Assessing the Impact of Farmers’ Markets
Mentor: Alison Buttenheim, Ph.D.
Overview

- Farmers’ Market Impact Study
- Goals
- Methods
- Preliminary results
- My role
Farmers’ Market Impact Study

- Robert Wood Johnson Health & Society Scholars Pilot Grant Program

- Impact evaluation study of a new farmers’ market in Hunting Park neighborhood

- Address question of whether farmers’ markets lead to higher fruit and vegetable intake
Significance

- Farmers’ markets as solution to lack of access to healthy foods
- President Obama’s $400 million Healthy Food Financing Initiative
- Gap in research

Aims

- Assess the impact of a new farmers’ market in a low-income neighborhood
  - Food shopping patterns
  - Dietary intake
  - Nutrition benefits
- Assess feasibility of “scaling up”
  - Sample refreshment
  - Sample retention
Methods

- Measure impact with pre-post design
  - Wave 1: July 2010 (n=80)
  - Wave 2: October 2010 (n=79)
  - Wave 3: July 2011
  - Wave 4: Fall 2011

- Conduct community-based participatory research
Wave 1 & 2 Results

- Low fruit and vegetable intake
- Minimal awareness of and use of farmers’ markets
- High rates of WIC and SNAP participation
About the Study
This goal of this study is to learn about the diet and food shopping habits of Hunting Park residents.

We are also interested to know whether Hunting Park residents are aware of and shop at local farmers’ markets.

We recruited and interviewed 80 community members in July-August 2010. Half of the participants lived within two blocks of the south-west corner of Hunting Park (“inner circle”). The other half lived in a larger area around the park (“outer circle”).

Participants were the primary food shoppers in the household. We asked questions about diet, food shopping habits, and farmers’ markets.

We re-contacted the same participants in October 2010-April 2011 and asked similar questions. If we could not contact a respondent, we replaced that respondent with a nearby resident.

We plan to interview our respondents again in July 2011 and Fall 2011/Winter 2012.

Study Area

Who Participated?

Race/Ethnicity of Participants

- Black/African-American: 26%
- Latino/Hispanic: 38%
- Other/Mixed Race: 8%

Age of Participants

- 20-29: 16%
- 30-39: 24%
- 40-49: 24%
- 50-59: 16%
- 60+: 4%

Gender of Participants

- Men: 34%
- Women: 66%

Average number of people per participant household: 3.1

Study Partners

The study is a collaboration between the Leonard Davis Institute at the University of Pennsylvania, The Food Trust, and Action Harvest, with funding support from the Robert Wood Johnson Foundation Health & Society Scholars Program at the University of Pennsylvania.
Hunting Park Neighborhood Diet & Food Shopping Study

DIET

How often do respondents report eating fruits and vegetables? What about fast food and sugary baked goods?

- I eat fruit at least 4x/week
- I eat salad or vegetables at least 4x/week
- I think that I eat enough fruits and vegetables
- I eat fast food 1x/week or less
- I eat sugary baked goods 2x/week or less

% of respondents (N=159)
Hunting Park Neighborhood Diet & Food Shopping Study

FOOD SHOPPING

We asked respondents about their “Big Shopping” trips (when they buy food for several days or for many people, and can’t carry everything they buy) and their “Small Shopping” trips (when they buy only as much food as they can carry).

How often do you make “Big Shopping” trips?

- 1x/week or more: 11%
- 2-3x times per month: 37%
- 1x/month or less: 52%

How would you rate the produce (fresh fruit and vegetables) at your “Big Shopping” store?

- Poor: 8%
- Fair: 13%
- Good: 26%
- Excellent: 51%

How often do you make “Small Shopping” trips?

- 1x/week or more: 5%
- 2-3x/week: 17%
- 1x/month or less: 67%
- Do not make small shopping trips: 11%

How would you rate the produce (fresh fruit and vegetables) at your “Small Shopping” store?

