

In Brief

PowerUp is a community-wide initiative to make better eating and physical activity easy and fun for youths and the entire community as part of an effort to prevent childhood obesity. PowerUp works in partnership and on multiple levels to change the food and activity environment, engage the community, deliver programs, and support clinical interventions throughout the health care system and the community. Early results show promise that the initiative is inspiring community-level change.

The Potential of Community-Wide Initiatives in the Prevention of Childhood Obesity

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In recent years, the face of type 2 diabetes has changed rapidly, with the disease affecting growing numbers of adolescents and children. Obesity is strongly associated with type 2 diabetes, and it is predicted that one-third of all children born today will develop type 2 diabetes in their lifetime.¹ The serious long-term health consequences of type 2 diabetes, including elevated risk of early cardiovascular disease,² contribute to the sobering prediction that, unless something changes soon, today's children will lead shorter, less healthy lives than the previous generation.³

The rates of childhood obesity and diabetes have grown by epidemic proportions in the past 20–30 years.⁴ At the same time, there have been profound changes in society and eating and activity patterns, such that food is promoted heavily and is more available. Eating occurs more often and in more places, and physical activity has decreased in school and neighborhood settings, all of which has contributed to caloric imbalance.¹

Prevention efforts focused on type 2 diabetes and obesity in youth have been based on sound physiological and behavioral theories and models, including the socio-cognitive theory. In more recent years, there has been growing recognition of the importance of socio-ecological models of change in prevention initiatives, recognizing the powerful influence of personal, social, and environmental factors on long-term behavior change.⁵ The 2010 Minnesota Diabetes Plan recognizes

the importance of widespread action, including community health promotion, policy change and advocacy, and coordination and partnerships, as key to diabetes prevention.⁶ This comprehensive approach recognizes that prevention of obesity and diabetes requires more than efforts focused on individual behavior change. With rates of childhood obesity reaching historic levels, many organizations have joined the effort to comprehensively address the epidemic of childhood obesity.

PowerUp Initiative

PowerUp is an example of a local community initiative focused on childhood obesity prevention in the St. Croix River Valley area of Minnesota and Wisconsin. PowerUp is supported by the Lakeview Foundation and reflects a long-term commitment and a joint effort with Lakeview Health and HealthPartners to improve community health. Lakeview Health, located in Stillwater, Minn., includes Lakeview Hospital, the Lakeview Foundation, and the Stillwater Medical Group clinics and is part of the HealthPartners network. HealthPartners, based in Minneapolis, Minn., is the largest consumer-governed, nonprofit health care organization in the United States, providing care, insurance coverage, research, and education to improve health.

PowerUp's vision is to rally the entire community to make better eating and active living easy, fun, and popular so that youth can reach their full potential. PowerUp's compre-

hensive design is based on promising approaches in childhood obesity prevention. Its goal is to build on what is already working on a national and local level, while developing innovative approaches that will work in local communities.

The decision to focus resources on childhood obesity prevention resulted from extensive collaborative discussions within the community through the Lakeview Foundation's Health and Wellness Advisory Committee. The committee includes representatives from local public health departments, health care providers, and the health plan (HealthPartners, Inc.), as well as strong community representation from a variety of sectors including businesses, nonprofits, civic leaders, and local parents.

Community health assessments performed by local county health departments^{7,8} identified obesity and lifestyle issues as top community health priorities. These areas were also identified in a Community Health Needs Assessment (CHNA) completed by Lakeview Hospital. All nonprofit hospitals complete a government-required CHNA⁹ at least every 3 years with input from the broader community, including public health experts, to focus health improvement efforts.

Obesity has been identified as a priority health concern by public health agencies in Minnesota, Washington County, and throughout the St. Croix River Valley. Rates of adult obesity in Minnesota increased from 10.2% in 1990 to 24.7% in 2009, with 62.8% of adults being either overweight or obese.

