

Western Region's SNAP-Ed Evaluation Framework: Nutrition, Physical Activity, and Obesity Prevention Outcomes

Supplemental Nutrition Assistance Program Education Western Region Food and Nutrition Service April 2014



Western Region Supplemental Nutrition Assistance Program Education (SNAP-Ed) Evaluation Framework: Nutrition, Physical Activity, and Obesity Prevention Outcomes

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Introduction

The Western Region SNAP-Ed Evaluation Framework: Nutrition, Physical Activity, and Obesity Prevention Outcomes is a menu of indicators for measuring the effectiveness of SNAP-Ed activities. Since February, 2013, the Western Regional Office Food Security and Obesity Prevention Team Leader (SNAP-Ed Regional Coordinator) has worked collaboratively with Western Region SNAP-Ed State Agencies and Implementing Agencies in an evaluation committee to develop and refine the *Framework*. Evaluation committee members represent a mix of institutions that receive SNAP-Ed funding, including SNAP agencies, land-grant colleges or universities, and public health departments. The indicators offer a consistent and systematic approach to developing state- and local-level SNAP-Ed objectives and reporting program evaluation results to the Food and Nutrition Service (FNS) Western Regional Office in Annual Reports. The indicators do not replace, but instead can supplement, current FNS reporting requirements in the Education and Administration Reporting System (EARS).

The *Framework* is being piloted in the Western Region to determine the feasibility of having a consistent set of indicators for SNAP-Ed outcomes and impacts. Accordingly, it is a "working" document, and feedback from State and local SNAP-Ed collaborators will refine the *Framework* over time. This April 2014 version marks the first annual update. The current version includes a new high-level visual depiction of the framework and more detailed indicators based upon expert and practitioner review and feedback. The indicators appear in a checklist format to make the *Framework* user-friendly.

The *Framework* includes a focused menu of 51 outcome indicators that align with the SNAP-Ed guiding principles and lend support to documenting changes resulting from multiple approaches required in the SNAP Nutrition Education and Obesity Prevention grant (SNAP-Ed). These approaches include individual, family, and group-based nutrition education, physical activity and health promotion, and related intervention strategies; comprehensive, multi-level interventions; and community and public health approaches. Western Region SNAP-Ed agencies that work to deliver comprehensive programs that include direct education, social marketing, and policy, systems, and environmental (PSE) changes do not have a mechanism to identify, track, or report their myriad accomplishments. The *Framework* attempts to fill this gap. Practitioners can also use the *Framework* to identify indicators of success when implementing the multi-component programs with a focus on social marketing or PSE interventions included in the <u>SNAP-Ed</u> <u>Strategies and Interventions: An Obesity Prevention Toolkit for States</u>.

No agency is expected to measure all indicators; the chosen indicators must be appropriate for the program delivery model and respond to state, territorial, tribal or local needs for nutrition education and obesity prevention services. A set of 14 priority indicators for Federal Fiscal Year (FFY) 2015 are identified on page 10. These indicators are achievable and aspirational. SNAP-Ed agencies are encouraged to focus on the priority indicators, which measure changes in

individual behaviors, food and physical activity environments, and policies and systems changes designed to make healthy choices easier and preferred. Additional indicators can be selected, when appropriate, to measure other program outcomes of interest to the State.

Evaluating Multiple Approaches

The *Framework* is multi-level; there are indicators of change that align with the four levels in the Socio-Ecological Model (SEM) referenced in the <u>SNAP-Ed Plan Guidance</u>. This model recognizes that SNAP-Ed efforts are intended to address the constellation of factors contributing to poor diet, inactivity, and weight gain. Efforts to improve individual knowledge and skills can be maximized when the food and activity environments reinforce individuals' healthy choices. Multiple sectors, including health care, media, agriculture, and community design, have a stake in addressing inequities in nutrition and health that disproportionately impact low-income residents, compared to the general population.

It is incumbent on SNAP-Ed agencies that deliver multi-level programming in multiple settings to document and measure their success and challenges at each level, and create a cycle of continuous program improvement. To guide agencies' evaluation goals and activities, each level of the *Framework* intends to measure a specific evaluation question, as follows:

1. *Individual***:** To what extent does SNAP-Ed programming improve participants' diet, physical activity, and health?

2. *Environmental*: To what extent does SNAP-Ed programming facilitate access and create appeal for improved dietary and physical activity choices in the settings where nutrition education is provided?

3. *Sectors of Influence*: To what extent is SNAP-Ed programming integrated into comprehensive strategies that collectively impact lifelong healthy eating and active living in low-income communities?

4. *Social and Cultural Norms and Values*: To what extent do community-level obesity prevention strategies impact the public's priorities, lifestyle choices, and values for healthy living?

Individual. The base level of the framework represents the foundation of SNAP-Ed: individual, group, and family nutrition education and physical activity promotion and related interventions. These activities are designed to change knowledge, goals, intentions, and skills that create pathways to behavioral changes among low-income SNAP-Ed participants. The outcomes in this level are measured through validated and reliable survey instruments, such as the Food Behavior Checklist or the School Physical Activity and Nutrition Survey (SPAN), designed for low-income and low-literacy populations to self-report their behaviors. Given low-income

households' budgetary constraints, the indicators in this level focus on improving nutrition, stretching food dollars, and physically activity through free or low-cost exercise or leisure-time sports. In this level, the number of participants refers to individuals who report the desired knowledge, goal, or behavioral outcome out of the total number of survey respondents.

