

# SPUR

**Ideas + Action for a Better City**

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*#FoodisMedicine*

# Food is Medicine

SPUR | February 12, 2019

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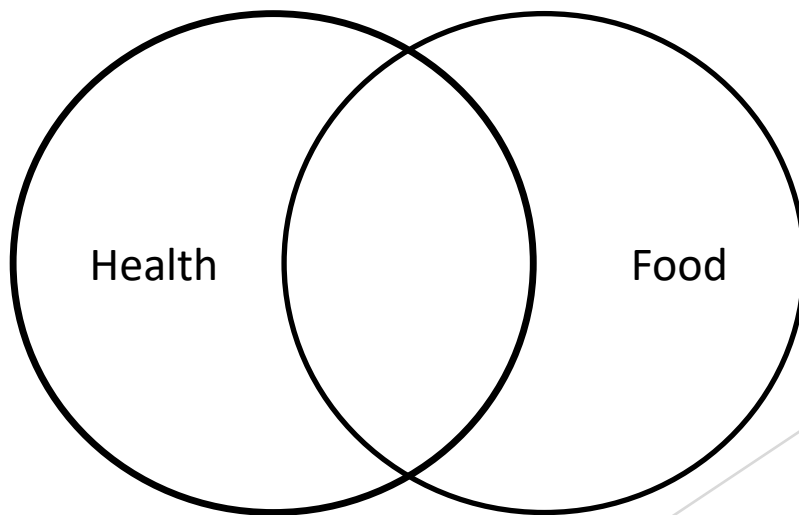
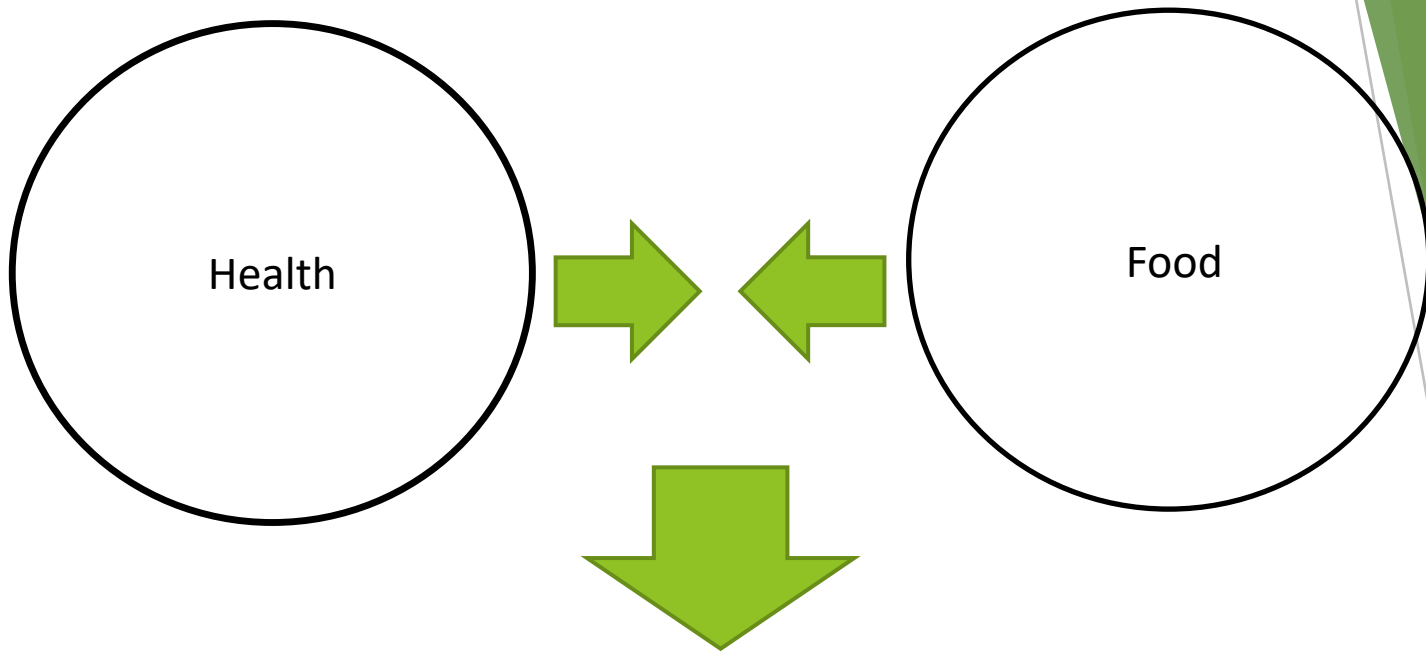
*People are fed by the food industry, which pays no attention to health, and are treated by the health industry, which pays no attention to food.*

Wendell Berry

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# A Conceptual Framework: Cycle of Food Insecurity & Chronic Disease

