



# Advancing Resilience Using PSE Approaches in Nutrition and Health: Integrating Framework, Application, and Evaluation Strategies

2021 Society for Nutrition Education and Behavior Annual Conference  
August 9, 2021

*#SNEB2021: Raising Reliance and Resilience*

# Objectives

- ▶ Define and apply the Individual + Policy, System and Environment (I+PSE) Conceptual Framework for Action to healthy eating and physical activity, food security, and sustainable food systems.
- ▶ Describe outcomes and implications from a childhood obesity prevention action planning application of the I+PSE Conceptual Framework for Action.
- ▶ Critique the evaluation strategies used in healthy eating and active living PSE initiatives using a systematic review.

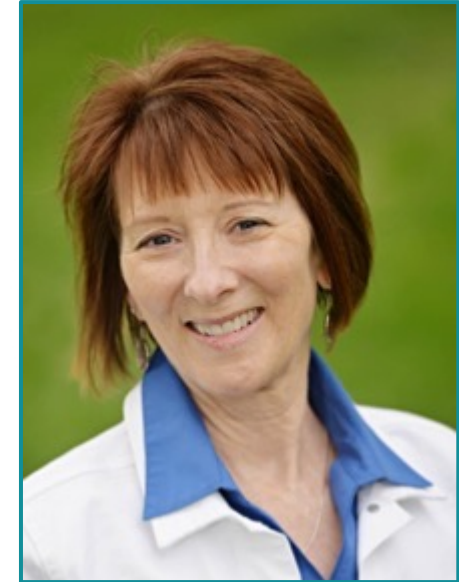
# Presenters



Angie Tagtow, MS, RD  
*Äkta Strategies, LLC, Elkhart, IA*



▶ Dena Herman, PhD, MPH, RD  
▶ *UCLA Fielding School of Public Health,  
Los Angeles, CA*



Leslie Cunningham-Sabo, PhD, RDN  
*Colorado State University, Food Science and  
Human Nutrition, Fort Collins, CO*



## I+PSE Conceptual Framework for Action: A Tool for the Nutritionists' Toolbox

Angie Tagtow, MS, RD, LD

Äkta Strategies, LLC

*#SNEB2021: Raising Reliance and Resilience*

# Nutrition & Wicked Problems

Diet quality	Overweight and obesity	Diet-related chronic disease	Health care expenditures
Hunger and food insecurity	Economic security	Global pandemic	Climate change
Biodiversity	Food waste	Trade and tariffs	Food supply chains
Poor investment in nutrition research	Minimal investment in nutrition education	Food and beverage marketing	Politics... <i>and many more</i>

## What is a “Wicked Problem?”

- ▶ “Adaptive challenge”
- ▶ Unique or novel
- ▶ No stopping rule
- ▶ Problem is not understood
- ▶ Complex
- ▶ No single cause and no single solution
- ▶ No cookie-cutter best practice approach
- ▶ Solutions are for better or for worse

Adapted from Williams B, van 't Hof S. Wicked Solutions. A Systems Approach to Complex Problems. 2014. Available at [www.gumroad.com/l/wicked](http://www.gumroad.com/l/wicked)

# What Are The Solutions?

“This modern public health world that we are quickly moving into, one in which public health as the local governmental institution has a responsibility and an opportunity to lead our collective impact around improving the public’s health. This is a multi-sectoral approach that takes the opportunity to address **environmental, systems, and policy-level change.**”

Dr. Karen DeSalvo, Former HHS Assistant Secretary for Health, October 26, 2015

“...nutrition programs use a more comprehensive approach that integrate sectors of external influence, **including interpersonal networks, communities, policies, and environmental conditions**, in conjunction with direct education...effective PSE interventions are those that improve access and affordability of **healthy foods and physical activity opportunities**”

Savoie-Roskos M, DeWitt K, Coombs C. Changes in nutrition education: A policy, systems, and environmental approach. *J Nutr Ed Behav.* 2018;50(5):431.

# Social Determinants of Health



## Healthy Individuals and Healthy Communities

- ▶ “Social determinants of health are the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.” (Healthy People 2030)
- ▶ Healthy eating and active living intersects with each of these areas
- ▶ Add new tools to our toolbox
  - ▶ Policy, system, and environmental (PSE) strategies

# What is “I+PSE?”

## Individual

**Direct Services** - Evidence-based interventions directed to individuals and families that support increased knowledge and positive behavior change

**Professional Development** - Practitioners identify topics to enhance their knowledge, skills and practices

## Policy

**Organizational & Community Policy** – Changes to procedures or organizational practices and the formation of interdisciplinary partnerships and collaborations

**Public Policy** - Changes to or creation of laws, ordinances, resolutions, mandates, regulations or rules

## Systems

**Infrastructure & Operations** - Changes to infrastructure that impacts all elements of an organization, institution, or framework

*\*Result of individual, policy PLUS environmental changes*

## Environments

**Built** - Modifications to physical spaces and settings in organizations, institutions, or public areas

**Natural** – Changes to ecological resources, landscapes and ecosystems that impact soil, water, air, energy, climate, and biodiversity

**Social** – Addresses societal dynamics, historical relationships, and cultural practices and their influence on power, equity, diversity, and inclusion



# Individual Behavioral Change Theories

- ▶ Health Belief Model
- ▶ Health Promotion Model
- ▶ Integrated Theory of Health Behavior Change
- ▶ Social Cognitive Theory
- ▶ Self-Regulation Model
- ▶ Theory of Planned Behavior
- ▶ Theory of Reasoned Action
- ▶ Transtheoretical Model (Stages of Change)



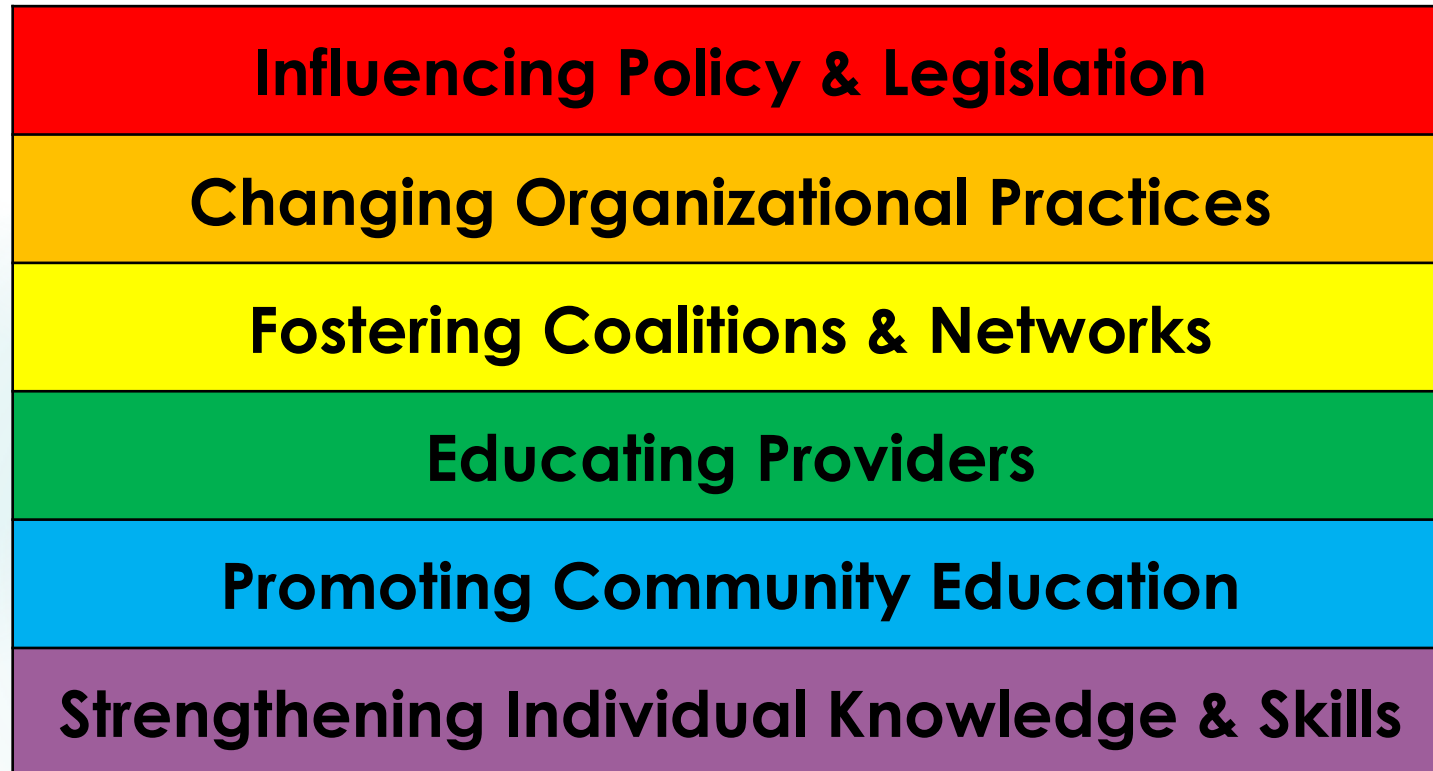


# System Change Theories and Frameworks

- ▶ Community Organization Model
- ▶ Culture of Health Framework
- ▶ Diffusion of Innovation Theory
- ▶ General Systems Theory
- ▶ Life Course Theory
- ▶ Organizational Change Model
- ▶ PRECEDE-PROCEED Framework
- ▶ Social Determinants of Health
- ▶ Social-Ecological Model

# Spectrum of Prevention

*The “I+PSE” Inspiration*



ADAPTED FROM COHEN L, SWIFT S. THE SPECTRUM OF PREVENTION: DEVELOPING A COMPREHENSIVE APPROACH TO INJURY PREVENTION. INJ PREV. 1999;5(3):203-207. AVAILABLE AT <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1730534/>.