Environmental. In this level, the focus of evaluation is not on measuring changes in individuals, but rather changes in the settings or venues in low-income areas where nutrition education is provided. These changes may include the adoption and implementation of a new or enhanced organizational practice, rule, or procedure that makes healthy choices easier and more desirable. Ideally, changes at the environmental level would contribute to long-term outcomes at the individual level of the framework. Yet, measuring cause-and-effect between a policy or environmental change and individual-level outcomes is difficult. Thus, at the environmental level, SNAP-Ed agencies can measure if the settings have policies or systems in place that research shows will improve individuals' nutrition and physical activity.

To be effective, organizational policy changes or environmental supports should be combined with education or marketing, parent or community involvement, and/or staff training to sustain the new changes or standards. The primary role of SNAP-Ed Implementing Agencies (IAs) is to provide consultation and technical assistance in creating appropriate organizational or environmental changes that benefit low-income households and communities. It is ultimately the responsibility of the organization that receives technical assistance to adopt, maintain, and enforce the PSE change. SNAP-Ed evaluators can measure progress along the way and resulting effectiveness.

Indicators in the environmental level of the *Framework* reflect a modified version of the RE-AIM (<u>R</u>each, <u>E</u>ffectiveness, <u>A</u>doption, <u>I</u>mplementation, and <u>M</u>aintenance) model, a program planning and evaluation tool. For SNAP-Ed purposes, agencies would measure reach and adoption of their program and practice changes, then implementation and effectiveness, and lastly maintenance using the following definitions:

<u>Reach</u>: Number of SNAP-Ed eligibles that benefitted from the change(s) during the period assessed (e.g., number of persons < 185% of Federal Poverty Level reached by the change in SNAP-Ed eligible settings).

Adoption: Aggregate number of SNAP-Ed settings where at least one organizational or environmental change is made in writing or practice to improve or strengthen access or appeal for healthy eating or physical activity during the period assessed

Implementation: Aggregate number of SNAP-Ed settings that report a multi-component initiative with one or more organizational or environmental changes adopted AND at least one of the following: 1) evidence-based education, 2) marketing, 3) parent/community involvement, 4) staff training on continuous program and policy implementation,

Effectiveness: Number of settings with improved food or physical activity environment assessment scores using a reliable and consistent environmental assessment tool [e.g., Nutrition and Physical Activity Self-Assessment for Child care (NAP SACC), Communities of Excellence in Nutrition, Physical Activity, and Obesity Prevention (CX^3), School Health Index, Nutrition Environment Measures Survey (NEMS)]. (report actual scores).

<u>Maintenance</u>: Average percentage increase, or number of institutional or community resources invested in nutrition and physical activity supports or standards at SNAP-Ed settings in terms of staff (number of full time equivalents), cash, or in-kind supports.

To maintain consistency across states in reporting environmental changes in the vast number of low-income venues where SNAP-Ed services are provided, settings are categorized into six options in this level.

- Restaurants, mobile vending/food trucks, congregate meal sites (or, other places where people primarily go to "eat")
- Public housing, shelters, places of worship, community organizations, residential treatment centers, adult or senior services (or, other community or neighborhood settings where people "**live**" or live nearby)
- Child care, head start, early care and education, adult education, schools, after-school, Cooperative Extension offices (or, other places where people go to "learn")
- Worksites with low-wage workers, job training programs, TANF worksites (or, other places where people go to "**work**")
- Parks and recreation, YMCA, county fairs, Boys and Girls clubs, bicycle and walking paths (or, other places where people go to "**play**")
- Farmers markets, grocery stores, food retailers, food pantries, stores (or, other places where people "**shop**" for food)

Sectors of Influence. Obesity is a complex problem that requires a multi-pronged solution. The Dietary Guidelines for Americans (DGA) recognize that all sectors of society, including individuals and families, educators and health professionals, communities, organizations, businesses, and policymakers, contribute to the food and physical activity environments in which people eat, live, learn, work, play, and shop for food. SNAP-Ed providers have a role to play in reshaping these sectors so that healthy choices are easy and accessible for disparate populations. The evaluation indicators reflect broader societal goals of reforming food systems, increasing access to healthy foods in low-income areas, and promoting safe and livable communities. At this level of the SEM, it will be difficult, if not impossible, to tease out the relative contributions of SNAP-Ed. For these indicators, we might consider the collective impact of partnerships among multiple agencies that receive FNS funding, as well as funding from complementary nutrition and public health initiatives.

Social and Cultural Norms and Values. These indicators represent the public's priorities, lifestyle choices, and values for healthy living. Many of these indicators may take a lifetime to change. Even so, they represent a meaningful target for SNAP-Ed agencies working toward a society where all people, regardless of socioeconomic position, have the potential for healthy and productive lives. Changes observed in these indicators may reflect the cumulative effects of interventions at all of the previous levels of the SEM.

