness Policy**



While the 38% of respondents who indicated a great deal of knowledge were most likely to report implementing all of the minimum requirements of the local wellness policy, even they did not fully implement each of the five minimum requirements (see Figure 3). For example, more than 20% did not establish a school health council, more than 30% did not implement all five requirements, and more than 40% did not conduct a needs assessment.

**Figure 3: Implementation by Those Most Knowledgeable of the Local Wellness Policy**



As one might expect, among respondents who indicated that they had implemented all five components, their schools had a higher percentage of students receiving health, nutrition, and physical education. For example, 61% of respondents who indicated that they had implemented all five requirements, compared to only 39% of those that had not implemented all five components, reported that between 75% - 100% of their students received a sequential health education curriculum.

However, just because respondents indicated that their school had implemented all five requirements did not necessarily mean that their students would receive the sequential health education curriculum. For example, 26% of those reporting to have implemented all five components indicated that less than one-quarter of their students (between 0% - 24.9%) received a sequential health education curriculum. Similarly, nearly a third (30%) of these same respondents indicated that less than one-quarter of their students received nutrition education as part of a structured and systematic unit of instruction.

### *Nutrition*

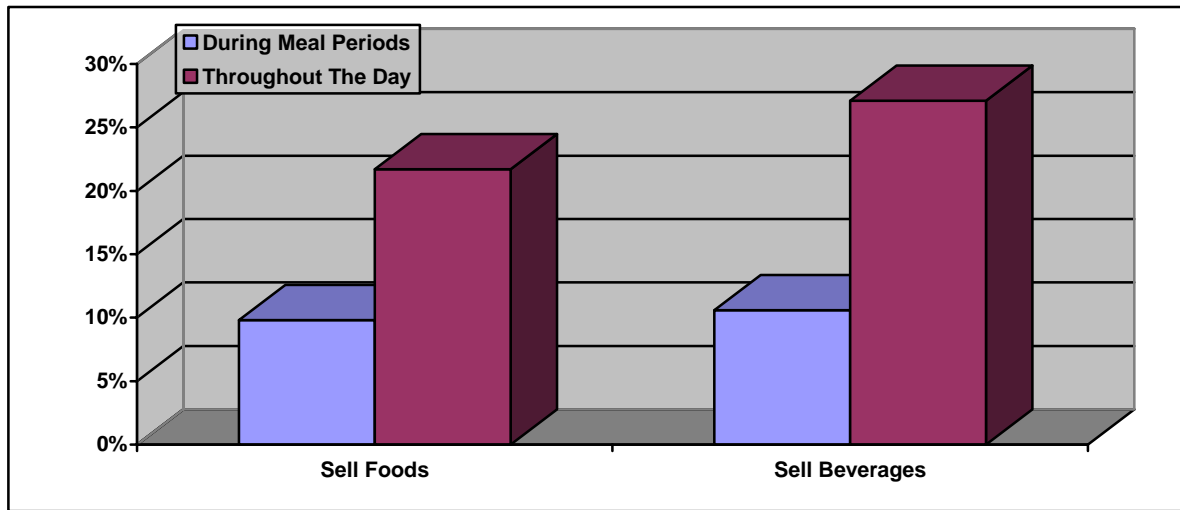
Part of the survey focused on the provision of nutrition education to students and on the nutrition value of the meals and foods served on the school campus during the school day. Over three-quarters of the respondents (78%) indicated that breakfast and lunch programs that met USDA standards were being provided to most students (between 75% and 100% of the students). However, most respondents (53.8%) indicated that less than half of their students received nutrition education as part of a structured and systematic unit of instruction. Only about one-third (35%) of the respondents indicated that most (between 75% - 100%) received nutrition education.

Only 9.8 % of the respondents reported selling competitive food during meal periods and 10.6 reported selling beverages during meal periods. However, 21.7 and 27.1 reported selling competitive foods and beverages, respectively, throughout the school day (see Figure 4).

