

# **Mission Statement**

The mission of the Greater Rochester Health Foundation (GRHF) is to improve the health status of all residents of the Greater Rochester community, including people whose unique healthcare needs have not been met because of race, ethnicity or income. GRHF will be good stewards of this valued community asset and will engage diverse populations and organizations

# Strategic Plan for the Prevention of Childhood Overweight and Obesity in Monroe County, New York 2007 - 2017

### **Table of Contents**

Appreciation for the Childhood Overweight and Obesity Task Force	2
Task Force Members	3
Executive Summary	4
Introduction	7
The Impact and Incidence of Obesity	8
A Community-wide, Methodical Approach to a Community Problem	11
Discoveries and Dilemmas in the Challenge to Reduce Childhood Overweight and Obesity	14
The Opinions of National Experts	17
Goals and Strategies	21
Next Steps	27
Call for Collaboration	29
Summary	31
Endnotes	32
Promising Interventions	34
GRHF Board of Directors	37

# A Special Thank You to the Childhood Overweight and Obesity Task Force Members

On behalf of the board and staff of the Greater Rochester Health Foundation, I would like to extend our appreciation to the members of the Childhood Overweight and Obesity Task Force.

This 10-year strategic plan for the Prevention of Childhood Overweight and Obesity in Monroe County is the area's integrated attempt to tackle what we now know is a community problem. As you review this Strategic Plan, you will see the depth of the commitment of each member to explore this complex issue, invite dialogue from every sector of the community, respectfully challenge concepts and review programs with a critical eye.

After months of study and dialogue, the area's 10-year plan to reverse the trend of childhood overweight and obesity is being made public. Going forward, we invite every member of the community to talk with Task Force members to learn more about the long-term consequences of overweight and obesity. We all have the opportunity to serve as role models of personal responsibility and to advocate for change that will improve the nutrition and physical activity levels of area children. By working cooperatively, we can, as a community, help ensure a bright, productive and healthy life for our children.

I also would like to thank Andrew Doniger, MD, MPH, of the Monroe County Department of Public Health for his role in co-chairing this Task Force with Dennis Richardson. Dr. Doniger has been a long-time advocate for preventive health and for addressing critical issues on a community-wide basis. His unique knowledge and expertise in the area of public health was invaluable in moving the process forward, and I would like to extend my personal thanks for his commitment and contribution to this strategic plan. Dennis has devoted his career to the well being of children and his practical knowledge of the challenges faced by children and their families was invaluable.

Again, thank you to each of the members for investing their time and talent to the Task Force.

John Urban

President and CEO

## The Childhood Overweight and Obesity Task Force

Co-Chairman

Andrew Doniger, MD, MPH

Monroe County Department of Public Health

Co-Chairman

Dennis Richardson

Hillside Family of Agencies

Members

Celeste Barkley, MPH

Foodlink

Stephen Cook, MD

University of Rochester Medical Center

Department of Pediatrics

Bonnie C. DeVinney

Greater Rochester Health Foundation

Laura Fasano

YMCA of Greater Rochester

Hazeldene Hercules

City of Rochester Mayor's Office

Catherine Goodfellow, MD

Genesis Pediatrics

Anne Kern

Monroe County Department of Public Health

Emily Leone, RN, MSN, C-PNP

Child Care Council. Inc.

Martin Lustick, MD

Excellus

Kim McLaughlin, MS Ed, CAS, CHES

Lisa Calabresi, MS Ed

New York State Student Support

Services Center

Corrine Silver

Preferred Care

John Urban

Greater Rochester Health Foundation

Staff

Gail L. Newton

Starr Webb

Greater Rochester Health Foundation

**Facilitator** 

Gwen Webber-McLeod

### **Executive Summary**

If obesity trends do not change, for the first time in our history, children may have a shorter life expectancy than their parents.

Increasingly, prevention of chronic medical conditions is being recognized as a logical and cost-effective way to improve health status. Poor nutrition and physical inactivity have been linked with many preventable medical conditions, including diabetes, joint replacement, asthma, heart disease and some forms of cancer. These medical conditions diminish the quality of life, cost American business millions of dollars from lost productivity, and are expensive to treat.

The Greater Rochester Health Foundation has made a 10-year commitment to serve as a catalyst for change in reversing the growing trend of overweight and obesity, beginning with children ages 2-10. Over the next decade, the Foundation will expand its support to include adolescents and families in the nine-county area surrounding Rochester.

### Why Obesity and Children?

Childhood overweight and obesity is a precursor of adult obesity; overweight and obesity are increasing problems in young children. New York's childhood overweight and obesity trends parallel or exceed national trends. Twenty-one percent of third grade school children in Upstate New York are obese, significantly exceeding the national rate of 16%. Children living in poverty are more likely to be overweight than children in more affluent families and prevalence rates for children differ across racial/ethnic categories.

Hispanics 29% African Americans 23% Whites 19%

## A Rigorous Approach to a Complex Problem

To address this serious trend, GRHF undertook a rigorous and thorough community-based process to understand the dynamics of childhood overweight and obesity. This included:

- Thorough review of the literature, best practices and promising strategies
- Building upon the groundwork laid by the Monroe County Department of Public Health
- Establishment of a multi-disciplinary committee The Childhood Overweight and Obesity Task Force
- Qualitative and quantitative research with professionals from child care, clinical and academic settings
- Discussions with the nation's leading experts in childhood obesity
- Initiation of dialogue with the community through a forum at which participants were asked for input on the 10-year strategic plan

### **Discoveries and Challenges**

Reversing this trend is complex and requires

multiple approaches to target

different segments of

the community.

While personal responsibility and

changes in individual

the trend of overweight and obesity, individuals must change their daily behavior. They must balance what they eat and their level of physical activity for the rest of their lives.

lifestyle choices result in greater health

improvement, several other variables contribute to this problem, including:

- The physical environment and the lack of affordable and safe recreational venues for many children
- Limited access to healthy food at an affordable price
- Family norms and culture
- The increasing pressure on schools to achieve academic performance at the expense of daily physical activity
- Limited time available for health care professionals to offer counseling regarding the impact of lifestyle on health
- The media, which emphasizes large portions of high-calorie, non-nutritious foods and beverages

This will be accomplished through:

- Increased physical activity
- Improved nutrition
- Engaging the clinical community
- Education and action strategies to change policies targeted at the local, state and national levels

GRHF and its Task Force
have identified a single goal:
Reduce the prevalence of overweight and
obesity, as measured by Body Mass Index (BMI),

from 12,244 (15%) to 4,081 (5%) of Monroe County children ages 2-10 by 2017.

