School Based Wellness Programs: A Key Approach to Preventing Obesity and Reducing Health Disparities

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School Based Wellness Programs (SBWP): A Key Approach to Preventing Obesity and Reducing Health Disparities

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Executive Summary

Currently, major causes of morbidity and mortality in the United States are related to obesity, mainly caused by poor diet and inadequate physical activity. Some specific diseases linked to poor diet and physical inactivity includes cardiovascular disease, type 2 diabetes, hypertension, osteoporosis, and some cancers.

In the past, labeling children as “obese” has been irrelevant for two main reasons: a small percentage of children were excessively overweight and the scientific, medical and larger community did not want to stigmatize or label those children who were excessively overweight as “obese.” Furthermore, as children grow their bodies rapidly change which sometimes makes labeling impractical. Recently, in June 2007, a group of medical professionals and others met to discuss the definitions of childhood obesity and childhood overweight; several organizations (The American Academy of Pediatrics, the Institute of Medicine, the American Dietetic Association, the American Academy of Child and Adolescent Psychiatry and the American College of Preventive Medicine) now endorse labeling children as “obese” that have a body mass index (BMI) at or above the 95th percentile for children of the same age and sex according to the 2000 CDC growth charts. This same group endorses labeling children as “overweight” if they have a BMI from the 84th-94th percentile for children of the same age and sex according to the 2000 CDC growth charts. Some members of the meeting came to decide that labeling children as obese is now necessary as about 17% percent of U.S. children are obese one-third are overweight, according to the new definition. While the CDC is looking in to the new recommendations, it does not currently endorse these definitions and still labels children as “at-risk for overweight” and “overweight.” Excessive body weight in childhood is a growing problem and the new definition is designed to call for more attention to the problem and guide treatment.

In this publication, we will use the term “childhood obesity” to mean “children with a BMI at or above the 95th percentile for children of the same age and sex according to the CDC growth charts. We will use the terms “childhood overweight” and “overweight” to mean “children with a BMI from 84th-94th percentile for children of the same age and sex according to the CDC growth charts.

Disparities, or “differences in health status among population groups which are avoidable and which are unfair or seen as unfair” exist in the distribution of childhood overweight and obesity; children of color and children from low socioeconomic status have a higher prevalence of being overweight and obese than white children and children of higher socioeconomic status. The data available on overweight children is alarming. According to NHANES data, the

prevalence of being overweight has increased by 45% for all children ages 2-19 years old from 1988-1994 to 1999-2002. Furthermore, in 2002 rates of overweight in children ages 2-19 were highest among boys of Hispanic descent (39.6%) and lowest among non-Hispanic White girls (22%). Also, being poor is associated with overweight. In the 1999-2000 year, 17.4% of boys in households of low socio-economic status (SES) were overweight as opposed to 9.7% of youth in households of high SES.

It is essential that disparities in overweight and obesity are noticed and acted upon. School Based Wellness Programs (SBWPs) are multi-level programs which focus on improving and promoting child health and wellbeing. SBWPs which include components aimed at reducing childhood overweight are, the DRA project believes, an important set of efforts that should be expanded, evaluated and improved. In this context, the purpose of this report is to:

- Increase awareness of the rich array of school based wellness programs focused on reducing childhood overweight.
- Increase knowledge regarding the differences between a “School Based Wellness Program” and an “Obesity Prevention Program.”
- Provide an initial comparison of the principal intervention areas that are being used.
- Provide primary recommendations for national, state, and local officials including policymakers, school leadership, faculty, and parents.

The intent of this report is to summarize and synthesize knowledge regarding site specific and nationwide school based wellness programs into recommendations. The recommendations are based on anecdotal evidence as well as best available evidence from the literature for lowering risk of childhood overweight through school based wellness programs. It is important to remember that these are integrated programs that should be implemented as a whole. Taken together, they encourage schools to be more aware of health disparities and to focus on preventing and reversing health disparities, thus preventing and reversing childhood overweight and childhood obesity.

There has been a heartening growth in schools based programs, some focused, some comprehensive. In the appendix of this report, 45 significant school based programs are described and catalogued. These programs can be significant in reducing health disparities. The identified programs have the potential to:

- Reduce/prevent school children from becoming obese
- Reduce/eliminate health disparities in obesity
- Be sustainable if successfully adapted and implemented.

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SBWP are important for schools to have and to do well. Schools can counter problems associated with overweight and obesity due to their near universal enrollment of children as well as position in the community. SBWP can facilitate change in the school environment, lifestyles of children, the lifestyles of family groups, and the broader community. Based on our initial review, we identified six recommendations for promoting health through the use of school based wellness programs that involve a component specific to reducing overweight in childhood.

The review of programs here is intended to provide an illustrative catalogue of SBWP of varying program types that schools in the U.S. are currently using. The programs differ in regards to size, nature, duration, required resources, implementation design, sustainability, and students. However, recommendations derived from this review are relevant to all.

The DRA project makes the following recommendations specific to disparity reduction in childhood overweight and childhood obesity.

1. Ensure that healthy foods are available in schools and eliminate unhealthy food choices.
2. Provide opportunities to actively engage in physical activity at school.
3. Guarantee that food and activity choices available in schools are culturally sensitive and culturally appropriate.
4. Provide health and nutrition education through School Based Wellness Programs.
5. Make health and nutrition education available to parents.
6. Specifically incorporate a plan to reduce the prevalence of being overweight in all local wellness policies via SBWPs.
7. Ensure that wellness is a focus of every school day and that SBWPs are held year round.
8. Ensure that children of low socioeconomic status and children of color have equal access to SBWPs.
10. Implement, and evaluate SBWPs specifically tailored to disparate populations.
11. Include high risk youth in the planning and implementation of SBWPs.
Introduction

“Overweight and obesity must be approached as preventable and treatable problems with realistic and exciting opportunities to improve health and save lives,”


Being overweight in childhood is entirely preventable and treatable. Some SBWPs have been designed to reduce the prevalence of being overweight in childhood as well as prevent children from becoming overweight.

Risk-Factors and Prevalence

In order to effectively prevent and reduce health disparities including childhood overweight and adult obesity as health disparities, it is important to understand that achieving good health is complex and many factors shape health. McGinnis et al., (2002) have identified several factors which shape health and has estimated their relative importance over the life course: behavior (40%); environment (20%) - social (15%), physical (5%); genes (30%); healthcare (10%).

Furthermore, several factors have been found to be associated with childhood overweight. Risk-factors for children which later lead to adult obesity are listed below.

- Low-Income: Low income children are more likely to be overweight/obese.
- Low-Socioeconomic Status: Socioeconomic status is associated with obesity.
- Minority: Minority children are more likely to be overweight, obese, and have lower insulin sensitivity than their White peers.
- Intrauterine and perinatal growth patterns: Larger size in early life, faster weight gain in infancy, and quick catch-up growth were found to be risk factors.
- Family characteristics and demographics: children who have at least one obese parent were more likely to be obese at age 7. Children who had two obese parents were even at greater risk of being obese at age 7.
- Lifestyle in early childhood: very young children who were sedentary were more likely to be obese at age 7. Further, children who watched more than eight hours of TV in a week were at risk of being obese at age seven.

• Sleep Patterns: very young children who slept less than 10.5 hours a night were more at risk for being obese at age 7.17

• Genetics: Genetics can affect obesity.
  o In 1962, geneticist James Neel proposed the thrifty gene hypothesis to explain the tendency of certain ethnic groups to become obese and develop diabetes. The hypothesis postulates that certain genes in humans have evolved which maximize metabolic efficiency and food searching behavior. In times of abundance, the genes predispose their carriers to obesity when exposed to excess nutritional intake.18 19 In times of food shortage, these genes enable their carriers to survive.
  o Very rare conditions like Bardet-Biedl syndrome and Prader-Willi syndrome can result from a single gene mutation which can directly cause obesity.20

Furthermore, according to NHANES data 1999-2002, there are disparities in the distribution of being overweight (BMI for Age > 95th percentile):

• Overweight among Girls 2 to 19
  o 30.7% Mexican American females, 32.8% Black females, 22% of non-Hispanic White females21

• Overweight among Boys age 2 to 19
  o 39.6% of Mexican American males; 25.9% of non-Hispanic Black males; 22.5% non-Hispanic White males.22

In a nutshell, scientific evidence shows that obesity and subsequent other health problems can either begin or be prevented in childhood. Some populations are disproportionately affected with higher rates of overweight and obesity. Furthermore, obesity is a devastating chronic disease that has physical, economic, and psychosocial consequences that can be prevented and reversed.

Overview of School Based Wellness Programs

In this report we will use “school based wellness programs” in place of anti obesity programs or obesity prevention programs for two reasons. First, the term/label of “obesity” can be stigmatizing to the affected children and youth. Second, it appears that school based anti-

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Obesity programs are typically of shorter duration and focus on losing or maintaining weight rather than broader goals. Wellness programs typically include a range of efforts, one goal of which is appropriate weight.

Comprehensive school-based wellness programs focus on all or most of eight key factors identified by the CDC Coordinated School Health Program (CSHP): physical education, health education, healthy school environment, nutrition services, health services, health promotion for staff, family and community involvement, and counseling, psychological and social services. Listed below are examples of how SBWP specifically address overweight and obesity.

- Physical Education- Incorporating physical education into the classroom curriculum, making adjustments which encourage greater physical activity, increasing health learning in physical education courses, and/or completing fitness assessments and body composition testing.
- Health Education- Focusing on living healthy, active lifestyles while minimizing risky behaviors.
- Healthy School Environment- Implementing facility and grounds improvements to encourage fitness and healthy eating. Implementing policies regarding the availability of healthy foods in vending machines and a la carte.
- Nutrition Services- Making changes in the types of foods sold or provided in the cafeteria or on the school grounds, providing individualized nutrition assessments, reinforcing healthy eating behaviors in the classroom.
- Health Services- Providing children (and in some cases communities) with school based health centers (SBHCs) which provide primary care services, mental health services, and lifestyle counseling regarding physical activity, nutrition and risky behaviors. Some SBHCs also include a dental clinic.
- Health Promotion for Staff- Improving the wellness of teachers and administration.
- Family and Community Involvement- Involving parents in these activities, encouraging healthier conditions in the school’s neighborhood, such as safe walking and biking routes.
- Counseling, Psychological and Social Services: Providing support for the psychosocial consequences of being an overweight child and addressing the social determinants of health.

SBWPs that appear to be most promising are holistic efforts that deal simultaneously with multiple components. SBWP which rely on a combination of the above components have the potential to reduce overweight in childhood; furthermore, they have the potential to reduce disparities in being overweight. Through a combination of anecdotal evidence as well as preliminary evidence from the literature, these programs have the potential to reduce disparities.

Why Schools should focus on reducing overweight

SBWPs are important because they can counter problems associated with being overweight. Many children spend most of their day in schools, which makes schools a great place to
encourage wellness. Also, initial results of physical activity programs implemented in schools have been shown to be effective in reducing body weight. Lastly, schools can affect the behavior of individual children, groups of children, families, and the larger community. Schools can be instrumental in facilitating behavior change and environmental change.

Schools can have a large impact due to near universal enrollment of children. In the fall of 2003, total enrollment for public and private elementary and secondary schools in the United States reached 54 million children. Because of the large numbers of children enrolled in school, great opportunities for successful interventions exist. Furthermore, elementary and secondary schools also serve as sites for preschool, child-care, and after school programs therefore increasing the potential for school wellness interventions to be successful.

The long term effects of SBWPs are awaiting evaluation, but initial results of physical activity programs have shown them to be effective. The Planet Health program has been shown effective in reducing weight for adolescent girls. Furthermore, two programs involving a physical activity component have been shown effective in reducing adiposity (fat mass) in adolescent boys. Physical activity in schools may provide both immediate effects and long term positive effects (encourage activity throughout life). Evaluations are underway of other programs that rely on multiple components.

School-based programs can facilitate change in the environment as well as encourage leading a healthy lifestyle.

**Recommendations**

The DRA project makes the following recommendations specific to disparity reduction in childhood overweight and childhood obesity.

1. Ensure that healthy foods are available in schools and eliminate unhealthy food choices.
2. Provide opportunities to actively engage in physical activity at school.
3. Guarantee that food and activity choices available in schools are culturally sensitive and culturally appropriate.

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4. Provide health and nutrition education through School Based Wellness Programs.
5. Make health and nutrition education available to parents.
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7. Ensure that wellness is a focus of every school day and that SBWPs are held year round.
8. Ensure that children of low socioeconomic status and children of color have equal access to SBWPs.
10. Implement, and evaluate SBWPs specifically tailored to disparate populations.
11. Include high risk youth in the planning and implementation of SBWPs.
Appendix 1: Program Comparisons

To support this hypothesis that school based wellness programs are important and can potentially reduce childhood overweight and be used in ways that reduce disparities in the prevalence of this risk factor and related health conditions, we gathered an illustrative collection of school based wellness programs. After reviewing the literature available on the CDC website related to DASH Healthy Youth\textsuperscript{29}, we were able to determine several key words and terms that helped define our initial search. We used the following key words alone and in combination: “obesity; childhood obesity; anti-obesity programs; obesity in schools; CSHP; childhood overweight; health disparities; local wellness policies; wellness programs; school based wellness; school based health centers; obesity legislation.” Using several different online databases and search engines (Google, Medline, PubMed, ERIC, and PsycInfo) we were able to gather relevant literature which identified in their text or footnotes most of the cases in the Appendix. In addition we interviewed teachers and others in the field\textsuperscript{30} that provided us with additional cases or information. The resulting collection of 45 programs is illustrative and demonstrates the wide range of possibilities for school based wellness programs.

Most programs included in this appendix focus on increasing physical activity and nutrition as well as decreasing sedentary behavior; however, programs meet these two objectives in different ways. Mostly, these programs do this through education. However, schools have found ways to educate children and modify behavior through a variety of outlets. We have found that school based wellness programs commonly are implemented in the classroom- teachers, peer members, volunteers, or AmeriCorps members provide education on health, physical activity, and nutrition through presentations, work book activities, small group discussions, or short bursts of aerobic activity; in the school/community environment- playgrounds are built, policies are made which encourage healthy eating and discourage junk food, and families and the larger communities are involved in outreach and education activities; through the utilization of school based health centers- physicians, nurse practitioners, nurses, psychologists, and other health center personnel play a variety of roles in school wellness programs. Sometimes, the health center personnel are responsible for the implementation of wellness programs. Other times, health center personnel go into the classrooms and provide education; education- or interventions where companies that specialize in reaching students through theatrical performances come to the school and put on a production focusing on nutrition and physical activity; through the utilization of student leaders- some programs are essentially run by student leaders, the student leaders provide peer education and support. Most programs have multiple components. The tables below detail a variety of SBWPs.