**Strengthen  
Individual  
Knowledge &  
Behavior**



**Promote  
Community  
Engagement &  
Education**



**Activate  
Intermediaries &  
Service Providers**



**Facilitate  
Partnerships &  
Multisector  
Collaborations**



**Align  
Organizational  
Policies &  
Practices**



**Foster Physical,  
Natural, & Social  
Settings**



**Advance Public  
Policies &  
Legislation**

# I+PSE Conceptual Framework for Action

Tagtow A, Herman D, Cunningham-Sabo L. Next-Generation Solutions to Address Adaptive Challenges in Dietetics Practice: The I+PSE Conceptual Framework for Action. *J Acad Nutr Diet*. 2021. <https://doi.org/10.1016/j.jand.2021.01.018>.

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**Strengthen Individual Knowledge & Behavior**

Enhance personal, individual, or household's decision-making and capability of healthy eating and active living



**Promote Community Engagement & Education**

Connect with diverse groups of people with information and resources to promote healthy eating and active living



**Activate Intermediaries & Service Providers**

Inform and educate intermediaries and service providers who transmit information about healthy eating and active living to others



**Facilitate Partnerships & Multisector Collaborations**

Foster relationships and cultivate multisector collaborations with stakeholders about individual and community approaches to healthy eating and active living



**Align Organizational Policies & Practices**

Revise or adapt policies, procedures, and practices within institutions that shape norms and support healthy eating and active living



**Foster Physical, Natural, & Social Settings**

Design, foster, and maintain physical (built), natural (ecosystems), and social settings within institutions and public environments that support healthy eating and active living



**Advance Public Policies & Legislation**

Develop strategies to inform change to laws, regulations, and public policies that support healthy eating and active living

# Creating Healthy Eating & Active Living (HEAL) Definitions for the I+PSE Conceptual Framework for Action

Tagtow A, Herman D, Cunningham-Sabo L. Next-Generation Solutions to Address Adaptive Challenges in Dietetics Practice: The I+PSE Conceptual Framework for Action. *J Acad Nutr Diet*. 2021. <https://doi.org/10.1016/j.jand.2021.01.018>.

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Strengthen  
Individual  
Knowledge &  
Behavior

Enhance personal, individual, or household's decision-making and capability of healthy eating and active living

**Professional:** Attend a webinar on the new *Dietary Guidelines for Americans* and the recommendations for infants, toddlers, pregnant and lactating women

Provide USDA MyPlate materials to parents and caregivers

Conduct a presentation to the Mayor/City Council on the economic impact of HEAL on businesses



**Promote  
Community  
Engagement &  
Education**

Connect with diverse groups of people with information and resources to promote healthy eating and active living

Partner with the local public health department to conduct a healthy food access community assessment

Offer cooking classes to 4-H groups, scout troops, and boys and girls' clubs

Work with city planners and engineers to assess walkability of neighborhoods



**Activate  
Intermediaries &  
Service Providers**

Inform and educate intermediaries and service providers who transmit information about healthy eating and active living to others

Work with health care providers to implement a fruit and vegetable prescription program

Provide a webinar to early care and education providers on the importance of drinking water

Host a roundtable discussion with physicians and lactation consultants on strategies for promoting breastfeeding





**Facilitate  
Partnerships &  
Multisector  
Collaborations**

Foster relationships and cultivate multisector collaborations with stakeholders about individual and community approaches to healthy eating and active living

Link SNAP-Ed with other programs such as WIC, CACFP, Title V MCH, HeadStart, food policy council

Forge partnerships between elementary schools and civic groups to build and maintain school gardens

Establish a community of practice or network focused on childhood obesity prevention



**Align  
Organizational  
Policies &  
Practices**

Revise or adapt policies, procedures, and practices within institutions that shape norms and support healthy eating and active living

Encourage staff and co-workers to take exercise breaks; establish a staff wellness policy that supports HEAL

Explore the coordination or integration of services (WIC, SNAP, Medicaid) within a community

Serve on committees within professional organizations and provide input on educational competencies, standards of practice, policy platforms, etc.



**Foster Physical,  
Natural, & Social  
Settings**

Design, foster, and maintain physical (built), natural (ecosystems), and social (equity) settings within institutions and public environments that support healthy eating and active living

Display HEAL messages (posters and brochures) throughout early care centers, schools, clinics, and worksites

Equip schools with adequate food storage and preparation spaces in kitchens/cafeterias

Install sidewalks in neighborhoods for increased access to food retail, including farmers' markets



**Advance Public  
Policies &  
Legislation**

Develop strategies to inform change to laws, regulations, and public policies that support healthy eating and active living

*...or work with those who can!*

**Local**

Ensure access (frequency, time of day, location, affordability) to farmers' markets

**Regional**

Meet with the Regional Planning Commission to develop or expand trails

**State**

Request additional funding for fruit and vegetable snack program in schools

**Federal**

Provide comment on Farm Bill (Title IV Nutrition), Child Nutrition Reauthorization Act, Family Medical Leave Act, Affordable Care Act