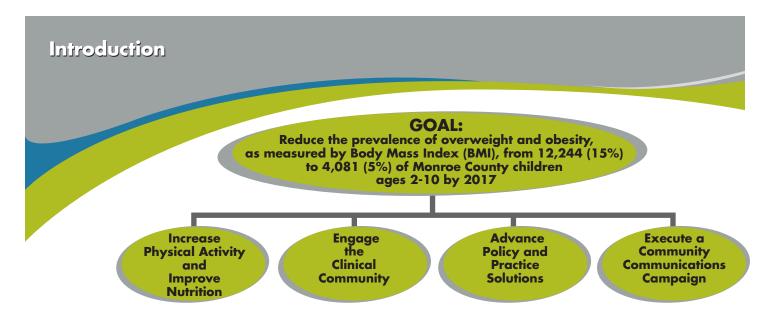
 A communication campaign that provides consistent, targeted messages to the community, including high-risk populations.

The GRHF Board of Directors has made a 10-year commitment to this goal and will invest up to \$2 million annually in the most promising practices that incorporate measurement and evaluation. The Foundation also will seek to leverage these funds by working with local, state and national funding sources on behalf of our community.

However, this investment also will require the following in order to be successful:

- The integration, cooperation and collaboration of every segment in the community
- · Environmental and cultural barriers must be addressed





## A Community-Wide Approach to the Prevention of Childhood Overweight and Obesity in Monroe County, New York 2007 – 2017

Historically, the emphasis on improving health has focused on the treatment of disease. Today there is greater recognition of and emphasis placed on prevention of disease. Poor nutrition and physical inactivity are the leading causes of many preventable medical conditions — diseases that shorten life expectancy, diminish the quality of life and cost our community millions of dollars annually in lost productivity and medical expenses. To change the paradigm, we must raise the awareness of the people in our community, and invite and excite them to change their behavior.

The Monroe County Department of Public Health (MCDPH) has provided leadership in identifying and addressing multiple health issues that affect the health of Monroe County citizens. In 1995, the Director of MCDPH established HEALTHACTION, Priorities for Monroe County, a process for identifying critically needed initiatives and bringing together multiple community partners to implement strategies to improve the health of the community. GRHF and its Task Force have built upon this community-based approach and recognize the Health Department as uniquely qualified to serve as a partner in the effort to reverse the trend of childhood overweight and obesity in Monroe County.

Greater Rochester Health Foundation has made a 10-year commitment to serve as a catalyst for change in Monroe County by investing in a sustained strategy to reverse the alarming increase in overweight and obesity. The initial strategy begins with our community's children and will, over time, expand to include adolescents and families.

The Childhood Overweight and Obesity Task Force, convened by GRHF, considered the dynamics of the problem in order to understand the barriers to good health, specifically physical activity and good nutrition. These barriers are complex and include the physical environment, family norms and values, race and poverty, the way we educate and care for our children, the health care system, the impact of media and the emotional context of food. Given these interrelationships, the Task Force deemed that in order for long-term behavior change to occur, we must implement culturally relevant programs and consistently employ measurement and evaluation techniques.

The Task Force also determined that there is no short-term solution, no immediate and inexpensive resolution to this alarming trend. Our community is traveling into new territory, where there is minimal national evidence as to the most effective approaches to combat this growing health problem. However, with a concerted community effort, the participation of families and private and public institutions, it is possible to reach this aggressive 10-year goal.

## The Impact and Incidence of Obesity

### Obesity is becoming a leading cause of preventable death.

By 2010, the root causes of obesity — poor nutrition and physical inactivity — may become the leading underlying causes of preventable deaths in the United States<sup>5</sup>. According to the National Institutes of Health and the Centers for Disease Control and Prevention, being overweight increases an individual's risk for a range of serious diseases:

Diabetes

Heart Disease

Stroke

Cancer

Asthma

Arthritis

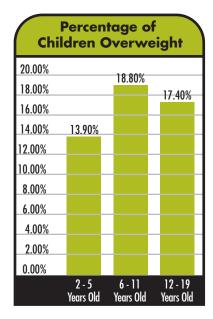
Disability

· Joint Replacement

From an economic perspective, it is more cost-effective to prevent disease than to treat it. From a social responsibility perspective, if a community can reverse poor health and increase the quality of life for its members, it is their collective duty to do so.

# Childhood overweight and obesity is a precursor of adult obesity; overweight and obesity are increasing problems in young children.

One-third of children in the United States are now either overweight or at risk for becoming overweight. Over the past 30 years, the obesity rate has nearly tripled for children ages 2-5 and quadrupled for children ages 6-11. If obesity trends do not change, for the first time in our history, children may have a shorter life expectancy than their parents?



Source: NHANES 2003-2004.

# New York's childhood overweight and obesity trends parallel or exceed national trends.

Twenty-one percent of third grade school children in Upstate New York are obese, significantly exceeding the national rate of 16%. Prevalence rates for children differ across racial/ethnic categories:

Hispanics 29%African Americans 23%Whites 19%

In addition, children living in poverty are more likely to be overweight than children in more affluent families.

In the Special Supplemental
Nutrition Program for Women, Infants, and
Children (WIC) in Monroe County, 29% of participants
ages 1-4 are considered overweight or at risk for
overweight. The increase in childhood overweight and
obesity in Upstate New York and in Monroe County
is a problem we must face and a trend
we must reverse:



# The physical health and the economic health of a community are linked.

It is widely thought that the economic health of a community is linked to the physical health of its members. However, there is no consensus as to the proper method for quantifying this relationship. The U.S. Department of Health and Human Services estimates that the annual cost of obesity is \$117 billion in medical costs and lost worker productivity. The national cost of childhood overweight and obesity alone may be up to \$14 billion in direct health care costs per year.

These numbers would suggest that Monroe County may spend about \$292 million related to obesity, with \$35 million spent specifically for children. Regardless of the methodology, it is safe to state that our community is losing millions of dollars annually on lost worker productivity while expending additional millions of dollars in adult and child health care related to overweight and obesity.



# A Community-wide, Methodical Approach to a Community Problem

News programs
and articles abound with information
on the harmful impact of overweight and
obesity and the ensuing health consequences.
Yet we are slow to connect our personal lifestyle
choices with our health. Significant advances in medicine
and pharmacology have created a false and costly sense
of security — implying that the poor health and lifestyle
choices of today can be reversed by a procedure or pill.
Our culture and the health coverage and care
available to many Americans have discouraged
us from taking responsibility
for our health.

