

INTERVENTION

West Virginia School Nutrition Standards West Virginia Department of Education



INTENT OF THE INTERVENTION

The *West Virginia Board of Education Policy 4321.1: Standards for School Nutrition* (“nutrition standards”) is a practice-tested policy with a primary focus on improving the school food environment through changes in school district policies and practices. Two key intended outcomes of the policy are to improve the nutritional quality of foods available in schools and reduce marketing of unhealthy foods and beverages to students. This intervention addresses the policy and organizational levels of the socio-ecological model.

OVERVIEW

West Virginia’s nutrition standards apply to foods sold, served and/or distributed to students on school property during the school day. The original rule was filed in 1982 and was revised in 1992, 1994, 2004, and 2008. The most recent revision (2008) was developed with significant stakeholder input by the West Virginia Department of Education, Office of Child Nutrition’s (OCN) Nutrition Advisory Council in response to the 2004 Child Nutrition Reauthorization requirement for local wellness policies and the 2007 Institute of Medicine (IOM) recommendation for nutrition standards in schools.¹ The Nutrition Advisory Council incorporated the IOM recommendations into West Virginia’s nutrition standards, which was then approved by the West Virginia Board of Education’s Wellness Committee and eventually enacted by the full Board in January 2008.

The nutrition standards are implemented through the OCN and address both school meals and “other foods and beverages” sold/available outside of the federally-reimbursed school meal programs (e.g. school stores, vending, school parties, and others). The standards for “other foods and beverages” more closely approximate the 2007 IOM recommendations for foods in schools than any other state policy to date. In addition to school meals, the nutrition standards comprehensively address the school nutrition environment with provisions for marketing, fundraising, food as a reward, availability of drinking water, adequate time for meal consumption, snacks, staffing, local wellness policies, accountability and compliance, and evaluation of the policy. (To download the policy, see the *Intervention Materials* section.)

Intended Population: Students attending schools in West Virginia under the authority of the West Virginia State Board of Education.

Setting: Schools under the authority of the West Virginia State Board of Education (pre-K through 12th grade).

Length of Time in the Field: The standards were passed by the West Virginia State Board of Education on January 2, 2008, and went into effect July 1, 2008.

¹ Institute of Medicine, *Nutrition Standards for Foods in Schools: Leading the Way toward Healthier Youth*, 2007

HEALTH EQUITY CONSIDERATIONS

The *West Virginia Board of Education Policy 4321.1: Standards for School Nutrition* ("nutrition standards") primary focus is to improve the school food environment through changes in school district policies and practices. Two key intended outcomes of the policy are to improve the nutritional quality of foods available in schools and reduce marketing of unhealthy foods and beverages to students. The West Virginia School Nutrition Standards were evaluated as state-level policy affecting all the children in the state who attend schools in the 55-county system. This is a mandatory policy that reaches 282,000 students, pre-K through 12th grade. Almost 52% of the student population in West Virginia is eligible for free or reduced-price school meals.

CORE ELEMENTS

This section outlines the aspects of an intervention that are central to its theory and logic and that are thought to be responsible for its effectiveness. Core elements are critical features of the intervention's intent and design and should be kept intact when the intervention is implemented or adapted.

- 1. Base the policy on strong nutrition standards that address all foods and beverages available in schools.** West Virginia based its nutrition standards on the Institute of Medicine's (IOM) recommendations for foods available outside of school meals. The standards address both school meals and "other foods and beverages" outside of school meals, as well as marketing, monitoring and enforcement, staffing, local wellness policies, and more.
- 2. To ensure key stakeholders are involved throughout the policy development process, invite a wide variety of stakeholders to participate.** West Virginia's Nutrition Advisory Council membership represents a wide variety of stakeholders including county school staff and administrators, teachers and parents, food service industry, the state legislature, university faculty and researchers, the state Departments of Education and Health & Human Resources, dietitians, physicians and others.
- 3. Recruit policymaker champions to help pass the standards.** In West Virginia, State Board of Education member Barbara Fish served on the IOM committee that developed the 2007 recommendations for school foods and was a key advocate for development and passage of West Virginia's standards.
- 4. Provide training and education for all groups involved with policy implementation.** West Virginia trained State Department of Education and county school district staff such as county food service directors, administrators, and principals. In addition, education materials were made available online for parents and other community members to advocate for healthier foods and beverages in schools. The West Virginia Child Nutrition Director and staff also provide information to federal agencies and other groups nationwide on their process and progress. (Learn more about training materials and resources in the *Training and Technical Assistance* section)
- 5. Develop resources to support implementation.** West Virginia developed or revised a wide variety of implementation tools to support the new standards, including a website, healthy school celebrations booklet, quarterly newsletters, and more. (Learn more about these resources in the *Implementation* section, and access them in the *Intervention Materials* section)
- 6. Tie policy implementation to financial incentives or disincentives.** West Virginia was able to eliminate soft drinks from high schools in all counties through a voluntary recognition program that provided financial incentives to participating county school systems (Learn more about this process in the *Implementation* section). Further, West Virginia ties policy compliance to funding for school meals.

