

Health Outcomes: Urban Agriculture and Data Collection

MA Urban Farming Conference 2016

Sara Shostak, Brandeis University

Catherine Sands, Fertile Ground and UMASS Amherst

Marydale Debor, Fresh Advantage LLC

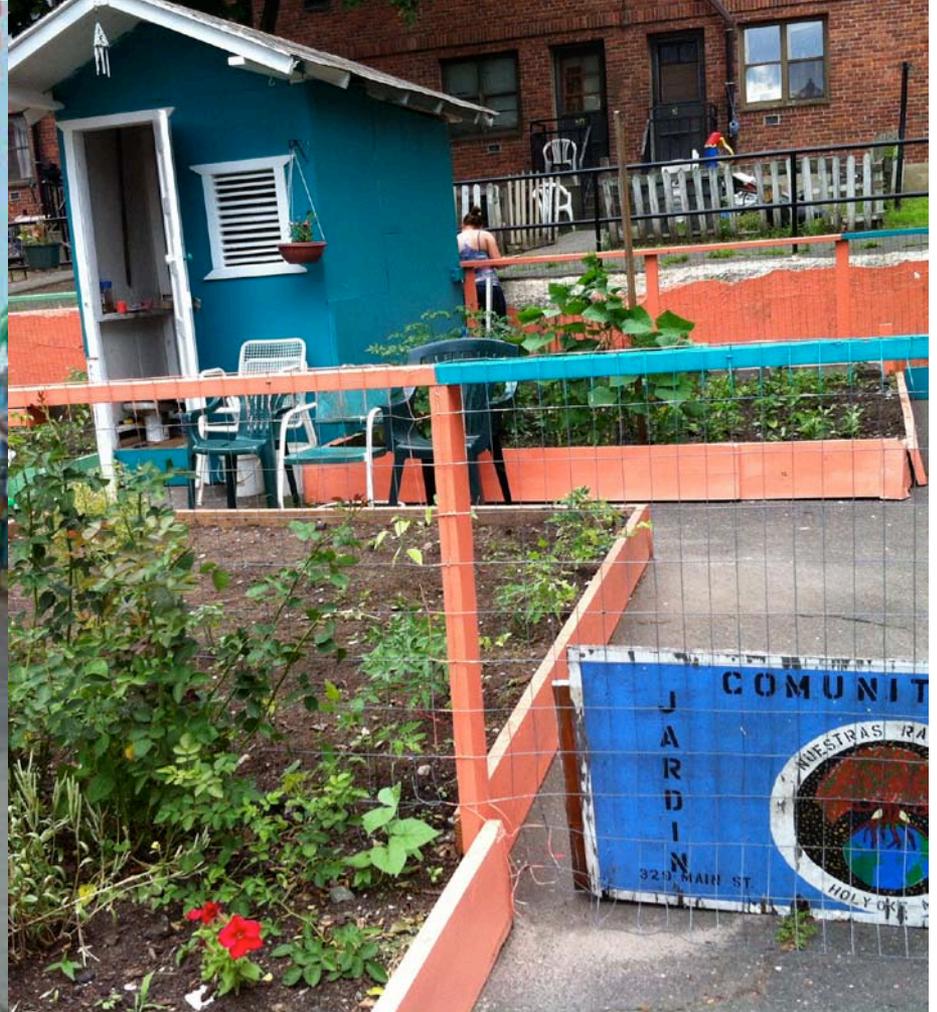
Ruth Goldman, Merck Family Fund

What We Talk About When We Talk About Health

- How do you know when you are healthy?
 - List 3 indicators

- How can your organization/program/business contribute to the health of others?
 - List 3 possible contributions

Nuestras Raíces



Celebrating Agri-Culture

- Community development organization
- 11 community gardens
- 2 youth gardens
- Over 100 families gardening in Holyoke
- 30 acre urban farm, producing cultural crops
- Youth program



2012 Research Project to Support Gardeners

- Collaboration with Food Justice and Policy Class, Stockbridge School of Agriculture, UMASS/Amherst, led by two graduate public policy students
- 8 gardeners interviewed at 5 different gardens
- The interviews conducted in Spanish and English
- An oral consent was read to the participants by the Garden Coordinator before each interview.
- Presentation of testimony and recommended reporting tools to gardeners and organization

Purpose of the Research Collaboration



- Support gardeners to determine whether and how to measure garden production
- Gather story and testimony
- Design reporting tools/methods