Evaluation Logic Model

The evaluation outcomes are presented in a logic model format, which is a visual depiction of the short-term; medium-term; long-term; and impacts that research shows may result from SNAP-Ed activities. Each indicator reflects a specific outcome of interest and identifies *what* change(s) can be measured. The logic model does not specify *how* the change will be measured. The preferred survey questions and data collection methodologies will be included in a forthcoming *Interpretive Guide to the Western Region SNAP-Ed Evaluation Framework*.

In the logic model, short-term outcomes are early markers of program success. While there is no set time-parameter for short-term activities, generally these are the immediate results that can be measured during or after program delivery. Medium-term and long-term outcomes build upon previous accomplishments.

At the individual level, the distinction between medium-term and long-term is that medium-term represents intermediate markers of progression toward meeting the DGA and Physical Activity Guidelines for American (PAGA) recommendations. Medium-term outcomes represent changes in actions or behaviors as measured by pre- and post-surveys before and after individual and group based education and health promotion activities. The medium-term indicators are actionable for on-going program evaluation.

Long-Term indicators at the individual level are more in alignment with the DGA and PAGA. The long-term indicators are designed for use by States that either conduct surveys among SNAP-Ed participants, or States that conduct annual or biennial population-level surveillance of low-income audiences using state-run surveillance systems, such as the Behavioral Risk Factor Surveillance System (BRFSS). The reference points for cups or servings of foods and beverages in long-term indicators align with population benchmarks used in surveillance surveys. This approach facilitates comparisons between the SNAP-Ed population and the general population when measuring State or national trends in nutrition and physical activity.

At the environmental and sectors of influence levels, the time period for medium-term and longterm outcomes may vary by State, population of interest, and type of activity provided. However, generally speaking, the short-term indicators represent 1 year, medium-term represents 2-3years, long term represents 3-5 years, and impacts represent 5+ years. However, at present, we have not defined a set standard for these time intervals given that the specific PSE strategy selected may determine implementation periods. For instance, within environmental level of the *Framework*, the adoption of an environmental change that includes posting signage and "shelf talkers" at the point of purchase in a food retail setting may occur at a faster rate than the negotiation of changes in a food procurement agreement. Both changes would be considered medium-term in the logic model.

Generally, at all levels of the *Framework*, impacts include the health and societal benefits, and reflect the degree to which program activities and resulting changes can be sustained over time.

Contact Information

Comments, questions, constructive criticisms regarding the *Framework* can be shared with Andrew Riesenberg, FNS Western Regional Office, at <u>andrew.riesenberg@fns.usda.gov</u> or (415)-645-1927. Please share examples of your evaluation tools and ways you are using the *Framework*.

Western Region's SNAP-Ed Evaluation Overview				
	Individual Level	Environmental	Sectors of Influence	Social/Cultural Norms and Values
Scope of Interventions:	Individual, family, or group-based nutrition education, physical activity promotion, and intervention strategies	Organizational changes, policies, rules, marketing, and access to make healthy choices easier	Community and public health approaches	The cumulative effects of all intervention categories combined
Overarching Evaluation Question:	To what extent does SNAP-Ed programming improve participants' diet, physical activity, and health?	To what extent does SNAP-Ed programming facilitate access and create appeal for improved dietary and physical activity choices in the settings where nutrition education is provided?	To what extent is the SNAP-Ed grant program integrated into comprehensive strategies that collectively impact lifelong healthy eating and active living in low-income communities?	To what extent do community-level obesity prevention strategies impact the public's priorities, lifestyle choices, and values for healthy living?

Western R	egion's SNAP-Ed Evaluatior		sical Activity, and Obesity Pre	vention Outcomes	
Outcome Indicators (* denotes priority or preferred indicators for FFY 2015)					
	Individual Level	Environmental	Sectors of Influence	Social/Cultural Norms and Values	
	[Focus: Knowledge, Intentions, and Goals]	[Focus: Organizational or Individual Support]	[Focus: Community Capacity]		
Short Term	ST1: MyPlate Knowledge ST2: Shopping Knowledge and Intentions ST3: Physical Activity Goals	ST4: Opportunity Identification [*] ST5: Local Champions ST6: Partnerships [*]	ST8: Community Partnerships ST9: Community Obesity Prevention Plan		
Medium Term	[Focus: Behavioral Changes]	[Focus: Adoption and Reach]	Focus: Community Changes]		
	MT1: MyPlate Behaviors [*] MT2: Shopping Behaviors [*] MT3: Physical Activity Behaviors [*]	MT4: Nutrition Supports Adopted [*] MT5: Physical Activity Supports Adopted [*] MT6:Marketing/ Messaging [*]	MT7: Food Industry MT8: Local Government [*] MT9: Agriculture [*] MT10: Education MT11: Community Design and Safety MT12: Health Care [*] MT13: Media	[<i>Focus:</i> Norms and Values] NV20 Family Meals NV21: Obesity Prevention Beliefs	
Long Term	[Focus: Dietary and Physical Activity Recommendations] LT2: Fruits & Vegetables* LT3: Whole Grains LT4: Dairy* LT5: Non-Dairy Beverages LT6: Food Security* LT7: Physical Activity Recommended Levels LT8: Entertainment screen time	[Focus: Implementation and Effectiveness] LT9: Nutrition Supports Implementation LT10: Physical Activity Program Implementation LT11: Program Recognition LT12: Media Coverage	[Focus: Community Benefits] LT13: Food Industry Healthy Outlets LT14: Local Government Healthy Food Sales LT15: Agriculture Sales LT16: Educational Attainment LT17: Shared Use Streets, and Crime Reduction LT18: Health Care Cost Savings LT19: Healthy Advertising	- NV22: Breastfeeding Norms NV23: Physical Activity Norms NV24: Active Commuting	
Impacts	[<i>Focus: Health</i>] I1: Healthy Weight and Blood Pressure I2: Quality of Life	[<i>Focus: Maintenance</i>] I3: Resources I4: Sustainability Plan I5: Barriers Mitigated	[<i>Focus: Sustainability</i>] I6: <i>Let's Move</i> Recognition I7: Regional Food Hubs I8: Nutrition in Community General Plan		

