

YEAR ONE EVALUATION

WEST VIRGINIA STANDARDS FOR SCHOOL NUTRITION

EXECUTIVE SUMMARY



INTRODUCTION

Overweight and obesity are major public health problems in the U.S. In 2005, West Virginia passed the Healthy Lifestyles Act (House Bill 2816) to help address the state's obesity epidemic by promoting healthy eating and regular physical activity. The law provided policy direction for schools regarding physical education, health education assessments, fitness assessments, body mass index (BMI) assessments and the availability of vended beverages.

To further improve the nutrition environment in public schools, the state Board of Education implemented new *West Virginia Standards for School Nutrition (Policy 4321.1)* during the 2008–09 school year. The standards are based on recommendations made by the Institute of

Medicine in their 2007 report, *Nutrition Standards for Foods in Schools: Leading the Way Toward Healthier Youth*.¹ The report concluded that federally reimbursable school nutrition programs should be the primary source of foods and beverages offered at school, and recommended restrictions on all competitive foods. West Virginia was the first state to implement these standards, which are among the strongest policies in the nation for competitive foods in schools.²

Staff from the Office of Child Nutrition provided training and guidance memoranda to help inform school personnel about the standards. An overview is provided in Table 1.

TABLE 1: SUMMARY OF WEST VIRGINIA STANDARDS FOR SCHOOL NUTRITION

Standard	Requirement
Standards for School Nutrition Programs	Meals must include fresh fruits and vegetables, lean meats, whole grains, low-fat milk and plenty of water. Lunches should contain one-third of the Recommended Daily Allowances for key nutrients.
Standards for Other Foods and Beverages ³	Snacks and drinks available outside of the school meal period should be nutritious, contain <200 calories, contain <200 mg sodium, and limit total fat and sugar to no more than 35% of calories. No products containing caffeine may be sold. Only commercially packaged items may be provided.
Marketing Other Foods and Beverages During the School Day ³	All school day fund raising involving food or drinks should comply with the standards. Commercial logos are not permitted on vending machines.
À La Carte Sales	À la carte sales are prohibited. All meals must be priced and served as a unit.
Snack Options	Schools may choose to provide snacks by following a Child Nutrition Program snack option or through the in-school Snack Program.
Availability of Drinking Water	Safe drinking water must be offered with all meals. Water must be available throughout the day.
Adequate Time for Meal Consumption	Students must have at least 10 minutes to eat for breakfast and at least 20 minutes for lunch.
Staffing	Every county must have a school nutrition program director; preferably a full-time staff person who has training in nutrition and a bachelor's degree.
Local Wellness Policy	All schools that participate in the National School Lunch Program must have a local wellness policy that allows schools to create an environment that promotes healthy living. Policy progress must be updated every two years and evidence of yearly progress must be collected. ⁴

¹ Institute of Medicine. 2007. *Nutrition Standards for Foods in Schools: Leading the Way Toward Healthier Youth*. Washington, DC: The National Academies Press.

² Story M, Nannery MS, Schwartz MB. Schools and obesity prevention: creating school environments and policies to promote healthy eating and physical activity. *Milbank Q*. 2009 Mar;87(1):71-100.

³ Requirements set for foods and beverages that are sold or served outside of the meal period.

⁴ In addition to the federal wellness policy mandate included in the Child Nutrition and WIC Reauthorization Act of 2004, West Virginia requires yearly progress measures and updates every two years.

OVERVIEW OF THE EVALUATION

This executive summary highlights key findings from the first annual evaluation of the implementation of the *West Virginia Standards for School Nutrition (Policy 4321.1)*. The evaluation was conducted in 2009 by a team from West Virginia University Health Sciences Center in collaboration with the West Virginia Office of Child Nutrition, the Office of Healthy Schools and the Office of Healthy Lifestyles.