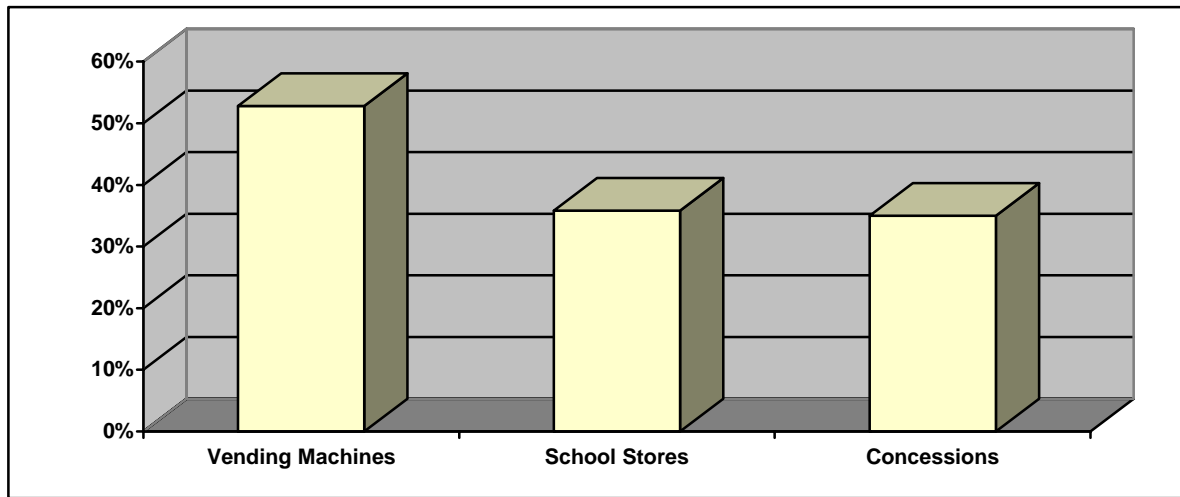
Figure 5 indicates that the majority of these schools sold the food and beverages in vending machines (52.8%) followed by school stores (35.8%), and concessions (35.0%).



