# CHILDHOOD OBESITY PREVENTION



**HEALTH AND WELL-BEING** 

# **ABOUT THIS REPORT**

Social Impact Research (SIR) reports are a resource to help donors and funders learn about social issues affecting at-risk populations and identify high-performing organizations that are addressing those issues. SIR believes that understanding which approaches are most effective to address social issues provides the best starting point for measuring nonprofit performance. Drawing on current research and interviews with experts

representing government, academia, nonprofits, and foundations, social issue reports provide information about the scope of and the population impacted by the issue, and a recommended approach for addressing it. This report is complemented by the state reports, which provide local context, and the guide to giving, which provides criteria for evaluating nonprofits based on the recommended approach described in this report.

#### **DEFINITION**

Childhood obesity prevention encourages development of healthy eating and exercise habits in children ages 2 to 19 that will keep them from becoming overweight or obese.

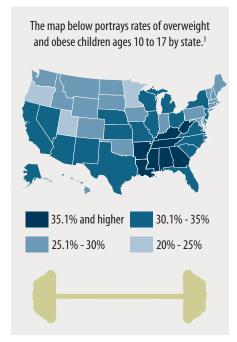
Addressing this issue requires holistic community initiatives that include policy and environmental changes, as well as programs that educate individuals about healthy behaviors. This report concentrates on the educational component, which enables healthy habits to be developed and sustained.

# **SOCIAL ISSUE REPORT SUMMARY**

Obesity prevention is a complex issue that requires changes at the systemic and individual levels. Therefore, a successful initiative to prevent obesity is comprised of interlocking parts that address policy, environment, and the individual.

- For the first time in 200 years, the current generation of American children may have shorter life spans than their parents because of childhood obesity.¹ For more on why childhood obesity prevention matters, see page 2.
- Programs that educate children on the importance of healthy habits, provide experiential opportunities in nutrition and physical activity, and involve caregivers to ensure consistency at home and school can provide children with the tools to maintain healthy lifestyles and avoid obesity. For more on childhood obesity prevention approaches, see page 3.
- Adult obesity-related healthcare and workplace costs were estimated to exceed \$215 million in 2010.<sup>2</sup> **For more on return on investment, see page 4.**

# FACTS: CHILDHOOD OBESITY IN THE UNITED STATES

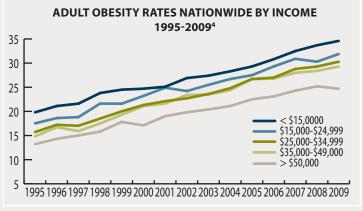


# **SOCIAL ISSUE INDICATORS**

A strong correlation exists between childhood and adult obesity; lower adult obesity rates are a key indicator of success in childhood obesity prevention. Obesity is defined by body mass index (BMI), a measure of a person's weight in relation to his or her height. Because BMI does not account for body fat versus lean muscle mass, it is not a perfect measurement, and it often results in controversy regarding medical diagnosis. Still, using BMI to measure obesity for both children and adults is the most

common system used.

As seen in the graph to the right, while obesity rates are consistently rising across all income levels, those with lower incomes are particularly affected. There are many reasons for this disparity; for example, low-income communities tend to have fewer resources to address the barriers to healthy habits and are therefore more likely to be obese.



# **SOCIAL ISSUE OVERVIEW: WHY OBESITY PREVENTION MATTERS**

Approximately two-thirds of adults and one-third of children in the United States are overweight or obese. Research conducted by Johns Hopkins University projects that if the current trend continues, about 86 percent of adults will be overweight or obese by 2020. Childhood obesity is a strong predictor of adult obesity, as 80% of obese adolescents will be obese as adults. With childhood obesity on the rise, the current generation of American children may not outlive their parents, despite considerable advances in medicine and technology. Obesity is not only a problem affecting the quality of life of individuals; it also shapes communities and yields large-scale medical and workplace costs.