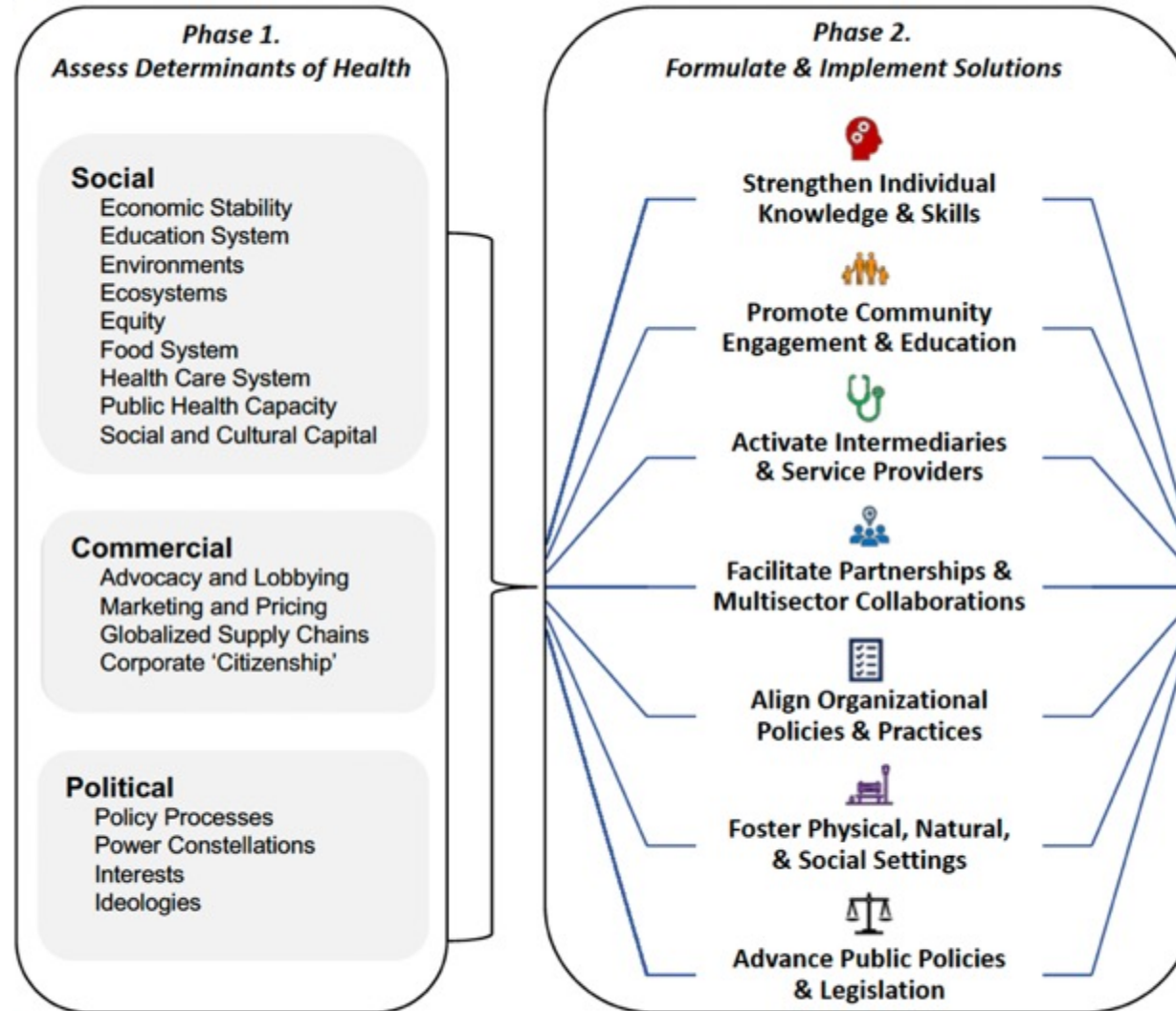
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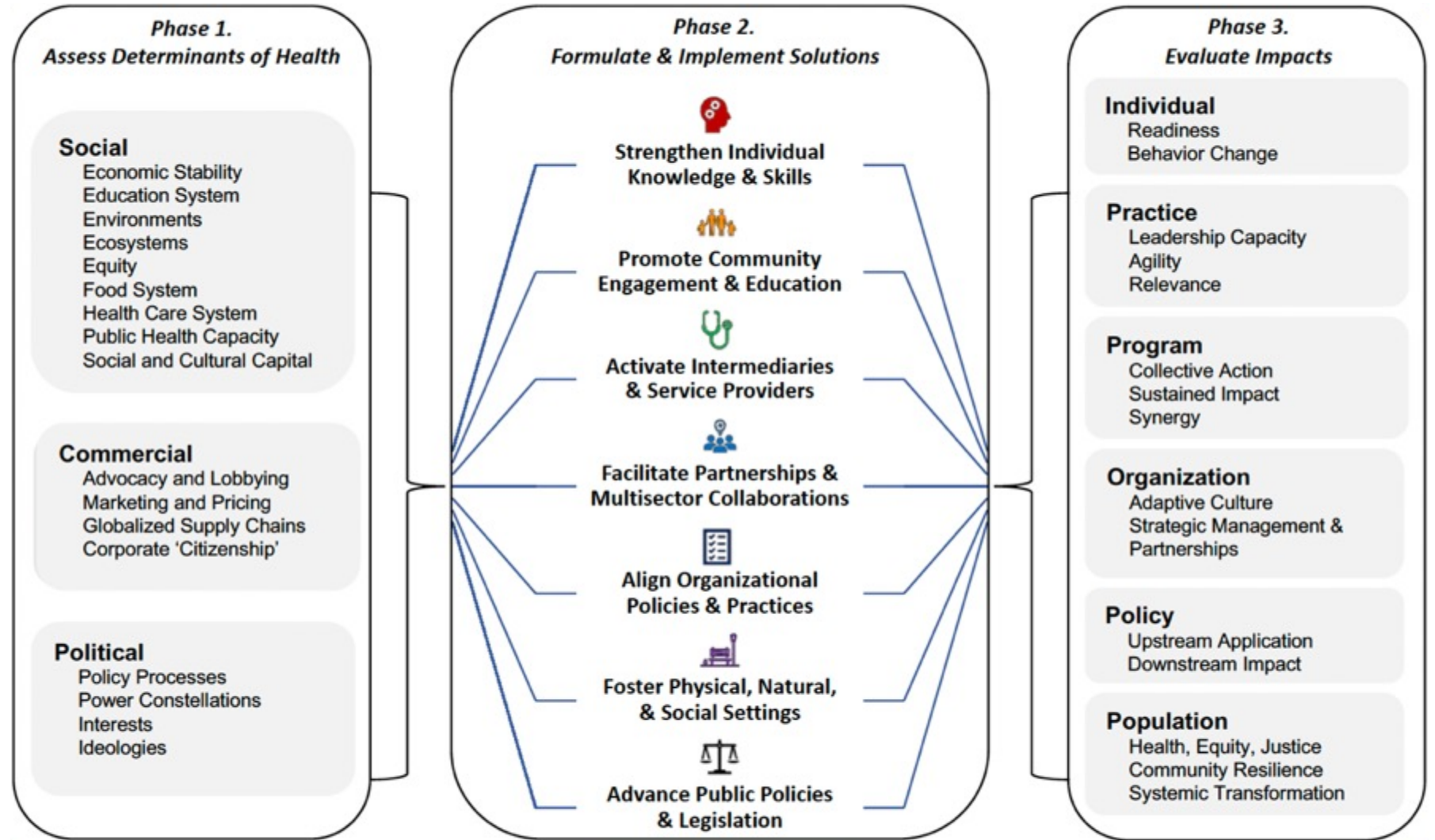
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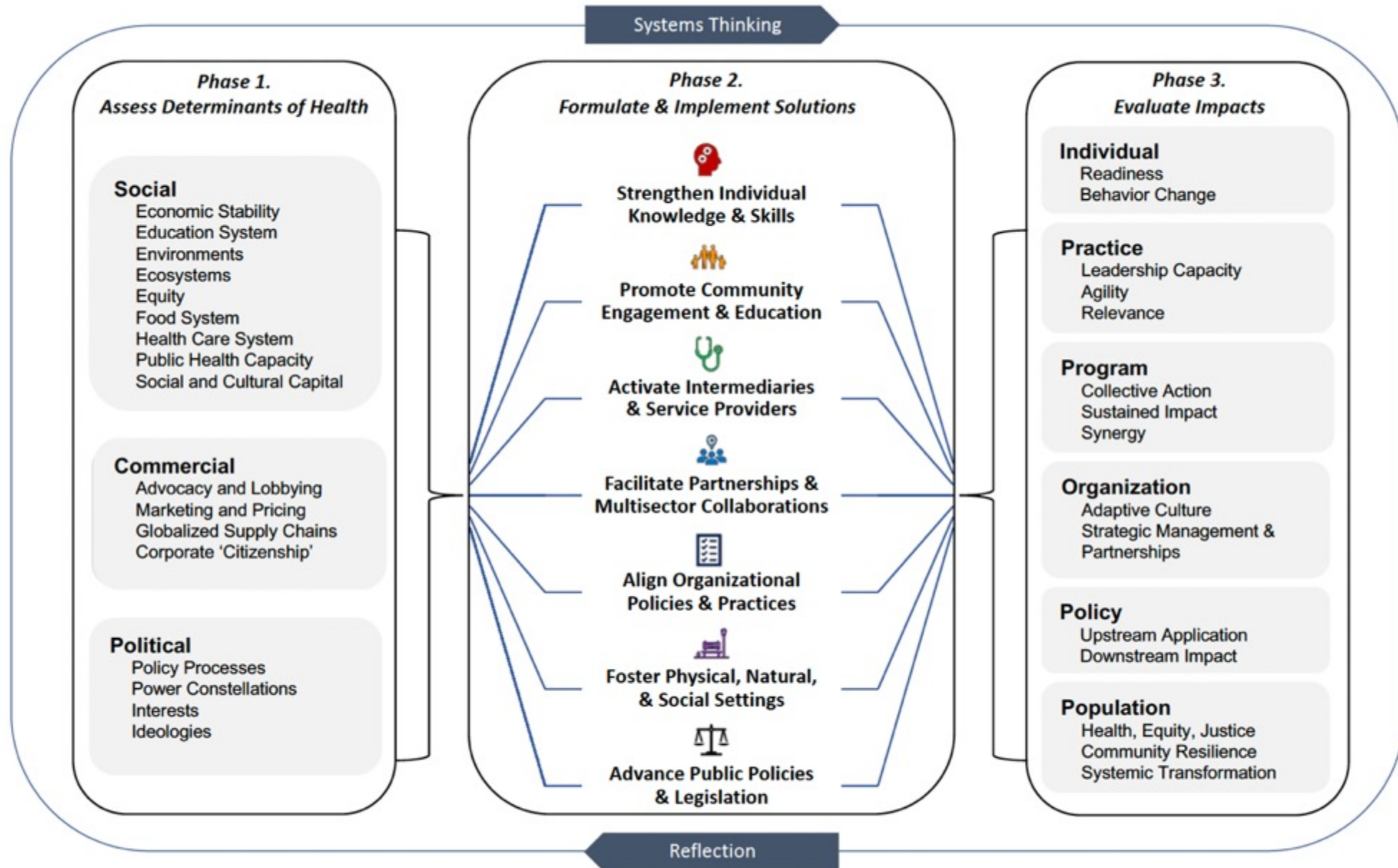
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**Figure 1.** Individual Plus Policy System and Environmental (I+PSE) Conceptual Framework for Action



# Putting the I+PSE Conceptual Framework for Action to Work

Nutrition  
Research

Dietetics &  
Nutrition  
Education

Nutrition  
Practice

Food &  
Nutrition  
Policy

# Putting the I+PSE Conceptual Framework for Action to Work

## Nutrition Initiatives Examples

Childhood Obesity Prevention

Healthy Eating & Active Living

Food & Nutrition Security

Sustainable, Resilient, and Healthy Food & Water Systems

Food Waste

Breastfeeding Promotion & Support

WIC Fathers' Engagement Initiative

*More to come!*

# Putting the I+PSE Conceptual Framework for Action to Work

## Food & Nutrition Operation Examples

Environmental Scans

Community Inventories/Assessments

Program Planning (Logic Model)

Strategic Planning

Communication & Marketing

Partnerships, Communities of Practice, Coalition Building

Training & Technical Assistance

Position Descriptions

Performance Measures

Staff Competencies

Funding

Monitoring & Evaluation



## Putting the I+PSE Framework into Practice: Childhood Obesity Prevention Initiative

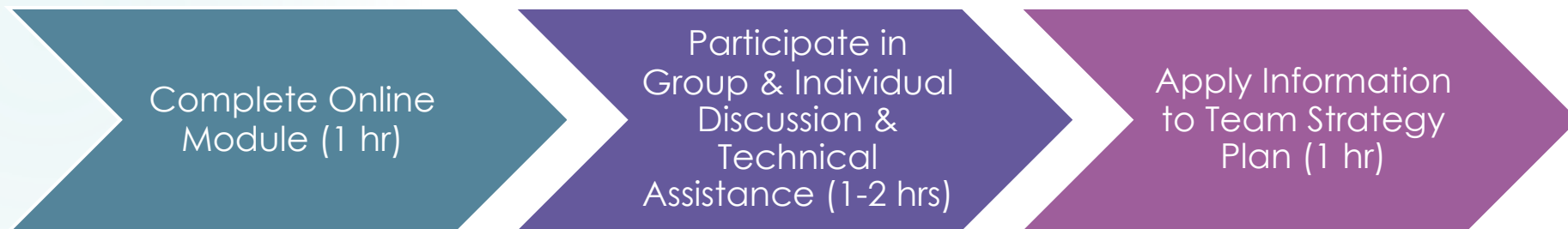
Dena Herman, PhD, MPH, RD

UCLA Fielding School of Public Health, Los Angeles, CA

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# Childhood Obesity Prevention Enhancement Project

- ▶ **Scope:** State health departments are charged with addressing childhood obesity, yet often lack resources, skills, and training needed to address multifactorial issues to reduce/prevent obesity at the systems level
- ▶ **Aim:** Provide comprehensive I+PSE training to enhance the viability and sustainability of state program efforts to reduce childhood obesity
- ▶ **Process:** Provide I+PSE training and technical assistance (TA) for 4 western state MCH nutrition teams that result in comprehensive, tailored strategic plans



