



# FRAC Focuses: Obesity and Poverty A Periodical Review of Research and Action Issue 1 | March 2010

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## Welcome

The Food Research and Action Center (FRAC) is committed to supporting healthy eating as well as eliminating food insecurity among low-income people. For this reason, we are pleased to welcome you to the first issue of *FRAC Focuses: Obesity and Poverty*. This periodical e-newsletter will focus on obesity as it relates to low-income children and adults, looking at the intersection of obesity, income, food insecurity, the federal nutrition programs, and federal food and nutrition policy.

Each issue will highlight relevant research and reports recently released from academia, government agencies, and health and advocacy organizations, and include a hyperlink to the research abstract, or full research article or report (if available for free). Additional newsletter content may include media reports, special analyses, and new resources and tools.

Until now, no electronic or print communication consistently addressed obesity, poverty, and food insecurity in an interrelated manner, or focused on the special situation of low-income people. The studies digested in this newsletter capture the complexity of the interplay among income, gender, race and ethnicity, food security status, weight, and federal nutrition programs. They capture the real world struggles of low-income families, explaining how program changes might help or hurt them; how the evidence is often so mixed that it may be premature to draw fixed conclusions as to cause, much less change policy; how stress in low-income families and parents' often heroic efforts to protect children complicate the picture; and how disparities based on income, race, and education interact with obesity and food insecurity.

This newsletter is also timely given President Obama's goal to end childhood hunger in America by the year 2015 – just five years away – and the First Lady's effort to end childhood obesity within a generation. FRAC has outlined seven essential strategies to meet the 2015 goal. They focus both on

improving and expanding the nation's nutrition programs, and bolstering the economy and strengthening supports for families in order to move more out of poverty. Many of these strategies will also address obesity and improve health – for example, “make sure all families have convenient access to reasonably priced, healthy food” (strategy 7). Fighting hunger and fighting obesity are not mutually exclusive actions. In many respects they are complementary. We can, and must, do both by ensuring that all Americans have access to enough affordable, nutritious foods for good health. (Click [here](#) for more information on achieving the 2015 ending childhood hunger goal.)

We hope that this newsletter will be a useful resource to you, whether you are an advocate, policymaker, researcher, with the media, and otherwise interested in the complex interconnections between hunger, obesity, and poverty. Please contact us if you have any comments or questions about the newsletter, or FRAC's other efforts.

We gratefully acknowledge the support of Kaiser Permanente for making this newsletter possible.

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## New from FRAC!

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### **Issue Briefs for Child Nutrition Reauthorization (No. 1): *How Improving Federal Nutrition Program Access and Quality Work Together to Reduce Hunger and Promote Healthy Eating***

Both childhood food insecurity and childhood obesity are widespread in the U.S. The latest Census Bureau/USDA data available tell us that 16.7 million children live in food insecure households (22.5 percent of the nation's children), and nearly one-quarter of 2- to 5-year-olds and one-third of school-age children are overweight or obese. Too often reducing hunger and promoting healthy eating among children are viewed as competing interests in the federal child nutrition programs. In fact, as this new policy brief from FRAC shows, they can be mutually reinforcing and complementary strategies: expanding participation in federal nutrition programs not only reduces childhood hunger but it markedly improves children's diets. At the same time, improving the quality of these federal programs, with a primary goal of preventing obesity, may well increase participation. A summary of the policy brief is provided below.

There is considerable evidence about the effective role that participation in the federal nutrition programs plays in alleviating hunger and providing the nutrients children need for growth, development, and overall health. For example, research shows that low-income school-aged children who eat federally-funded school breakfast have better overall diet quality (as measured by the USDA's Healthy Eating Index) than those who eat breakfast elsewhere or skip breakfast.<sup>1</sup> There also is a growing body of research on how the programs impact obesity. A nationally representative study of U.S. school students found that school breakfast participation was associated with a significantly lower body mass index (BMI, an indicator of excess body fat).<sup>2</sup>

Clearly, the federal nutrition programs are important programs with well-documented nutritional and health benefits. Even though the programs can be even stronger, it is critical to increase participation in these programs given the associated benefits. One way to achieve this – and to strengthen the programs – is to improve quality. For example, an evaluation of 69 diverse schools in the California Fresh Start Program found that increasing fruit and vegetable availability in the School Breakfast Program increased breakfast participation.<sup>3</sup>

For descriptions of these and other studies, click [here](#) for the FRAC issue brief *How Improving Federal Nutrition Program Access and Quality Work Together to Reduce Hunger and Promote Healthy Eating*.