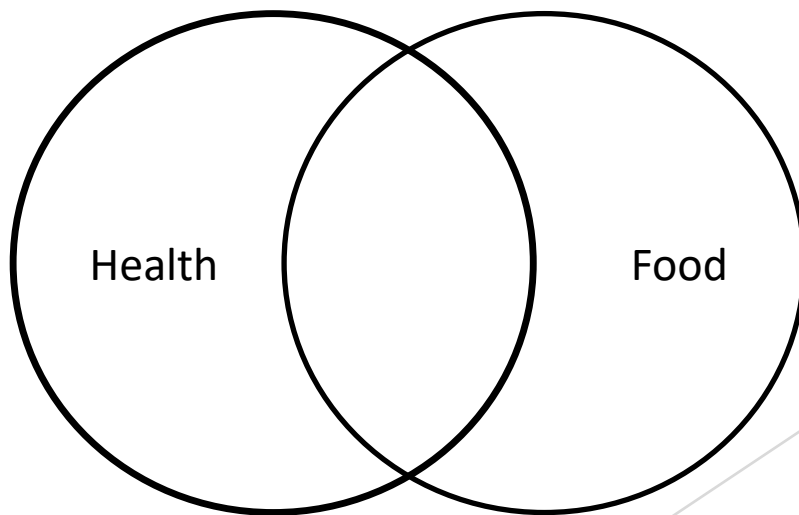
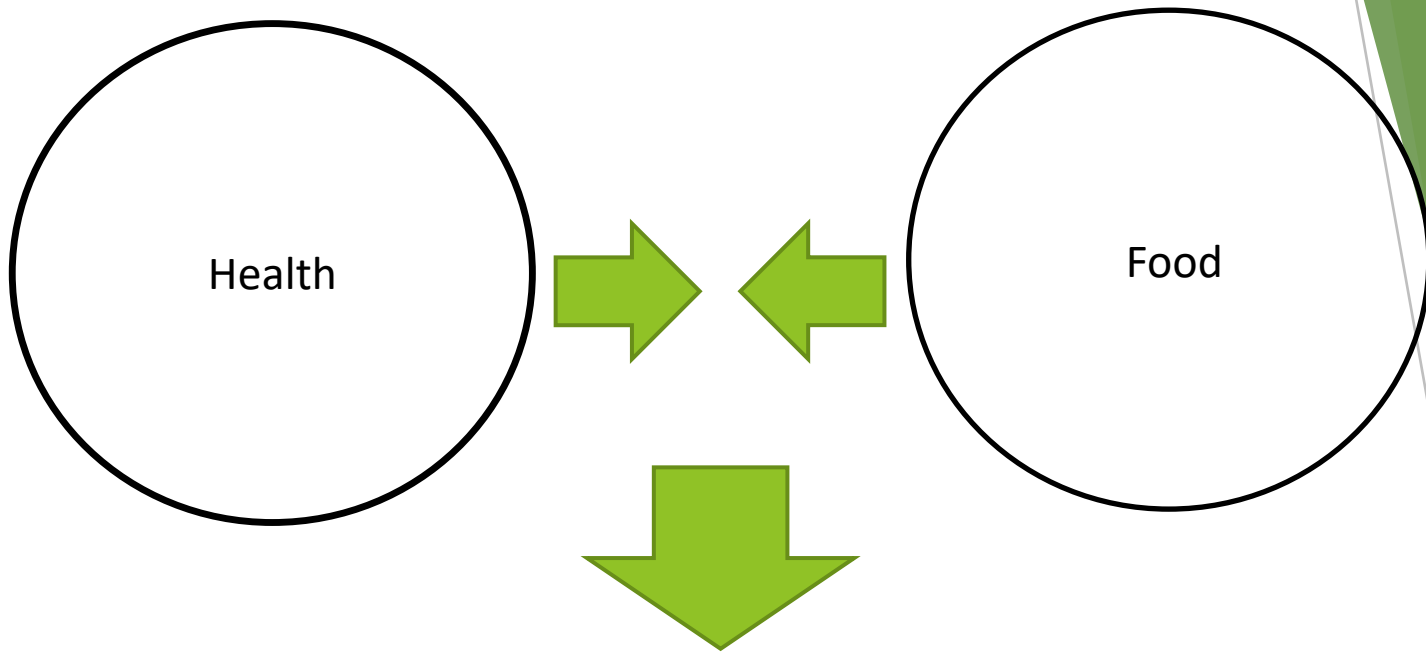




A balance scale is shown with two pans. The left pan is filled with various pills and capsules, including white, yellow, and orange ones. The right pan is filled with fresh fruits, including a kiwi slice, a strawberry, and several cherry tomatoes. The scale is positioned in the center, and the text is overlaid on the image.

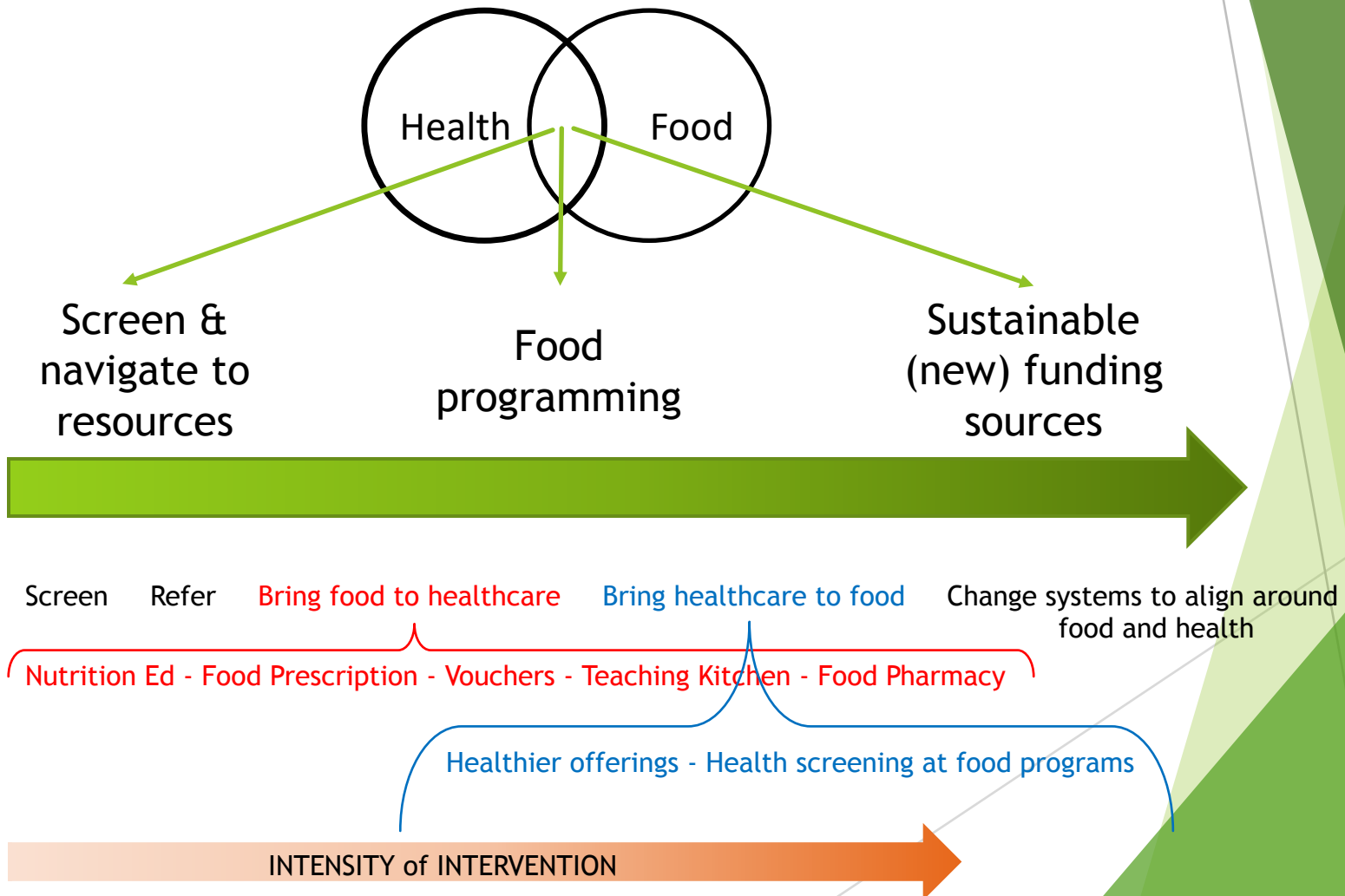
We need to do better.

