



CHAMPION PROVIDER FELLOWSHIP

A Powerful Approach to Healthier Communities

Food Insecurity, Public Health, and Healthcare Provider Engagement

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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)



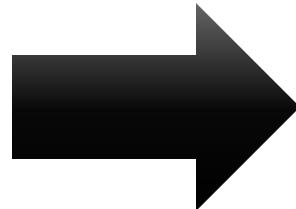
Food insecurity: Household-level economic and social condition of limited or uncertain access to adequate food (USDA)

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

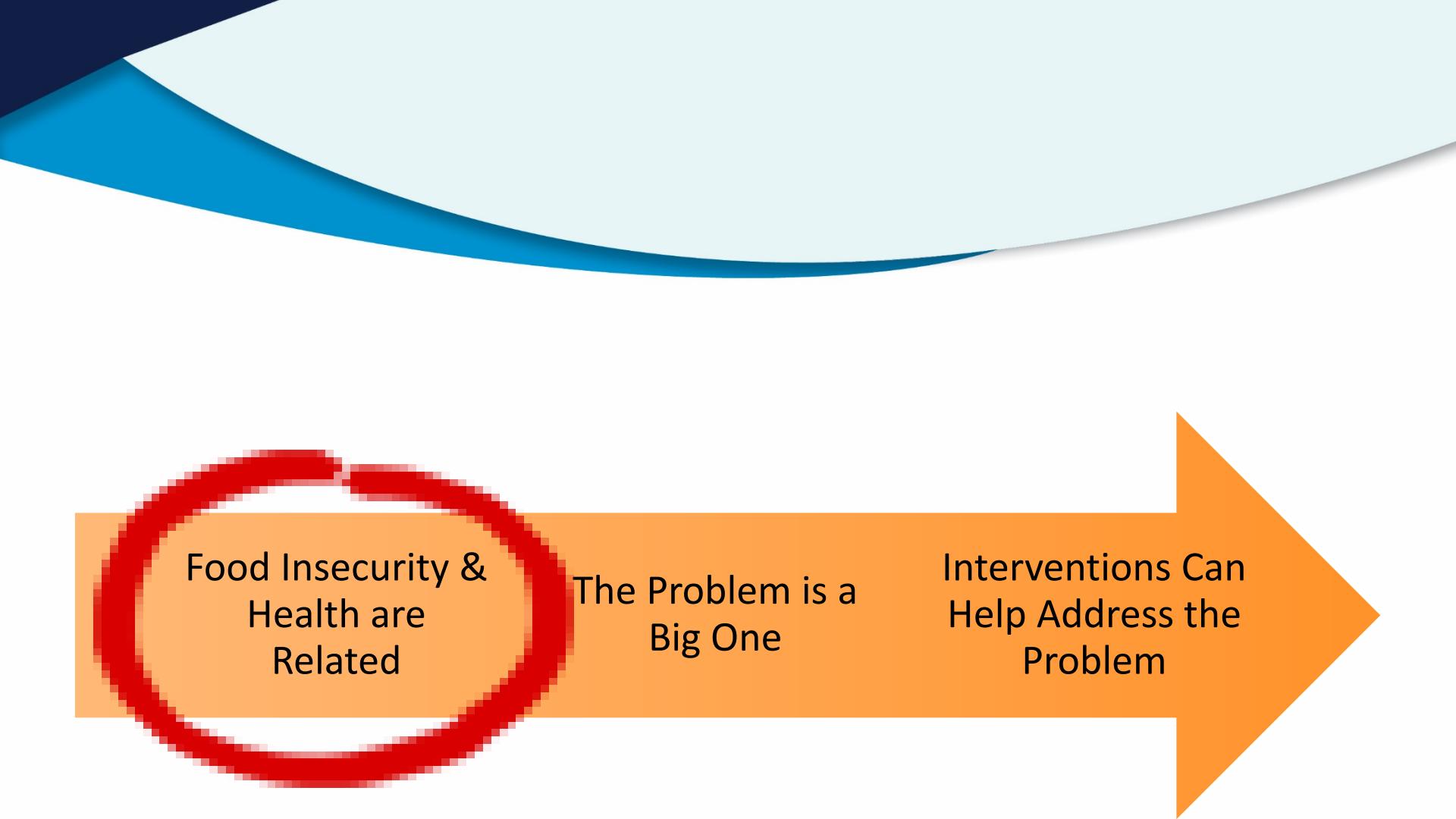


Coping Strategies to *Avoid* Hunger

- 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

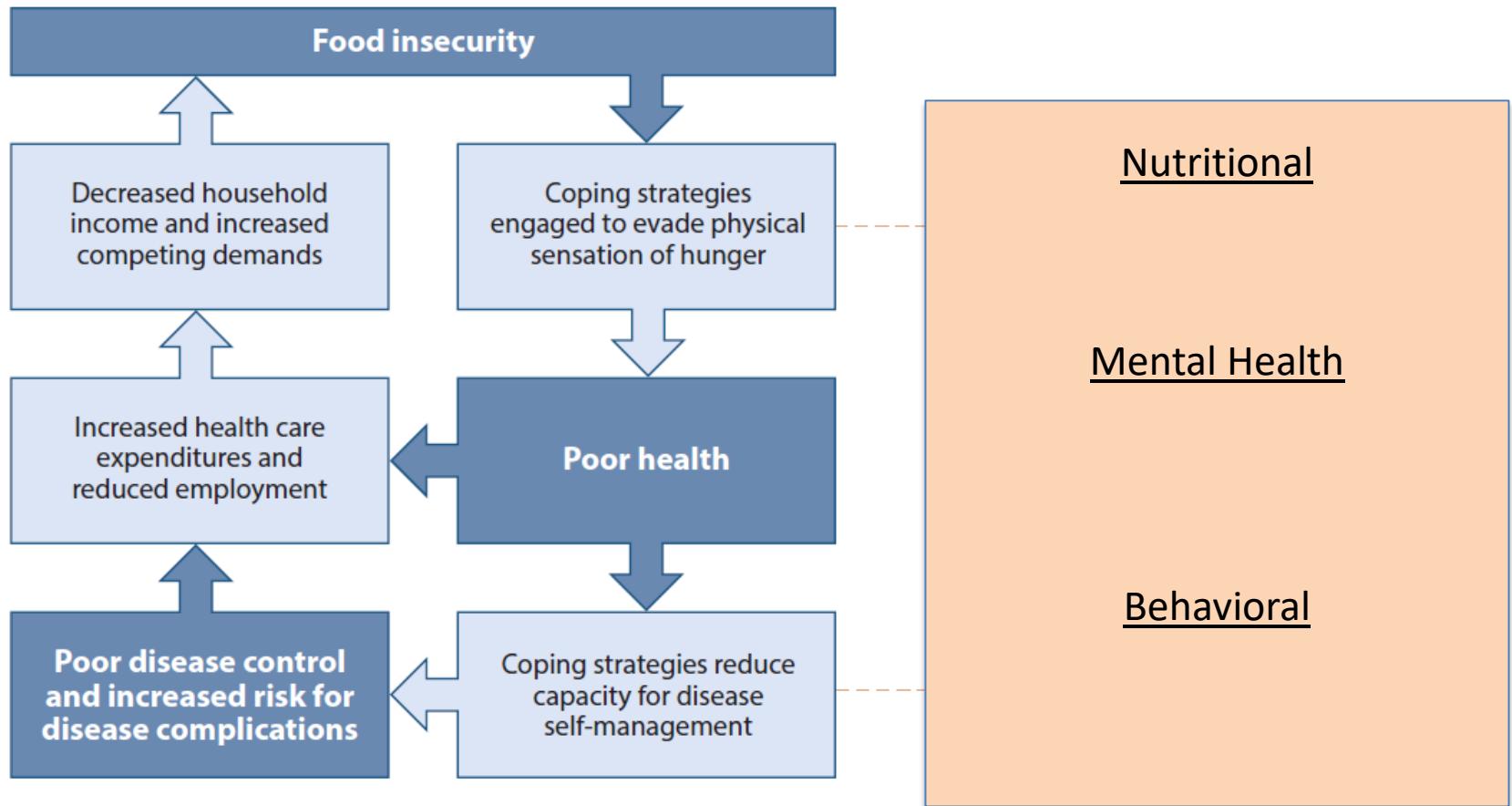


Figure 2

Interwoven pathways connecting food insecurity and poor health.