# Activities and Core Components of the I+PSE TA Initiative

Core Component	Activities	Operational Details
<p><u>Concept Acquisition:</u> UMN online training modules</p>	<p>Registration for and completion of five modules on PSE approaches.</p>	<p>After each module, reflection sheets and evaluation assessments completed to assess comprehension and application of materials.</p>
<p><u>Concept Application:</u> Workbook: Individual + Policy, System, and Environmental (I+PSE) Conceptual Framework for Action to Healthy Eating Active Living Initiatives</p>	<p>Complete tailored action sheets in workbook: I+PSE conceptual framework for action and HEAL strategies in local setting</p>	<p>Application of I + PSE approaches with team of MCH public health practitioners to local setting. Serve as building blocks for development of action plan.</p>
<p><u>Co-learning/Capacity Building:</u> Participation in Community of Practice (CoP) Discussions</p>	<p>Conduct CoP group discussions and individual coaching</p>	<p>Coaching and technical assistant sessions to discuss lessons learned and barriers encountered. Support co-learning and resource sharing. Coaching sessions use systematic reflection and action learning as tools to support capacity building, iteration, and system change.</p>
<p><u>Implementation:</u> I + PSE Strategic Plan for Obesity Prevention (and other PH issues)</p>	<p>Development of strategic plan for application in local setting</p>	<p>Workbook with tailored action sheets and CoP discussions, teams develop, review and implement a strategic action plan for local settings.</p>



# Western MCH Nutrition Leadership Network

- ▶ The Western Partners MCH Nutrition Leadership Network (NLN) members are state and regional Title V and public health nutrition leaders from the 13 Western states, including Hawaii, Alaska and Inter-tribal Councils
- ▶ The NLN began in 1999 and has State members in Regions: VI, VII, VIII, IX, and X
- ▶ NLN Purpose: provide leadership training for nutritionists in leadership positions, as well as networking, promoting continuing education, and supporting TA and opportunities for collaborative learning to strengthen the practice of public health nutrition across the Western region
- ▶ <https://mchnutritionpartners.ucla.edu/>

# Team Leads: Childhood Obesity Prevention Initiative



Suzanne Haydu, MPH, RD

Nutrition & Physical Activity Coordinator  
California Department of Public Health



Robin Stanton, MA, RDN, LD

MCH Nutrition Lead  
Oregon Health Authority



Chris Mornick, MPH, RDN

Nutrition Coordinator  
Washington State Department of Health



Nicole Lawrence, MPH, CHES,  
RDN, LDN

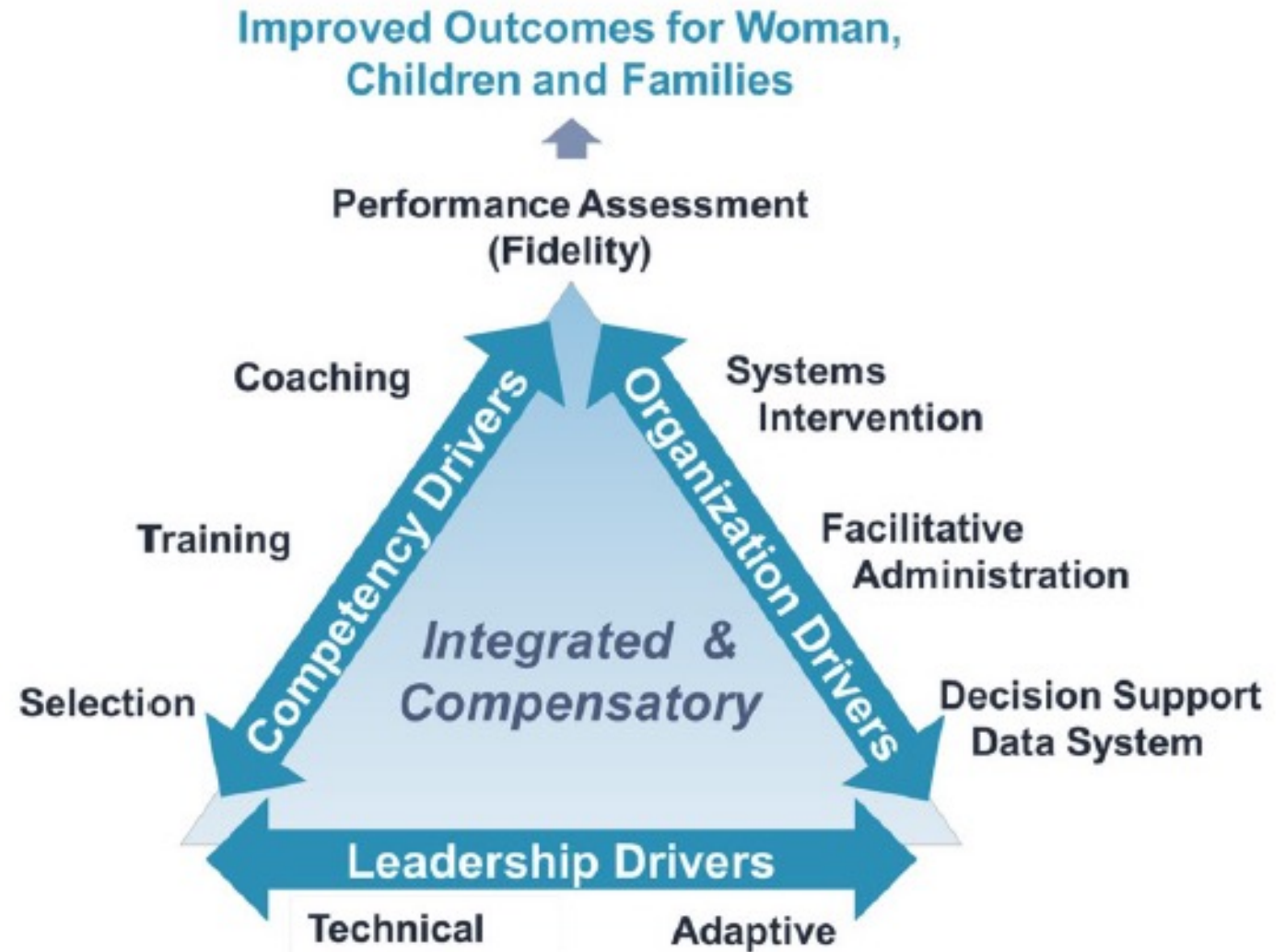
LCDR USPHS, Supervisory Dietitian  
Winslow Indian Health Care Center (AZ)

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# MCH Workforce Development Training & Technical Assistance Implementation Drivers Framework

Oscar Fleming W, Apostolico A, Mullenix A, Starr K, Margolis L. Putting implementation science into practice: Lessons from the creation of the National Maternal and Child Health Workforce Development Center. *Matern Child Health J.* 2019; 23:722-732. <https://doi.org/10.1007/s10995-018-02697-x>



# Building Blocks for Optimal MCH Nutrition Impact



## I+PSE Can:

- ✓ Be integrated into existing efforts
- ✓ Drive multi-level action
- ✓ Cultivate relationships
  - Reciprocal support
  - Multisectoral and interdisciplinary
- ✓ Be operationalized at the organization and community levels
  - Applicable and adaptable
- ✓ Achieve broader community and population benefits
- ✓ Result in collective and sustained impact

# Childhood Obesity TA Initiative: What Did We Learn?

- ▶ Conducted three assessments to ascertain readiness to change during the TA process
  - ▶ Identify processes that took place that made those changes possible using a mixed methods approach
  - ▶ Midpoint Evaluation Survey
  - ▶ Endpoint Evaluation Survey
  - ▶ Participant Interviews with team members (qualitative)

## Childhood Obesity Technical Assistance Efforts:

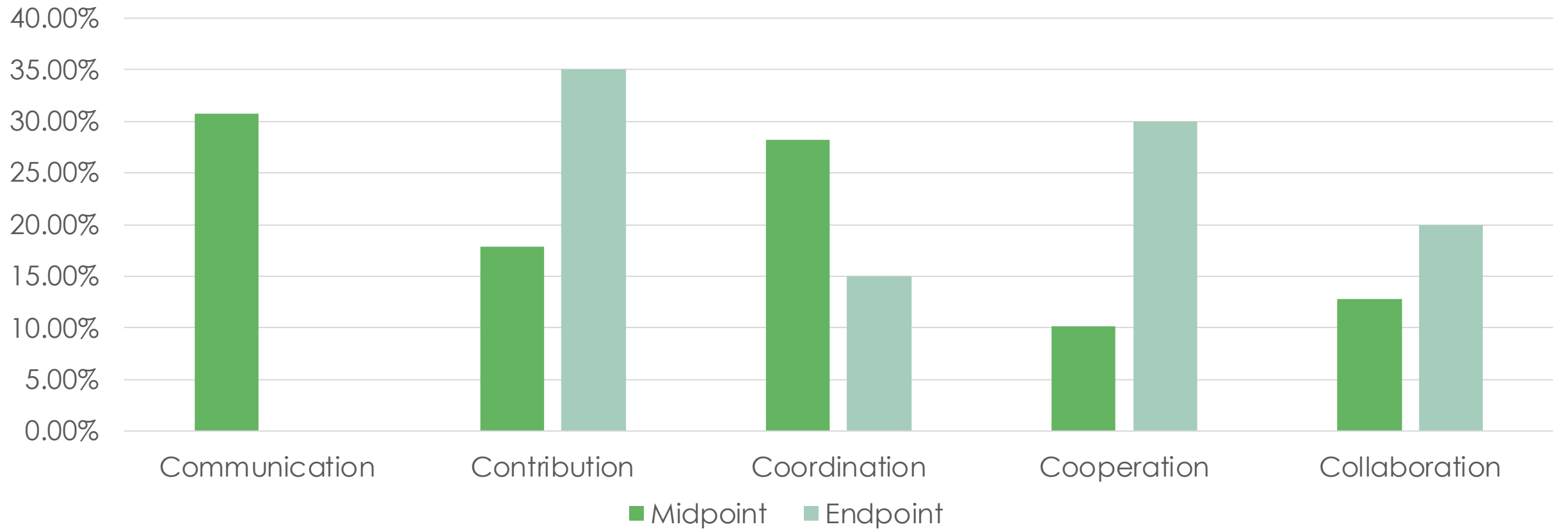
### *What Did We Learn?*

Adapted from University of Wisconsin Cooperative Extension. Evaluating Collaboratives. Reaching the Potential (July 1998). Available at <https://learningstore.uwex.edu/Assets/pdfs/G3658-08.pdf>

## Classification of Relationship Quality

Integration	Classification	Process	Structure	Purpose
<div style="text-align: center;"> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">Low</div> <div style="margin: 10px auto; width: 100px; height: 100px; border-left: 2px solid black; border-right: 2px solid black; position: relative;"> <div style="position: absolute; top: 0; left: 50%; transform: translate(-50%, -50%);">↓</div> </div> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">High</div> </div>	1	Communication	Network, Roundtable	Dialogue and common understanding. Clearinghouse for information. Explore common and conflicting interests.
	2	Contribution	Support each other's efforts	Mutual exchanges to support each other's efforts. Build mutual obligation and trust.
	3	Coordination	Taskforce, Council, Alliance	Match and coordinate needs, resources, and activities. Limit duplication of services. Adjust current activities for more efficient and effective results.
	4	Cooperation	Partnership, Consortium, Coalition	Link resources to help parties achieve joint goals. Discover shared interests. Build trust by working together.
	5	Collaboration	Interdependent system with shared resources	Develop shared vision. Build interdependent system to address issues and opportunities. Share resources.

