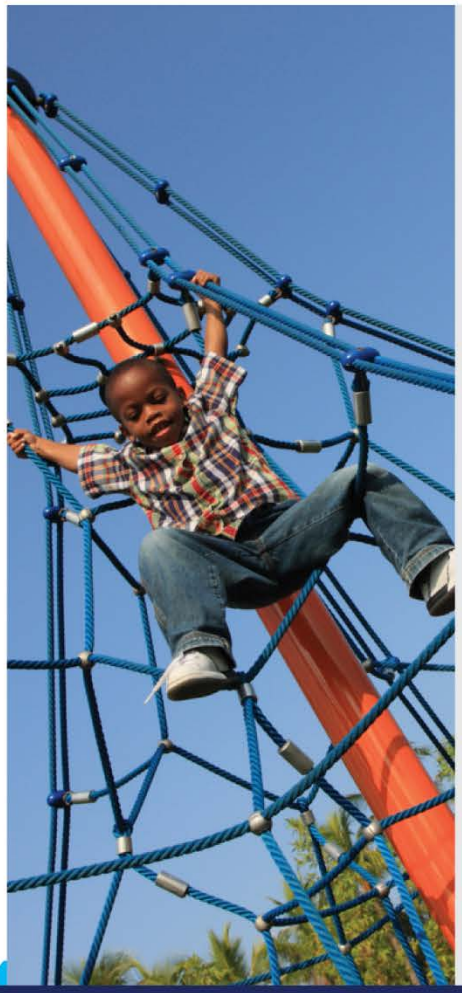

THE SUPPLEMENTAL NUTRITION ASSISTANCE PROGRAM EDUCATION (SNAP-ED) EVALUATION FRAMEWORK:

Nutrition, Physical Activity, and Obesity Prevention Indicators

Interpretive Guide to the SNAP-Ed Evaluation Framework

JUNE 2016

This guide is a collaborative effort between: USDA ASNNA The Association of SNAP Nutrition Education Administrators NCCOR National Collaborative on Childhood Obesity Research

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Foreword: Speaking with One Voice

According to a Kenyan proverb, "Sticks in a bundle are unbreakable." The Food and Nutrition Service's *Supplemental Nutrition Assistance Program Education (SNAP-Ed) Evaluation Framework: Nutrition, Physical Activity, and Obesity Prevention Indicators,* commonly known as the SNAP-Ed Evaluation Framework, gives SNAP-Ed professionals the powerful ability to collectively share successes. When all SNAP-Ed programs use the same set of indicators, they can speak in one voice to describe the many positive outcomes of work done across the United States, including increasing healthy eating and physical activity among low-income Americans. The evaluation framework is SNAP-Ed's opportunity to produce cumulative results using standardized, evidence-informed methods to share with our clients, partner organizations, stakeholders, and policy makers. The collective voice in this interpretive guide mirrors the collective impact we hope to see in obesity prevention for low-income people.

The evaluation framework represents nearly three years of discussion, review, and careful deliberation about the topics, measures, and instruments involved in conducting SNAP-Ed direct education; social marketing; and policy, systems, and environmental change interventions. Aligning with the Social-Ecological Model featured in the *2015-2020 Dietary Guidelines for Americans,* the 51 indicators in the framework represent the consideration, negotiation, and collaboration of representatives from State SNAP Agencies, Land-grant universities (cooperative extension system), public health departments, and other Implementing Agencies, such as food banks, Indian Tribal Organizations, and nonprofit organizations that plan, deliver, and evaluate SNAP-Ed programs. The original U.S. Department of Agriculture Western Regional Office framework was guided by the vision of the Western Region's Andrew Naja-Riese and resulted from expert contributions and many diverse perspectives. Specifically, 11 registered dietitian nutritionists, 2 exercise scientists, 8 public health specialists, and 3 academic peer reviewers worked together to arrive at a set of markers of achievement that cover the broad range of topics addressed by SNAP-Ed strategies and interventions.

A wide network of experts in the field, consisting of those engaged in SNAP-Ed implementation and others outside of SNAP-Ed, provided an extensive review of both the indicators themselves and this interpretive guide to transform the Western Regional Office framework into a national SNAP-Ed framework. The Association of SNAP Nutrition Education Administrators (ASNNA) and the National Collaborative on Childhood Obesity Research (NCCOR) played a vital role in leading and coordinating the review. More specifically, the ASNNA Evaluation Committee, led by Susan Foerster and Marci Scott, and NCCOR's Laura Kettel Khan and Jerold Mande, provided technical and content expertise.

NCCOR is a partnership between the U.S. Department of Agriculture (USDA), the Centers for Disease Control and Prevention (CDC), the National Institutes of Health (NIH), and the Robert Wood Johnson Foundation (RWJF). Finally, more than 28 states and 25 external experts provided feedback and expertise. Given the range of organizations and representatives involved in the effort, the SNAP-Ed Evaluation Framework and its interpretive guide represent an unprecedented national advancement in SNAP-Ed evaluation. Now, we can highlight nationally the many positive outcomes SNAP-Ed produces to improve the lives of the people it serves.