The measurement of obesity and overweight in Minnesota children only began in 2007 through the Minnesota Student Survey for 9th- and 12th-grade students. Therefore, long-term trends are difficult to evaluate. In Washington County, 17% of 9th- and 12th-graders were considered overweight or obese in 2010. This reflects a slight decline from 2007, but the rates are still significant.¹⁰

In addition to overweight and obesity, the trends regarding youth consumption of fruits and vegetables, sugar-sweetened beverages, and physical activity also demonstrate the importance of intervening. The Minnesota Student Survey measures reported fruit and vegetable intake in both younger and older students. In 2010 in Washington County, only one



Figure 1. The PowerUp Countdown for Community Change.

in four 6th-grade students and one in five high-school students were eating at least five fruits and vegetables per day. Despite local and national efforts to increase fruit and vegetable consumption, since 1998, there has not been a measureable increase in this important behavior. In addition, consumption of soda and fruits drinks indicate room for improvement, with > 10% of students in grades 6–12 consuming > 3 glasses of soda daily, a slight decrease since 1998.¹¹

PowerUp is an essential strategy to address these issues and for carrying out Lakeview's overall community health plan. PowerUp is geographically focused, primarily serving residents within the school districts in the Stillwater, Minn., and Somerset, Wisc., areas. This geographical focus allows PowerUp to conduct effective and strategic outreach in the primary service area of Lakeview Health.

Research has shown that nutrition and exercise behaviors develop during early childhood; therefore, PowerUp's primary target population is children aged 3–11 years. This age range may be a crucial time for intervention, because lifestyle behaviors and weight patterns may become more difficult to change as children enter adolescence.

Message Matters

To capture the attention of the target audience, PowerUp employs marketing strategies for message development and dissemination. The name, logo, visual "look," and key messages of PowerUp were developed to be relevant to the target audience, as well as simple, positive, and fun. For exam-

ple, PowerUp promotes key messages about improving food and beverage choices and increasing physical activity in a "countdown," as shown in Figure 1. The PowerUp countdown message is intended to be simple, direct, and relevant to both parents and children. The message is also consistent with, and complementary to, the nationally disseminated 5-2-1-0 message,^{12,13} which encompasses:

- 5 fruits and vegetables
- 2 hours of screen time or less
- 1 hour of physical activity
- 0 sugary drinks

PowerUp messages are disseminated as part of an overall communication strategy through multiple channels, including print materials, advertising, the Internet (www.powerup4kids.org), and social media sites such as Facebook and Twitter. Social media and social networking sites are important and cost-effective tools that show promise as a new method of creating connections and sharing ideas about healthy behaviors, in addition to promoting specific programs and interventions.¹⁴

An effective communications strategy is also necessary to combat the challenge of the prevalent marketing messages directed at children that focus on sugar-sweetened, low-nutrient foods and beverages. Rarely will an advertisement for broccoli be as effective as a cartoon character endorsing a sweet treat or an advertisement illustrating the "power" of an energy drink. For PowerUp, developing messages and materials that capture the attention of the target

