

Every child and family matters.

Children's Nutrition

Children's Health Series

April 2006

Factors in the social and physical environments in which children live affect their health and development. Over time, multiple influences determine whether children will reach their full potential as physically and emotionally healthy adults. This paper is one in a series on children's health produced by SCAA to explore programs and policy interventions that can support the development of healthy children in New York State.



Introduction

Good nutrition is necessary for the development of the brain and the body before a child is born and in the early years of life. Eating the right nutrients at the right time during growth increases a child's potential. Yet, the physical, behavioral and cognitive development of too many children in New York is threatened by inadequate nutrition.

Even as obesity has emerged as a major public health threat, researchers are learning how income, food access, physical activity and family interact to increase the likelihood of childhood obesity. While there are some early indications that living in poverty compounds the social, emotional and health risks that accompany childhood obesity, it is clear that both individuals and society will pay a significant price in financial costs and in human suffering if the trend toward obesity is not reversed.

Overview

- Available child nutrition programs for children in households below 185% of poverty are underutilized. While 70.3% of low-income children eat a free or reduced price lunch at school, only 23.7% of the eligible children are served by the school breakfast program. Even fewer are served by the summer food program (19.8%), because there are so few sites operating.
- State data reveals that while about half of two to five -year-olds in New York consume the recommended servings of fruit a day, only 3% consume the recommended servings of vegetables a day.(9) Only 24% of adolescents indicate that they eat at least five fruits or vegetables per day.(8)
- In 2003, slightly over 22% of the two to five-year-olds participating in New York's Women, Infants and Children (WIC) program were obese or overweight. In 2004, 21% of third grade school children in upstate New York and 24% in New York City were obese. (9)

Burden of Poverty

The 21% of New York children living in poverty are less likely to eat foods that provide adequate nutrition than their more affluent peers. In low-income families, the need to pay for housing, utilities and health care can compete with the need for nutritious food ("heat or eat"). About 10% of New Yorkers, more than 2 million people, live in "food-insecure" households; those without the financial or other resources to buy enough food at some time during a month.(4)

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Food insecure households are more likely to be located in neighborhoods that don't have stores selling healthy foods or reliable transportation. Families often cope by visiting food banks/pantries, relying on less expensive processed foods (which are often higher in fat and lower in nutritional quality) and eating fewer fruits, vegetables and dairy products. Children in households with limited incomes are at increased risk for various chronic diseases because they eat fewer of the nutrients necessary to maintain good health.(3) Cultural norms or lack of awareness about healthy eating can also lead to food choices that don't meet the nutritional needs of children.

Children have poor nutrition for many different reasons but the negative impacts are magnified by such factors as lack of parental support, social stressors and being uninsured.

Nutrition and Child Development

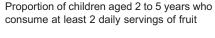
Diet influences all facets of a child's growth: physical, mental, cognitive, and psychosocial. Brain development can be restricted by even mild-malnutrition but chronic under-nutrition can lead to life-long cognitive limitations and behavioral impairments.(5)

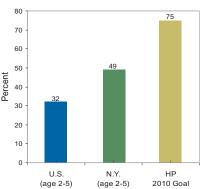
- Malnourished children often exhibit extreme behaviors that can be aggressive or passive, anxious or apathetic, withdrawn, or characterized by irritability.(11) Continuous low nutritional intake may have a negative effect on critical development stages including parent-child interaction, attachment, play, and learning.(5)
- Poor nutrition weakens the body's ability to fight off common infections leading to longer absences from school and increased medical costs.
- Overweight children are stigmatized by their peers and sometimes even by parents and teachers, leading to low self-esteem, negative body image and depression. This can affect their ability to socialize well with others and to feel comfortable in a classroom setting.(10)
- Overweight children and adolescents have an increased frequency of risk factors for heart disease, such as high cholesterol and high blood pressure, compared to children with a healthy weight. For the same reason, Type 2 diabetes, previously considered an adult disease, has increased dramatically in children and adolescents.(11)
- Healthy mothers are fundamental to the growth and development of their children. Many nutrition programs target expecting and parenting mothers to ensure children are born healthy and receive the nutrition they need early in life.

Nutrition Programs for Women and Children

Food Stamps

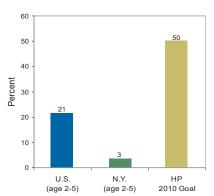
The Food Stamp Program helps low-income households buy the food they need for a nutritionally adequate diet. The Federal Government funds programs that are operated by state and local social services. An eligible





Source: NYS Strategic Plan for Overweight and Obesity Prevention, 2004, p. 54.

Proportion of children aged 2 to 5 years who consume at least 3 daily servings of vegetables, with at least 1/3 of them being dark green or orange vegetables.



Source: NYS Strategic Plan for Overweight and Obesity Prevention, 2004, p. 54.

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household must meet certain standards of income and resources, work requirements, and citizenship status.

Women, Infants and Children (WIC) Program

The Special Supplemental Nutrition Program for Women, Infants and Children (WIC) provides nutritious foods to improve diets, information on healthy eating, and referrals to health care and other services to low-income women and children up to age 5. The program has been proven to: increase the number of women receiving prenatal care, reduce the incidence of low birth-weight and fetal mortality, reduce anemia, and enhance the nutritional quality of the diet of participants.