Findings: Value of Urban Gardens

Connections

- Keeping tradition with the past
- Connection to the future

Individual fulfillment

- Recreation
- Therapy

Community building

- Cooperation
- Sharing
- Sense of belonging
- Community pride



Connection with the past and future

- *“When we grew up, my father, he grew everything we ate.”*
- *“When they see this, everybody says that it is Puerto Rico and everybody is delighted.”*
- *“I remember, the first time when the kids came here. They came and collected the vegetables. ... I almost cried. I see those little guys walking, one behind the other. I almost cried. I enjoy when I see them here. Today in the street, it’s bad.”*

Individual fulfillment

- *"I feel like I am in another world, in a clean world... and made of nature"*
- *"I spend all of my time here. Eight days a week. Only seven but I say eight. Every day, every single day."*
- *"I love it because this really is a therapy for me".*
- *"You get rid of the sad things. You get involved"*
- *"You feel peace, and it is helpful for your mind"*

Cooperation, community, sharing

- *“If someone needs help, we help them. It is about the unity that we have. We help each other here.”*
- *“We do it with love, because the things that you don’t do with love, do not progress. We do it with love so it can progress.”*

Pride

- *“People are proud of this [garden]”*
- *“When they see this in the community... they feel like this belongs to them. It belongs to the whole community.”*



Quantitative Value of Production

- *“A lot, a lot, a lot, a lot, a lot, a lot!”*
- *“From every lot many people benefit”*



Somerville Mobile Farmers' Market (2014)

- Founded in 2011
- Managed by Shape Up Somerville and Groundwork Somerville
 - 3 locations/2 days
- Has always accepted SNAP/EBT
 - Produce sold wholesale
 - Residents of housing developments receive 50% discount [no documentation required]
- 2014 Season
 - \$14,254 SNAP/EBT sales [including match]



Food Access

- *“...this was around the time that [the] Star Market had closed on Broadway, so there was this gap in access to food in that neighborhood. So we were talking...about how to [help] people to get to markets and to get to farmers’ markets, and there were all these barriers that were coming up, like transportation, affordability...And then one of the youth...said “Why don’t we just bring the produce directly to the people here in the housing development?” And so that’s how it got started.” (Interview 08).*

Evaluating the SMFM: Methods

- Interviews
- Attendance Counts
- Sales Data
- Dot Surveys
- Open ended questions



Evaluating the SMFM: Findings

- 52 unique groups/day purchase produce at the market
 - 60% living in housing development
 - Many recent immigrants
- More SNAP/EBT sales at the SMFM than the other two Somerville Farmers' Markets combined
 - 61% SNAP/EBT sales at Farmers' Markets in Somerville are at the SMFM
- 81% of customers surveyed at the Mystic Market reported that the market helps them – or their children – eat more fruits and vegetables.

Challenges at the SMFM

- Increase diversity of products
- Consider demand for non-local foods



Meeting the Challenges in 2015



FQHC-Urban Farming Non- Profit Partnership

2014 Report



Farm Based Wellness

18 week program: farming, nutrition education,
Cooking and farm share with recipes

Referred by clinic physicians

Two or more diet related chronic disease
risk factors

200 % poverty level:

2014 study group: 68 families/340 individuals

Food security results

The program achieved statistically and substantively significant decreases in food insecurity