INDIVIDUAL LEVEL

Individual, family, or group-based nutrition education, physical activity promotion, and intervention strategies

OVER-ARCHING EVALUATION QUE	STION:	To what extent does SNAP-Ed programming improve participants' diet, physical activity, and health?	
Short-Term Outcomes (Knowl	edge, Intentions, and G	oals)	
Nut	rition		Physical Activity
ST1 MyPlate Knowledge: Number, or %, ¹ of participants who know MyPlate, as demonstrated by: Food Groups. Recall of at least one benefit of	OST2 Shopping Practices (Adults/Head of Household): Number, or %, of participants who know the nutritional or financial benefits of the following targeted shopping practices, and/or intend to perform the behavior:		ST3 Physical Activity Goals: Number, or %, of participants who set a goal with intentions to perform the following behavior(s):
 a. Fruits and Vegetables b. Lean proteins c. Whole grains d. Low-fat or fat-free dairy Messaging. Recall of at least one of the following <i>Dietary Guidelines</i> messages:	 a. Shop with a list b. Read nutrition to ingredients lists c. Identify 100% of d. Identify low-fate e. Reduce purchas 	t facts and nutrition	Increased Activity. Increase their time spent in physical activity a. number of minutes per day in exercise, physical activity or leisure-sport b. number of walking steps per day
 e. Make half your plate fruits and vegetables f. Make half your grains whole g. Switch to low-fat or fat-free milk and milk products h. Drink water instead of sugary beverages 	trans) 2. Sugar 3. Salt	s before buying foods	Reduced Sedentary Behaviors. Reduce their time spent in sedentary behavior (e.g., sitting, television watching)

¹ Number of participants refers to individuals who report the desired knowledge, goal, or behavioral outcome out of the total number of survey respondents.

✓ Long-Term Outcomes (Dietary and Physical Activity Recommendations)	
Nutrition	Physical Activity
LT2 Fruits and Vegetables: Number, or %, of participants who ate:	ULT7 Physical Activity
a. Fruits two or more times per day (or, average number of cups consumed daily)	Recommended Levels:
b. Vegetables three or more times per day (or, average number of cups consumed daily)	Adults: Number, or %, of adults who achieve:
LT3 Whole Grains: Number, or %, of participants who ate 100 % whole grain/whole wheat versions of:	a. at least 150 minutes per week of moderate-intensity aerobic physical activity or 75 minutes
a. Cooked grains: a. Pasta b. Rice c. Other	per week of vigorous-intensity
b. Ready-to-Eat grains: a. Bread b. Cereal c. Tortillas d. Other	aerobic physical activity or an
 c. Average servings of whole grains consumed daily d. Number, or %, of participants who consume less refined grain foods (or, average servings consumed daily) 	equivalent combination of moderate-and vigorous-intensity aerobic activity.
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LT4 Dairy: Number, or %, of participants who drank/ate low-fat (1%) or fat-free versions of	on 2 or more days a week that
he following:a. Milk or fortified soy beverages (or, average cups consumed daily)	work all major muscle groups (legs, hips, back, abdomen,
b. Yogurt or cheese (or, average cups consumed daily)	chest, shoulders, and arms)
c. Number, or %, of participants who switched from whole or 2% milk to fat-free or low-fat	c. a daily step count goal of \geq
(1%), white milk (with or without cereal)	7000-10,000 steps
d. Number, or %, of participants that consumed any dairy products three or more times per day	
	Children and teens: Number, or %, of
LT5 Non-Dairy Beverages	children and teens who engage in one
 a. Number or %, of participants who drank plain water when thirsty (or, average cups consumed daily) 	hour or more per day of moderate-and/or vigorous-intensity physical activity
b. Number, or %, of participants who reduced their consumption of sugar-sweetened beverages	
(or, average cups consumed daily)	LT8 Screen Time (Children and
c. Number, or %, of participants who switched from fruit-flavored drinks to 100% fruit juice (or,	Teens ages 2 and older): Number, or
number or % of participants who consumed less than 8 ounces of fruit juice daily)	%, of participants who report entertainment viewing for 2 or fewer
LT6 Food security (Adults/Head of Household, or Youth Ages 12 and Older):	hours on an average school day (or,
a. Number, or %, of participants who did not run out of food in the past 30 days	average number of minutes daily)
b. Number, or % of participants who were food secure in the past 12 months	