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

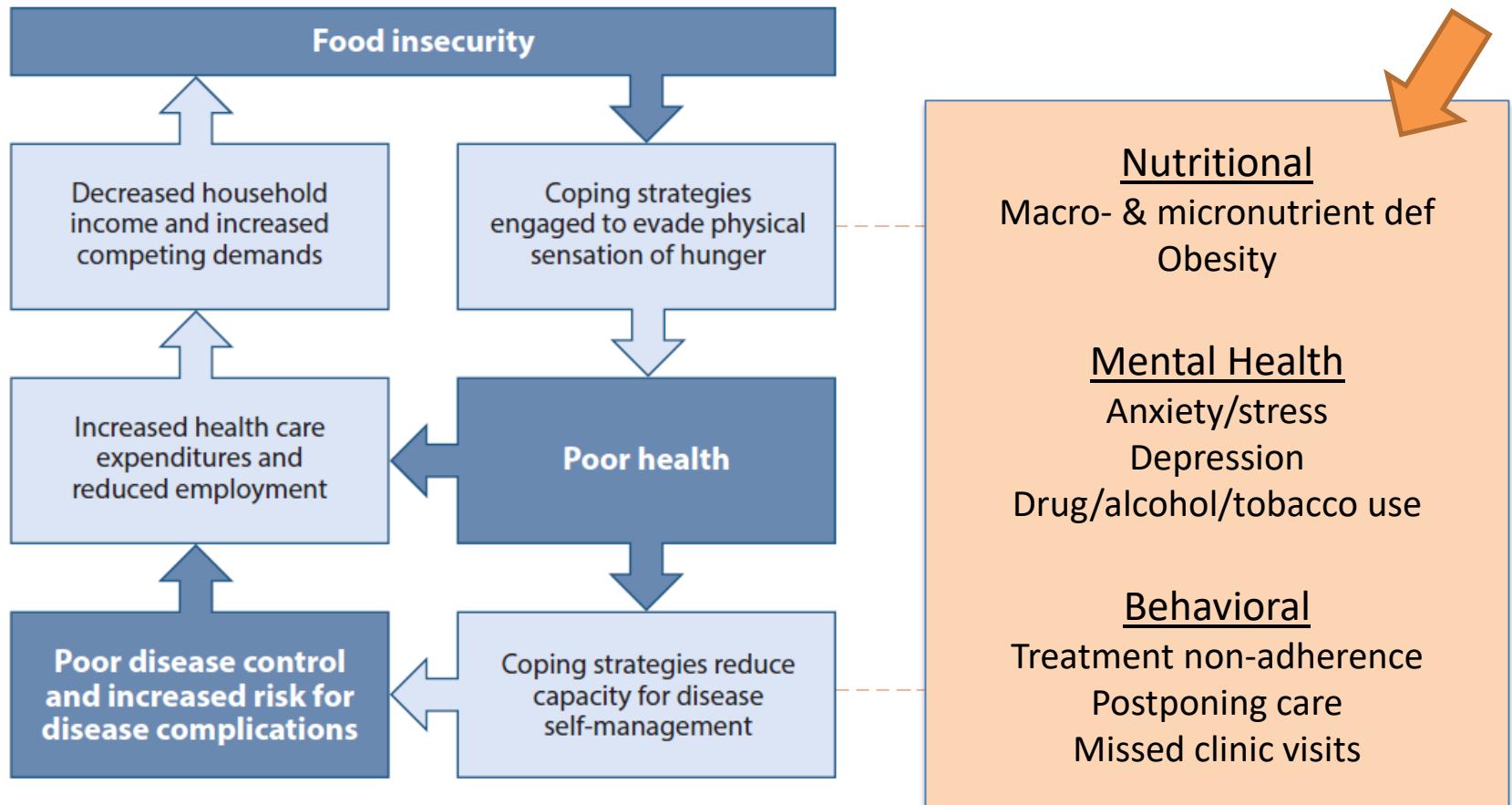


Figure 2

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.