\textsuperscript{30} Allison McElroy, Carol Tyson, Renae Buss, Sean Faircloth, Paula Nettleton, Katherine Newland, Linda Juszczak, Jennifer Alles, Jo Ann Bolick, Jon Hisgen, Philip Troped, Pauline Shen, David Lloyd, Sharon Milberger, Penny Bailar, Kate Eig, and Erik Peterson.
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## Table 1 Program Focus

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<td>X</td>
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<td>X</td>
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<td>Squire’s Quest</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Take 10!</td>
<td>X</td>
<td>?</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
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<td></td>
<td></td>
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</tr>
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</table>
Some programs focus on increased physical education while others focus on increasing physical activity outside of the school day while others integrate physical activity into classroom lessons. Furthermore, some schools focus on modifying the built environment (like play areas and neighborhoods) to encourage more physical activity. Schools also focus on eating behaviors in a variety of ways. While some schools focus on nutrition education, others focus on modifying behavior- and others focus on both. Some schools have made more fruits, vegetables, whole grains, and low fat milk more accessible to all students. Some schools have implemented “garden” programs where students are able to grow their own fruits and vegetables. Furthermore, other schools have implemented policy changes which make high calorie, high fat, high salt foods unavailable to students. Also, some schools have implemented programs which focus on teaching students and their families how to prepare healthy foods. A table of programs which details program outcomes is provided below. Lastly, some programs also focus on decreasing sedentary behavior by trying to move children from the screen (television and computer) to engaging in physical activity.

### Table 1 Program Focus

<table>
<thead>
<tr>
<th>Focus Area</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased physical education</td>
<td>Some schools integrate physical activity into classroom lessons.</td>
</tr>
<tr>
<td>Increased activity outside school</td>
<td>Some schools modify the built environment to encourage physical activity.</td>
</tr>
<tr>
<td>Eating behaviors</td>
<td>Some schools focus on nutrition education.</td>
</tr>
<tr>
<td>Gardening</td>
<td>Some schools implement “garden” programs.</td>
</tr>
<tr>
<td>政策改变</td>
<td>Some schools make high calorie, high fat, high salt foods unavailable.</td>
</tr>
<tr>
<td>Teaching</td>
<td>Some schools focus on teaching healthy food preparation.</td>
</tr>
<tr>
<td>Decreasing sedentary behavior</td>
<td>Some schools try to move children from screens to physical activity.</td>
</tr>
<tr>
<td>Increase Physical Activity</td>
<td>Increase Healthy Eating</td>
</tr>
<tr>
<td>----------------------------</td>
<td>-------------------------</td>
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<td>5-a Day Power Plus</td>
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<td>A Garden in Every School</td>
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<td>Activ8Kids!</td>
<td>X</td>
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<tr>
<td>Adapted P.E. Program</td>
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</tr>
<tr>
<td>Bienestar</td>
<td>X</td>
</tr>
<tr>
<td>Brain breaks</td>
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<td>Breakfast in the Classroom</td>
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<tr>
<td>bSAFE-bFIT</td>
<td>X</td>
</tr>
<tr>
<td>CATCH</td>
<td>X</td>
</tr>
<tr>
<td>Cooking with Heart and Soul</td>
<td>X</td>
</tr>
<tr>
<td>Cooking with Kids</td>
<td>X</td>
</tr>
<tr>
<td><strong>Table 2 Physical Activity</strong></td>
<td><strong>Increase Physical Activity</strong></td>
</tr>
<tr>
<td>-------------------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>Eat Well and Keep Moving</td>
<td>X</td>
</tr>
<tr>
<td>Fit For Life</td>
<td>X</td>
</tr>
<tr>
<td>FOR</td>
<td>X</td>
</tr>
<tr>
<td>FOODPLAY</td>
<td>X</td>
</tr>
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<td>Gimme 5</td>
<td></td>
</tr>
<tr>
<td>Health Ahead/Heart Smart</td>
<td>X</td>
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<tr>
<td>Healthy and Nutritious School Environments</td>
<td>X</td>
</tr>
<tr>
<td>Healthy Kids Centers</td>
<td>X</td>
</tr>
<tr>
<td>High Five</td>
<td></td>
</tr>
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<td>HIP Childhood Obesity Program</td>
<td>X</td>
</tr>
<tr>
<td>HOPE</td>
<td>X</td>
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</table>
Table 2 Physical Activity

<table>
<thead>
<tr>
<th>Program</th>
<th>Increase Physical Activity</th>
<th>Increase Healthy Eating</th>
<th>Decrease Screen Time (TV &amp; computer)</th>
<th>Duration</th>
<th>Curriculum</th>
<th>Intended Audience</th>
</tr>
</thead>
<tbody>
<tr>
<td>INSight Youth Corps</td>
<td>X</td>
<td>X</td>
<td></td>
<td>Year round</td>
<td>Contact Katherine Newland</td>
<td>9th-12th grade</td>
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<tr>
<td>International Walk to School Initiative</td>
<td>X</td>
<td></td>
<td></td>
<td>annually</td>
<td>N/A</td>
<td>K-12, parents, teachers, community members</td>
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<td>Just for Kids!</td>
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<td>X</td>
<td></td>
<td>10 weeks</td>
<td>Available to Purchase</td>
<td>4th graders</td>
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<td>KaBoom!</td>
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<td></td>
<td></td>
<td>Year round</td>
<td>N/A</td>
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</tr>
<tr>
<td>KID-FIT</td>
<td>X</td>
<td>X</td>
<td></td>
<td>Year round</td>
<td>Available to Purchase</td>
<td>2 years- kindergarten</td>
</tr>
<tr>
<td>Maine Physical Activity and Nutrition Program</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Year round</td>
<td>Contact David Crawford</td>
<td></td>
</tr>
<tr>
<td>Move Across America</td>
<td>X</td>
<td></td>
<td></td>
<td>Year round</td>
<td>Contact Paul Shimon</td>
<td>Grades 3rd-5th</td>
</tr>
<tr>
<td>Movin &amp; Munchin Schools</td>
<td>X</td>
<td>X</td>
<td></td>
<td>Year round</td>
<td>Tool-kit is available</td>
<td>Ages 8-13 years</td>
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<tr>
<td>Native FACETS</td>
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<td>X</td>
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<td>15 weeks</td>
<td>Available to Purchase</td>
<td>Native American youth</td>
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<td></td>
<td>Varies</td>
<td>Toolkit Available at no charge</td>
<td>K-12 students, teachers, parents</td>
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<td>Pathways</td>
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<td>X</td>
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<td>No charge, on website</td>
<td>American Indian Children grades 3rd-5th</td>
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<td>Peaceful Playgrounds</td>
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<td></td>
<td></td>
<td>Year round</td>
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<td>K-6th grade</td>
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<tr>
<td>Program</td>
<td>Increase Physical Activity</td>
<td>Increase Healthy Eating</td>
<td>Decrease Screen Time (TV &amp; computer)</td>
<td>Duration</td>
<td>Curriculum</td>
<td>Intended Audience</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
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<td>--------------------------</td>
<td>--------------------------------------</td>
<td>----------------</td>
<td>---------------------------------------------</td>
<td>--------------------------------------------</td>
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<tr>
<td>Philadelphia School Nutrition Policy Initiative</td>
<td>X</td>
<td>X</td>
<td></td>
<td>Year round</td>
<td>Contact Jackie McLaughlin</td>
<td>K-12th, teachers</td>
</tr>
<tr>
<td>Pineview Wellness Program</td>
<td>X</td>
<td>X</td>
<td></td>
<td>Year round</td>
<td>Contact Deedee Kullenberg</td>
<td>K-5th grade, teachers, parents, community</td>
</tr>
<tr>
<td>Planet Health</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>63 lessons</td>
<td>Available to Purchase</td>
<td>6th-8th grades</td>
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<tr>
<td>Presidents Challenge</td>
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<td>?</td>
<td>Ages 6+</td>
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<td>Project Fit America</td>
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<td>Year round</td>
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<td>School Based Health Centers</td>
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<td></td>
<td></td>
<td>Year Round</td>
<td>N/A</td>
<td>K-12</td>
</tr>
<tr>
<td>School WELLth™</td>
<td></td>
<td></td>
<td></td>
<td>Year Round</td>
<td>Contact Erica Oberg</td>
<td>School age children, teachers, faculty, parents</td>
</tr>
<tr>
<td>ShapeDown</td>
<td>X</td>
<td>X</td>
<td></td>
<td>Varies</td>
<td>Available to Purchase</td>
<td>Pre-K-12th grades</td>
</tr>
<tr>
<td>SPARK</td>
<td>X</td>
<td>X</td>
<td></td>
<td>Varies</td>
<td>Available to Purchase</td>
<td>Pre-K-12th grades</td>
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<tr>
<td>Squire’s Quest</td>
<td>X</td>
<td></td>
<td></td>
<td>5 weeks</td>
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<td>Elementary</td>
</tr>
<tr>
<td>Take 10!</td>
<td>X</td>
<td></td>
<td></td>
<td>Year round</td>
<td>No charge, available on the web</td>
<td>K-5th grade</td>
</tr>
<tr>
<td>TEENS</td>
<td></td>
<td>X</td>
<td></td>
<td>5 weeks</td>
<td>No charge, available on web</td>
<td>7th and 8th graders</td>
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</table>
Table 2 Physical Activity

<table>
<thead>
<tr>
<th></th>
<th>Increase Physical Activity</th>
<th>Increase Healthy Eating</th>
<th>Decrease Screen Time (TV &amp; computer)</th>
<th>Duration</th>
<th>Curriculum</th>
<th>Intended Audience</th>
</tr>
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<tbody>
<tr>
<td>The National Theater for Children</td>
<td>X</td>
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<td></td>
<td>Varies</td>
<td>Available to Purchase</td>
<td>Ages 6-12</td>
</tr>
<tr>
<td>Trim Kids</td>
<td>X</td>
<td>X</td>
<td></td>
<td>Year round</td>
<td>Contact Mike Barton, Eileen Thompson</td>
<td>6-8th grade</td>
</tr>
<tr>
<td>Tuttle Wellness Project</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
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</table>
Funding is important in the development, implementation, evaluation, and sustainability of all programs. The programs included in the appendix have been funded by a variety of agencies and sources. Funding has commonly come from the following agencies: National Cancer Institute (NCI), National Institute of Diabetes and Digestive Kidney Disorders (NIDDK), National Heart Lung Blood Institute (NHLBI), United States Department of Agriculture (USDA), Centers for Disease Control (CDC), The National Institute of Child Health and Human Development (NICHD), Human Resources and Services Administration (HRSA), and other large agencies. Other programs have obtained funding through private community agencies or foundations, local businesses, community hospitals, state governments, members of the community, and insurance companies. Some programs generate their own funding for development and evaluation (through sales) and may even provide grants for schools to implement programs.

While many programs have received funding for development, implementation, evaluation, and sustainability, there is not a wide base of research or knowledge on the effectiveness of programs. Program Scores were provided by the National Cancer Institute (NCI) Research-Tested Intervention Programs (RTIP). The NCI provided money for the development and/or evaluation of the following programs. A panel of prominent researchers then evaluated the programs on dissemination capability, cultural appropriateness, age appropriateness, and gender appropriateness using a scale from 1.0 (low); 5.0 (high).

Click for more information on the Criterion.

Table 3 Preliminary Assessments

<table>
<thead>
<tr>
<th>Program</th>
<th>Dissemination Capability</th>
<th>Cultural Appropriateness</th>
<th>Age Appropriateness</th>
<th>Gender Appropriateness</th>
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<td>4</td>
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<td>Bienestar</td>
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<td>5</td>
<td>5</td>
<td>N/A</td>
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<td>CATCH</td>
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<td>4</td>
<td>5</td>
<td>5</td>
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<td>Eat Well and Keep Moving</td>
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<td>3</td>
<td>5</td>
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<tr>
<td>Gimme 5</td>
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<td>4.5</td>
<td>5</td>
<td>4.5</td>
</tr>
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<td>High 5 Fruit and Vegetable Intervention</td>
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<td>3.5</td>
<td>5</td>
<td>N/A</td>
</tr>
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<td>Native FACETS</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>N/A</td>
</tr>
<tr>
<td>Planet Health</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>N/A</td>
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<td>SHAPEDOWN</td>
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<td>N/A</td>
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<td>SPARK</td>
<td>5</td>
<td>N/A</td>
<td>5</td>
<td>N/A</td>
</tr>
<tr>
<td>TEENS</td>
<td>3.5</td>
<td>N/A</td>
<td>5</td>
<td>N/A</td>
</tr>
<tr>
<td>Trim Kids</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>5</td>
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</tbody>
</table>
Appendix 2: Key School Based Wellness Programs

5-a Day Power Plus, St. Paul, Minnesota

Contact Information:
Gretchen Taylor
Phone: 651-201-5390
Rita Mays
Phone: 651-201-5433
Address: PO BOX 64975, St. Paul, MN 55164-0975
Website: http://www.health.state.mn.us/divs/hpcd/chp/powerplus/
Funding: National Cancer Institute

Purpose of the Program: To promote fruit and vegetable consumption among elementary school students.

Description of the Program: Twenty low-income, ethnically diverse, inner city elementary schools in St. Paul, Minnesota were matched and then randomly assigned to either the 5-a-Day Power Plus program or to a control group. Fourth-and fifth-grade students in the treatment group received an 8-week curriculum which included sixteen 40- to 45-minute classroom sessions. Parental involvement, food service, and industry components supported and reinforced the classroom intervention.

The school curricula included skill(s) building and problem solving activities, snack preparation, and taste testing; the family component involved information/activity packets (4th grade) and snack packs (5th grade) to prepare at home; the food service intervention included point-of-purchase promotion of fruits and vegetables, enhancement of the attractiveness of fruits and vegetables, increasing the variety and choice of fruits and vegetables in the cafeteria, and providing additional fruit and vegetable options on days when baked desserts are served; the final component, industry support, involved the recruitment of local food industries to donate food, educational materials and presentations to the intervention program.

Required Resources: The curriculum is available on the web.

Cost: The curriculum is free.

Intended Audience: 4th and 5th grade students

Duration of the Program: eight weeks
**Activ8Kids!, New York**

Website: [Activ8Kids! - Childhood Obesity Prevention Program](#)

Program Purpose: The programs include broad community involvement so that lasting changes in the environment and in people's behaviors can be achieved. The programs also provide people with tools to understand the problem and the solutions. Activ8Kids! messages and goals are being incorporated into many New York State Department of Health programs.

Program Description: This is an example of a community-based program designed to fight overweight and obesity. The New York State Department of Health funds a wide-variety of community-based programs “Eat Well Play Hard” for children and adults that have already shown success in combating overweight and obesity by using a variety of techniques and creative approaches.

These programs are reaching out to school staff, physicians, health care providers, childcare providers, children and parents to make maintaining a healthy weight a priority for everyone.

The basic principles of Activ8Kids! are:
- 5 fruits and vegetables each day
- 1 hour of physical activity each day
- 2 hours OR LESS of TV or screen time daily

Resources:

[Activ8Kids! New York State School Nutrition and Physical Activity Best Practices Toolkit](#)

Download the Activ8Kids! brochure for more information.

**Adapted Physical Education Program: Miami, Florida**

Contact Information:
Rene Rodrigue
Riviera Middle School
10301 SW 48th street
Miami, FL 33165
Phone: 305-226-4286
E-mail: rodrigur@stis.net

Program Purpose: The goal is to teach students with disabilities lifetime wellness skills.

