What Must New York Do Now to Prevent Obesity?

Food Policy Recommendations from the NYU Nutrition and Obesity Policy Research and Evaluation Network
January 2011

The NYU Nutrition and Obesity Policy Research and Evaluation Network (NOPREN) is a group of faculty from across New York University, dedicated to the development and dissemination of policy recommendations to address nutrition and obesity prevention, with a focus on racial and ethnic minorities in urban settings. This brief outlines some of our best evidenced-based multilevel policy recommendations for reducing obesity rates through food and nutrition policy, particularly around access to healthy food, taxes/pricing, and marketing to children.

Introduction

Obesity is a major public health challenge. Currently, 34% of Americans over age 20 are obese, and 34% are overweight. After steadily rising over the last two decades, obesity rates among adults have recently began to stabilize, however it is too early to tell if this trend will continue.

Being obese increases one’s risk of developing serious illness, including diabetes, hypertension, high cholesterol, stroke, heart disease, certain cancers, and arthritis. The tripling of the obesity rate among children is extremely serious. Currently, more than 23 million U.S. children and teens—nearly 1 in 3 young people—are overweight or obese; this prevalence approaches 50% in some minority populations. Childhood obesity increases the risk of developing high cholesterol, hypertension, respiratory ailments, orthopedic problems, depression and Type 2 diabetes. Overweight adolescents have a 70-80% chance of becoming overweight or obese adults.

There is an increasing recognition that our social, cultural, and physical environments tend to encourage inactivity and unhealthy eating. As researchers, experts, and policy makers, there are things we can do to change the “food environment” – to make sure there are healthier choices available to everyone and to encourage people to choose them. In essence, we can make the healthier choice the easier choice. In this brief we consider some things New York State and City can do to address this significant public health problem—environmental and policy approaches to address obesity.

The latest data place New York State’s overall obesity rate at 24.2%. Treating obesity-related disease costs New Yorkers about $7.6 billion per year. Currently, every household in the state pays $771 annually towards obesity-related health care costs. However, obesity does not affect all of New York’s communities equally. Variations in neighborhoods,
such as the types of food readily available and the neighborhood features that encourage physical activity, are major contributors to obesity rates, and create disparities across communities. Racial and ethnic minority communities and low-income communities have the highest obesity rates. In the U.S. as a whole, 34% of adults are obese; for Blacks, the rate is 44% and for Hispanics it is 39%. In New York, Manhattan has the lowest obesity rate, while some upstate counties have the highest. Within New York City, obesity rates have remained steady and relatively low at a rate of 8% in areas of the highest socio-economic status (SES) (Upper East Side, Chelsea, West Village) In contrast, areas with lower SES rates (e.g., East Harlem, areas of the South Bronx and Central Brooklyn) have obesity rates surpassing 30%.

In this brief we present ideas that can help New York curb the trend in rising obesity rates, through policies related to increasing access to healthy food, changing taxes/pricing, and curtailing marketing to children. Any one approach will necessarily take time to make a measurable impact. And, some of the recommended approaches might not be fruitful in the end. But we must do what we can with today’s best available evidence to institute changes to protect the health of New Yorkers. It is also imperative that we continue to study if, and how, these changes impact the health of New York residents.

**Improve Access to Healthy Food in New York State**

We can use policy in several ways to change food environments in areas with the highest rates of obesity. Variation in obesity rates is linked to variation in the food environment. People living in low-income and minority neighborhoods face measurable inequities with respect to access to full-service supermarkets and to healthy foods. Census tracts that have a supermarket have lower proportions of obese and overweight residents than census tracts that do not have a supermarket, and in New York City, obesity rates are connected with the density of healthy food options in the neighborhood. Rather than supermarkets, farmers’ markets, or other fresh food sources, many low-income communities offer easy access to unhealthy foods through fast food restaurants and corner stores stocking mostly unhealthy snack foods and sugar-sweetened beverages.

**What We’ve Learned**

New York City has taken a lead in offering tax credits and other incentives to developers willing to build full-service supermarkets in “food deserts” (areas lacking supermarkets), and in working with corner stores to stock and promote healthier products. There is no data from the U.S. yet regarding the way new supermarkets in food deserts impact healthy eating. Evidence indicates that for those in an urban area, the most influential shopping is quite close by. These residents’ lack of access to a car or similar transportation is a particular obstacle to accessing healthy fresh food.