STRESS

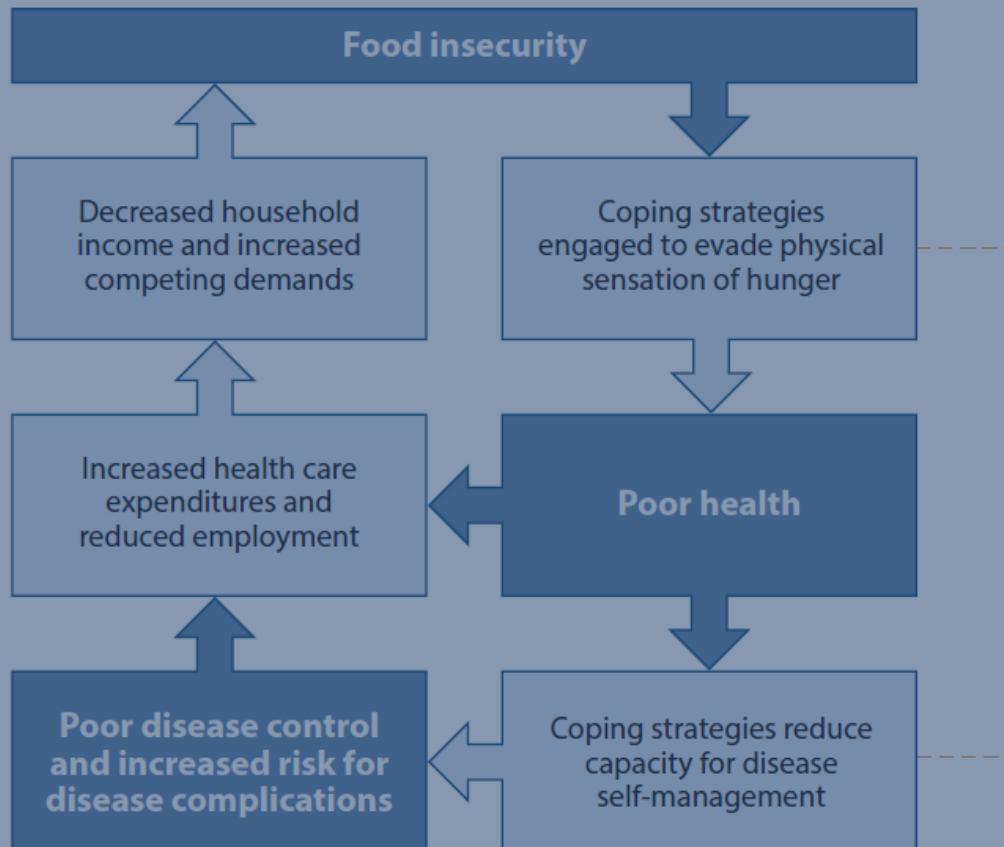


Figure 2

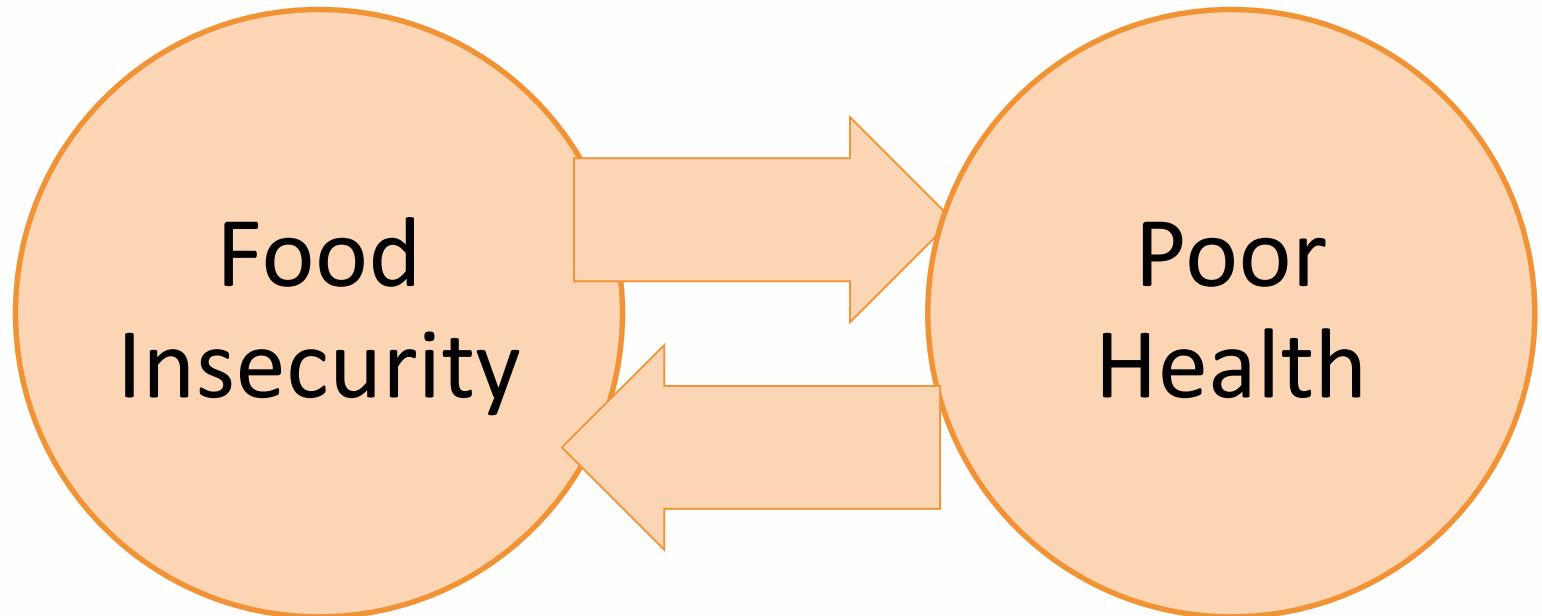
Interwoven pathways connecting food insecurity and poor health.