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Summary

For over 50 years, the Supplemental Nutrition Assistance Program (SNAP) has served as the foundation of America's hunger safety net. SNAP is the nation's first line of defense and a powerful tool to improve nutrition and well-being among low-income Americans. The program is effective in its mission to mitigate the effects of poverty on food insecurity and is supplemented by SNAP Education (SNAP-Ed), the nutrition education and obesity prevention arm of the SNAP. SNAP-Ed is central to USDA's efforts to improve nutrition and prevent or reduce diet-related disease and obesity among SNAP-Ed eligible households. Moreover, it is an important priority for the USDA's Food and Nutrition Service (FNS) since the program aims to increase the likelihood that SNAP-Ed eligible households will make healthy diet and physical activity choices within a limited budget. FNS applauds the leadership demonstrated by states toward the mutual commitment to improve the health of low-income American families.

As a result of the Healthy, Hunger-Free Kids Act of 2010, policies, systems, and environmental changes (PSEs) were to be layered with direct nutrition education and social marketing to enable, promote, and support healthy behaviors among SNAP-Ed eligible Americans and their communities. However, states that are now implementing comprehensive programs with direct education, social marketing, and PSE strategies do not have an established or streamlined mechanism to evaluate program effectiveness and report results to funders. The FNS *Supplemental Nutrition Assistance Program Education (SNAP-Ed) Evaluation Framework: Nutrition, Physical Activity, and Obesity Prevention Indicators* fills this gap. Released in 2013 by the USDA/FNS Western Regional Office, updated in 2014, and finalized at the national level in 2016, the evaluation framework includes a focused menu of 51 evaluation indicators that align with SNAP-Ed guiding principles. Furthermore, the indicators lend support to documenting changes resulting from multiple approaches for nutrition education and obesity prevention targeted to a low-income audience. The three approaches include 1) individual, group, and family nutrition education and physical activity promotion in addition to related interventions; 2) comprehensive, multi-level interventions in environmental settings; and 3) community and public health approaches that reach a large segment of the population.

Intended Audience

The intended audience of this guide includes SNAP-Ed program administrators and program evaluators who are involved in planning, implementing, and evaluating local, state, territorial, or tribal programs. SNAP-Ed agencies include state agencies that administer SNAP, Implementing Agencies (e.g., Land-grant universities, other universities, public health departments, Indian Tribal

Organizations, and nonprofit organizations), and their sub-contractors. The indicators and associated methodologies are flexible so that a variety of SNAP-Ed Implementing Agencies will find them useful. The guide may also be useful for agencies delivering the Expanded Food and Nutrition Education Program (EFNEP) and community-based researchers working with SNAP-Ed or EFNEP interventions. Other program operators, stakeholders, partners, and funders who work on related nutrition education, obesity and diet-related disease prevention, and chronic disease prevention programs may find this guide valuable.

History of the SNAP-Ed Evaluation Framework

From 2013 to 2014, eight state SNAP-Ed programs in the Western Region developed and piloted the framework to track and report outcomes for more than 1.5 million individuals served. The framework was initially piloted in the Western Region of the FNS to determine the feasibility of having a consistent set of indicators for SNAP-Ed outcomes and impacts. Aggregated results across those states for 2014 show 923 PSE changes were adopted to improve access and appeal for healthy eating and physical activity in SNAP-Ed qualified sites where nutrition education is provided (Riesenberg, Sugerman, Foerster, and Franck, 2015). Results from the pilot identified a common set of SNAP-Ed indicators that provides meaningful direction, yet SNAP-Ed providers interpret PSE change measures differently. This interpretive guide intends to correct these inconsistencies. Since that time, the framework has been diffused across all regions of the FNS through collaboration with FNS Regional Offices; the FNS National Office; the National Institute of Food and Agriculture (NIFA) (which administers the complementary EFNEP); CDC's Division of Nutrition, Physical Activity, and Obesity; and ASNNA's Evaluation Committee.

Food and Nutrition Service's Western Region States

Authors and contributors represent a mix of institutions that receive SNAP-Ed funding, including SNAP agencies, land-grant colleges or universities, nonprofit organizations, and public health departments.

The current framework resulted from an intensive review process led by ASNNA's Evaluation Committee members, including a half-day workshop at the 2016 ASNNA Winter Conference in February 2016, where SNAP-Ed Implementing Agencies provided their input on the usability and relevance of the indicators. In addition, NCCOR hosted a two-day workshop in Washington, DC, on December 2–3, 2015. NCCOR brings together four of the nation's leading research funders—the Centers for Disease Control and Prevention (CDC), the National Institutes of Health (NIH), the Robert Wood Johnson Foundation (RWJF), and the U.S. Department of Agriculture (USDA)—to address the problem of childhood obesity in America. The workshop convened authors and content experts to discuss and think through the following questions related to the SNAP-Ed Evaluation Framework.

