



# CHAMPION PROVIDER FELLOWSHIP

*A Powerful Approach to Healthier Communities*


## Food Insecurity, Public Health, and Healthcare Provider Engagement

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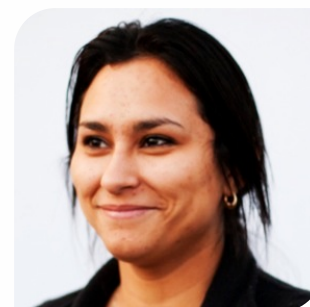
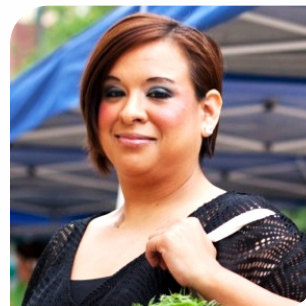
**Disclosures:** I have no commercial conflicts of interest to disclose.

Opinions expressed in this presentation are my own and do not necessarily reflect the opinions of any of my funders, including Feeding America, CDC, USDA and NIH.

# Learning Objectives

- Articulate the connection between food insecurity & chronic disease
- Define two models of community engagement
- Lessons learned from working in community settings

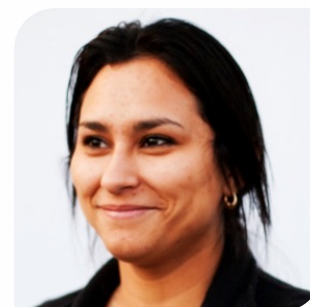
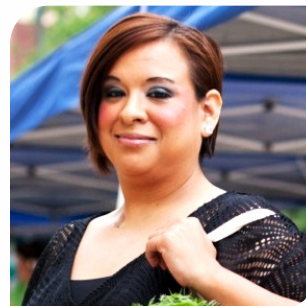
Food insecurity: Household-level economic and social condition of limited or uncertain access to adequate food (USDA)



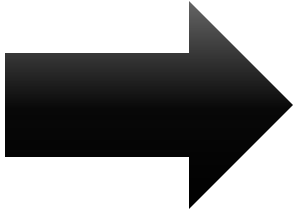
Food insecurity: Household-level economic and social condition of limited or uncertain access to adequate food (USDA)


Hunger:

The uneasy or painful sensation caused by a lack of food, or the recurrent and involuntary lack of access to food. (LSRO)



# Coping Strategies to *Avoid* Hunger

- Eating low-cost foods
    - Fewer F&V
    - More fats/carbs
  - Eating highly filling foods
  - Small variety of foods
  - Avoiding food waste
  - Binging when food is available
- 
- Higher risk of obesity, diabetes, & other chronic, diet-sensitive chronic disease
  - Once you are chronically ill, poorer ability to manage it your illness

