The Child Nutrition and WIC Reauthorization Act of 2004 mandated that school districts participating in any federally reimbursed school meal programs develop a local school wellness policy by the beginning of the 2006–07 school year. School districts were required to establish nutritional guidelines for all foods available on the school campus; assure that federally reimbursable school meals meet minimum USDA standards; and establish goals for nutrition education, physical activity and other school-based activities. While the federal mandate included some physical activity language, it did not include specific requirements for addressing physical education.

As Congress works to reauthorize the federal legislation that included the local school wellness policy provision, there is real opportunity to help school districts address the nation’s childhood obesity epidemic. Nearly one-third of U.S. children and teens are now overweight or obese, which increases their risk for heart disease, type 2 diabetes, high blood pressure and a host of other serious conditions. Policy-makers, researchers and advocates are looking for ways to make schools healthier by strengthening local wellness policies; updating nutrition standards for competitive foods, such as those offered in vending machines, à la carte lines and school stores; allowing more time for physical activity; and strengthening nutrition education and promotion efforts.

This brief summarizes results of the preliminary evidence on the implementation of local school wellness policies and presents data in three key areas: quality, evaluation and funding of the policies; nutrition standards and nutrition education requirements; and physical activity requirements. While many of the published studies include school districts from across the nation, it is not clear that they accurately represent national data or trends. This brief will be updated as more evidence about the implementation and impact of these policies becomes available.

Key Research Results

Quality, Evaluation and Funding of Local School Wellness Policies

The majority of U.S. school districts developed a local school wellness policy by the first day of the 2006–07 school year, but many of the policies were weak, and the quality varied greatly.

Evidence from two states suggested that local school wellness policies lacked strength because they did not include enforcement mechanisms, and many did not provide specific guidelines for issues addressed by the federal mandate.
• A study of local school wellness policies from districts in lower-income, rural Colorado communities found that ratings of policy strength ranged on average from 3 to 31 on a scale of 1 (weakest) to 100 (strongest). Physical education guidelines had the weakest rating of 3 on average, followed by nutrition guidelines, which received an average rating of 6.  

• A review of 2007–08 local school wellness policies for districts in Connecticut found a mean strength rating of 30 for policies related to school meals, and a rating of 31 for policies related to physical education, physical activity, and communication and promotion. The ratings were based on a scale of 1 to 100.  

According to an analysis of 140 school districts nationwide, 87 percent to 99 percent had a written wellness policy that addressed all of the federal requirements, but there was considerable variation in the strength of the policies.  

An evaluation of local school wellness policies in Connecticut found that districts with the highest free and reduced-price lunch participation rates had the strongest policies overall. The same pattern was found in Utah.  

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**Average Strength Scores of Local School Wellness Policies Among Connecticut Districts**  

<table>
<thead>
<tr>
<th>Policy Category</th>
<th>Strength Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nutrition Education</td>
<td>44%</td>
</tr>
<tr>
<td>School Meals</td>
<td>30%</td>
</tr>
<tr>
<td>Other School Foods and Beverages</td>
<td>49%</td>
</tr>
<tr>
<td>Physical Education</td>
<td>31%</td>
</tr>
<tr>
<td>Physical Activity</td>
<td>31%</td>
</tr>
<tr>
<td>Communication and Promotion</td>
<td>31%</td>
</tr>
<tr>
<td>Evaluation</td>
<td>38%</td>
</tr>
</tbody>
</table>

The graph highlights the total strength score for each policy category based on a scale of 1 to 100 for local school wellness policies in districts across Connecticut. Policy items were scored as strong statements (defined as those that include a concept followed by specific plans or strategies for implementation and wording that indicates action is required, such as shall, will, must, comply and enforce) or weak statements (defined as those that are hard to enforce because they are vague and/or only recommend, and include words such as may, should, encourage, suggest, urge, make an effort and try).

School districts cited a lack of resources as a barrier for implementing their local school wellness policy.  

An analysis of 256 school districts from across the country found that only 2 percent addressed how funding will be made available for implementation and evaluation of the local school wellness policy.  