Nutritional
Macro- & micronutrient def
Obesity

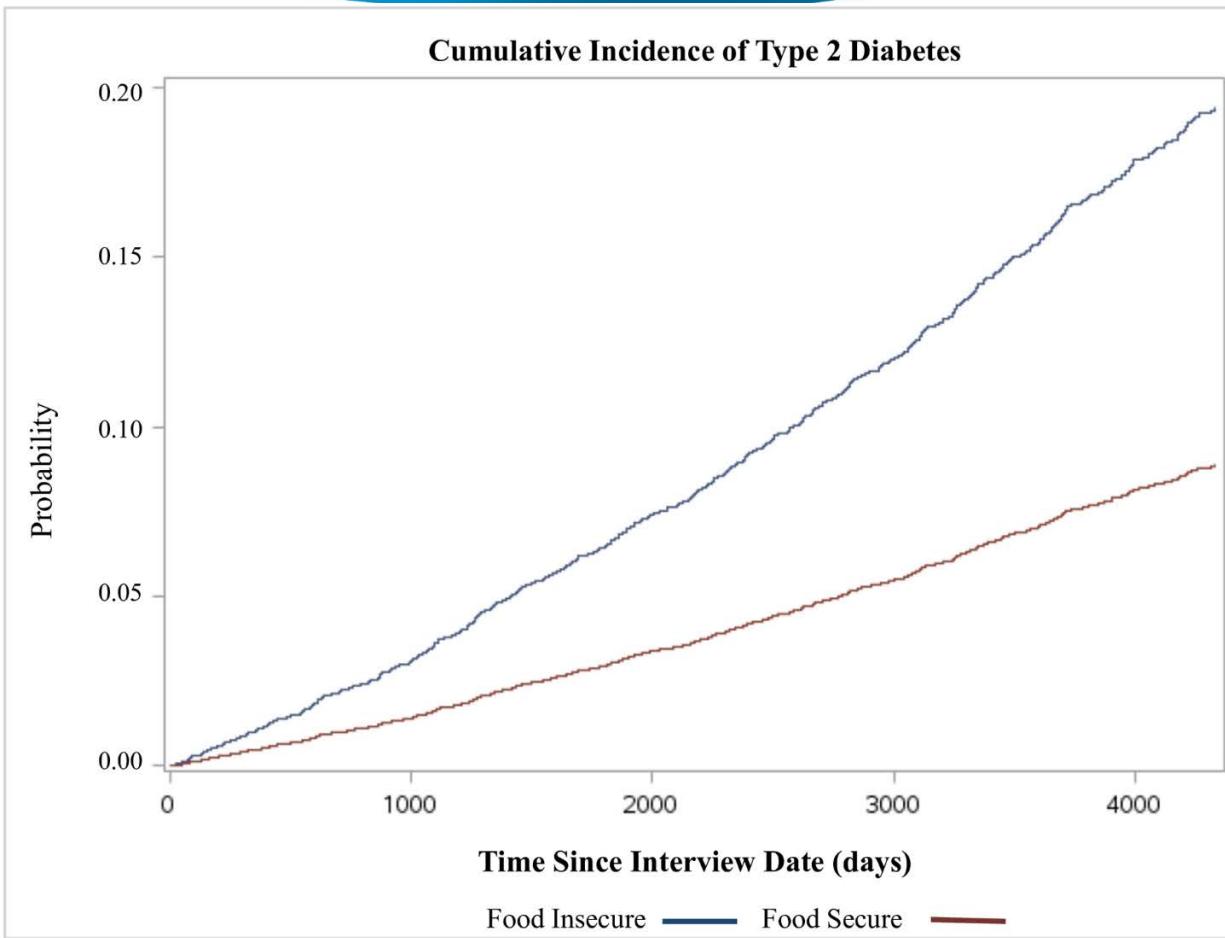
Mental Health
Anxiety/stress
Depression
Drug/alcohol/tobacco use