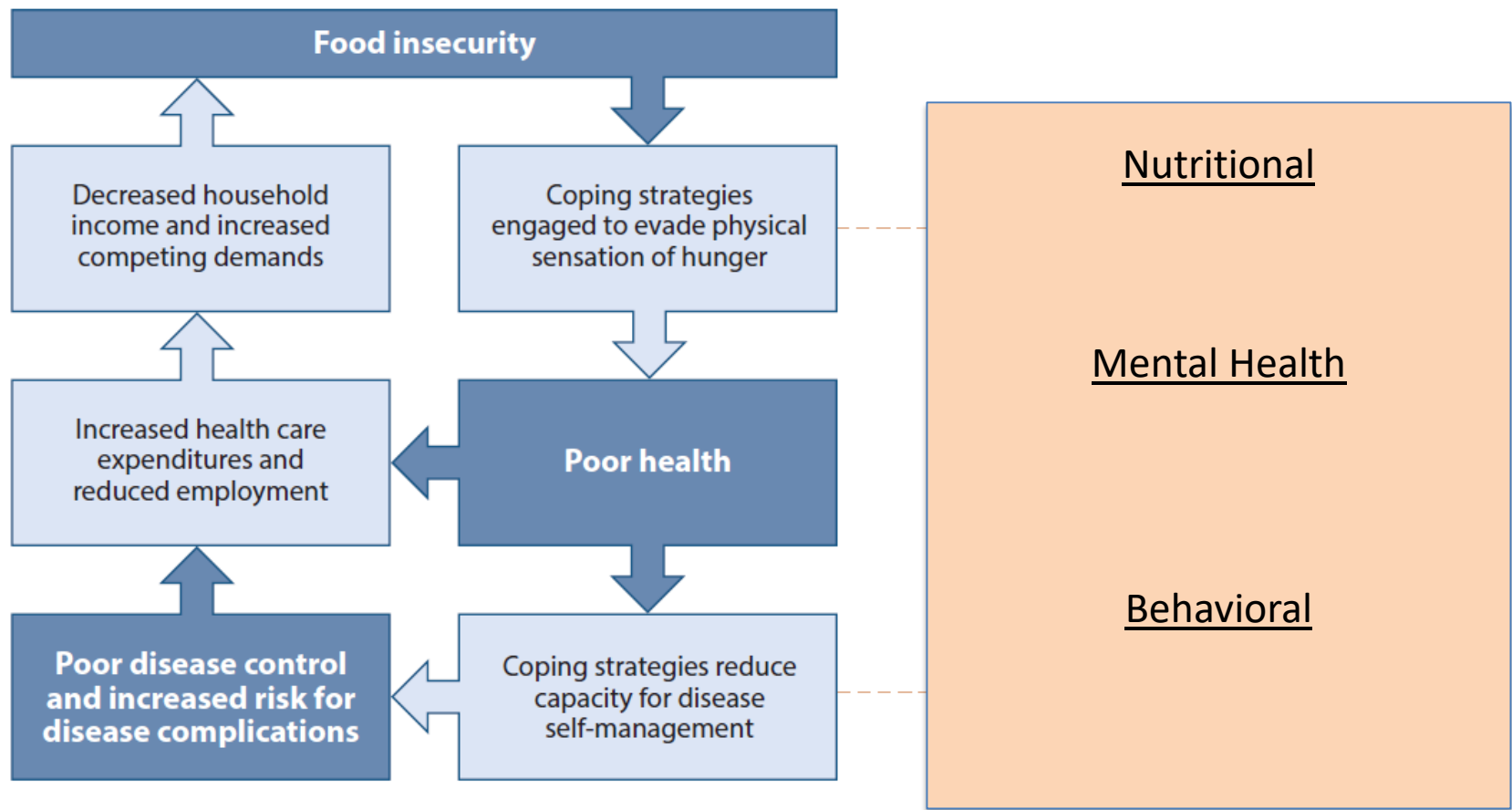


Food Insecurity &  
Health are  
Related

The Problem is a  
Big One

Interventions Can  
Help Address the  
Problem



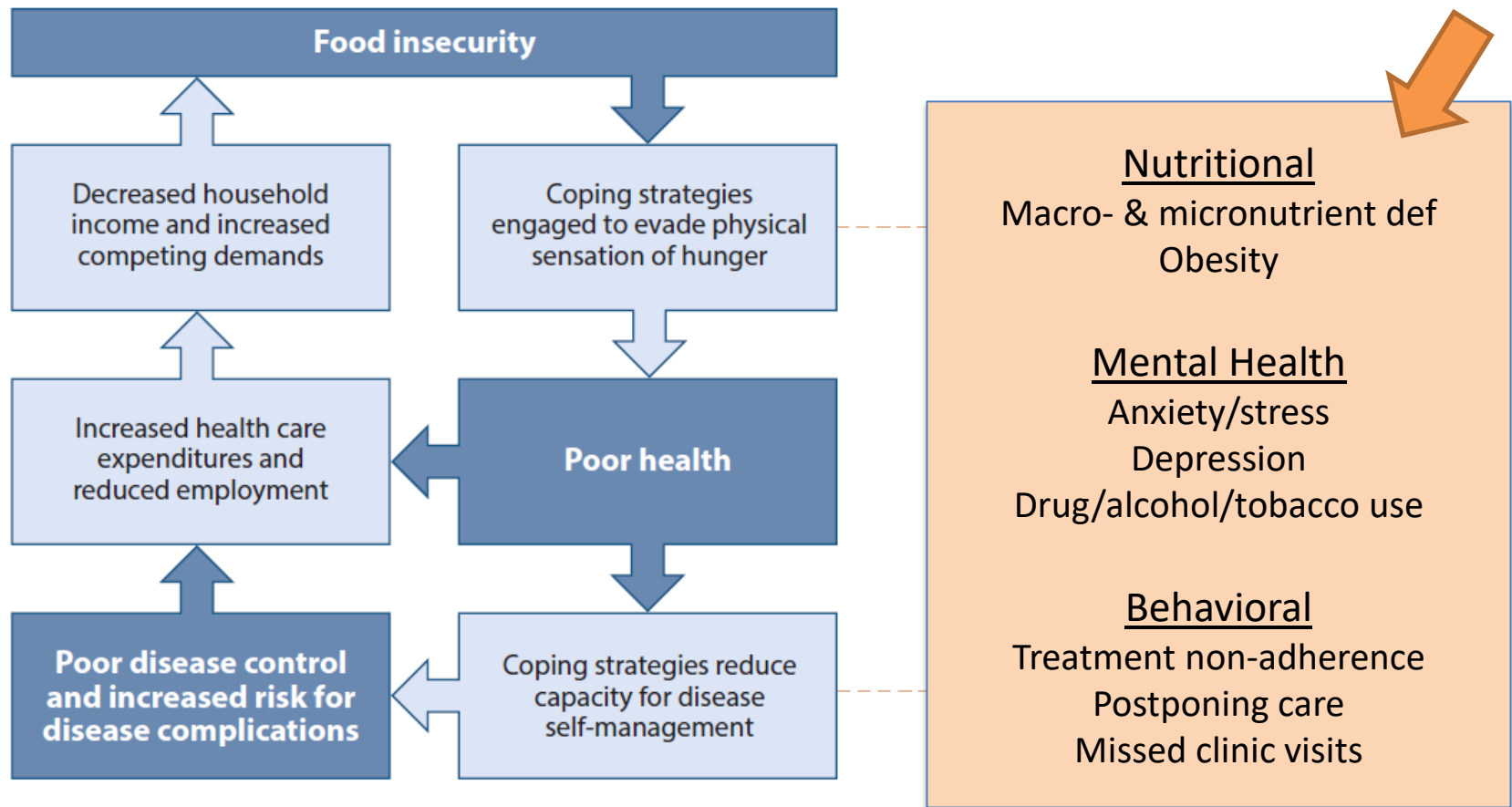


**Figure 2**

Interwoven pathways connecting food insecurity and poor health.



These are not theoretical. All of have been shown in multiple research studies.