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<sup>1</sup> Basiotis, P. P., Lino, M., & Anand, R. S. (1999). Eating breakfast greatly improves schoolchildren's diet quality. *Nutrition Insight*, 15. Alexandria, VA: U.S. Department of Agriculture, Center for Nutrition Policy and Promotion.

<sup>2</sup> Gleason, P. M. & Dodd, A. H. (2009). School breakfast program but not school lunch program participation is associated with lower body mass index. *Journal of the American Dietetic Association*, 109(2 Supplement 1), S118-S128.

<sup>3</sup> Woodward-Lopez, G. & Webb, K. (2008). *Evaluation of the California Fresh Start Program: Report of Findings*. Berkeley, CA: University of California – Berkeley, Center for Weight and Health. Available at: [http://www.californiahealthykids.org/Pages/articles/CFSP\\_FINAL.pdf](http://www.californiahealthykids.org/Pages/articles/CFSP_FINAL.pdf). Accessed November 3, 2009.

## Summary of FRAC's Analysis of a New Study on Food Stamps and Obesity

A recent study by Jay Zagorsky and Patricia Smith on SNAP/Food Stamp participation and weight gain received considerable attention in the press and on Internet blogs, with some erroneously reporting that the study shows that SNAP/Food Stamps cause weight gain or obesity. Yet, a number of published studies have found no relationship between participation and obesity, or found that participation was actually protective against obesity. (For a summary of several studies, see the USDA report [Obesity, Poverty, and Participation in Food Assistance Programs](#).) A summary of FRAC's analysis of the Zagorsky and Smith study is provided below. Contact Heather Hartline-Grafton ([hartline-grafton@frac.org](mailto:hartline-grafton@frac.org)) for the full analysis.

Using national data from the 1980's to 2002 and controlling for many variables (e.g., socioeconomic, demographics, county characteristics), Zagorsky and Smith examined whether or not the SNAP/Food Stamp program contributes to weight gain among participants. The main finding of the study was that female SNAP/Food Stamp participants had higher body mass index (BMI) than women not enrolled in the program, suggesting that the program may contribute to obesity. The relationship was stronger among White women than Black women, and no significant association was found for men. A secondary finding was that BMI increased before, during, and after SNAP/Food Stamp participation, but the increase was greatest during program participation.

There are a number of caveats in this study that were often omitted in the press. First, the study found an *association* between SNAP/Food Stamp participation and weight gain, not a *causal* relationship. Second, the authors controlled for a variety of variables, but not food insecurity – a key limitation of the study. Third, the authors were unable to control for selection bias in their study design – that is, those who were eligible and enrolled in the program may have been different in important ways from those who were ineligible, or eligible but not enrolled.

Overall, this study simply cannot be said to show that SNAP/Food Stamp participation contributes to weight gain, especially since there was only a significant finding for women (particularly for White women), not men or children. In fact, the findings are in many ways consistent with what we already know about obesity and low-income women. A number of research studies in the U.S. have found associations between food insecurity and obesity as well as low income and obesity - and the strongest, most consistent evidence is for women.

**Source:** [Zagorsky, J. L. & Smith, P. K. \(2009\). Does the U.S. Food Stamp Program contribute to adult weight gain? \*Economics and Human Biology\*, 7\(2\), 246-258.](#)

## Research Highlights

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### ***Federal Nutrition Programs***

- **Impact of possible changes to the SNAP/Food Stamp program on eating patterns.**

Researchers at the University of California–Davis explored the potential impact of limiting SNAP/Food Stamp purchases to healthy foods such as fruits, vegetables, whole grains, lean meat and fish, low-fat milk, and water. They concluded that while such purchasing restrictions may improve diets and reduce obesity among *some* SNAP/Food Stamp participants, a number of potential consequences make it an “ineffective and inefficient” strategy on its own. For example, these purchasing restrictions may diminish the perceived value and attractiveness of the program, causing a decline in SNAP/Food Stamp participation. Eligible, “healthy” foods with their higher demand could increase in price, while ineligible, “unhealthy” foods with their lower demand could drop in price. As a result, healthy food consumption may increase among SNAP/Food Stamp participants, but decline among non-participants, especially low-income non-participants who cannot afford the higher-priced items. Updates to the list of eligible foods could also increase SNAP/Food Stamp administrative costs, given the continuous stream of new and reformulated products on grocery store shelves. Finally, the impact on unhealthy food purchases and consumption is unknown because ineligible foods could still be purchased using other payment methods.