INDIVIDUAL LEVEL

Impacts (Health²)

UI1 Healthy Weight and Blood Pressure:

Healthy Weight. Number, or %, of participants at healthy weight

- a. Adults 18 and older: BMI = 18.5 24.9
- b. *Children and teens (ages 2 and older)*: 5th percentile to less than the 85th percentile (weight-for-age)

Blood Pressure (Adults Only³)

Number, or %, of adults, who report normal blood pressure levels (systolic < 120 and diastolic < 80)

I1: Qualify of Life (Adults only):

Total average number of healthy days reported by adults (CDC-HROOL⁴)

² Health-related impacts (Healthy Weight and Blood Pressure) are measured in appropriate interventions with at least a 1-year follow-up period and reflect Federal, state, and local rules for human subjects protections, if applicable.

³ For adults ages 18 and older who are not on medicine for high blood pressure. ⁴ Health-Related Quality of Life: http://www.cdc.gov/hrqol/

ENVIRONMENTAL LEVEL

Organizational changes, policies, rules, marketing, and access to make healthy choices easier

OVER-ARCHING EVALUATION QUESTION:

To what extent does SNAP-Ed programming facilitate access and create appeal for improved dietary and physical activity choices in the settings where nutrition education is provided?

Short-Term Outcomes (Organizational or Individual Support)

ST4 Identification of Opportunities: Number, or %, of settings with an identified need for improving access or creating appeal for nutrition and physical activity supports within the following categories of venues:

- a. Restaurants, mobile vending/food trucks, congregate meal sites (or, other places where people primarily go to "eat")
- **b.** Public housing, shelters, places of worship, community organizations, residential treatment centers, adult or senior services (or, other community or neighborhood settings where people "**live**" or live nearby)
- c. Child care, head start, early care and education, adult education, schools, after-school, Cooperative Extension offices (or, other places where people go to "learn")
- **d.** Worksites with low-wage workers⁵, job training programs, TANF worksites (or, other places where people go to "work")
- e. Parks and recreation, YMCA, county fairs, Boys and Girls clubs, bicycling and walking paths (or, other places where people go to "play")
- f. Farmers markets, grocery stores, food retailers, food pantries (or other places where people "shop" for food)

UST5 Local Champions: Number and type of local champions willing to create access to healthier foods and physical activity in SNAP-Ed sites where nutrition education is provided

- a. Youth
- b. Parents/Caregivers
- c. Community Members
- d. Staff/service providers
- e. Leadership/Decision-makers
- f. Local celebrities

ST6 Partnerships: Number of organizational task forces with SNAP-Ed representatives that agree to develop a plan for improving nutrition or physical activity practices or standards in settings where nutrition education is provided

⁵ Low-wage SNAP-Ed worksites are defined as industries generally classified by the Bureau of Labor Statistics as low-wage, with at least 25 employees, and whose human resources department or management confirms that more than half of workers earn annual wages comparable to 185% of the FPL for the state.

Medium-Term Outcomes: (Reach and Adoption)

WT4 Nutrition Supports Adopted: Aggregate number of SNAP-Ed settings, per "eat, live, learn, work, play, or shop" category in ST4, where at least one change is made in writing or practice to improve or strengthen access or appeal for healthy eating during the period assessed

Description. Written progress summary or photographic documentation(s) of change(s).

Reach. Number of SNAP-Ed eligibles that benefitted from the change(s) during the period assessed (e.g., number of persons < 185% of Federal Poverty Level reached by the change in SNAP-Ed eligible settings).

Identify types of environmental changes

- **a.** Improvements in hours of operations/time allotted for meals or food service
- **b.** Improvements in layout or display of food
- **c.** Change in menus (variety, quality, offering lighter fares)
- **d.** Point-of-purchase/distribution prompts
- e. Menu labeling/calorie counts
- **f.** Edible gardens
- **g.** Lactation supports, or policies for working mothers
- **h.** Improvements in free water taste, quality, smell, or temperature
- i. Rules on use of food as rewards, or foods served in meetings or classrooms

Identify types of procurement changes

- **a.** Change in food purchasing specification(s)
- **b.** Change in vendor agreement(s)
- c. Farm-to-table
- **d.** Increase in fruits and vegetables
- e. Increase in 100% whole grains
- **f.** Increase in low-fat dairy
- g. Increase in lean proteins
- **h.** Lower sodium levels
- **i.** Lower sugar levels
- **j.** Lower solid fats (e.g., saturated or trans fats)

Identify types of food preparation changes

- **a.** Enhanced training on menu design and healthy cooking techniques
- **b.** Reduced portion sizes
- **c.** Use of standardized recipes

Medium-Term Outcomes (continued): (Reach and Adoption)

UMT5 Physical Activity Supports Adopted: Aggregate number of SNAP-Ed settings, per "eat, live, learn, work, play, or shop" category, in ST4 where at least one change is formally adopted in writing or practice to improve or strengthen access or appeal for physical activity during the period assessed

Description. Written progress summary or photographic documentation(s) of change(s).