7. **Provide a strong marketing/PR component.** West Virginia contracted with a private public relations firm to develop a branding and marketing campaign that included a website and various materials and online tools to assist schools and parents in making changes to the school food environment. They also developed media packets and other communication tools to increase visibility and publicity for the policy. (Learn more about these resources in the *Implementation* section, and access them in the *Intervention materials* section)
8. **Monitor county school food service departments for compliance with the state policy.** West Virginia incorporated monitoring activities into existing tools' tracking of county compliance with National School Lunch Program standards. (Learn more about monitoring and evaluation in the *Implementation* section, and access related resources in the *Intervention Materials* section)

RESOURCES REQUIRED

Staff:

State level: Two full-time staff (in West Virginia, the Child Nutrition Executive Director and Child Nutrition Coordinator) oversee coordination and support for policy implementation, monitoring and evaluation. They also provide training and technical assistance to county staff to ensure clarification and compliance.

County level: County child nutrition directors monitor compliance at the county and school level with the assistance of school administrators. Some larger counties may designate this responsibility to a child nutrition supervisor or assistant director. (*NOTE: staffing needs may vary by county*)

Materials:

State level: No materials are required, but a variety of tools and resources are helpful to assist county school systems implement the policy at the local level. These include a nutrition calculator and website (WVSmartFoods.com), newsletters, presentations, and implementation guidance memos to clarify the policy. Presentation materials for county-, state-, and national-level audiences are also useful.

County level: County school systems are not required to develop any materials supporting policy implementation, but may choose to do so based on their individual preferences. (*Note: costs may vary by county*)

Other Costs:

State level: In West Virginia, most costs related to policy development and implementation and monitoring are incorporated into the Department of Education Office of Child Nutrition's (OCN) general operating budget and workplan, and do not represent significant additional expenditures. Two activities that do present additional costs are:

- \$50,000 for a contract with a university to evaluate the impact of the policy (two-year contract that involved research, surveys and cost of results publication)
- \$25,000 per year for a contract with a marketing firm to create and maintain a marketing campaign

County level: No mandatory initial investment costs are required, although counties may incur various costs related to meeting the requirements of the policy, for example changing vending

machine fronts to comply with the marketing requirements or making changes to food service to comply with new school meal nutrition standards. In West Virginia, counties did not see overall decreases in revenue after implementing the policy. The OCN provided state grant matching funds for the first two years after the policy went into effect that were earmarked for costs associated with implementing the policy. (NOTE: costs may vary by county)

IMPLEMENTATION

Formative Work and Advocacy Process

In 2004-2005, the West Virginia Nutrition Advisory Council (NAC), with guidance from the Child Nutrition Executive Director, convened to determine how West Virginia could meet the new nutrition requirements of the 2004 Child Nutrition Reauthorization. At that same time, Barbara Fish, a West Virginia State Board of Education member, was serving on the Institute of Medicine (IOM) committee that issued recommendations for nutrition standards for all foods in schools.² Ms. Fish worked closely with the Child Nutrition Executive Director to encourage the NAC to draft statewide nutrition standards based on the IOM recommendations.

The West Virginia Board of Education Wellness Committee then approved the draft policy and referred it to the full board. The board posted the new standards for a 30-day public comment period, during which stakeholders responded with 132 pages of comments. The Board voted on the individual provisions of the policy separately and revised certain provisions of the policy, specifically the beverage recommendations (see description below). The revised policy passed on January 10, 2008 and went into effect July 1, 2008, making West Virginia the first state to enact statewide nutrition standards based on the IOM recommendations.

