

Obesity, Poverty, and the Case for Community Supported Agriculture in New York State

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Obesity: A National Epidemic

Obesity rates in the United States have risen dramatically during the last decade. The Center for Disease Control (CDC) reports that an estimated 65% of U.S. adults are either overweight or obese (CDC, 2004). National data collected during 1999-2002 shows that one adult in three was considered to be obese, with a Body Mass Index of 30% or higher compared to 23% of adults in 1994 (NHANES, 2004). Among children and adolescents, the increase is also on the rise. Of children and teens ages 6-19, 16% are overweight; this number has tripled since 1980 (CDC, 2004). This consistent increase among young people is especially worrisome due to the fact that overweight youth will likely become overweight adults and will inherit serious health problems.

Sadly, the epidemic in this country is getting worse. Overall, the data on the three objectives of a National Public Health initiative, *Healthy People 2010*, for the weight status of adults and children reflect a trend for the worse. In addition, the three objectives for fruit, vegetable, and grain consumption have shown little or no progress in this decade (CDC, 2004).

Data from New York State

Unfortunately, New York State has not avoided this disease. The state's rates mirror national obesity statistics. Data from 2002 shows that over half (57%) of adult New Yorkers are overweight (CDC, 2004). One in six New York adults is obese. Additionally, the obesity rate among New York adults doubled between 1990 and 2002 (CDC, 2004). For young people who live in New York State, the data remains grim. An overwhelming 28% of New York State adolescents are overweight or at risk for becoming overweight, according to the New York State Department of Health (USDA, 2004).

Causes and Consequences of Obesity

There are several causes that can lead a person to be obese/overweight. They are: 1) Genetic factors; obesity tends to run in biological families, 2) Environmental factors' which include lifestyle and behaviors like patterns of eating and physical activity, 3) Psychological factors; which is when people eat in response to their emotions, such as boredom and depression, and 4) Physical factors; such as symptoms of medical conditions (for example, hyperthyroidism and aging) (NIH, 2004).

For the purpose of this report, we will be examining environmental factors, food access and food choices. According to public health experts, the environment is the most important factor contributing to the dramatic rise in obesity over the last decade. Specifically, increased food consumption is the key factor leading to the rise in obesity (Block, 2004).

According to Edward Sondik, the Director of the Centers for Disease Control and Prevention's National Center for Health Statistics, the effects of the obesity epidemic are just beginning to surface, and they are devastating and will continue to worsen. In emphasizing the severity of the problem of obesity, Dr. Sondik noted that the cost of obesity to the United States in 2000 was more than \$100 billion. Dietary factors are associated with 4 of the 10 leading causes of death—coronary heart disease, some types of cancer, stroke, and type 2 diabetes—as well as with high blood pressure and

osteoporosis. Being overweight/obese can lead to serious health consequences. Type 2 diabetes, heart disease, high blood pressure, stroke, and certain kinds of cancer have all been linked to obesity.

Additionally, obese people experience enormous emotional and psychological suffering, as well as face discrimination and prejudice. Depression is a common characteristic of people who are obese.

The Link Between Poverty and Obesity

Research shows that most health disparities in the United States are linked to differences in socioeconomic status (SES). Studies conducted in several first world countries found connections between income and quality of diet (Drewnowski, 2004).

Public health professionals have established a significant link between being overweight and obese and being poor. “Obesity in America is, to a large extent, an economic issue” (Drewnowski, 2004). The highest rates of obesity in the United States occur among communities with the highest poverty rates and the least education. Although obesity rates have been rising steadily among both genders, across income levels, ethnicities and ages, the burden of the disease remains unequivocally highest among people in the low-income bracket (Drewnowski, 2004).

There has been a great deal of research conducted linking income with obesity in the United States. Several studies are presented in this report to display the diversity of the research, targeting multiple age groups in varied contexts.