Behavioral
Treatment non-adherence
Postponing care
Missed clinic visits

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

Cumulative Incidence of Type 2 Diabetes

0.20
0.15

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.

0.00

0

1000

2000

3000

4000

Time Since Interview Date (days)

Food Insecure — Food Secure

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 & Health are Related

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Interventions Can Help Address the Problem

1 in 8 Households are Food Insecure

\$77.5 billion
additional health care
expenditures annually

Food Insecurity &
Health are
Related

The Problem is a
Big One

Interventions Can
Help Address the
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 DEFINITIVELY 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.

Food Insecurity &
Health are
Related

The Problem is a
Big One

Interventions Can
Help Address the
Problem

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.

Food Insecurity &
Health are
Related

The Problem is a
Big One

Interventions Can
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Problem



Where are we in early 2019?

Food Insecurity &
Health are
Related

The Problem is a
Big One

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

Interventions Can
Help Address the
Problem



Clinical Models: Screen and Intervene

Identification of food insecurity by positive clinical screen

Referral to entity managing connection to federal or community program

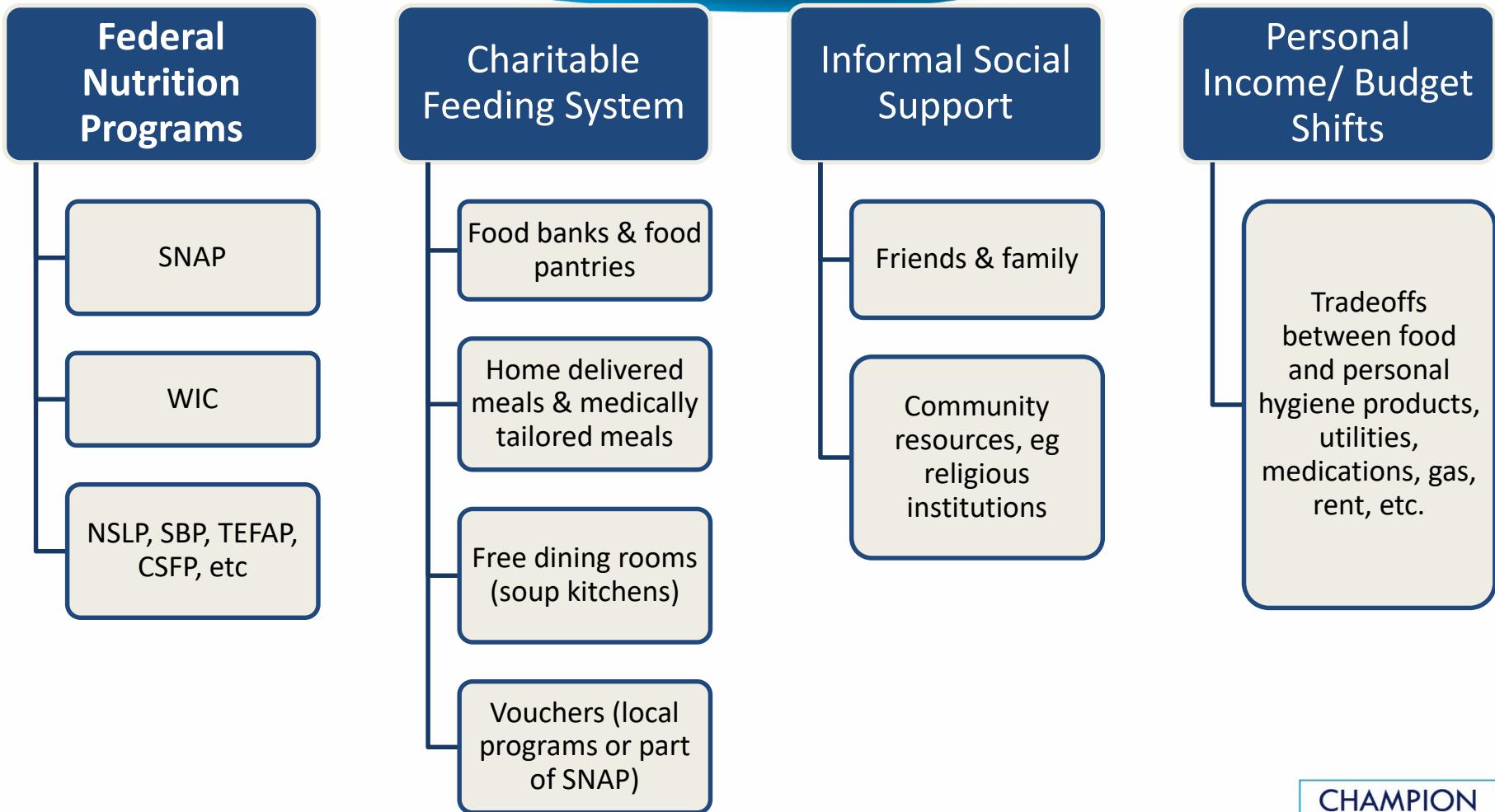
Enrollment in federal or community food program