- Do we have the right set of indicators?
- Are there any indicators that should be deleted or collapsed?
- Are there any that should be added?
- How could the indicators be streamlined or improved?
- Which indicators should be considered priority?

As a result of the NCCOR workshop and the feedback received during the ASNNA conference, the interpretive guide authors made the following changes to the framework:

- Found a balance between rigor and practicality. For SNAP-Ed purposes, rigor comes from choosing evidence-based interventions.
- Incorporated consistent measurement for reporting results by age groups.
- Standardized when indicators should include a numerator and denominator.
- Incorporated health equity and reduction in disparities.
- Reconsidered chronological headings in the logic model and instead focused on the intensity and depth of the intervention. Renamed short-term (ST), medium-term (MT), and long-term (LT):
    - Changed ST to "Readiness and Capacity"
    - Changed MT to "Changes"
    - Changed LT to "Maintenance and Effectiveness"
- Reintroduced the Healthy Eating Index.

- Moved the Individual long-term outcomes to a new section titled "Population Results" that spans all previous levels of the framework. Added a benchmark comparing against current state of the population (along with recommendations/guidelines and behavior change over time). This focuses on narrowing the gap between different populations, addressing the issue of health disparities.
- Combined ST8 and ST9 to focus on partnerships and planning with at least five diverse sector representatives (versus 10). Some states will have legislatively mandated sectors but this will vary across states.
- In Sectors of Influence, changed "community" to "multi-sectoral" or "sector."
- Changed "local government" to "government" to reflect state policies as well.
- Eliminated specific indicators for "social and cultural norms and values." There are no special data sets on norms and values.
- Added a glossary of terms.

About This Interpretive Guide

The interpretive guide to the SNAP-Ed Evaluation Framework identifies and explains the indicators, outcome measures, and preferred methodologies for tracking success; developing state and local-level SNAP-Ed objectives; and reporting program evaluation results to FNS, other funders, and program stakeholders. The framework offers invaluable benefits to program implementers by presenting a roadmap that monitors program effectiveness, informs continuous program improvement, and generates a consistent set of program outcomes of interest to stakeholders and funders, including Congress. The Healthy, Hunger-Free Kids Act (HHFKA) of 2010 requires that SNAP-Ed strategies and interventions be evidence-based, and the SNAP-Ed Evaluation Framework and its interpretive guide will help meet Congress's mandate. The framework focuses on evaluating the array of comprehensive SNAP-Ed strategies and interventions implemented by a myriad of agencies to achieve nutrition, physical activity, and obesity prevention for the SNAP-Ed eligible population. It builds upon other existing evaluation frameworks, including the

SNAP-Ed eligible persons are the target audience for SNAP-Ed, specifically SNAP participants and low-income individuals who qualify to receive SNAP benefits or other means-tested federal assistance programs, such as Medicaid or Temporary Assistance for Needy Families. It also includes individuals residing in communities with a significant low-income population.

Center for Training and Research Translation (Center TRT) Evaluating Policy and Environmental Change Interventions and the NIFA Community Nutrition Education Logic Model.

Since the provisions of the HHFKA took effect, State SNAP Agencies were given greater leadership and authority over how SNAP-Ed funds are administered locally. It is important for State SNAP Agencies that enter into grants and contracts with Implementing Agencies to use the framework when identifying indicators that are reasonable, necessary, and science-based for measuring success and evaluating SNAP-Ed performance. Multiple states across the country varying in size and annual funding—including Alaska, Arizona, California, Colorado, Florida, Guam, Hawaii, Kansas, Oregon, Maine, Michigan, Missouri, Nevada, Tennessee, Utah, and Washington—use the framework for identifying SNAP-Ed performance measures and building SNAP-Ed evaluation plans. The Association of SNAP Nutrition Education Administrators (ASNNA) Evaluation Committee has focused on priority indicators and channels measured through the framework and contributed significantly to the review, rollout, and expansion of SNAP-Ed evaluation activities. The Southeast Regional Office, in partnership with the Public Health Institute, organized a collaborative of agencies in the Southeast Region—which is anticipated to grow significantly in SNAP-Ed expenditures through 2018—to identify shared priority outcomes and survey measures from the framework for multi-year program planning and growth. The Mountain Plains Region, in partnership with the Kansas State University Office of Educational Innovation and Evaluation, has created a tracking and reporting system of framework indicators across the region. The Regional Nutrition Education and Obesity Prevention Centers (RNECE) at Cornell University, Colorado State University (in partnership with Washington State University), Purdue University, University of Kentucky, University of North Carolina at Chapel Hill, Utah State University, and University of Tennessee, provided invaluable recommendations in updating the SNAP-Ed Evaluation Framework at the national level. With RNECE funding, the University of Tennessee developed tools to measure organizational and staff readiness for PSE changes referenced in the interpretive guide. The University of North Carolina at Chapel Hill designed an interactive version of the evaluation framework. The University of Kentucky assessed which SNAP-Ed indicators the cohort of RNECEs has used in signature research projects nationally. Additional vignettes describing how states use the framework and communicate their results appear in the accompanying document *SNAP-Ed Evaluation Framework – Practitioner Stories*. The goal is to have all agencies using the framework over time.