Program Description: The Adapted Physical Education Program at Riviera Middle School is designed to increase the lifetime wellness skills of students with disabilities. It is directed by a state-endorsed, nationally certified Adapted Physical Educator with a doctorate degree. The program focuses on improving student skills:
- motor development and coordination
- individual and team skills
• independent and recreational skills
• physical fitness and activity
• health/wellness

The program is based on current state and national, adapted physical education standards. The current health and fitness level of each student is determined when entering the program. Medical conditions and medications are a consideration in health assessment and exercise prescription. The student is placed in the least restrictive environment, goals are set to improve current levels of performance with emphasis on success, and progress is monitored and recorded. Several types of assessments are available and are used in the program.

Assessments

<table>
<thead>
<tr>
<th>Program Assessments</th>
<th>IEP Assessments</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Teacher Observation</td>
<td>• Checklists</td>
</tr>
<tr>
<td>• Student Participation</td>
<td>• Charts</td>
</tr>
<tr>
<td>• Fitness Tests</td>
<td>• Student Interviews</td>
</tr>
<tr>
<td>• Skills Tests</td>
<td>• Work Samples</td>
</tr>
<tr>
<td>• Sport Tests</td>
<td>• Curriculum Based Assessments</td>
</tr>
<tr>
<td>• Mastery Assessments</td>
<td></td>
</tr>
</tbody>
</table>

The program is conducted at the school site with support visits to a local fitness facility with a childhood obesity program. The lifetime wellness skills included are aerobic fitness, strength training and making healthy food choices. Specific aerobic fitness activities include the use of: stationary bikes, stair masters, rowing machines, recumbent bikes, Nordic tracks, treadmills, Reebok steps and adult tricycles. Specific strength training activities include the use of: plastic coated dumbbells, iron dumbbells, multi-gyms, and gym-quality equipment to perform exercises for every major muscle group. Each activity is broken down into basic objectives. Progress is charted on instructor-designed checklists.

The concept of healthy food choices is addressed through instructor-based counseling and a student diet log. The data from the diet log is entered into a nutritional program on the internet weekly. The program builds a pyramid based on the student data and compares it to the United States Dairy Association’s Food Pyramid.

Intended Audience: The program serves profound, trainable, and educable mentally handicapped; autistic; and physically impaired, ages 11-21 in grades 6-12

Participation Rate: The program has been implemented the last three years (2000-2003), with at least 100 students participating each year.

Impact:
• Over 70% of students in program decreased body composition each year.
• Over 75% of students in program increased aerobic fitness skills each year.
• Over 75% of students in program increased strength training skills each year.
• Over 60% of students in program increased healthy food choices each year.

Demographic Information
• 68.6% of all students enrolled at Riviera Middle School are economically disadvantaged.
A Garden in Every School: California

Contact Information:
Deborah Tamannaie
Nutrition Services Division
California Department of Education
560 J Street, Suite 270
Sacramento, CA 95814
Phone: 916-323-2473
E-mail: dtamanna@cde.ca.gov
http://www.cde.ca.gov/ls/nu/he/garden.asp

Program Purpose: The "Garden in Every School" initiative, launched by State Superintendent of Public Instruction Delaine Eastin in 1995, creates opportunities for schools to provide dynamic environments that support student mastery of educational standards. Students who participate in school garden projects also discover fresh food and make healthier food choices, and develop a deeper understanding and appreciation for the environment, the community, and each other.

Description of the Program: Distributes a free packet of garden startup information to schools upon request. This resource contains over ten items including the popular "Getting Started -- A Guide for Creating School Gardens as Outdoor Classrooms."

- Funds Garden-Enhanced Nutrition Education project mini-grants. To date, it has disseminated grants totaling over $850,000 and provided training to staff at about 835 schools. The goals of these projects are to (a) build skills and motivate children to make healthy food choices; (b) teach composting and waste management techniques; and (c) foster a better understanding and appreciation of where food comes from, how it gets from the farm to the table, and the important role of agriculture in the state, national, and global economies.
- Supports a regional resource center network that provides California's teachers with practical training and other services to assist them in implementing successful nutrition-focused school garden projects. Current regions include the Capital Region at the University of California, Davis, the Inland Empire at Cal Poly Pomona, and San Diego County at the Resource Conservation District of Greater San Diego County. The network will expand to include other regions in future years.
- Supports a network of projects that link gardens and local agriculture with classrooms and cafeterias to provide a consistent nutrition message throughout the school environment. With funds from The California Endowment, six experienced SHAPE California districts are developing and testing strategies that promote the use of school gardens to connect cafeterias and classrooms.
- Supports the development and/or publication of educational materials related to school gardens, including:

- 87% Hispanic
- 9.4% White
- 2.1% Black
- 1.4% Asian/Pacific Islander
- .1% Alaska Native
o A guide linking nutrition, gardening, and food systems curriculum to the California Standards in the core academic subject areas at selected grade levels (in press);
  o "Nutrition to Grow On," a garden-enhanced nutrition education curriculum for upper elementary school children;
  o "Growing Healthy Kids," a literature- and standards-based nutrition education curriculum for grades K-5 that incorporates school garden activities; and
  o "Kids Cook Farm Fresh Food!" -- a curriculum with seasonal recipes, activities, and farm profiles that teaches ecological responsibility.

Target Audience: All public schools in California (grades K-12).

Participation Rate: At the beginning of the program it was estimated that about 1,000 of the close to 8,000 public schools in California had school gardens. About 835 schools have programs which have been started from granted funds, and many others have started projects without our specific funds. It is estimated that about 3,000 schools have school garden projects.

Impact: food service directors have reported that schools with garden projects demonstrate increased sales of fruits and vegetables from their salad bars. More research is needed.

Bienestar Diabetes Prevention, Nationwide- no contact info

http://hjb.sagepub.com/cgi/reprint/27/1/120.pdf?search=%22Bienestar%20school%20intervention%22
http://www.uthscsa.edu/hscnews/singleformat.asp?newID=2196

Purpose of the Program: To reduce/prevent diabetes mellitus in low-income Mexican American school children.

Description of the Program: This program was culturally tailored for low-income Mexican Americans and uses multiple systems of delivery to promote lifestyle change. The Bienestar program (a diabetes prevention program) comprised of a health and P.E. curriculum, a parent program, an after-school health club, and a school cafeteria program. Across all components, Bienestar targeted a similar cluster of behaviors-decrease dietary saturated fat; increase fruit, vegetable and whole grain intake; decrease intake of sugars; and increase physical activity. The aim of these targeted behaviors was to control type 2 diabetes in children. The Bienestar health curriculum, available in both English and Spanish, was designed for K-5th graders.

Components of the Program:
  • health and physical education classes
    o 13 health classes on nutrition, physical activity, self-esteem, self-control, and diabetes mellitus
    o 32 different activities in physical education classes
  • an after-school health club
    o 26 after-school health club sessions which reinforce classroom learning and emphasize leisure time physical activity
  • family activities
Four parent activities covering cooking demonstrations, salsa dancing, and games on nutrition and exercise.

- a food service component.
  - This component improves the nutrition knowledge of the food service staff.

Time Required: This program is carried out for seven months during the school year.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Duration of Activity</th>
<th>Frequency of Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Education Class</td>
<td>45 minutes</td>
<td>Weekly</td>
</tr>
<tr>
<td>Physical Education Class</td>
<td>45 minutes</td>
<td>4 days a week</td>
</tr>
<tr>
<td>After-school health club meeting</td>
<td>60 minutes</td>
<td>Weekly</td>
</tr>
<tr>
<td>Parent Meeting</td>
<td>60 minutes</td>
<td>Every other month</td>
</tr>
<tr>
<td>Food Service Program</td>
<td>30 minutes</td>
<td>Once per month</td>
</tr>
</tbody>
</table>

Intended Audience: The Bienestar curricula are developed for kindergarteners to fifth graders.

Tested Audience: The curricula were tested on a population where 94% of participants were of low income.

Required Resources
The Bienestar curricula are from kindergarten to fifth grade level. The curricula materials include:

- Bienestar Physical Education Activities Guide
- Cafeteria Program Teacher’s Guide
- Bienestar Family Times Take-Home Activity Program
- Health Curriculum Teacher’s Guide (includes student handbook)

Cost: Cost associated with program implementation is not provided.

About the Study: This study was evaluated using twenty-seven elementary schools in San Antonio, Texas which were randomized to the Bienestar Health Program or the control group. The sample size was (N=1,419). The participants included fourth grade students from inner-city neighborhoods and 94% of participants were classified as economically disadvantaged.

Study Demographics
- 94% economically disadvantaged
- 82.5% Mexican American
- 7.0% African American
- 5.5% Asian
- 5.0% White (non-Hispanic)
Results:

<table>
<thead>
<tr>
<th>Outcomes Measured</th>
<th>Experimental Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fasting Capillary Glucose levels</td>
<td>Decreased (-.20 mg/dl)</td>
<td>Increased (+.52 mg/dL)</td>
</tr>
<tr>
<td>Physical Fitness Scores</td>
<td>Increased (1.81 points)</td>
<td>Decreased (-.73 points)</td>
</tr>
<tr>
<td>Dietary Fiber Intake</td>
<td>Increased (.38 grams)</td>
<td>Decreased (-.15 grams)</td>
</tr>
<tr>
<td>Saturated Fat Intake</td>
<td>No significant difference</td>
<td>No significant difference</td>
</tr>
</tbody>
</table>

**Brain Breaks, Nationwide**

Contact Information
Address: Michigan Department of Education
608 West Allegan Street
P.O. Box 30008
Lansing, Michigan 48909
Phone: 517-373-4582
Website: [http://www.emc.cmich.edu/brainbreaks/2005/TOC.htm](http://www.emc.cmich.edu/brainbreaks/2005/TOC.htm)

Program Purpose: To integrate physical activity with classroom based learning.

Program Description: The Brain Breaks activity booklet has been developed by undergraduate teacher education students from Albion College, Concordia University, and the University of Michigan to help increase the number of physical activities implemented into the elementary classroom.

This activity booklet has been developed by undergraduate teacher education students from Albion College, Concordia University, and the University of Michigan to help increase the number of physical activities implemented into the elementary classroom.


Required Resources: Brain Breaks, the free Physical Activity Idea Book for Elementary Classroom Teachers.

Cost: Free

Intended Audience: K-6th grade

Duration of the Program: year round

**Breakfast in the Classroom**

Contact Information:
David A. Lloyd
Harrisburg School District
1830 Derry Street
Harrisburg, PA 17102
Program Purpose: To increase breakfast participation and help students be more attentive in class and thus improve their overall academic standing.

Program Description: Breakfast items were delivered to the classrooms in insulated breakfast bags by 8:10 a.m. Students reported to their classrooms at 8:30 a.m., and had until 8:40 a.m. to eat their breakfast. At 8:45 a.m., the lunch aides and custodians picked up the trash and the breakfast bags.

Intended Audience: Students in grades K-7.

Evaluation/Monitoring: This program has not been formally evaluated.

Participation Rate: Breakfast participation prior to program implementation was 37 percent. Breakfast participation rose to around 80 percent after Breakfast in the Classroom was implemented.

Impact: The principals, teachers and nurses all reported positive changes, such as the learning environment was improved, student attentiveness improved, and student behavior was better following the start of "Breakfast in the Classroom." The school nurse commented that there was a dramatic drop in students visiting the nurse's office because students had missed breakfast and were hungry and had stomach aches.

School Demographics (IES)

- 53.7% are economically disadvantaged
- 75.3% are Black
- 16.0% are Hispanic
- 6.1% are White
- 2.6% are Asian/Pacific Islander
- .1% are American Indian/Alaska Native

Sustainability: The Harrisburg School District has plans to expand "Breakfast in the Classroom" program

bSAFE-bFIT, Nationwide

bSAFE, bFIT!™ A Physical Activity and Nutrition Program for Kids
Contact Information:
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bSafe, bFit, Inc.
33791 150th Street
LeMars, Iowa 51031
Phone: 712-546-6005
E-mail: crbus@frontiernet.net; info@bsafebfit.com
Website: http://www.bsafebfit.com/
Program Purpose: The goal is to help all children develop health-related fitness, cognitive understanding, physical competence, and positive attitudes so they can adopt a lifestyle that reflects lifetime wellness.

Program Description: The program is an innovative children’s educational fitness program that focuses on physical activity and nutrition. The program uses 55 fun food characters called Fitness Pals that illustrate physical activity and to emphasize the importance of both physical activity and nutrition. The program is based on five components of health-related physical fitness: Body Composition, Strength, Aerobic Fitness, Flexibility, and Endurance. An acronym and acrostic sentence is used to help children retain components. The first letter of each component is used to spell “bSAFE”. The acrostic sentence is constructed using the acronym “bSAFE”-“b”odies “S”taying “A”ctive “F”eel “E”nergetic.

Intended Audience: The manuals are written to be age appropriate and grouped ages 2 through Preschool, Kindergarten through 2nd grade, and 3rd through 6th grade. Lesson plans within the manual address multicultural infusion in the Suggested Activities section.

Evaluation/Monitoring: The program was piloted to study the effects of the fitness program by selecting at random two third grade classes. One class was assigned to an experimental group and received intervention from the fitness program. The other group was the control group and received no intervention. Data was collected on both groups using a criterion-referenced test with a pre-test and post-test design. A test for correlated means was used to compare the mean scores of each group before and after treatment. A significant difference was found on third graders’ meaningful learning of physical fitness components.

Training Required: No training is required for teachers.

**Cooking with Heart and Soul: Illinois**

Contact Information:
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School- Based Health Center Proviso East High School
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E-mail: readc12@hotmail.com
Funding: Westlake Health Foundation and local community businesses

Program Purpose: To introduce families (Proviso East High School students and their parents/guardians) to cooking and eating nutritious, easy-to-make meals.

Program Description: Cooking with Heart and Soul started in part, due to data and information gathered through the School-Based Health Center at Proviso East High School that revealed students’ poor eating habits and high risk of overweight and obesity.

The overarching program implemented at the SBHC is The Nutrition Revolution. This incorporates a Junk Free Zone in the SBHC, where students are not allowed to eat junk food such as chips, candy and...
carbonated beverages. In the Junk Free Zone students at Proviso East High School are given the opportunity to put away or trade in their junk for a healthy snack provided by the SBHC.

Cooking with Heart and Soul was an expansion of this idea and it gives students and their families an opportunity to meet once a week for a six-week program where they learn how to prepare healthy, easy to make, affordable meals. Each week a different guest chef (faculty and staff members from the school, community members, or SBHC staff) teaches the 24-30 participants how to prepare and cook their nutritious dinner. The participants also listen to a 15 minute nutrition presentation (various topics) and have an opportunity to participate in a discussion on family communication which is facilitated by the SBHC clinical psychologist.

Duration of the Program: 6 weeks

Target Audience: High school students (grades 9-12) and their parents/guardians

School Demographics
- Latino - 21.7%
- White - 2.2%
- Black - 75.1%
- Asian - 0.6%
- Native American - 0.4%

**Cooking with Kids, a program of SFPIE, New Mexico**

Contact Information:
Lynn Walters, M.S.
Cooking with Kids, a program of Santa Fe Partners in Education
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Santa Fe, NM 87507
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E-mail: walters@osogrande.com
Website: [www.cookingwithkids.net](http://www.cookingwithkids.net)

Program Purpose: Cooking with Kids’ purpose is to improve children’s nutrition by engaging public school students in hands-on learning with fresh, affordable foods from diverse cultures. Cooking with Kids objectives are that children will:
- Learn healthy food habits and acquire practical skills that will benefit themselves and their families
- Explore and accept a wide variety of healthful foods
- Learn about people of different cultures, while they work together cooperatively.