As critical as it is to begin to accept responsibility for our health, it also is essential to recognize that there are significant environmental barriers to success. An individual cannot correct these barriers, such as unsafe neighborhoods and poor access to wholesome, affordable food. Overcoming these barriers will require community-wide intervention and collaboration.

In light of the above, the Greater Rochester Health Foundation and its Task Force are committed to serving as a catalyst for community change. They have determined that the most logical and effective way to reverse this damaging trend of overweight and obesity is to invest in a decade-long strategy directed at three groups:

- · Children ages 2-10
- Adolescents
- Families

To assure that each segment is addressed methodically, the Foundation and its Childhood Overweight and Obesity Task Force decided to phase in strategies and implement interventions beginning with children ages 2-10 years.

To approach the problem systematically, the process began with a review of national literature to understand the dynamics of childhood overweight and obesity and to identify best practices. GRHF also conferred with leading experts from across the country to shorten the learning curve and invest Foundation dollars effectively.

Of significant importance was the decision to reach deeply into the local community to:

- Establish an interdisciplinary Task Force
- Conduct focus groups and surveys with a variety of people in direct contact with children
- Sponsor a community-wide forum and continue a structured dialogue with local professionals and citizens to solicit their input into the 10-Year Strategic Plan and, going forward, amend the Plan as new data becomes available.

## Childhood Overweight and Obesity Task Force — An Interdisciplinary Approach

The Task Force was co-chaired by Andrew Doniger, MD, MPH, Director of the Monroe County Department of Public Health, and Dennis Richardson, President and CEO of the Hillside Family of Agencies.

"When I was asked to chair this Task Force, one of my first questions was 'Who will be on this Task Force?' I was impressed with the care that the Foundation had taken to engage members who represented a crosssection of community institutions and ethnic groups, including: University of Rochester Medical Center Department of Pediatrics; City of Rochester Mayor's Office; YMCA; Child Care Council, Inc.; health plans and medical providers; and Foodlink. During this process, members have engaged in respectful debate over process and goals, reviewed best practices and listened to one another regarding barriers and challenges faced by their own institutions. Rochester has had a unique legacy of community cooperation, and this process has reinforced the logic of setting aside 'turf' and working as a team to reverse the alarming trend of childhood overweight and obesity."



Andrew Doniger, MD, MPH, Director of the Monroe County Department of Public Health

The charge to the Task Force was to work with GRHF to create a framework and identify strategies for GRHF's 10-year, community-wide strategic plan for addressing the incidence of childhood overweight and obesity in Monroe County. In the process of developing the plan, the Task Force examined the extent of the problem in the urban, suburban and rural communities; determined the effectiveness of local research, advocacy, and programmatic efforts; and reviewed national best practices and evidence-based models to determine the appropriateness of replication in Monroe County.

### **Initial Qualitative and Quantitative Research with Relevant Segments**

As part of the Task Force's research into local efforts, several focus groups and surveys were conducted with staff representing more than 15,000 children. One group involved staff from the Rochester Childfirst Network and its satellite offices, representing approximately 500 family child care homes/providers and 4,000-5,000 children.

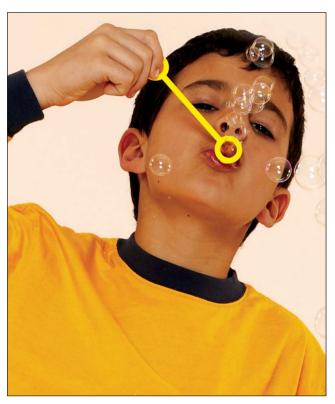
A second group consisted of 16 school administrators from multiple districts, most of whom were supportive of obesity prevention efforts, including health education specialists, health coordinators, and assistant principals. These discussions focused on their top priorities for the more than 5,000 children they represent, their knowledge of childhood overweight and obesity, and regulations that impact the ways in which they conduct child care and formal education. The professionals also were asked to identify barriers to improving nutrition and increasing physical activity, how these barriers could be overcome, and ideas for interventions, including strategies to engage families.

To expand the preliminary base of information, surveys were conducted with a dozen members of the School Age Child Care Networking Support Group involved with before- and after-school programs for children. These programs impact close to 4,000 children in a wide range of urban, suburban and rural areas. Additionally, 13 institutional child care administrators in 11 locations were surveyed on the issues impacting the 1,600 children for whom they provide care. These professionals were surveyed on topics similar to that of focus group participants.

An existing survey of clinicians, compiled by the Medical Society of the County of Monroe, Inc., provided helpful insights about how clinicians are currently treating overweight children in their practices.

"I would like to commend the Foundation for its in-depth process to examine the formidable issues facing the child care community in providing nutrition and physical education activities with impact. No single approach can be applied, and the GRHF took the time and effort to hear from all types of providers to understand the issues. All children in their early years are at risk of childhood obesity, and we as a community of providers must respond to this crisis."

George M. Romell, President/CEO, YMCA of Greater Rochester



# A Community-wide Forum and an Initiation of an Open Community Dialogue

GRHF sponsored a conference that featured a leading national expert on childhood overweight and obesity, keynote speaker William Dietz, M.D., Ph.D., the Director of the Division of Nutrition and Physical Activity at the Centers for Disease Control and Prevention.

The conference was an opportunity to present a manifestation of GRHF's core values — to work proactively with the community and to make the funding processes accessible and interactive. Registrants were invited to participate in facilitated breakout sessions focused on 10-year strategic interventions in child care, school, clinical and community settings.

"It was inspiring to see people from every corner of our community, 150 strong, come together to learn, contribute and strategize how we are going to work through these issues together. This included community leaders, neighborhood and community organizations and clinicians serving children and families from all ethnic and socio-economic groups. They were given an opportunity to be very candid with Task Force members and Foundation staff in what they thought was appropriate for our community. The Foundation's revised draft reflected this new thinking."

G. Jean Howard, Chief of Staff, Office of the Mayor, City of Rochester

# Discoveries and Dilemmas in the Challenge to Reduce Childhood Overweight and Obesity

There is consensus among experts that changing overweight and obesity trends requires that individuals change their daily behavior, what they eat and their level of physical activity, for the rest of their lives.

While there continues to
be emphasis on personal
responsibility within family units,
experts recognize that many factors contribute to
this growing health problem. To be effective, any blend of strategies needs to address the full range of compounding influences.