Reach. Estimated number of SNAP-Ed eligibles that potentially benefit from the change(s) during the period assessed (e.g., number of persons < 185% of Federal Poverty Limit exposed to the change).

Identify types of environmental changes

- **a.** Improvements in hours of operations of recreation facilities
- **b.** Improvements in access to safe walking or bicycling paths, or Safe Routes to School or work
- c. Signage and prompts for use of walking and bicycling paths
- **d.** New or improved stairwell prompts
- **e.** Improvements in access to stairwells

Identify types of program or practice changes

- **a.** New or increased use of school facilities during non-school hours for recreation, or joint use policies
- **b.** New or stronger limits on entertainment screen time
- **c.** Increase in school days spent in physical education
- **d.** Improvements in time spent in daily recess
- e. New or improved access to structured physical activity programs

\bigcup MT6 Marketing and Messaging:

Number, or %, of SNAP-Ed eligibles who, when aided, can recall SNAP-Ed nutrition, physical activity, and obesity prevention messaging.

- **a.** Social marketing
- **b.** Indirect education

Long-Term Outcomes: (Implementation and Effectiveness)		
DLT9 Nutrition Supports Programs	DLT10 Physical Activity Programs	
Implementation. Aggregate number of SNAP-Ed settings, per "eat,	Implementation. Aggregate number of SNAP-Ed settings, per "eat,	
live, learn, work, play, or shop" category in ST4, that report a multi-	live, learn, work, play, or shop" category in ST4, that report a multi-	
component initiative with one or more changes in MT4 AND at least	component initiative with one or more changes in MT5 AND at least	
one of the following: 1) evidence-based education, 2) marketing, 3)	one of the following: 1) evidence-based education, 2) marketing, 3)	
parent/community involvement, 4) staff training on continuous program	parent/community involvement, 4) staff training on continuous program	
and policy implementation a. Total number of changes implemented in MT4	and policy implementation a. Total number of changes implemented in MT4	
b. Number of settings with 2 components above	b. Number of settings with 2 components above	
c. Number of settings with 3 components above	c. Number of settings with 3 components above	
d. Number of settings with 4 components above	d. Number of settings with 4 components above	
e. Number of settings with all 5 components above	e. Number of settings with all 5 components above	
Effectiveness. Number of settings in ST 4 with improved food	Effectiveness. Number of settings in ST 4 with improved physical	
environment assessment scores using a reliable and consistent	activity environment assessment scores using a reliable and consistent	
environmental assessment tool [e.g., Nutrition and Physical Activity	environmental assessment tool [e.g., Nutrition and Physical Activity	
Self-Assessment for Child care (NAP SACC), Communities of	Self-Assessment for Child care (NAP SACC), School Health Index,	
Excellence in Nutrition, Physical Activity, and Obesity Prevention	School Physical Activity Policy Assessment (S-PAPA), Communities	
(CX^3) , School Health Index, Nutrition Environment Measures Survey	of Excellence in Nutrition, Physical Activity, and Obesity Prevention (CY^2) Wellshilting Checklist, (uppert extra learned)	
(NEMS)]. (report actual scores).	(CX^3) , Walkability Checklist). (report actual scores].	
ULT11Program Recognition: Number, or %, of SNAP-Ed setting	s in MT4 and MT5 that newly achieve:	
a. Let's Move child care recognition		
b. Healthier US School Challenge – Gold certification		
c. Alliance for a Healthier Generation – Gold certification		
d. Retailer Recognition Program (state or locally-defined)		
e. Healthy Business Recognition Program (state or locally-defined)		
f. Other state or locally-defined standards for recognition program		
LT12 Media Coverage: Number, or %, of favorable mentions by	y non-SNAP-Ed agencies of the environmental or organizational changes	
publicized in:		
a. local news (newspaper, TV, radio)		
b. on-line/social media		
c. newsletters or bulletin boards		

ENVIRONMENTAL LEVEL

Impacts : (Maintenance)

UI3 Resources: Average percentage increase, or number of institutional or community resources invested in nutrition and physical activity supports or standards at settings in MT4 and MT5

- a. Staff [Number of Full Time Equivalents (# FTE)]
- b. Cash (Total dollars expended)
- c. In-kind support (e.g., volunteers, spacer, equipment)

I4 Sustainability Plan

Number, or % of SNAP-Ed settings in MT4 and MT5 settings with a plan for sustaining, evaluating, and improving the nutrition or physical activity standards or environmental changes.

I5 Barriers

Number and type of barriers/challenges prevented or mitigated through program implementation (provide examples)

SECTORS O	FINFLUENCE	
Community and Public Health Approaches		
OVER-ARCHING EVALUATION QUESTION:	To what extent is the SNAP-Ed grant program integrated into comprehensive strategies that collectively impact ⁶ lifelong healthy eating and active living in low-income communities ⁷ ?	
Short-Term Outcomes: (Community Capacity)		
serving primarily low-income persons) addressing nutrition or physica a. Types and number of organization or individuals per sector rep b. Documented level of integration of the partnership (as docume c. Level of influence of SNAP-Ed (as documented by partners)	presented	
ST9 Community Obesity Prevention Plan: Number, or %, of	f communities with community-wide plan that to engage multiple strategies	
and sectors to prevent obesity specifically in low-income populations		
Medium-Term Outcomes: (Community Policy and Systems C	Changes)	
MT7 Food Industry		
 a. Number, or %, of food manufacturers, distributors, or retailers that b. Number, or %, of food retailers that procure locally sourced food c. Total dollar value of financial incentives for the local production a the place of sale) 	at have standards that promote healthy meals, including smaller portions (i.e., food grown within a day's driving distance of the place of sale) and distribution of food (i.e., food grown within a day's driving distance of	
I. Total dollar value of financial incentives for food retailers to open	1 stores in food deserts	