Connections Between the Education and Administrative Reporting System, SNAP-Ed Evaluation Framework, and the SNAP-Ed Strategies & Interventions: An Obesity Prevention Toolkit for States

Many practitioners have asked, "How do the Education and Administrative Reporting System (EARS), the SNAP-Ed Evaluation Framework, and the SNAP-Ed Strategies & Interventions: An Obesity Prevention Toolkit for States, commonly known as the SNAP-Ed Toolkit, relate to one another?" EARS collects information on SNAP-Ed activities implemented and participants reached, while the evaluation framework goes further by providing a progression of outcomes from these activities using a logic model approach. EARS includes the universe of SNAP-Ed activities; the framework encourages sampling methodologies to strategically measure changes resulting from SNAP-Ed programs and partnerships across different contexts and circumstances. Both EARS and the framework comprise a complementary pair of tools that provide deeper understanding of the quality, value, and importance of SNAP-Ed. The SNAP-Ed Toolkit is a resource for States and Implementing Agencies that adds rigor to SNAP-Ed through its focus on evidence-based strategies and interventions. States and community-based researchers working on SNAP-Ed evaluations can use the SNAP-Ed Evaluation Framework to measure a common set of program outcomes, thereby strengthening the evidence for SNAP-Ed programming and enhancing the quality of strategies and interventions included in the toolkit.

The EARS Form (FNS-759) is an administrative tool used to collect annual uniform data and information on SNAP-Ed activities. Data elements collected include demographic characteristics of participants, topics covered by educational interventions, education delivery sites, education strategies, and resource allocation. FNS is releasing a revised EARS form that will collect data related to some Healthy, Hunger-Free Kids Act provisions starting in Fiscal Year 2017.

The SNAP-Ed Evaluation Framework is a program evaluation tool that guides State SNAP-Ed Agencies and providers in measuring and reporting to stakeholders SNAP-Ed program outcomes for annual and multi-year State Plan activities. The SNAP-Ed Evaluation Framework outcomes are to be reported in the SNAP-Ed Annual Report. The framework indicators do not replace, but rather supplement and amplify, current FNS reporting requirements in EARS. Practitioners are encouraged to choose from the data collection tools and survey instruments recommended in the SNAP-Ed Evaluation Framework interpretive guide. These tools and survey instruments are especially relevant for practitioners who are evaluating the effectiveness of programs that are already included or have the potential for inclusion in the SNAP-Ed Strategies & Interventions: An Obesity Prevention Toolkit for States.

The SNAP-Ed Strategies & Interventions: An Obesity Prevention Toolkit for States is a package of off-the-shelf options that can be readily adopted by State SNAP-Ed Agencies and providers and are highly likely to produce positive outcomes. State SNAP-Ed Agencies and local providers can use the outcome measures and data collection tools in the interpretive guide to demonstrate that toolkit interventions on the lower end of the continuum of evidence (e.g., emerging or practice-tested) produce changes in policies, systems, or environments and individual behaviors. Evaluation of toolkit interventions or those not yet in the toolkit can provide evidence for obesity prevention potential and movement towards more rigorous research evidence.

Suggested Citation

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SNAP-ED EVALUATION FRAMEWORK

Nutrition, Physical Activity, and Obesity Prevention Indicators

	READINESS & CAPACITY SHORT TERM (ST)	CHANGES MEDIUM TERM (MT)	EFFECTIVENESS & MAINTENANCE LONG TERM (LT)
INDIVIDUAL	GOALS AND INTENTIONS ST1: Healthy Eating ST2: Food Resource Management ST3: Physical Activity and Reduced Sedentary Behavior ST4: Food Safety	BEHAVIORAL CHANGES MT1: Healthy Eating MT2: Food Resource Management MT3: Physical Activity and Reduced Sedentary Behavior MT4: Food Safety	MAINTENANCE OF BEHAVIORAL CHANGES LT1: Healthy Eating LT2: Food Resource Management LT3: Physical Activity and Reduced Sedentary Behavior LT4: Food Safety
ENVIRONMENTAL SETTINGS EAT, LIVE, WORK, LEARN, SHOP, AND PLAY	ORGANIZATIONAL MOTIVATORS ST5: Need and Readiness ST6: Champions ST7: Partnerships	ORGANIZATIONAL ADOPTION AND PROMOTION MT5: Nutrition Supports MT6: Physical Activity and Reduced Sedentary Behavior Supports	ORGANIZATIONAL IMPLEMENTATION AND EFFECTIVENESS LT5: Nutrition Supports Implementation LT6: Physical Activity Supports Implementation LT7: Program Recognition LT8: Media Coverage LT9: Leveraged Resources LT10: Planned Sustainability LT11: Unexpected Benefits
SECTORS OF INFLUENCE	MULTI-SECTOR CAPACITY ST8: Multi-Sector Partnerships and Planning	MULTI-SECTOR CHANGES MT7: Government Policies MT8: Agriculture MT9: Education Policies MT10: Community Design and Safety MT11: Health Care Clinical-Community Linkages MT12: Social Marketing MT13: Media Practices	MULTI-SECTOR IMPACTS LT12: Food Systems LT13: Government Investments LT14: Agriculture Sales and Incentives LT15: Educational Attainment LT16: Shared Use Streets and Crime Reduction LT17: Health Care Cost Savings LT18: Commercial Marketing of Healthy Foods and Beverages LT19: Community-Wide Recognition Programs