The IOM beverage recommendations, which do not allow soft drinks, were a controversial provision because they conflict with existing West Virginia state law. West Virginia Code §18-2-6a expressly allows sale of soft drinks in high school. Since West Virginia State Board of Education policy cannot conflict with state legislation, the policy's provision addressing soft drinks was revised to prohibit caffeinated drinks, which would categorically disallow many soft drinks. However, since some soft drinks are caffeine-free or have uncaffeinated versions, the West Virginia Department of Education's Office of Child Nutrition (OCN) worked with West Virginia First Lady Gayle Manchin to develop a program that publicly recognized and provided financial incentive for county school systems that voluntarily removed all soft drinks—both caffeinated and uncaffeinated—from their high schools. The program was very successful and resulted in 53 of the 55 county school systems in the state removing soft drinks from all of their high schools during the school day.

Policy Implementation

Implementation of the nutrition standards involves a variety of components including:

- 1) Education and training for state- and county-level school staff as well as other key groups;
- 2) A marketing campaign targeting parents, students, and schools through a branded website and a variety of informational materials; and
- 3) Resources and tools to help schools and parents implement the policy and advocate for healthier foods in schools.

² Institute of Medicine, *Nutrition Standards for Foods in Schools: Leading the Way toward Healthier Youth*, 2007

1) **Education and Training**

Training and guidance for state- and county-level staff is critical to ensuring the policy is implemented as intended. Training and guidance materials could include:

- **Implementation guidance memos:** In West Virginia, guidance memos are developed and distributed by the OCN to key state- and county-level school staff on an ongoing basis and are posted to the OCN website. The memos clarify and operationalize specific provisions of the policy.
- **In-person trainings for state- and county-level school staff:** Following passage of the West Virginia nutrition standards, the Child Nutrition Director conducted in-person internal trainings with state OCN staff. State-level staff then held in-person training for county food service directors, superintendents, principals, school business staff, and school nurses in all 55 counties in the state. Presentations were also delivered to county boards of education, the West Virginia School Nutrition Association, the West Virginia Healthy Lifestyles Coalition, the U.S. Department of Agriculture, and other state and national audiences. Training and education efforts are ongoing with both county- and state-level staff and policymakers, as well as national groups and federal agencies.
- **General informational/educational materials:** The OCN developed various factsheets for general dissemination and public education. These factsheets provide general information about the policy and also cover specific topics such as flavored milk and school meals.
- **Press kit:** After passage of the nutrition standards, the OCN developed a press kit that was made available to county school system staff and administration to supply to media outlets in their county.

2) **Marketing and Promotion**

Marketing and promotion of the nutrition standards increases awareness of and support for the policy after it has passed.

In West Virginia, the OCN hired a communications and marketing firm to develop a branding and marketing campaign for the policy. The campaign involved:

- **Designing an OCN logo,** which is used on all materials related to the policy.
- **Developing a website:** In West Virginia, the website (www.wvsmartfoods.com) is the centerpiece of the implementation strategy. The site provides information about the policy and includes a toolkit to help parents and schools advocate for and implement various provisions of policy including healthy fundraising, school celebrations, healthy rewards, and healthy snacks. The website also includes success stories, recipes that meet the policy's nutrition guidelines, a nutrition calculator, and media contacts.
- **Creating a variety of other marketing and educational materials:** West Virginia developed these materials—including the factsheets mentioned above—for schools, parents, and the community. (These materials can be accessed through the www.wvsmartfoods.com website or in the *Intervention Materials* section of this template)

3) **Revise Tools and Resources**

In addition to creating new tools and resources, it is important to revise existing resources to support policy implementation.