 ⁶ Note, at this level of influence, observed changes cannot be directly attributed to SNAP-Ed programming. Instead, SNAP-Ed is integrated into broader strategies for change.
 ⁷ Low-income communities are well-defined geographic areas where more than half of the contiguous census tracts, census blocks, or census designated places that comprise the area have 50% of residents that lie within 185% of the Federal Poverty Level.

Medium-Term Outcomes: (Community Policy and Systems Changes) (Continued)

JMT8 Local Government

- a. Number, or %, of local governmental facilities (including SNAP Offices) that interface with the public where there are healthy food procurement vending standards
- b. Number, or %, of local governmental facilities (including SNAP Offices) that provide nutrition education/nutrition resources at the point of enrollment for public assistance (e.g., office, on-line, telephone)
- c. Number, or %, of local governments that create public-private partnerships to provide incentives for the local production and distribution of food (i.e., food grown within a day's driving distance of the place of sale)

MT9 Agriculture

- a. Number of certified farmers markets or direct marketing farmers for every 10,000 residents in low-income communitie
- b. Number, or %, of farmers markets or direct marketing farmers that accept SNAP Electronic Benefit Transfer (EBT) in low-income communities
- c. Number, or %, of farmers markets or direct marketing farmers with public-private partnerships that provide bonus incentives programs for SNAP EBT (\$ value of the bonus per individual/household per month)
- d. Number, or %, of farm stands or mobile produce carts per 10,000 residents that sell or serve produce in low-income communities

MT10 Education

- a. Number, or %, of low-income schools that require K-12 students to be physically active for at least 50% of time spent in PE classes
- b. Number, or %, of low-income schools that integrate nutrition education into K-12 academic standards

MT11 Community Design and Safety

- a. Number, or %, of parks or open space with improved access, signage, lighting, or operating hours in low-income communities
- b. Number, or %, of trails, greenways, or sidewalks with improved access, signage, lighting, or operating hours in low-income communities
- c. Number, or %, of low-income areas with community policing initiatives

MT12 Health Care

- a. Number, or %, of low-income health care facilities that routinely measure and track patients' BMI
- b. Number, or %, of low-income health care facilities that provide "prescriptions" for physical activity or healthy eating

MT13 Media

a. Number, or %, of media outlets that have practices that promote advertising of healthy food and physical activity b. \$ value of all earned media (annually) in the community for promotion of healthy food and physical activity

Long-Term Outcomes: (Community Benefits)

LT13 Food Industry Healthy Retail OutletsNumber, or %, of low-income census tracts with a healthy food outlet, defined as a grocery store or produce stand/farmers' market that meets WIC nutrition standards

a. Total dollar value (annual) of food sales from locally sourced food in retail settings

ULT14 Local Government Healthy Food Sales

- a. Percent increase in sales of healthy foods or beverages in local vending facilities
- b. Number, or %, of local communities with an active food policy council

ULT15 Agriculture Sales: Number, or %, of farmers markets/direct marketing farmers that accept EBT per SNAP beneficiary

- a. Annual EBT redemptions⁸ for all farmers markets/direct marketing farmers that accept SNAP
- b. Percent increase in local sales of fruit and vegetables reported by growers

ULT16 Educational Attainment: Within low-income schools

- a. average third grade reading levels
- b. attendance rates
- c. dropout rates

ULT17 Shared Use Streets and Crime Reduction

- a. Total miles of shared-use path, sidewalks and bike lanes, relative to the total street miles in the low-income community
- b. Total annual crimes per 10,000 residents

LT18 Health Care Cost Savings: obesity- related medical expenditures (\$) per capita

a. Projected reduction in expenses (\$)using economic model

b. Actual reduction in expenses (\$) using claims data

LT19 Healthy Advertising Number, or %, of media outlets that place restrictions on youth exposure to advertising of unhealthy foods a. By time of day b. By program type

⁸ Retailer information is protected under the Food and Nutrition Act at 7 U.S.C. 2018 (9) (c) and Title 7 Part 278 of the federal regulations at 278.1 (q). For program evaluation purposes, only aggregated EBT transactions data for all markets can be reported.

 \mathbf{V}

Impact: (Sustainability)

UI6 *Let's Move* **Recognition:** # of cities, towns, and counties that achieve the five *Let's Move* goals

I7 Regional Food Hubs: Number of food hubs per 10,000 residents, defined as a centrally located facility that aggregates, stores, processes, distributes and/or markets locally/regionally produced food products

I8 Nutrition in Community General Plan: Number of communities (where residents are primarily low-income) that have achieved a nutrition or health element in their General Plan

SOCIAL AND CULTURAL NORMS AND VALUES

OVER-ARCHING EVALUATION QUESTION

To what extent do community-level obesity prevention strategies impact the public's priorities, lifestyle choices, and values for healthy living?