Food enables the active pursuit of health.  
It's the solution, not the problem.



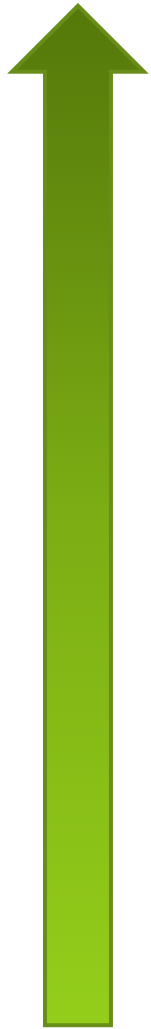


# Spectrum of Food as Medicine Interventions





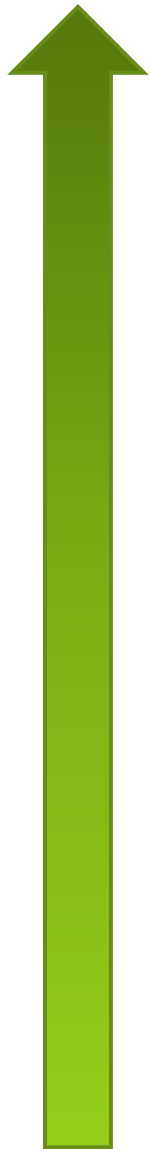
# Degree of Prevention



Chronic Disease Management

Secondary Prevention

Primary Prevention



Chronic Disease Management

MTM

Food pharmacies  
Teaching kitchens

Secondary Prevention

Food vouchers  
Food prescriptions

Primary Prevention

Screening and referral  
Nutrition education  
Improving healthy food accessibility

Intervention Intensity



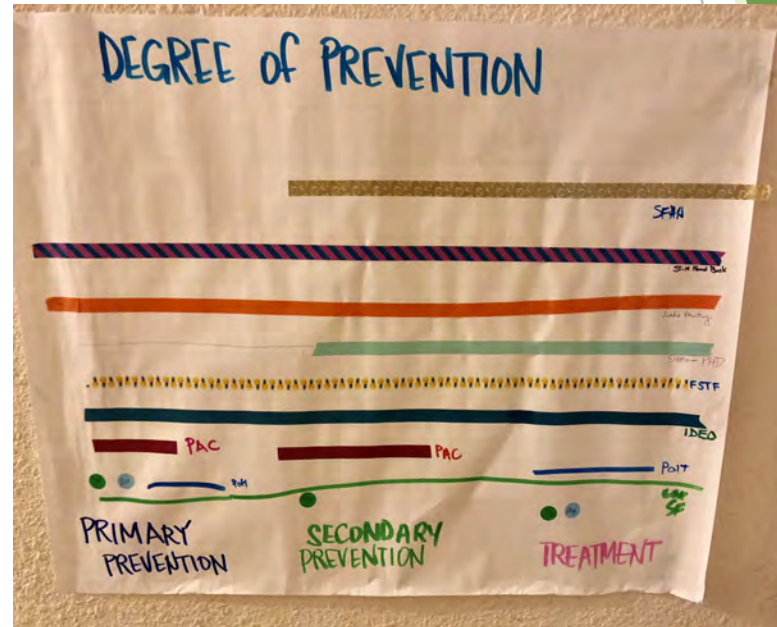
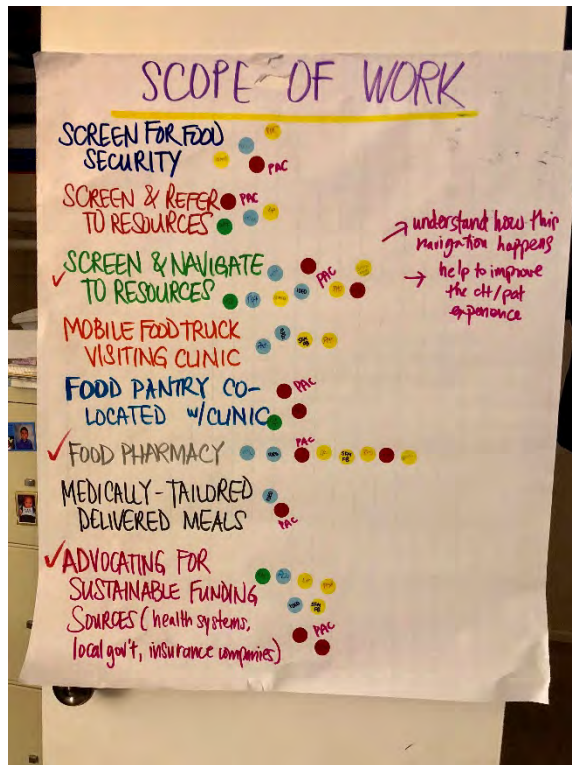