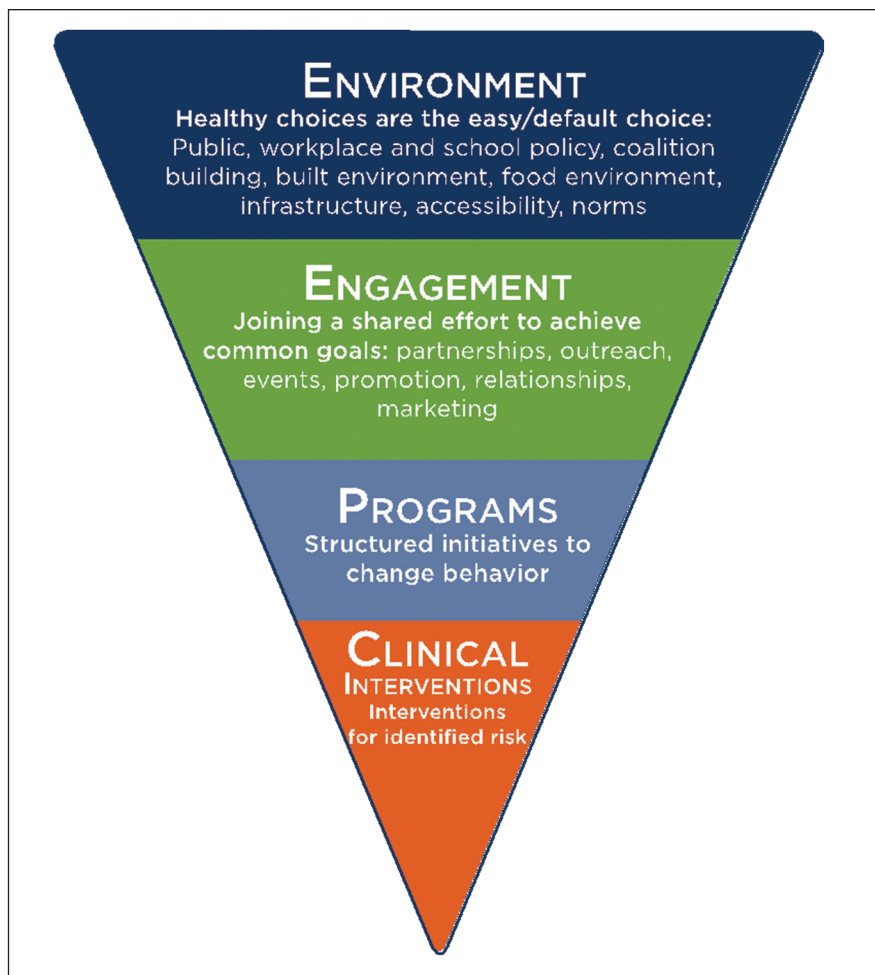


Figure 2. The PowerUp Pyramid Framework for Community Initiatives.

audience is essential for the long-term success of the initiative.

Multi-Level, Community-Initiative Approach

Childhood obesity is not an issue that can be solved in the medical exam room or through health communications alone. Although health professionals play a key role in advising essential lifestyle changes, the environment in which children live, learn, and play shapes their ability to successfully change daily habits. Young children's food, beverage choices, and physical activity patterns are strongly influenced by adults, and access to healthy choices at home, at school, and throughout the community are primarily determined by adults. Thus, efforts to curb childhood obesity must encompass the entire landscape of children's lives and the adults that influence them.¹⁵⁻²⁰

The PowerUp initiative is therefore structured as a community-wide, multi-level, multi-sector initiative. This comprehensive strategy is categorized into four levels of action: Environment

and Policy, Community Engagement, Programs and Interventions, and Clinical Interventions, as illustrated in Figure 2. The larger sections of the pyramid shown in Figure 2 represent the greater reach and lower intensity of interventions focused on environment, policy change, and community engagement. The smaller sections represent the more intense nature of clinical interventions and programs that reach smaller numbers of children and families. All levels of intervention are necessary for a comprehensive approach, and this framework serves as a guide in setting priorities.

The PowerUp pyramid model includes many components of the socio-ecological model, simplified for use with broad community audiences and committees. This has been essential for making the case for PowerUp to the community.

PowerUp seeks to inspire the community to improve its food and physical activity environment by fostering positive partnerships with families, schools, businesses, health

care providers, food retailers, childcare providers, faith-based organizations, local governments, and other potential partners. Reaching younger children with the PowerUp message requires reaching the adults that influence their children's food and physical environments. Educating parents and adults in the community about their important role as influencers of food and activity choices is therefore an important aspect of the overall strategy. Engaging adults as role models for the children in the community can have a significant impact.

A wide variety of community partners and stakeholders are involved in strategy and decision-making. This approach recognizes that a focus on individual change is insufficient to make changes on a population level, and that community input, engagement, and adoption is essential to success.

Community engagement is an important and possibly underestimated component of any strategy for community change.²¹ Engaging the community in change involves developing relationships with stakeholders and finding common goals regarding changes needed to improve children's long-term health and potential. Finding common ground involves making the case to key community leaders, individually and in community gatherings. It takes time, conversation, active listening, collaboration, and the setting aside of other agendas.

This kind of partnership can include parents, families, youth leaders, coaches, and teachers in multiple sectors. Community engagement falls outside the boundaries of schools and individual homes and may include partners as diverse as restaurant owners, grocers, health club managers, parks personnel, gas station owners, local school boards, conscientious parents, and members of parent-teacher organizations and service clubs.

A successful engagement strategy also involves understanding where community ties are strongest and determining how people identify with the community as a whole. For example, a community's identity may be tied to geography, language, faith, ethnicity, or other factors. Knowing the community members and what connects them is a key to finding the appropriate influences for change.

