

Letter of Intent: Robert Forrester
Vice Chairperson & Chief Operating Officer
Newman's Own Foundation

Organization: The New York Academy of Medicine
Jo Ivey Boufford, MD, President
Joanne Eichel, Director of the Office of School Health Programs

The New York Academy of Medicine (NYAM) has been advancing the health of people in cities since 1847. An independent organization, NYAM addresses health challenges facing the world's urban populations through interdisciplinary approaches to policy leadership, education, community engagement and innovative research. Drawing on the expertise of diverse partners worldwide and more than 2,000 elected Fellows from across the professions, our current priorities are to create environments that support healthy aging; to strengthen systems that prevent disease and promote the public's health; and to implement interventions that eliminate health disparities.

Project Title: *HEAL (Healthy Eating Active Living): A School and Community Initiative*

Proposed Grant Amount: \$50,000

Statement of Need

In recent years, overweight and obesity have emerged as a major public health issue in the United States. Based on statistics from the Centers for Disease Control and Prevention (CDC), over the last twenty years rates of overweight have increased nearly 40%, with two-thirds of the adult population in the US classified as overweight. Obesity and diabetes are health issues of great concern both nationally and in New York City. In 2009, the New York City Department of Health and Mental Hygiene, as part of the "Take Care New York" initiative, reported that 39% of the City's public school children are overweight or obese.³ The New York City Department of Health and Mental Hygiene report released in 2009 states that compared with children nationwide, NYC children are more likely to be obese (21% vs. 17%) and overweight (18% vs. 14%).⁴

In 2004, the New York City Department of Health and Mental Hygiene, as part of the "Take Care New York" initiative, reported that being "overweight or obese causes serious problems, including diabetes, heart disease, stroke, arthritis, and many cancers." The report suggests that "losing even a few pounds and being a little more physically active can significantly reduce these problems. People can lower their risk of diabetes by more than half with modest weight loss and regular exercise."⁵ As part of the Take Care New York initiative's effort to promote physical activity and healthy eating, as of June 2011, new vending standards and competitive food guidelines have been adopted by all New York City public schools.⁶

Numerous studies have shown that children who are overweight are more likely to be overweight adults and being overweight has serious negative health consequences. The risk of adult overweight is nearly two times greater in children suffering from overweight; and even moderate overweight in males is associated with excess mortality in adulthood.⁸ In a separate study reviewing the risks and consequences associated with pediatric obesity, evidence suggests that it can have lasting effects on self-esteem, body image, and economic mobility and "the risk of all-cause mortality and cardiovascular disease mortality are significantly elevated" among those individuals who are overweight during childhood.⁹

In addition to the physical and emotional consequences associated with obesity in youth, there is also evidence that obesity can affect performance in school. In a study of 1,128 middle school students in sixth and seventh grade, researchers in Texas found that not only did obese children have statistically significant lower grades across science, math, social studies and reading courses, they also achieved lower scores on the Texas Assessment of Knowledge & Skills (TAKS) measures during the 2006-2007 school year as a result of their increased weight.¹⁰

Schools are increasingly seen as central to the efforts to promote the health and well being of our nation's children. Through education and prevention, schools are in a unique position to address serious health and social problems before they become unmanageable. To promote health and prevent childhood obesity and diabetes, the CDC recommends a Coordinated School Health Program (CSHP) approach that engages the school community including students, administrators, staff, parents, and families in the initiative. School-based Comprehensive Health Education as part of the CSHP can give children the skills they need to make wise health choices and grow into healthy adolescents and productive adults. Studies have confirmed that comprehensive health education can effectively promote the knowledge, attitudes, and behaviors our students need to grow into healthy adults.¹¹

Cultural, ethnic, socio-economic, and education levels also play a factor in health disparities, including obesity rates. It is important that interventions are tailored culturally, ethnically, and at an appropriate literacy rate for the target population. According to the CDC, in the US, the prevalence of obesity is highest in Blacks, followed by Hispanics.¹³ In East Harlem in New York City, the risk of obesity between these two groups differs by only 1% whereas Black residents are 34% more likely to be obese than their White counterparts and Hispanic residents are 33% more likely to be obese.¹⁴

According to the 2000 US Census Bureau data, the demographics of East Harlem in New York City are 55% Hispanic, 33% Black, 7% white, 3% Asian and 2% other. East Harlem residents are less educated than the rest of the City. Twenty-one percent of residents have completed education up to the eighth grade, less than 50% of East Harlem residents have a high school diploma, and only 13% have a college degree. Additionally, 38% of East Harlem residents fall below the federal poverty level. Evidence suggests that people with lower incomes and less education are less likely than others to engage in physical activity.¹⁴ More than four in ten children in Head Start and elementary schools in East Harlem are obese or overweight.¹⁵