# Food as Medicine Collaborative



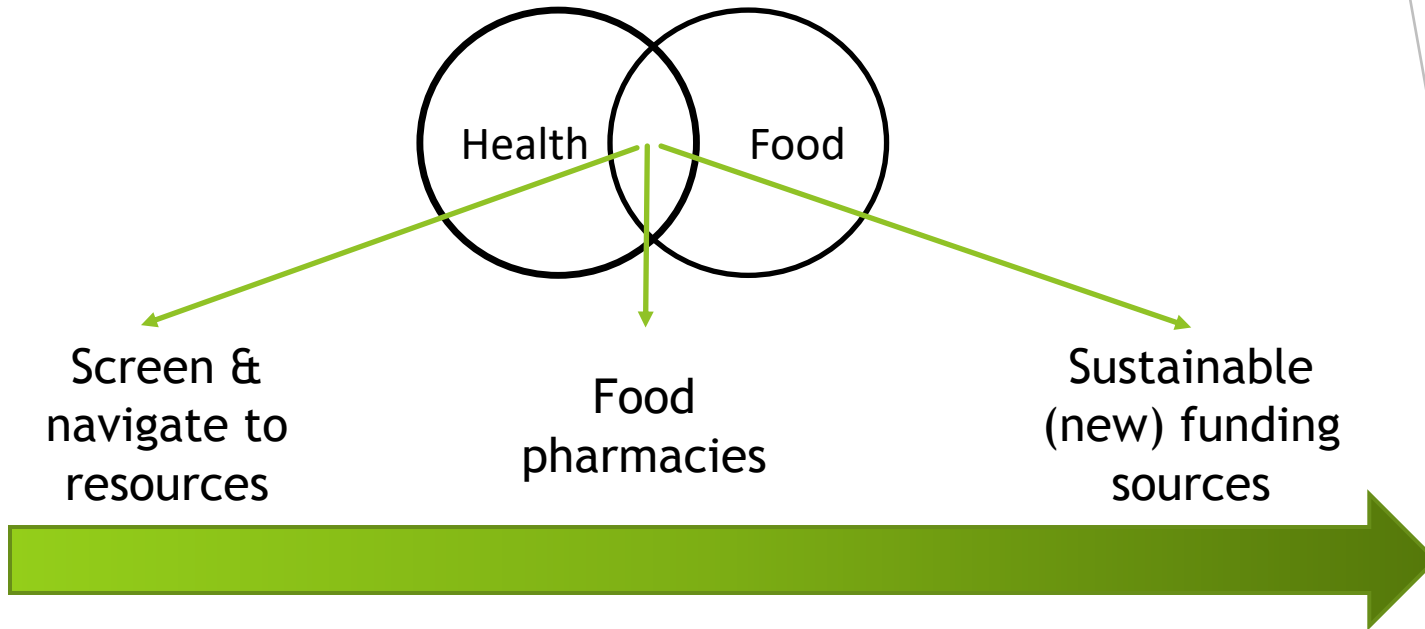


# Food as Medicine Collaborative Visioning





# Food as Medicine Collaborative







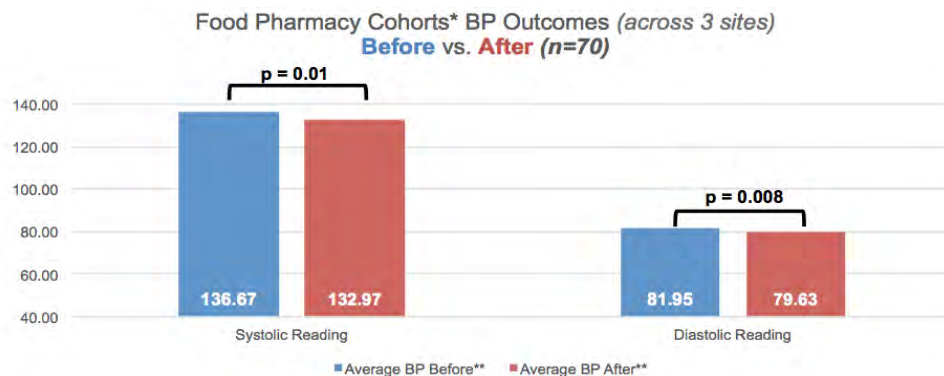
# Food Pharmacy Updates





# Food Pharmacy Updates

- ▶ 96% of participants report increased access to healthy food (n\*=55)
- ▶ 92% indicate they have adopted healthier eating practices (n\*=48)
- ▶ 65% of patients who attended three or more sessions (n=71) had a decline in their blood pressure!



\*Patients who attended 3 or more sessions

\*\*Averaged first 3 BP readings from outpatient visits within the 6 months prior to their first session and within 6 months after their last session

\*n=those who “refilled” their food prescription 6 or more times and responded to the post-survey question  
n=those who “refilled” their food prescription 6 or more times and had matched pre-and post-surveys



# Additional Outcomes: Community



- ▶ 98% of respondents (n=47) felt that participating in food pharmacy made them feel part of a community



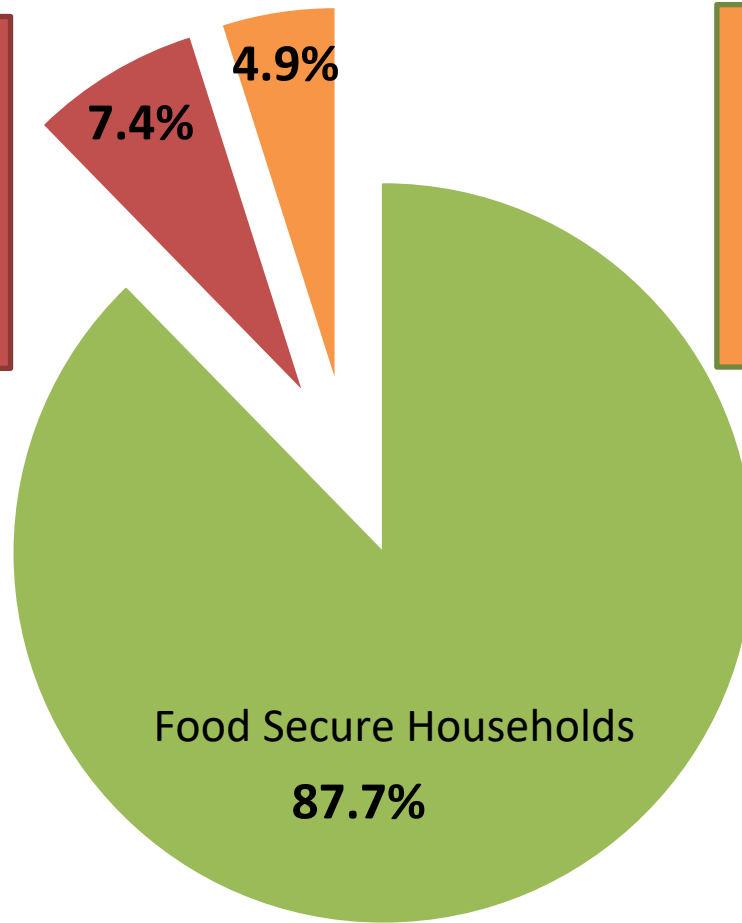
Thank you for your interest  
and partnership!

