



# DEPARTMENT OF PLANNING

## Healthy Food Assessment: Baltimore City's Public Markets

### Executive Summary

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## EXECUTIVE SUMMARY

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With more public markets than any other U.S. city, Baltimore has a remarkable opportunity to increase the city's availability and accessibility of healthy foods. The six public markets are an integral part of the city; over 4.2 million customers come to the markets a year.<sup>a</sup> Unfortunately, each market is located in or near "food deserts;"<sup>b</sup> three are situated in neighborhoods with over 55% of the households below the poverty line.<sup>1</sup>

Low-income, ethnic minority communities are known to have increased energy intake, poor diets, and adverse health outcomes because of the lack of fresh produce and the abundance of fatty foods through the high number of prepared food sources (PFSS).<sup>2,3,4,5</sup> PFSSs, also known as carryouts, are typically individually-owned, small food stores that serve calorie-dense foods to-go, such as fried chicken, Chinese take-out, and sandwiches.<sup>6,7</sup>

On average, Americans spend more than half of their food dollars on prepared foods.<sup>8</sup> More importantly, African-American adults in Baltimore City consume approximately 200 kcal above the national average, obtaining more than half of their daily energy intake from the city's 786 carryouts.<sup>9,10,11</sup> Efforts must be made to best strategize how public markets can increase the availability of healthy, affordable foods in several of the city's food deserts rather than continue to add to the density of unhealthy prepared foods. This report provides the foundation for accomplishing this by assessing the prepared food environment of all six public markets and providing specific recommendations.

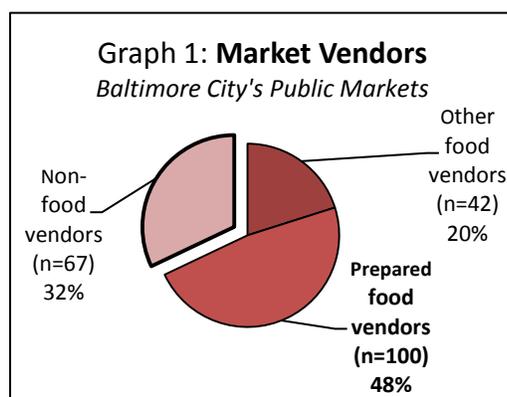
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### *Carryouts make up 70% of all food vendors in Baltimore's public markets*

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The assessment, completed between April and July 2011 at Lexington, Northeast, Hollins, Cross Street, Avenue and Broadway Markets, revealed that Baltimore's public markets are dominated by PFSSs. **Carryouts (n=100) make up 70% of food vendors** and 50% of all market vendors (n=209), **greatly contributing to the existing high density of PFSSs in Baltimore** (Graph 1). Lexington Market, the largest public market, has 54 carryouts.

The results showed that there should have been a greater availability of vegetables, fruits and whole grains. Out of 100 carryouts, 49 had planned and committed on their lease agreements to sell vegetables, fruits and/or meats prepared in low-fat cooking methods but did not offer them at the time of the assessment. Only 33, out of 62 vendors that sold bread, had a whole wheat option. Fried meats, French fries and chips were sold in 40 carryouts. While many carryouts did sell at least one healthy option such as vegetables, only three vendors used menus, or marketing at the point-of-purchase, to emphasize, promote, and encourage customers to purchase these items.



<sup>a</sup> Estimated customer volume from Baltimore Public Market Corporation.

<sup>b</sup> Food deserts are defined as low-income block groups with 40% or more of the residents below the poverty line (household income <\$25,000 per year) and are more than a ¼ mile from a supermarket (Center for Livable Future, Johns Hopkins School of Public Health, March 2010). See attached map.