## **Environment and Physical Activity — Limited Safe, Affordable Outlets**

Children who live in environments that do not support healthy behaviors are at the highest risk for obesity. Forty percent of the children in the City of Rochester live in poverty, and do not have safe places for outdoor play. Parental work schedules, transportation challenges and limited family budgets make it difficult for children of poverty to participate in the few structured activities available. In some families, the only safe form of activity for children is television viewing or computer games.

# **Environment and Nutrition** — **Limited Access to Healthy Food**

According to United States Department of Agriculture Economic Research Service,<sup>10</sup> Americans enjoy the cheapest, most abundant food supply in the world. We spend less than 10% of our income on food, far less than people in other countries. In urban areas

and low-income areas, fast food is readily available and less expensive than healthy food. In addition, the buying power of large food chains has made it difficult for local grocers to compete, resulting in fewer "corner stores" in neighborhoods. The remaining local grocers in low-income neighborhoods are less likely to stock fresh foods because of the high cost, creating an additional barrier to healthy eating for low and moderate-income families in the city.



### Family Life, Norms and Nutrition — Our Past Should Not be Our Future

All cultures have beliefs about food established well before today's current knowledge of good nutrition. What is cooked, how it is prepared, how much everyone is expected to eat, what constitutes a "good meal" or a "generous host/hostess" and the meaning of "clean your plate" all impact people's eating habits. These beliefs and norms are passed from generation to generation along with obesity, high blood pressure and diabetes.

Changes in family life also have contributed to unhealthy eating habits. Many parents work outside the home for long hours, meaning the family dinner hour has been replaced by meals on the go or in front of the television. A study conducted by Stanford University suggests that children consume significantly more calories while watching television than when they are engaged in other activities.<sup>11</sup>

There is an increasing body of knowledge on the impact of family life, and the emotional context of food, on eating habits. Simultaneously, there is growing debate on the roles of the family and public institutions, and where the ultimate responsibility for children's health should fall. It is the position of GRHF that the medical consequences of childhood overweight and obesity are of such severity that home and community must work in concert with individuals and families to support a full range of efforts.

### Schools — Increasing Emphasis on Academic Performance

Teachers and school administrators attribute lack of time as one of the barriers to addressing childhood overweight and obesity in schools.

"With increased emphasis on academic preparation and assessment in schools from the federal and state levels as well as from a competitive business environment demanding that students be prepared to function effectively in a flattening world, it is difficult to mobilize an effort to address student wellness issues such as obesity with resources that are increasingly limited and targeted to academic interventions. While teachers, principals and school board members clearly understand how important it is that children are healthy in order for them to gain the maximum benefit from the education they are offered every day in our classrooms, schools are not built to respond to multiple priorities without an incentive for doing so. One of the benefits of a local foundation providing incentives for social and behavioral change is that schools can and will compete for dollars that may be used to enhance their programs, their offerings to kids and ultimately their students' academic achievement as a result. Healthy kids do better in school than unhealthy ones. Part of our goal as educators is to prepare young people to live healthy, productive and fulfilling lives in a society that places multiple demands on their time, energy and resources."

Christopher B. Manaseri, Ph.D., Superintendent of Schools, Brighton Central School District

The two major factors to reducing overweight and obesity – increasing physical activity and improving nutrition – also increase academic performance. Some research studies indicate that children who are overweight and obese have lowered academic achievement as measured by standardized test scores.<sup>12, 13</sup> Additional research also indicates that students who participate in school breakfast programs and participate in regular physical activity not only perform better academically, but also miss fewer days of school.<sup>14, 15, 16</sup> Although these initial studies indicate a correlation between overweight and obesity and academic performance, additional research is necessary to strengthen the body of evidence.

#### The Role of Health Care

While the majority of children enrolled in school have an annual physical, providing an opportune time for parents and physicians to discuss overall health, one yearly conversation is insufficient to the task.

"Each day in my office I see more and more children who are overweight and obese. Even with measurement of their BMI and counseling of their parents of the risks of their weight, the results are poor. We need to fight obesity at the community level with everyone who impacts the life of our children, spreading the same message: children need a healthy lifestyle including healthy eating habits and exercise opportunities. We all need to be singing the same tune if we are going to have an impact on this 'growing' problem."

Anne B. Francis, MD, FAAP, Pediatrician at Elmwood Pediatric Group

### The Impact of Media

Food and beverage commercials bombard listeners/viewers of all ages with messages about the value of fast food, snack foods and high calorie beverages and the idea that quantity is king. Pharmaceutical commercials de-emphasize personal responsibility and attempt to persuade consumers that there is a pill to fix everything. And the people selected by the media to be role models are rarely of a healthy weight. Everywhere are offers to eat more or, ironically, to be too thin.



## The Opinions of National Experts

Despite widespread media attention on the issues of childhood overweight and obesity and the growing number of formal and informal research programs, there is little hard evidence of effective means of addressing the problem. In addition to querying Task Force members, local school personnel/educators, child care professionals and clinicians about the barriers they face in implementing programs or treating patients, GRHF turned to six national experts on the issue. They were asked to identify which interventions they believed to have the greatest promise in reversing the trend of childhood overweight and obesity.

One expert recommended 100% of resources be used for a community-level discussion about priorities for policy and environmental change related to healthy lifestyles, nutrition and physical activity. The remaining experts agreed that they would allocate the majority of dollars toward physical activity and nutrition interventions in schools and child care settings to reach the maximum number of children and families in the most efficient manner. The following information reinforces the concept of working with organizations and schools as the most efficient way to impact the behavior of young children.

### **Schools**

Because children ages 5 and older spend at least seven hours a day in school for 9 to 10 months a year, school personnel can exert a great deal of influence on their physical activity and nutrition. Children who eat nutritious meals and have adequate, safe recreational outlets have higher academic performance than poorly fed TV viewers. We cannot ignore the role of schools in shaping the mental and physical health of the next generation. However, the "No Child Left Behind" initiatives place so much

emphasis on academic performance that many physical activity programs have been reduced or discontinued. It is critical that the role of physical activity in improving academic performance be recognized.





### **Child Care Settings**

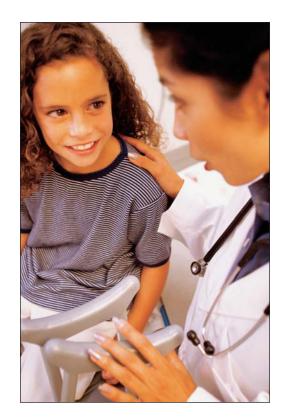
According to the American Academy of Pediatrics, the majority of children attend some organized child care setting that can support community-based initiatives. This suggests that these children, who eat one or two snacks and lunch in a child care setting, can be taught healthy eating habits at an early age.