[rita.nguyen@sfdph.org](mailto:rita.nguyen@sfdph.org)



# 12.7% of U.S. Households by Food Insecure, 2016

Households with Low Food Security  
17.5 million adults  
6.5 million kids



Households with Very Low Food Security  
10.8 million adults  
703 thousand kids



Source: Calculated by ERS, USDA, using data from the December 2016 Current Population Survey Food Security Supplement



# The Challenge for Low-Income San Franciscans



1 in 4 SF residents are food insecure!



Barriers to healthy diets:

- High cost of fruits & vegetables (23% higher than US ave.)
- Food deserts
- Many vulnerable SF residents ineligible for CalFresh

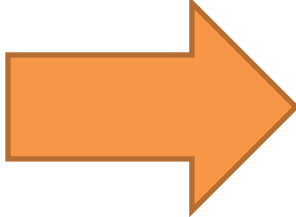


Dietary impacts:

- 44% of low-income SF residents report they **cannot afford** nutritious food
- Only 25% of children in SF eat 5+ servings of F&Vs daily

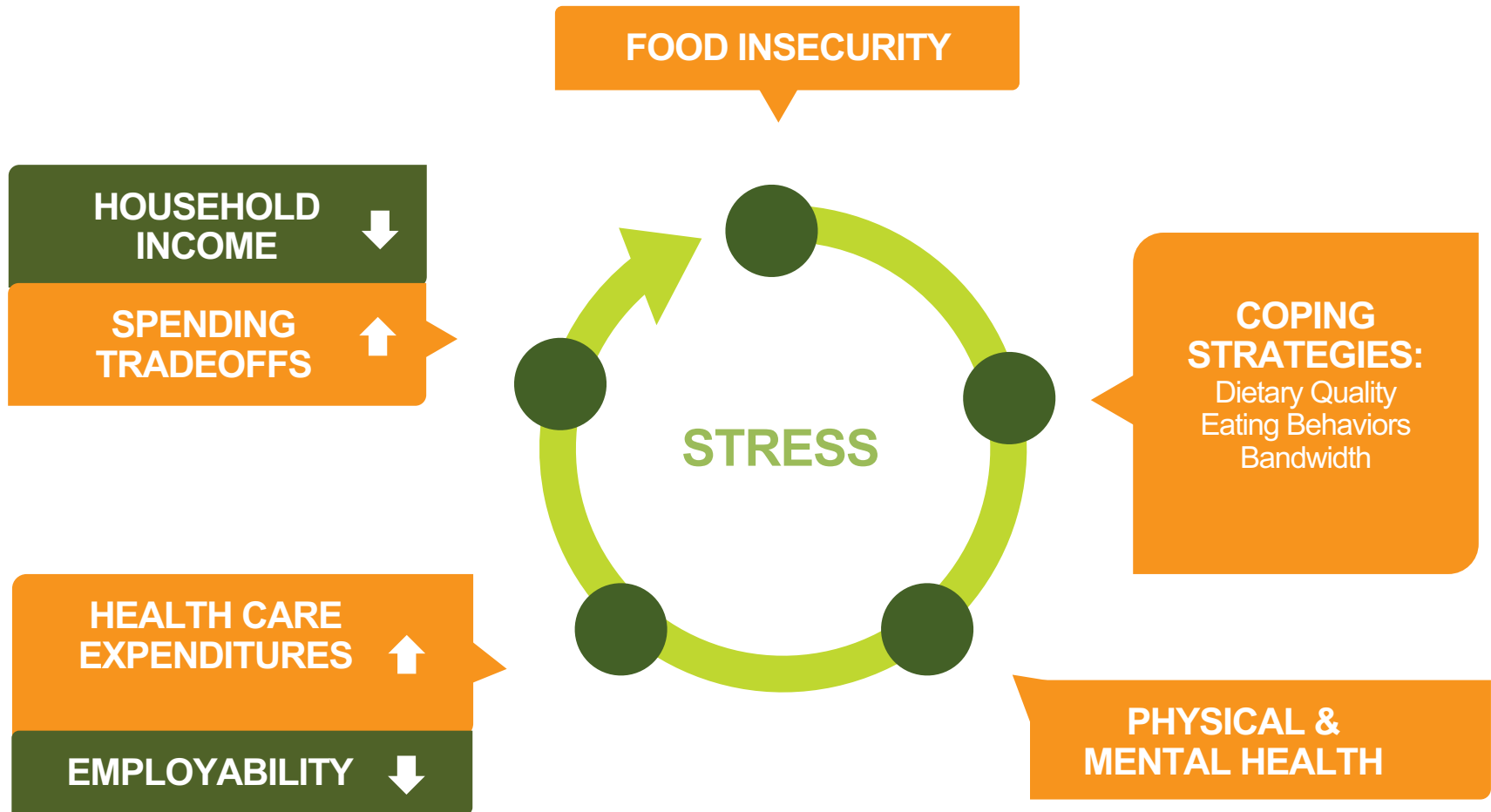


# Food Insecure Patients Engage in Coping Strategies to *Avoid* Hunger that are Detrimental to Health

- Eat low-cost foods
  - Eat highly filling foods
  - Small variety of foods
  - Avoid food waste
  - Binge when food is available
- 
- Higher risk of obesity, diabetes, & other chronic disease
  - Once chronically ill, poorer ability to manage illness



# Does Food Insecurity Impact Health?

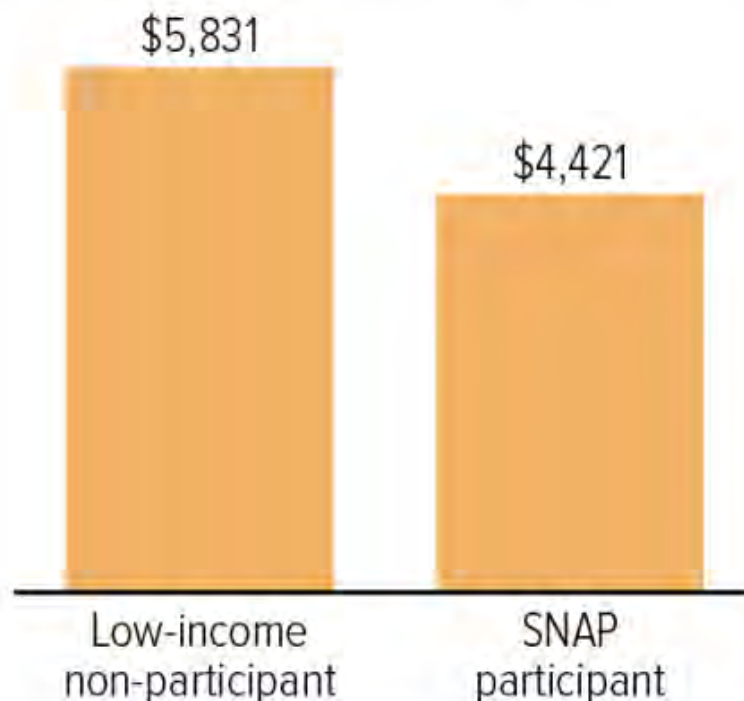


Adapted from Seligman and Schillinger,  
New England Journal of Medicine, 2010.