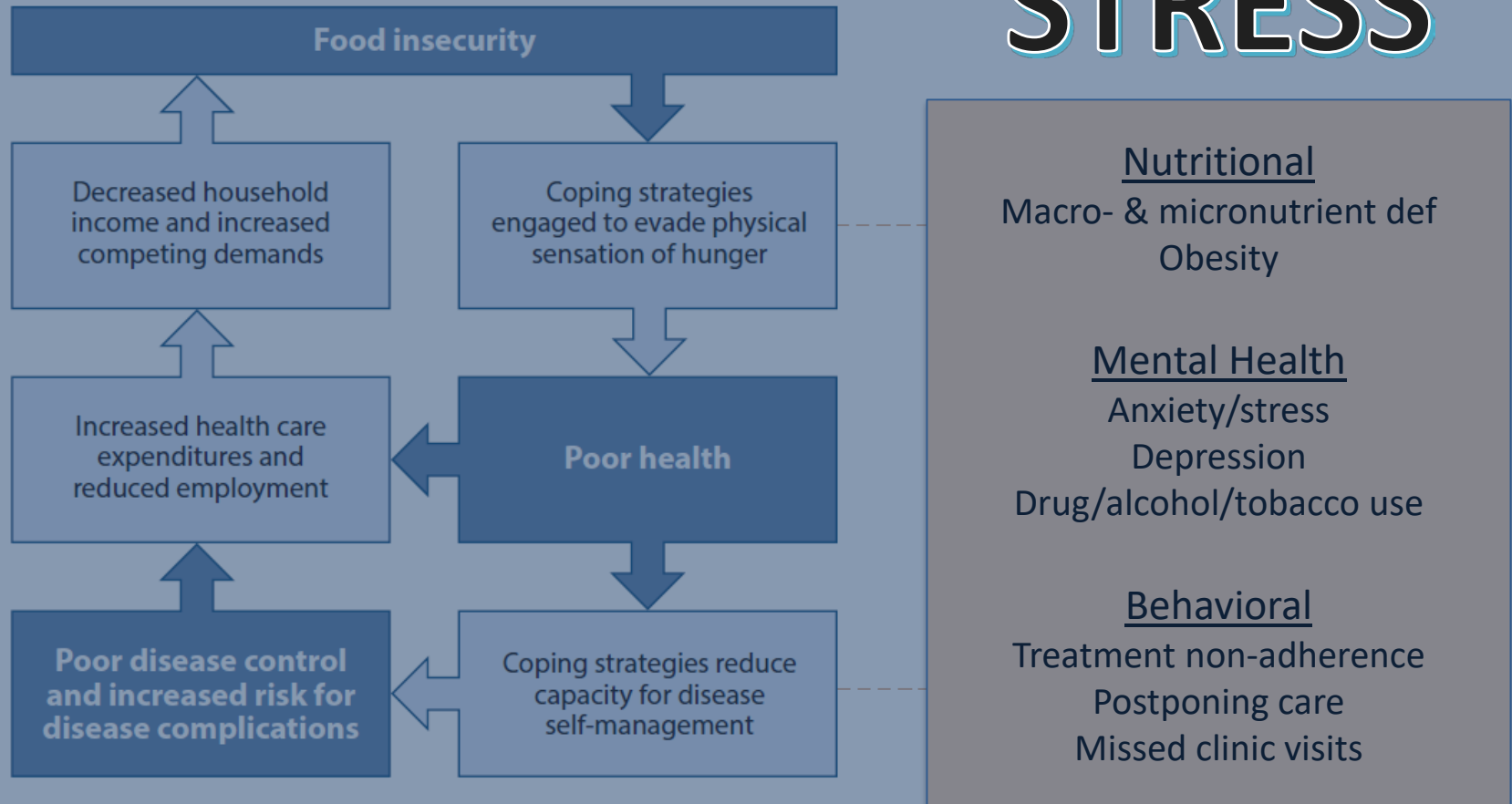


**Figure 2**

Interwoven pathways connecting food insecurity and poor health.

Weiser, Palar, et al. Food Insecurity and Health: A Conceptual Framework. Chapter in:  
Food Insecurity and Public Health.  
CRC Press, 2015.

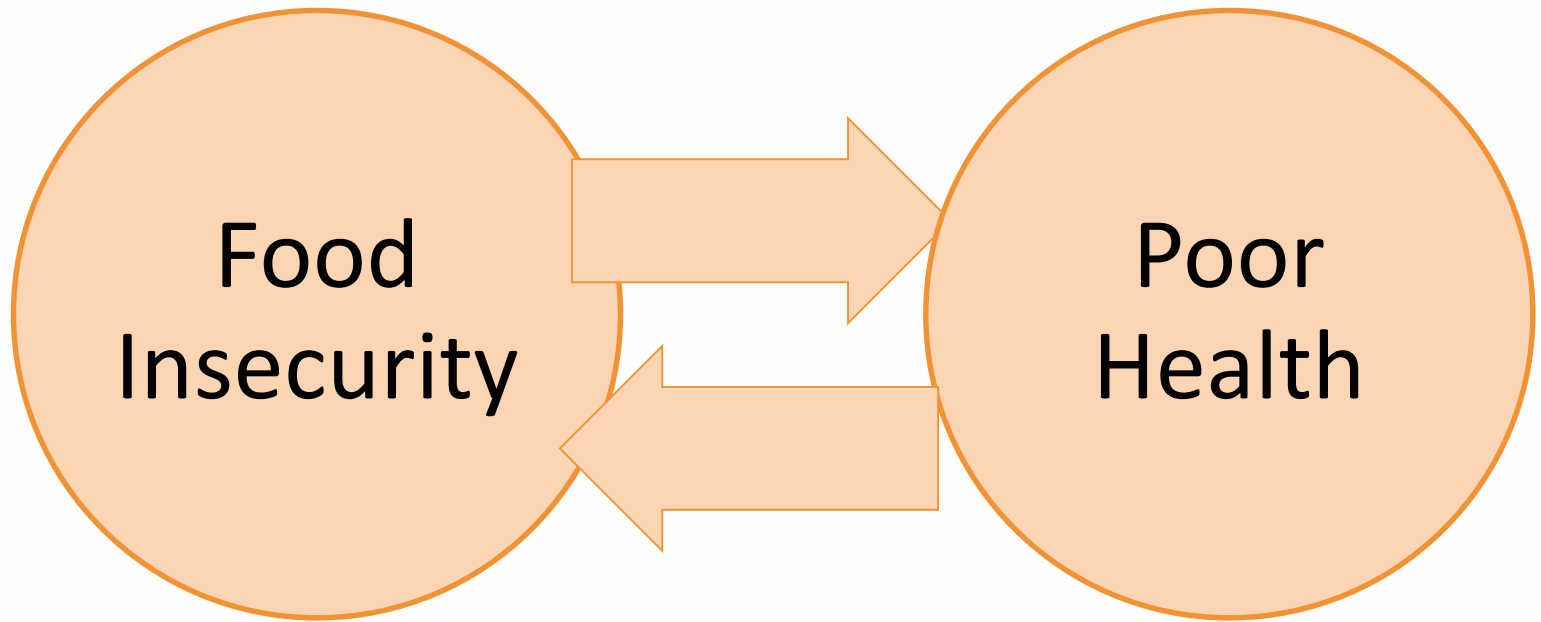
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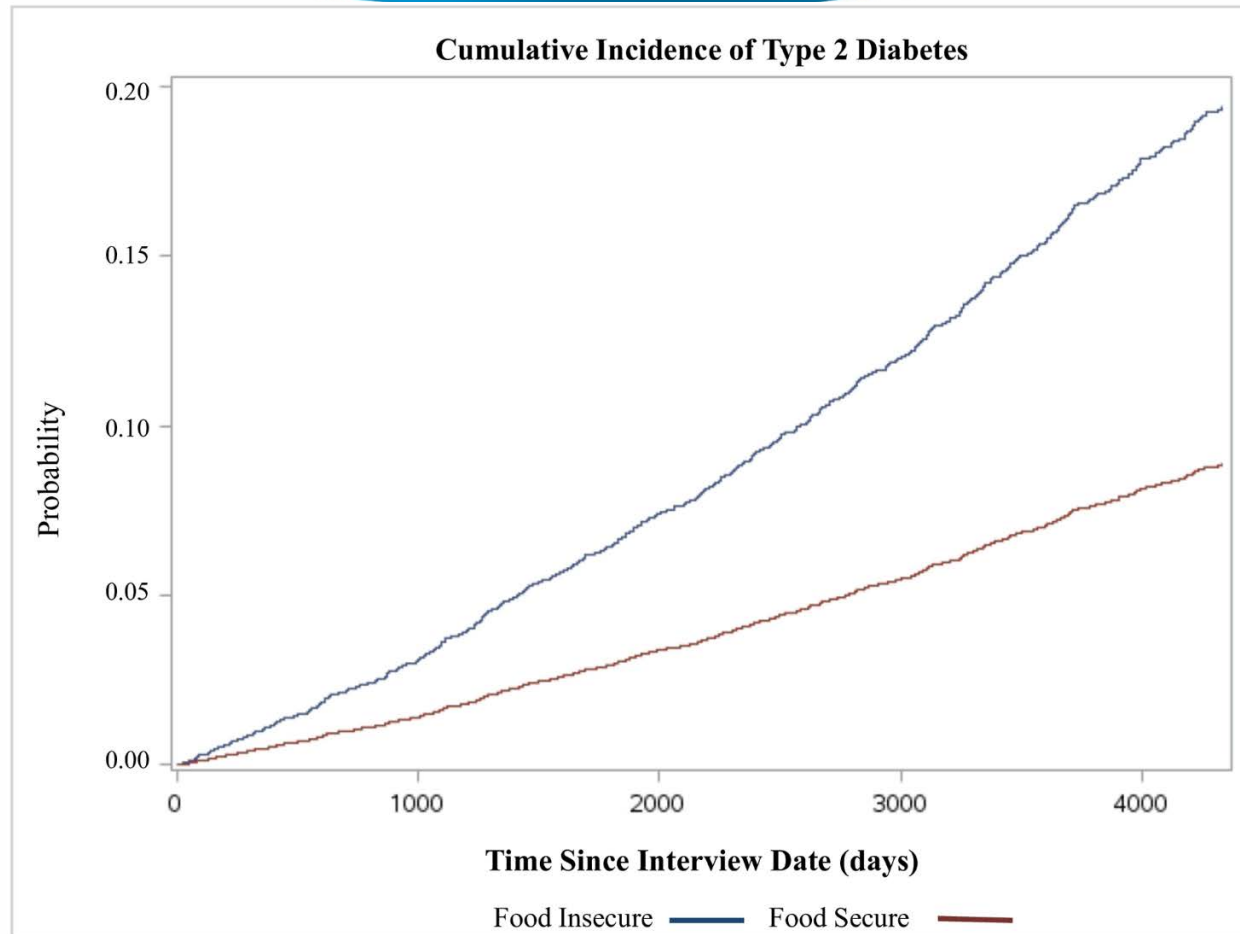
**Figure 2**