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

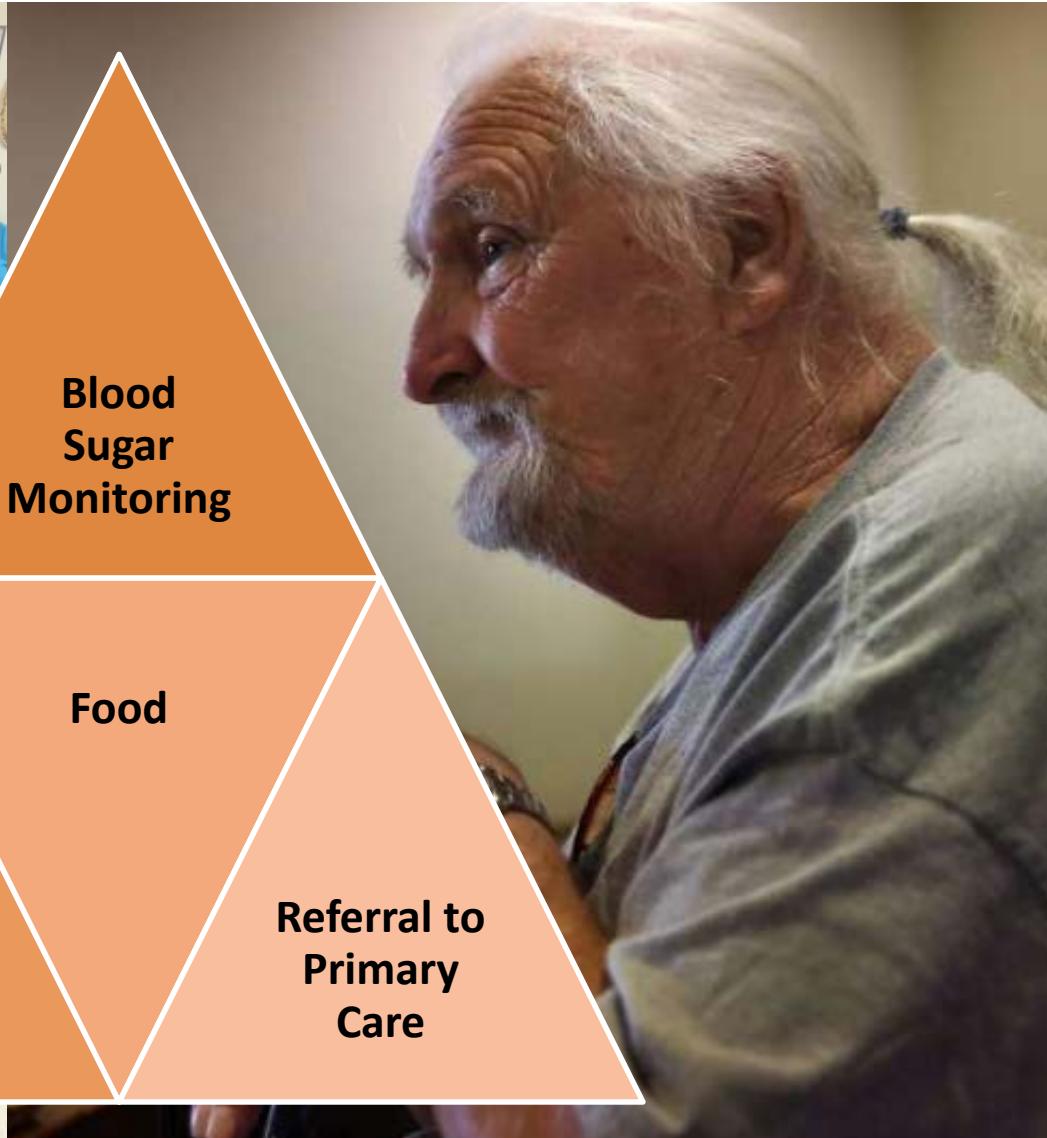
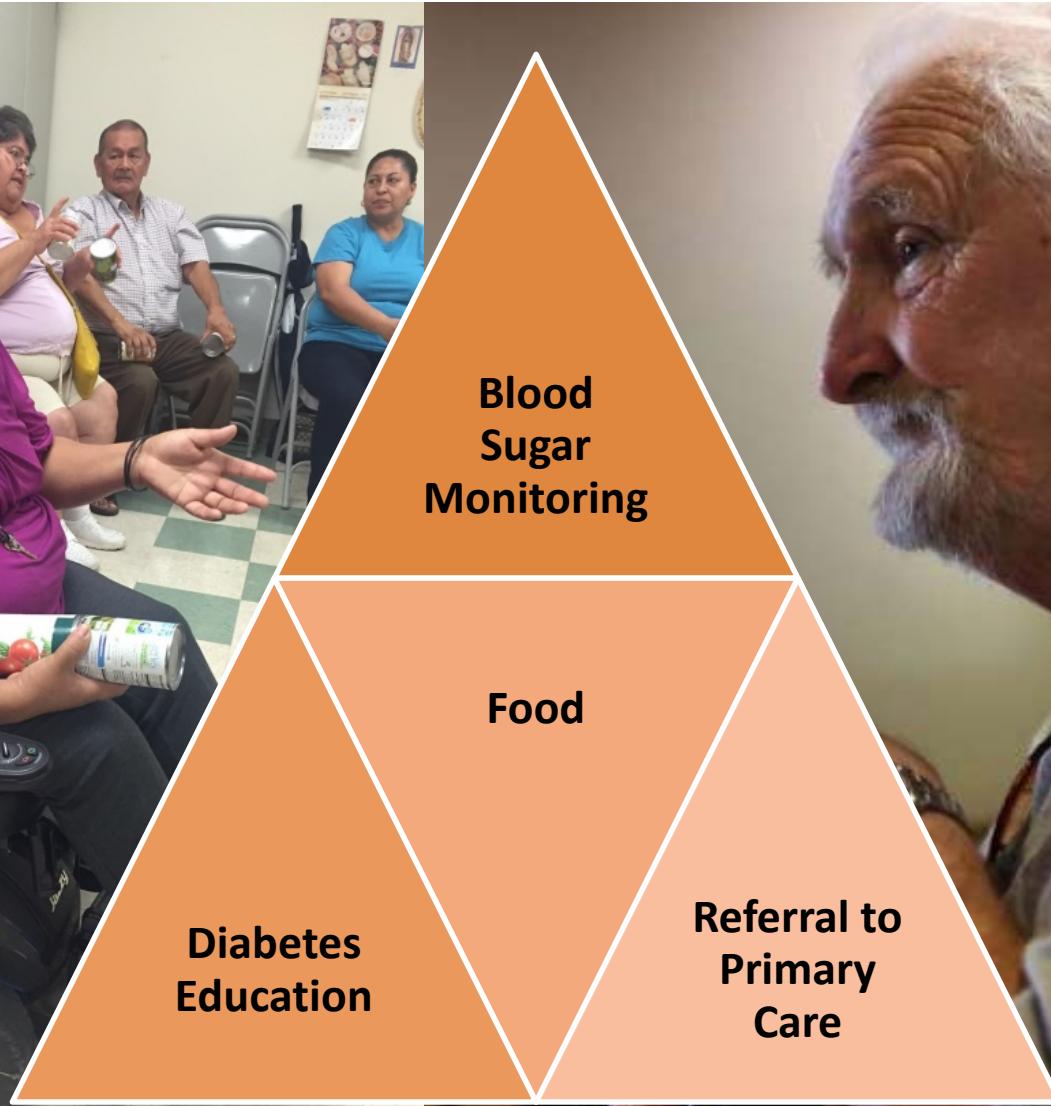
By CATHERINE SAINT LOUIS JUNE 17, 2016



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Feeding America Intervention Trial For Health Diabetes Mellitus



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.⁴⁻⁸ Such challenges likely contribute to the poor glycemic control observed among patients with diabetes living in food-insecure, compared with food-secure, households.^{9,10}