POPULATION RESULTS (R)

TRENDS AND REDUCTION IN DISPARITIES

R1: Overall Diet Quality
R2: Fruits & Vegetables
R3: Whole Grains
R4: Dairy
R5: Beverages
R6: Food Security
R7: Physical Activity and Reduced Sedentary Behavior
R8: Breastfeeding
R9: Healthy Weight
R10: Family Meals
R11: Quality of Life

CHANGES IN SOCIETAL NORMS AND VALUES

APRIL 2016

SNAP-Ed Priority Outcome Indicators*

*Priority indicators can be identified by looking for the ☑ symbol

Four Core Indicators

All states are strongly encouraged to measure the following four core indicators of changes in the medium-term components of the SNAP-Ed Evaluation Framework. The first three are indicators of behavioral changes in SNAP-Ed participants in direct education programs. The fourth is a multi-component indicator of adoption and reach of nutrition PSE changes and promotion across the environmental settings where SNAP-Ed eligible populations eat, learn, live, play, shop, and work.

Indicator Code (MT = medium-term)	Indicator Name
MT1	Healthy Eating Behaviors
MT2	Food Resource Management Behaviors
MT3	Physical Activity and Reduced Sedentary Behaviors
MT5	Nutrition Supports Adopted in Environmental Settings

Two Partnerships and Coalition Indicators (*measure at least one*)

All states are strongly encouraged to measure at least one or both of the following indicators of partnerships and coalitions associated with short-term components of the SNAP-Ed Evaluation Framework. The first indicator, ST7, tracks active partnerships in SNAP-Ed qualified sites or organizations that regularly meet, exchange information, and identify and implement mutually reinforcing activities that will contribute to adoption of one or more organizational changes, policies, or other environmental supports. The second indicator, ST8, identifies changes in multi-sector partnerships representing diverse sectors of influence or industries at the local (e.g., community, district, parish, city, town, county, or borough), state, territorial, or tribal levels. The community may be defined by geographic, demographic, or civic or political boundaries. ST8 is suitable for assessing the strength of the State Nutrition Action Council (SNAC) or other nutrition, food systems, and obesity prevention coalitions.

Indicator Code (ST = short-term)	Indicator Name
ST7	Organizational Partnerships
ST8	Multi-Sector Partnerships and Planning

Population Results Indicator (*Measure, if possible)*

All states are strongly encouraged to measure the Fruits and Vegetables indicator, R2, in the Population Results section of the SNAP-Ed Evaluation Framework. Population Results indicators are markers of the low-income population's achievement of recommendations put forth in the current *Dietary Guidelines for American* and *Physical Activity Guidelines for Americans* and their associated health and well-being. Population-level indicators measure changes over time in the behaviors that promote positive health outcomes. R2 measures low-income people (within 185% of the federal poverty level) that ate fruits one or more times per day and vegetables one or more times per day.

Indicator Code (R = population results)	Indicator Name
R2	Fruits and Vegetables

Using the Interpretive Guide: Making the SNAP-Ed Evaluation Framework Work for You

Step 1: Reflect on your State SNAP-Ed Plan goals and objectives and state or local needs assessment results.

Key questions:

- What are the top priority interventions in your state or local area?
- What do you hope to accomplish for the populations or communities you are serving?
- Where are there gaps in services, and which populations are unserved or under-served?

Step 2: Review the framework diagram on page 22 to identify which indicators overlap with your goals and objectives.

Key questions:

- Does your state or local project already assess these indicators?
- Are your evaluation indicators in a different structure or format?

Step 3: Familiarize yourself with the terms used in the glossary in Appendix A to understand the language of the framework.

Step 4: Develop a set of criteria for selecting indicators for your state or local project.

Key questions:

- Which indicators will be most useful for continuous program improvement?
- Which are most useful for reporting results to funders and stakeholders at the federal, state, and local levels?
- Which indicators are achievable and relevant in the current SNAP-Ed period of performance?
- Which indicators are aspirational over time?
- Which indicators are priorities for the USDA Food and Nutrition Service?[1] Your regional office? Your state?
- Are there indicators that apply across geographies (e.g., rural, frontier, urban), linguistic and cultural contexts, and SNAP-Ed Implementing Agency types?
- Which indicators entail directly engaging program participants or the surrounding community?

[1] Food and Nutrition Service's priority indicators for FY 17 are listed on page 23.