Program Description: Cooking with Kids is a unique program that teaches hands-on food preparation skills that are integrated with academic subjects and connected to school cafeteria meals. Cooking with Kids’ bilingual (Spanish/English) curriculum is an innovative model of interdisciplinary teaching and learning, with age appropriate lessons for grades K-1, 2-3, and 4-6. The curriculum supports USDA Dietary Guidelines and is aligned with New Mexico State Department of Education Academic Standards.
and National Health Education Standards. Classroom recipes are adapted for school foodservice and served about twice each month as school lunches in all twenty-one Santa Fe elementary schools.

Cost: Cost of curricula materials ranges from $25.00 for a DVD to $155.00 for curricula for grades K-6th.

Free downloads of tasting lessons are available at http://cookingwithkids.net/What_s_Available/index.html.

Intended Audience: Cooking with Kids works with 3900 ethnically diverse low-income Kindergarten through sixth grade elementary school children (5 to 12 years) in the Santa Fe Public Schools, with at least 50% of the students qualified for free or reduced-price school meals.

Evaluation/Monitoring: Cooking with Kids’ on-going evaluation measures include classroom and cafeteria observations, annual parent and teacher surveys, and feedback from administrators. These measures include knowledge, attitude, skills, and behavior. Policy and environment have not been evaluated, but program staff work with district Student Nutrition Department and School Wellness Obesity Taskforce.

Participation Rate: Between 2004 and 2005, Cooking with Kids provided a total of 1936 tasting and cooking classes, 1015 taught by classroom teachers. Through Cooking with Kids, 3100 children in seven schools participated in 16.5 hours of cooking and tasting food and nutrition education classes during the school year.

Impact:
2002-2003 data confirmed that students enthusiastically accepted new foods in their classrooms,
- An average of 88% of the students said that they liked the new foods.
- 77% of the students said that they would like this meal for school lunch.

2004-2005 data gathered via parent surveys also reflected measurable impacts.
- 77.8% of parents responded that since their child began participating in CWK he/she has shown greater interest in choosing healthy foods.
- 62.8% reported that they now eat more meals at home together.
- 64.7% reported that they now eat more fruits and vegetables at home.
- 95.9% of families reported that they believe CWK provided a valuable educational experience for their child.

Application/Adoption: A number of other communities in New Mexico, the United States, and Canada have implemented all or part of the Cooking with Kids curriculum.
- Each lesson includes detailed lesson plans for grades K-1, 2-3, and 4-6, materials and equipment lists, and suggested additional resources.
- Training resources are being developed at this time. To date, training has been provided in New Mexico.
- Technical support is available on an "as-needed" basis.
- All classroom and student materials, including volunteer forms and home recipes are available in Spanish and English.
School Goals and Student Achievement: Curriculum is aligned with New Mexico Department of Education Academic Standards in the areas of Math, Science, Social Studies, Language Arts, Wellness, and National Health Education Standards. Cooking with Kids' activities are designed to provide applied learning opportunities for children at all levels.

Curriculum Integration: Cooking with Kids is a model of integrated learning. It is best viewed as a nutrition education component of a coordinated school health model.

Sustainability: Cooking with Kids has grown from two to ten schools over the past ten years. Sustainability is dependent on a diversified funding stream and school district support. In addition, continued evaluation efforts will support and strengthen the program, encouraging enthusiastic students to appreciate and choose healthy foods now and throughout their lives.

Coordinated Approach to Children's Health- Nationwide (CATCH)

Contact:  
http://www.flaghouse.com/information.asp

Program Purpose: The goal of the Coordinated Approach to Child Health (CATCH) program is to prevent chronic disease among young people by using a multi-component behavioral health intervention. The program seeks to affect children’s attitudes and behaviors towards nutrition and physical activity.

The program’s four main objectives are:
- Achieving 50 percent of class time in moderate to vigorous physical activity.
- Providing opportunities for every student to participate.
- Promoting activity outside of physical education class.
- Having fun.

Program Description: CATCH is a multi-component behavioral health intervention designed to be delivered during grades three, four, and five to students of diverse backgrounds. CATCH aims to decrease consumption of fatty and salty foods and increase physical activity. The healthy CATCH environment can even be extended to after school and community recreation settings. In a CATCH school, students are immersed in an environment that supports and encourages a healthy lifestyle.

Components:
The components of the CATCH program are:
1. Education
2. Physical Education
3. Nutritional Services
4. Family/Community Involvement.

Program Implementation: This program requires classroom teachers to implement home and classroom curricula.
<table>
<thead>
<tr>
<th>Student Participants</th>
<th>Number of Lessons</th>
<th>Duration</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade Three</td>
<td>15</td>
<td>5 weeks</td>
<td>30-40 min</td>
</tr>
<tr>
<td>Grade Four</td>
<td>24</td>
<td>12 weeks</td>
<td>30-40 min</td>
</tr>
<tr>
<td>Grade Five</td>
<td>16</td>
<td>8 weeks</td>
<td>30-40 min</td>
</tr>
</tbody>
</table>

- 1-1.5 days are required for teacher training and food personnel training.

Intended Audience: Students in grades 3, 4, & 5 from diverse backgrounds.

Tested Audience: Participants were in Grade 3 at baseline (mean age 8.76 years), represented ethnically diverse backgrounds, and attended public schools in California, Louisiana, Minnesota, and Texas.

Results indicated:
- % of energy intake from total fat from school lunches was reduced in the intervention school (p<.001)
- At first follow-up and at the school level, time spent on moderate-to-vigorous and vigorous activity during PE class increased in intervention schools compared to control schools (p < 0.02) as shown by higher expenditures of energy (kJ/kg).
- At first follow-up and at the individual level, fat intake was reduced by 2.4% among students in intervention schools compared to 0.3% for students in control schools (p < .001). At 3-year follow-up these between group differentials were maintained.
- At 3-year follow-up, intervention students continued to have increased dietary knowledge and intentions, compared to control students.
- At first follow-up and 3-year follow-up, blood pressure, body size, and cholesterol measures did not differ between the two groups.

Sustainability: CATCH is used by schools in 30 states, Canada and at schools on U.S. Department of Defense military bases around the world. In Texas, where the program is based, more than 1,000 schools use CATCH.

City Year Detroit and Henry Ford Health System: Fit for Life

Promoting Healthy Lifestyles in Youth

City Year Detroit
http://www.cityyear.org/detroit.aspx
Executive Director: Penny Bailer
Contact: pbailer@cityyear.org

Henry Ford Health System (HFHS) – Center for Health Promotion and Disease Prevention (CHPDP)
Associate Director for Research: Sharon Milberger, Sc.D.
Contact: smilber1@hfhs.org

Program Purpose: The Fit for Life Program aims to address the youth obesity epidemic by having City Year Detroit corps members serve as school health ‘champions’, In this role the corps members work with and support a Coordinated School Health Team made up of school personnel and community leaders in designing and implementing changes to promote school health.
Program Description: City Year is a national service organization which unites young adults, ages 17-24, from diverse racial, cultural, education, and socioeconomic backgrounds for a demanding year of full-time community service, leadership development, and civic engagement. United in their desire to serve, corps members invest their talents and energies as leaders of after-school programs and tutors in elementary, middle schools, and high schools.

A team of City Year Detroit (CYD) young adult AmeriCorps members is assigned to each key school for 4 days per week, full time. Each team consists of 8-9 corps members and has a Senior Corps member Service Leader who is the “point person,” working with the school administration and City Year staff liaisons, coordinating assignments and service and problem-solving for the team. The effort uses the Healthy School Action Tool (HSAT) which is an online tool based on CDC- and USDA-developed tools to assess needs and develop an action plan in eight areas of the school health environment: 1) school health policies and environment; 2) health education; 3) physical education and other physical activity programs; 4) nutrition (food) services; 5) school health services; 6) school counseling, psychological and social services; 7) health promotion for staff; and 8) family and community involvement.

CYD corps members use planning data from the HSAT to design after school programs to address obesity and to influence fitness and good nutrition among the children. In addition, the corps members track their efforts to implement the Coordinated School Health Team’s action plan and the progress of their work, successes and failures, in order to document what works well and what needs improvement (for future replication purposes). They develop and deliver programs, creating incentive programs and marketing strategies to attract and retain the children in areas such as nutrition, healthy food shopping and cooking, fitness and regular physical activity during school and/or after school. These activities typically include recreation and sports, exercise, cheerleading, step teams, simple gymnastics and calisthenics, physically active games and challenging physical activities such as dance, drill and step teams. Techniques such as having the children mentor other children, as they learn, will be employed, and the activities will be planned with input from the children, parents and school leadership in order to obtain their buy-in and enthusiastic support and participation.

This program design takes advantage of the following assets:

- CYD has an existing infrastructure and a well-established track record for providing service to schools and schoolchildren;
- CYD has strong relationships with the schools to which CYD teams have been assigned;
- CYD corps members are peers or near-peers of the students targeted by the intervention, which will increase the students’ receptivity to the messages being delivered;
- The HSAT has been developed by leading experts and stakeholders at the national and state levels;
- The HSAT is being promoted and used in the “Michigan Steps Up” campaign, and thus this project feeds into a statewide initiative that enjoys leadership from the
Michigan Surgeon General and participation by health organizations and advocates working throughout Michigan; and

- CHPDP and HFHS have substantial experience in delivering school-based healthcare services and health education.

The beauty of this approach is that it marries an ideal intervention team with a high-quality intervention tool, neither of which need to be developed de novo.

Intended Audience: the target populations are K-8 school children in some of metropolitan Detroit’s poorest neighborhoods where over 70% of the children participate in the free or reduced price school lunch program. The students represent the full diversity of the city, including those from two schools that are predominantly Hispanic and one that is predominantly Arab American, while the overwhelming majority of Detroit public schoolchildren overall are African American.

Evaluation/Monitoring: This program needs to be formally evaluated.

**Eat Well and Keep Moving**

Contact Information:
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E-mail: lcheung@sph.harvard.edu
Website: [http://www.hsph.harvard.edu/nutritionsource/EWKM.html](http://www.hsph.harvard.edu/nutritionsource/EWKM.html)

Purpose: Eat Well and Keep Moving seeks to improve diet and physical activity levels in 4th and 5th graders.

Program Description: This is a consecutive two year diet and physical activity program for 4th and 5th graders. By the end of 5th grade, participants will have had twenty-six fifty minute classroom lessons in math, science, language arts, and social studies. Additionally, five thirty minute physical education lessons are incorporated into the program.

Unlike traditional health curricula, EAT WELL & KEEP MOVING is a multi-faceted program encompassing all aspects of the learning environment -- from the classroom, cafeteria, and gymnasium to the school hallways, the home, and even community centers. This varied approach helps reinforce important messages about nutrition and physical activity and increases the chance that students will eat well and keep moving throughout their lives. The program is also designed to use existing school resources, to fit within school curricula, and to be inexpensive to implement.

Costs: The cost of the first edition of the program is $47.00 and the cost of the second edition is $54.00. The curriculum is available to purchase at [www.humankinetics.com](http://www.humankinetics.com).

Training Required: One full day of training is required for every teacher involved. Additionally, school wellness meetings are held twice a year.
Intended Audience: This program is intended for use with 4th and 5th graders.

Tested Audience: This study was evaluated using a sample of 4th and 5th graders from Baltimore, Maryland. 59% of these students were female and 91% of these students were Black.

Evaluation/Monitoring: Six intervention schools were matched with 8 control schools in Baltimore, MD.

Results: They found that students in the intervention group reduced their intake of calories from fat, saturated fat, and increased their consumption of fruits and vegetables.

**Food On the Run (FOR): California**

Contact:
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California Project LEAN
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E-mail: apurcell@dhs.ca.gov

Program Purpose: The mission of FOR is to increase healthy eating and physical activity among low-income high school students as a way to improve health and reduce the risk of chronic disease.

Program Description: FOR seeks to:
- Prompt adolescents, parents, local policymakers, and community members to advocate for policies that create school and community environments supportive of adolescent healthy eating and physical activity;
- Motivate adolescents to eat healthier and engage in more physical activity; and
- Strengthen statewide leadership and communication on adolescent nutrition and physical activity issues.

FOR assists California communities to design healthy eating and physical activity messages and policies which are appropriate for their local high schools. Over the past five years, FOR schools have worked with coalitions of local organizations, health providers and parents to build local high school interventions.

Interventions involved:
- The recruitment and training of 10-20 high school students from each community to serve in a leadership capacity as advocates promoting healthy eating and physical activity within their school. Special emphasis was placed on promoting policy changes that create a school environment which promotes healthy eating and physical activity.
- Training student advocates in the basics of nutrition, physical activity, and advocacy. Three FOR publications, "Playing the Policy Game: Preparing Teen Leaders to Take Action on Healthy Eating and Physical Activity", "Jump Start Teens", and the "Teen Web Site" were used extensively in the trainings.
• Working with student advocates to identify nutrition and physical activity policy change goals.
• Conducting activities in each high school that promoted healthy food choices and physical activity for adolescents. Most activities were directly related to the policy goals being pursued by the student advocates. “Simple Solution” posters, counter displays, PSAs, and incentive items were developed by FOR to promote teen healthy eating and physical activity.
• Conducting activities that increased parental awareness of nutrition and physical activity education and policy messages and encouraged parent involvement in project activities.

Coalitions also utilized CDC’s "School Health Index" and USDA’s "Changing the Scene" to assess nutrition and physical activity environments within the school district. Coalitions shared district strengths and opportunities for improvement with their local school board.

FOR is partnering with the California School Boards Association to develop a Nutrition Policy Manual and supporting materials for California school board members. These materials and associated trainings will better equip school board members to create and implement district policies that promote healthy eating. Local organizations will be able to utilize the materials to more effectively work with their school boards on nutrition policy.

Intended Audience: Low-income high school students.

Tested Audience: During the height of intervention, FOR directly reached 11 percent of California’s low-income high schools students.

Impact: FOR efforts are evaluated annually through student surveys, and an assessment of the school environment. The environment assessment describes the eating and physical activity environment at FOR high schools through the use of pre- and post-test measures. Statistically significant increases at least the p=.05 level were observed for:

• Physical activity knowledge (6 percent increase) and attitude (4 percent increase);
• Nutrition knowledge (5 percent increase), attitude (5 percent increase) and behavior (9 percent increase);
• Healthy eating options offered to students at school (5.7 out of a possible eleven points).
• Healthy eating promotional efforts on school campuses (2.3 out of a possible five points);
• Physical activity options made available to students at schools (3.3 out of a possible six points).

Other evaluation components currently under completion include a case-control study of FOR effectiveness, case studies of successful program strategies, and a survey of school board members regarding policy implementation.

FOR evaluation and survey results as well as reviews of our educational materials have been published in the Journal of School Health, the Journal of the American Dietetic Association, and the Journal of Nutrition Education and Behavior.