# Quality of Relationships Formed During TA: Midpoint Survey to Endpoint Survey

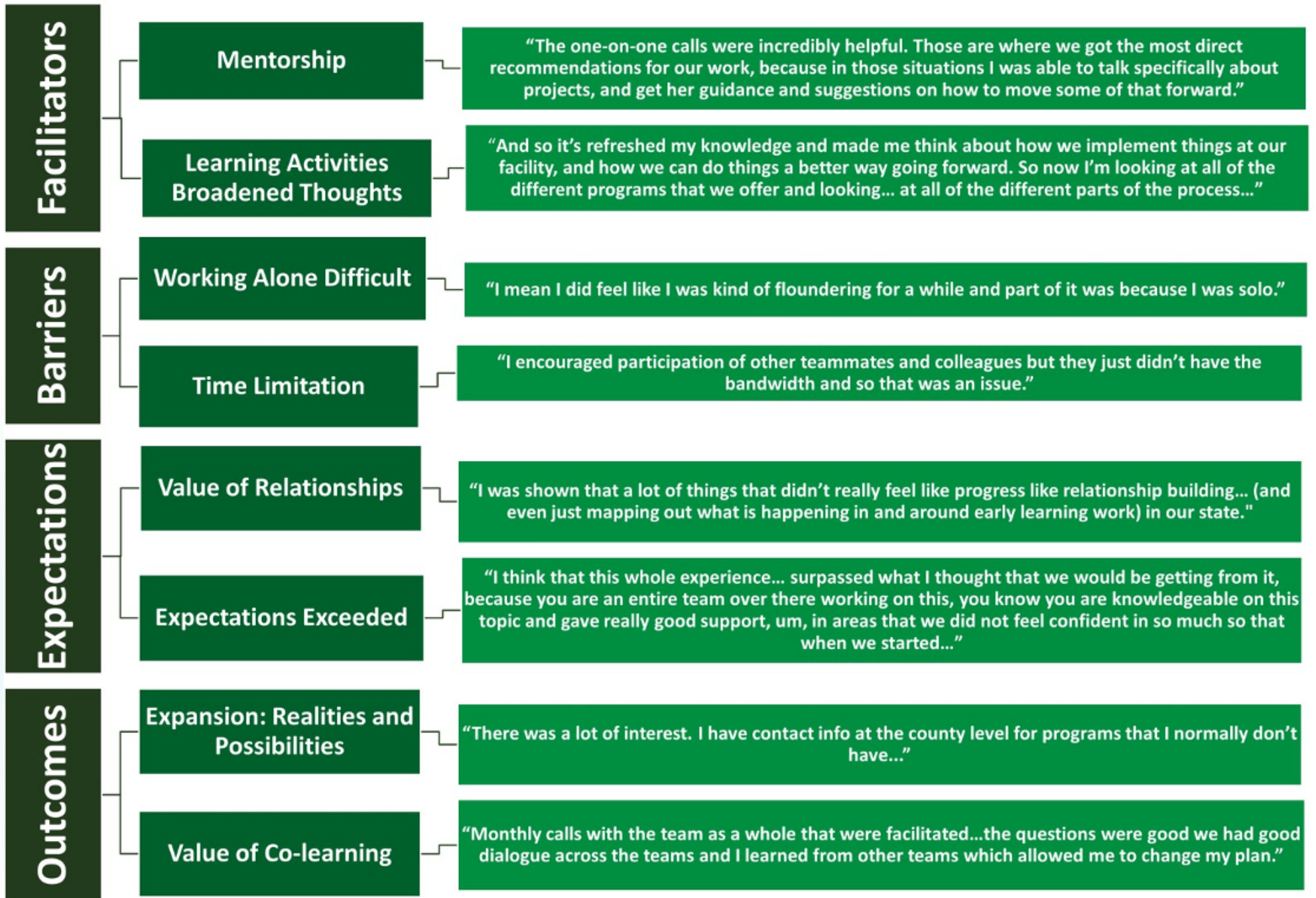


# Readiness to Change: Endpoint Survey

On a scale of 1 to 5, TA respondents answered the question:

- ▶ “Over the course of the project, do you feel you have met your expectations of individual and organizational readiness to change?”
  - ▶ High level of readiness to change (Level 4, n=3)
  - ▶ Highest level of readiness to change (Level 5, n=1)

Interviews with TA Participant Teams Revealed a Range of Experiences



# Conclusions from Technical Assistance Effort

- ▶ **Relationships:** Relationship-building was identified as an important aspect of TA that was not formerly recognized as a “job activity”
- ▶ **Capacity-building:** Could be achieved when information was shared across multiple levels of the agency – gaining “buy-in”
- ▶ **Major barriers:** Time and resources
  - ▶ Funding to support professional development and training
  - ▶ Funding for data to support practice-based evidence
  - ▶ Scope of work does not allow for scale and spread
- ▶ **Next steps:** Submitted a manuscript to a special issue on workforce development in the MCH Journal





## How are HEAL I+PSE Initiatives Evaluated? Results from a Systematic Review

Leslie Cunningham-Sabo, PhD, RDN

Colorado State University, Food Science and Human Nutrition, Fort Collins, CO

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# Relevance of This Review

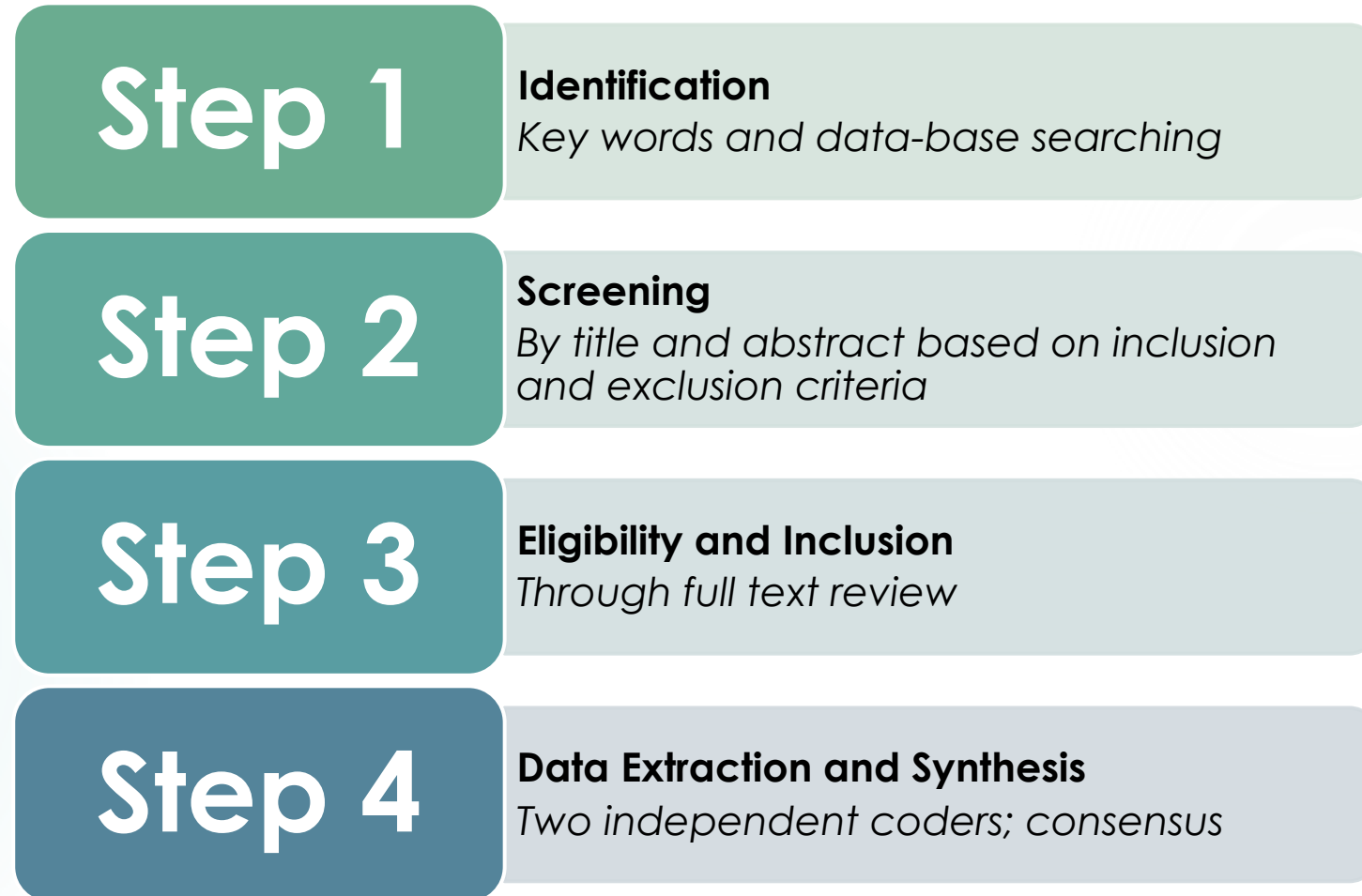
- ▶ PSE initiatives becoming the ‘expected’ approach for addressing many public health issues; yet implementers need training (*Hill, 2020*)
- ▶ Gap in practice-based evidence to show improvements in health outcomes
  - ▶ Evidence required for organizations’ leadership to embrace PSE approaches with funding and incorporation into programming
- ▶ Lack of common understanding of PSE evaluation language, approaches, strategies used, and potential for collective impact (*Savoie-Roskos, 2018*)

# Purpose of Systematic Review

- ▶ Describe how I+PSE Conceptual Framework for Action components are applied and evaluated in HEAL PSE initiatives
  
- 1. What are common purposes and settings for HEAL initiatives?
- 2. What I+PSE components are often targeted and reported?
- 3. What evaluation strategies are used; for each component?
- 4. Further analysis will examine:
  - (Mis)matches between initiatives' purposes, approaches, and results
  - What evaluation challenges are noted
  - Opportunities and recommendations for strengthening evaluation strategies
  - How to build stronger practice and evidence using a structured approach such as the I+PSE framework

# Method: Systematic Review

Using PRISMA  
Guidelines...