**Source:** [Alston, J. M., Mullally, C. C., Sumner, D. A., Townsend, M., & Vosti, S. A. \(2009\). Likely effects on obesity from proposed changes to the U.S. food stamp program. \*Food Policy\*, 34\(2\), 176-184.](#)

- **Obesity prevalence among low-income, preschool-aged children.**

New data suggest that obesity rates have stabilized among low-income, preschool children (2 to 4 years of age) participating in federally funded health and nutrition programs, possibly as a result of state and local WIC efforts targeting childhood obesity. Rates are still too high, however, and are especially high among Hispanic and American Indian/Alaska Native children. These are the main conclusions from the recent Pediatric Nutrition Surveillance System (PedNSS) - a state-based surveillance system that monitors young children enrolled in federally-funded health and nutrition programs (primarily WIC). In 1998, 12.4 percent of low-income preschoolers were obese, compared to 14.5 percent in 2003 and 14.6 percent in 2008 – an increase of 0.43 percentage points annually during 1998-2003, but only 0.02 percentage points annually during 2003-2008. The 2008 prevalence of obesity varied greatly by racial and ethnic group: 21.2 percent for American Indian/Alaska Native children, 18.5 percent for Hispanic children, 12.6 percent for non-Hispanic White children, 12.3 percent for Asian/Pacific Islander children, and 11.8 percent for non-Hispanic Black children. Of the 44 states, territories, and Indian tribal organizations providing data for 2003-2008, 50 percent saw an increase in obesity, 32 percent had no change in obesity rates, and 18 percent experienced a decrease in obesity.

**Source:** [Sharma, A. J., Grummer-Strawn, L. M., Dalenius, K., Galuska D., Anandappa, M., Borland, E., Mackintosh, H., & Smith, R. \(2009\). Obesity prevalence among low-income, preschool-aged children - United States, 1998-2008. \*Morbidity and Mortality Weekly Report\*, 58\(28\), 769-773.](#)

- **Obesity prevention practices and environments in Head Start.**

Most Head Start programs exceeded federal performance standards for healthy eating and gross motor activity, based on the first national survey of Head Start obesity prevention practices and environments. Head Start - the largest federally-funded early childhood education program in the U.S. - serves almost 1 million low-income preschoolers and each Head Start program is required to participate in the Child and Adult Care Food Program (CACFP) or the national school meals programs. The 1,583 Head Start programs participating in the 2008 study represented 828,707 children (89 percent of all Head Start children) in 13,607 centers (90 percent of all Head Start centers). Of participating programs, 94 percent reported serving fruit other than 100% fruit juice daily, 97 percent reported serving non-fried vegetables daily, 70 percent reported serving only low fat milk, and 74 percent of full-day programs reported having structured gross motor activity for at least 30 minutes per day. Geographic region was one of the only factors associated with healthy eating and gross motor scores, with higher healthy eating scores in the

New England, Pacific, and Middle Atlantic regions, and higher gross motor scores in the Mountain and Pacific regions. In addition, programs that used a school food service as the source of meals rather than a non-school food service or program-hired cook had significantly lower healthy eating scores and perceived control over foods served, and were less likely to receive 100 percent reimbursement of food costs from the USDA.