## Quality of life:

- Obese individuals face an increased risk of coronary heart disease, type 2 diabetes, hypertension, and other illnesses
- Obesity is highly correlated with long-term health complications, leaving obese children twice as likely to die from a disease before age 55<sup>8</sup>
- Overweight and obese children are 63 percent more likely to be bullied, hindering their development of interpersonal relationships and social skills<sup>9</sup>
- Poor nutrition and lack of physical activity has been linked to decreased academic performance in children<sup>10</sup>

#### **Medical costs:**

- Preventable deaths from obesity are estimated to be at least 112,000 per year<sup>11</sup>
- Medical costs for obese adults are estimated to be approximately \$147 billion per year<sup>12</sup>
- Medical costs for obese children are estimated to be approximately \$14.3 billion per year<sup>13</sup>

## Workplace costs:

- Obese individuals experience greater mental distress and loss in earnings because of discrimination experienced at work, medical facilities, and other settings<sup>14,15</sup>
- Medical expenditures and work loss costs for private employers are estimated to be approximately \$45 billion a year<sup>16</sup>
- Weight discrimination has increased by 66 percent since 2000, with obese employees earning 3 to 6 percent less for the same work<sup>17</sup>

Risk factors for obesity can be divided into two main categories: environmental and cultural factors and individual factors. Figure 1 provides examples for each category. At the environmental and cultural level, the amount of high-fat and high-density caloric food in the American diet has increased in the last 20 years. More calories per serving and larger serving sizes of readily available foods have made individuals and communities more susceptible to obesity. <sup>18</sup>

At the individual level, people of lower education levels and socioeconomic status often live in environments that lack safe spaces for exercise and physical and financial access to

healthful foods. Additionally, genetic attributes may shape one's physiological and behavioral predispositions to become overweight or obese. 19

#### FIGURE 1: RISK FACTORS FOR OBESITY

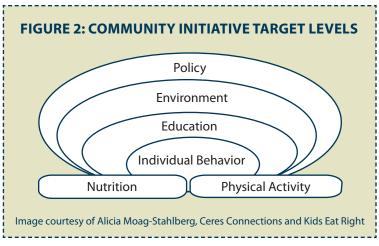
Environmental and cultural factors

- Diet, including large portion sizes of high-fat, highcalorie foods
- Lack of safe spaces for physical activity
- Lack of stores that sell affordable, fresh, healthy food
- Lack of zoning that allows farmers' markets and community and school gardens

## Individual factors

- Educational level
- Socioeconomic status
- Genetic attributes

Because the risk factors for obesity are at the environmental and cultural level as well as the individual level, a variety of interventions are used. Many in the field agree that holistic community initiatives that promote changes to the environments in which people live, work, and play – combined with changes to individual behavior and habits – provide the best chance of success. Figure 2 shows the levels that community initiatives target.



While treatment to curb obesity is important, and there are various approaches to treating obesity, as with many medical conditions, it is more cost-effective to take preventative measures rather than wait until the condition has reached a critical level.

Current research on obesity identifies three key stages at which prevention can occur through altering behavior: gestation and infancy, childhood and adolescence, and adulthood. The approaches and best practices differ, and this report is focused on direct service education programs designed for children. However, these programs must take place as part of larger community initiatives to have lasting impact.

## APPROACHES TO CHILDHOOD OBESITY PREVENTION

Obesity prevention is a multifaceted issue that will not bring about significant social impact without simultaneous implementation of advocacy, access, and direct service. No single approach offers the definitive solution to ensure that at-risk children develop healthy habits and adopt a long-term healthy lifestyle.

Currently, obesity prevention encompasses a variety of programs that are often divided between those that focus on nutrition and those dedicated to physical activity. Traditionally, organizations that work to improve the physical activity of children do not work to improve their nutrition – and vice versa. Today, organizations are increasingly merging their nutrition and physical activity agendas.

Organizations dedicated to physical activity or nutrition tend to engage, separately, in three main approaches: advocacy, access, and direct service educational programs.