**FOOD PLAY, Nationwide**

FOODPLAY Productions
1 Sunset Avenue
Hatfield, MA 01038
Phone: 1-800-FOODPLAY
E-mail: info@foodplay.com
Website: www.foodplay.com

Program Purpose: FOODPLAY promotes the new US Dietary Guidelines and Food Pyramid and teaches how to:

- Choose a wide variety of healthy foods from the Food Pyramid
- Enjoy being physically active every day
- Strive for Five: eat at least five fruits and vegetables a day
- Cut down on sugars and fats
- Choose low-fat milk, water, and 100% fruit juice in place of sugary drinks
- Fuel up with breakfast and participate in school breakfast programs
- Read food labels, understand food marketing techniques, and get the most nutritional value for their money
- Treat their bodies right, whatever their size and shape...and that everybody is different and different is a great thing!

Program Description: FOODPLAY is a national award-winning, research-based, nutrition theater show which tours elementary schools, conferences, and special events to educate and motivate children to improve their eating and exercise habits. This turn-key program features a skills-based, highly engaging theatrical performance with juggling, music, and audience participation. A comprehensive resource kit provides year-long follow-up with materials for students, parents, teachers, school food service, health staff, and the media. FOODPLAY helps schools integrate nutrition into core subject areas and triggers school and community-wide interest in fighting childhood obesity and improving nutrition and health environments.

Intended Audience: Geared for children grades K-5, FOODPLAY is age-appropriate with the variety of demographic groups found in the US. It is updated annually and selected materials are available in Spanish.

Evaluation/Monitoring: A validated student pre and post evaluation tool is available to assess students' nutrition and health knowledge, attitudes, skills, and behaviors as well as test program impact (see results below). Teacher and contact evaluations are also available which assess teacher's observance of student's improvements in eating and exercise habits, changes in the school's nutrition environment, and follow-up nutrition activities performed in and out of the classroom.

Participation Rate: FOODPLAY has reached over two million children and is presented to approximately 140,000 children at 400 schools each year.

Impact: According to an extensive two state-wide evaluation sponsored by the USDA, FOODPLAY has been shown to be a highly effective nutrition education program showing dramatic improvements in student nutrition and health knowledge, attitudes, skills, and behavior. Conducted by the MA and RI Departments of Education with 1400 fourth graders and analyzed by the University of Rhode Island's Food and Nutrition Department, the following results were reported one week after student participation in FOODPLAY:
75% correctly chose “grains” as the group in the Pyramid from which to eat the most (up from 18%)
85% correctly reported that a can of cola has ten teaspoons of sugar (up from 21%)
90% of students correctly identified the main ingredient in a food label (up from 53%)
63% were able to put all food groups in their correct place on the Food Pyramid (up from 37%)
68% reported "eating breakfast more often"
75% reported "eating more fruits and vegetables"
69% reported "drinking less soda"
Over 90% of teachers and principals gave FOODPLAY the highest rating of "excellent"

Application/Adoption: The program has been successfully presented in a wide variety of settings including schools assemblies, parent and family nights, health and wellness fairs, fund-raisers, large theaters, museums, special events, and conferences.

Curriculum Integration: Schools often use FOODPLAY to kick off or cap their nutrition curriculum unit or to get everyone on board (school nurse, school food service, teachers, administrators, parents, and students) to work towards improving the school’s nutrition environment. The resource materials are designed to supplement school curriculum and help schools meet national and state nutrition and physical activity standards.

Sustainability: FOODPLAY's effectiveness in improving student knowledge, attitudes, skills, and behavior, as evidenced by its outstanding evaluation results, is due to its ability to not only educate but also to motivate and empower students. Studies show that theater is a powerful medium for change, and because FOODPLAY is presented to an entire school, it helps level the playing field with the over 40,000 TV commercials children see each year, with a majority promoting high fat, high sugar food products. The show uses 'peer pressure' to its own advantage...all of a sudden, it is no longer "cool" to drink soda; it's cooler to read the ingredients and find healthier choices!

Health Ahead/Heart Smart, Nationwide

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New Orleans, LA 70112
(504) 585-7197
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Purpose of the Program: To give children’s health and behavior (lifestyles) a boost that will last them a lifetime.

Description of the Program: Health Ahead/Heart Smart builds on more than two decade’s research in creating an effective cardiovascular prevention and general health education for children. The program addresses general health of the entire school environment. The newly revised edition of the curriculum integrates health education, science, and technology standards. It also incorporates school guidelines
for nutrition, physical activity, and tobacco use prevention recommended by the Centers for Disease Control and Prevention (CDC), and importantly, addresses social problems such as drugs, alcohol abuse, sexually transmitted diseases, dropping out of school, and violent behavior.

Components of the Program:
1. General Health
2. Nutrition
3. Super Kids/Super Fit (Physical Education)
4. Coping Skills
5. It's Me (Self-Esteem, Attitudes and Values)

Impact: The impact of the program is measured by the ability of students participating in the curriculum to practice health protective behaviors while taking responsibility for their own health.

Healthy and Nutritious School Environment, South Carolina

Contact Information
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Program Purpose: Abolition of junk foods from schools and replacement with healthy food and teaching of nutrition awareness.

Program Description: Because so many of South Carolina's children are overweight, have high blood pressure and/or Type II diabetes, Richland One's school board adopted a policy under which all foods and beverages sold and served in its schools must meet the dietary guidelines for Americans established by the federal government. It also provides learning opportunities for student to obtain the skills necessary to make healthy food choices.

This policy, in effect, banned "junk" food from schools. The sale of foods and drinks that have minimal nutritional value is prohibited in snack bars, school stores, concession stands and the a la carte offerings in school cafeterias. Elementary schools are not permitted to have student-accessible vending machines at all. Secondary schools have vending machines filled with low-fat, low-calorie foods.

There has been a major emphasis on nutrition education through the policy. Schools call upon Student Nutrition Services to participate in school health fairs, assist in planning meals or food sales that meet the policy guidelines, sponsor nutrition advisory councils, conduct kitchen tours, aid teachers in nutrition lesson plans and visit classrooms to discuss proper nutrition. Student Nutrition Services also has been approached by surrounding school districts to help co-author their nutrition policies. Our greatest success is awareness of nutrition as it relates to health and education throughout the district.
Target Audience: Students, K-12; secondary audiences are parents, employees, community members.

Evaluation/Monitoring: Participation in school lunch program has increased, but hard data are not available.

Participation Rate: 62% of students

Healthy Kids Centers: Lexington, KY

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Original Funding - Federal Grant
Current Funding - Federal Grant and Community Hospitals

Program Purpose: The mission is to improve the lives and education of disadvantaged youth through providing access to comprehensive health, mental, and dental services in a positive and supportive environment.

Program Description: Healthy Kids Centers (HKC) are comprehensive school based health care centers in high poverty schools in Lexington, Kentucky. Over 95% of the children in those areas live in poverty, and 50% of them are uninsured. Recognizing those needs, Dr. Tom Young of the University of Kentucky spearheaded a community collaborative partnership to form school-based clinics. The clinics deliver primary care, dental care, mental health care and health education in an integrated school environment. While the initial site was funded by a federal grant, the community hospitals have take up the gauntlet and have fully funded three additional school sites in high poverty areas. HKC's have been enthusiastically accepted by the schools, parents, children and the community, and school attendance has significantly improved.

Intended Audience: Elementary students and their families

Participation Rate: Over 95% of students are enrolled and participate in health services.

Impact: The initial site now plays a school-wide video tape for physical activity. Schools also offer Take 10!, an educational physical activity program for teachers to use in the classroom. The health educators teach nutrition and physical activity in the classroom.

HIP Childhood Obesity Program

Contact Information:
Kristin Duquaine, RN BSN CDE
Program Purpose: The objectives of this program are to:
- Increase time spent in exercise activities.
- Improve nutritional practices.
- Reduce prevalence of overweight/obesity in school age children
- Reduce body mass index by 2kg/m2 after 12 week program.
- Introduce daily nutrition and physical education in entire school curriculum.

Program Description: Parents and children go to separate sessions on nutrition and self-efficacy. The content of these sessions is listed below. After the separate session, children and parents are reunited for dinner and exercise prior to dismissal. Each session includes the following:
- Nutrition
- Fun Exercise! (obstacle courses, exercise dance)
- Review of pedometer readings and activity logs
- Personal Development (Behavioral Component)

The following is the content of the sessions taught during the HIP program

<table>
<thead>
<tr>
<th>Parents</th>
<th>Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Portion Distortion</td>
<td>- Portion Sizes</td>
</tr>
<tr>
<td>- Hunger Gauge</td>
<td>- Hunger Gauge</td>
</tr>
<tr>
<td>- BP and Cholesterol Information</td>
<td>- Filling up the tank</td>
</tr>
<tr>
<td>- Healthy Ethnic Cooking</td>
<td>- Children’s Pyramid</td>
</tr>
<tr>
<td>- Self efficacy – behaviors and ability to change</td>
<td>- Importance of increasing activity</td>
</tr>
<tr>
<td>- Liquid Candy</td>
<td>- Self efficacy - how do I make good choices</td>
</tr>
<tr>
<td>- Emotional Eating</td>
<td>- Liquid Candy</td>
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<tr>
<td>- Body Image</td>
<td>- Emotional Eating</td>
</tr>
<tr>
<td>- Portion Distortion</td>
<td>- Body Image</td>
</tr>
<tr>
<td>- Healthy Carbs</td>
<td>- Paint Your Plate</td>
</tr>
<tr>
<td>- Small Changes Result in Big Results</td>
<td>- Healthy Carbs</td>
</tr>
<tr>
<td></td>
<td>- Small Changes Result in Big Results</td>
</tr>
</tbody>
</table>

Intended Audience: 1st – 5th graders and their parents

Duration of the Program: 12 Week Program – 2 hours per week

Evaluation/Monitoring: Data will be collected on BMI, weight, height, health survey, blood pressure, and body fat percentage testing with the bioimpedance analyzer. The following lab work will be conducted:
- Hemoglobin A1c
- Insulin level
- Lipids
- Comprehensive metabolic Panel
• TSH, Free T4
• C-reactive protein

**Hooked on Positive Education (HOPE): California**

Contact Information:
Cathy Perfect
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Program Purpose: To increase the awareness, knowledge and consumption of the importance of eating five fruits and vegetables per day and to promote 60 minutes of exercise daily among school-age students.

Program Description: This program operates for low-income students in a remote location within Kern Valley, California. The program was developed using the Social Ecological Model and the foundation of this program is the skill-based nutrition education instruction provided to all students in the classroom setting.

This base of information is then modeled by the nutritious and healthy meal and snack selection provided by child nutrition staff under the National School Lunch, Breakfast, and After School Snack Programs. The school community participates in the delivery of a consistent health message (eating 5 fruits and vegetables per day) by providing students opportunities to participate in Poster Contests, School Health Fair, Farmer Market Field Trips, and other classroom and school based activities.

The HOPE (Hooked On Positive Education) After School Nutrition Program then provides students the opportunity to participate in a variety of weekly nutrition education, cooking, taste-testing, and/or gardening classes/activities. The classes and activities focus on the project goal, consuming five fruits and vegetables per day and the promotion of physical activity. The popularity of these classes is evident in the growing number of classes provided weekly. One highlight of this program has been the recipe card file project. This project involved students in grades 4-6 developing fruit and vegetable recipes, and younger students decorating the recipe cards with colorful drawings of fruits and vegetables. The middle school students have challenged themselves by preparing a spaghetti dinner which included all steps from planning the menu to preparing and serving the meal. The students learned some valuable lessons about balancing food choices, incorporating tasty and colorful fruits and vegetables and food budgeting.

Although the emphasis of this project is within the school environment, the impact of the family and the larger community on the food selection and consumption is addressed. Meal planning and nutrition education classes focusing on the message of Five-a-Day are scheduled for community members (parents, senior citizens, pregnant woman and caretakers of small children). In addition presentations, cooking classes and taste-testing are provided at community events and community health fairs. A newsletter is distributed monthly to inform the community of the presentations and classes. It also provides another avenue for consistent 5 a day messages. Local media has been very receptive and provided coverage in both the local paper and newscasts.

Intended Audience: Students in grades K-8 attending Kernville USD and students in grades 4-8 in the Kernville USD HOPE after-school program.
Participation Rate: The program annually reaches 900-1,000 K-8 students in traditional classroom nutrition education and an additional 100 students in grades 4-8 in the HOPE After-School Nutrition Program.

Impact: A pre- and post-test of students participating in the HOPE after-school program was conducted during the third year of the program in 2001-2002.

- An increase in the consumption of fruits and vegetables (self-reported) was reported
- An increase in preference in fruits and vegetables as snacks was reported among students along with a decline in preference for "unhealthy food choices as snacks" from pre- to post-test.
- Students (post-test) more accurately identified the need for five fruits and vegetables per day.
- Overall, students reported an increase in the number of times they participated in active sports during a one-month period.

**INSight Youth Corps, Indiana**

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Program Purpose: The INSight Youth Corps is designed to provide experience-based learning, enhance personal and academic achievement, and build leadership skills among its members, preparing them for future success and commitment to lifelong healthy lifestyles and health advocacy.

Program Description: The INSight Youth Corps is a student-led initiative that was developed out of INShape Indiana. The INSight Youth Corps prepares and empowers high school students to provide health education within their school system, as well as design and carry out various creative health-related individual and community-based projects.

Vision of INSight Youth Corps: The vision of the INSight Youth Corps is to develop a statewide network of high school students trained as mentors and leaders to promote, model, and teach healthy behaviors in their schools and communities.

INSight Youth Corps Mission and Values: The mission of the INSight Youth Corps is to empower youth to make choices and take action that will positively impact their own health and the health of their peers, families, and communities. The INSight Youth Corps initiative embraces the Department of Education’s service learning values which include:

- Youth/Student Voice
- Meaningful Service/Civic Engagement
- Authentic Needs Assessment
- Academic Connections
• Collaboration
• Reflection
• Evaluation
• Recognition/Celebration

Participation: The program currently reaches about 14 high schools in Indiana.

Evaluation/Monitoring: An outcomes study will be coming out later in 2007.

**International Walk to School Initiative in USA, Nationwide**

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Funding: Evaluation funding by the CDC

Program Purpose: Walk to school initiatives promote routine physical activity, improved pedestrian safety and awareness of the environmental changes needed to create safe routes to school.

Program Description: Every October, a day is set aside for children, parents, teachers and community leaders to walk to school together to celebrate the importance of physical activity, safety and walkable communities.

Communities use this event as an opportunity to identify things to improve, such as traffic around schools, the need for sidewalks or crossing guards. Many communities go beyond the day to establish walking incentive programs, walking school buses and other innovative programs to make safe walking and bicycling a routine part of children's lives.

Cost: Free

Intended Audience: Elementary and middle-school children, community leaders, parents and school personnel.

Duration of the Program: annually, but can be adapted to a year round program.

Evaluation/Monitoring: This program does not have published evaluation results.

Participation Rate: It has grown from two U.S. cities in 1997 to over 3 million walkers worldwide in 2001. This year, all 50 states have communities with events planned. Visit the web site http://www.walktoschool.org for more information or to see a map of who is participating in what states.
Impact: Self reports from local program coordinators have documented environmental improvements and sustained walking programs. Numbers of events and participants have increased annually. A national evaluation funded by CDC to obtain tangible measurements has begun.

**Just for Kids!, Nationwide**

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Program Purpose: The purpose of this program is to increase fruit and vegetable consumption among fourth and fifth grade students by affecting behavior change in the school, home, and community environment.