In the St. Croix River Valley area, there is a rich and historic sense of

community based on geography, and a collection of smaller towns along the river identify as being part of “the Valley.” PowerUp has the opportunity to draw on the community’s shared values and identity to engage key stakeholders in change. Local messages and outreach methods help reinforce that PowerUp is a way to make “our” community better. In keeping with this geographical focus, the slogan “We PowerUp the Valley” has been incorporated as the initiative’s community call to action. Focusing on this specific geographical area has been instrumental in getting the attention of the target audiences and in developing the partnerships and relationships necessary for community-level change.

In communities, these connections matter and are instrumental in improving community health. When effective community engagement and message adoption occur, the change can become “contagious.” PowerUp has received feedback from teachers, parents, youth program leaders, schools, and businesses with reports of changes they are making as a result of hearing the PowerUp Countdown message. These include eliminating food rewards, adding physical activity to each day in the classroom, and adults changing what they eat or drink in front of kids as they recognize themselves as role models. It is not possible to measure this kind of change other than anecdotally through such reports.

It is a priority to continue building opportunities for engagement through community meetings, social media, and encouragement to “share a PowerUp idea or story” via the program Web site or social media. In addition, an online advisory council is being formed to formalize a process for the community to provide feedback on and input regarding efforts to move the PowerUp initiative forward in the St. Croix Valley area.

Evaluation

The comprehensive nature of the PowerUp initiative requires a multi-level evaluation plan, including measures of the food and physical activity environment, level of community engagement, behavior change, and program outcomes and changes in BMI and other health status indicators. The plan includes measuring progress toward achieving PowerUp

goals at the four levels of the pyramid model as follows:

1. **Environment:** the community environment supports and integrates healthy food, beverage, and physical activity options.
2. **Community Engagement:** the community joins a shared effort to establish better food, beverage, and activity choices.
3. **Program:** the target audience improves food, beverage, and physical activity behaviors and makes progress toward a healthy weight.
4. **Clinical Interventions:** the clinic provides resources and referrals to youth and families with identified risk and for obesity prevention for all children and documents improvement in obesity-related health measures.

The level of community engagement is measured through monitoring reach and response to PowerUp in channels including the Internet, social media, and community conversations and events. In addition, the depth and sustainability of community engagement is measured through the number and strength of partnerships, as well as the commitment and involvement of various sectors in PowerUp committees, workgroups, and advisory councils.

County and school district-level data from the 2010 and 2013 Minnesota Student Survey will establish a community baseline for key behaviors. These data include reported rates of overweight and obesity, fruit and vegetable consumption, sugar-sweetened beverage consumption, and physical activity levels. In addition, aggregated data from the health system and health plan regarding BMI percentiles from electronic medical records will be used to track BMI in the populations served by the health system. Specific PowerUp interventions will use measurement tools such as fruit and vegetable trackers, self-reported behavior change, and other program surveys to monitor results and progress toward PowerUp goals.

Progress and Plan

PowerUp is being implemented in stages over multiple years. The initial focus for the first year of PowerUp has been partnership development and program implementation in key sectors as follows:

- **PowerUp launch.** PowerUp was publically launched with a community leadership kick-off in the summer of 2012. The event successfully engaged more the 120 community leaders from numerous sectors in a conversation about the importance of “powering up” the St. Croix Valley. The interest and ideas generated as a result of these events has helped guide programmatic and partnership priorities.
- **Community involvement.** PowerUp representatives are increasingly participating in local coalitions with public health services, community gardens, schools, faith communities, and civic organizations. Being “at the table” allows PowerUp to find mutually beneficial opportunities to improve eating and activity for children and families through partnership with others.
- **Community outreach and engagement.** A PowerUp presence at community events has reached more than 6,000 families and children with the “countdown” message and PowerUp resources. The events are focused on fun, with activities such as vegetable tasting, quizzes, jump-rope lessons, or squash bowling. To support continued engagement of community members after events, the program Web site (www.powerup4kids.org) offers resources and information for parents, children, school personnel, and health professionals, as well as social networking sites.

The community response has exceeded expectations. As a result of outreach activities, Web site traffic has increased steadily, and Facebook views recently exceeded 1,000 for a single 1-week period. Because of increased visibility in the community, requests for PowerUp resources have been increasing rapidly from schools, parent-teacher organizations, youth organizations, restaurants, and local businesses, and new relationships have formed. For example, a new local restaurant contacted PowerUp to see how it could make changes to become part of the PowerUp movement. (See box on p. 169.)