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。



VOUCHERS
4 VEGGIES

\$5.00

MAXIMUM



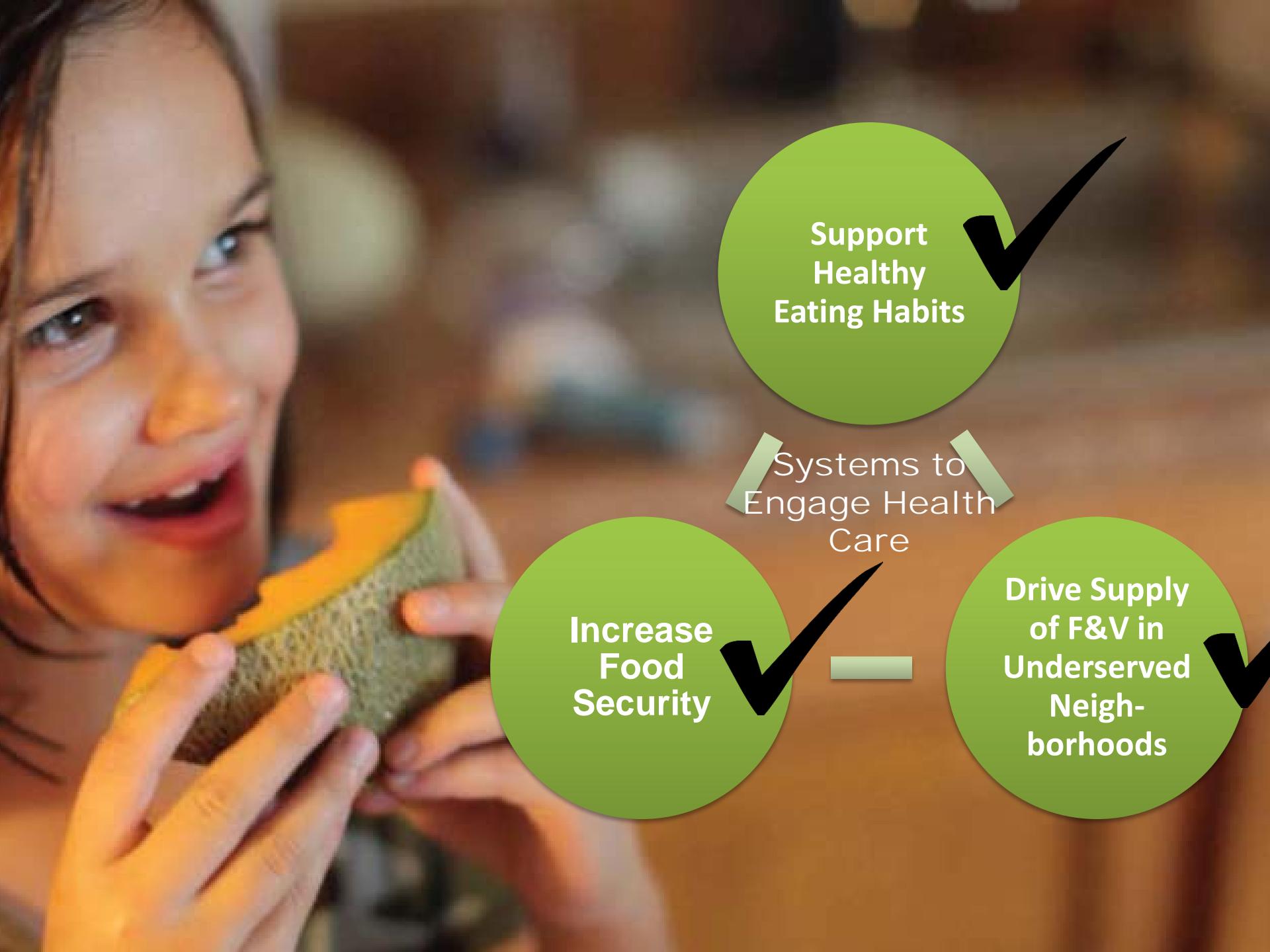
NO CHANGE GIVEN



EatSF



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Support
Healthy
Eating Habits

Increase
Food
Security

Systems to
Engage Health
Care

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

- 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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Fresh Produce for all San Franciscans | www.eatsfvoucher.org

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
- ...



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.

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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

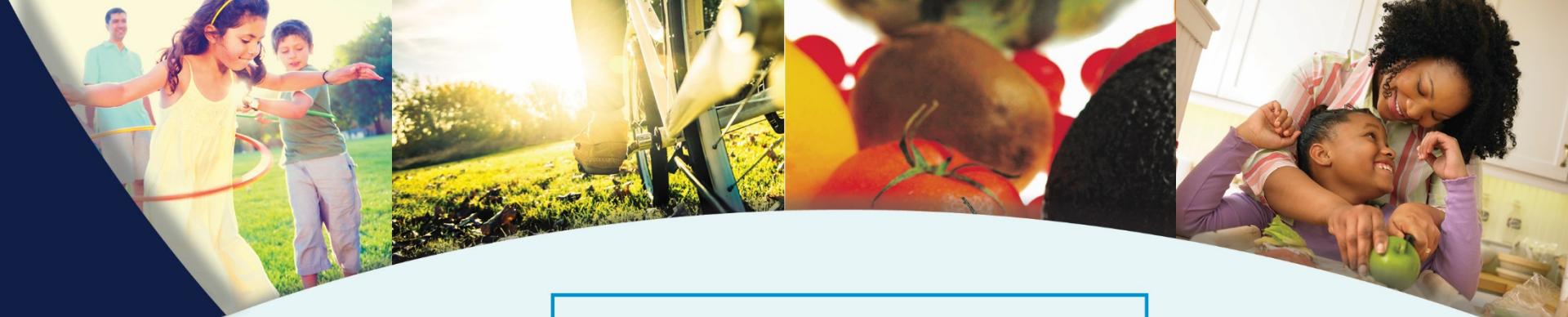
SOAPBOX

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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