Program Description: Just For Kids! was developed at the University of California School of Medicine, successfully tested in San Francisco schools, and is based on the nation's leading pediatric obesity program for over 20 years. Just For Kids! is a health education program for all children which helps them make changes in their diet, exercise, communication and affect which result in decreased obesity, improved cardiovascular and physical fitness, and increased nutrition knowledge.

Just For Kids! takes about 10 weeks to complete. Each week the Just For Kids! Workbook guides children in making changes in their habits and lifestyle which improve their fitness and knowledge. The program may be completed in a group format or individually. The Just For Kids! Workbook is divided into nine tabbed sections, and each section is normally completed in one week. This allows children time to make suggested changes in their behavior and to practice the new skills they learn in each section.

Materials:
- Work Book
- Instructor’s Guide

Cost:
- $12.00 per workbook
- $28.00 per instructor’s guide
- Shipping charges

Duration of the Program: 10 weeks

Evaluation/Monitoring: To see the detailed evaluation visit [http://www.just-for-kids.org/links.htm](http://www.just-for-kids.org/links.htm).

Results: Significant results were seen in a few areas:
1. Triceps skin fold thickness (F=4.95, p<.03)
2. Diastolic blood pressure (F=9.74, p<.01)
3. Knowledge (F=5.74, p<.02)
**KaBoom, Nationwide**

Designed by Kids, Built by Volunteers
Website: [http://www.kaboom.org/](http://www.kaboom.org/)

Purpose: KaBOOM!, uses a community-build process which seeks to build healthy, fun play spaces and strong communities. In the same way that playgrounds promote exercise and social development among children, a community build promotes positive collaboration among private citizens and business leaders. A KaBOOM! build instills a lasting sense of empowerment.

Description of the program: Over the past decade, KaBOOM! has used our innovative community-build model to bring together business and community interests to construct nearly 1,000 new playgrounds, skate parks, sports fields and ice rinks across North America. KaBOOM! play spaces are all designed by the experts on play – children – and built by the communities who will use them. That means that local kids choose their favorite slides and climbers or ramps and rails, decide on a color scheme, and create unique themes—. But it also means that dozens, sometimes hundreds, of local residents volunteer their time to install the playground, skate park or field. A portion of the funding is raised locally, and important decisions about layout, safety, and land issues are made by community leaders and concerned citizens.

Evaluation/Monitoring: This program has not yet been formally evaluated.

**KID-FIT, Nationwide**

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Program Purpose: The goal is to teach children healthy lifestyle habits of regular exercise, healthy eating and proper rest.

Program Description: KID-FIT is a structured physical education program designed to target different systems of the body and to teach specific facts about each one. Children move to a fitness class for one half hour, a minimum of once per week (more often if possible). The fitness class is designed much like an aerobic class but geared towards preschool abilities and brain development; Age appropriate equipment is used (scarves, hoops, bean bags, balls, etc.) along with popular children\'s music. Each class begins and ends with a brief educational message delivered by using charts, puppets and anatomical models. Exercises are chosen according to generally accepted fitness guidelines promoted by the American Council on Exercise, AAHPERD and American College of Sports Medicine. Reference
material is obtained and in alignment with organizations such as the USDA, American Heart Association, National Dairy Council, American Cancer Society, American Psychological Association, etc.

Children who have used the program love the games, music and activities. Children learn more than fitness and health facts; it is extremely interactive and helps develop good social skills including sharing, partner activities and cooperation. Academic concepts are also intertwined into the program - abc's, numbers, shapes, colors, and spatial relationships.

Intended Audience: Children ages 2 years-K

Evaluation/Monitoring: Evaluation measures are available and include pre and post tests to assess health knowledge and healthy behaviors. A yearly physical skills assessment progress sheet is also included.

Application/Adoption: Virtually anyone who has a computer and DVD player can use the KID-FIT curriculum. Along with the first package comes a preview of all the materials included and suggestions for use. Each session participants learn a step-by-step fitness routine to teach the children. They learn each song individually and then view an entire KID-FIT class as taught in a real life setting. It can easily be adapted to younger vs. older age groups and special needs children can benefit from the program with modifications as well.

Maine Physical Activity and Nutrition Program

Contact:
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Program Purpose: Increase the proportion of Maine people who are at a healthy weight and reduce the health risks associated with overweight and obesity, especially among populations who experience health disparities.

Program Description: The Maine Physical Activity and Nutrition Plan 2005-2010 is intended for health professionals, business leaders, the food industry, policymakers, educators, the media, and citizens to use as a guiding document to improve the health and well-being of Maine people. The plan outlines key objectives and strategies for youth and adults with eight focus areas:

- Physical Activity
- Consumption of Fruits and Vegetables
- Caloric Imbalance and Expenditure
- Television Time
- Breastfeeding
- Food Safety
- Food Security
- Eating Disorders
The plan was developed by a group of key stakeholders through a comprehensive strategic planning process. Based on input from various key partners, the objectives in the plan were developed to target four settings: school, community, worksite, and health care.

The plan has includes two school based interventions
1. Vending and a la Carte High School Intervention
2. Take Time! Physical Activity in Schools Pilot Initiative

Movin and Munchin Schools, Wisconsin

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Madison, 53707-7841
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E-mail: jon.hisgen@dpi.state.wi.us
Funding Level: $25,000
Funding: CDC funds, funding from the department of justice, support from Casey FitzRandolph and Suzy Favor-Hamilton, funding from a generic drug settlement, support from Wisconsin Education Association Trust (WEA, Trust) and some gifts and grants monies sent to DPI.

Program Purpose: The goal of the program is to get students participating in physical activity and healthy eating outside of the school day.

Program Description: Movin and Munchin Schools has been in place as Movin schools for the previous four years with recently added nutrition criteria. The Movin and Munchin program is supported by teachers who believe this has engaged students who would not have been active but can take the challenge of doing such things as staying soda free for a week.

Required Resources: A tool-kit is available.

Cost: About $25,000 per year ($250.00 mini grant given to each participating school).

Intended Audience: Tweeners (students between 8-13)

Duration of the Program: year round

Evaluation/Monitoring: An outcome study that measures physical activity levels as a result of participation in the program has been completed.

Participation Rate: This program has averaged 18,000 students and 8,000 adults participating over the last four years. It started with CDC money to promote physical activity in the states as part of the VERB initiative.
Impact: In terms of cultural impact the program has reached about ten urban schools out of the seventy who turn in their results each year. Each school that turns in their projects can receive between $250 and $500 for their physical activity program. This money was made available by a generic drug settlement with the attorneys general office.

Application/Adoption: It is in the form of a toolkit that schools easily adapt to their state by changing the logos used. It is written with examples that help a school develop their own unique program.

School Goals and Student Achievement: It meets both our new nutrition standards and most of our Physical Education standards in a fun, engaging way. Most schools want to address in their wellness policy ways of getting kids to exercise after school and with their parents as well as lessening the amount of soda consumed. This program addresses those goals in an effective way.

Curriculum Integration: As a curriculum item it fits perfectly with social studies. Projects have ranged from traveling to the Olympics in Salt Lake City to climbing Mt. Everest.

Funding Level: The funding level of the program is $25,000 because the program gives a $250 mini grant to each school who completes and report that demonstrates what they did, how many students, adults and staff were involved. There are 100 Movin & Munchin schools in Wisconsin this year. The money comes from a number of sources CDC funds, a generic drug settlement and some gifts and grants monies sent to DPI.

Collaboration: Movin & Munchin Schools collaborates with Wisconsin Education Assoc. Trust, the insurance provider for 80% of schools in WI. They match the mini grants to any school that is a trust member and has 50% of the building staff involved in the project. They also produce the hard copy of the toolkit, do the kick off with two Wisconsin Olympians (Casey FitzRandolph skater and Suzie Favor Hamilton, runner). They provide $20,000 to the effort.

Sustainability: Money was received from the CDC for start up and the Dept. of Justice to continue it for four years. One Sponsor has lowered the price of PE materials for this project (Sportime). One Insurance company helps financially if a school has their policy and does Movin and Munchin schools (WEA Trust). Movin and Munchin has support of the community and parents. Parents count “movin miles”, do visual bulletin boards, and provide promotional materials in kind. This community support helps keep costs of the program down. Safe Routes to School are also incorporated in some communities.
**Move Across America: A Patriotic Endeavor, Winfield, Kansas**

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Program Purpose: To educate area students in grades 3-5 about physical fitness and to have students actively participate in an activity that combats obesity.

Program Description: At recess, children in grades 3-5 are able to make their way around a quarter mile track (painted on mowed grass) in exchange for a tongue depressor with a health tip on it. The children collect the tongue depressors then turn it in to the program director; the program director records the number of laps. As children walk more laps, they “move across America” from San Francisco to New York City and their progress is plotted on a bulletin board. The program facilitates relating physical education to math, geography, health and positive reinforcement of good behaviors and healthy lifestyles. It also lends itself to positive motivators such as the use of digi-walkers, pedometers and heart rate monitors.

Intended Audience: Students in grades 3-5.

Evaluation/Monitoring: This program has not been formally evaluated.

Participation Rate: All students participate in the program weekly and have the opportunity to participate at recess.

Impact: The students are eager to increase their mileage totals. Some are interested in the goal of reaching New York City, while others want to get more shoe tokens. They students also learn about portion control, balanced diet and energy balance.
Native FACETS
(Family, Active healthy choices, Cancer prevention, Eating wisely, Thankfulness, Survival as a Native American)

Contact Information:
Not Available

Program Purpose: To lower cancer risks among Native Americans through youth tobacco prevention and dietary modification

Description of the Program: The program consists of a diet curriculum and a tailored tobacco use prevention curriculum. The program also recruits and trains Native Americans to deliver the intervention.

Program Components:
- Diet curriculum
  - Based on federally recommended dietary guidelines
  - Based on culturally-specific food practices
- Tobacco use prevention curriculum
  - Based on current available evidence from the literature
  - Tailored to the study sites by community representatives
- Use of culturally appropriate staff
  - Trained Native Americans to deliver the intervention

Time Required: The program is delivered in 15 weekly group sessions, 90 minutes in length, after the school day or on Saturdays at participating community centers. Subject attendance was good, especially among sites delivering the intervention in the summer months (93%). Youths completed pre- and post-test measurement instruments, and follow-up six months after post-test. Together with pre-test, post-test and follow-up sessions, subjects participated in a total of 18 sessions.

Intended Audience: Native-American youth

Evaluated Audience: The study participants were Native-American youth in the Northeastern United States.

Required Resources: Required program materials include three Native FACETS curricula:
- tobacco prevention
- diet modification
- combined tobacco prevention and diet modification

The program also includes the Anthology of Native American Tobacco Traditions. Necessary materials for each session are listed in the Native FACETS curriculum guide, and required handouts are included.

About the Study: The intervention was designed to examine cancer risks among Native Americans through tobacco use prevention and dietary modification. The study tested culturally sensitive curricula
on tobacco use, diet, tobacco and diet combined, and a control arm. The intervention delivery occurred in 15 weekly group sessions, with 3 additional pre-/post-test sessions.

Results:

- Among youths receiving the intervention, rates were lower for current smoking, past 24-hour smoking, having ever smoked for 1 month, and having ever smoked in a lifetime, as compared to control youths.
- Youths knew more about the negative effects of smoking and smokeless tobacco use after their receipt of the intervention.
- After delivery of the intervention, youths demonstrated an increased knowledge of cancer risks as they relate to the consumption of fat, fiber, and fruits and vegetables.

Order Native FACETS- Preview, download, or order free materials on CD-ROM

The National Theatre for Children, Nationwide

Contact Information:
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http://www.nationaltheatre.com/pyramid.htm

Program Purpose: The National Theatre for Children produces interactive theatre that teaches important societal issues to 6- to 14-year-old children.

Program Description: The fast-paced and funny edutainment program The Prince of the Pyramid was developed in partnership with Tufts University and focuses on the following educational points:

- Eat a variety of good foods.
- The importance of drinking milk.
- Eat five servings of fruit or vegetables every day.
- The importance of exercise.

The message is reinforced through the distribution of classroom posters, student take-home workbooks, and online offerings.

Intended Audience: School children, ages 6-12.

Participation Rate: Since its premiere in the fall of 1999, The Prince of the Pyramid has been presented in over 500 schools to over 300,000 students.

Impact: Complete pre- and post-test evaluation, conducted by Tufts University School of Nutrition Science and Policy, is available upon request.
One Percent or Less School Kit, Nationwide

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Program Purpose: "1% Or Less" is a nutrition-education campaign aimed at reducing saturated-fat consumption and chronic-disease risk. The campaign encourages adults and children over two years to drink low-fat or fat-free milk.

Program Description: The 1% Or Less School Kit describes how to plan and implement a school-based, nutrition-education campaign. It includes a variety of materials that can help organizations or individuals plan a program that meets the needs of their students.

The 1% Or Less School Kit contains materials for both primary and secondary school students, including:
- Strategies for marketing low-fat milk to students;
- A model press release to promote a 1% or Less program;
- Signs to hang in cafeteria dairy cases to encourage students to choose low-fat milk;
- Instructions for conducting milk taste tests;
- Instructions for constructing visual displays to encourage students to drink to low-fat milk;
- Ideas for using peer education to promote low-fat milk to middle and high school students;
- Activity sheets for primary school students to incorporate the 1% Or Less message into other class lessons;
- Model fact sheets and handouts for parents of primary school students to encourage students to choose low-fat milk; and
- Model handouts for secondary school students to encourage them to choose low-fat milk.

Intended Audience: Teachers, parents, organizations, etc., who work with K-12 students

Participation Rate: CSPI has run about a half dozen 1% Or Less campaigns. The campaign materials have been used by hundreds of organizations around the country to run their own campaigns.

Impact:
- In the first pilot campaign in Clarksburg, WV
  - Low-fat milk sales (1%, ½%, and fat free) doubled from 18% to 41% of milk sales (as measured by supermarket milk sales).
  - Total milk sales increased 25% (For the same time period, milk sales were unchanged in the control city).
- Other campaigns have also been successful.

Clarksburg, WV Demographics

2000 U.S. Census data, adjusted for inflation

<table>
<thead>
<tr>
<th>U.S.</th>
<th>Harrison County</th>
<th>Clarksburg</th>
</tr>
</thead>
<tbody>
<tr>
<td>$49,902</td>
<td>$37,022</td>
<td>$33,582</td>
</tr>
</tbody>
</table>

White- 93.1%
Black- 3.8%
Other- 1.5%
Latino- 1.1%

Pathways
Prevention of Obesity Among American Indian Schoolchildren Nationwide

Contact:
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Website: http://hsc.unm.edu/chpdp/projects/pathways.htm

Sources of Funding: National Heart, Lung and Blood Institute of the National Institutes of Health

Program Purpose: To create for American Indian children in grades three, four, and five, a culturally appropriate school-based curriculum that promotes healthful eating behaviors and increased physical activity. The overall focus of the program and supporting materials was designed to prevent childhood obesity by promoting increased physical activity and healthful eating behaviors.

Description of the Program: Pathways was an eight-year obesity prevention program for American Indian schoolchildren in grades 3–5. The project involved 1,704 students in 41 schools in Arizona, South Dakota, Utah and New Mexico. With funding from the National Heart, Lung and Blood Institute, the project was developed and conducted through a partnership that included seven American Indian tribes—the Navajo Nation, the Gila River Indian Community, the Tohono O'odham Nation, the White Mountain Apache Tribe, the San Carlos Apache Tribe, the Oglala Lakota Nation, and the Sicangu Lakota Nation—and five Universities—Johns Hopkins University, the University of Arizona, the University of Minnesota, the University of New Mexico and the University of North Carolina.