In West Virginia, existing resources that were revised to support the new nutrition standards and provision in the policy include:

- *Let's Party: School Party Ideas* (April 2010), a booklet to help schools and parents host safe, healthy, active school celebrations. The booklet includes tips, recipes, and ideas for activities, decorations, and creative themes. Originally published in 1993, the booklet was revised in 2010 to include more physical activity and support the new, revised nutrition standards. (This resource can be accessed in the *Intervention Materials* section of this template)
- *Mountain MealTimes Newsletter*. The Mountain MealTimes Newsletter is the OCN's quarterly newsletter. After passage of the new nutrition standards, the newsletter included information about and promotional messaging for the policy. (This resource can be accessed in the *Intervention Materials* section of this template)

Policy Monitoring and Evaluation

Monitoring activities determine the extent to which county school systems are in compliance with the policy, and evaluation examines the impact of the policy on environmental and behavioral outcomes. In West Virginia, the OCN conducts two key activities to measure progress on implementing the policy and improving the school food environment:

- 1) **Monitoring**: West Virginia incorporates monitoring activities into existing tools and systems. Monitoring occurs through both formal and informal methods. Informally, the OCN receives feedback from parents and independent auditors about policy violations observed in county school systems. Formally, the OCN modified its annual Monitoring of Accountability form, a mandatory reporting tool that tracks compliance with the National School Lunch Program standards and is completed annually by county food service directors for each school in their school system. The form was modified to incorporate questions tracking compliance with the nutrition standards. County school system funding for school meals is contingent upon compliance with the nutrition standards policy. (The Monitoring of Accountability form may be accessed in the *Intervention Materials* section of this template)
- 2) **Evaluation**: The OCN contracts with the West Virginia University Health Sciences Center to conduct an annual evaluation. The Year One Evaluation surveyed parents, students, and key school staff (food service directors, county school superintendents, principals, and school nurses) about their perceptions of the policy, as well as the extent to which the policy is being implemented. The evaluation also reported changes in student food and beverage consumption. The Year Two Evaluation is expected soon and will examine additional measures and policy outcomes. (The Year One Evaluation may be accessed in the *Intervention Materials* section of this template)

Keys to Success:

- *Gain student acceptance of new foods*. Various counties conducted taste testing of some new food items, along with meetings to educate the students about some of the new changes and the reasons for the change. Many counties used student councils and student advisory groups as well as the students involved in the USDA Team Nutrition grants West Virginia received. These students were peer advocates and were able to lead the change in some counties.
- *Be flexible and creative in implementing challenging policy provisions*. In West Virginia, changes to foods offered in the cafeteria as part of school meals included identifying and purchasing more whole grain products. Most schools had already offered some whole grains but expanded from offering only whole wheat bread to including brown rice and

whole wheat pastas. Schools also added more fresh fruits and vegetables. There was some concern that costs would significantly increase, and while there was an initial increase, planning healthier options and food preparation methods—such as preparing more meals from scratch—allowed the costs of other food products to decrease. Milk distributors have been reformulating some of their products to meet the new standards. For example, low fat dairy products were already available prior to the new policy, but distributors are now reducing the amount of sugar in flavored milk and are providing nonfat flavored milk as well.

- *Address fundraising concerns by providing alternatives.* In West Virginia, concerns about fundraising were addressed by OCN staff and county child nutrition directors by providing alternative ideas for fundraising through the www.wvsmartfoods.com website. The OCN and county child nutrition directors also monitor schools for compliance on marketing healthier items.
- *Address professional development requirements.* In West Virginia, there were no major concerns about the policy provision requiring that all county child nutrition directors hold a bachelors degree with a minimum of six hours of foods and nutrition related course work. Every current child nutrition director was grandfathered in with a “permanent authorization.” All new child nutrition directors were given a “temporary authorization” that is renewed annually, and is contingent upon the annual completion of 15 clock hours of staff development related to Child Nutrition Programs and offered or granted prior approval by the state agency.

Barriers to Implementation:

- *Opposition from various stakeholders to specific provisions during policy development and enactment.* West Virginia experienced opposition during policy development to certain policy provisions such as eliminating soft drinks during the school day. This barrier was addressed by creating a recognition program for schools that voluntarily removed soft drinks (see page 4 for a detailed explanation).
- *Resistance from parents, principals, and other school staff in implementing various aspects of the nutrition standards.* In West Virginia, parents and schools were not initially receptive to certain policy provisions such as disallowing unhealthy foods in school/classroom celebrations, and no longer using food as a reward. Providing guidance memos and training to school staff, as well as educational materials for parents such as the “Let’s Party” booklet and the online parent toolkit helped increase buy-in. Tracking compliance through the annual monitoring forms and tying compliance to funding further helped ensure the policy’s implementation.