Interwoven pathways connecting food insecurity and poor health.

# Food Insecurity Impacts Diverse Health Outcomes Across the Lifespan

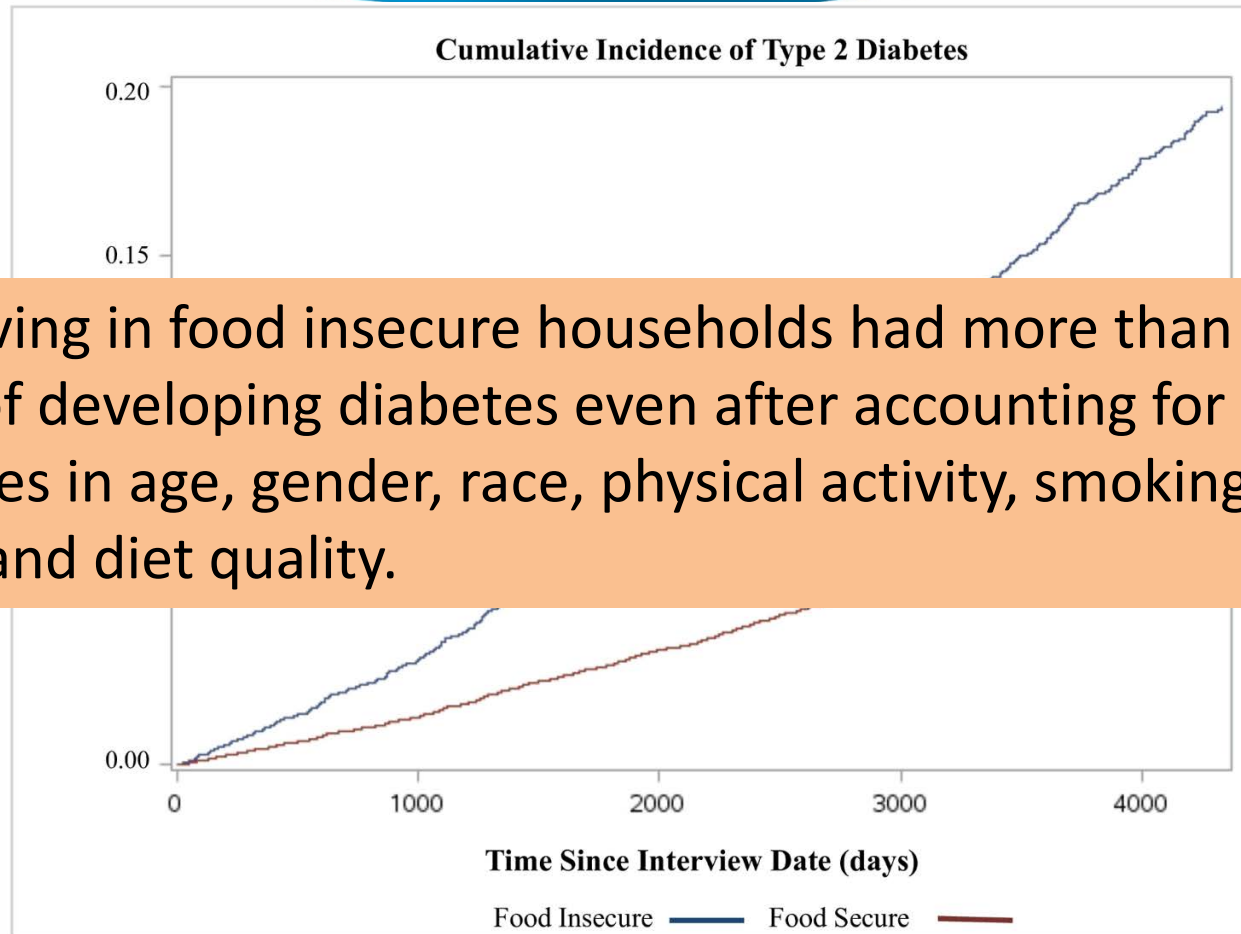


# Food Insecurity → Diabetes




Tait, C. A., et al. (2018). "The association between food insecurity and incident type 2 diabetes in Canada: A population-based cohort study." PloS one **13**(5): e0195962.