Components of the Program:
- Classroom Curriculum
  - Pathways Third Grade Curriculum
    * 3RD GRADE
  - Pathways Fourth Grade Curriculum
• 4TH GRADE
  o Pathways Fifth Grade Curriculum
• 5TH GRADE
  • Family Component
    ▪ Read Me File
  • Food Service Component
    ▪ Read Me File
  • Physical Activity Component
    ▪ Read Me File

Resources Required: The materials developed for each component are available for use by interested teachers, school personnel, and health promotion practitioners, by contacting the coordinator of the project, identified below, or by viewing the website for the Pathways curriculum.

Cost: All resources are available free of charge on the Pathways website.

Intended Audience: American Indian children in grades three, four, and five.

Tested Audience: American Indian children in grades three, four, and five.

Training Required: Training sessions are being conducted up to the present as requests are received from the original participating schools, to educate school staff and students about obesity prevention strategies.

Evaluation:

Methods: A school-based physical activity intervention was implemented which emphasized increasing the frequency and quality of physical education (PE) classes and activity breaks. Changes in physical activity were assessed using the TriTrac-R3D accelerometer in a subsample of 580 of the students (34%) randomly selected from the Pathways study cohort. Baseline measures were completed with children in second grade. Follow-up measurements were obtained in the spring of the fifth grade.

Results: Intervention schools were more active (+6.3 to +27.2%) than control schools at three of the four sites, although the overall difference between intervention and control schools (approximately 10%) was not significant (P>0.05). Boys were more active than girls by 17 to 21% (P < or = .01) at both baseline and follow-up.

Conclusions: Despite the trend for greater physical activity at three of four study sites, and an overall difference of approximately 10% between intervention and control schools, high variability in accelerometer AVM and the opportunity to measure physical activity on only 1 day resulted in a the failure to detect the difference as significant.

Impact/Potential Impact:
After the project was completed, several activities were initiated to disseminate the program and the results. In October 2002, the Center for Health Promotion and Disease Prevention was awarded a CDC grant for a three-year project entitled Participatory Action for Healthy Lifestyles (PAHL). This project
involves investigating the dissemination, diffusion and utilization of the Pathways project and curriculum.

**Peaceful Playgrounds, Nationwide**

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Program Purpose: Peaceful Playgrounds helps schools address several goals:
- Provide daily recess periods for elementary school students, featuring time for unstructured but supervised active play.
- Encourage the use of school facilities for physical activity programs offered by the school and/or community-based organizations outside of school hours.
- Encourage children and adolescents participate in at least 60 minutes of moderate intensity physical activity every day of the week.

Intended Audience: The target audience is K-6 grade students.

Evaluation/Monitoring: PPP has participated in numerous studies that can be reviewed at [www.peacefulplayground.com/research.htm](http://www.peacefulplayground.com/research.htm).

Participation Rate: Over 8000 schools across the nation are in various stages of implementing Peaceful Playgrounds. Its rapid expansions attests that the approach is both practical and a realistic intervention for schools interested in this cost effective childhood obesity intervention that gets kids moving.

Impact: Research studies (San Diego Consortium PEP Grant Evaluation Report) documented that "more students were drawn to the playground markings which resulted in more active children." Over 500 observational sessions by trained observers with SOPLAY a research validated instrument supported the notion that students found the markings both engaging and interacted with the new environment.

School Goals and Student Achievement: PPP fits into required school mandates.

Curriculum Integration: PPP has been shown to easily be integrated in to classroom practice though the use of the problem solving techniques adapted school wide in most settings.

Sustainability: Sustainability is achieved through the painted markings which last on average 5-7 years.
Philadelphia School Nutrition Policy Initiative, Pennsylvania

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Program Purpose: To ensure that students attending schools in Philadelphia receive nutrition education messages which are reinforced throughout the school and community with healthy foods and physical activity.

Program Description: The percentage of young people who are overweight has doubled since 1980. The prevalence of children nationwide who are overweight has more than tripled in children aged 6 to 11 (from 4 to 13 percent) and more than doubled in children aged 12-19 (from 6 to 14 percent). In response to these high obesity rates, the Comprehensive School Nutrition Policy Task Force, a Philadelphia-based group, is working toward the adoption of a comprehensive school nutrition policy for the School District of Philadelphia.

This proposed policy has the potential to positively change eating habits, behavioral outcomes and ultimately the incidence of obesity among school children. The school nutrition policy was adapted from CDC's guidelines and is being piloted in nine schools including:

- developing Nutrition Advisory Councils (NACs),
- conducting a self assessment to guide the planning process,
- insuring that all foods sold and served in the schools are consistent with the specified dietary guidelines on sugar, salt, fat and caffeine,
- conducting 10 hours of teacher training in food and nutrition education,
- integrating 50 hours of nutrition education as part of an interdisciplinary, integrated curriculum,
- initiating a social marketing campaign to reinforce messages about health eating and physical activity,
- involving family members and the community in promoting healthy eating and
- evaluating the effectiveness of the policy in promoting healthy eating and increasing physical activity.

An evaluation is being conducted to determine the extent to which the policy is being implemented, to examine the impact of the nutrition policy on BMI, food intake, physical activity, sedentary activity and body image/eating disorders and a policy analysis to examine the cost effectiveness of implementing the nutrition policy.

Intended Audience: Students in grades K-12 in the Philadelphia School District and their families.

Participation Rate: In the nine schools in which the policy is being piloted, there is an 80 percent participation rate among teachers and full participation among students.
Impact: Teachers in four schools received 10 hours of nutrition education training in September 2001. Trained teachers committed to meet the policy standard of 50 hours of nutrition educations per year. A target of 1,500 hours of nutrition education was set for each school. Teachers in three out of four schools met or exceeded the goal of 1,500 hours of nutrition education per school.

Nutrition standards were established for all beverages and snack foods offered in participating schools. Beverage standards were implemented in March 2001 and all a la carte beverages sold in 4 schools met the standards. Beverages in high school and middle school vending machines were also changed to meet the standards. These changes were accompanied by a social marketing campaign encouraging students to drink healthy beverages and eat healthy snacks.

Vending sales increased during the time period from March through June 2000, with the school food service realizing a slightly higher monthly profit from vending beverage sales during the months following the beverages changes.

**Pineview Elementary Staff and Faculty Wellness Program**

**West Columbia, South Carolina**

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Program Purpose: To increase the health awareness of our faculty and staff as well as have them model healthy behaviors for our students and community.

Program Description: Pineview Elementary Faculty and Staff Wellness Program has a point system that is totaled each nine weeks. Participants can earn points for healthy behaviors -- wearing seatbelt, non-smoker, relaxation time, personal progress record, blood work for screening, sharing healthy recipes, aerobic exercise (which earns the most points), mammograms, or safe weight loss program. Prizes are awarded based on the number of points earned. Prizes are changed each year.

- An annual Clemson/Carolina cookout is held where new hobbies are shared.
- A yogurt social and luncheons at school with healthy foods are held.
- Healthy snacks are offered before faculty meetings, healthy breakfast or lunch offered on in-service days, and healthy recipes and ideas are shared.
- The faculty and staff also participate in the Pineview Running Club and community walks and runs.
- Faculty, Staff, and students participate in the Walk Our Children to School Day, which brings out families, community members, business partners and dignitaries (875 participants this year).

Intended Audience: Faculty and staff, participating with K-5 students and our community.

Evaluation/Monitoring: This program has not been formally evaluated.
Participation Rate: 80-100% in most activities.

Demographics: The racial makeup of the city was 74.54% White, 19.81% African American, .28% Native American, 1.71% Asian, .02% Pacific Islander, and 2.04% from other races. Hispanic or Latino of any race was 4.66% of the population.

The median income for a household in the city was $30,999. The per capita income for the city was $18,135. About 12.8% of all families were under the poverty line.

**Planet Health, Nationwide**

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Program Purpose: Focusing on how to increase physical activity and improve dietary habits, researchers at Harvard University’s CDC-supported Prevention Research Center (PRC) developed an interdisciplinary curriculum Planet Health for public middle schools, in explicit collaboration with teachers and school principals.

Description of the Program: The curriculum was designed to fit easily into existing language, math, science, social studies, and physical education classes; to foster basic educational competencies required by the state of Massachusetts; and to provide materials easy for teachers to use. The content emphasizes:
- increasing consumption of fruits and vegetables
- decreasing consumption of high-fat foods
- decreasing television viewing
- increasing physical activity.

Intended Audience: 6th, 7th, and 8th grade students

Required Teacher Training:
On-line teacher training is available at http://www.hsph.harvard.edu/prc/proj_planet.html via a 73 slide Power Point presentation with notes. The slides are designed to:
- Takes teachers through the background material and information on which the curriculum is based
- Familiarizes teachers with the overall design of the curriculum
- Takes teachers through some sample classroom lessons
- Promotes discussion of Planet Health's key messages
- Provides teachers with planning tools and procedures.

Required Resources: An Interdisciplinary Curriculum for Teaching Middle School Nutrition and Physical Activity
Part I: Classroom Lessons contains 32 lessons and Power Down, a campaign to reduce TV viewing.
  - Sample Classroom Lesson:
    • Html File
    • PDF File

Part II: Physical Education Micro-Units and FitChecks contains 30 brief lessons and tools for self-assessment of activity and inactivity.
  - Sample Physical Education Lesson:
    • Html File
    • PDF File

Teacher trainings, flexible design, and planning tools facilitate the implementation of Planet Health.

Cost: The curriculum is $47.00.

Evaluation/Monitoring:
Phase I: A 2-year randomized controlled trial of the curriculum in 10 public middle schools in Boston yielded a significant reduction in television watching for both girls and boys, and a significant decrease in the prevalence of obesity among girls.

Results- Phase I:
  - Television watching decreased for girls and boys
  - There was a significant decrease in the prevalence of obesity for girls.

Phase II: After the Boston Public Schools (BPS) expressed interest in disseminating Planet Health, a partnership was formed to pilot test how feasible and sustainable the curriculum could be in public school settings where resources are constrained. Using the model of community-based participatory research, a project advisory board representing the key stakeholders within the BPS and the Harvard PRC guided the partnership from its inception. The BPS selected a sample of six inner-city middle schools to participate, while the PRC provided the Planet Health curriculum, training workshops for more than 100 teachers, small stipends for teacher coordinators within each of the participating schools, and research expertise to assess diffusion of the program.

Results-Phase II:
  - 76% to 100% of teachers found the curriculum highly acceptable and 78% to 100% planned to continue using it.
  - More than 90% of teachers found the curriculum effective and believed that it made a positive contribution to their classes.

Funding: Originally, funding was provided by NICHD, Centers for Disease Control and Prevention and a University Gift. After evaluation, satisfied that its criteria for success were met, Boston Public Schools endeavored to sustain and expand use of the Planet Health curriculum through independent funding.

Impact and Potential Impact: Planet Health is being implemented in more than 120 schools in Massachusetts, and in the past years, more than 1,000 teachers have been trained to use it. In addition, 2,000 copies of the curriculum have been purchased by interested parties in 48 states and 20 countries, potentially benefiting many thousands of children.
Sustainability: Planet Health has demonstrated effectiveness, feasibility, acceptability, and sustainability in a public school environment. The curriculum has been found to be cost-effective and, dollar for dollar, to save society money in the long run. To order Planet Health, go to the Human Kinetics Website.

**Presidents challenge Physical Activity and Fitness Awards Program, Nationwide**

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Website: www.presidentschallenge.org

Program Purpose: To motivate youth ages 6-17 via the President's Challenge Physical Activity and Fitness awards and anyone age 6 and older through the President's Sports and Fitness awards to begin and continue an active lifestyle leading to enhanced physical fitness.

Program Description: The President's Challenge consists of three program areas: Active Lifestyle, Physical Fitness and Health Fitness. The awards serve as motivating tools for kids by allowing them a chance to earn presidential recognition for their active lifestyles. Awards for the Presidential Active Lifestyle Award (PALA); the Presidential, National, and Participant Physical Fitness Awards; and the Health Fitness Award are comprised of an embroidered emblem and certificate. Starting in late 2002, adults were encouraged to become role models by earning the complement to PALA, the Presidential Adult Active Lifestyle (PAAL) award. With the active lifestyle awards, participants maintain a log documenting those activities meeting the 60 minutes per day (youth)/30 minutes per day (adult) of activity five days per week for six weeks.

Schools can also receive recognition for their efforts at ensuring students are physically active. The Physical Fitness State Champion Program recognizes the highest percentage of Presidential Physical Fitness winners based on the size of school enrollment; the Active Lifestyle Model school is one that has 35 percent or more of their school enrollment earn the PALA two or more times during the school year; and the Physical Activity and Fitness Demonstration Centers are recognized for quality physical education programs and serve as models for other schools, teachers, etc.

Intended Audience: For the President's Challenge Physical Fitness and Health Fitness Awards: youths, ages 6-17. For the Active Lifestyle awards, ages 6 and older.

Evaluation/Monitoring: As is evident from the increasing number of participants each year, more children and teenagers are exposed to and completing the program.

Participation Rate: The Challenge reached more than 6 million students in 2001-02.
**Project Fit America, Nationwide**

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Novato, CA 94949
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E-mail: info@projectfitamerica.org

Funding: Most sponsors have been hospitals. Over $6,000,000 has been raised since the founding sponsorship drive.

Program Purpose: Project Fit America donates to schools (grades K-12) fitness programs to get kids physically fit by increasing the minutes they are active per week during the school day.

Program Description: Project Fit America donates the following materials to schools:
- State-of-the-art fitness equipment that is specifically designed to address all the deficit areas where children fail fitness tests. The equipment becomes the permanent property of the school.
- A PFA activity curriculum for each teacher at the grade level students they teach. The curriculum goes hand-in-glove with the equipment to create games and challenges the children use on a daily basis. The curriculum is the permanent property of the school.
- An Extracurricular Games & Challenges book for grades 1-12 with related support materials: wall charts for hallway promotions, markers, certificates and ribbons, and cadence tapes.
- Teacher training at the school site with specialists from PFA.

Intended Audience: Schools, grades K-8

Participation Rate: As of the close of 2006, 524 schools in 247 cities and 40 states have participated.

Impact: Each year schools submit pre- and post-testing results to PFA. These are the schools' testing scores, and the testing model varies from the President's Council, AAHPERD, Fitgram, etc.

Overall, the national averages of pre- and post-testing as reported by PFA schools (these are not controlled studies) showed the following:
- 45.82% improvement in the Pull Up
- 28.57% improvement in the Modified Pull Up
- 40.85% improvement in the Flexed arm hang
- 23.32% improvement in Sit Ups

**School Based Health Care and Interventions**

School Based Health Centers

In 2004-2005, there were 1709 school based health centers (SBHCs) in 44 states (NASBHC). School based health centers (SBHCs) provide a variety of services: primary care (100%), mental health care (65%),
dental health care (12%), health education (15%), and nutrition (13%). SBHCs are said to help keep students in school and in class by bringing the doctor’s office into the school thus increasing academic exposure. SBHC's help increase access to care for students with barriers to care (language barriers, transportation barriers, financial barriers, etc...) (NASBHC)

School Based Health Centers at a Glance
- Located in or near a school facility and open during school hours
- Organized through school, community, and health provider relationships
- Staffed by qualified health care professionals
- Focused on the prevention, early identification, and treatment of medical and behavioral concerns that interfere with a student’s learning.
- In 2004-2005, 87% of SBHCs were located in a school building.
- 41% of SBHCs are located in Title One schools
- 69% of SBHCs are located in schools where more than half of their students are eligible for the United States Department of Agriculture’s National School Lunch Program.