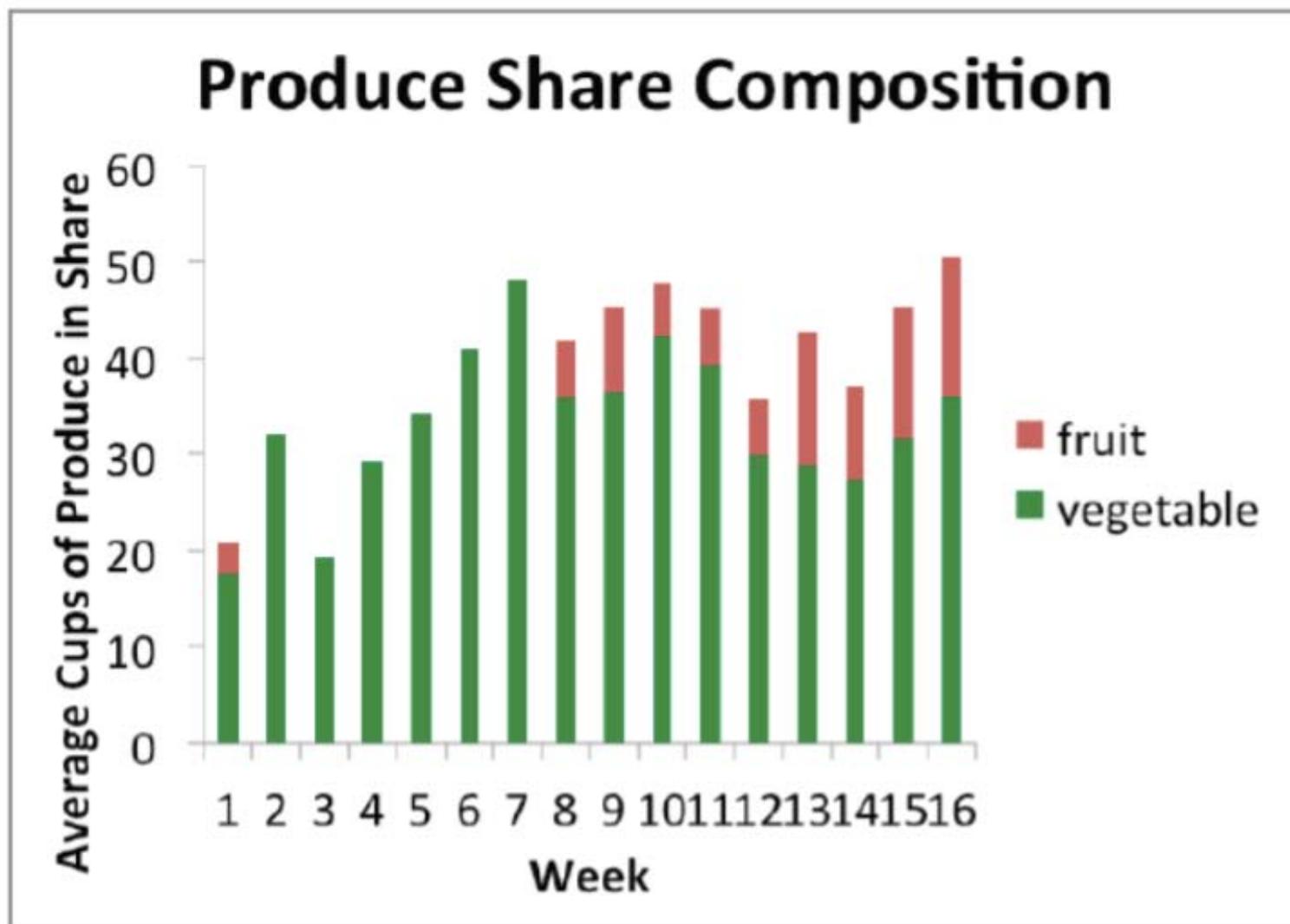
<u>Food Security Q</u>	<u>T1</u>	<u>T2</u>	<u>% point difference*</u>
	%	%	
Total Food Insecurity	64.8	44.4	- 20.0
Adults cut/skipped meals	32.4	11.4	- 21.0
Relied on few foods	70.8	48.1	- 22.7
Child not eating enough**	41.7	14.8	- 26.9
Cut size of children's meals	29.1	7.4	- 21.7