Some market-specific findings include:

- **Lexington Market:** This market has the highest number of produce stands (n=8) but also the most carryouts (n=54), greatly contributing to the already high density of PFSs in the West Baltimore low-income community (55% live under the poverty line). Further, 22 out of 54 carryouts (41%) did not sell healthier items specified on their leases.
- **Northeast Market:** The market, also located in a food desert, has 20 carryouts and two produce stands. Roughly 60% of the local East Baltimore community lives under the poverty line. Of the carryouts, 50% did not sell the healthier items they specified on their leases.
- **Hollins Market:** Located in West Baltimore, the 6 out of 8 carryouts (75%) in this market planned to but did not sell vegetables, baked chicken, and/or fruits at the time of the assessment.
- **Cross Street and Broadway Market:** Situated on the border of food deserts, these public markets should include a larger selection of healthy options and better promote healthy dietary decisions on their menus. Over 60% of the carryouts in these two markets have seating adjacent to the store, allowing for high visibility of material emphasizing healthy eating.
- **Avenue Market:** This market is also located in a food desert, where 68% of the local community lives under the poverty line. Moreover, 3 out of 5 carryouts (60%) planned to but did not sell garden salads and collard greens as promised on their leases, adding to the dearth of vegetables in the neighborhood's food environment.

Baltimore thus has a phenomenal opportunity to improve the food environment in many of Baltimore's food deserts by targeting efforts to encourage and support the high number of carryouts in public markets.

## INTEGRATING RESEARCH

Individual-focused nutrition interventions, alone, cannot adequately influence dietary decisions without necessary changes to the food environment.<sup>12</sup> Research suggests that programs and policies tailored to impact the food and built environment, by increasing access to healthy foods, most effectively influence low-income, urban communities and ethnic minority groups.<sup>13,14,15</sup>

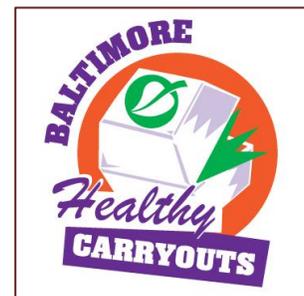


Image 1: BHC logo

The intervention proposed here adopts evidence-based strategies from the Baltimore Healthy Carryouts (BHC) project that have increased healthy food availability and demand specifically in the city's corner stores and carryouts (Image 1). The BHC project is a pilot study directed by Dr. Joel Gittelsohn and Seung Hee Lee, at Johns Hopkins School of Public Health's Center for Human Nutrition. It incorporates point-of-purchase (POP) information using symbolic menu labeling and photographs of healthy foods to increase demand (Image 2).

Evidences suggest that small food store interventions, that use point-of-purchase marketing and pricing and behavioral strategies, have successfully improved dietary knowledge, demand, and supply



Image 2: BHC menu with its green leaf symbol

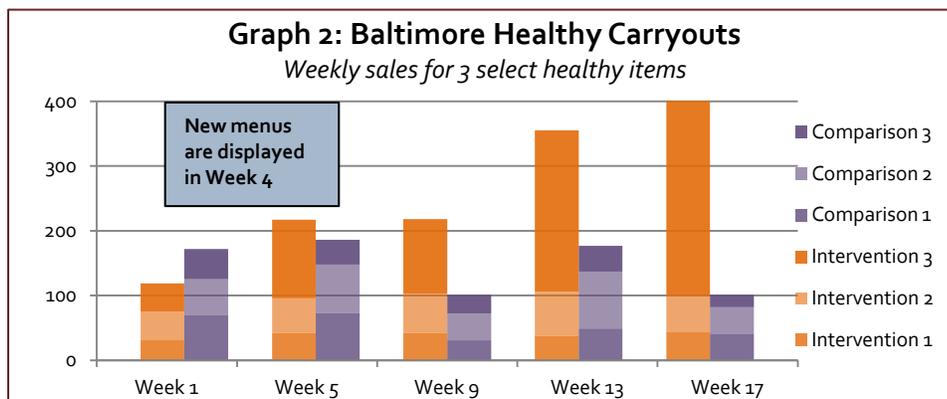
of healthy foods.<sup>13,16,17,18,19</sup> Point-of-purchase (POP) marketing aims to influence customer purchasing decisions at the point where sales are made. Strategic POP messages can be used to effectively promote healthy food choices.<sup>20</sup> Research shows that nutrition environmental interventions particularly in carryouts, which have fewer menu options, have a significant impact on dietary behaviors.<sup>13</sup> Since all PFSs in public markets are carryouts, a multi-pronged intervention that fosters healthier dietary decisions has the potential to significantly impact local community members.