The evaluation analyzed information from telephone interviews with a stratified random sample of 1,500 parents of students in kindergarten and grades 2, 5, 7 and 9, and 420 students in grades 5, 7 and 9. Surveys also were completed by:

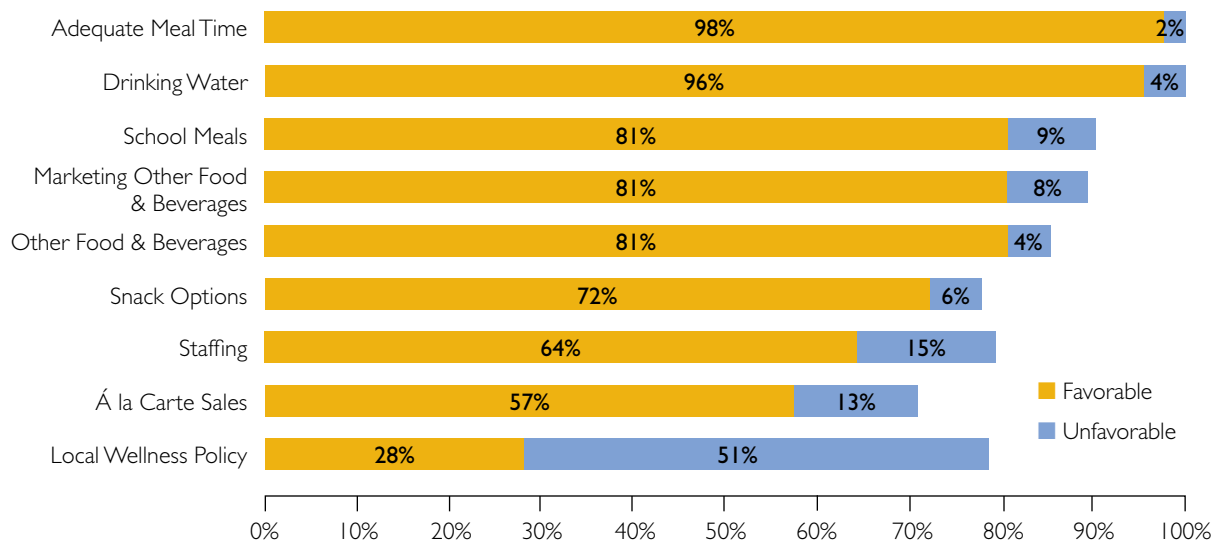
- 53 county food service directors (96% response rate);
- 53 county school superintendents (95% response rate);
- 601 elementary-, middle- and high-school principals (87% response rate); and
- 231 school nurses (83% response rate).

Baseline data for this evaluation were provided by data collected during the Year 1 evaluation of the Healthy Lifestyles Act, which is available at www.hsc.wvu.edu/som/hrc/ecocwv/2816.asp. The Year 2 Healthy Lifestyles Act evaluation, which was funded by the Robert Wood Johnson Foundation, and this evaluation of the nutrition standards were conducted concurrently.

KEY FINDINGS FROM COUNTY FOOD SERVICE DIRECTORS

1. There was strong support for the new standards among county food service directors. As illustrated in Figure 1, food service directors viewed the majority of the components favorably.
2. Surveys of county food service directors also indicated that they had favorable expectations of the new standards. Among county food service directors:
 - 98 percent believed the standards would improve student nutrition “somewhat” or “very much;”
 - 96 percent believed the standards would help educate students to make healthier choices “somewhat” or “very much;”
 - 94 percent believed the standards would provide a safe and healthy learning environment “somewhat” or “very much;”
 - 94 percent believed the standards would improve student health “somewhat” or “very much;” and
 - 72 percent believed the standards would help educate parents to make healthier choices “somewhat” or “very much.”
3. A majority of schools implemented the standards and most principals received training.
 - Eighty-five percent of county food service directors reported that at least 75 percent of the requirements had been implemented at their schools; only 2 percent reported less than 25 percent implementation.
 - Eighty-nine percent of food service directors provided training on the new standards to all principals in their county.

FIGURE 1: COUNTY FOOD SERVICE DIRECTORS' RATINGS OF THE STANDARDS*



* Neutral responses were not included. Some bars may not sum to 100.