Step 5: Choose one or more indicators for your monitoring and evaluation plan.

Key questions:

- Which indicators will fit in your agency's existing evaluation plan? Which indicators will require updating or streamlining your evaluation plan?
- Do you have a mixture of indicators that remain in the same level (e.g., Environmental Settings) to ensure that progression within that level is appropriately tracked over time? The readiness & capacity (short-term), changes (medium-term), and effectiveness & maintenance (long-term) indicators should be related to each other through time.
- Have you selected at least one indicator for change at the Individual level, and at least one indicator at the Environmental Settings and/or Sectors of Influence levels of the framework?

Step 6: Study the indicator interpretive guide write-ups for your selected indicators.

Key questions:

- What is the benefit of the indicator?
- Which outcome measures require new data collection?
- Which ones use existing or secondary data sets?

Step 7: Select appropriate outcome measures for each indicator.

Key questions:

- Which outcome measures are appropriate for the staff and resources you have available for data collection, analysis, and reporting?
- Which indicators will have the least burden on program participants and protect their rights and welfare?

Step 8: Communicate your indicators and outcome measures to senior management and other stakeholders, and where applicable, sub-grantees or local providers.

Key questions:

- What expectations will your senior management team have?
- What expectations will you have of your local providers?
- What challenges or barriers do you anticipate from local providers, including front-line personnel and their communities?
- Will your evaluation provide relevant information in a timely manner to your program's stakeholders?

Step 9: Implement your training and technical assistance plans.

Key questions:

- What is your staff readiness for measuring PSEs and comprehensive obesity prevention interventions?
- What types of training and technical assistance (T&TA) will be necessary for using different indicators and evaluation approaches?
- Are there existing T&TA tools or methods from other states or agencies you can use?

Example of Using the Interpretive Guide

State Z is gearing up for its annual kickoff meeting with the State SNAP Agency and three SNAP-Ed Implementing Agencies to begin preparing its 2017 State SNAP-Ed Plan.

Step 1: Reflect on your SNAP-Ed Plan goals and objectives and state or local needs assessment results.

The prior year's SNAP-Ed State Plan contained four statewide objectives:

- By September 30, increase fruit and vegetable intake among SNAP-Ed participants by 7 percent over the baseline.
- By September 30, increase physical activity behaviors among SNAP-Ed participants by 5 percent over the baseline.
- By September 30, reach at least 400,000 SNAP-Ed participants in evidence-based nutrition education programs.
- By September 30, facilitate at least three new partnerships with non-governmental organizations focused on PSE changes.

The objectives emphasized direct education and individual outcomes, but did not reflect the full scope of objectives for more comprehensive approaches required in SNAP-Ed. The PSE emphasis on partnerships was a good place to start but lacked specificity. What types of PSEs? How will they address your state and local needs assessments results? How will your objectives leverage your partners' existing efforts focused on PSE strategies in communities and other jurisdictions?

Step 2: Review the framework diagram on page 22 to identify which indicators overlap with your goals and objectives.

The indicators that directly aligned with last year's objectives were: MT1 (Healthy Eating Behaviors) and MT3 (Physical Activity and Reduced Sedentary Behaviors). Indicator R2 (Fruits and Vegetables) and R7 (Physical Activity and Reduced Sedentary Behaviors—Recommendations) may also be useful. When preparing for the meeting, some of the attendees were not entirely clear on the difference between Individual-level indicators and the Population Results, but both seemed important. Indicators ST7 and ST8—both of which focus on partnerships and collaborations—are also relevant in different ways.

Step 3: Familiarize yourself with the terms used in the glossary in Appendix A. to understand the language of the framework.

There is so much alphabet soup in SNAP-Ed and unclear terminology. Particularly, the difference between adoption and implementation of a PSE was unclear for several staff members. In the glossary, the staff learned that adoption shows a commitment when at least one change is made in writing or practice. Implementation is full-scale and comprehensive delivery of a PSE intervention as it was intended.

Step 4: Develop a set of criteria for selecting indicators for your state or local project.

The Implementing Agency partners are proposing some exciting new projects focused on school wellness policies and healthful retail initiatives in 2017. Choosing indicators that will determine whether these new initiatives are being delivered fully and as intended is important. Learning if they are effective also matters. The State SNAP Director is also interested in showing SNAP-Ed improves the health of SNAP participants. Some of the Implementing Agency staff thought it might be difficult to show that SNAP-Ed programs improve health in a single year; this might take more time to show. The agencies set some criteria as follows:

- The indicators should align with state priorities.
- The indicators should focus on priority environmental settings where the SNAP-Ed audience learns, works, and shops for food.
- Identify what PSEs at the local, state, territorial, or tribal levels are already occurring that leverage SNAP-Ed priorities.
- In order to show progression, it would be important to pick a mixture of indicators—some focused on readiness & capacity (short-term), changes (medium-term), and effectiveness & maintenance (long term).

Step 5: Choose one or more indicators for your monitoring and evaluation plan.