Implementation

The New York Academy of Medicine proposes to expand its reach from elementary schools to partner with New York City public middle schools to reach approximately 2,000 staff, parents/caregivers, students, and community members with *Healthy Eating Active Living: A School and Community Initiative*. Two new East Harlem middle school sites will be chosen, and NYAM will continue to partner with the 9 elementary school sites that participated in the program in East Harlem and the Bronx, to offer ongoing technical assistance to sustain the *HEAL* school-wide health promotion activities, and policy and environment changes in support of obesity prevention.

Program Goals

The goals of *Healthy Eating Active Living: A School and Community Initiative* are to:

- Establish and/or build the capacity of a School Wellness Council that includes students, administrators, teachers, school staff, Parent Coordinators, parents and community-based organizations to create changes in school policy, the environment, and the educational program to promote health and reduce risk factors for obesity and diabetes.
- Work with the School Wellness Council to implement schoolwide health promotion activities using promising evidence-based obesity prevention strategies.

Background

With the support of Newman's Own Foundation, OSHP has implemented *Healthy Eating Active Living: A School and Community Initiative (HEAL)*, a series of educational experiences and school-wide health promotion activities for New York City public elementary school communities that involve the school staff, parents, and children in the prevention of obesity and diabetes.

The program uses an evidence-based Coordinated School Health approach with an interdisciplinary school-community team, the School Wellness Council, that develops and implements school-wide health promotion activities; provides professional development training workshops for staff to help integrate obesity prevention information and skills into the curriculum; and offers educational activities for parents and caregivers.

Since its inception, the program has been implemented in 9 elementary schools and communities in East Harlem and the Bronx. The comprehensive program has resulted in *sustained* changes in school policy, the environment, and the educational program, an increase in physical activity, and reported nutritional and behavior changes among staff, students, and parents/caregivers.

On June 21, 2011, four of the schools that have participated in *HEAL* received *Excellence in School Wellness Awards* from the Strategic Alliance for Health (SAfH), a project of the NYC Department of Health and Mental Hygiene funded by the federal Centers for Disease Control and Prevention. The SAfH works to make sustainable improvements to the environment, systems, and policies that influence physical activity, nutrition, and tobacco use in East and Central Harlem and the South Bronx. *HEAL* allowed these schools not only to make significant progress in these areas, but to sustain the changes they made over time. They will continue to participate in *HEAL* to make further improvements as they serve as models for other schools. The article citing the *Excellence in School Wellness Awards* and MetLife's contribution to making this program possible is enclosed.

Based on the accomplishments and the overwhelming positive response to the program, NYAM proposes to expand the initiative to include middle schools in East Harlem. The program in the middle schools will use a Coordinated School Health model and work to engage young teens in leadership and advocacy roles, including participation on the School Wellness Council and implementation of school-wide health promotion activities. The program will use a youth development approach to build the capacity of the middle school students to serve as educators and advocates for better food choices and increased activity patterns at school, with friends, and at home.

While expanding to include middle school sites, NYAM will continue to partner with and provide ongoing consultation and technical assistance to sustain the *HEAL* activities and policy and environment changes that were instituted by the participating elementary schools.

Outcomes

NYAM's Center for Evaluation will conduct an independent evaluation of the project, gathering data on the implementation process, and school and individual level outcomes. The process component will track implementation of all components of the project (e.g. planning, curriculum development, professional development), so as to be able to accurately report on activities undertaken and factors facilitating or impeding progress toward stated goals. The process component will also assess satisfaction with project activities through brief surveys and interviews.

The outcome component will have a dual focus: (1) changes to school policy, curriculum and environment, including shifts in the nutritional quality of food available in the school and increased opportunities for physical activity among students; and (2) increased knowledge and self-reported behavior change among staff and family members participating in educational sessions. Preliminary evaluation findings will be reported to project staff on a regular basis for quality assessment and improvement purposes. A final evaluation report will be prepared.

Program Budget

We anticipate the total cost of the HEAL program in 2012 and 2013 to be \$250,000, and we respectfully request a grant for \$50,000 from Newman's Own Foundation, Inc. We hope you will partner with us to support the expansion of this important initiative to include Middle Schools to curb the threat of obesity and diabetes and benefit New York City's young adolescents and their families.