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## A SNAP Participant Incurs \$1,400 Less for Health Care

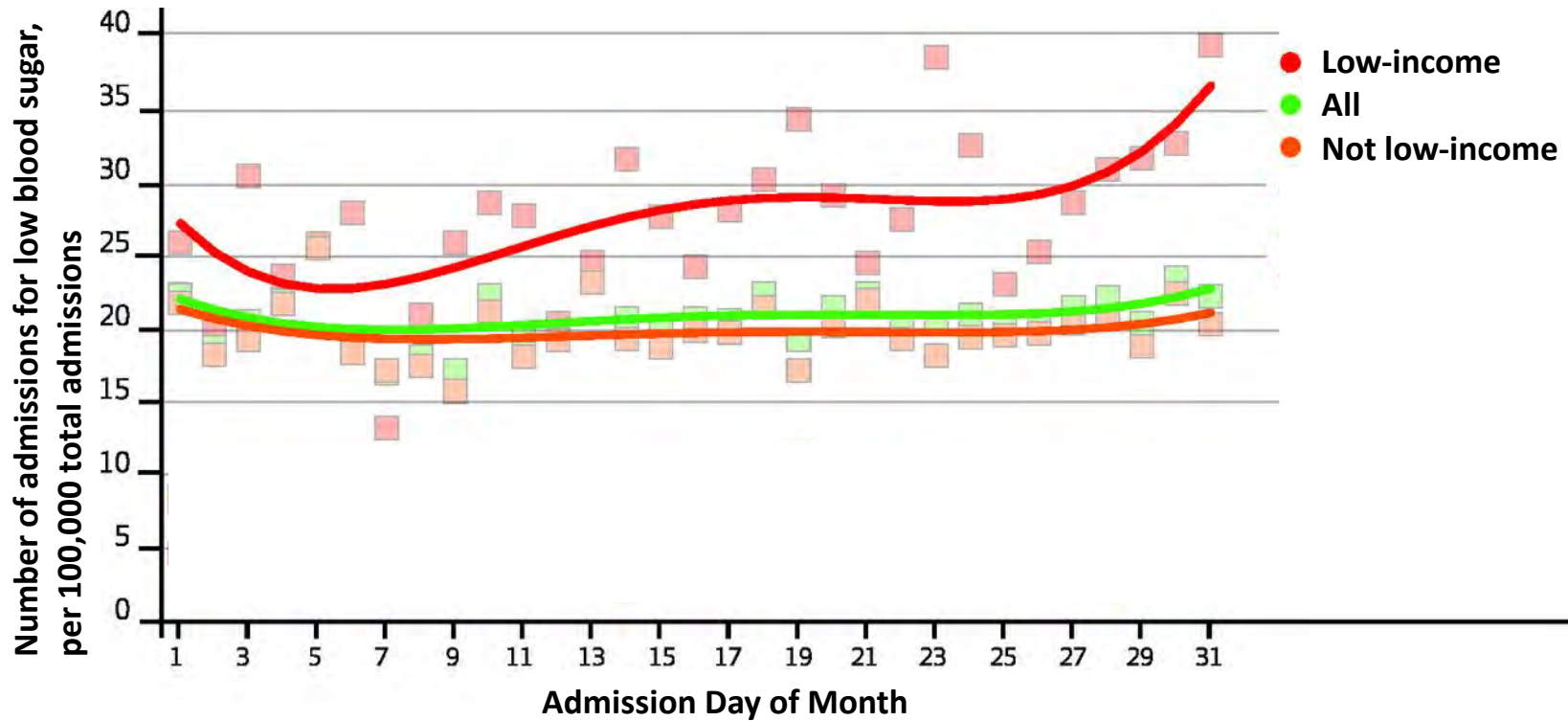
Estimated annual per-person health care spending



Note: Health care spending includes out-of-pocket expenses and costs paid by private and public insurance, including Medicare and Medicaid.

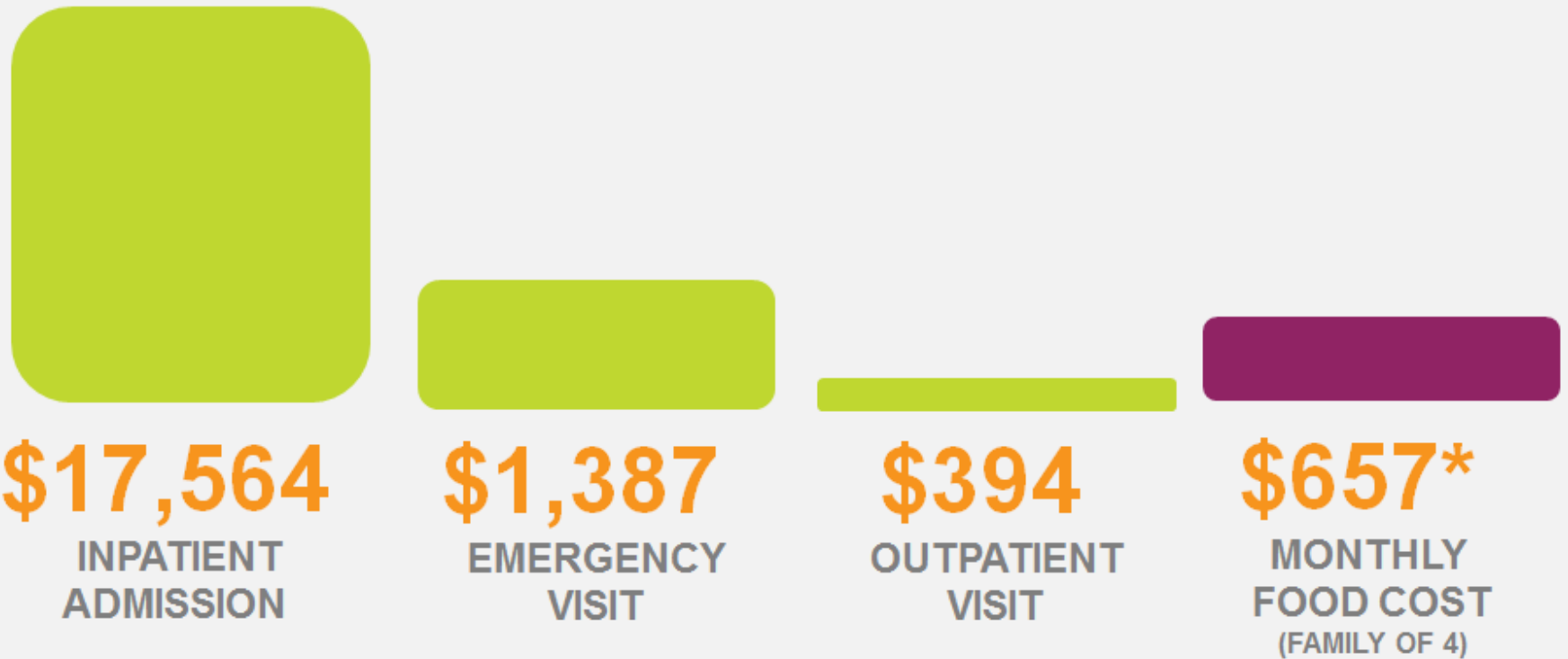
Source: Seth Berkowitz, Hilary K., Seligman, and Sanjay Basu, "Impact of Food Insecurity and SNAP Participation on Healthcare Utilization and Expenditures," University of Kentucky Center for Poverty Research, 2017.

