Can Mobile Food Truck Vendors Contribute to the Accessibility of Nutritious Foods in Vulnerable Communities?: An Analysis of Public Health Policy

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The abandonment of inner cities by supermarkets and their reluctance to invest in urban areas have forced people from underrepresented populations to purchase foods and snacks from unattractive bodegas. Although there are existing strategies that suggest some increase in access to supermarkets and grocery stores, inner city access to healthy affordable foods remains an issue. While many public health researchers have explored the efficacy of corner store interventions, mobile food truck vendors have received very little attention in the public health literature. However, food truck vendors have interesting features, which makes them a viable venue to increase nutritious food access. We analyze four key components of the food truck vending regulations in five of the most populous cities to demonstrate how local government can use mobile food truck vendors to increase the accessibility of nutritious foods, specifically in poor, urban communities. Diabetes and obesity-related illnesses and deaths in these communities is not just a matter of personal health but a growing public health concern. Hence, it is not enough to propose novel health policies to regulate food truck vendors and hope that we will be able to address the lack of nutritious foods in vulnerable communities — particularly those urban, low-income neighborhoods described in our introduction. This exploratory study shows that more work is needed dealing with the use of mobile food vendors’ municipality regulations to improve access to nutritious foods.

INTRODUCTION

Over the past 15 years, there has been a growing focus on reducing the obesity epidemic in America (Story, et al., 2008). In particular, there is a demand for greater access to nutritious foods and more limitations on energy-dense foods with low nutritional value. There is evidence that the residents of poor neighborhoods will consume healthy foods: the greater the availability of nutritious foods in local bodegas, the greater the intake of those foods (Cheadle, et al., 2008). While there are existing strategies that demonstrate some increase in access to supermarkets and grocery stores, increased access to healthy affordable foods at the ubiquitous bodegas remains an issue (Kaufman, 1999). There are a variety of factors that have historically been barriers to providing nutritious foods to low-income communities. First, the general trend of supermarkets to abandon these communities and their reluctance to invest in urban areas have forced low-income populations to purchase foods and snacks from the limited stock of bodegas (Pothukuchi, 2005). Second, the lack of access to fresh produce is a common nutrition challenge for many low-income urban neighborhoods in which fast food outlets dominate the food landscape (Jones and Bhati, 2011). Third, supermarkets are more likely to carry fresh produce, but they are less likely to be found in low-income neighborhoods and communities of color (Powell et al., 2007; Morland et al., 2002). Fourth, most supermarkets have abandoned the inner city for suburban locations, which offer more land for parking, and easier and convenient access to interstates and highways (Pothukuchi, 2005), not to mention a larger, more moneyed customer base.

While many public health researchers have explored the efficacy of corner store interven-
tions (Burt, et al., 2003), mobile food truck vendors have received very little attention in the public health literature. Food truck vendors, however, have interesting features that make them a viable venue for increasing access to nutritious foods. Because food truck vendors are mobile, they could provide to underserved populations healthy foods, which normally would not be available from local corner stores. Food truck vendors are usually familiar with and are often welcomed in urban areas where large numbers of African American and Latino people reside (Tester, et al., 2010; Taylor, et al., 2000; Cupers, 2006). These vendors understand the communities and understand how to encourage the sale of nutritious foods rather than foods associated with high rates of obesity, diabetes, and circulatory problems (Hedley, et al., 2004). These food trucks can also serve as informal gathering places, providing community generated education about healthy eating habits and share healthy recipes (Little, et al., 2009).

Our review of the literature shows that very little has been researched and discussed about mobile food vendors beyond concerns about hygiene and food sanitation. In one study, Little and Sagoo (2009) assessed the cleanliness of food preparation areas, and the microbiological quality of water used by mobile food vendors. Researchers found that surfaces that were visually dirty, wet, and damaged, and had high levels of bacteria, which is unsanitary according to health standards. In a pilot study, Burt (2010) examined the food handling practices of ten (10) processing mobile food vendors operating in a 38-block area of midtown Manhattan, New York. Researchers found that well over half of all vendors (67%) handled served foods with bare hands. It was also found that seven (7) vendors had cooked meat products stored at unsafe temperatures on non-heating or non-cooking portions of the vendor cart for the duration of the researcher’s observation; four (4) vendors were observed to contaminate served foods by contact with uncooked meat or poultry. Each of these actions violates the New York City Code of Health and potentially jeopardizes the safety of the public. Our review of the literature shows very little has been researched and discussed around the topic of food truck vendors. We address this gap in the literature by analyzing public health policy to see if mobile food truck vendors can contribute to the accessibility of nutritious foods, specifically in poor urban communities.