EVIDENCE REVIEW SUMMARY

Underlying Logic:

The school food environment is an important source of nutrition for many children. It is a place where children spend about one-third of their day so an improvement in the school food environment is likely to lead to improved dietary behaviors. This environment seems particularly important for youth, who qualify for free and reduced breakfast and lunch, as some research has shown that children who participate in school meal programs have better nutrition than those who do not.

Strategies Used³: West Virginia's nutrition standards include the following evidence-based strategies for healthy eating:

- **School nutrition programs to promote healthy eating** by modifying the school food environment.
- **Comprehensive obesity prevention programs in a single setting** that encompasses requirements related to not only the foods and beverages offered during the meal times of breakfast and lunch, but also for foods available in other school environments such as school celebrations and fundraising events.
- **Food and beverage marketing to favor healthy foods and beverages:** Commercial logos and other marketing messages for 'other foods and beverages' were removed and such foods and beverages were not available for sale during mealtimes.
- **Changing access and availability to favor healthy foods and beverages** by increasing availability of healthier foods and beverages during breakfast and lunch meal times. Also, free drinking water was made available throughout the school day.

Research Findings or Evaluation Outcomes:

The West Virginia Office of Child Nutrition contracts with West Virginia University (WVU) to conduct annual evaluations of the nutrition standards. Methodology for Year One Evaluation included surveying 1,500 parents, 420 students, 53 food service directors, 53 county school superintendents, 601 principals, and 231 school nurses about the extent to which the policy was being implemented and changes in student food and beverage consumption. Only Year One Evaluation data were available at the time of this review.

West Virginia's nutrition standards were reviewed for outcomes related to: 1) **Implementation of the policy** at the school-level and 2) **Behavioral change** at the student-level.

The Year One Evaluation data from the WVU report indicate that:

- 85% of county food service directors reported that at least 75% of the policy requirements have been implemented at their schools. Only 2% reported less than 25% implementation.
- 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 the previous year.
- Students reported eating an average of 1.8 servings of vegetables on the day before the interview, a significant increase from 1.6 servings the previous year.
- Students reported drinking an average of 1.7 servings of milk on the day before the interview, a significant increase from 1.4 servings the previous year.
- 22% of students reported eating the recommended number of fruit and vegetable servings on the day before the interview, a significant increase from 16% the previous year.

POTENTIAL PUBLIC HEALTH IMPACT

Reach: West Virginia's nutrition standards have strong potential for reach due to their nature as a statewide policy which will affect all the children in the state who attend schools in the 55 county school systems under the purview of the West Virginia State Board of Education (282,000 students pre-K through 12th grade). The policy may have a greater impact on students eligible for free or reduced school meals, which comprises almost 52% of the student population

³ A full description of the intervention strategies used can be found on the Center TRT website with references to the sources of evidence to support the strategies.

in West Virginia (U.S. Department of Education, National Center for Education Statistics, Common Core of Data, 2009-10). Approximately 195,000 lunches are served daily in West Virginia schools. In addition to school meals, the policy comprehensively addresses different components of the school food environment with provisions for marketing and nutrition standards for “other foods and beverages during the school day,” fundraising, food as a reward, availability of drinking water, adequate time for meal consumption, snacks, staffing, local wellness policies, accountability and compliance, and evaluation.

Adoption: The potential for adoption is very high due to the mandatory nature of the nutrition standards, and county school system funding for school meals is contingent upon adoption of and compliance with the policy. According to the evaluation data available, West Virginia’s policy has been adopted across all counties in the state. Additionally, by tying policy implementation to financial incentives/disincentives, the potential and motivation for school districts to adopt the policy is further increased.

Implementation: Data indicate different provisions of the policy have been implemented across the counties within West Virginia. Specifically, the Year One Evaluation data collected by West Virginia University indicates 85% of county food service directors report that at least 75% of the policy requirements have been implemented at their schools. Only 2% report less than 25% implementation. The West Virginia Department of Education Office of Child Nutrition’s (OCN) modified annual Monitoring of Accountability form incorporates questions that track compliance with the nutrition standards. Policy developers provided good communication and training to assist with policy implementation.

