

Notes from Health Affairs article: “New Neighborhood Grocery Store Increased Awareness of Food Access But Did Not Alter Dietary Habits or Obesity”

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The recent passage of the 2014 farm bill has spurred new discussion and attention to food and agriculture policy. In particular, the media has focused considerable attention on the issue of healthy food access, its relationship to obesity, and policies improving access to healthy, fresh food. Research demonstrates that without access to healthy food, a nutritious diet is out of reach. The following document responds to the recent media attention to the newly published Health Affairs article: “New Neighborhood Grocery Store Increased Awareness of Food Access But Did Not Alter Dietary Habits or Obesity,” and provides key responses to the media framing of the study and the policy implications.

Media Coverage of Health Affairs Study Fails to Tell the Complete Story

The media, while focusing on the relationship of access directly to BMI, fails to acknowledge key facts acknowledged by the study authors, including perceptions of food quality, accessibility, price, and dietary behavior.

- ***There was a “significant improvement” in residents’ perception of choice and quality of fresh fruits and vegetables, and a “moderate improvement in residents’ perception in food accessibility” (page 283).*** “[W]e found a significant improvement...respondents perceived greater grocer choice and quality and fruit and vegetable choice and quality to have improved, and the cost of fruit and vegetables was perceived to have decreased” (page 286). “The direction of change is generally positive” (page 289).
- ***The authors acknowledge that other studies and reviews of studies “have reported mean increases” in the size of daily fruit and vegetable portions (page 289).***
- ***As most people who have tried to change their eating habits and lose weight can attest, the process takes time.*** “Food buying habits and BMI might be slow to change” (page 286). In fact, ***some positive change in eating habits was observed.*** The study did report some increase in the consumption of fresh fruits and vegetables, and while the change was not found to be statistically significant, the lack of statistical significance could be due in part to the inadequate “power” of the study—the small sample size, short timeframe, limited demographic covered, etc (page 289).

The Study Authors Acknowledge “The Study Has Important Limitations” (page 285)

- ***“It is a pilot study in a single intervention community, and the sample was not large” (page 285).*** While the authors indicate that the baseline sample size was nearly 1,500, the number of participants at follow-up who adopted the store as their primary store was only 83. This is a significant shortcoming since the majority of the analysis and findings are based on individuals who did not report regularly shopping at this store. Further, the sample size was homogenous and had to possess a landline telephone in order to participate. Most respondents were over the age of 54 (mean age) and were predominantly female (79%) and African American (86%).
- ***“The direction of change is generally positive (page 289) and “the study might be underpowered, particularly for analyses of adopters versus non-adopters, which reduces our ability to make robust statements about effectiveness.”*** Quote can be found on page 285; definition of adopter is found on page 288.

- **Authors cannot apply the conclusions of this study to other populations; findings can only draw conclusions about the older residents covered by this study given the small size of the study and the limited socio-demographic population that it examined.** The neighborhood covered by the study had “high proportions of university students and older retired people who had lived in the neighborhood for a long time.” Moreover, over time the composition of the study sample would tilt toward the older, more stable residents limiting whether the study’s conclusions could be applied to a general population: “the composition of the study sample meant that the generalizability of our findings to other settings with different socio-demographic profiles might be limited” (p.285). *Note that the study did not include or represent Latinos.*
- **Study covered an extremely short time period to see changes in BMI:** tracking only a **six to nine month** time period, the authors acknowledge that the new supermarket could impact eating habits and BMI, but nine months may be too short a time to detect the impact: ***“It may not be surprising that we did not see significant changes in BMI: our follow-up period might have been too short to detect such changes”*** (page 289). The authors continue, ***“Food buying habits and BMI might be slow to change. Thus, the short follow-up period might limit our ability to detect an intervention effect”*** (page 286). *Note that there was a three year delay in the construction of the supermarket, significantly shortening the time period covered by the study (page 286).*
- **Given prior studies that have identified positive associations between healthy food access and improved eating habits, more comprehensive studies are to draw general or broad conclusions.** “This and other remaining uncertainties suggest that our findings urgently require confirmatory studies, with longer follow-up periods, in other locations and populations” (page 289).

Addressing the Nation’s Obesity Crisis Requires Multifaceted Intervention Strategies

Healthy food access is an essential part of the equation to reduce obesity. Complementary measures, including healthier school foods, integrating physical activity into people’s daily lives, and nutrition education programs, are only effective in conjunction with improving access.

- **Study authors recognize that changes in eating habits and reduction in BMI may require access and other complementary activities “focused on price and availability that could help bridge the gap between improvements in people’s perceptions of accessibility and behavior change”** (page 289).
- In Philadelphia where multiple strategies are being deployed to address childhood obesity, it has been reported that the **overall obesity rate among Philadelphia schoolchildren fell 4.7 percent between the 2006-07 and 2009-10 school years**, according to a study published in Preventing Chronic Disease.
http://www.phila.gov/health/pdfs/Childhoodobesity_pressrelease_9512_final.pdf

Policies Promoting Healthy Food Access Have Both Health and Economic Impacts

- More than 29 million Americans do not live within reasonable access to a full-service supermarket and low-income and communities of color are disproportionately impacted by limited and inadequate access to full service supermarkets and grocery stores.

- Decades of public and private disinvestment have left low-income neighborhoods to contend with abandoned supermarket buildings and a glut of fast food and convenience stores, cutting them off from all the economic benefits that accompany a local grocery store.
- Bringing healthy food retail into neighborhoods that have historically lacked access is a key community economic development strategy approach to improve the food environment, create jobs, and advance a community's well-being. Healthy food retail can serve as economic anchors in a community, generating new income while attracting complementary stores and services like banks, pharmacies, and restaurants.
- **New programs authorized in the Farm Bill signed by President Obama on Friday, February 07, 2014, hold promise for helping to advance better eating habits and a reduction in BMI over time.** The Farm Bill includes a new program— Food Insecurity Nutrition Incentives—which will provide participants with additional SNAP benefits for the purchase of fresh fruits and vegetables. This program will help reduce the barrier of affordability when fresh fruits and vegetables become available for purchase and in pilots in different states have indicated statistically significant positive associations between healthy food access and produce consumption.
- The farm bill also includes a \$125 million authorization for the national Healthy Food Financing Initiative (HFFI). To improve access, the program invests in the development and expansion of food retail businesses and food hubs that can improve health and bring economic benefits to communities that currently lack access.
- HFFI was modeled after the highly successful Pennsylvania Fresh Food Financing Initiative (FFFI). The PA FFFI channeled \$190 million into communities across the state. These investments helped to launch 88 new and improved fresh food retail outlets and resulted in over 5,000 jobs and improved access to healthy foods in many communities including the neighborhood that was subject of the study.
- The Fresh Grocer supermarket, the store examined in the study published by Health Affairs, is located in one of the poorest neighborhoods in Philadelphia and it is thriving: store managers report produce sales and offerings that are on par with stores located in more affluent communities, as well as growing year-to-year increases in overall produce sales. Presently, the store's produce department does about \$50,000 in sales a week. Not only does it provide much needed jobs, but the arrival of the store even helped attract new businesses to the neighborhood, including a bank and movie theater.
- “We can say that fresh produce purchases in our stores that would be considered ‘food deserts’ are on par with those in our more suburban locations. To us, this indicates that customers are actively seeking out fresh produce and purchasing it. We have seen fresh produce sales increase year after year, and are proud to say we offer more than 400 fresh fruits and vegetables in our stores.” — Carly Spross, Director Of Marketing, The Fresh Grocer, February 4, 2014