- **School involvement.** Significant progress has been made in changing local school health and wellness policies and practices. The local school board recently

issued a PowerUp proclamation with language recognizing the role of the district in improving the eating and activity patterns of students. PowerUp staff was also invited to participate in the school district's strategic planning process to advise the district on how to improve student wellness. These pending changes have the potential to improve the food and physical activity environment for more than 9,000 students at all grade levels.

- **In addition to policy and planning work, the PowerUp School Challenge will be implemented in 15 targeted elementary schools in 2013 and will reach more than 5,500 students.** The challenge is a 4-week, classroom-based, turn-key school program that starts with a high-energy kick-off assembly to generate excitement about increasing fruits, vegetables, and physical activity. Students and classrooms then track their individual fruits, vegetables, and activity over the course of 4 weeks on colorful trackers. Teachers, parents, and school food service personnel all participate to reinforce lessons and activities. In addition, schools receive incentives for high participation rates in the program in the form of "PowerUp bucks," which can be used to purchase wellness-related items for the schools.
- **The challenge is a partnership program with the HealthPartners yumPower School Challenge.** In the previous school year, the HealthPartners' pilot schools showed a measurable increase in fruit and vegetable intake during the 4-week challenge. The PowerUp Challenge is collecting data from students, classrooms, teachers, and school food service personnel to measure the program's impact.
- **Food environment changes.** Food services changes at Lakeview Hospital and affiliated clinics have already improved the food environment for employees and community visitors. A featured vegetable of the day, new PowerUp entrees and snacks, half-priced salad bars, and lower-cost fresh fruits have been implemented with excellent response from customers. These changes have also been adopted at events and meetings sponsored by Lakeview.

PowerUp at Great Harvest Bakery

PowerUp's progress in community engagement was demonstrated by a call received from local restaurant owners who heard about PowerUp at a school board meeting. Preparing to open a second location of Great Harvest Bakery in Stillwater, Minn., they asked what they could do to "PowerUp" their new site. Great Harvest specializes in fresh, whole-grain breads, cereals, and other baked items.

After consultation with PowerUp, a plan was developed to increase the amount of fruits and vegetables available on the menu, as well as eliminate all sugar-sweetened beverages. The results include new family meal packs with fresh, whole-grain sandwiches and a side each of fresh fruit and fresh vegetable, especially priced for families. In place of sugar-sweetened beverages, 100% fruit juice products, milk, and coffee beverages are available. Soda has been replaced with "hydration stations," offering water infused with fresh fruits and vegetables (such as cucumber mint or raspberry peach flavors). Some customers request soda, but the owners offer these other options as part of their community partnership with PowerUp.

Sales of infused water are brisk, and the owners are optimistic that this approach benefits both their business and the health of the community. PowerUp continues to promote Great Harvest through multiple communications channels as an example to other community partners interested in making changes. PowerUp will roll out a comprehensive restaurant program in this year.

- **Physical activity environment changes.** Local schools have partnered with PowerUp to create 15 new "open gym" events on winter weekends. These free events provide a needed alternative for families to find ways to be active in the winter and have been attended by up to 120 people at a single session.
- **Health care provider involvement.** The pediatric and family practice providers were trained in effective strategies for prevention and treatment of pediatric obesity. Although there is still much work to be done in this area, the training led to early discussions about the potential to change processes to identify children at risk for obesity and to provide appropriate resources. Health care providers continue to be highly involved in the PowerUp advisory committees to ensure that their perspective is included.

Building on early success, plans for the future include additional partnerships with restaurants, grocers, schools, and community gardens, as well as youth engagement, parent education, and early childhood programs.

Summary

Community engagement represents a significant opportunity to expand efforts to prevent obesity and associated chronic diseases. PowerUp is one example of an effort to change

the food and activity environment and support individual lifestyle change through a community-wide engagement initiative. PowerUp is an opportunity for Lakeview, as the primary health care system in the targeted geographical areas, to lead the effort to prevent obesity in children in the St. Croix River Valley. Although the initiative is still in the early stages of development and implementation, early results show promise in inspiring the entire community to "PowerUp."

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