- Poor: 4%
- Fair: 13%
- Good: 7%
- Excellent: 72%

Variety/Selection

- Poor: 4%
- Fair: 17%
- Good: 7%
- Excellent: 72%

Quality

- Poor: 4%
- Fair: 13%
- Good: 13%
- Excellent: 70%

Price

- Poor: 4%
- Fair: 13%
- Good: 13%
- Excellent: 70%

*Includes only respondents who report doing “small shopping” at corner stores
Wave 2 Farmers’ Market Use Results

Hunting Park Neighborhood Diet & Food Shopping Study

FARMERS’ MARKETS

Do respondents know the nearest neighborhood farmers’ market location? How many shop at a farmers’ market and how often?

<table>
<thead>
<tr>
<th>Yearly Use of Farmers' Markets</th>
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</thead>
<tbody>
<tr>
<td>Knows the Nearest Farmers' Market</td>
</tr>
<tr>
<td>Shops at a Farmers’ Market</td>
</tr>
<tr>
<td>Shops at least 2x/month</td>
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</tbody>
</table>

% of Wave 2 respondents (N=79)

How would you rate the produce (fresh fruit and vegetables) at the farmers’ market where you shop?*

- Poor
- Fair
- Good
- Excellent
- Does not buy produce

VARIETY/SELECTION

QUALITY

PRICE

Includes only Wave 2 respondents who report shopping at farmers’ markets (N=13)
My Role in Wave 3

- Compile sample retention materials
- Conduct interviews
- Modify Farmers’ Market Metrics Field Guide
Sample Retention

- **Reply cards**
  - 108 sent
  - 4.6% returned to sender
  - 27% received

- **Text reminders**

- **Results**
  - 14% replied and completed
    - 53% completed on requested date
Changes to Wave 3 Survey

- Awareness of Hunting Park opening
- Shopping patterns at Reading Terminal Market
- Nutrition benefit use at Reading Terminal Market

http://www.slashfood.com/2008/08/01/feast-your-eyes-fresh-produce-at-reading-terminal-market/
The survey

**DIET AND FOOD PURCHASING SURVEY**

This is a survey about your food consumption and food shopping habits. This information is being collected as part of a study by the University of Pennsylvania in partnership with Action Harvest to evaluate food access in the community surrounding Hunting Park. In order to participate in this study, we will require you to complete this survey twice this year and twice again next year. We will also require your contact information in order to reach you. As a reward for your time, you will receive $20 upon completion of each survey. If you have any questions or concerns, please contact Alison Buttenheim (215) 898-5456.

**Consumption Questions**

In an average month, how often do you eat each of the following foods?

<table>
<thead>
<tr>
<th>2 or more times/day</th>
<th>Once a day</th>
<th>4-6 times/week</th>
<th>2-3 times/week</th>
<th>Once a week</th>
<th>Less than once a week</th>
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<tr>
<td>Real fruit juice (fresh, frozen or canned) (not including sodas, hogs, or Kool-Aid)</td>
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<td>Fruit (fresh, frozen or canned) (not including juice)</td>
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<td>Vegetable juice (such as tomato juice, V-8, carrot juice)</td>
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<td>Green salad</td>
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<td>Potatoes (baked, mashed. Not including fried)</td>
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<td>Fried potatoes, french fries</td>
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<td>Vegetable soup, or stew with vegetables</td>
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<td>Any other vegetables (such as broccoli, string beans, peas, corn)</td>
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<td>Fiber cereals (such as Raisin Bran, Shredded Wheat, Mini-Wheat, or Special K)</td>
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Interviews in Hunting Park
Wave 3 Preliminary Findings

- 40 interviews completed
- 53% know nearest farmers’ market location
- 28% shop at a farmers’ market
- 58% aware of Hunting Park opening
- Inner circle: 89% aware of Hunting Park opening
Hunting Park Farmers’ Market
Farmers’ Market Metrics Field Guide

- For The Food Trust
- Comprehensive guide to gathering data at farmers’ markets
Lessons Learned

- Complex array of factors affecting food shopping and consumption
- Community-based participatory research
- How to present survey data effectively
Special Thanks

- Dr. Alison Buttenheim
- Tiffany Thurman and Action Harvest
- Melissa Kulynych
- The Food Trust
- Lissy Madden
- Joanne Levy
Questions/Comments?