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*Programs and policies can be tailored to increase access to healthy foods in low-income urban communities and reduce health disparities*

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There is evidence that customers favor menu labeling, a form of POP marketing, allowing them to make informed dietary decisions.<sup>21,22</sup> Federal and local policies have pushed for caloric labeling on menus in fast-food chains and restaurants but its effect on positively changing dietary patterns is unclear, particularly in populations who have low-literacy and little understanding of the relationship between calories, diet and health.<sup>23</sup> According to findings from studies in New York City, caloric menu labeling may not have the largest impact on low-income customers.<sup>24</sup> Symbolic labeling of low fat/low cholesterol foods, on the other hand, is a promising alternative for carryout settings. A study in northern Californian restaurants showed significant increases in sales of foods designated by symbols.<sup>25</sup> Similarly, preliminary results from BHC show that there is an increase in sales of healthier items when they are designated as fresh, healthy choices with a green leaf symbol on carryout menus (Graph 2).



In a focus group conducted by BHC, the study coordinators found that calorie labeling was not acceptable in low-income communities and foods with higher calories would be identified as the best deal for the price paid.<sup>26</sup> The team found that store owners were also strongly opposed since they did not have the resources to calculate calories for each product, especially since most are custom ordered. Instead, BHC decided to use a green leaf to designate and highlight healthier items on menus and posters (Image 1 and 2). The idea of using a leaf came as a result of customer interviews and interest in incorporating more greens, like collards and kale, into carryouts. Additional qualitative research showed that an overwhelming majority highly favored the leafy logo because it was associated with the perception of healthy foods.<sup>27</sup>

Evidence-based strategies that have found success in individual stores can also be applied to the public market setting. The current BHC project and other interventions suggest that a combination of POP marketing, interactive nutrition sessions, and increased healthy food availability can positively impact dietary behaviors.<sup>28,29,30</sup> By coupling the results of this food assessment with proven strategies, we can work to increase demand and availability of healthy foods in Baltimore’s six public markets.