**Advocacy** refers to efforts to create changes in policies and economic structures that influence what and how foods are produced and marketed in agribusiness, and policies related to transportation, zoning, land use, and physical education in schools.

- **Access** refers to efforts that bring about infrastructure changes to places that encourage physical activity, more available nutritional information on menus, and efforts to bring healthier food into school cafeterias. This includes increasing the supply of fresh produce to areas whose residents have little or no geographical or financial access to healthy foods. Initiatives focused on access can also include creating rehabilitation spaces for physical activity.
- Direct Service Educational Programs address individual risk factors by improving habits and sociocultural norms related to nutrition and increasing physical activity. Such programs include sports, school or community gardens, cooking and nutrition classes, and counseling in primary

Holistic community initiatives are comprised of organizations that focus on advocacy, access, and direct service educational programs to create lasting change. All of these approaches are needed. These direct service programs will help to improve health and longevity for individuals, generate significant health gains at a low cost, and demonstrate demand for changes in policy and environment.

## CHARACTERISTICS OF HIGH-PERFORMING ORGANIZATIONS

When considering organizations that use the direct service approach for either nutrition or physical activity, SIR recommends programs that incorporate the following components:

- Education about healthy habits: Providing children and adolescents with information on nutrition and activity will sufficiently equip them with the knowledge to live healthy lifestyles. Classes can focus on nutrition or why physical activity is important and how to integrate healthy habits into a daily routine.
- Experience in a healthy lifestyle: Exposing children and adolescents to actual activities involved in living healthy lives will help them to confidently build long-lasting habits. Examples include cooking classes on how to prepare healthy food or games that require participants to be physically active.
- Outreach to parents and caregivers: Involving caregivers or community members who facilitate and model healthy habits will ensure consistency at home and in school, creating accountability networks. Examples include budgeting and cooking classes for parents or a neighborhood walk program.

Donors and funders should also consider how connected the program is to larger community initiatives because lasting success cannot happen in a vacuum; educational programs must operate in conjunction with efforts to change policy and community environments. Because obesity is impacted by social determinants of health, such as income, race, equity, education, crime, and jobs, addressing these issues will improve the environment for healthy food and physical activity. For example, a partnership with organizations focused on safety or crime abatement will make the environment more accessible for physical activity, therefore providing a place for children to engage in newly learned activities.

## **RETURN ON INVESTMENT**

Quality childhood obesity programs that operate in underserved communities present donors and funders with the opportunity to create significant social impact, particularly over the long term. Although the short-term economic costs associated with childhood obesity are relatively small, obese children are more likely to grow into obese adults. As obese adults, they are more likely to create the high social and economic costs associated with adult obesity. The following studies highlight some of the long-term economic returns of investing in childhood obesity prevention, as well as some of the positive returns for communities.

**Medical Costs:** A 2009 study from the United Health Foundation, the American Public Health Association, and the Partnership for Prevention found that obesity is our fastest-growing public health issue, with a possible 103 million Americans considered obese by 2018 if the issue is left unaddressed. If preventative measures are effectively implemented, and if obese or would-be obese children instead grow into healthy adults, the U.S. could see a return on investment of almost \$200 billion in adult healthcare costs saved in 2018.<sup>21</sup>

**Workplace Costs:** The workplace is another area where returns are apparent as children grow into healthy adults. Over the past 10 years, several studies have identified strong correlations between obesity and increased absenteeism, as well as decreased productivity at work. Absenteeism refers to absence from work due to obesity-related health needs. Decreased productivity is

a result of obesity-related health problems and psychological factors that reduce an individual's productivity (for example, obesity can impact focus and relationships with coworkers).