#### **Clinical Practices**

Clinical practices are an obvious venue for educating patients and families about childhood overweight prevention and treating patients who are already overweight. Primary care providers, including school-based health centers, are in a unique position to screen and track a patient's progress and influence health outcomes over time.

# Community Settings (after-school programs, neighborhood centers, faith-based organizations)

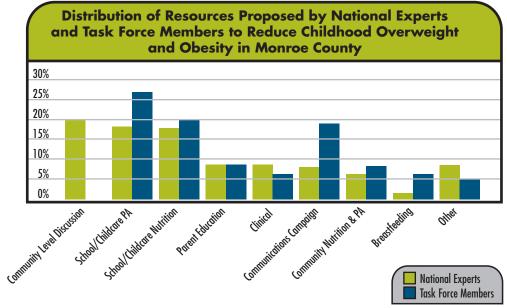
More preschool and school-age children are spending less time with their families and more time in child care and community-based programs for children. The Rochester community has numerous resources and assets that, if mobilized strategically, can directly impact the health and well-being of children. Therefore, involving after-school and faith-based programs for children is critical to addressing childhood overweight and obesity.



Task Force members agreed with national experts on the need to devote Foundation dollars for physical activity (PA) and nutrition interventions in schools and child care settings.

In recognition of the need for reinforcement in all areas of the community, the Task Force also allocated a high percentage of funds for the implementation of a targeted community communications campaign focused on behavior change.

The Institute of Medicine 2005 report "Preventing Childhood Obesity: Health in the Balance" suggested that while many prevention policies and programs



to combat this alarming trend are underway, they generally remain small scale and fragmented. A follow-up report supported by the Robert Wood Johnson Foundation, "*Progress in Preventing Childhood Obesity: How Do We Measure Up?*" called for stakeholders to increase and sustain their leadership and commitment.<sup>20</sup>

Stemming and reversing the trend of childhood overweight and obesity is not a short-term activity. It will likely take a decade or more to change both the thinking and behavior of a generation and their influencers. Therefore, GRHF and its Task Force have committed to a long-term initiative in which initial dollars are used to achieve maximum impact on the health of the community's children. Over the next several years, GRHF will extend its focus to adolescents and families.

# Consistent Monitoring and Evaluation — Sustainability

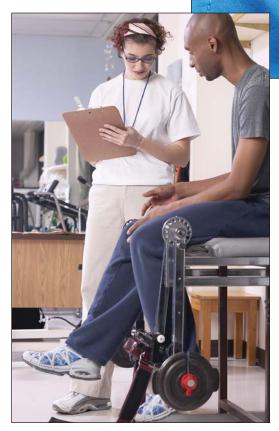
GRHF is a community asset and takes its stewardship and evaluation of the use of its funds very seriously. Allocated funds are an investment in a healthier future.

"The Foundation prefers projects that apply evidence-based or best-practice interventions. However, GRHF also recognizes the need to support programs that are innovative and show promise for improving the health of a population. Of critical importance are programs that are sustainable, programs that offer improved health practices that become so ingrained in the family or institution that they are inseparable from the culture of that family or institution."

John Urban, President, GRHF

Applicant organizations will be assessed on their experience and ability to fill the parameters of the grant and the cost-effectiveness of the proposed interventions. The Foundation and the Task Force recognize the critical need to systematically evaluate and monitor progress for each of the funded initiatives.

GRHF and its Task Force recognize that there may be several venues capable of effectively reversing the trend of childhood overweight and obesity — unique programs for different people in a variety of settings.



"The Foundation is committed to regular and thoughtful evaluation of all funded programs and therefore will engage a professional evaluator and a team of experts. This team will design and apply measurements periodically over the next 10 years to assist with community-wide measures. Depending on the outcomes of various interventions, adjustments will be made over the 10-year period to increase the effectiveness of all programs."

Dennis Richardson, President and CEO, Hillside Family of Agencies



### Goals and Strategies

GOAL:

Reduce the prevalence of overweight and obesity, as measured by Body Mass Index (BMI), from 12,244 (15%) to 4,081 (5%) of Monroe County children ages 2-10 by 2017.

Reversing the trend requires sustainable effort by the entire community and consistent measurement of all children.

GRHF has funded a baseline study of BMI through a grant to

the University of Rochester. The legislation passed in the state budget in April 2007 requires that BMI be reported on health forms submitted to schools for kindergarten, second, fourth, seventh and 10th grades beginning in the 2008-2009 school year that will serve as a second measurement point. The goal of this reporting

is not to reiterate the obvious — that too many children are at an unhealthy weight — but to monitor the

effectiveness of interventions.

## 1. Strategies

A. Increase physical activity for children ages 2-10 in Monroe County.

This intervention requires that programs address a series of complex challenges:

- Safe environment (traffic, violence, lead, pollution, construction, etc.)
- Supervision (adult supervision not older siblings, not a TV)
- Equipment (jump ropes, bats, balls, helmets, etc.)
- Proper attire (sneakers, swimsuits, etc.)
- Cost (registration, fees, etc.)





# B. Improve nutrition of Monroe County children ages 2-10.

This intervention requires that programs address a series of complex challenges:

- Influence of family culture, knowledge, personal beliefs about food
- · Cost price of fresh fruit and vegetables versus processed food
- Availability ability of small urban stores to stock fresh foods economically, feasibility of gardens
- Value "fast food" appears more economical than wholesome foods to families
- Time parents are stretched for time for food preparation
- Message inconsistency daily advertisements by food industry versus annual message from physicians



### Measurable objectives for nutrition:

#### **GRHF** Measures

By 2011, 100% of school districts supported by GRHF will initiate one or more changes to improve the nutritional quality of meals and snacks consumed by children age 6-10 years.

By 2011, 100% of intervention sites serving 2-10 year olds supported by GRHF will serve 30% more fruits and vegetables, thereby reducing servings of high-calorie, high-fat foods.

By 2011, 100% of intervention sites serving 2-10 year olds and supported by GRHF will serve only skim or 1% milk.

By 2011, 100% of intervention sites serving 2-10 year olds and supported by GRHF will eliminate sweetened beverages with little or no nutritional value.

The next two strategies are evolving as GRHF and its community partners research and evaluate the most powerful messages and programs.