# Food Insecurity → Diabetes



People living in food insecure households had more than TWICE the risk of developing diabetes even after accounting for differences in age, gender, race, physical activity, smoking, alcohol, and diet quality.

Tait, C. A., et al. (2018). "The association between food insecurity and incident type 2 diabetes in Canada: A population-based cohort study." *PloS one* **13**(5): e0195962.



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# **1 in 8 Households are Food Insecure**

## **\$77.5 billion**

**additional health care  
expenditures annually**





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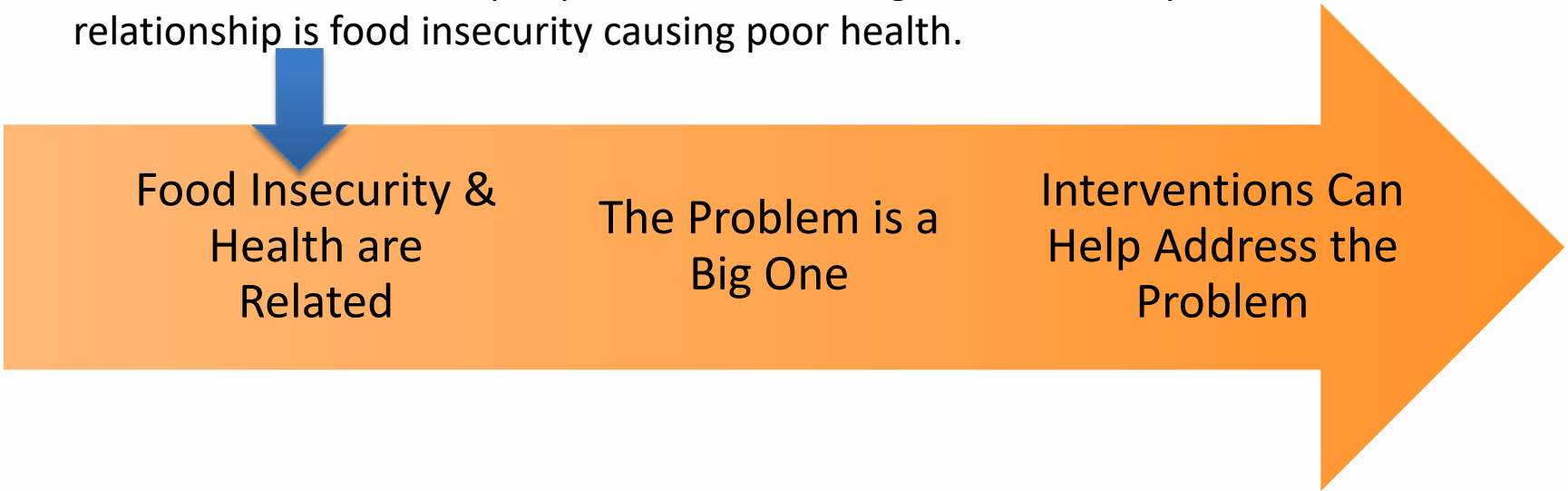
Interventions Can  
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Problem

# SNAP & Impact on Health Outcomes

- Less hypoglycemia at end of month
- Fewer pregnancy-related ER visits
- Fewer child ER visits for asthma
- Fewer adult ER visits for HTN
- Fewer hospitalizations and shorter length-of-stay
- Lower health care expenditures
- Less cost-related medication non-adherence

# Where are we in early 2019?

- Food insecurity is DEFINITELY linked with poor health and higher health care utilization.
- Some of this relationship is poor health causing food insecurity; some of this relationship is food insecurity causing poor health.



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# Where are we in early 2019?

- Food insecurity more than doubles diabetes risk.
- Food insecurity is associated with ER use and hospitalizations.
- Annual health care expenditures associated with food insecurity are enormous.



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# Where are we in early 2019?

- SNAP works
- WIC likely works
- Home delivered meals—data is suggestive



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# Clinical Models: Screen and Intervene