In a study conducted by the United States Department of Agriculture (USDA), gender, race, and socioeconomic status were examined in correlation to obesity. Among all groups, body weight has increased substantially over the past decade. Significantly, among individuals considered obese, the prevalence of diabetes, hypertension and heart disease were higher in black individuals, and in individuals with lower education, and consequently, lower SES (Paeratakul et al).

Additionally, public health researchers explored overweight and obese children among low-income families. They found that white children in families with lower incomes were significantly more likely to be overweight than children in families with higher incomes (Alaimo et al, 2001). Another study examined whether participation in the Federal Food Stamp Program (geared toward low-income people) correlated positively with being overweight/obese. Researchers found that women who participated in the program were more likely to be overweight than women who were not participants in the program.

Finally, this sample of data suggests that people who are poor are more likely to suffer from obesity than people who have higher incomes.

Access to Food

One important aspect of this report is *food insecurity*. This concept is relatively new in public health literature and is related to, but distinct from hunger issues. It is defined as “a

limited or uncertain availability of nutritionally acceptable or safe foods” (Drewnowski, 2004). Those in the low-income bracket describe the inability to access healthy and nutritional food, particularly fresh vegetables and fruit. Food insecurity strikes predominately people in lower income communities. Additionally, people who suffer from food insecurity are more likely to be overweight and obese.

In another study, researchers examined the correlation between food insecurity and obesity. They found that among women of child-bearing age, Body Mass Index was significantly higher in women who experienced food insecurity (lack of appropriately healthy food) compared with women in food secure households (Olson, 1999). Public health researchers agree that further exploration examining the links between food insecurity and obesity needs to occur.

Public health researchers at the University of Washington have examined the connections between obesity, food insecurity, and poverty. They report that poor people are more likely to purchase and consume energy dense food, composed of refined grains, added sugars, and fats that represent the lowest cost options available to people. People who are in the low-income bracket and report food insecurity stated that “they had enough [food], but not the kinds of foods we want to eat.” They reported having limited food choices in their communities. Dry foods with a stable shelf life are generally less costly and more available than perishable food, like meat or vegetables and fruit. Studies have been conducted showing that it costs *less* to buy fresh food than fast food, but accessibility is an important issue to consider and must be integrated into the cost of food. Generally, wealthier households buy higher quality meats, more fish, and more fruit and vegetables (Drewnowski, 2004).

Additionally, there have been several studies measuring geographical access to fast food in low-income neighborhoods. These studies indicate that predominately black, low-income neighborhoods were exposed to six more fast food restaurants than predominately white neighborhoods (Block, 2004). Other studies conclude that wealthy and white neighborhoods have more supermarkets and fewer neighborhood grocery stores than poor and black neighborhoods. Supermarkets tend to have more variety and fresher fruits and vegetables than smaller neighborhood grocery stores and bodegas (Block, 2004).

Other elements associated with poor food access, like lack of transportation to supermarkets carrying fresh food, convenience, and lack of time to prepare fresh foods also affect what people eat. Ultimately, low-income communities’ lack of access to fresh fruit and vegetables is one of the key reasons for poor diets, and thus obesity among poor people.

Time to Take Action: Innovation and Creativity

As the overweight/obesity rates continue to increase, Federal and State government plans are being drafted to address the issues. One of the main objectives of the Federal *Healthy People 2010* program is to lower obesity rates among adults and maintain healthy weight rates in both young people and adults.

New York State is currently developing a comprehensive state obesity prevention plan, and the state legislature recently passed legislation establishing the Childhood Obesity Prevention Plan which includes community based nutrition, physical activity programs, and obesity prevention strategies in food assistance and health education and recreation programs (CDC, 2004).

State and Federal programs are important starting points for developing obesity prevention plans. These plans can potentially incorporate exciting new ways to address the obesity epidemic.