In a national survey of 363 foodservice directors, 63 percent perceived limited resources as a barrier to developing and implementing the local school wellness policy.  

According to a national study, 43 percent of 809 responding school district nutrition directors cited a lack of resources, such as time and labor, as barriers to implementing nutrition standards. In the same study, 27 percent of 538 responding school district nutrition directors reported lack of funding as a barrier.  

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ii The number of responses from school district representatives varied among the different survey questions.
for implementing nutrition education components, and 17 percent of 251 responding school district nutrition directors reported lack of funding as a barrier to implementing physical activity components.\(^8\)

**Monitoring and evaluating local school wellness policies were challenges for many school districts.**

- A national study of 256 school districts found that 68 percent of districts addressed monitoring and evaluation as part of their local school wellness policy. However, only 32 percent had a process for revising policies based on evidence of implementation or effectiveness and identified a specific person responsible for making revisions.\(^9\)
- Nationwide analyses of 240 school districts found that only 42 percent of districts were evaluating the implementation or impact of their local school wellness policy. An additional 49 percent of the districts indicated plans to evaluate the impact of their wellness policy in the future.\(^\text{10}\)

**Nutrition Standards and Nutrition Education Requirements**

*Since the federal mandate was passed, school districts have strengthened their nutritional guidelines. Research links such actions to health benefits for students and to increased participation in the National School Lunch Program.*

- Several surveys showed that restrictions on competitive foods have increased since the federal mandate was passed. For example, in a study of 363 school districts nationwide, the percentage of districts with nutritional guidelines for foods and beverages sold in vending machines increased from 23 percent prior to the mandate to 79 percent following the mandate. The same study found that the percentage of districts with a policy that set limits on the fat and sugar content of à la carte foods and beverages increased from 30 percent and 24 percent to 80 percent and 74 percent, respectively.\(^11\)
- An analysis of food practices at 16 middle schools in the Minneapolis/St. Paul metropolitan area found that student body mass index increased slightly on average for each additional unhealthy food practice in the school, such as offering junk foods in fundraising programs or as rewards in class.\(^12\)
- Schools with a policy that prohibited students from bringing fast food on campus had higher rates of participation in the National School Lunch Program, according to a survey of more than 200 food service directors in Pennsylvania.\(^13\)
- An intervention conducted in three Connecticut middle schools found that student consumption of unhealthy foods and beverages decreased when these items were removed from school, and there was no compensatory increase in consumption of those foods or beverages at home.\(^14\)

*Students who had easy access to unhealthy competitive foods and drinks at school tended to eat more calories and have a less healthy diet compared with students who attended schools with stronger restrictions for competitive foods.*

- Data from studies conducted in different regions of the country suggested that students’ access to unhealthy competitive foods, such as those sold in vending machines, à la carte lines and school stores, was associated with a higher intake of total calories, soft drinks, total fat and saturated fat, and a lower intake of fruits, vegetables, milk and key nutrients.\(^15,16,17,18,19,20,21\)
Local school wellness policies commonly required schools to follow state standards for nutrition education and to develop ways to integrate nutrition education into the core curriculum. There was considerable variance in how the policies addressed nutrition education outside of the classroom.

- Nearly 90 percent of districts required schools to align their nutrition education programming with state-specified standards or curricula, according to one study of 363 districts around the country and a statewide study of 499 districts in Pennsylvania.22,23
- A study of 256 school districts across the country found that 79 percent of the local school wellness policies addressed classroom-based nutrition education that included requirements for teaching the subject; following state health- and nutrition education-related standards; and/or addressing specified learning outcomes.24
- Data from two national surveys indicated that more than 75 percent of school districts had a local school wellness policy that included goals for involving the food service department in nutrition education programming,25,26 but another national study found that only 46 percent of school districts had a policy for nutrition education programming outside of the classroom.27

Physical Activity Requirements

While most districts addressed physical activity in their local school wellness policy, few offered specific requirements for physical education or physical activity.