Effectiveness: The policy’s potential for effectiveness is strong because many of its provisions are requirements, not recommendations. Data available at the time of the review show that majority of the provisions of the policy had been implemented in 85% of the schools. In addition, while the behavioral data were self-reported or reported by parents, it appears that the policy was associated with improvements in students’ dietary behaviors: an increase in fruit/vegetable and milk consumption and a decrease in soft drink consumption compared to the previous year were reported.

Maintenance: Maintenance appears to be feasible because the various policy components do not require extensive resources to be sustainable. Incorporating the policy into the regular monitoring of the federal school nutrition programs by the OCN further ensures maintenance. West Virginia’s nutrition standards have been in effect since July 1, 2008. Implementation, monitoring and enforcement of the policy are overseen by the OCN, and all funding for implementation and monitoring comes from the OCN’s working budget.

INTERVENTION MATERIALS

The West Virginia Standards for School Nutrition (Policy 4321.1) are available for download at: <http://wvde.state.wv.us/nutrition/toolkit/pdfs/Policy%204321-1.pdf>

The Year One Evaluation Report, conducted by the West Virginia University Health Research Center, is available for download at: <http://www.hsc.wvu.edu/som/hrc/Current-Research/Standard-%20for-School-Nutrition.aspx>

The WVSmartFoods.com website can be accessed at www.wvsmartfoods.com. This website contains many implementation materials, including:

- Factsheets about the policy in general, as well as specific topics including flavored milk and school meals
- Outreach and marketing materials such as sign-on postcards, posters, and more
- Links to resources for topics addressed by the policy such as healthy fundraising, school celebrations, school snacks, and increasing school meal participation rates
- Media contacts for each county school system
- Links to school recipe databases
- West Virginia county school system success stories

The Implementation Guidance Memos developed by the WV Office of Child Nutrition for and distributed to county food service directors to clarify specific provisions of Policy 4321.1, are available for download at: <http://wvde.state.wv.us/nutrition/policies.html>.

Materials for Download from the [Center TRT website](#):

- *Let's Party: School Party Ideas* (see page 6 for booklet description)
- *Mountain State MealTimes* (see page 6 for newsletter description)
- Monitoring of Accountability form (see page 6 for description)
- WV Office of Child Nutrition Training Presentation for county school system administrators

EVALUATION MATERIALS

Center TRT Evaluation Materials:

Center TRT developed an evaluation logic model and suggested evaluation plan for statewide school nutrition standards such as those West Virginia passed. The logic model is intended to guide the evaluation process (as opposed to the planning process). The evaluation plan focuses on the implementation and effectiveness of the school nutrition standards in changing the school food environment. The evaluation plan addresses the reach, implementation, and acceptability and effectiveness of statewide school nutrition standards on short term outcomes regarding availability of healthy foods. This evaluation is a pre-post design with no control group. The evaluation plan provides guidance on evaluation questions and types and sources of data for both process and outcome evaluation. If you are interested in answering questions not listed in the evaluation plan, please refer to the list of additional evaluation question found on the Center TRT website. Links for some of West Virginia's data collection tools are available in the Intervention Materials section of the West Virginia template on the [Center TRT website](#) and are linked where applicable.

Developer Evaluation Materials:

The West Virginia Department of Education, Office of Child Nutrition evaluators created several materials for its evaluation that are also available for your use. Some of these tools have been incorporated into the evaluation plan that Center TRT developed. **Please note that Center TRT has not reviewed these tools. Please provide credit to the West Virginia Department of Education, Office of Child Nutrition when reproducing materials in the original, or adapted, form:**

- Monitoring of Accountability Form

TRAINING AND TECHNICAL ASSISTANCE

The West Virginia Office of Child Nutrition is available to discuss or present on their process for passing, implementing, monitoring and evaluating the West Virginia nutrition standards.

ADDITIONAL INFORMATION

Program Contact(s):

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Related Resources:

West Virginia Department of Education, Office of Child Nutrition:

<http://wvde.state.wv.us/nutrition/>

Institute of Medicine, *Nutrition Standards for Foods in Schools: Leading the Way toward Healthier Youth*, 2007: <http://www.iom.edu/Reports/2007/Nutrition-Standards-for-Foods-in-Schools-Leading-the-Way-toward-Healthier-Youth.aspx>