There is some evidence to support the impact of renovating and restocking corner stores. The New York City Department of Health and Mental Hygiene (DOHMH), for example began the “Healthy Bodegas Initiative,” which helps corner stores (“bodegas”) in low-income areas to offer and promote fresh fruits
and vegetables, whole grain bread, low-fat milk and dairy, and other healthier items. Through this program, 21% of the participating stores began selling low-fat milk and 45% reported that low-fat milk sales increased. Further, 46% of participating bodegas expanded their fruit and vegetable selections, and 32% of stores reported increased fruit sales, and 26% reported increased vegetable sales. Similar results were seen from related programs in Maryland, North Carolina, California, and the White Mountain and San Carlos Apache Reservations in Arizona. In the Apache Healthy Stores program, customers who were exposed to the stores purchased and ate more healthy foods than customers who were not. They were also more likely to decrease eating certain unhealthy foods. Taken together, these studies provide encouraging evidence that store-based interventions are an effective way to reach people in low-income communities.

**Recommended Strategies**

- Use zoning restrictions to prohibit new fast food restaurants in specific areas. Restrictions can address the density of fast food in an area, the proximity to schools, or the type of retail space, for example.
  - Offer more tax credits, loans, and economic development incentives for supermarkets to build in underserved areas. For examples, see NYC’s Food Retail Expansion to Support Health, and Pennsylvania’s Fresh Food Financing Initiative.
  - Offer incentives for renovations and improvements to existing supermarkets and corner stores, including increasing fresh foods, decreasing unhealthy foods, putting healthier foods at eye level or doing promotions and advertising for healthy items.

  For example, see NYC’s Healthy Bodega Initiative.

- Support farmers’ markets and green carts and/or mobile produce trucks through zoning and incentives. (A bill was passed by NY state senate in 2009 to offer construction help, planning grants, revolving loans, and construction guarantees but was vetoed by Governor Patterson in June 2009.)
  - Help these vendors to acquire technology for EBT cards and credit/debit cards. (For example, Illinois just signed the “Farmers Market Technology Improvement Act” (HB 4756) into law.)

- Provide support for NY’s farmers. Legislate to protect farm land, link farmers to local schools and institutions that are interested in fresh local food, help them to purchase technology for EBT/credit/debit cards, and link them to greenmarket and to greencarts in NYC. (For example, Illinois just passed a bill establishing a “Farm to School Electronic Database” that links interested farmers and schools (SB615)).
Implement Tax and Pricing Changes

The price of healthy food has been steadily increasing over the last few years, while unhealthy food items have become increasingly inexpensive. Sugar-sweetened beverages (SSBs) in particular have become widely accessible—in terms of their affordability and availability in stores, restaurants, vending machines, etc.—and the daily intake of calories from sugary beverages has increased dramatically over the last decade. In 2006, children ages 2 to 18 consumed over 225 calories from sugar-sweetened beverages each day, while adults’ daily intake from sugar-sweetened beverages was about 211 calories. This change presents a real opportunity to try leveraging taxes, or prices, to nudge people to make healthier choices.

In January 2010, Governor Paterson proposed a tax of about 18% on sugar-sweetened beverages that was rejected. A similar proposal was introduced the prior year, but it, too, was rejected. This “penny-per-ounce” tax would have been levied on all non-diet soft drinks, including fruit drinks containing less than 70% fruit juice. In addition to New York, Philadelphia, California and Massachusetts have recently considered implementing or increasing the existing tax on sugar sweetened beverages. None of these proposals succeeded.

What We’ve Learned

The research suggests there is real potential for a tax on SSB to decrease obesity, if implemented properly. A recent study conducted by the U.S. Department of Agriculture (USDA) suggests that a 20% tax on all sugar sweetened beverages could lead to an average loss of 3.8 pounds per year among adults, and 4.5 pounds among children. This individual weight loss could reduce the prevalence of obesity from 33.4% to 30.4%, and overweight from 66.9% to 62.4% among adults. The prevalence of childhood overweight could fall from 16.6% to 13.7%. A tax of one cent per ounce on sugar-sweetened beverages would contribute to lowered obesity rates across New York State. With such a tax, consumption of these beverages is estimated to be reduced by at least 10%, which, according to the NYC DOHMH, could translate into a reduction of 10 pounds of excess weight gained over a 5-year period. In addition, this policy would reach those New York communities with the greatest need: racial and ethnic minorities are more likely to consume sugar sweetened beverages than Whites, as are low-income individuals versus those with higher income.