Identification of  
food insecurity  
by positive  
clinical screen

Referral to  
entity managing  
connection to  
federal or  
community  
program

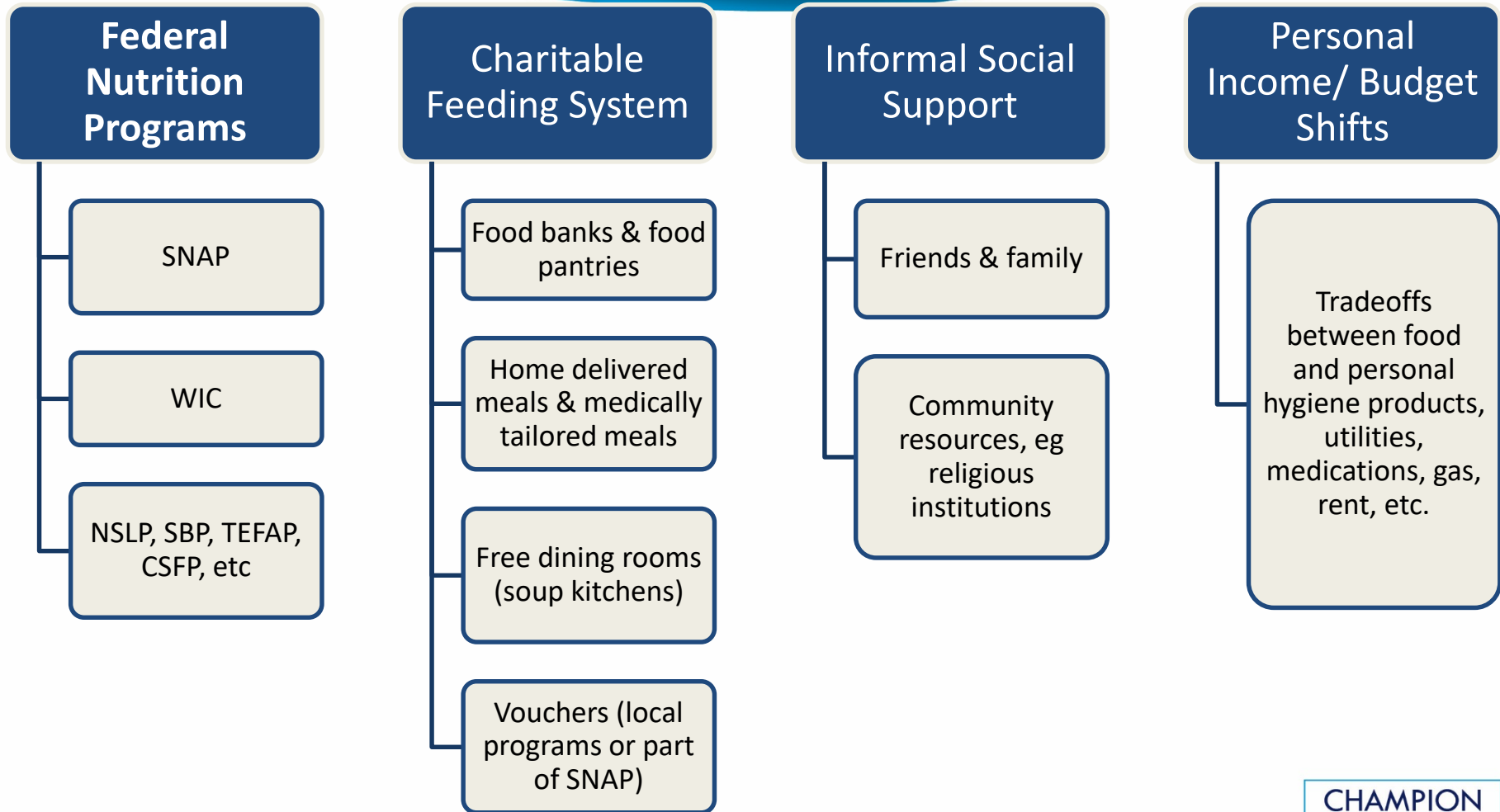
Enrollment in  
federal or  
community food  
program

Improved diet  
quality, food  
security, and  
clinical  
satisfaction

Improvement of  
health and  
utilization  
outcomes



# Resources for Food Insecure Households





# Two Models of Community Engagement

## Leveraging an Existing CBO Infrastructure

- Partner with a CBO, add your unique skills to their unique skills



## Developing Your Own Infrastructure

- Creating your own program



# The Feeding America Network

**200** MEMBER  
FOOD BANKS

+



=

**46M**

**AMERICANS  
SERVED ANNUALLY**

+

**60K** FOOD  
PANTRIES  
AND MEAL  
PROGRAMS



# Advantages to Working with an Existing CBO

- Leverages infrastructure of an entire organization
  - Established reputation
  - Communications expertise, especially helpful for framing your issue
  - Infrastructure for advocacy, grant-writing, interventions, & dissemination of findings
  - Meeting the right people
- Working “on the inside” may be more effective than exerting external pressure

# Challenges Working with an Existing CBO

- Navigating the line between advocacy & science—what is your role as a physician?
- Negotiating who owns the content
- Justifying your effort to your home institution

# Feeding America's 2025 Goal

**By 2025, Feeding America, in collaboration with our network and our partners, will ensure access to enough **nutritious** food for people struggling with hunger and make meaningful progress toward ending hunger.**