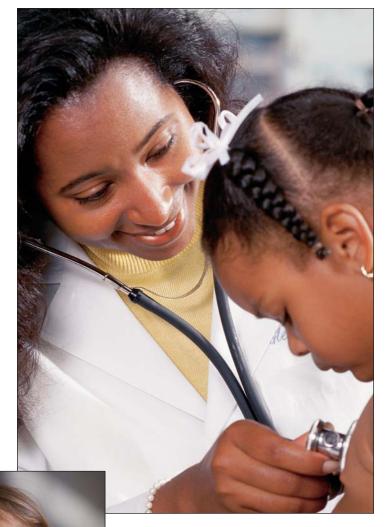
### 2. Engage the clinical community.

GRHF will engage with the clinical community to involve pediatricians and family physicians in the prevention of childhood overweight and obesity. Advice will be sought from national experts such as the National Initiative of Children's Healthcare Quality and the New York Upstate Chapter of the American Academy of Pediatrics.

# 3. Advance policy and practice solutions targeted to the local, state and national levels.

The problem of childhood overweight and obesity has many implications for public policy. To fully address this issue may require regulations ranging from changes in the physical layout of a community to more rigorous nutritional requirements for schools. The full spectrum of opportunities and the exact role GRHF will assume has not yet been determined. The Foundation intends to serve as a catalyst for change and seek opportunities to consult and cooperate with other organizations, including education and awareness coalitions, national

alliances or organizations of influence, to have a meaningful impact on this serious health trend. As a catalyst, GRHF may at times be "invisible" in the process other than as a source of funds, whereas at other times the Foundation may assume a public role in education, advocacy or policy reform.



# 4. Execute a Community Communications Campaign that provides consistent, targeted messages to the community, including high-risk populations.



One of the barriers to reversing this troubling trend is the constant barrage of messages to which children are exposed. Billions of dollars are spent on fast food advertising directed at children. A 2004 article by Children's Hospital of Boston stated that fast food consumption has risen five-fold among children since 1970, driven in large part by a multi-billion dollar advertising campaign. Dr. David Ludwig, Director of the Obesity Program at Children's Hospital, and the developer of the Children's Optimal Weight for Life Program, said, "Limiting advertisement of fast food to children may be one of the most important public health measures that we can take today."

We cannot expect fast food restaurants to sacrifice market share and profits to competitors by limiting their advertising dollars. Recent studies suggest that while posting nutritional content on menus is a reasonable effort toward consumer education by the industry, consumers remain baffled by the meaning of the details, so its effectiveness is limited.

Behavioral change does not come quickly. Families and individuals must first become aware that there is a problem and move through the stages of change to adoption of a healthier lifestyle. GRHF recognizes this is a process that will occur over several years and is prepared to work through these issues with community partners for the next decade. GRHF will support a diverse communications campaign in the broadest sense — print, TV, grassroots events, radio, webcasts, etc. — in its efforts to help shift the mindset of the entire community, including those members considered high risk.

Through a national RFP process, GRHF will seek an advertising agency of record with solid experience in social marketing and which works through a team of culturally diverse professionals — African American, Latino and Caucasian. Consistent with our commitment to collaborate with a broad range of constituencies in the community, GRHF will convene a diverse group of local professionals to identify appropriate content and media. Pilot testing of all aspects of the campaign will ensure that our communications strategies are culturally sensitive, at an appropriate literacy level and transcend all age groups.



### **Next Steps**

In order to maintain focus and allocate the human and financial resources adequate to the task, GRHF will coordinate a phased approach to reversing the trend of overweight and obesity across multiple age groups. Beginning with children ages 2-10 in Monroe County, the strategies will be extended to the Greater Rochester area of nine counties and integrated with strategies targeted to adolescents and families over time.

### GRHF has begun implementation of this strategic plan through the following activities:

- 1. Funding the collection and analysis of data on children's BMI from pediatric and family medicine practice sites in Monroe County to determine the percentage of children with BMI levels at the 85th (at risk) and 95th (overweight) percentiles. The University of Rochester Medical Center will collect children's date of birth, date of visit to the clinician's office, gender, height, weight, race/ethnicity, and home address to track the greatest geographic concentrations of childhood overweight and obesity in Monroe County.
- 2. Assessing the readiness of public schools to track children's BMI on an annual basis and to increase physical activity and improve nutrition.

GRHF acknowledges the significant challenges confronting our community as we work together to reverse the trend of childhood overweight and obesity. Core values, in addition to those articulated in GRHF's mission, that will guide all of the Foundation's investments in support of this strategic plan include:

#### Measurement

Measurement of effectiveness is a critical component of each program; baseline measurements will be a critical component in each project. GRHF will encourage potential grant recipients to implement programs that:

- · Are nationally known and recommended
- Use assessment tools that have demonstrated effectiveness

GRHF recognizes that effective interventions are in their infancy and therefore will seek innovative programs that include a rigorous evaluation component. All grant recipients will be required to submit a comprehensive quarterly report.

#### Coordination

GRHF will:

- Regularly convene grantees to create opportunities for sharing of ideas and strategies
- Establish a monitoring and evaluation committee to sharpen strategies and interventions based on lessons learned in this community and throughout the nation

#### Focusing on Behavior Change

GRHF will engage a behavioral consultant to provide technical assistance to community organizations funded by GRHF to implement effective, sustainable programs.

### **Engaging Families**

GRHF recognizes the importance of messages that will resonate with families and will require applicants to articulate how they will address the family component in their proposed intervention.

#### **Funding**

GRHF will invest up to \$2 million per year for the next decade in support of this Strategic Plan. The Foundation will seek to leverage these funds by identifying local, state and national sources for additional funding to support interventions. Requests for Proposals (RFPs) will be phased in by venue:

- Summer 2007 Child care community
- Fall 2007 Clinical communities
- Winter 2007 Community communications campaign
- Winter 2008 Schools
- RFPs for community-based organizations will occur at a later date so that GRHF Opportunity grantees implementing
  childhood overweight and obesity programs will have time to demonstrate success with their initial projects before
  applying for additional funding.
- 2007-2008 Development of strategic plans for overweight and obesity in adolescents. The Adult Overweight and
  Obesity Task, co-chaired by Louis Papa, MD, and Mary Ellen Burris of Wegmans, is currently in the process of drafting
  a community strategy targeting adults.

### Keeping the Community Informed

GRHF will continue to monitor and report the results of strategic interventions to the community on a regular basis. Progress will be reported through press releases, GRHF annual reports, minutes of quarterly grantee meetings, and through an annual conference.