National School Lunch and School Breakfast Programs

The National School Lunch (NSLP) and School Breakfast (SBP) Programs reimburse schools providing meals to eligible children. All children may participate although household income determines whether they receive free or reduced price meals or whether they pay full cost. Research shows that children who participate in these programs eat better than children who do not participate. Studies also conclude that students who eat school breakfast increase their scores on academic and cognitive tests.

Summer Food Service Program

The Summer Food Service Program (SFSP) is an entitlement program that provides funds for eligible sponsoring organizations to serve meals to low-income children when school is not in session. SFSP sites can provide up to two meals (breakfast and lunch or breakfast and dinner) or one meal and a snack. Many sites provide educational enrichment and recreational activities that help children continue to learn and stay safe when school is not in session.

Child and Adult Care Food Program

The Child and Adult Care Food Program (CACFP) is a key source of support for nutritious meals and snacks in child care centers, family child care homes, Head Start, after-school programs, shelters and adult day care centers. The program provides reimbursement for food and meal preparation costs, ongoing training in the nutritional needs of children, and onsite assistance in meeting the program's nutritional requirements.



Government, school, industry and health professionals all need to do their part to give parents a fighting chance at helping their children eat well, be active and maintain a healthy weight.

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New York State Program Participation*

	Number	Percent
	Served	Eligibles Served
Food Stamps	1.7million	48%
WIC	459,504	55%
School Lunch	930,000	71%
School Breakfast	300,000	23.7%
Summer Food	310,000	20.2%

^{*}most recent data available

New York State Nutrition Consortium - www.hungernys.org

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References

- (1) Alaimo, K., Olson CM, Frongillo EA, "Food Insufficiency and American School-Aged Children's Cognitive, Academic, and Psychosocial Development." Pediatrics 108: 44-53, 2001.
- (2) Brown JL, Pollitt E, "Malnutrition, Poverty and Intellectual Development." Scientific American, February 1996.
- (3) The Consequences of Hunger and Food Insecurity for Children: Evidence from Recent Scientific Studies. Waltham, Mass.: Center on Hunger and Poverty, Brandeis University, June 2002. www.centeronhunger.org.
- (4) Household Food Security in the United States, 2004-ERR-11. Economic Research Service: United States Department of Agriculture. www.ers.usda.gov
- (5) Hunger Harms Brain Development: Scientific Research Links Nutrition and Brain Development. Waltham, Mass.: Center on Hunger and Poverty, Brandeis University, June 2005.
- (6) Kleinman, RE, Murphy JM, Little M, Pagano M, Wehler CA, Regal K, Jellinek MS, "Hunger in Children in the United States: Potential Behavioral and Emotional Correlates." Pediatrics 101, January 1998. www.pediatrics.org
- (7) Koplan, Jeffrey P., et. al., eds. Preventing Childhood Obesity: Health in the Balance. National Academies of Sciences: National Academy Press, 2005. www.nap.edu.
- (8) New York State Maternal and Child Health Services Title V Block Grant Program 2006 Application/2004 Report: New York State Department of Health, 2005. www.health.state.ny.us.
- (9) New York State Strategic Plan for Overweight and Obesity Prevention, 2004: New York State Department of Health, 2004. www.health.state.ny.us
- (10) Obesity, Food Insecurity and the Federal Child Nutrition Programs: Understanding the Linkages. Food Research and Action Center, October 2005, p. 9. www.frac.org
- (11) The Surgeon General's Call to Action Prevent and Decrease Overweight and Obesity. Rockville, MD: US Department of Health and Human Services, 2001. www.surgeongeneral.gov.

Recommendations:

- Increase outreach efforts to ensure that more eligible children enroll in school lunch programs.
- Provide start-up grants for school breakfast and summer food programs to assist school districts and sponsors who want to operate programs.
- Create universal breakfast programs in all schools where 50% of students are eligible for reduced-price or free school meals.
- Require school districts to make summer food programs available in or near all elementary schools if any school in the district meets the criteria. The programs can be operated either by the school or another organization.
- Increase funding for Nutrition Outreach and Education Programs (NOEP) to increase enrollment in food stamps and child nutrition programs. Increase the number of Summer Food Program sites available.
- Provide funding to make transportation available to children who
 do not have a way to get to summer food program sites.
- Require only healthy snacks and foods in school vending machines.

Conclusion

A healthy child must have an adequate diet, rich in all the important nutrients. Emerging research shows that even mild to moderate nutritional deficits early in life can diminish developmental achievements.

There are nutrition and food programs for mothers, infants and children but narrow eligibility guidelines and inadequate funding make these programs inaccessible to many in need. New York's policymakers must be creative in designing solutions since the federal statutes and regulations governing these programs preclude some of the easy fixes. Policies must enhance nutrition program availability and accessibility in neighborhoods. Families, schools and communities must be engaged in developing and implementing solutions for the duel problems of inadequate nutrition and obesity.



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