*Significant at $\alpha = 0.5$

**Significant at $\alpha = 0.1$

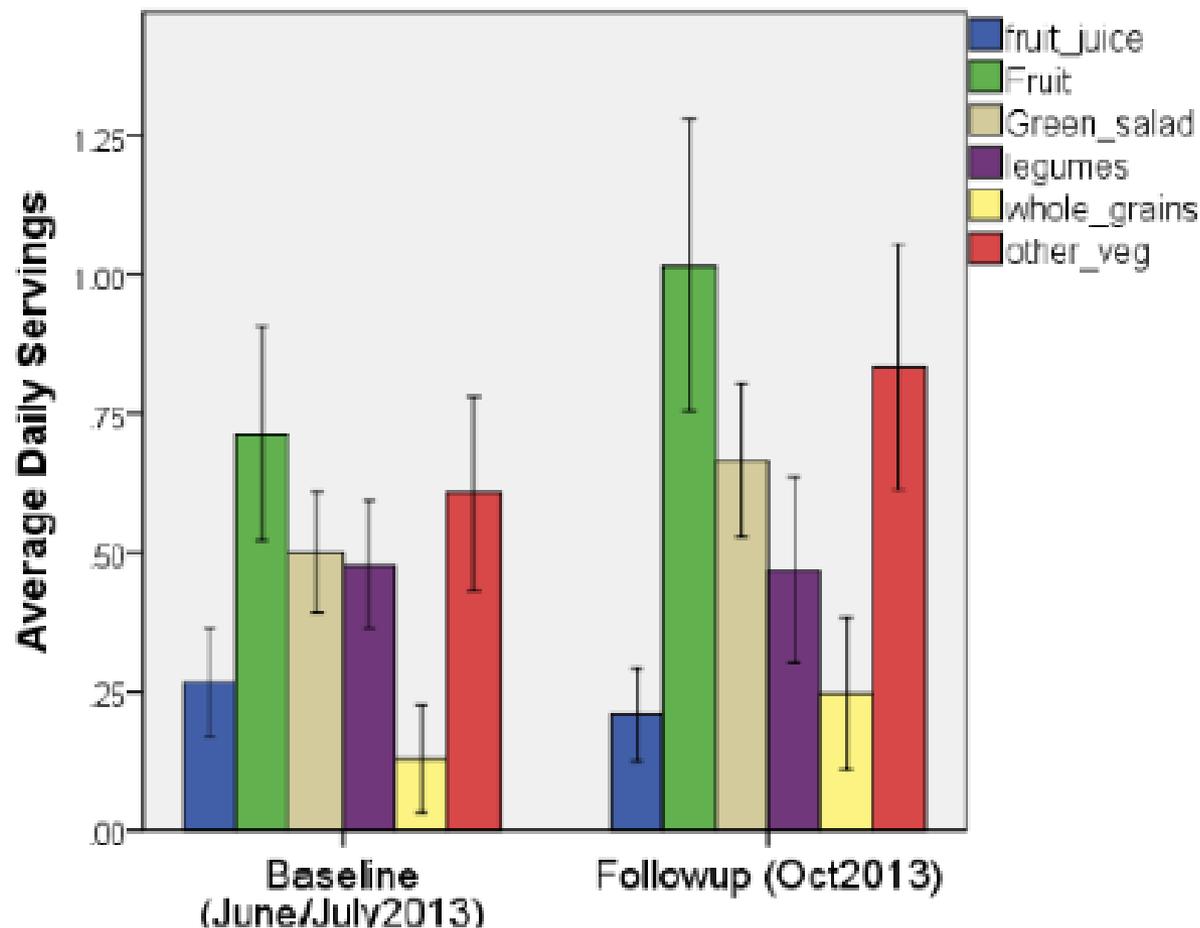
** The USDA defines food insecurity as: limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways.*

Farm Production: Servings Distributed



Changes in F&V Consumption

Increased daily intake of fruits and vegetables by an average of 0.86 ± 0.25 servings ($p=0.002$)



Partnership Expansion

- **Connecticut Mental Health Center (2015 Pilot)**
- Adults with SMI; Diabetic/Pre Diabetic; Food Insecure; Spanish speaking
- Integration of Farm Based Wellness into “Recovery” model of mental health care
- New Haven Land Trust: Graduates acquire community garden plot to manage; continuing stewardship by NHF staff

Using Community Benefits to Improve Healthy Food Access in Massachusetts

COMMUNITY BENEFITS - 2015

Table 4: Evaluation Metrics		
Hospital	Program	Evaluation Metrics
Baystate Medical Center	Integrated diet and exercise intervention	BMI, lipid abnormality and fitness test
Beth Israel Deaconess Medical Center	Funding for varied programs at community health centers	Varied, all included BMI
Boston Children's Hospital	Integrated diet and exercise intervention	BMI, TV time, fruit and vegetable intake, sugar sweetened beverage consumption, and amount of physical activity
Fairview Hospital	Meal delivery	Pounds of food
Hallmark Health	Mobile farmers market	Pounds of food, number of people served
Holy Family Hospital	Fruit and vegetable prescription program	Use of coupons, number of participants
Beth Israel Deaconess Hospital Plymouth (previously Jordan Hospital)	Community coalition to address food environment	Participation in school lunch program, sales at corner stores
Lahey Hospital and Medical Center	Meals and nutrition education	Pounds of food, number of people served
Massachusetts General Hospital	Food insecurity screening and pantry	Pounds of food, number of people served, and food insecurity prevalence
Saint Elizabeth's Medical Center	Medically-tailored meal delivery	Readmission rates
UMass Memorial Medical Center	Community and backyard gardens and SNAP incentive program	Number of beds developed, number of people served, amount of incentive dollars distributed
Source: Evaluation metrics were provided through interviews with hospital staff.		

Contact

- Sara Shostak sshostak@brandeis.edu
- Catherine Sands
chsands@fertilegroundschools.org
- Marydale Debor
mdebor@freshadvantage.com
- Ruth Goldman rgoldman@merckff.org