**Figure 4. Foods and Beverage Services in Schools**

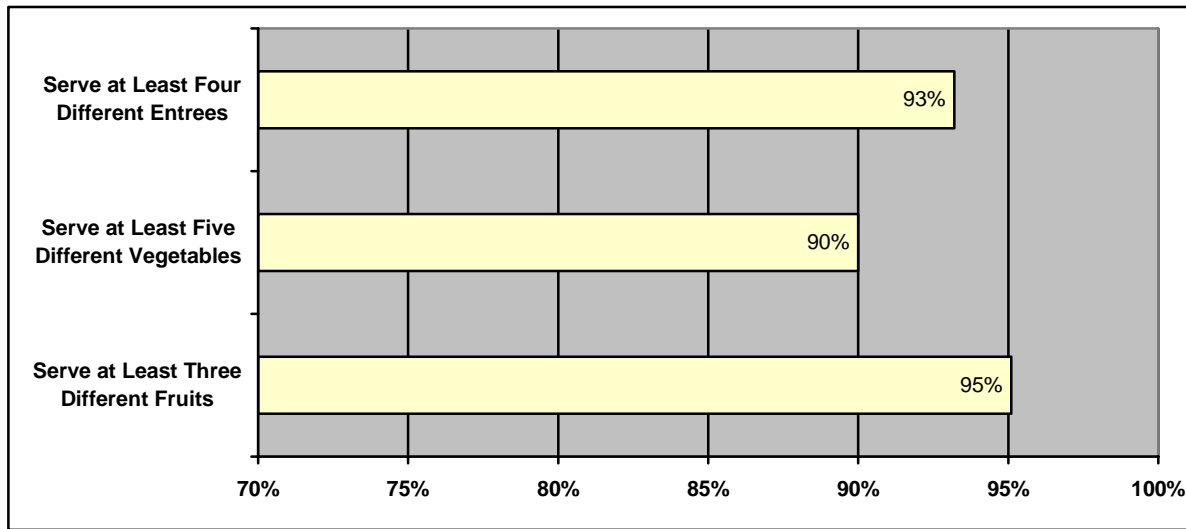


**Figure 5: Places to get Foods and Beverages**



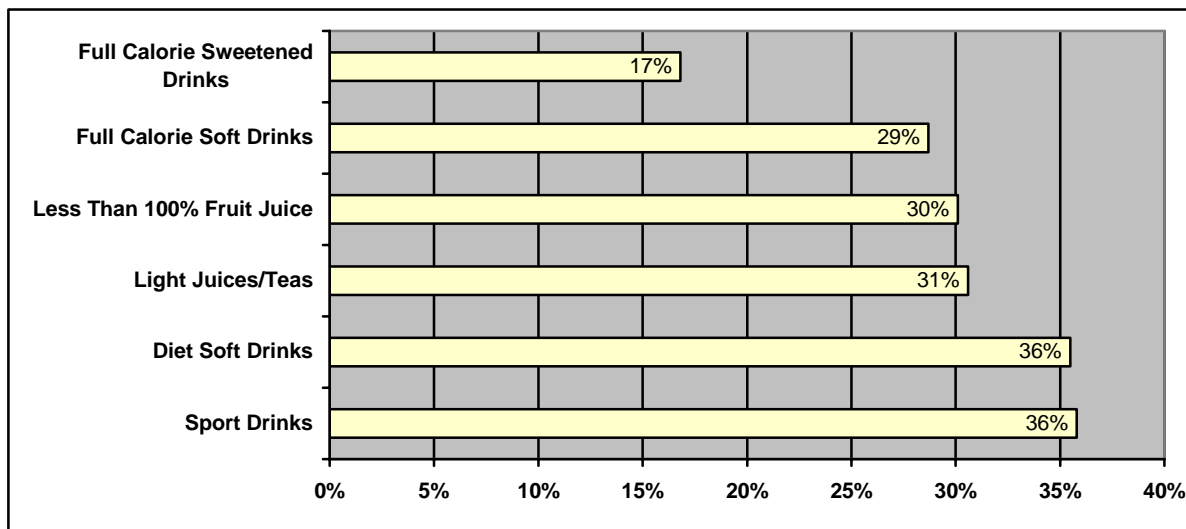
Since specific requirements are mandated by the USDA for the National School Lunch Program and School Breakfast Program, it is not surprising that the majority of the respondents reported offering a wide variety of foods at meal time (see Figure 6). During the school week, the majority of the respondents reported they served at least four different entrees (93.2%), at least five different vegetables (90.0%) and at least three different fruits (95.1%).

**Figure 6: Food Served in School During the Average Week**



However respondents also reported selling beverages other than milk and 100% juices. Nearly 36% reported selling sports drinks, 35.5% had diet soft drinks available, 30.6% sold light juices and tea, 30.1% sold juices with less than 100% juice, 28.7 sold full calorie soft drinks, and 16.8% sold full calorie sweetened drinks.

**Figure 7: Beverages Sold in Schools**



### *Health Education*

Half (50.2%) of the respondents indicated that more than 50% of their students received a sequential health education curriculum that was consistent with state or national standard. Over one-third (38.4%) indicated that 75% or more of their students received a sequential health education curriculum.

In addition, 40.6% of those that responded reported that those who taught health education held no certification to teach health education. Among the respondents, 38.6% reported their health education was taught by classroom teachers; 22% reported nurses taught health education, and 35.2% reported physical education teachers were responsible for health education.