### Call for Collaboration

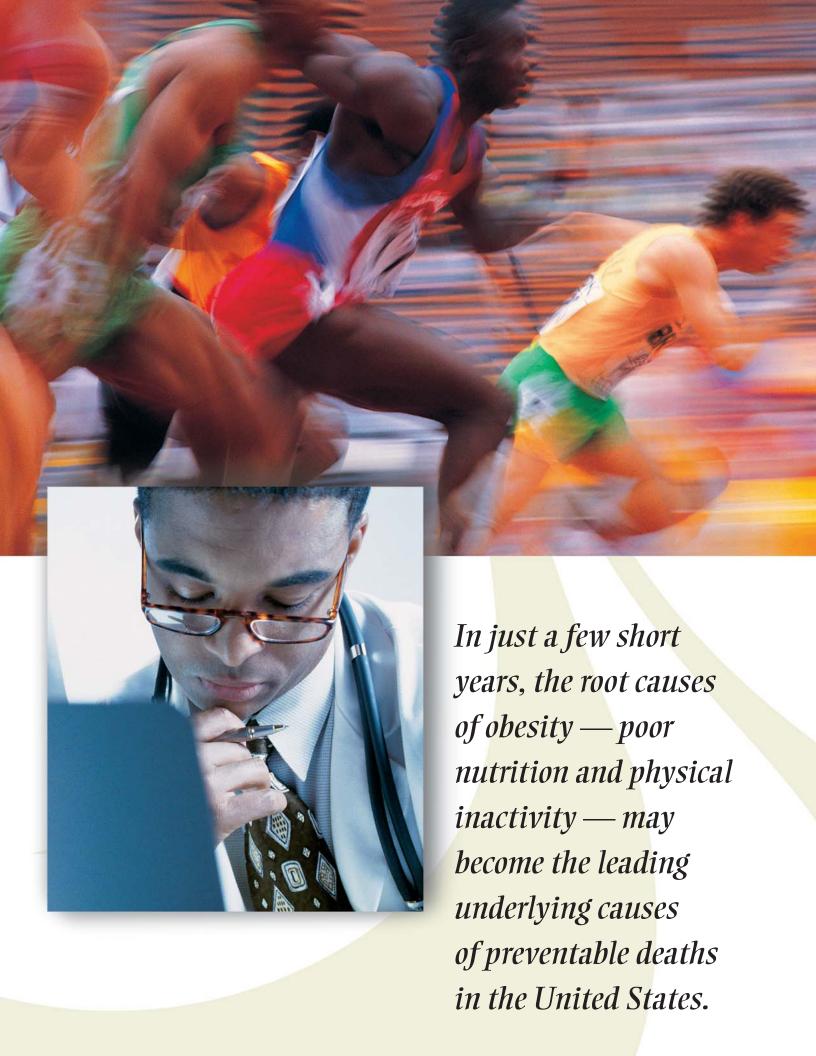


While GRHF will assume a leadership role as a catalyst for change, the energy and commitment of every sector of our community will be necessary to reverse the disabling trend of overweight and obesity. We invite businesses, government, community and not-for-profit groups, educational institutions, faith-based communities, the health care community, and other interested parties to collaborate with GRHF in this effort.

### Through collaboration and partnerships, we can:

- Share information, best practices, evaluation and outcomes data in order to direct scarce community resources to the most effective programs
- Champion community education programs that stimulate behavioral change
- Shape public policy to support the collective health of the community
- Coordinate activities so that all groups are reached without duplication of effort, staff or funding and through mediums that are culturally relevant and appropriate
- Disseminate successes and lessons learned, guidelines for replication and recommendations for enhancements to the rest of New York State

Together, we can regain the health of our community and ensure a healthy future for our children.



### Summary

In just a few short years, the root causes of obesity — poor nutrition and physical inactivity — may become the leading underlying causes of preventable deaths in the United States.<sup>18</sup> Obesity costs our community millions of dollars annually in lost productivity and direct medical expenses. Unless we change this paradigm, the current generation of children may be the first generation whose life expectancy will be shorter than that of their parents.

A sustained, systematic, community-based approach is essential to reversing this alarming trend. The Greater Rochester Health Foundation has reached out to every corner of the community to engage their cooperation and instill a sense of ownership in this dilemma. The Foundation and its Task Force have evaluated local and national information, identified barriers and best practices, committed to a consistent process of evaluation and measurement, and engaged in a 10-year strategic planning process.

The overall goal of the first phase of this strategic plan is to reduce the prevalence of overweight and obesity, as measured by Body Mass Index, from 15% to 5% of Monroe County children ages 2-10 by 2017. This will be accomplished through increased physical activity, improved nutrition, engagement of the clinical community, education and advocacy at the local, state and national levels and an integrated, culturally relevant community education campaign.

Over time, GRHF will expand its efforts to include adolescents and families in a nine-county area. Recognizing the complexity of the issues and the need for a sustained commitment, the Foundation also will seek financial and

programmatic support from local, regional and state-level sources to join the Rochester community in improving its economic and health status.



### **Endnotes**

- Olshansky SJ, Passaro DJ, Hershow RC, Layden J, Carnes BA, Brody J, Hayflick L, Butler RN, Allison DB, and Ludwig DS, "A Potential Decline in Life Expectancy in the United States in the 21st Century," New England Journal of Medicine, 352:11, pp. 1138-1145.
- 2 Upstate New York, Grade 3 Oral Health, Physical Activity and Nutrition Survey, 2004.
- 3 U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. The National Survey of Children's Health 2003. Rockville, Maryland: U.S. Department of Health and Human Services, 2005.
- 4 Upstate NY, Grade 3 Oral Health, Physical Activity and Nutrition Survey, 2004. New York City; American Journal of Public Health, 2004;94: 1498. U.S.:NHANES, 1999-2002, Journal of the American Medical Association 2004; 291:2847-2850.
- 5 Mokdad et al., Actual Causes of Death in the United States. 2000. JAMA. 2004;291:1238-1245.
- 6 Olshansky SJ, et.al. Ibid.
- 7 U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. Ibid.
- 8 HEALTHACTION, Monroe County Maternal/Child Health Report Card, December 2003.
- 9 Physical Activity and Health: A Report of the Surgeon General. (Atlanta, GA: US DHHS, Centers for Disease Control and Prevention. National Center for Chronic Disease Prevention and Health Promotion, 1996. http://www.surgeongeneral.gov/topics/obesitycalltoaction/fact\_glance.htm
- 10 United States Department of Agriculture, Economic Research Service, 2005. http://www.ers.usda.gov/data/