# Admissions for Low Blood Sugar Increase by 27% in Last Week of the Month for Low-Income Population





## Cost of A Health Care Visit for Low Blood Sugar vs. Food



American Journal of Managed Care, 2011.

\*Thrifty Food Plan



**\$77.5**

**billion**

additional health care  
expenditures due to food  
insecurity

# Diet is a Cornerstone of Care for the Most Common Chronic Diseases

- Diabetes
- High blood pressure
- High cholesterol
- Obesity
- Congestive Heart Failure

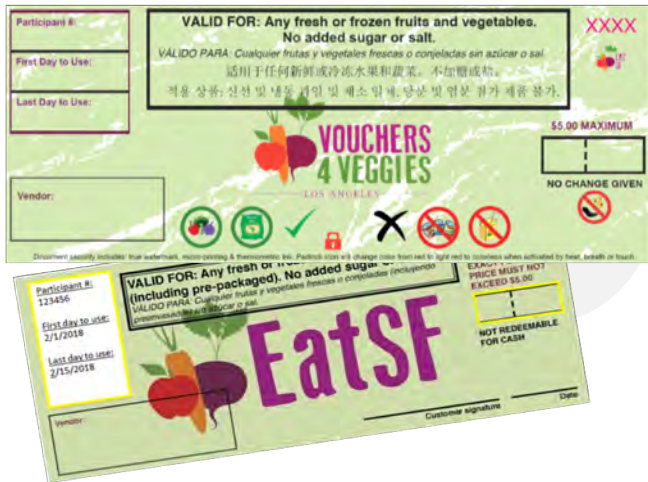




# Problem...



# A Solution: Vouchers 4 Veggies



WELCOME TO EATSF  
*Participant*  
INFORMATION



**EatSF** IN PARTNERSHIP WITH **wic**  
AND THE SAN FRANCISCO DEPARTMENT OF PUBLIC HEALTH

**Healthy Eating  
Voucher Program**

**Attributes:  
convenience,  
choice, health-  
focus, simplicity**

**Activates Healthy Eating Habits**

# How does EatSF work?





# “Triple Win”

Develop  
Healthy Eating  
Habits

Drive Supply of  
F&V in  
Underserved  
Neighborhoods

Increase Food  
Security

# Proven Results



✓  
Develop  
Healthy Eating  
Habits

Participants  
Increased F&V  
intake by 1  
daily Serving

91% report  
positive  
dietary  
changes

Stores report  
increased  
produce sales  
& re-stocking

✓  
Drive Supply of  
F&V in  
Underserved  
Neighborhoods

Millions of  
dollars of  
economic  
impact

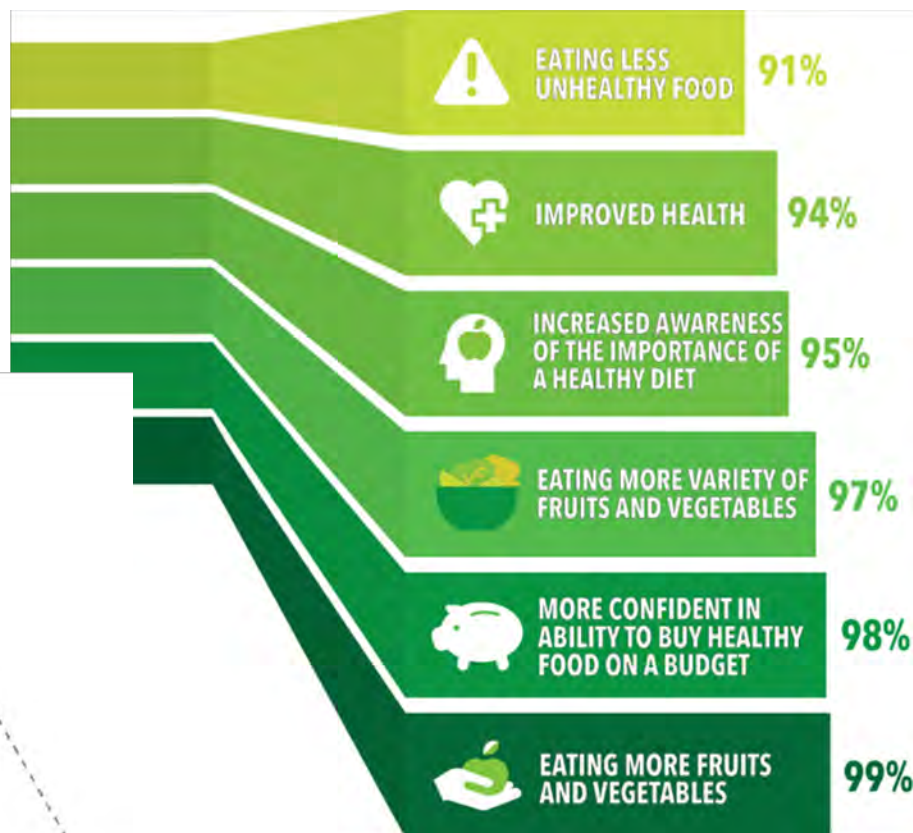
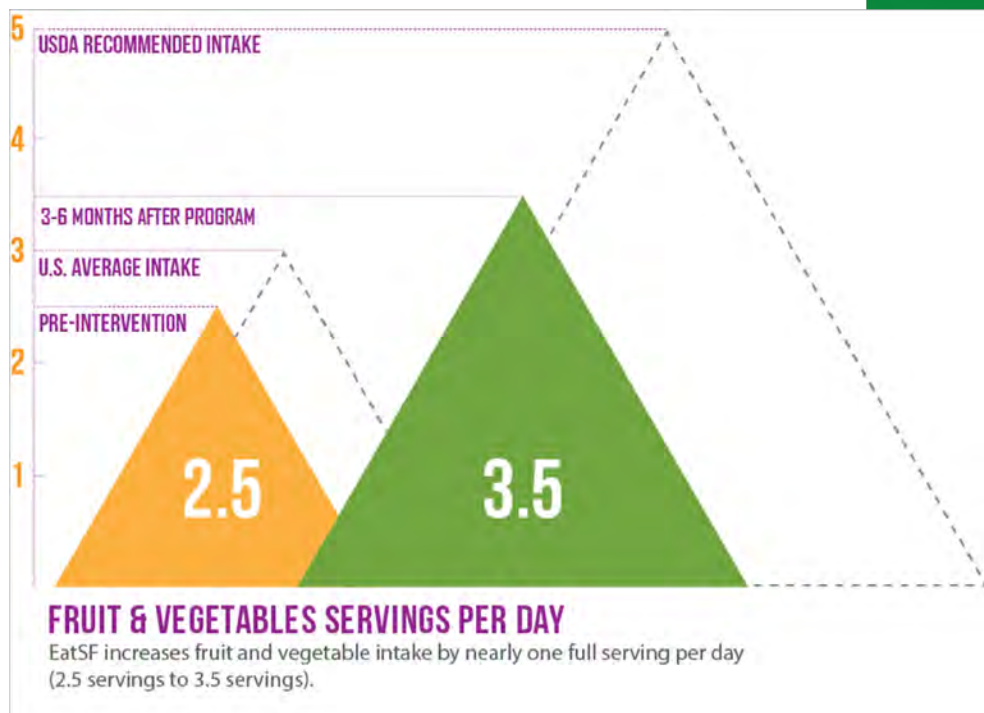
✓  
Increase Food  
Security

More than  
1 in 3  
increase their  
food security  
status



# Proven Results

*Participants increase F&V intake by over 1 daily serving – enough for immediate health impacts*



*Over 91% of participants report positive dietary changes*



# Long-Term Positive Dietary Changes

After 6 – 12 months post program (no longer receiving vouchers):



**83% of participants report positive dietary change** as a result of the program including eating less junk food and eating more fruits and vegetables



**53% maintain the same level of F&V consumption** as in the program despite no longer receiving vouchers



**94% report** they are more confident buying healthy food on a budget and report improved health as a result of the program





# Summary

Vouchers 4 Veggies is an effective healthy eating program that is easily implemented and saves health care costs while increasing patient satisfaction.

We are currently serving San Francisco, Los Angeles and soon to be in Colorado







Thank You!

# Fresh Approach

The logo features the words 'Fresh' and 'Approach' stacked vertically in a bold, white, sans-serif font. A stylized white plant with a central stem, three leaves, and a root system is integrated into the text, with the stem passing through the letter 'o' in 'Approach'.