### *Physical Education and Physical Activity*

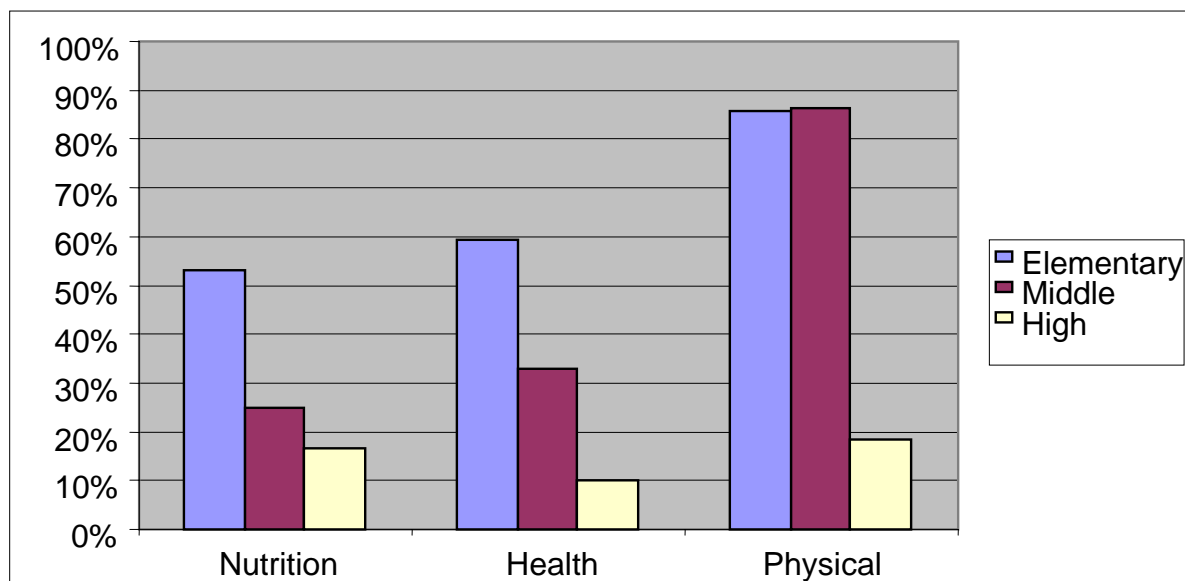
More than two-thirds (69%) of schools surveyed had more than 50% of students that received a sequential physical education curriculum that was consistent with state or national standard. Over half (57%) indicated that 75% or more of their students received a sequential physical education curriculum. Seventy-three percent of the respondents reporting that physical education was taught five times a week, with the majority of respondents (64%) reporting that students are physically active for at least 75% of the time that they are in physical education. About 35.8%, 12.2%, 11.4%, and 36.0% of schools report that average number of minutes students were in physical education each week was “0-60” minutes, “61-120” minutes, “121-180” minutes, and 180 or more minutes, respectively. Only 17% of the respondents indicated that they had individuals teaching physical education that were not certified to teach physical education.

## *A Comparison of Nutrition, Health, and Physical Education*

It should be noted that approximately 38% of respondents indicated that less than one-quarter of their students received nutrition education as part of a structured and systematic unit of instruction. One-third (33%) indicated that less than one quarter of their students were receiving a sequential health education curriculum that was consistent with state or national standards. Seventeen percent indicated that less than one-quarter of their students were receiving a sequential physical education curriculum that was consistent with state or national standards.

When comparing grade levels of schools that have more than half the students participating in nutrition, health, and physical education, it appears that most of the respondents reported the highest rates of involvement in the elementary schools, followed by middle schools, and then in high schools. The highest percentages of participation were in physical education, followed by health, and then nutrition education. Nutrition and health education appear to drop off during middle school. All three appear to drop off by high school.