**Source:** [Whitaker, R. C., Gooze, R. A., Hughes, C. C., & Finkelstein, D. M. \(2009\). A national survey of obesity prevention practices in head start. \*Archives of Pediatrics and Adolescent Medicine\*, 163\(12\), 1144-1150.](#)

### ***Food Insecurity and Obesity***

- **Obesity and its relationship with food insecurity and stress among low-income adolescents.**

This new study points to the need to address stress in obesity policies and programs targeting low-income adolescents. The three-city study (Boston, San Antonio, Chicago) examined the independent relationships and interactions between food insecurity, individual, maternal, and family stressors, and overweight or obesity in a sample of 1,011 low-income, predominantly minority adolescents and their mothers. Higher levels of individual stressors for the adolescent significantly increased the likelihood of being overweight or obese. On the other hand, maternal stressors, family stressors, and adolescent food insecurity were not directly linked to adolescent weight status. However, maternal stress *in combination* with adolescent food insecurity significantly increased an adolescent's probability of being overweight or obese.

**Source:** [Lohman, B. J., Stewart, S., Gundersen, C., Garasky, S., & Eisenmann, J. C. \(2009\). Adolescent overweight and obesity: links to food insecurity and individual, maternal, and family stressors. \*Journal of Adolescent Health\*, 45\(3\), 230-237.](#)

- **Food insecurity and obesity among low-income preschoolers.**

Household food insecurity was associated with obesity among girls, but not boys, in a study of 8,493 one-month to 5 year-old children participating in WIC; however, the direction of the relationship varied by age. Among boys and girls in this racially diverse sample from Massachusetts, 30.7 percent were from food insecure households (8.3 percent with hunger) and 18.4 percent were obese. In statistical models that controlled for race-ethnicity and maternal education, girls 2 years of age and younger from food insecure households (with or without hunger) had 35 percent *lower* odds of being obese than those from food secure households. Girls 2 to 5 years of age from food insecure households with hunger had 47 percent *higher* odds of being obese compared to those from food secure households. Food insecurity was not associated with obesity among boys in either age group or when hunger was absent among 2 to 5 year-old girls. More research is needed to confirm and understand the underlying reasons for such gender and age differences.

**Source:** [Metallinos-Katsaras, E., Sherry, B., & Kallio, J. \(2009\). Food insecurity is associated with overweight in children younger than 5 years of age. \*Journal of the American Dietetic Association\*, 109\(10\), 1790-1794.](#)

### ***Food Choices and Coping Strategies***

- **Food resources, food choices, and food-related behaviors of low-income women.**

New findings from focus groups of low-income women offer rich insight into their food resources, food choices, and food-related behaviors, only a few of which can be highlighted here. Researchers at the University of Minnesota conducted fourteen 90-minute focus groups with a total of 92 racially diverse, low-income women who had at least one child 9 to 13 years of age living in their household. Over 75 percent of the women were overweight or obese, 83.7 percent were currently enrolled in SNAP/Food Stamps, and about three-fourths rated their diet and health as fair or good. SNAP/Food Stamp benefits were generally perceived as insufficient, often providing for only enough food to last 2 to 3 weeks of the month. Women

coped with inadequate food resources in a number of ways, including sacrificing their own nutrition so that their children could eat. Furthermore, many women reported struggling with stress and depression, and some were frustrated that they could not afford more healthful food items like lean meats and fresh produce. High food prices, insufficient food stamp benefits, and limited access to larger retail food stores were commonly reported barriers to food choice, especially for the more healthful foods that many would prefer to purchase. Similarly, addressing health concerns (e.g., diabetes, hypertension) or maintaining health through diet presented financial and emotional challenges for the women – some were able to modify their diets, but others found it difficult to do so because of the perceived added cost. Regardless of health problems, many women thought eating a healthful diet was unrealistic on a limited budget and that it was more important to focus on quantity than nutritional quality. While most had primary responsibility for food purchasing and preparation, some had limited nutrition knowledge and cooking skills, leading to irregular and unhealthy food-related behaviors for their families. Finally, many of these low-income women believed genetics and metabolism had a stronger influence on health and weight than dietary intake.