During their first meeting, the agencies reviewed the different criteria for selecting indicators. The implementing agencies also had one additional parameter: They wanted to choose indicators that would be useful for continuous program improvement. Given the state's overall focus on fruits and vegetables, and the priority environmental settings, the agencies chose the following indicators for the 2017 State SNAP-Ed Plan:

- Individual: MT1 (Healthy Eating Behaviors), MT2 (Food Resource Management Behaviors)
- Environmental: MT5 (Nutrition Supports Adopted), LT5 (Nutrition Supports Implementation and Effectiveness)
- Sectors of Influence: ST8 (Multi-Sector Partnerships and Planning), MT8 (Agriculture)
- Population Results: R2 (Fruits and Vegetables), R11 (Health-Related Quality of Life)

The agencies chose ST8 (Multi-Sector Partnerships and Planning) rather than ST7 (Organizational Partnerships) because it was important to the state to assess whether its State Nutrition Action Council was working across sectors and large-scale systems to have an impact on nutrition, obesity, and diet-related disease prevention. The agencies also agreed to divide up the responsibilities for monitoring specific indicators based upon their individual State Plan goals, objectives, and capacity. This agreement offered relief so that no one agency was responsible for measuring everything. Each agency appropriately will use its strengths or leverage existing partners' data collection activities.

Step 6: Study the indicator write-ups for your selected indicators.

The evaluation specialists at each Implementing Agency reviewed the indicator write-ups in great detail to understand specific types of surveys and data collection methods that were necessary. They realized that the indicators at the individual and environmental levels would require their staff to collect and input data. They felt optimistic that the Sectors of Influence and Population Results indicators could be tracked using existing data sets that are publically available or through the telephone screener survey that one agency had the capacity to conduct.

Step 7: Select appropriate outcome measures for each indicator.

Similar to the previous step, the evaluation specialists chose at least one specific outcome measure for each indicator. The indicators in MT1 and MT2 allowed for the use of existing surveys that one of the three agencies was using as part of its pre- and post-tests in educational interventions. A second agency chose to focus on using specific measures of reach and adoption to track school wellness policies in the 'learn' domain and corner store makeovers in the 'shop' domain within the Environmental Settings chapter. To measure long-term implementation and effectiveness, the

second agency selected a series of environmental assessment tools to measure before and after outcomes of school wellness policies (WellSAT 2.0) and the Nutrition Environment Measures Survey (NEMS). Because the State SNAP-Ed Agency was leading the SNAC, the State SNAP-Ed Coordinator decided to focus on ST8 for a state-level evaluation. Lastly, the third Implementing Agency was working on farmers market promotion as a member of a food systems collaborative and was part of an existing consortium of community-based research agencies that jointly conduct a telephone screener measuring health and social conditions of households in low-income areas. Thus, this third agency chose to focus on tracking farmers markets accepting SNAP using data from the Agricultural Marketing Service (MT8), while also asking specific questions identified in the Centers for Disease Control and Prevention's (CDC) Behavioral Risk Factor Surveillance System (R2, fruits and vegetables, and R11, health-related qualify of life). The telephone screener would be a three-year effort; during the first year, staff would develop and test the survey instrument and identify a representative sample of the SNAP-Ed eligible audience to participate in data collection.

Step 8: Communicate your indicators and outcome measures to senior management and stakeholders, and where applicable, sub-grantees, local providers.

Once the agencies identified specific indicators and outcome measures, they prepared a one-page overview document with their goals and objectives for the following year's State SNAP-Ed plan. This document becomes a useful handout to share with partners and senior leadership on SNAP-Ed activities, sets the goals of the evaluation, and informs how the results will be used in a timely manner. The SNAP-Ed Implementing Agencies also communicated how their chosen interventions were evidence-based and associated with improvements in health status. The State SNAP Director was also pleased to learn of the three-year telephone survey project that would determine to what extent the SNAP-Ed eligible population was eating fruits and vegetables and showing overall improvements in health-related quality of life.

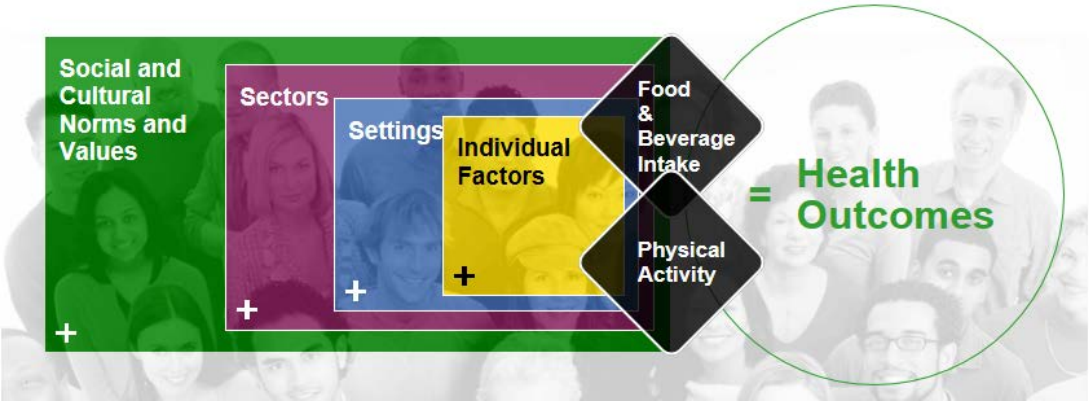
Step 9: Implement your training and technical assistance plans.