School-Based Health Centers are designed to ease access to health care by reducing the barriers that have historically prevented adolescents from seeking the health services they need including inconvenience, cost, transportation, concerns surrounding confidentiality, and apprehension about discussing personal health problems. The practitioners provide a full range of services for all students, regardless of whether or not they have health insurance coverage (Oregon).

Because all SBHCs are different and have varying levels of funding and distinct reimbursement policies, the combination of services offered in each SBHC are unique. However, the services typically offered in School Based Health Centers include:

- Performing routine physical exams, including sports physicals
- Diagnosing and treating acute and chronic illness
- Prescribing medications
- Treating minor injuries
- Providing vision, dental, and blood pressure screenings
- Administering immunizations
- Health education, counseling, and wellness promotion
- Providing and/or connecting students with mental health services
- Giving classroom presentations on health and wellness

School-based health centers are generally funded through partnerships that may include the state, school districts, hospital districts, community health centers, universities, special grants, and private fund-raising efforts.

Staff salaries and benefits comprise the largest portion of the school health center's budget. Public and private grants, Medicaid billing, and fees collected for services provided generally pay for the staffing costs and medical and office supplies. Some staff salaries may be paid by the sponsoring local hospital or health agency. Clinic space, utilities, and janitorial services are usually an in-kind contribution by the school district.
To look at the funding levels, services offered, and individual policies for SBHCs by state please visit: http://www.healthinschools.org/sbhcs/sbhcs_table.htm.

Interventions in School Based Health Centers
Lastly, SBHCs can help eliminate obesity as a health disparity. According to the NASBHC, 69% of SBHCs are located in schools where more than 50% of the children are eligible to participate in the National School Lunch Program. Obesity interventions can be performed under the direction of the staff in school based health centers. The staff in school based health centers can educate the children on living a healthy lifestyle (physical activity/ nutrition) and conduct BMI screening and facilitate lifestyle change. BMI screening in SBHCs: http://www.mc.vanderbilt.edu/reporter/index.html?ID=3791

The staff in a SBHC can perform formal interventions like Shapedown or Trim Kids - A Weight Loss Plan for Kids. Also, the staff typically focuses on preventative care and is likely to talk about healthy lifestyles with their patients. Some health professionals even write their patients a “Green Prescription” http://www.sparc.org.nz/getting-active/green-prescription/overview to encourage healthy lifestyles. SBHCs are valuable resources for the elimination of obesity as a health disparity.

Further Reading:
Background - School-Based Health Centers

The National Assembly on School-Based Health Care

School WELLth™, Arizona & Seattle

Contact Information:
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Program Purpose: School WELLth™ is a comprehensive school-based wellness program developed by Naturopathic Physicians to focus on health education, fitness and nutrition, primary care, and prevention of illness for school-aged children, teachers, faculty, and parents. School WELLth™ is intended to be a flexible, creative, low-cost program that is easy to implement, sustain, and expand.

Program Description: The School WELLth™ Program integrates health and wellness throughout academics, food service, and student and family life, including using parents and faculty as role models for health. These elements provide an opportunity to develop long-standing habits necessary to lead a healthy lifestyle. The program offers primary care clinical services with a natural emphasis, afterschool programs targeted to increase awareness and skill in healthy whole foods nutrition and physical activity and stress reduction/coping. Incorporation of health messaging into the curriculum includes math lessons based on calculating calories or percent fat or social studies lessons investigating the impact of the built environment on human health.
Intended Audience: K-12th, parents and community members- minorities, low income, serves most needy district in Puget Sound area- high rate of disparities

Funding- Partnership with school district, naturopathic medical schools southwest college, small school district

Evaluation: Has not been formally evaluated, but the evaluation plan includes outcomes listed below:

1. Quality of life of students
2. Utilization
3. Biomarkers- BMI, diabetes screenings- fasting glucose,

For more information on Naturopathy visit: www.naturopathic.org

**SPARK, Nationwide**

**The SPARK Programs**

Phone: 619-293-7990 or 1-800-SPARK PE
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Website: http://www.sparkpe.org/

Program Purpose: SPARK strives to improve the health of children and adolescents by disseminating evidence-based physical activity and nutrition programs that provide curriculum, staff development, follow-up support, and equipment to teachers of Pre-K through 12th grade students.

Program Description: Each SPARK program is an all-inclusive package that includes:

- Assessment/Evaluation: Extensive needs assessments, in-service evaluation, program evaluation, teacher assessment tools and more, assure SPARK meets the specific needs of a particular school or agency.
- Curricula: The SPARK Programs books are easy to read and understand, simple to teach, and the lessons are inclusive, active and fun!

SPARK Programs
- Early Childhood
- Elementary PE
- Middle School PE
- High School PE
- Lifelong Wellness
- After School
- Coordinated School Health

- Staff Development: Teachers/leaders learn by doing, become motivated by our dynamic staff of trainers and feel more comfortable teaching movement concepts. Trainers travel worldwide to "share their SPARK" and hold convenient training workshops.
- Equipment: SPARK has complete equipment packages available from Sportime.
- Follow-up/Consultation: The SPARK Programs is committed to institutionalizing concepts and methods. SPARK is dedicated to improving the quantity and quality of physical activity for
children and teachers everywhere and countering our nation's growing epidemic of childhood obesity.

Original Funding: In June 1989, a team of researchers and educators received funding from the Heart, Lung, and Blood Institute of the National Institutes of Health, to create, implement, and evaluate an elementary physical education program that could eventually become a nationwide model.

**Squire's Quest**

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Website: [http://www.kidsnutrition.org/consumer/archives/videogames.htm](http://www.kidsnutrition.org/consumer/archives/videogames.htm)

Purpose of Program: To increase fruit, vegetable, and juice (FJV) consumption among elementary school children through a multimedia program.

Description of the Program: Squire's Quest! is a ten-session, psycho educational, multimedia game delivered over 5 weeks, with each session lasting about 25 minutes. Based on social cognitive theory, educational activities attempted to increase preferences for FJV through multiple exposures and associating fun with their consumption, increase asking behaviors for FJV at home and while eating out, and increase skills in FJV preparation through making virtual recipes. As children progress from a squire to a knight in the video game, he/she earns points towards various levels of knighthood and learns about fruits, 100-percent fruit juices, and veggies. The video game is part of a series of ten, 25-minute-long classroom sessions in which kids make tasty virtual recipes using fruits and veggies. Then they set personal goals for making those recipes at home, and for eating at least one more serving of a fruit or vegetable at a specific meal or snack.

Components of the Program:
1. Video game
   • Ten, twenty-five minute long sessions
2. At home recipe making
   • Time spent on at home recipe making varies

Intended Audience: Elementary school students

Required Training: Training is not required for teachers.

Evaluation: Twenty-six elementary schools were pair matched on size and percentage of free or reduced-price lunch, and randomly assigned to treatment or control groups. Data were collected just before and just after the program. Data were collected on 1578 students. Servings of fruit, 100% juice, and vegetables consumed. Four days of dietary intake were assessed before and after the intervention. Assessment was made by the Food Intake Recording Software System (FIRSS).
Results: Children participating in Squire's Quest! increased their FJV consumption by 1.0 servings more than the children not receiving the program. More research is warranted.

TAKE 10!, Nationwide

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Website: www.take10.net

Program Purpose: The mission of TAKE 10! is to reduce sedentary behavior and to promote multiple short periods (10-minutes) of physical activity in the elementary-school classroom, while simultaneously reinforcing academic objectives based on national standards.

Program Description: TAKE 10! is designed to give school children in grades K-5, increased opportunities for regular physical activity during the school day.

TAKE 10! Program:
-- Is a classroom-based physical activity program.
-- Reduces inactivity.
-- Integrates academic learning objectives.
-- Addresses multiple learning styles.
-- Requires little teacher preparation.
-- Is easy for teachers to use and lets the teachers decide when to schedule activity.

Required Resources: The program materials, designed for use in the classroom, include: activity cards, student worksheets, a tracking poster and stickers, student health knowledge assessments, and a teacher training video. Teacher in-service training sessions are also available.

Intended Audience: elementary school children

Evaluation/Monitoring: Beginning in Fall 1999, ILSI CHP began scientifically evaluating this program that is designed to promote multiple 10-minute periods of moderate-to-vigorous physical activity that are linked with grade-specific, academic learning objectives

Participation Rate:
1999 -- 4 schools
2000 (winter) -- 35 schools
2000 (spring) -- 100 schools
2001 -- 255 schools
2002 -- 270 schools
Teens Eating for Energy and Nutrition at School (TEENS), Minnesota

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E-mail: cyhp@epi.umn.edu
Website: http://www.epi.umn.edu/cyhp/r_teens.htm
Funding: National Cancer Institute

Purpose of the Program: A school-based, group-randomized trial that evaluated school-environment, classroom, and family interventions to increase fruit and vegetable intake and decrease fat intake of low-income young adolescents to reduce their future risk of cancer.

Description of the Program: The intervention consisted of behaviorally-based curricula with peer-led classroom activities ("Parent Packs"), intervention-related messages and activities mailed home, and School Nutrition Advisory Councils made up of teachers, parents, and students with a goal of developing policy practices that would enhance the healthfulness of the school food environment. TEENS is composed of ten 45-minute sessions designed to be implemented over five weeks.

Components:
1) Classroom Component
2) School Wide Component
3) Family Component

Curricula: TEENS curricula and classroom/family materials.

Required Resources
1) TEENS seventh and eighth grade teacher training manuals
2) TEENS video and audiotapes
3) Three parent newsletters
4) 10 behavioral cue coupons for students’ families

Intended Audience: TEENS is intended for use with 7th & 8th graders.

Evaluated Audience: Participants who tested this program were students in the seventh and eighth grade from 16 middle schools in Minneapolis/St. Paul, Minnesota.
- 73% of the students were White,
- 8% were African American,
- 3% were Hispanic,
- 6% were Asian or Pacific Islander;
- 74% lived with two parents.
- Approximately 20% of students received free or reduced-price lunch.

Evaluation and Monitoring: TEENS was implemented during a two-year period with cohort students in middle and junior high schools. The study was conducted in 16 schools, half were randomly assigned to the comparison condition and half to the intervention condition. Four incremental exposures were
possible: (1) control group, (2) school environment interventions-only, (3) classroom plus environment intervention, and (4) peer leaders plus classroom plus environment interventions

Results: Patterns suggesting dose response were observed, with peer leaders reporting the largest increases in fruit, vegetable, and lower fat food consumptions. Students exposed to classroom plus environment interventions also improved, whereas students exposed only to school environment interventions showed trends towards choosing lower fat foods and declining fruit intake and no change in vegetable intake. Control students’ choices remained stable.

Conclusion: Future studies may investigate mechanisms for peer leader’ changes, maximizing curriculum effectiveness, and improving environmental interventions.

Tuttle Wellness Project, Crawfordsville, Indiana

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Program Purpose: Students are given the skills and knowledge to develop an individual wellness program to promote a healthy lifestyle now and for future years. The focus of the student program is to address the increasing problem of obesity and lack of physical fitness in school age children. The program emphasizes physical fitness for the student.

Program Description: Student wellness is the theme of a new program being implemented by the Tuttle Middle School physical education department. Through the use of an exercise program, heart rate monitors, physical fitness assessment equipment, a wellness center software program and a meal planner, each student will be able to make conscientious decisions that will affect his or her daily health and lifestyle. The scope of the program includes developing a portfolio for each student that will track their physical fitness and wellness from grades six through completion of their high school physical education experience.

Students wear heart monitors throughout the day and establish a pattern of their heart rate; this information is downloaded to a computer and a chart and graph of each student's heart rate at various stages of physical activity throughout the day is made. A target heart rate is established for each student and performance in class is directly related to the student working to achieve and maintain his or her target heart rate.

The school corporation purchased a physical fitness evaluation system in March 2002 with corporation funding and grant money. This equipment includes a skin caliper, a body weight and strength evaluation machine and a sit and reach evaluator. These devices connect to instantly register each student's individual results that can be used to chart and graph individual information for the portfolio.

Intended Audience: Students in grades 6-8
Evaluation/Monitoring: This program has not been formally evaluated.

Participation Rate: Every student at Tuttle Middle School participates in physical education each year.

Demographic Information: 42.8% of students attending this school are economically disadvantaged.
Appendix 3: On-line Resources

The Division of Adolescent and School Health (DASH) of the Centers for Disease Control and Prevention (CDC) offers a number of useful resources including school health guidelines, guidance on specific curriculum "Programs That Work," and a school health finance database that contains regularly updated information on various sources of federal, state, and private sector funding sources.

The National School Boards Association (NSBA) provides consultation and technical assistance to school districts on school health policies and programs. NSBA offers a series of policy issue briefs on foundation policies and other school health issues. They also maintain a database that includes sample district policies and important research information.

The American School Health Association (ASHA) offers an extensive variety of publications that address all aspects of school health programs.

The Education Development Center (EDC) maintains a continually updated interactive website designed to assist the implementation of programs suggested in the book Health Is Academic: Creating Coordinated School Health Programs (1998).

The National PTA has a number of materials available for family members in English and Spanish, including an online guide to the National Standards for Parent/Family Involvement Programs.

The National Conference of State Legislatures (NCSL) operates two searchable databases: one on state funding sources to support school health programs and the procedures required to access the funds, and the other on states’ use of federal block grants.

The Finance Project, a national initiative funded by a consortium of private foundations, has produced a useful series of working papers on salient issues related to financing for education and other children’s services.

The Institute of Medicine (IOM) of the National Academy of Sciences offers Schools and Health: Our Nation’s Investment (1997), a major, in-depth review of the history, research findings, and literature pertaining to school health programs with specific recommendations for action.

The National Association of School Nurses determines professional standards, adopts position statements on current issues, and offers useful publications to school health services personnel.

The National Association of School Psychologists provides state-of-the-art research and training, advocacy, and ongoing program evaluation on behalf of its members.

The School Mental Health Project in the Department of Psychology at UCLA emphasizes a broad perspective of addressing barriers to learning and promoting healthy development. The website offers information on the project’s clearinghouse, introductory packets, consultation cadre, newsletter, links to other Internet sites, and electronic networking.
The National Wellness Institute offers an online resource guide for workplace wellness information and programs.

ETR Associates offers a broad variety of useful publications on school health programs, including *Step by Step to Health-Promoting Schools: A Guide to Implementing Coordinated School Health Programs in Local Schools and Districts* (1998).

Children’s Hunger Alliance

Michigan Team Nutrition

School-Based Health Centers is a website that offers statistics on the use of school-based health centers in the State of New York.

The Center for Health and Health Care in Schools (CHHCS) is a nonpartisan policy and program resource center located at The George Washington University School of Public Health and Health Services.