**FOOD TRUCK VENDING REGULATIONS**

Vending regulations usually consist of standard requirements such as permits and fees, food safety, routes and location of truck vendors, and traffic safety. Food truck vendors normally are regulated at the city level. There are citywide regulations found in each city’s municipal codes. A given city’s approach to food truck regulations ranges from rigidly restrictive to permissive. We examined the municipal codes of a subset of U.S. cities to compare mobile food truck vending regulations. For ease of comparison, we chose five of the nation’s most populous cities ranked by 2009 estimates—New York, New York, Chicago, Illinois, Philadelphia, Pennsylvania, Houston, Texas, and Phoenix, Arizona (Population Division, United States Census Bureau, 2009). Each city’s municipal codes were available online at the city’s own web site. Between January and March of 2011, we searched for all sections pertaining to food truck vendor’s policy to identify language relevant to four major priority areas. These major priority areas are (1) health and safety, (2) permits and fees, (3) location, and (4) whether there are nutrition incentives. From the five-city analysis we identified two cities, Chicago, Illinois, and New York, New York, that had nutrition incentives for mobile food trucks to provide vulnerable populations with healthy foods (see Table 1 below).
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**TABLE 1**
**COMPARISON OF MOBILE FOOD TRUCK VENDORS MUNICIPAL CODES IN THE FIVE MOST POPULOUS U.S. CITIES: 2009**

<table>
<thead>
<tr>
<th>City</th>
<th>Health and Safety</th>
<th>Permits &amp; Fees</th>
<th>Location</th>
<th>Nutrition Regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Are food trucks required to operate from a commissary?</td>
<td>Are truck vendors subject to inspection?</td>
<td>Fees for mobile food truck vendors</td>
<td>Restrictions on duration of vendors stops</td>
</tr>
<tr>
<td>Chicago</td>
<td>Yes</td>
<td>Yes, must pass inspection before license will be issued</td>
<td>$185 every 2 yrs for trucks delivering healthy fruits otherwise $275 payable every 2 yrs</td>
<td>No</td>
</tr>
<tr>
<td>Houston</td>
<td>Yes</td>
<td>Yes</td>
<td>$100 for vendors</td>
<td>May not stop for more than 3 hrs in 1 location in 24 hr period</td>
</tr>
<tr>
<td>Phoenix</td>
<td>Yes</td>
<td>Yes, must be inspected at least every 6 months</td>
<td>$250 for 1st inspection then $30/per yr</td>
<td>may not stop for more than 1 hr on public street</td>
</tr>
<tr>
<td>New York</td>
<td>All vendors operate from commissary</td>
<td>Yes, all vendors must pass inspection</td>
<td>$125 valid for 2 yrs plus have educational brochures</td>
<td>No regulation</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>Yes</td>
<td>Yes, all vendors must pass inspection every 3 months</td>
<td>$300 annually</td>
<td>No regulation</td>
</tr>
</tbody>
</table>

**ANALYSIS OF COMPONENTS FOR FOOD TRUCK VENDING POLICY**

Using the regulatory components of food truck policies concerned with health and safety, permits and fees, location, and nutrition incentives, we now analyze how local government can use mobile food truck vendors to increase access to nutritious foods to vulnerable communities.

**Health and Safety**

Table 1 shows that when it comes to health and safety, the information available from five of the most populous cities show that each does require mobile food truck vendors to undergo inspections and operate from a commissary. A commissary is a centralized location where vendors clean, store, and sanitize their vehicles and equipment (New York City Administration Code, 2008). These requirements show that the local government is committed to protecting the public from food-borne illness and contamination by prescribing a level of hygiene. Since local government already plays an important role in ensuring the safety of food, we argue that additional steps can be taken to encourage increased access to nutritious foods. Local government (health departments, in particular) could periodically evaluate mobile truck vendors to
make sure they stay in compliance with nutritional standards. As an incentive, mobile food truck vendors who meet and stay within the nutritional standard could be eligible for other regulatory incentives. A political gain of implementing this policy is that it would show the local government to be committed not only to food safety, but also to providing access to healthy foods for vulnerable communities. For example, New York City has passed Local Law 9, which provides an incentive for vendors willing to sell exclusively unprocessed foods; vendors seeking these permits have priority on the city’s overall permit waiting list (New York Administration Code, 2008). Since New York passed this law there has been a high demand for these permits.