## CONCLUSIONS

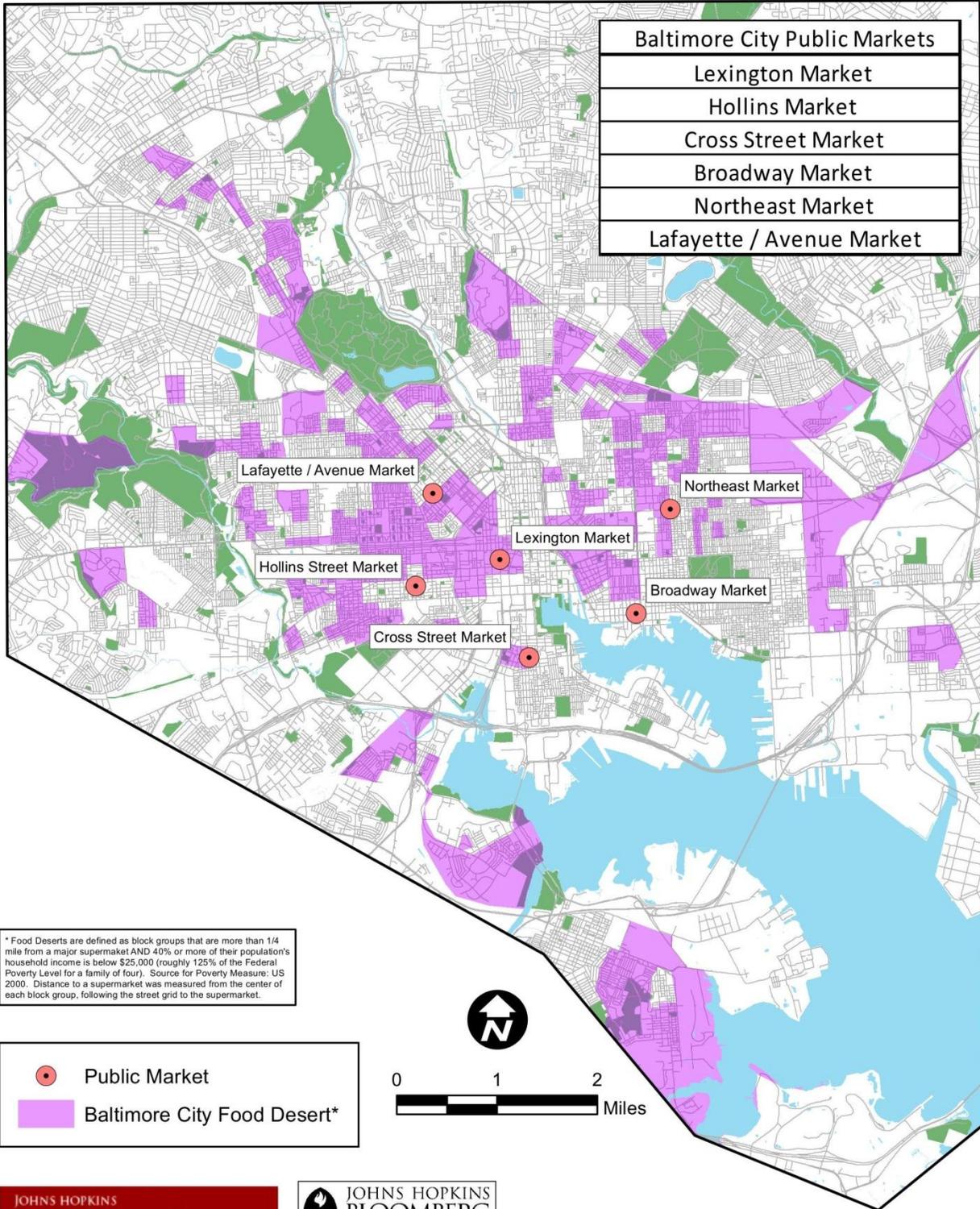
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The results of this assessment emphasize the need to support carryout vendors and get buy-in with other public market stakeholders in order to transform public markets into healthy food centers. The report includes recommendations that are modeled after evidence-based strategies from Dr. Joel Gittelsohn and his team from Johns Hopkins School of Public Health's Center for Human Nutrition. Based on their recommendations and findings from our extensive formative research, we recommend that further initiatives include:

- Healthy menu labeling to raise consumer awareness and demand for healthier entrees, sides and combination meals;
- Vouchers to wholesale suppliers to aid vendors in including low-fat options as planned on leases;
- Community food assessment to further assess how public markets can best improve the community's food environment
- Introduction of day stands for taste testing of promoted items and for selling local produce;
- Evaluation of the initiative's impact on consumer purchasing behavior and availability of healthy foods in public markets.

Future policy implications will include developing formal criteria for healthy carryout certification. Accordingly, carryouts throughout the public markets and city will need to meet the evidence-based criteria to obtain and maintain certification from the City. With the implementation of these recommendations, public markets can become central locations where the local community can access wholesome foods at healthy carryouts and produce stands.

# Baltimore City Food Deserts and Public Markets



\* Food Deserts are defined as block groups that are more than 1/4 mile from a major supermarket AND 40% or more of their population's household income is below \$25,000 (roughly 125% of the Federal Poverty Level for a family of four). Source for Poverty Measure: US 2000. Distance to a supermarket was measured from the center of each block group, following the street grid to the supermarket.

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