Several innovative programs have been piloted in urban areas to provide improved food access to poor communities. For example, in Seattle, Washington a program was developed as part of the urban farmers' market. Fruit and vegetables were delivered to low-income, homebound senior citizens who signed up for the plan. The highly successful project was designed to be easily replicated (Johnson et al, 2004). Additionally, there are several projects in Brooklyn, New York linking community farming, community education and farmers' markets in neighborhoods that do not have supermarkets or other sources of fresh food (McMillan, 2004). There are also projects throughout New York State that link low-income communities with fresh locally grown food (Hunger Action Network of NYS, 2004).

Finally, it is imperative that low-income neighborhoods and communities be targeted in plans to address these issues, as these communities are overrepresented among the overweight. Public health researchers have found that when developing community programs, the targeted community must be involved in planning the programs from the inception and be involved in the implementation of these programs. In this way, communities are invested in the project from the beginning and have "buy-in" to ensure participation in the program.

The Case for Community Supported Agriculture

Community Supported Agriculture (CSA) is an innovative, affordable way to connect people in low-income communities to fresh fruit and vegetables. CSAs allow local farmers to sell their produce directly to consumers. CSAs could potentially play an important role in decreasing rates of obesity in New York State.

The CSA model was developed several decades ago, when small farmers needed to find creative ways to sustain themselves and their farms economically. By purchasing a share of the harvest before the harvest begins, CSA members develop a relationship to the farmer who grows the food and the land on which it grows (Just Food, 2004). Communities share harvest risks with the farmers; they are also directly involved in creating their own food security.

Small farmers in New York State continue to struggle to have viable business enterprises. They are often excluded from or priced out of the usual wholesale distribution channels and are further threatened by intense development pressure. CSAs offer local farmers a secure

market to sell their produce and allow them to focus on their crops (Just Food, 2004). There are now more than 1,000 CSAs in the United States and their popularity is growing.

At the same time, for many New Yorkers who have little or no access to quality produce in their neighborhood, CSAs provides nutritional, affordable food. CSAs address both these problems: 1) The difficulty that small farmers face sustaining themselves economically, and 2) Low-income communities' lack of access to fresh food and vegetables.

There are several barriers that make it difficult for a low-income family to join a typical CSA (Shute, 2004). However, through creative strategic planning, myriad solutions to these barriers have evolved. For instance, several New York CSAs have instituted a "Revolving Loan Fund," which is a fund to pay the farmer for a certain number of CSA shares upfront instead of every member having to pay a lump sum. Low-income members can then make small payments into the Revolving Loan Fund throughout the CSA season, avoiding the burden of paying a lump sum. Additionally, subsidies and scholarships are offered to low-income families, often through a sliding-scale share price. Community-wide fundraising events are often held to help subsidize low-income shares, as well. Just Food has also worked to enable many CSAs to accept Food Stamp payments in New York City.

Accessibility is another challenge that low-income families face. Often the CSA distribution site is near public transportation; delivery and carpooling systems have been instituted by several CSAs (Shute, 2004).

There are many states (Wisconsin, California, etc.) where CSAs are an important part of the food security movement and have joined in the struggle to provide low-income communities with healthy food.

Conclusion

National and state data instruct professionals in the public health field and the food security/sustainable agriculture movements to join forces to fight the obesity epidemic that overwhelmingly affects low-income communities. We need to create programs that involve the community, are affordable, and most importantly, give all people access to fresh, healthy food.

Community Supported Agriculture is an exciting, innovative model that empowers both farmers and CSA members. In New York State, CSAs are one of the few programs that offer low-income people access to fresh fruit and vegetables. The expansion and addition of new CSAs can continue to improve New Yorkers' access to wholesome healthy foods.

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Founded in 1982, the Hunger Action Network of New York State is a statewide membership organization of direct food providers, advocates, communities of faith and low-income individuals whose goal is to end hunger and its root causes, including poverty, in New York State. Hunger Action combines grassroots organizing at the local level with state level research, education, and advocacy.

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