**Source:** [Dammann, K. W. & Smith, C. \(2009\). Factors affecting low-income women's food choices and the perceived impact of dietary intake and socioeconomic status on their health and weight. \*Journal of Nutrition Education and Behavior\*, 41\(4\), 242-253.](#)

## ***Environmental Influences***

- **A systematic review of built environments and obesity in disadvantaged populations.**

A systematic review of the literature identified several promising strategies to reduce obesity-related health disparities in disadvantaged communities, including increases in supermarket access, places to exercise, and neighborhood safety. The review focused on U.S. studies published between January 1995 and January 2009 that included at least one of three target groups (poor or low-socioeconomic status, African-Americans, Hispanics). Based on the 45 selected studies, food store proximity, exercise facility access, and crime- or traffic-related safety were the built environment characteristics with the greatest influence on obesity and related behaviors for the target groups. Unfortunately, the target groups also lived in worse built environments with respect to these three characteristics and in neighborhoods with the most fast food outlet access. Unlike the aforementioned built environment characteristics, low walkability did not explain obesity-related health disparities among the target groups because it was not strongly associated with obesity or lack of physical activity, nor were target groups at a disadvantage with respect to walkability.

**Source:** [Lovasi, G. S., Hutson, M. A., Guerra, M., & Neckerman, K. M. \(2009\). Built environments and obesity in disadvantaged populations. \*Epidemiologic Reviews\*, 31, 7-20.](#)

- **A systematic review of the food desert literature.**

Disparities in healthy food access by income and race exist in the U.S., based on a systematic review of the food desert literature. By contrast, the evidence for food deserts in socioeconomically disadvantaged areas was weak for four other high-income countries (Australia, Canada, New Zealand, United Kingdom). The evidence was also inconsistent for disparities in the U.S. with regard to neighborhood food prices. Canadian researchers reached these conclusions after searching for and critically reviewing relevant market-basket and/or geographic studies written in English or French. Of the 49 studies in five countries that met their inclusion criteria, 34 were conducted in the U.S. and all were published between 1966 and 2007. Given that food deserts may contribute to disparities in dietary intake and diet-related health outcomes, the authors proposed a variety of policy and planning strategies to address socioeconomic inequalities in nutrition environments, such as facilitating food store entry into underserved communities.

**Source:** [Beaulac, J., Kristjansson, E., & Cummins, S. \(2009\). A systematic review of food deserts, 1966-2007. \*Preventing Chronic Disease\*, 6\(3\), A105.](#)

- **Impact of an urban food store intervention on consumer knowledge, attitudes, and behavior.**

A food store intervention in Baltimore, Maryland is one of the first to show positive, albeit modest, impacts on consumers in low-income, urban communities. The Baltimore Healthy Stores (BHS) program was implemented in two supermarkets and seven corner stores in low-income, predominantly African-American areas of East Baltimore. The 10-month program had several components, including increased stocks of healthier food options, point-of-purchase promotions (e.g., shelf labels for healthy options), and interactive, in-store nutrition education sessions. Based on pre- and post-assessments of 84 respondents in intervention and comparison areas, BHS did not significantly improve scores for food knowledge, label reading, healthy eating self-efficacy, healthy eating intentions, or healthy food purchases. The program, however, did show several positive impacts: an increase in the healthfulness of food preparation methods, a trend toward improved intentions to make healthy food choices with increased intervention exposure, and an increased likelihood of purchasing a promoted food as a result of BHS shelf labels. The authors attributed the modest impacts to moderate exposure to intervention materials.

**Source:** [Gittelsohn, J., Song, H. J., Suratkar, S., Kumar, M. B., Henry, E. G., Sharma, S., Mattingly, M., & Anliker, J. A. \(2009\). An urban food store intervention positively affects food-related psychosocial variables and food behaviors. \*Health Education and Behavior\*, Epub ahead of print \(December 17, 2009\).](#)

- **Neighborhood-level disadvantage and child dietary quality.**

Children living in disadvantaged neighborhoods in a metropolitan area of Alabama consumed significantly more sodium, calories from fat, and trans fat than those from more advantaged neighborhoods. While there were no significant differences in caloric intake, the lower dietary quality associated with neighborhood disadvantage may lead to increased disease risk later in life. These are the main findings and conclusions from a study examining the impact of census tract neighborhood-level disadvantage (e.g., poverty, unemployment, social and physical disorder) on the dietary quality of 182 racially-diverse children 7 to 12 years of age. Although the sample was relatively small and not representative of all children, the study adjusted for a variety of demographic, socioeconomic, and dietary characteristics in statistical models and is one of the only studies to examine neighborhood disadvantage and dietary quality among children.