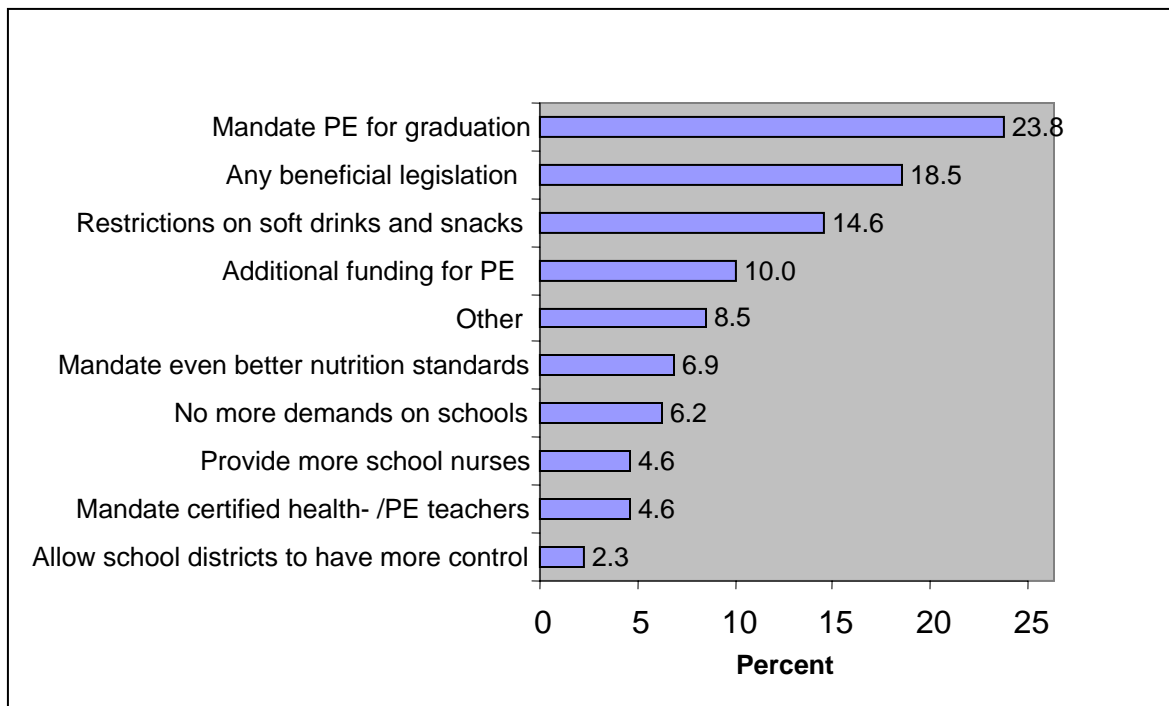
**Figure 7: Provision of Nutrition, Health, and Physical Education by Grade Level**



### *New legislation Supporting School Health*

At the end of the survey, respondents were also given an open-ended question on what policies, programs, or legislation they would support regarding school health (see Figure 8). There were 130 responses (35%) to the question. The responses were grouped into ten categories. Mandating physical education for graduation received the most support (23.8%). Another 18.5% supported any legislation that would benefit their schools. Other suggestions included the provision of restrictions on soft drinks and snacks and additional funding for physical education.

**Figure 8: Supported Policies, Programs, or Legislation**



## Summary

- Although implementation of the Local Wellness Policy was required by July 2006, less than half of the respondents (44.4%) reported implementation at the time of data collection (Fall 2006).
- Approximately one-third (38%) of the respondents indicated that they knew a great deal and another 44% indicated that they knew a fair amount about the Local Wellness Policy.
- Knowledge of the policy did not necessarily translate into implementation. For example, among those indicating a great deal of knowledge, more than 20% did not establish a school health council, more than 30% did not implement all five requirements, and more than 40% did not conduct a needs assessment.
- Implementation of the requirements did not necessarily mean that all students were receiving nutrition, health or physical education. For example, 26% of those reporting to have implemented all five components indicated that less than one-quarter of their students (between 0% - 24.9%) received a sequential health education curriculum. Similarly, nearly a third (30%) of these same respondents indicated that less than one-quarter of their students received nutrition education as part of a structured and systematic unit of instruction.
- Differences exist in the implementation of nutrition, health, and physical education. Approximately 38% of respondents indicated that less than one-quarter of their students received nutrition education as part of a structured and systematic unit of instruction. One-

third (33%) indicated that less than one quarter of their students were receiving a sequential health education curriculum, and 17% indicated that less than one-quarter of their students were receiving a sequential physical education curriculum that was consistent with state or national standards.

- There appears to be a need for certified staff, as 17% of the physical education and 40% of the health education are taught by non-certified staff.
- The highest rates of involvement in nutrition, health, and physical education are in the elementary schools, followed by middle schools, and then in high schools. The highest percentages of participation were in physical education, followed by health, and then nutrition education. Nutrition and health education appear to drop off during middle school. All three appear to drop off by high school.