There is admittedly much we do not know about the use of taxes to curb obesity. Much depends on the level of the tax. A literature review conducted by the USDA concluded that taxes at their current rate, on average 5.2% (which is very small) are not effective in reducing the consumption of soft drinks among children and adults. This, however, may be due to the fact that people are not aware of the fact that their drinks are being taxed, and because the current taxes are minimal. A recent study found that a small tax on sugar-sweetened beverages sold in vending machines on school grounds can be effective in reducing their consumption by children, and lead to minor BMI reductions. These findings are particularly applicable to children from low-income families, African Americans, or those who are at risk for overweight. The authors predict that higher taxes on sugary beverages would have a greater impact on sales to these groups.
Recommended Strategies

- Implement taxes on all sugar-sweetened beverages, syrups, and powders sold to retailers, at a rate of 1 cent/ounce across the state (New York State’s 2010-11 Executive Budget contained such proposal). Consider methods to highlight the tax so consumers are well aware of the additional costs.
- Earmark the funds for obesity-prevention efforts. A 2010 legislation in California (SB 1210), which calls for a tax of one cent for every teaspoon of added sugar, specifically states that the money raised by this tax be spent on childhood obesity prevention initiatives.
- Consider other ways to apply taxes to obesogenic products such as snack foods.
  - In an experimental study setting, taxes on calorie-dense foods led to a significant reduction in their purchases. Calories from fat, in particular, experienced lower sales when taxes were present, while the sale of high protein foods increased.

Control Marketing to Children

Children and adolescents under the age of 19 are a rapidly growing segment of the U.S. population, as well as a powerful consumer group. This makes them an attractive target for food marketers. In fact, because of their growing buying power, minority youth are the most frequent target of marketing efforts.

Food marketers use television commercials, Internet and radio, video games, event sponsorship, toys, movies, billboards, product-placements, in-store promotions, and more to reach their target audience. Some food companies are known for giving away toys with their products, making them highly attractive to children. Most of the advertised food products are nutrient-poor, and high in fat, sugar, and sodium.

What We’ve Learned

Studies show that even very young children are influenced by food advertising. Children as young as two have demonstrated a preference for foods they see on television commercials versus non-advertised foods. Preschoolers describe foods that feature cartoon characters on the packaging as better tasting than the same foods without the animations. In one study, simply placing an “Elmo” sticker on broccoli led 50% of kids to choose the broccoli instead of a chocolate bar for a snack (versus 22% who chose the broccoli when there was no sticker). In another study, more than half of children ages 4 to 6 who tasted two identical packages of gummy fruit snacks and graham crackers – one package with a sticker of Dora the Explorer, Shrek, or Scooby Doo added – said the food from the packages with the characters actually tasted better than those without. And earlier this year, after the Shrek image was used to promote Vidalia onions, their sales tripled.
Recommended Strategies

Advertising of food to children has come under considerable public scrutiny, as increasing evidence suggests that exposure to these ads increases the likelihood of a child becoming obese. There are several steps New York State can take to monitor and restrict food advertising to children:

- Implement a ban on toy giveaways with particularly unhealthy meals, leaving them available for healthy meals. Santa Clara County, California, prohibits toy giveaways with unhealthy fast food meals, and other constituencies are considering similar legislation. Since toys and giveaways function as lures to bring children into restaurants, perhaps ban toy giveaways from fast food restaurants altogether.

- Ban advertising on public property. Massachusetts bans alcohol advertising on public property, specifically targeting buses, and bus stops, and subways. Massachusetts’ law mentions public transportation specifically because of the large number of people taking public transportation. Since so many New York City’s residents—including children—depend on public transportation, they are all at risk for exposure to food advertising.

- Prohibit food companies from sponsoring school activities, including sports teams, events, after-school programs, supplies, report cards, etc.

- Consider limits on billboards advertising food to young children, and possibly banning all fast food ads. McDonald’s ads, for example, may appeal to very young children just because they are familiar with the brand.

- Implement public health campaigns counter-advertising, encouraging healthy eating and discouraging unhealthy eating.

  - For example: The New York City Department of Health and Mental Hygiene recently launched a media campaign, called “Pouring on the Pounds” which depicts how much sugar an average soda contains, and warns against weight gain and elevated diabetes risk associated with the consumption of sugar-sweetened beverages. The campaign consists of posters featured in subway cars. One could mandate that these ads be featured at the point of purchase.

References


25. New York City Department of Health and Mental Hygiene. (n. d.) The Sugar-Sweetened Beverage Tax, Obesity and Health.


NOPREN is a special interest project within NYU’s Prevention Research Center, funded by the Centers for Disease Control and Prevention under cooperative agreement number 1-U48-DP-001946.

Visit http://www.nopren.org/pilotprojects/nyuprc.html or contact the NYU NOPREN coordinator at Courtney.Abrams@nyumc.org for more information.

This brief was prepared by Dr. Brian Elbel (NYU NOPREN’s Principal Investigator), Kamila Kiszko, and Courtney Abrams. Many thanks to our wonderful faculty network who guided its content and development.

The findings and conclusions do not necessarily represent the official position of the Centers for Disease Control and Prevention.