- 11 Stanford Report, July 7, 2004, Stanford University. http://news-service.stanford.edu/news/2004/july7/med-tv-obesity-77.html
- 12 A Study of the Relationship Between Physical Fitness and Academic Achievement in California using 2004 Test Results. California Department of Education, April, 2005. http://www.cdc.ca.gov/
- 13 Dwyer T, Sallis JF, Blizzard L, et al. Relation of academic performance to physical activity and fitness in children. Pediatric Exercise Science 2001; 13:225-237.
- 14 Dwyer T, Blizzard L, Dean K. Physical activity and performance in children. Nutrition Review 1996; 54(4, pt II):S27-S31.
- 15 Kennedy E, Davis C. U.S. Department of Agriculture School Breakfast Program. American Journal of Clinical Nutrition 1998; 67(4):798S-803S.
- 16 Geier AB, et. al. The relationship between relative weight and school attendance.
- 17 Gantz, W, et al. Food for Thought: Television Food Advertising for Children in the Unites States. A Kaiser Family Foundation Report, March, 2007.
- Out of Balance: Marketing of Soda, Candy, Sacks & Fast Foods Drowns Out Healthful Messages, California Pan Ethnic Health Network and Consumers Union, September, 2005. http://www.consumersunion.org/pdf/OutofBalance.pdf
- 19 Koplan JP, Liverman CT, Kraak VA, "Preventing Childhood Obesity: Health in the Balance" Committee on Prevention of Obesity in Children and Youth, Food and Nutrition Board, Board on Health Promotion and Disease Prevention, Institute of Medicine of the National Academies, The National Academic Press, 2005. http://www.nap.edu
- 20 Progress in Preventing Childhood Obesity: How Do We Measure Up? Institute of Medicine, National Academies Press, supported by funds from The Robert Wood Johnson Foundation, September, 2006. http://www.nap.edu/

## Promising Interventions Identified by GRHF

- SPARK (Sports, Play, and Active Recreation for Kids) is an intervention for preschool and elementary school children that can be used in all early childhood settings, elementary schools, and after-school programs. The program has a built-in assessment tool that tracks increases in moderate to vigorous physical activity, fitness skills, and student enjoyment. It is the only known program that measures the correlation between increased physical activity and academic performance.
- NAP SACC (Nutrition and Physical Activity Self-Assessment for Child Care Program) is an intervention in child care centers aimed at improving nutrition and the physical activity environment, policies and practices through self-assessment and targeted technical assistance. The goals of the program are to improve nutritional quality of food served, amount and quality of physical activity, staff-child interactions, and center nutrition and physical activity policy. The tool assesses the center on 15 key areas in nutrition and physical activity ranging from minimal to best practice. (In North Carolina, this intervention has been used in concert with Color Me Healthy, noted on page 35.)

### • Three Healthy Start Programs

- *Healthy Start* is a program for 3-4 year olds in child care centers that focuses on changing the nutrition patterns in preschool centers. Measures include blood cholesterol levels, saturated fat intake, nutrition knowledge, and fat content in preschool meals and snacks.
- *Healthy Start: Animal Trackers* is a program that targets children 3-5 years old in preschool center settings and increases the amount of structured physical activity. The program assesses how often activities are implemented and the duration, and the time children spend per week engaged in structured physical activity.
- *Healthy Hops* is a program for 3-5 year olds in child care and preschool settings that teaches children about healthy eating and healthy play, helps children discover the body and its systems, as well as the eating habits that keep their bodies healthy.

- Hip Hop to Health Jr. is a program for 3-5 year olds in child care and preschool settings that teaches children about healthy eating and physical activity, while including sessions for vigorous physical activity. The primary measurement is BMI.
- Color Me Healthy is a program to increase physical activity and improve nutrition for preschool children age 4-5 that stimulates all the senses of young children and is designed for use in family child care homes, Head Start classrooms, and child care centers.
- Eat Well Play Hard is a New York State Department of Health initiative to improve the food, nutrition, and physical activity environment in licensed child care centers and to improve eating and activity behaviors among young children. All child care centers that have taken part in this initiative participate in the Child and Adult Care Food Program. The curriculum targets preschool children, their parents and families, and child care center staff.
- I am Moving, I am Learning is a research-based, developmentally appropriate program designed specifically for Head Start classrooms to prevent and reverse childhood obesity and promote lifelong fitness for children under 5 through increased physical activity and healthy nutrition. The three goals are: increase the quantity and quality of time spent daily in moderate to vigorous physical activity to meet national guidelines for physical activity; improve the quality of structured movement experiences intentionally facilitated by teachers and other adults, including parents; and improve healthy nutrition choices for children every day. The philosophy of the program is that by integrating moving with learning, it results in school readiness. In the two years since launching the program, outcomes indicate significant increases in moderate to vigorous physical activity, and teachers implementing the program have reported losing weight.

### **Greater Rochester Health Foundation Board of Directors**

Essie L. Calhoun

Chief Diversity Officer and Director, Community Affairs

Vice President, Eastman Kodak Company

William G. Clark

President and Chief Executive Officer Urban League of Rochester, NY, Inc.

David C. Heiligman

Retired, former Vice President & Corporate Secretary

RG&E

Bryan D. Hetherington

Chief Counsel

Empire Justice Center

Jean G. Howard Chief of Staff

City Hall-Office of the Mayor

Mark Keogh

Retired, former V. P., Treasurer & Secretary

RG&E, a subsidiary of Energy East

Robert Oppenheimer

Partner

Chamberlain, D'Amanda, Oppenheimer & Greenfield

Carlos R. Ortiz, MD

Senior V.P., Medical Services Hospital Medical Director

Thompson Health System

Louis J. Papa, MD FACP

Partner, Olsan Medical Group

Chris Pulleyn

Strategic Brand Consultant

Martino Flynn LLC

Thomas S. Richards

Corporation Counsel

City of Rochester

Dennis M. Richardson

President & CEO

Hillside Family of Agencies

Geoffrey Rosenberger

Co-Founder & Retired Managing Director

Clover Capital Management

Tammi Shlotzhauer, MD

Physician

Rheumatology Associates of Rochester

Christine Wagner, SSJ, PhD

**Executive Director** 

St. Joseph's Neighborhood Center

Iames H. Watters

Senior Vice President

Rochester Institute of Technology

John Urban

President

Greater Rochester Health Foundation



150 State Street Suite 100 Rochester, NY 14614

Tel: 585-258-1799 Fax: 585-258-1711 www.thegrhf.org