**VeggieRx Program**

**Danielle Hamilton**, Education Program Manager



# OUR MISSION

**Fresh Approach** is a non-profit organization working to create long-term change in local food systems.

We do this by connecting California communities with healthy food from California farmers and expanding knowledge about food and nutrition.



Our **three program areas** address different aspects of food access inequities and health disparities in Bay Area communities.





1

# Food Access

## FARMERS' MARKETS

- Mobile Farmers Market: Fresh, locally grown produce sold at affordable prices
- Market Match participation – 50% discount for shoppers with CalFresh (SNAP), WIC, SSI, or Medi-Cal benefits for up to \$20 in free produce per day
- East Palo Alto community farmers' market, offering \$10 Market Match for shoppers paying with CalFresh (SNAP), FMNP WIC, & senior FMNP checks





2

## Collective Roots

### COMMUNITY GARDENING NETWORK

- Community garden space with monthly gardening workshops
- Backyard or balcony garden installations for East Palo Alto residents
- Collective Gardening Network – seed swaps, assistance becoming a Certified Producer, and free home garden installation for qualifying participants



3

## VeggieRx

### COOKING & NUTRITION CLASSES

- Free classes for adults, youth, and families in English & Spanish
- 8-week programs with biometric monitoring and drop-in sessions
- Classes include nutrition lesson, cooking demonstration
- VeggieRx vouchers for free farmers' market produce given to qualifying participants during program

# Food As Medicine

## Different Models

- Operating outside the healthcare setting
- Operating in partnership with a health clinic
- Institutionalizing Food as Medicine within health clinics







# Results

- 95% Increased fruit and vegetable consumption
- Weight Loss
  - 55% lose weight
  - 18% maintain
- 95% very comfortable cooking at home
- Skipped a meal in the last 30 days because there wasn't enough food available?
  - Pre-surveys 21% said yes
  - Post-survey 10% said yes
- Received Food From Pantry or charity
  - Pre-surveys 45% said yes
  - Post-survey 29% said yes
- 1 year follow-ups
  - 100% prepare meals that include the same or more vegetables
  - 90% prepare meals that include the same or more fruit

# Sustainability

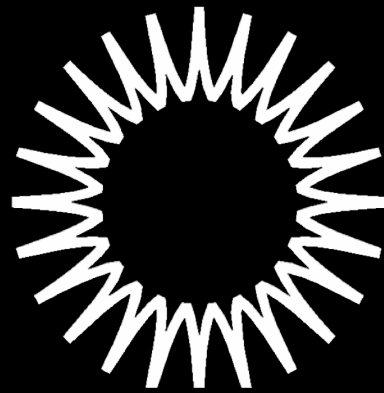
- Integrate into healthcare setting
- Importance of local food system
- Get involved in growing food



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**925-771-2990**







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