- In a study of 256 districts from across the country, 70 percent of the local school wellness policies included language about the time dedicated to physical education, and 48 percent included statements about standards and requirements for physical education. The same study found that 45 percent of the policies specified staff training and certification for physical education teachers, and only 9 percent included language about teacher-to-student ratios.28
- A statewide assessment in Utah revealed that slightly more than half of the local school wellness policies included language about striving to have 150 minutes of physical education during the school week, but only 33 percent of those policies mandated that schools comply.29
- An evaluation in Pennsylvania found that 78 percent of the state’s school districts adopted a local wellness policy that included a goal related to providing “quality physical education to promote a lifelong physical activity habit.” Fewer than half of the state’s school districts had a policy that mentioned providing students with 60 minutes of daily physical activity (44 percent) or classroom physical activity breaks for elementary students (46 percent).30
- According to a study of school districts in lower-income, rural Colorado communities, physical education and physical activity sections of the local school wellness policies had less content and fewer requirements than any other sections of the policies. Only 3 percent of physical education goals outlined in the policies required schools to take action.31

iii State standards for nutrition education are broadly defined to include nutrition components in the curriculum; integrating nutrition-related lessons into other subject matter (e.g., mathematics and science); and nutrition-related learning activities outside of the classroom, including in the cafeteria and through community-based efforts.
Early data indicated that barriers to implementing stronger physical activity standards in schools included competing priorities, limited resources and a lack of clear requirements in the local school wellness policy.

- Principals and superintendents of schools in rural, lower-income communities in Colorado indicated that competing interests, such as academic achievement, made it difficult to increase students’ time in physical activity. Principals reported cutting recess or time spent in physical education classes to make more time for classroom instruction.\(^5\)

- The same study found that rural, lower-income elementary schools in Colorado showed a net loss of five minutes of physical activity per week after the local school wellness policy was implemented. Schools increased time spent in physical education by 14 minutes, but cut recess time by 19 minutes per week.\(^6\)

**Conclusions**

The Child Nutrition and WIC Reauthorization Act of 2004 required school districts to develop a local school wellness policy to help create healthier school environments, reduce childhood obesity and prevent diet-related chronic diseases. While it is still too early to draw conclusions about the impact of the local school wellness policies on school environments or children’s health, analyses of the law reveal the potential for districts to set weak standards that may prevent many schools from achieving their wellness goals.

- The Act requires school districts to set only general goals—and not specific guidelines—for providing physical activity, nutrition education and other activities to promote health and fitness.

- The Act’s enforcement language is weak—there is no requirement for school districts to evaluate their local school wellness policy and no penalty for a district that fails to implement its wellness plan.

- The quality of local school wellness policies is not consistent across school districts, and many of the policies lack strength. For example, some policy sections are worded in such a way that schools are not required to take any action. This is most evident in sections describing physical education and physical activity components.

- No funding was authorized for implementation of local school wellness policies.

This review of the preliminary evidence on the implementation of local school wellness policies indicates that more rigorous policies are needed, along with additional financial resources to improve nutrition and increase opportunities for quality physical activity. It also identifies key areas for further research. For example, studies that examine how some schools have overcome barriers related to scheduling, financial restrictions and competing priorities could identify helpful strategies for school districts facing similar challenges. Additional research also is required to determine which school-based nutrition and physical activity policies are most effective for reducing and preventing obesity.
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6 Local Wellness Policies One Year Later: Showing Improvements in School Nutrition and Physical Activity. Skokie, IL: Action for Healthy Kids, 2007. (No authors given.)
8 From Cupcakes to Carrots: Local Wellness Policies One Year Later. Alexandria, VA: School Nutrition Association, 2007. (No authors given.)
11 From Cupcakes to Carrots: Local Wellness Policies One Year Later.


20 Ibid.

21 Cullen K and Zakeri I, 463-467.


23 Probart C, et al., 1497-1502.


26 *From Cupcakes to Carrots: Local Wellness Policies One Year Later.*


28 Ibid.


30 Probart C, et al., 1497-1502.

31 Belansky E, et al., S141-S160.


35 Belansky E, et al., S141-S160.

36 Ibid.