4. County food service directors found some components of the standards to be particularly challenging.
 - As shown in Figure 2, 90 percent of food service directors rated the local wellness policy requirement as “somewhat” or “very difficult” to implement. It is important to note that federal policy required school districts participating in the National School Lunch Program or other child nutrition programs to implement a local wellness policy by the first day of the 2006–07 school year. In addition to the federal mandate, West Virginia requires yearly progress measures and updates every two years.
 - A majority of food service directors found it “somewhat difficult” or “very difficult” to implement the standards for providing and marketing other foods and beverages during the school day.
 - The sodium requirement was reported to be the most challenging aspect in procuring foods by 55 percent of food service directors.
5. As part of the evaluation, food service directors were asked about feedback they received from families and school personnel in response to the new standards.
 - As shown in Table 2, county administrators (e.g., superintendents, principals, central office administrators) and school personnel were more positive about the standards than students and parents.
6. According to accounts from county food service directors, negative feedback from families and school personnel was related to different policy provisions.
 - County food service directors reported that students were most concerned about restrictions on foods prepared at home and parents were most concerned about restrictions on calories, fat, sugar and sodium (64% and 42%, respectively).
 - Reports from county food service directors also indicated that school personnel were most concerned about restrictions on the use of food and food coupons as rewards and administrators were most concerned about restrictions on fundraising (30% and 28%, respectively).

FIGURE 2: COUNTY FOOD SERVICE DIRECTORS' RATINGS OF IMPLEMENTATION DIFFICULTY

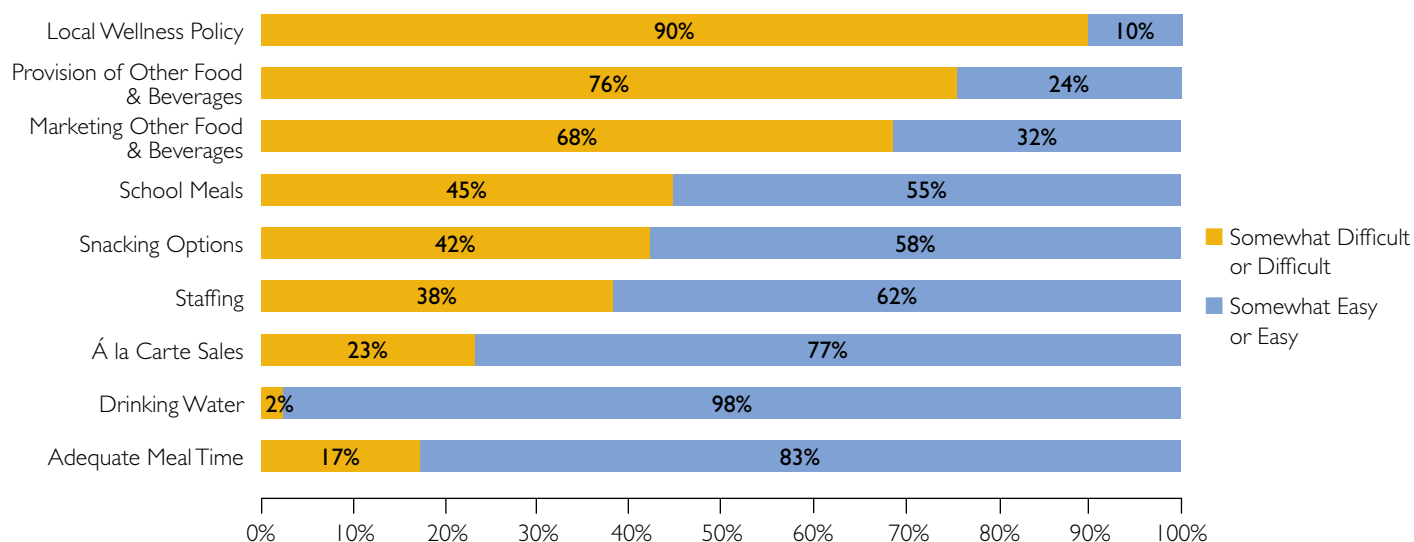


TABLE 2: COUNTY FOOD SERVICE DIRECTORS' PERCEPTIONS OF FEEDBACK REGARDING THE STANDARDS

Feedback Provided By	Generally or Overwhelmingly Positive	Equally Positive and Negative	Generally or Overwhelmingly Negative
County Administrators	38%	40%	21%
School Personnel	17%	38%	42%
Students	13%	17%	60%
Parents	9%	34%	67%