# The New York Times

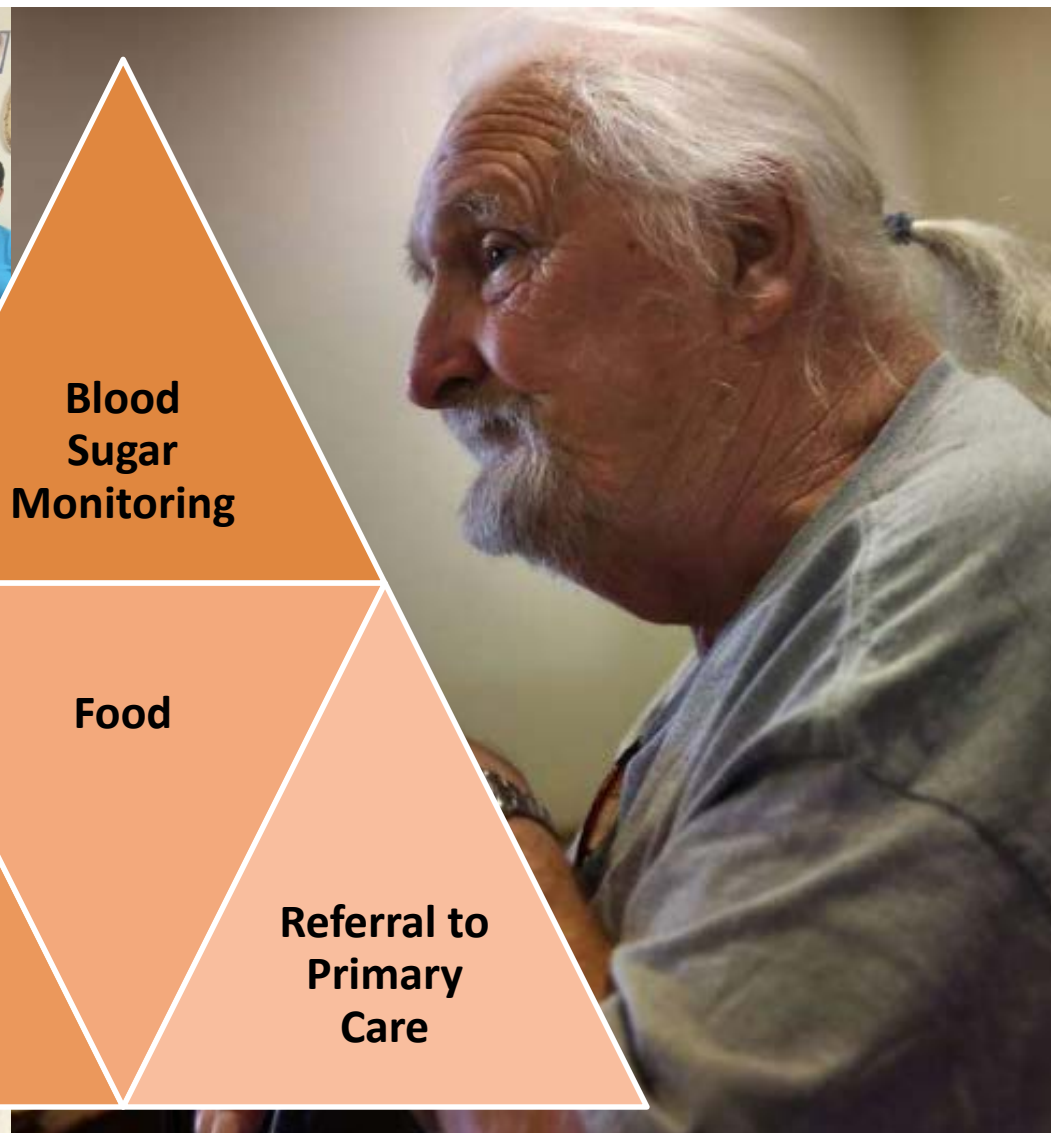
HEALTH

## *Food Banks Take On a Contributor to Diabetes: Themselves*

By CATHERINE SAINT LOUIS JUNE 17, 2016







**Blood  
Sugar  
Monitoring**

**Food**

**Diabetes  
Education**

**Referral to  
Primary  
Care**



# Comprehensive Diabetes Self-Management Support From Food Banks: A Randomized Controlled Trial

Hilary K. Seligman, MD, MAS, Morgan Smith, RN, PHN, CNS, CDE, Sophie Rosenmoss, BA, Michelle Berger Marshall, MS, RD, and Elaine Waxman, PhD

**Objectives.** To determine whether food bank provision of self-management support and diabetes-appropriate food improves glycemic control among clients with diabetes.

**Methods.** We screened 5329 adults for diabetes at food pantries ( $n = 27$ ) affiliated with food banks in Oakland, California; Detroit, Michigan; and Houston, Texas, between October 2015 and September 2016. We individually randomized 568 participants with hemoglobin A1c (HbA1c) 7.5% or greater to waitlist control or 6-month intervention including food, diabetes education, health care referral, and glucose monitoring. The primary outcome was HbA1c at 6 months.

**Results.** Food security (relative risk [RR] = 0.85; 95% confidence interval [CI] = 0.73, 0.98), food stability (RR = 0.77; 95% CI = 0.64, 0.93), and fruit and vegetable intake (risk difference [RD] = 0.34; 95% CI = 0.34, 0.34) significantly improved among intervention participants. There were no differences in self-management (depressive symptoms, diabetes distress, self-care, hypoglycemia, self-efficacy) or HbA1c (RD = 0.24; 95% CI = -0.09, 0.58).

**Conclusions.** Food banks are ideally situated to provide diabetes-appropriate food to food-insecure households. Effective strategies for food banks to support improvements in diabetes clinical outcomes require additional study.

**Public Health Implications.** Moving chronic disease support from clinics into communities expands reach into vulnerable populations. However, it is unclear how community interventions should be integrated with clinical care to improve disease outcomes.

**Trial Registration Number.** NCT02569060 (*Am J Public Health*. 2018;108:1227–1234. doi:10.2105/AJPH.2018.304528)

often financially out of reach for food-insecure households. In addition, adults with diabetes living in food-insecure households face other significant barriers to self-management, including cost-related medication nonadherence, poor clinical follow-up because of competing time demands, depression, and increased hypoglycemia risk.<sup>4–8</sup> Such challenges likely contribute to the poor glycemic control observed among patients with diabetes living in food-insecure, compared with food-secure, households.<sup>9,10</sup>

Food banks have emerged as a potential partner in addressing challenges with traditional diabetes interventions in clinical settings for numerous reasons. First, food banks can support food-insecure households who have difficulty accessing diabetes-appropriate foods. While few diabetes interventions implemented in health care settings have the capacity to provide food, food distribution is the main expertise of food banks. Second, food banks reach highly vulnerable populations, many of which are also at highest risk of poor engagement in traditional clinical

# Two Models of Community Engagement

## Leveraging an Existing CBO Infrastructure

- Partner with a CBO, add your unique skills to their unique skills



## Developing Your Own Infrastructure

- Creating your own program





**FRESH PRODUCE FOR ALL SAN FRANCISCANS**

Participant #:

First Day to Use:

Last Day to Use:

Vendor:

**VALID FOR: Any fresh or frozen fruits and vegetables.  
No added sugar or salt.**

*VÁLIDO PARA: Cualquier frutas y vegetales frescas o congeladas sin azúcar o sal.*  
适用于任何新鲜或冷冻水果和蔬菜。不加糖或盐。