**Community Benefits:** Effective obesity prevention programs connected to holistic community initiatives can ultimately result in policy and environmental changes, which provide the possibility for a host of returns that resonate throughout a community. While there have yet to be conclusive studies, the success of several communities, large and small, provide examples of the potential for returns. North Carolina's northern Outer Banks commissioned a study to evaluate its investment in bicycle infrastructure and found that the focus on improving physical fitness in the community yielded strong local economic returns in the form of increased tourism dollars, an increase in repeat visitors, and increased levels of community satisfaction and pride.<sup>22</sup> In Philadelphia, the work of a community initiative to improve access to healthy foods also improved the community food supply lines and infrastructure. This resulted in the preservation or creation of 4,860 jobs and the building of 1.5 million square feet of retail space.<sup>23</sup>

The studies above highlight some of the long-term benefits of childhood obesity prevention programs. Below are more of the main benefits relating to medical returns, workplace returns, community benefits, and quality of life that may be seen over the long term.

# **RETURN ON INVESTMENT**

#### Medical Returns

- \$200 in medical expenditures saved per child who would have become overweight without preventative measures<sup>24</sup>
- \$600 saved annually in Medicare drug costs for each obese beneficiary<sup>25</sup>
- An average savings of \$820 in healthcare costs per adult by 2018; aggregate savings total of almost \$200 billion if the increase in obesity is stemmed and held at current rates<sup>26</sup>

## **Workplace Returns**

- An estimated \$66 billion per year in recovered productivity costs<sup>27</sup>
- Reduced mental distress and workplace discrimination that result in decreased earnings losses for employers<sup>28</sup>

## Community Benefits<sup>29</sup>

- Improved neighborhood safety and community cohesion, as more community members interact and value public space
- Reduced risk of bicycle and pedestrian deaths, as access to alternative and safe transportation is improved
- Increased local economic development, as healthier communities see a rise in real estate values and local businesses thrive

## **Quality of Life**

- Improved academic performance<sup>30</sup> and better psychological well-being,<sup>31</sup> with strong evidence that increased physical activity reduces depression<sup>32</sup>
- Enriched interpersonal relationships through the reduction of bullying<sup>33</sup>
- Transference of healthy lifestyles to subsequent generations, breaking the cyclical nature of obesity

## INVESTMENT RECOMMENDATION

For donors and funders interested in childhood obesity prevention, SIR emphasizes the need for holistic change across environments in which people live, work, and play. In addition, each community has its own culture, activity patterns, socioeconomic conditions, and constraints, which should be considered when determining the most effective point of intervention. SIR recommends supporting direct service educational programs that are part of a holistic community initiative, as well as organizations working to address the policy and environmental changes needed for a healthier community.

SIR recommends providing unrestricted or flexible funding to organizations implementing the recommended approach (see Figure 3) so that they may use funds for a wide range of activities, including delivering programs, building the organization's infrastructure, and spreading best practices in their field. Many organizations will use funds to support specific growth goals outlined in a strategic plan, perhaps seeking to increase the number of participants in their program or replicate their model to additional locations. Organizations may seek to implement a more rigorous data tracking mechanism to

improve program effectiveness. They may also choose to engage in research, publishing, and convening to spread information about a particularly successful program to others in their field. Other common quality improvements include hiring new staff or expanding the social service offerings available to program participants.

# FIGURE 3: COMPONENTS OF THE **RECOMMENDED APPROACH**

- Education about healthy habits to inform children and adolescents about nutrition and physical activity
- **Experience in a healthy lifestyle** that exposes children and adolescents to recommended activities
- Outreach to parents and caregivers who can facilitate and model healthy habits

To be most effective, successful direct service educational programs should operate as part of a community initiative that is simultaneously addressing needed policy and environmental changes for a healthier community.

## **TAKE ACTION**

Donors and funders can take many additional actions to support organizations helping children develop healthy lifestyles and prevent obesity, or holistic community initiatives working for healthier communities.