KEY FINDINGS FROM SCHOOL PERSONNEL

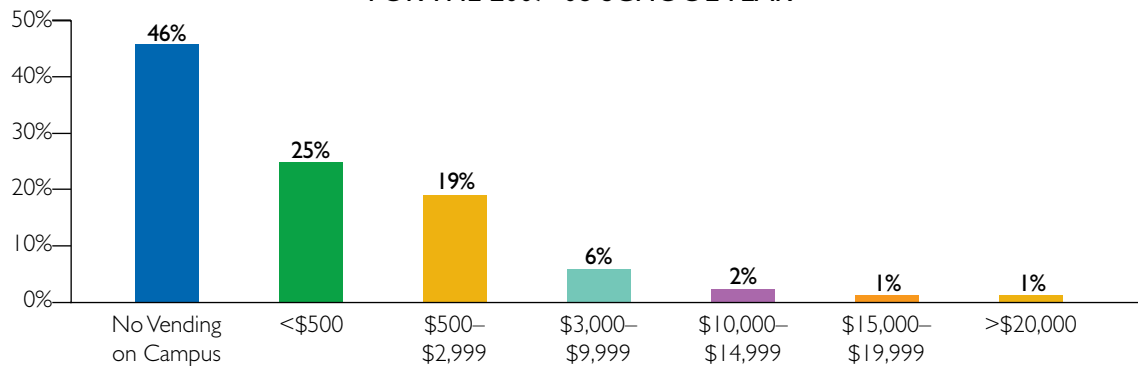
Administrators and staff provided their impressions of the new standards and described the general impact of the policy on students, families and schools.

1. School personnel generally supported the requirements of the new standards.
 - Ninety percent of county superintendents believed the standards would contribute to a healthier lifestyle for students.
 - A majority of school nurses (83%) believed that the standards would lead to improvement in student nutrition.
2. The standards did not impact vending revenues for a majority of schools.
 - According to 68 percent of principals, there was no change in vending revenues from the 2007–08 to the 2008–09 school year. It is important to note that 46 percent of those principals had no vending machines on campus during the 2007–08 school year.

According to one school nurse, “Many children receive the majority of their meals...at school, so we have a very good opportunity to help them develop good eating habits when they are younger.”

- For the 2008–09 school year, decreased vending revenues were reported by 31 percent of principals. Among those, 72 percent attributed the decrease to implementing the new standards.
- As Figure 3 illustrates, 71 percent of schools received relatively modest revenue (less than \$500) from vending during the 2007–08 school year, which was before the standards were implemented. Only 4 percent of schools received \$10,000 or more in revenues.

FIGURE 3: PRINCIPALS’ REPORTS OF VENDING MACHINE REVENUES FOR THE 2007–08 SCHOOL YEAR



When asked about the impact of the new standards, one principal reported, “At first a slight decline in beverage sales during the conversion from soda to water and change over to healthy snacks in the machines. The budget has now stabilized.”

According to one principal, “Our celebrations and parties have taken a new direction. We rarely have these, but now we serve a healthy snack that meets nutritional guidelines, and the parties focus on student activities, not food.”

3. As part of this evaluation, principals were asked about feedback they received from parents and students in response to the new standards. Results are shown in Table 3.

- A majority of principals (51%) reported that parents were most concerned about the requirement for using only commercially packaged foods for parties and celebrations.
- Reports from 42 percent of principals indicated that students were most concerned about restrictions on the use of food or food coupons as rewards.