Permits and Fees

Table 1 reveals that all of the cities for which we have information require food truck vendors to obtain a permit. The fees for these permits vary greatly. While ensuring that food truck vendors have a permit before they can sell their products is an effective way of regulating which food vendors are legally on the road, this also potentially causes a “roadblock” if local laws put a cap on the number of permits, limiting the amount of nutritious foods to accessible to underserved communities.

If we are truly interested in providing healthy foods to underserved communities, one approach would be to disproportionately increase the number of permits for food truck vendors selling nutritious foods in certain areas of the city. This approach would allow more people from underserved communities to have access to nutritionally dense foods. Another policy change that could contribute to the accessibility of nutritious foods in vulnerable communities would be for local government to reduce or waive permit fees for food truck vendors who meet nutritional requirements. For example, in Chicago, Illinois food truck vendors who sell fruits and vegetables pay a reduced permit fee of $185 instead of $475 every two years. This discount on their vending permit results in a savings of $290.

Location

Table 1 also shows that many cities restrict the duration of stops a truck vendor can make while working and a vendor’s hours of operation. For example, Houston, Texas and Phoenix, Arizona specifically restrict food vendors from stopping on a public street in one location for more than three hours in a 24-hour period. This restriction limits the amount of time per day mobile food truck vendors can conduct business and offer nutritious food, while fast food restaurants and other business establishments can operate up to 24 hours per day. In some areas mobile food vendors must obtain written permission from any adjacent or nearby business owners (Houston, Texas Code, 2008). Not only does this prohibitive practice allow business owners (such as fast food restaurant owners) to determine who will sell food products proximate to their establishments, it also may prohibit mobile food vendors from establishing themselves as legitimate businesses and going through the bureaucratic process simply because they are not granted written permission by local business owners.

Our analysis of public health policy for mobile food vendors demonstrates that local government can implement better policies in terms of location regulation. We make the argument that local government should modify their health policy laws to permit mobile food vendors who sell “healthy foods” to work alongside local business owners without obtaining written permission from existing food establishments. This approach would help address the economic
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A disparity associated with access to nutritious foods. Fast food establishments will be present in these neighborhoods, but healthy food vendors will be allowed an opportunity to provide their services as well in neighborhoods most in need of nutritionally dense foods.

Nutrition Regulation

Table 1 shows that only two of the cities in this exploratory study—Chicago and New York—actually provide mobile food vendors with incentives if they provide healthy food to underserved communities. The current policy charges mobile food vendors a reduced permit fee and/or provides that they be given priority on the permit waiting list. While this health-promoting policy is an added bonus for food truck vendors, we also suggest that local government consider other nutrition regulations. One approach is to offer “special permits” that allow food truck vendors to sell healthy foods in city parks, around schools, and in recreation areas as long as they meet all health department guidelines. Food truck vendors who meet these criteria can then be offered the incentive to operate and sell their healthy products in more areas within the city. San Francisco’s Parks and Recreation Department recently requested that if food vendors serving at least 50% “healthier foods” meet the city’s guidelines, those food vendors could qualify for permits to distribute their products in various locations within the city limits (2010). A modification in health policy such as this would encourage food truck vendors to provide products rich in nutrients and low in calories and fats to underserved communities.

CONCLUSION

This exploratory research examined four components of the health policy for mobile food vendors in five of the nation’s most populated cities to determine ways in which local government can use mobile food truck vendors to increase access to nutritious foods in vulnerable communities. Diabetes and obesity-related illness and death in these communities are not just a matter of personal health but also a public health concern. Hence, it is not enough merely to propose novel health policies to regulate food truck vendors and hope that we will be able to address the lack of nutritious foods in vulnerable communities—particularly in low-income urban neighborhoods. As health initiatives continue to be developed, research will be needed to evaluate the effects of these policy changes. Specifically, we need to understand at a population level whether many of these policies actually result in increased access to healthier foods, and whether they lead to an improved dietary intake by low-income consumers. Sustainability and feasibility of mobile food truck vendors also need to be documented and understood especially in light of the impact of rising gas prices. Vulnerable populations that experience a higher prevalence of obesity, such as low-income and ethnic minorities, should continue to be a research priority area. Due to the current obesity epidemic among youth and the fact that students appear to make purchases after school at local bodegas in low-income communities, specifically addressing the relationship of mobile food truck vendors to youth should be an area of exploration for practitioners and researchers in the field.

This research serves as groundwork for further study of the role and benefits of mobile food truck vendors in improved access to nutritious foods. More work is needed to examine and understand the complexities between fully realizing the positive potential of mobile food trucks and not creating undue distress or burdens for municipalities and or food truck vendors themselves.
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