# Methods: Identification

- ▶ Searched for articles published between **2009-2020** using **five databases: PsychINFO, CAB Abstracts, MEDLINE, Web of Science, CINAHL.**



- ▶ **Search terms:**

("policy, systems, and environmental" OR "policy, systems, and environment" OR "policy, systems, environment" OR "policy, systems, environmental" OR "policy and environmental")

Select a Field (optional) ▼

Search

AND ▼

(evaluat\* OR assess\* OR initiative OR intervention OR framework)

Select a Field (optional) ▼

[Clear](#) ?

# Methods: Screening and Eligibility

## Inclusion



Original research published  
2009 through 2020

Published in English

Described evaluation of PSE-  
focused HEAL initiatives

## Exclusion



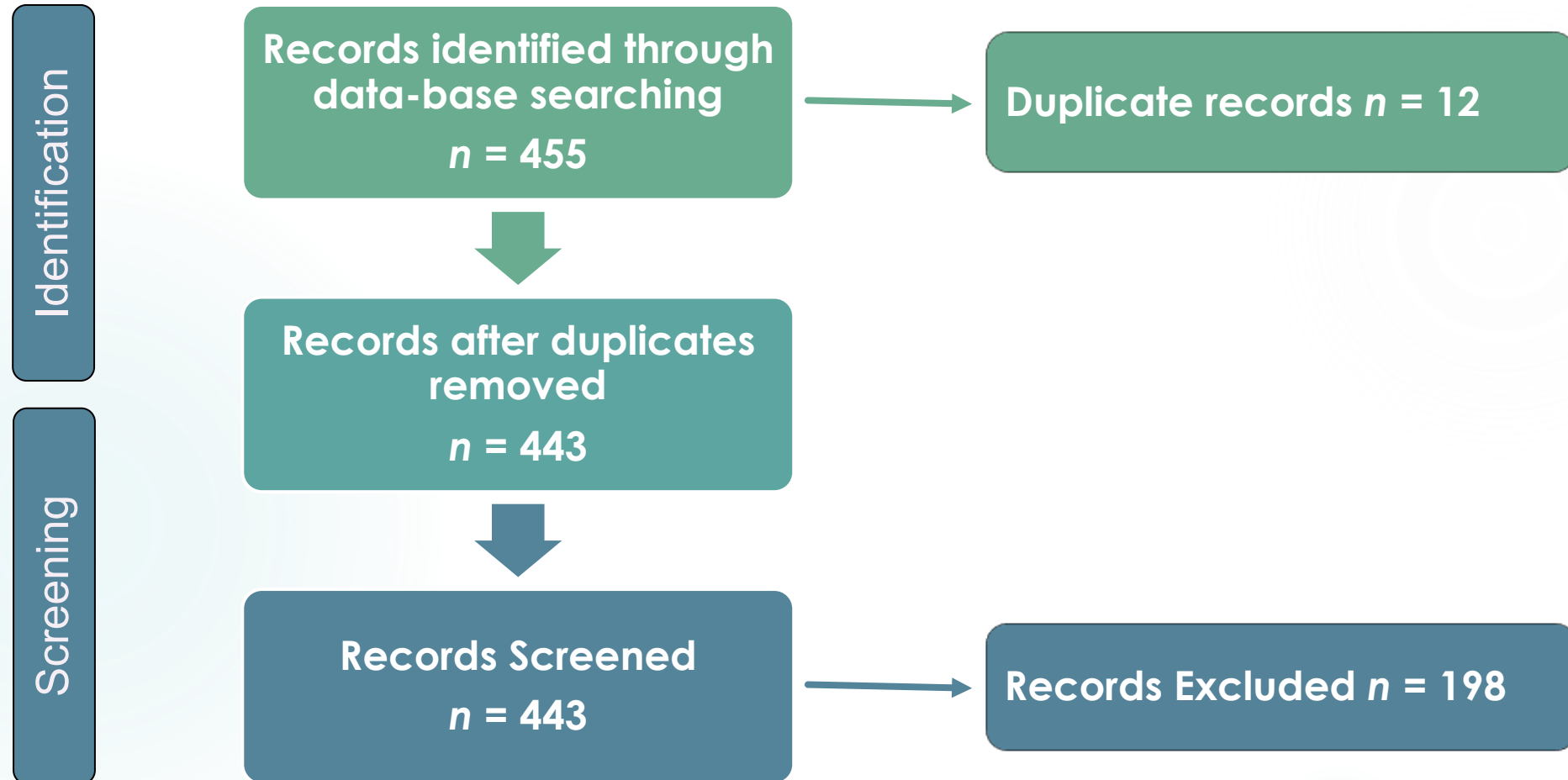
Reviews, commentaries,  
posters

Published before or after  
inclusion dates

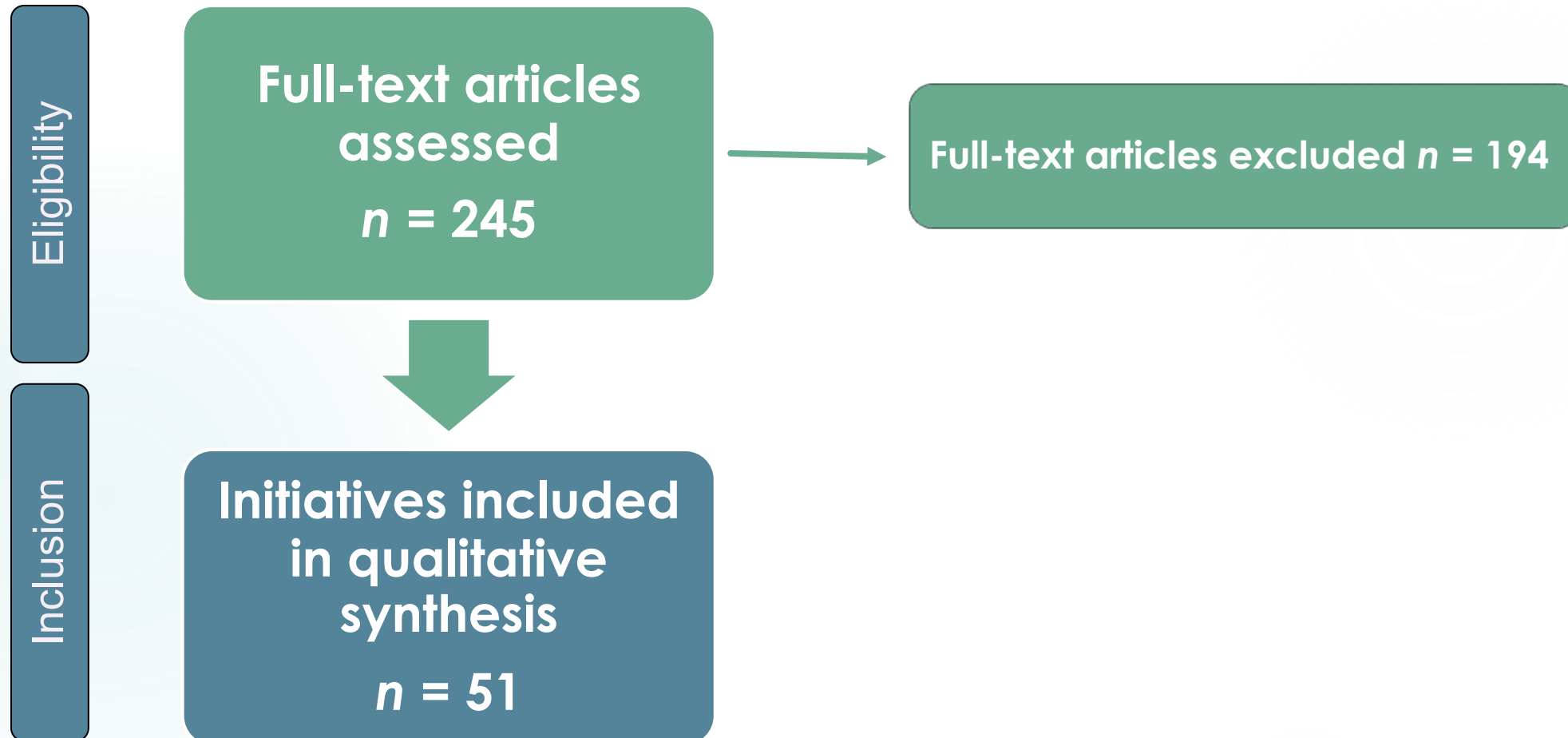
Not published in English

Not including evaluation, PSE  
and/or HEAL

# Results from Identification and Screening



# Results from Eligibility and Inclusion





# Results: Example of Data Extraction

First author, year of publication	Funding Source	Initiative; Purpose(s)	Settings	Length	I+PSE Framework Components Aligned with Evaluation Strategies	Results, Successes & Challenges
Long, 2018	CDC, NIH	Sodium Reduction in Communities; Reduce sodium intake through food service guidelines, procurement and food preparation practices, and environmental strategies	30 public schools and 5 community meal programs in Northwest Arkansas	1 year	<p><b>I+PSE Component:</b></p> <p>(#2) - No evaluation                      (#3) - No evaluation                      (#4) - No evaluation                      (#5) - Procurement records, food production records                      (#6) - Observation and documentation of food preparation</p> <p><b>Evaluation methods:</b></p> <p>Schools – procurement and food production records, number of people served, menu item nutrient reports, point-of-service and observation.</p>	<p><b>Successes:</b></p> <p>Mean sodium levels per lunch diner decreased 11.2% from baseline to follow-up in schools and decreased 16.6% in community meal programs</p> <p><b>Challenges:</b></p> <p>implementation was time and staff-intensive.</p>