**Source:** [Keita, A. D., Casazza, K., Thomas, O., & Fernandez, J. R. \(2009\). Neighborhood-level disadvantage is associated with reduced dietary quality in children. \*Journal of the American Dietetic Association\*, 109\(9\), 1612-1616.](#)

## ***Disparities***

- **Dietary energy density, costs, and links to education and income.**

Consistent with previous research, high energy density diets (i.e., more calories per gram of food) were associated with lower micronutrient and fiber intake, higher total and saturated fat intake, and lower costs per calorie in a sample of 164 predominantly White staff and faculty at a large Pacific Northwest university. Diets of lower energy density were of higher nutritional quality, but more expensive per calorie. Specifically, women and men consuming the lowest energy density diets spent 41 percent and 17 percent more per calorie, respectively, than those with the highest energy density diets. In statistical analyses that controlled for a variety of confounding variables, education and household income were negatively associated with energy density, but positively associated with energy-adjusted diet costs – meaning that people with more education or more income consumed diets of higher nutritional quality (lower in energy density) and, as a result, spent more per calorie. Education was a stronger predictor in these analyses than household income. The statistical models also revealed that women consumed diets significantly lower in energy density and significantly higher in energy-adjusted diet costs than men.

**Source:** [Monsivais, P. & Drewnowski, A. \(2009\). Lower-energy-density diets are associated with higher monetary costs per kilocalorie and are consumed by women of higher socioeconomic status. \*Journal of the American Dietetic Association\*, 109, 814-822.](#)

- **Obesity and depression in U.S. women by income.**

Obese women with lower income had increased odds of experiencing moderate/severe depressive symptoms compared to their wealthier counterparts. This was just one of many findings from a study examining the relationship between obesity and depression among a nationally representative sample of 1,857 women. Body mass index (BMI) was positively and significantly associated with moderate/severe depressive symptoms and major depression, with progressive increases in the probability of these outcomes beginning at a BMI of 30. In addition to lower income women, a number of other subgroups of obese women were identified as at-risk for moderate/severe depressive symptoms, including those with severe obesity, more chronic health conditions, fair or poor self-rated health status, relatively high education, or age under 65.

**Source:** [Ma, J. & Xiao, L. \(2009\). Obesity and depression in U.S. women: results from the 2005-2006 National Health and Nutritional Examination Survey. \*Obesity\*, Epub ahead of print \(July 9, 2009\).](#)

- **Relationship between socioeconomic status, nativity status, and body mass index among Hispanic children.**

Among Hispanic children, the relationship between household income and body mass index (BMI) varied by parents' nativity status. This important distinction comes from a nationally representative study of 12,696 children that examined BMI in kindergarten (baseline BMI) and the change in BMI from kindergarten through fifth grade (growth in BMI). After controlling for parental education, household income was negatively associated with BMI in kindergarten among children of White and Hispanic natives, but positively associated among children of Hispanic immigrants. The authors argued that this difference between children of Hispanic natives and immigrants reflects cultural differences immigrant parents bring from their countries of origin. The study also found that parental education was negatively associated with growth in BMI for White and Hispanic children, although the association was much weaker for the latter and not explained by the large proportion of immigrants in the Hispanic sample.

**Source:** [Balistreri, K. S. & Van Hook, J. \(2009\). Socioeconomic status and body mass index among Hispanic children of immigrants and children of natives. \*American Journal of Public Health\*, 99\(12\), 2238-2246.](#)

## New Federal Reports and Resources

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- **USDA Report: *School Meal Program Participation and Its Association with Dietary Patterns and Childhood Obesity***

A recent report from the USDA examined the impact of school meal program participation on student dietary behaviors and body mass index (BMI) in the 2004-2005 school year, based on the nationally representative Third School Nutrition Dietary Assessment Study (SNDA-III). Findings from SNDA-III have been published before, but this report offers additional information on student dietary intake and patterns, including extensive data tables on the location and timing of eating occasions as well as the consumption of low-nutrient, energy-dense (LNE) foods and beverages. Several key findings are highlighted here.

National School Lunch Program (NSLP) participation was associated with reduced intake of sugar-sweetened beverages (elementary and secondary schools) and a lower proportion of calories from LNE foods and beverages (elementary schools). NSLP participation was not significantly related to BMI or risk of obesity.