# **Strengthen Programs and Networks**

- Help build relationships by introducing the organization to local government officials and business people, and connect the organization with your contacts
  - Fund capacity building within your community and create community-driven work plans
  - Advocate for unified county- or statewide campaigns or coordinated case studies so that organizations can operate in tandem
  - Actively pursue partnerships network on behalf of an organization to lay the groundwork for collaboration
- Improve monitoring and evaluation of childhood obesity in your area by funding training of local practitioners in a common measurement and evaluation system

#### **Raise Awareness**

- Advocate for increased access to healthy lifestyle opportunities through activities such as adding bike lanes in the community, or providing more healthy options at local schools
- Advocate for policies that keep community health in mind: support transportation measures which improve conditions for pedestrians and cyclists, city planning that places living spaces close to parks and healthy food, and job creation that also addresses nutrition and physical activity

# Make it Personal

- Improve your understanding of the challenges that at-risk children and their families face through direct involvement
  - Volunteer for local nutrition or physical activity programs or support them as a board or planning committee member
  - Volunteer with a program that cleans up parks and creates safe environments where children can play and exercise
- Encourage your workplace to adopt healthier policies, such as installing bike racks, providing health food options, instituting walking meetings, hiring healthy caterers, opening stairwells for employees
- Sponsor a free cooking or nutrition class for employees and their families

To learn more about childhood obesity prevention in Massachusetts or New York, refer to SIR's state reports. For a guide to selecting high-performing direct service educational programs, refer to SIR's guides to giving on nutrition and physical activity.

## REFERENCES FOR FURTHER RESEARCH

ORGANIZATION	WEBSITE
Active Living By Design, UNC Gillings School of Public Health	www.activelivingbydesign.org
America's Health Rankings	www.americashealthrankings.org
Centers for Disease Control and Prevention	www.cdc.gov/obesity
The Future of Children	www.futureofchildren.org
Robert Wood Johnson Foundation	www.rwjf.org
White House Task Force on Childhood Obesity	www.letsmove.gov