Norms and Values (NV)

NV20 Family Meals (Adults/Head of Household only)

Number, or %, of low-income parents or caregivers that set rules for:

- a. Eating meals together
- b. Eating meals without television

ONV21 Obesity Prevention Beliefs.

Number, or %, of low-income residents who believe their food and activity environments shape and support healthy eating, active living, and obesity prevention

WV22 Breastfeeding Norms (Adults/Head of Household only)

Number, or %, of low-income community members with positive attitudes toward breastfeeding in public

NV23 Physical Activity

Number, or %, of low-income community members who do not view physical activity or exercise as punishment

NV24 Active Commuting

Number, or %, of low-income residents that use public transportation, walking, or bicycling to travel to and from work on a regular basis

SOCIAL AND CULTURAL NORMS AND VALUES

References

Blackburn ML, Kaiser LL, Martin AC, West EA, Turner B, Joy AB. Food behavior checklist effectively evaluates nutrition education. California Agriculture 2006; 60(1):20-24. Available at: http://ucce.ucdavis.edu/files/repositoryfiles/ca6001p20-69226.pdf.

Calhoun A, Mainor A, Moreland-Russell S, Maier RC, Brossart L, Luke DA. Using the program sustainability assessment tool to assess and plan for sustainability. Prev Chronic Dis. 2014;11:E11

California Department of Public Health. Compendium of surveys for nutrition education and obesity prevention, Updated 2012. Sacramento, CA: Network for a Healthy California. Available at: http://www.cdph.ca.gov/programs/cpns/Documents/Compendium%20of%20Surveys.pdf.

Centers for Disease Control and Prevention. Community health assessment and group evaluation (change) action guide: Building a foundation of knowledge to prioritize community needs. Atlanta: U.S. Department of Health and Human Services, 2010.

Centers for Disease Control and Prevention. Evaluation Guide: Fundamentals of Evaluating Partnerships. Atlanta: U.S. Department of Health and Human Services; 2008.

Centers for Disease Control and Prevention. State indicator report on fruits and vegetables, 2013. Atlanta, GA: Centers for Disease Control and Prevention, U.S. Department of Health and Human Services; 2013. Available at: http://www.cdc.gov/nutrition/downloads/State-Indicator-Report-Fruits-Vegetables-2013.pdf.

Hoelscher DM, Day RS, Kelder SH, Ward JL. Reproducibility and validity of the secondary level School-Based Nutrition Monitoring student questionnaire. J Am Diet Assoc. 2003;103:186-194.

Khan LK, Sobush K, Keener D, Goodman K, Lowry A, Kakietek J,et al. Recommended community strategies and measurements to prevent obesity in the United States. MMWR Recomm Rep. 2009 Jul 24;58(RR-7):1-26. Available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5807a1.htm.

Leeman J, Sommers J, Vu M, Jernigan J, Payne G, Thompson D, et al. An evaluation framework for obesity prevention policy interventions. Prev Chronic Dis 2012;9:110322. Available at: <u>http://dx.doi.org/10.5888/pcd9.110322</u>.

Mattesich PW. Evaluation of state nutrition, physical activity, and obesity plans. Atlanta, GA: Centers for Disease Control and Prevention, U.S. Department of Health and Human Services; n.d. Available at: <u>http://www.cdc.gov/obesity/downloads/EvaluationofStateNPAOPlans.pdf</u>.

Pronk NP, Hernandez LM, Lawrence RS. An integrated framework for assessing the value of community-based prevention: a report of the institute of medicine. Prev Chronic Dis 2013;10:120323. Available at: <u>http://www.cdc.gov/pcd/issues/2013/12_0323.htm</u>.

Sexton, JS. Supplemental nutrition assistance program-education (SNAP-Ed) through the land-grant university system for FY 2010: A retrospective review. 2013. Starkville, MS.

Story M, Kaphingst KM, Robinson-O'Brien R, et al. Creating healthy food and eating environments: Policy and environmental approaches. Annual Review Public Health. 2008;29:253-72.

Townsend MS, Kaiser LL, Allen LH, Joy AB, Murphy SP. Selecting items for a food behavior checklist for a limited resource audience. J Nutr Educ Behav 2003;35:69-82.

Townsend M, Sylva K, Martin A, Metz D, Wooten-Swanson P. Improving readability of an evaluation tool for low-literate clients using visual information processing theories.

J Nutr Educ and Beh. 2008;40:181-186.University of North Carolina Center for Health Promotion and Disease Prevention. Center for Training and Research Translation Web site. Available at: http://www.centertrt.org

U.S. Department of Agriculture and U.S. Department of Health and Human Services. Dietary Guidelines for Americans, 2010. 7th Edition, Washington, DC: U.S. Government Printing Office, December 2010.

SOCIAL AND CULTURAL NORMS AND VALUES

U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Health People 2020. Washington DC. Available at: <u>http://www.healthypeople.gov/2020</u>.

U.S. Department of Health and Human Services. 2008 Physical Activity Guidelines for Americans. October 2008.