Although school breakfast participants consumed more calories from LNE baked goods and desserts, at breakfast, and for the entire day, they also had a significantly lower BMI than nonparticipants - possibly because participants consumed some type of breakfast or because calories were spread more evenly throughout the day. The inverse breakfast-BMI association was primarily concentrated in non-Hispanic Whites.

**Source:** [Gleason, P., Briefel, R., Wilson, A., & Dodd, A. H. \(2009\). \*School meal program participation and its association with dietary patterns and childhood obesity. Contractor and Cooperator Report, 55.\* Washington, DC: U.S. Department of Agriculture, Economic Research Service.](#)

- **Institute of Medicine Report: *Local Government Actions to Prevent Childhood Obesity***

A new report from the Institute of Medicine and National Research Council highlights the important role of the federal nutrition programs in improving diets and reducing obesity among vulnerable populations. *Local Government Actions to Prevent Childhood Obesity* outlines nine healthy eating strategies and six physical activity strategies for local government officials to consider in childhood obesity prevention efforts. Many of the healthy eating strategies address improving access to and consumption of healthy, safe, and affordable foods. Specific action steps related to the federal food programs include: increasing participation in all of the federal nutrition programs (e.g., school meals, WIC, SNAP), promoting breastfeeding in WIC clinics, implementing strong nutrition standards for foods and beverages available in programs run or regulated by the government (e.g., child care facilities, afterschool programs), and encouraging farmers markets to accept SNAP/Food Stamp and WIC benefits.

**Source:** [Institute of Medicine. \(2009\). \*Local Government Actions to Prevent Childhood Obesity.\* Washington, DC: The National Academies Press.](#)

- **CDC Report: *State Indicator Report on Fruits and Vegetables 2009***

Fruits and vegetables are important for health promotion and disease prevention, yet a new report from the Centers for Disease Control and Prevention (CDC) shows that U.S. consumption falls short of recommendations, and more policy and environmental strategies are needed to support and promote consumption. No state (including the District of Columbia) meets national objectives for fruit and vegetable consumption. Only 32.8 percent of adults and 32.2 percent of adolescents meet fruit recommendations (2 or more daily servings), and only 27.4 percent of adults and 13.2 percent of adolescents meet vegetable recommendations (3 or more daily servings). Besides these behavioral indicators, three different policy and environmental areas were examined at the national and state level in the report, including the availability of healthier food retail in communities, availability of healthier foods and nutrition services in schools, and food system support. Nationwide, 72 percent of census tracts

have a healthier food retailer within the tract or within a half-mile of tract boundaries. Eight states have state-level healthier food retail policies. With regard to the school environment, only 21 percent of middle and high schools offer fruits (not juice) and non-fried vegetables as competitive foods. (Competitive foods are those foods and beverages sold outside of the federally-reimbursed school meals programs, often in a la carte lines, student stores, or vending machines.) State-specific figures for these and other behavioral indicators and policy and environmental indicators are included in the report.

**Source:** Centers for Disease Control and Prevention. (2009). *State Indicator Report on Fruits and Vegetables 2009*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. Available at:

[http://www.fruitsandveggiesmatter.gov/health\\_professionals/statereport.html](http://www.fruitsandveggiesmatter.gov/health_professionals/statereport.html). Accessed on November 9, 2009.

- **CDC Data Release: County-Level Adult Obesity Data**

The CDC has released the first county-level estimates of adult obesity in the U.S., providing an important resource for local communities to better understand and address this major public health problem. Prior adult obesity estimates were only available at the national and state level, yet many obesity and nutrition policies and interventions are designed and implemented at the local level. These new local estimates for all 3,141 counties in the U.S. will be very influential in identifying areas with populations at high risk for obesity and tailoring services and programs accordingly. For the Web-based tool with county-level figures, click [here](#).

**Source:** [Gregg, E. W., Kirtland, K. A., Cadwell, B. L., Burrows, N. R., Barker, L. E., Thompson, T. J., Geiss, L., & Pan, L. \(2009\).](#)

[Estimated county-level prevalence of diabetes and obesity - United States, 2007. \*Morbidity and Mortality Weekly Report\*, 58\(45\), 1259-1263.](#)