## References

- Child Nutrition and Women, Infants, and Children (WIC) Reauthorization Act of 2004, Pub. L. No. 108-205, § 204, 42 U.S.C. § 1751.
- Jarrett, O. S., Hoge, P., Davies, G., Maxwell, D. M., Yetley, A., & Dickerson, C. (1998). Effect of recess on classroom behavior: Group effects and individual differences. *Journal of Educational Research, 92*, 121-126.
- Kleinman, R. E., Hall, S., Green, H., Korzec-Ramirez, d., Patton, K., Pegano, M. E., et al. (2002). Diet, breakfast, and academic performance in children. *Annals of Nutrition & Metabolism, 46*, 24-30.
- Meyer, M. K., Conklin, M. T., & Turnage, C. (2002). School foodservice administrators' perceptions of the school nutrition environment in middle grades. *Topics in Clinical Nutrition, 17*, 47-54.
- School Nutrition Association. (2005, March 29). *SNA Local Wellness Policy Guidelines*. Retrieved March 9, 2006, from <http://www.schoolnutrition.org>
- Shahid, B. (2003). A study of school principals and the promotion of nutritional health in middle grade schools. *Education, 123*, 552-569.
- Wechsler, H., McKenna, M. L., Lee, S., M., & Dietz, W. H. (2004, December). The role of schools in preventing childhood obesity. *The State Education Standard*, pp. 4-11.



## Additional Results

<b>Schools Providing Health Related Education</b>		
	Frequency	Valid %
1. Schools where the number of students that received sequential <i>health education</i> curriculum was 50% or greater.	157	49.8%
2. Schools where the number of students that received sequential <i>physical education</i> curriculum was 50% or greater.	232	69%
3. Schools where the number of students that received <i>nutrition education</i> as part of a structured and systematic unit of instruction was 50% or greater.	134	46.2%

<b>Schools Employing Teachers for Health Related Education</b>		
	Frequency	Valid %
4. Schools employing 1 or more teachers qualified-certified to teach teaching health education	60	59.4%
5. Schools employing 1 or more nurses to teach health education	123	47.6%
6. Schools where 1 or more physical education teachers are teaching health education	198	67.3%
7. Schools where 1 or more those teaching PE were certified to teach PE	287	82.4%
8. Schools where 1 or more health education teachers were classroom teachers	206	70.5%

<b>Time / Activity Level of School Health Related Education</b>		
	Frequency	Valid %
9. Schools where the average percent of time during PE that students were physically active was 50% or greater.	300	86.9%
10. Schools where the average number of minutes students were in PE each week was greater than 120.	175	49.7%
11. Schools where PE was taught an average of 5 days per week.	260	73%

<b>Sales / Offering of Foods and Beverages that Compete with Reimbursable Meals</b>		
	Frequency	Valid %
12. Schools that sell/serve <i>foods</i> in competition with reimbursable meals <i>during the meal periods in the food service area.</i>	36	9.8%
13. Schools that sell/serve <i>beverages</i> in competition with reimbursable meals <i>during the meal periods in the food service area.</i>	39	10.7%
14. Schools that sell/serve <i>foods</i> in competition with reimbursable meals <i>throughout the day and campus.</i>	80	22.1%
15. Schools that sell/serve <i>beverages</i> in competition with reimbursable meals <i>throughout the day and campus.</i>	100	27.5%

<b>Frequency of Food / Nutrient Group Provision at Schools</b>		
	Frequency	Valid %
16. Schools that serve <i>at least 3 different fruits during an average week</i>	351	97%
17. Schools that serve <i>at least 5 different vegetables during an average week</i>	332	94.9%
18. Schools that serve <i>at least four different entrees or meat/meat alternatives during an average week</i>	344	96.9
19. Schools that serve <i>fresh fruit</i> an average of three or more times a week	307	85.2%
20. Schools that serve <i>raw vegetables</i> an average of three or more times a week	228	64.9%
21. Schools that serve <i>whole grain foods</i> an average of three or more times a week	233	70.6%
22. Schools that serve <i>cooked dried beans or peas</i> an average of three or more times a week	294	88.5%

<b>Frequency of Food / Nutrient Group Provision at Schools (Continued)</b>		
	Frequency	Valid %
23. Schools that serve <b>2 or more sources of iron</b> an average of three or more times a week	298	85.6%
24. Schools that serve <b>dark green/orange vegetables/fruits</b> an average of three or more times a week	322	89.9%
25. Schools that serve <b>good sources of vitamin C</b> an average of three or more times a week	329	92.6%