1. Reports from both parents and students indicated that student dietary habits have improved.

- Parents reported that their child drank an average of 0.5 glasses of soda on the day before the interview, a significant decrease from 0.6 glasses last year.
- Students reported eating an average of 1.8 servings of vegetables on the day before the interview, a significant increase from the 1.6 servings last year.
- Students reported drinking an average of 1.7 servings of milk on the day before the interview, a significant increase from the 1.4 servings last year.
- Twenty-two percent of students reported eating the recommended number of fruit and vegetable servings on the day before the interview, a significant increase from the 16 percent last year.

2. Most parents (64%) and students (52%) were aware that school food and beverage policies changed during the 2008–09 school year.

KEY FINDINGS FROM PARENTS AND STUDENTS

Parents and students were asked about the foods and beverages they typically consumed.⁵ During the interviews, parents and students also were asked about their perceptions of the new standards—much of this feedback was consistent with findings reported by county food service directors and principals.

TABLE 3: PRINCIPALS’ PERCEPTIONS OF FEEDBACK REGARDING THE NEW STANDARDS

Feedback Provided By	Generally or Overwhelmingly Positive	Equally Positive and Negative	Generally or Overwhelmingly Negative
Parents	20%	27%	40%
Students	16%	20%	42%

Phone interviews with students indicated a significant increase in vegetable and milk consumption over the past year. A significantly higher percentage of students also reported meeting the daily recommendation for fruits and vegetables.

⁵ Student and parent reports were compared to data obtained the previous year through the evaluation of the Healthy Lifestyles Act.

3. As shown in Table 4, parents and students who were interviewed as part of this evaluation reported mixed reactions to the new standards.
- There was a wide range of responses from parents. Some were in favor of eliminating student access to soda during the school day, while others were opposed to bans on homemade snacks for school parties. Some parents also reported that standards for older students should be less stringent than those for elementary-school students.

- Students also provided a variety of responses, including an appreciation for having more healthy options during the school day and beliefs that this would help them make nutritious choices. Like parents, some students were opposed to bans on homemade snacks for school parties.

TABLE 4: PARENT AND STUDENT PERCEPTIONS OF THE STANDARDS

Feedback Provided By	Generally or Overwhelmingly Positive	Equally Positive and Negative	Generally or Overwhelmingly Negative	Don't Know
Parents	36%	28%	33%	3%
Students	37%	34%	26%	3%

SUMMARY

This initial evaluation of the implementation and impact of the *West Virginia Standards for School Nutrition (Policy 4321.1)* highlighted some of the challenges and benefits associated with creating a healthier nutrition environment in public schools across the state. Overall, the new standards were implemented to a surprisingly high degree in the first year, despite some difficulties reported by county- and school-level personnel. County food service directors and school personnel perceived the new standards quite positively and believed that implementation would improve student health. The significant improvements in students' dietary habits that were reported by parents and students during this first year already provide documented support for these beliefs.

Reports from county food service directors and school administrators generally indicated that families had negative perceptions of the standards, but it is important to note that this finding was not true among those parents and students who were interviewed as part of this evaluation. It is possible that school administrators were more likely to hear feedback from parents and students who were dissatisfied, or that those conversations were more likely to be remembered.

RECOMMENDATIONS

Following are key recommendations based on the findings highlighted in this report. Policy-makers at the state, county and school level are the primary audience for these recommendations, however school personnel and community members may use these to help support a healthier environment for students.

- 1 Inform and educate families to explain the reasoning behind the standards, the intent of implementing strong nutritional standards in public schools statewide, and their potential to positively impact student health.
- 2 Provide professional development for school personnel that emphasizes alternatives for rewarding student achievement, as opposed to using food or food coupons.
- 3 Increase the involvement of school personnel and community members in the wellness policy process. Although local wellness policies are typically coordinated by county food service directors, the policies focus on both nutrition and physical activity. Including physical activity/education experts and others may be beneficial in facilitating physical activity and reducing the difficulties perceived by county food service directors.