# **SOURCES AND ENDNOTES**

- Olshansky S. Jay, et al., "A Potential Decline in Life Expectancy in the United States in the 21st Century," New England Journal of Medicine, 352:11 (Mar. 2005): 1138-1145.
- Hammond, Ross A. and Ruth Levine, "The Economic Impact of Obesity in the United States," *Diabetes, Metabolic Syndrome and Obesity* (Aug. 2010), http://www.brookings.edu/~/media/Files/rc/articles/2010/0914\_obesity\_ cost\_hammond\_levine/0914\_obesity\_cost\_hammond\_levine.pdf.
- "2007 Rates of Overweight and Obese Children," National Conference of State Legislatures, http://www.ncsl.org/?tabid=13877. Reproduced by SIR.
- "The Behavioral Risk Factor Surveillance System (BRFSS) Database," Center of Disease Control, http://apps.nccd.cdc.gov/brfss/income.asp?cat= OB&yr=2009&qkey=4409&state=UB. Graph generated by SIR.
- Sassi, Franco, et al., Obesity and the Economics of Prevention: Fit not Fat (2010), "United States Key Facts," http://www.oecd.org/document/57/0,374 6,en\_33873108\_33873886\_46038969\_1\_1\_1\_1,00.html
- Gardener, Amanda, "Overweight Kids Often Become Obese, Unhealthy Adults," U.S. News & World Report, Dec. 5, 2007, http://health.usnews.com/ usnews/health/healthday/071205/overweight-kids-often-become-obeseunhealthy-adults.htm.
- Olshansky S. Jay, et al., "A Potential Decline in Life Expectancy in the United States in the 21st Century," New England Journal of Medicine, 352:11 (Mar. 2005): 1138-1145.
- Franks, Paul W., et al., "Childhood Obesity, Other Cardiovascular Risk Factors, and Premature Death," New England Journal of Medicine 362 (Feb. 11, 2010): 485-493, http://www.nejm.org/doi/full/10.1056/ NEJMoa0904130.
- 9. Lumeng, Julie C., et al., "Weight Status as a Predictor of Being Bullied in Third through Sixth Grades," *Pediatrics* 125:6 (2010): 1301-1307, http://pediatrics.aappublications.org/cgi/content/abstract/125/6/e1301.
- Taras, H. and W. Potts-Datema, "Obesity and Student Performance at School," *Journal of School Health* 75(2005):291-295, doi: 10.1111/j.1746-1561.2005.00040.x.
- Daniels, Stephen R., "The Consequences of Childhood Overweight and Obesity," The Future of Children (Spring 2006), http://www.jstor.org/ stable/3556550.
- 12. Steenhuysen, Julie, "Obesity costs US health system \$147b: study," Reuters (July 27, 2009), http://reut.rs/iDxWT1.
- 13. Hammond, Ross A. and Ruth Levine, "The Economic Impact of Obesity in the United States," *Diabetes, Metabolic Syndrome and Obesity* (Aug. 2010), http://www.brookings.edu/~/media/Files/rc/articles/2010/0914\_obesity\_cost\_hammond\_levine.pdf.
- Karnehed, Nina et al., "Obesity and Attained Education: Cohort Study of More Than 700,000 Swedish Men," Obesity 14(2006): 1421-1428, http://www.nature.com/oby/journal/v14/n8/full/oby2006161a.html.
- 15. Melnick, Meredith, "Explaining the Gender Gap: Obesity Costs Women a Lot More Than Men; Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults," *TIME* (Sept. 22, 2010), http://ti.me/jKNAAL.
- Liebenson, Donald, "The Crippling Costs of Obesity in the Workplace," Kaiser Health News (July 16, 2010), http://www.kaiserhealthnews.org/ Stories/2010/July/16/FT-obesity-workplace-costs.aspx.
- 17. Rosen, Barbara and Linda Barrington, "Weights and Measures: What Employers Should Know about Obesity," *The Conference Board* (May 2008), http://www.simple2bthin.com/Weights\_and\_Measures\_Report.pdf.
- 18. O'Connor, Anahad, "Study Details 30-Year Increase in Calorie Consumption," *The New York Times* (Feb. 26, 2004), http://nyti.ms/iOsoHw.