<b>Beverages Served / Sold at Schools</b>		
	Frequency	Valid %
26. Schools that serve <b>diet soft drinks</b>	131	41.9%
27. Schools that serve <b>sports drinks</b>	132	42.9%
28. Schools that serve <b>light juices/teas</b>	113	36.9%
29. Schools that serve <b>full calorie sweetened drinks</b>	62	21.5%
30. Schools that serve <b>fruit juice that is &lt;100% real juice</b>	111	36.5%
31. Schools that sell low <b>fat (1%) and /or fat-free milk</b> daily	308	87%

<b>Reimbursable Meals, Demographics, and Enrollment at Schools</b>		
	Frequency	Valid %
32. Schools where students participating in breakfast and lunch programs that met USDA guidelines averages 50% or greater.	300	89.2%
33. Percentage race in schools that is <i>African American</i> :		
• 0-24.9%	78	22.6%
• 25%-49.9%	81	23.5%
• 50%-74.9%	59	17.1%
• 75%-100%	127	36.8%
34. Percentage race in schools that is <i>Caucasian</i> :		
• 0-24.9%	100	31.2%
• 25%-49.9%	55	17.1%
• 50%-74.9%	90	28.0%
• 75%-100%	76	23.7%
35. Percentage race in schools that is <i>Hispanic American</i> :		
• 0-1%	112	55.7%
• 2%-3%	54	26.9%
• 4+%	35	17.4%

<b>Reimbursable Meals, Demographics, and Enrollment at Schools (Continued)</b>		
	Frequency	Valid %
36. School Classifications:		
• Elementary	143	39.5%
• Middle/Junior High	56	15.5%
• High School	77	21.3%
• k-6 or k-8	60	16.6%
• k-12	25	6.9%
37. School Enrollments		
• <500	183	50.7%
• 501-999	147	40.7%
• 1000-1499	25	6.9%
• >1500	6	1.7%

<b>Wellness Policy Knowledge</b>		
	Frequency	%
38. Schools where <i>principals</i> have a great deal of knowledge about the requirements of the local school wellness policy	140	37.9%
39. Schools where <i>faculty</i> have a great deal of knowledge about the requirements of the local school wellness policy	57	15.4%
40. Schools where <i>students</i> have a great deal of knowledge about the requirements of the local school wellness policy	28	7.6%
41. Schools where <i>parents</i> have a great deal of knowledge about the requirements of the local school wellness policy	19	5.1%
42. Schools where the <i>broader community</i> has a great deal of knowledge about the requirements of the local school wellness policy	14	3.8%

<b>Wellness Policy Implementation</b>		
	Frequency	%
43. Schools that have: <i>established a school health council</i>	238	64.5%
44. Schools that have: <i>conducted a needs assessment</i>	162	43.9%
45. Schools that have: <i>developed and approved local wellness policies</i>	280	75.9%
46. Schools that have: <i>implemented all five minimum requirements of a local school wellness policy act</i>	164	44.4%
47. Schools that have: <i>exceeded minimum requirements of the local school wellness policy act</i>	101	27.4%

<b>Schools Principals Opinion About Further Legislation Affecting Schools and Schools Wellness Issues</b>		
	<b>Frequency</b>	<b>Valid %</b>
48. Schools where there principals feel that the government should: <i>mandate PE or make PE a required course for graduation</i>	31	23.8%
49. Schools where there principals feel that the government should: <i>provide additional funding for PE teachers and equipment</i>	13	10%
50. Schools where there principals feel that the government should: <i>allow school districts to have more control over wellness policy</i>	3	2.3%
51. Schools where there principals feel that the government should: <i>mandate certified health and PE teachers in schools</i>	6	4.6%
52. Schools where there principals feel that the government should: <i>require more school nurses</i>	6	4.6%
53. Schools where there principals feel that the government should: <i>mandate more restrictions on soft drinks and sweet snacks in school vending machines</i>	19	14.6%
54. Schools where their principals feel that the government should: <i>mandate even better nutrition standards for school meals</i>	9	6.9%
55. Schools where there principals feel that the government should: <i>create more legislation and policies that will benefit schools</i>	24	18.5%
56. Schools where there principals feel that the government should: <i>place no more demands on schools</i>	8	6.2