# Results: Synthesis (in progress)

- ▶ **51 initiatives** met inclusion criteria
- ▶ **Settings**
  - ▶ Schools, faith-based, targeted communities, combination of sites
- ▶ **Focus Areas**
  - ▶ Healthy Eating (n= 19)
  - ▶ Physical Activity (n= 5)
  - ▶ Combination (n= 20)
- ▶ **Common evaluation strategies:** Interviews, surveys, document review, observation
- ▶ **Gaps in evaluation:** Educate intermediaries (#3), partnerships and collaborations (#4)

# Next Steps:

- ▶ Final analysis to complete the review
  - ▶ (Mis)matches between initiatives' purposes, approaches, and results
  - ▶ What evaluation challenges are noted
  - ▶ Opportunities and recommendations for strengthening evaluation strategies
  - ▶ How to build stronger practice and evidence using a structured approach such as the I+PSE framework
- ▶ Prepare manuscript for submission

# Resources

- ▶ Western Maternal and Child Health Nutrition Partners  
<https://mchnutritionpartners.ucla.edu/>
  - ▶ Amplifying MCH Nutrition Impact using I+PSE Approaches Short Course (June 2020)
- ▶ AMCHP Innovation Hub, Emerging Practice: Individual plus Policy, System, and Environment Approaches to Technical Assistance  
<https://www.amchpinnovation.org/database-entry/individual-policy-systems-and-environmental-approaches-technical-assistance/>
- ▶ Tagtow A, Herman D, Cunningham-Sabo L. Next-Generation Solutions to Address Adaptive Challenges in Dietetics Practice: The I+PSE Conceptual Framework for Action. *J Acad Nutr Diet*. 2021. <https://doi.org/10.1016/j.jand.2021.01.018>

# With Gratitude



- ▶ Amy Blom, Chelsea Didinger, Jessa Engelken, Kiaya Johnston, and Sirui Mi
- ▶ This project was supported, in part, by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under grant number T79MC00013, Leadership Education in Maternal and Child Health Nutrition. This information or content and conclusions in this presentation are those of the authors and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS or the U.S. Government.

# Questions and Answers



# Advancing Resilience Using PSE Approaches in Nutrition and Health: Applying the I+PSE Conceptual Framework for Action to Advance Healthy People, Communities, and the Planet

This is a supplemental handout developed by Angie Tagtow, MS, RD, LD, Åkta Strategies, LLC; Dena Herman, PhD, MPH, RD, UCLA Fielding School of Public Health; and Leslie Cunningham-Sabo, PhD, RDN, Food Science and Human Nutrition, Colorado State University to support the 2021 SNEB session: *Advancing Resilience Using PSE Approaches in Nutrition and Health: Integrating Framework, Application, and Evaluation Strategies* presented Monday, August 9, 2021.



The acronym “I+PSE” represents a suite of approaches that bundles evidence-based individual or direct services with policy, systems, and environmental approaches to optimize the impact on individual, community and population health. The I+PSE Conceptual Framework for Action (Tagtow et al, 2021) is a blueprint for tackling complex problems – such as overweight and obesity, food and nutrition security, food waste, breastfeeding duration, health equity and racial justice, sustainable food and water systems – *and many others*. It supports assessment, planning, implementation, and evaluation of multidimensional strategies using a systems orientation to sustain policies, systems, and environments that promote nutrition and health. The results may garner more sustained and collective impacts and more resilient families and communities. This handout is designed to offer examples to practitioners, organizations, and communities on potential strategies for each component. These are exemplars but can be modified and expanded to best meet the needs of populations.

Reference: Tagtow A, Herman D, Cunningham-Sabo L. Next-Generation Solutions to Address Adaptive Challenges in Dietetics Practice: The I+PSE Conceptual Framework for Action. *J Acad Nutr Diet*. 2021. Open Access. <https://doi.org/10.1016/j.jand.2021.01.018>.



## Example: Framing I +PSE Conceptual Framework for Action For *Healthy Eating & Active Living*





## I+PSE Conceptual Framework for Action Examples


Components	Healthy Eating Active Living Examples	Food Waste Examples	Nutrition Security Examples
 <p><b>Strengthen Individual Knowledge &amp; Behavior</b></p> <p><i>Enhance personal, individual, or household's decision-making and capability of participating in or benefitting from</i></p>	<p><b>Personal/Professional:</b></p> <ul style="list-style-type: none"> <li>✓ Assess knowledge and skills on childhood obesity, food systems, I+PSE strategies, etc.</li> <li>✓ Establish a CPE plan and complete CPEs</li> <li>✓ Network</li> <li>✓ Apply new knowledge and skills</li> </ul> <p><b>Individual/Household:</b></p> <ul style="list-style-type: none"> <li>✓ Use MyPlate resources for nutrition education</li> <li>✓ Provide incentives for healthy eating</li> <li>✓ Offer healthy cooking classes</li> <li>✓ Offer grocery shopping tours</li> <li>✓ Provide food preparation equipment to low-income households</li> </ul>	<p><b>Personal/Professional:</b></p> <ul style="list-style-type: none"> <li>✓ Attend a composting/vermiculture class hosted by Cooperative Extension</li> <li>✓ Explore the opportunities and challenges of reducing food waste in the community</li> </ul> <p><b>Individual/Household:</b></p> <ul style="list-style-type: none"> <li>✓ Encourage meal planning and making a shopping list before shopping</li> <li>✓ Assist clients and patients with reading date labels on food</li> <li>✓ Make referrals to organizations who can assist patients, clients, and students in obtaining a working refrigerator or stove (i.e., means to safely store and prepare food)</li> </ul>	<ul style="list-style-type: none"> <li>✓ Assess household access to healthy food</li> <li>✓ Refer clients to food and nutrition assistance programs</li> <li>✓ Provide gardening education programs and distribute plants and seeds to SNAP and WIC clients</li> <li>✓ Promote increased consumption of fruits, vegetables and whole grains to benefit human and environmental health</li> <li>✓ Provide information to consumers on farmers' markets, CSAs and U-pick farms within the community</li> <li>✓ Encourage use of WIC fruit and vegetable cash value voucher, WIC Farmers' Market Nutrition Program and Senior Farmers' Market Nutrition Program coupons</li> </ul>
 <p><b>Promote Community Engagement &amp; Education</b></p> <p><i>Connect with diverse groups of people with information and resources</i></p>	<ul style="list-style-type: none"> <li>✓ Conduct community needs assessment to identify gaps in nutrition education and physical activity opportunities</li> <li>✓ Engage the nutrition community to promote consistent messages around healthy eating and physical activity (i.e., boys' and girls' clubs, YMCA/YWCA, summer camps, fitness centers)</li> <li>✓ Partner with community groups, civic organizations, and/or food retail on social marketing campaigns</li> <li>✓ Collaborate with planners and engineers to assess walkability of neighborhoods</li> <li>✓ Leverage local media to promote healthy eating and active living messages</li> </ul>	<ul style="list-style-type: none"> <li>✓ Host food preservation workshops with community or civic groups</li> <li>✓ Connect small- and mid-sized producers with local food banks and pantries</li> <li>✓ Launch a community messaging campaign to raise public awareness of the simple steps to reduce food waste at home</li> <li>✓ Present on the Bill Emerson Good Samaritan Food Donation Act<sup>b</sup> to food retailers</li> </ul>	<ul style="list-style-type: none"> <li>✓ Host a farmers' market at the hospital or health department</li> <li>✓ Develop and implement community-wide programs aimed at healthy eating and local food access</li> <li>✓ Work with food pantries, grocers, farmers' market managers, Extension or community colleges to offer cooking demonstrations to consumers regarding preparation of whole foods</li> </ul>