XXXX



**\$5.00**

**MAXIMUM**

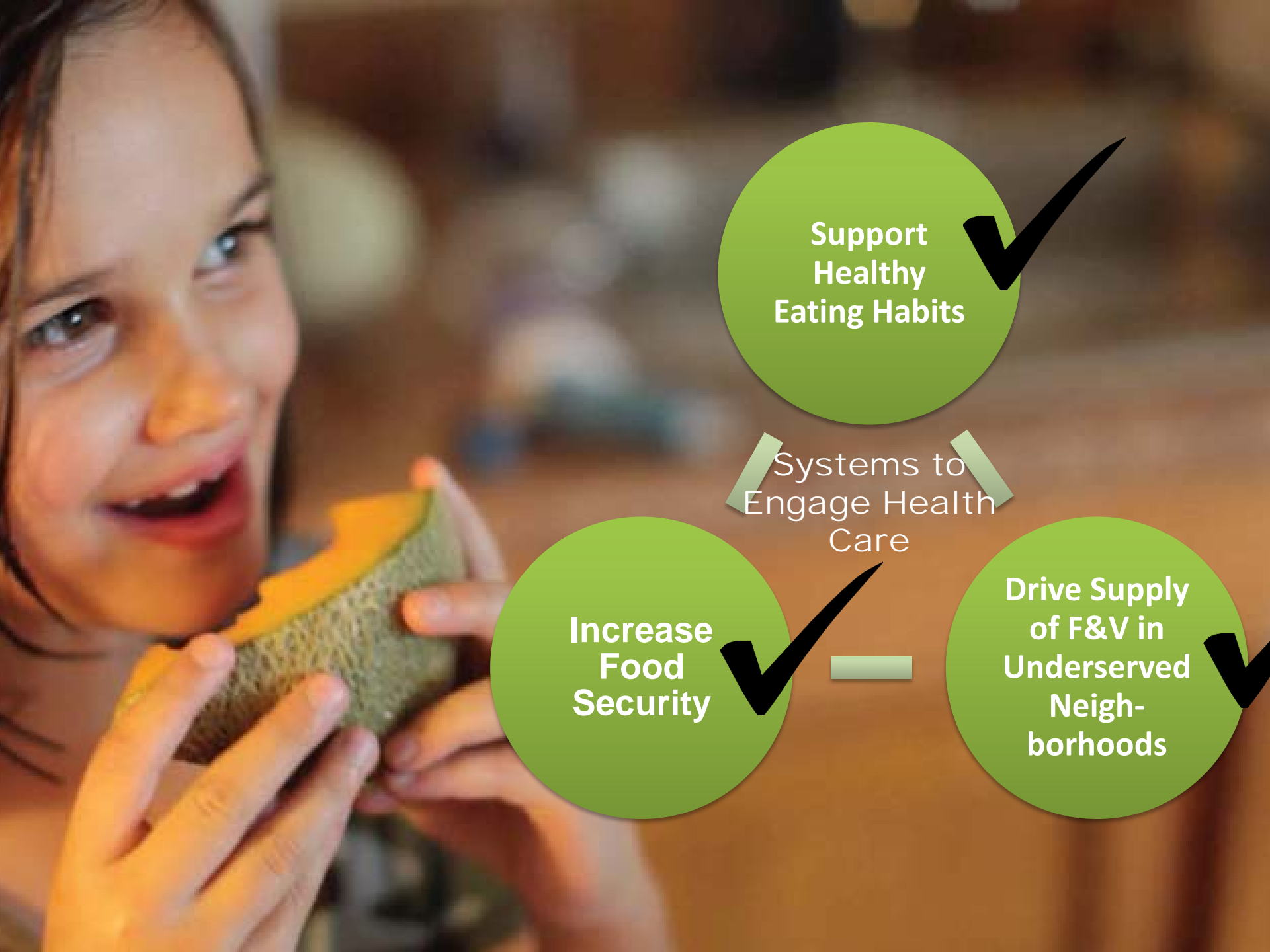


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**Support  
Healthy  
Eating Habits** ✓

Systems to  
Engage Health  
Care

**Increase  
Food  
Security** ✓

**Drive Supply  
of F&V in  
Underserved  
Neigh-  
borhoods** ✓

# We Are On the Right Track

- Individual participants
  - Increase F&V intake by 1 serving daily
  - More food secure
  - Greater confidence in making healthy food choices on a budget
  - Improved health status & quality of life
- Vendors
  - New customers
  - Increased revenue
  - Higher produce turnover, less food waste





WE ENVISION A SAN FRANCISCO WHERE ALL PEOPLE IN ALL NEIGHBORHOODS CAN ACCESS AND AFFORD FRUITS AND VEGETABLES.

Fresh Produce for all San Franciscans | [www.eatsfvoucher.org](http://www.eatsfvoucher.org)

- Advantage: We make all of the decisions
  - Values: maximally efficient, client-centered, no reproduction of existing community resources
  - We have had HUGE impact in a short period of time
- Challenges
  - My team has to do all the work and learn many, many new skills
  - We are responsible for keeping the program running
    - Logistics of a network of stakeholders, CBO's, food vendors, and financial personnel.
  - We need ongoing funding—don't underestimate this!





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## Skills Learned in this Process

- Running a non-profit
- Communications/media externally and internally
- Political savvy
- How to be a service provider for a government entity
- Strategic planning process
- Program scaling
- Establishing and running a Board
- University reimbursement systems
- Program QI processes outside of academic research
- Complex budgeting processes
- Navigating gaps in funding for a program
- Fundraising strategies: individual & corporate focus
- Technology of debit cards
- Working with food vendors
- ...

**I am not trained in most of these skills. Neither are typical physicians.**

## City offers vouchers for fruits, veggies



Radman's Produce Market manager Marwan Omar stocks his store in the Tenderloin with fresh fruits and vegetables. (Mike Koozmin/S.F. Examiner)

By Joshua Sabatini on September 7, 2015 2:00 am



San Francisco is booming with soaring rents and flourishing technology companies, but economic challenges persist for hundreds of thousands of residents who do not have the means to afford adequate nutritious food, putting them at risk for chronic diseases.

### Trending Articles

[BART approves 'Gator Pass' discount for SFSU students](#)

[Proposed SF sales tax hike would reduce consumer spending by \\$154M, report finds](#)

[A tale of three cities](#)

[Pokemon Go craze sweeps San Francisco](#)

[Muni buses to get air conditioning for first time](#)

### SEE ALSO

**1** [Wholesale Grocery](#)

**2** [Organic Food Products](#)

**3** [Printable Snack Coupons](#)

# Things I Have Learned Doing Community Advocacy

Community engagement is not traditionally rewarded at academic institutions, health systems, or other physician employers.

Highlight for your employer the ways your advocacy benefits them.

# Things I Have Learned Doing Community Advocacy

It is easy to overstretch.

Focus on what you are most interested in; there will be more opportunities than you will have the bandwidth to participate in once you start engaging deeply.

# Things I Have Learned Doing Community Advocacy

There WILL BE more false starts than true starts;  
this is not easy work (but it may be the most  
rewarding!).

Find the low-hanging fruit wherever you can.

# Things I Have Learned Doing Community Advocacy

I have developed tremendous skills, made essential connections, and created impact from community work that was *not* officially part of my job.



Food Security Task Force



Board of Directors



Policy/advocacy engagement



# Local Politics

- Real change happens at the local level
- San Francisco Board of Supervisors: Food Security Task Force
  - Member of the public → voting member representing hospitals & health care





# Op-Ed Penned with ED of CBO

SOAPBOX

## California's housing crisis is worsening hunger and health

BY HILARY SELIGMAN AND GEORGE MANALO-LECLAIR *SPECIAL TO THE BEE*

NOVEMBER 22, 2017 01:00 PM, UPDATED NOVEMBER 25, 2017 09:25 AM





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