- Farooqi, Sadaf and Steve O'Rahilly, "New advances in the genetics of early onset obesity," *International Journal of Obesity* 29(2005): 1149-1152, http:// www.nature.com/ijo/journal/v29/n10/full/0803056a.html.
- 20. Freedman DS, LK Khan, MK Serdula, et al., "The relation of childhood BMI to adult adiposity: the Bogalusa Heart Study," *Pediatrics* 115(1)(2005):22–27, http://ajph.aphapublications.org/cgi/ijlink?linkType=ABST&journalCode=pediatrics&resid=115/1/22.
- 21. United Health Foundation, the American Public Health Association, and Partnership for Prevention, "The Future Costs of Obesity: National and State Estimates of the Impact of Obesity on Direct Health Care Expenses," *America's Health Rankings* (Nov. 2009), http://www.nccor.org/downloads/CostofObesityReport-FINAL.pdf.
- 22. Finkelstein, Eric A. and Justin G. Trogdon, "Public Health Interventions for Addressing Childhood Overweight: Analysis of the Business Case," American Journal of Public Health 98(3)(2008):411-415, http://ajph.aphapublications.org/cgi/content/full/98/3/411.
- 23. Hammond, Ross A. and Ruth Levine, "The Economic Impact of Obesity in the United States," *Diabetes, Metabolic Syndrome and Obesity* (August 2010), http://www.brookings.edu/~/media/Files/rc/articles/2010/0914\_obesity\_cost\_hammond\_levine/0914\_obesity\_cost\_hammond\_levine.pdf.
- 24. United Health Foundation, the American Public Health Association, and Partnership for Prevention, "The Future Costs of Obesity: National and State Estimates of the Impact of Obesity on Direct Health Care Expenses," America's Health Rankings (Nov. 2009), http://www.nccor.org/downloads/ CostofObesityReport-FINAL.pdf.
- 25. Hammond, Ross A. and Ruth Levine, "The Economic Impact of Obesity in the United States," *Diabetes, Metabolic Syndrome and Obesity* (August 2010), http://www.brookings.edu/~/media/Files/rc/articles/2010/0914\_obesity\_cost\_hammond\_levine/0914\_obesity\_cost\_hammond\_levine.pdf.
- 26. United Health Foundation, the American Public Health Association, and Partnership for Prevention, "The Future Costs of Obesity: National and State Estimates of the Impact of Obesity on Direct Health Care Expenses," America's Health Rankings (Nov. 2009), accessed Oct. 4, 2010, http://www. americashealthrankings.org/2009/report/Cost%20Obesity%20Reportfinal.pdf.
- 27. Hammond, Ross A. and Ruth Levine, "The Economic Impact of Obesity in the United States," *Diabetes, Metabolic Syndrome and Obesity* (August 2010), http://www.brookings.edu/~/media/Files/rc/articles/2010/0914\_obesity\_cost\_hammond\_levine/0914\_obesity\_cost\_hammond\_levine.pdf.
- Melnick, Meredith, "Explaining the Gender Gap: Obesity Costs Women a Lot More Than Men," TIME (Sept. 22, 2010), accessed Sept. 24, 2010, http:// ti.me/jKNAAL.
- Daniels, Stephen R. et al., "Overweight in Children and Adolescents," The American Heart Association 111(2005):1999-2012, http://circ.ahajournals. org/cgi/content/full/circulationaha%3B111/15/1999.
- 30. University of Illinois at Urbana-Champaign, "Physical Activity May Strengthen Children's Ability to Pay Attention," *ScienceDaily* (Apr. 1, 2009), http://www.sciencedaily.com/releases/2009/03/090331183800.htm
- 31. Fox, Kenneth R., "The Influence of Physical Activity in Well-Being," *Public Health Nutrition* 2(1999):411-418, accessed Sept. 26, 2010, http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=554844.
- 32. Lumeng, Julie C., et al., "Weight Status as a Predictor of Being Bullied in Third through Sixth Grades," *Pediatrics* 125:6 (2010): 1301-1307, http://pediatrics.aappublications.org/cgi/content/abstract/125/6/e1301.

## This report was authored by:

Ji Hea Kim, Research Fellow Sarah Kramer, Research Fellow Julie Babyatzky, Communications Assistant Anne Radday, Senior Manager of Research Colette Stanzler, Director

#### **Social Issue Expert Interviewees:**

Ed Bruske, D.C. Urban Gardeners Elizabeth Cushing, Playworks Jaime Corliss, Shape Up Somerville Mark Dessauer, Active Living By Design Dr. Ginny Ehrlich, *Alliance for a Healthier Generation* Dr. Beverly Gor, CAN DO Houston John Govea, Robert Wood Johnson Foundation Dr. Laura Kettel Khan, Centers for Disease Control and Prevention Lorissa Mahoney, Girls on the Run of Suffolk County Alicia McCabe, Cooking Matters Alicia Moag-Stahlberg, M.S., R.D., L.D., Ceres Connections and Kids Eat Right Elizabeth Nahar, John Hancock Research Center at Tufts Nicole Rioles, Shape Up Somerville Maren C. Stewart, LiveWell Colorado Dr. Lawrence Stifler, Health Management Resources Sarah Strunk, Active Living By Design

Social Impact Research (SIR) is the independent research department of Root Cause, a research and consulting firm dedicated to mobilizing the nonprofit, public, and business sectors to work together in a new social impact market. SIR aggregates, analyzes, and disseminates information to help donors and funders identify and support the most effective, efficient, and sustainable organizations working to solve social problems. Modeled after private sector equity research firms, SIR produces research reports, analyzes philanthropic portfolios, and provides educational services for advisors to help their clients make effective and rigorous philanthropic decisions.