Components	Healthy Eating Active Living Examples	Food Waste Examples	Nutrition Security Examples
 <p><b>Activate Intermediaries &amp; Service Providers</b></p> <p><i>Inform and educate intermediaries and service providers who transmit information and skills to others</i></p>	<ul style="list-style-type: none"> <li>✓ Conduct nutrition trainings for teachers, HeadStart, and childcare providers on the importance of early childhood nutrition and on engaging kids in nutrition activities</li> <li>✓ Equip (pediatric) health systems with nutrition education and physical activity information</li> <li>✓ Offer nutrition CMEs/CPEs for health care professionals on ways to incorporate HEAL messages into clinic visits</li> <li>✓ Inform community leaders of health, social, and economic benefits of healthy eating and active living</li> <li>✓ Identify opportunities for intermediaries to educate others (4-H, FFA, coaches)</li> <li>✓ Share experiences and outcomes with peers</li> <li>✓ Write articles and publish findings in peer-reviewed publications</li> </ul>	<ul style="list-style-type: none"> <li>✓ Provide a seminar to local food service providers on ways to reduce food waste in school (K-12, university) and workplace cafeterias</li> <li>✓ Write articles for nutrition, dietetics, food service, hospital management, or food retail newsletters on strategies for reducing food waste within institutions</li> </ul>	<ul style="list-style-type: none"> <li>✓ Work with Cooperative Extension to offer food safety and fresh produce handling training with food pantry staff and volunteers</li> <li>✓ Work with Master Gardeners or other gardening groups to train neighborhood associations or faith-based groups on creating and maintaining community gardens</li> <li>✓ Provide technical and marketing assistance to convenience store operators to encourage increased availability of fresh healthy foods</li> </ul>
 <p><b>Facilitate Partnerships and Multisector Collaborations</b></p> <p><i>Foster relationships and cultivate multisector collaborations with stakeholders and individuals to meet broader public health goals</i></p>	<ul style="list-style-type: none"> <li>✓ Strengthen existing partnerships and identify new partnerships (Examples: WIC, R&amp;Rs/CACFP, SNAP-Ed, HeadStart, food policy councils)</li> <li>✓ Assess and nourish relationships with partners (e.g., communication, cooperation, coordination, collaboration)</li> <li>✓ Identify and engage with community leaders (champions) with interest in nutrition and physical activity</li> <li>✓ Engage private and public sectors to build support</li> <li>✓ Establish a coalition, council, or commission focused on obesity prevention</li> <li>✓ Initiate a Community of Practice or Community of Learning (peer-to-peer network)</li> </ul>	<ul style="list-style-type: none"> <li>✓ Host a food waste discussion with colleagues on how your organization can reduce food waste</li> <li>✓ Invite commercial composters and waste haulers to a roundtable discussion on food waste</li> <li>✓ Join or start a community food waste reduction coalition</li> <li>✓ Assemble a volunteer food gleaner corps, groups of volunteers to rescue surplus farm crops</li> </ul>	<ul style="list-style-type: none"> <li>✓ Form a county or regional coalition focused on addressing food insecurity and hunger by increasing access to healthful foods</li> <li>✓ Work with agricultural partners to recruit and support beginning or transitioning farmers</li> <li>✓ Convene a food access work group that addresses food security and health issues in the community</li> <li>✓ Encourage development of food-buying cooperatives to save households money by pooling resources</li> </ul>

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	<ul style="list-style-type: none"> <li>✓ Join or establish a division, section and/or practice group within professional organizations (e.g., AND, APHA, ASPHN, ASNNA, SNEB)</li> </ul>		
<div style="text-align: center;">  </div> <p><b>Align Organizational Policies &amp; Practices</b></p> <p><i>Revise or adapt policies, procedures, and practices within institutions that shape norms</i></p>	<ul style="list-style-type: none"> <li>✓ Incorporate nutrition standards in procurement policies and concessions</li> <li>✓ Include a food gardening clause in homeowners’ association contract</li> <li>✓ Specify PSE knowledge and experience in public health position descriptions</li> <li>✓ Reimburse employees for preventative health activities</li> <li>✓ Explore the integration of services (WIC, SNAP, Medicaid, etc.)</li> <li>✓ Assess current organizational practices and procedures (e.g., procurement, contracts, employee handbook)</li> <li>✓ Establish a school wellness committee</li> <li>✓ Serve on a school wellness committee to address universal breakfast, after school snacks, open vs closed campuses (closed campus means more school meals consumed which are generally healthier than outside meals), concession options, and mobile vending around school campuses</li> <li>✓ Supply faith-based organizations with messaging, materials, and suggestions for improving the healthfulness of food during functions</li> <li>✓ Employ nutrition guidelines on food served at conferences, meetings, and events</li> <li>✓ Be an active professional organization member and provide input</li> <li>✓ Serve on boards, committees, taskforces, councils</li> <li>✓ Develop and/or update resolutions, curricula, protocol, policy statements</li> <li>✓ Incorporate nutrition, nutrition education, nutrition services, and/or</li> </ul>	<ul style="list-style-type: none"> <li>✓ Work with a local composter to establish a food compost program within the facility</li> <li>✓ Maximize opportunities for recycling and composting within your facility</li> <li>✓ Register organizations as U.S. Food Loss and Waste Champions<sup>a</sup></li> </ul>	<ul style="list-style-type: none"> <li>✓ Support emergency feeding providers to implement food donation and procurement guidelines that align with MyPlate or Dietary Guidelines</li> <li>✓ Establish edible landscaping on city and county-owned property</li> <li>✓ Launch a community garden “delivery” program to deliver produce to senior, disabled or rural residents who may lack transportation</li> <li>✓ Assess, develop, and adopt strategies to increase the purchase of fruits and vegetables at farmers’ markets by low-income households. For example: <ul style="list-style-type: none"> <li>○ Secure financial support to provide incentives for SNAP participants to purchase fruits and vegetables (e.g., <i>Double Up Bucks Program</i>)</li> <li>○ Use public-private partnerships to purchase wireless EBT devices</li> <li>○ Launch outreach initiatives targeted to farmers’ market managers, vendors, and low-income households</li> <li>○ Provide fruit and vegetable prescriptions to patients or clients</li> </ul> </li> <li>✓ Remove fast food outlets in schools and hospitals</li> <li>✓ Support school, workplace, and business policies that make healthy foods accessible at reasonable prices and set nutritional quality standards for food sold in vending machines</li> </ul>

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	nutrition policy into professional competencies, standards or performance measures ✓ Promote active transport to schools (e.g., walking school bus) ✓ Eliminate physical activity as discipline in schools		
 <p><b>Foster Physical, Natural and Social Settings</b></p> <p><i>Design, foster, and maintain physical (built), natural (ecosystems), and social settings within institutions and public environments</i></p>	<ul style="list-style-type: none"> <li>✓ Install adequate food storage and prep spaces in school cafeterias</li> <li>✓ Retrain school cafeteria staff on healthier food preparation and cooking methods</li> <li>✓ Work with municipalities to install sidewalks, curb cuts, and cross walks in neighborhoods</li> <li>✓ Increase water access in schools (i.e., make water fountains operable and accessible)</li> <li>✓ Establish green and recreational space in new residential developments</li> <li>✓ Eliminate food and beverage advertising in schools</li> <li>✓ Install and maintain backyard, community, or school gardens</li> <li>✓ Establish joint use agreements between schools and communities for gym/recreational space</li> <li>✓ Redesign/refresh school playgrounds and incorporate gardens or edible landscapes</li> <li>✓ Establish optimal school physical activity facilities</li> <li>✓ Provide vending or concessions with healthy options</li> <li>✓ Identify neighborhoods with low-walkability options and develop a proposal</li> <li>✓ Assess public transportation options in low-income neighborhoods</li> <li>✓ Establish a farmers' market in a health clinic or hospital parking lot</li> </ul>	<ul style="list-style-type: none"> <li>✓ Demonstrate to leadership the economic and environmental benefits of installing a food pulper within a food service operation</li> <li>✓ Connect food retail (grocery and convenience stores, restaurants) to the emergency food system to decrease food waste in landfills               <ul style="list-style-type: none"> <li>○ This may be supported using online technologies to match food donors with emergency food organizations</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>✓ Establish a food pantry in the student wellness center on campus</li> <li>✓ Retrofit a recreation vehicle into a mobile food pantry to connect healthy food to areas that have lack of access to healthy food</li> <li>✓ Install a commercial kitchen in a food bank to process high volumes of fresh produce to be distributed to low-resource households</li> <li>✓ Increase availability and affordability of healthy food choices in worksite cafeterias</li> </ul>

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 <p><b>Advance Public Policy &amp; Legislation</b></p> <p><i>Develop strategies to inform change to laws, regulations, and public policies (or work with those who can)</i></p>	<p><b>Public Policy (local, regional, state, Federal)</b></p> <ul style="list-style-type: none"> <li>✓ Restrict food and beverage marketing to children in schools</li> <li>✓ Regulate unhealthy foods in and around schools</li> <li>✓ Support consumer-friendly nutrition labeling</li> <li>✓ Invest in food system (i.e., agriculture) infrastructure to produce healthy foods</li> <li>✓ Provide universal school breakfast across the district or state</li> <li>✓ Provide input on State Performance Standards</li> <li>✓ Incentivize the purchase of healthy foods</li> <li>✓ Change zoning ordinances to allow fresh produce carts or food trucks near worksites</li> <li>✓ Tax unhealthy foods</li> <li>✓ Provide public comment (written or oral) to regulation proposals</li> <li>✓ Write a policy brief</li> <li>✓ Provide testimony at a hearing</li> <li>✓ Serve on Federal Advisory Committee</li> <li>✓ Monitor and engage in Federal annual appropriations and legislation such as the Child Nutrition Act, Farm Bill, Older Americans Act, Bill Emerson Good Samaritan Act, National Nutrition Monitoring and Related Research Act</li> </ul>	<ul style="list-style-type: none"> <li>✓ Develop a policy brief on food waste to support a platform for a professional nutrition organization</li> <li>✓ Present to state lawmakers a proposal to offer a state tax incentive for specialty crop producers who donate fresh fruits and vegetables to emergency food providers</li> </ul>	<ul style="list-style-type: none"> <li>✓ Create GIS maps of food deserts, access to healthy food retail, or access to food and nutrition assistance, farmers' markets, etc. to educate city and county governments the role planners have on linking neighborhoods to healthful food</li> <li>✓ Set nutrition standards, such as the <i>Dietary Guidelines for Americans</i>, for food provided through emergency food assistance programs</li> <li>✓ Support allowances and agreements for organizations to lease non-developable city or county-owned property for community gardens or urban farms</li> <li>✓ Inform on the benefits of municipal transportation policies that increase access to healthy food such as bus routes, pedestrian walkways and bike paths that connect to farmers' markets, food retail and food assistance programs</li> <li>✓ Provide incentives to healthy food vendors in lower income neighborhoods Educate on the availability and benefits of a tax credit for food producers to donate excess harvest to food banks or food pantries</li> <li>✓ Pass legislation to increase minimum wage to ensure families can earn a living wage and be economically sufficient</li> </ul>