The Implementing Agencies found print-ready materials that they could use to train local affiliates on data collection. This was most important for local affiliates that were using the WellSAT 2.0 and NEMS; they wanted to ensure that each local affiliate collected data appropriately and consistently to ensure it could be aggregated. The agency also replicated a PSE tracking tool that local agencies could use for measuring reach and adoption. They had learned about this tool at the most recent ASNNA winter conference. There was no need to reinvent the wheel!

Evaluating Multiple Approaches

The indicators of change in the SNAP-Ed Evaluation Framework align with the four levels in the Social-Ecological Model (SEM) referenced in the SNAP-Ed Plan Guidance and depicted below. This model recognizes that SNAP-Ed efforts are intended to address the constellation of factors contributing to poor diet, inactivity, weight gain, and other negative health outcomes. Efforts to improve individual goals and behaviors can be maximized when environmental settings where individuals eat, learn, live, play, shop, and work 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.

A Social-Ecological Model for Food and Physical Activity Decisions



Source: Figure 3.1 *Dietary Guidelines for Americans, 2015–2020*.
http://health.gov/dietaryguidelines/2015/guidelines/chapter-3/social-ecological-model/

No agency is expected to measure all indicators and outcome measures; 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. Practitioners should examine the SNAP-Ed Evaluation Framework and identify the indicators and outcome measures relevant to their evaluation questions and stakeholder needs. State agencies and Implementing Agencies can choose evaluation indicators when developing their state-level SMART (specific, measurable, attainable, relevant, time-bound) objectives. Some indicators will require SNAP-Ed agencies to collect the data, whereas others will use secondary data sources. A set of priority indicators for federal fiscal year (FFY) 2017 was identified in the SNAP-Ed Plan Guidance with input from all Regional SNAP-Ed Coordinators and the National SNAP-Ed team. States can use this interpretive guide to select additional indicators to measure other program outcomes of interest.

Program Evaluation

It is incumbent on SNAP-Ed agencies that deliver multi-level programming in multiple settings and communities to document and measure their successes and challenges at each level. This process creates a cycle of continuous improvement and accountability to stakeholders. According to CDC, program evaluation is "the systematic collection of information about the activities, characteristics, and outcomes of programs to make judgments about the program, improve program effectiveness, and/or inform decisions about future program development" (CDC, 2012). Program evaluation does not occur in a vacuum; rather, it is influenced by real-world constraints. Evaluation should be practical and feasible and conducted within the confines of resources, time, and political context. Moreover, it should serve a useful purpose, be conducted in an ethical manner, and produce accurate findings. Evaluation findings should be used both to make decisions about program implementation and to improve program effectiveness. Please see Appendix E and Appendix F for more details on the types of program evaluation relevant to the SNAP-Ed Evaluation Framework.

SNAP-Ed Evaluation Framework Questions

Each level of the framework and chapter in this guide intends to measure a specific evaluation question, as follows:

1. ***Individual***: To what extent does SNAP-Ed programming improve and sustain participants' healthy eating and physical activity behaviors?
2. ***Environmental Settings***: To what extent does SNAP-Ed programming create and sustain access and appeal for improved healthy eating and physical activity choices in the settings where people eat, learn, live, play, shop, and work?
3. ***Sectors of Influence***: To what extent is SNAP-Ed programming working with other sectors to collectively impact lifelong healthy eating and active living in low-income communities?
4. ***Population Results:*** To what extent does SNAP-Ed programming improve the low-income population's achievement of the current *Dietary Guidelines for Americans*' recommendations and other health behaviors, compared to the general population?
5. ***Social 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. As with the SEM, 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. This level corresponds with SNAP-Ed Approach 1, as described in the SNAP-Ed Plan Guidance and the Food and Nutrition Act of 2008. Informed by behavioral change theories, these activities are designed to change goals and intentions toward behavioral changes among 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. The medium-term indicators measure changes in participants before (entry) and after (exit) series-based programs. Long-term indicators measure the degree to which these behaviors "stick" at a minimum 6 months post-intervention.

Environmental Settings. At this level, the focus of evaluation is measuring changes in settings where people eat, learn, live, play, shop, and work. 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. Corresponding to SNAP-Ed Approach 2 in the Food and Nutrition Act, the environmental settings indicators measure whether an evidence-based SNAP-Ed intervention, such as those appearing in the Appendix G, support greater access or appeal for healthy behaviors through coordinated and comprehensive approaches that may include written policies, social-environmental changes, or promotion and use of new systems. To be most effective, policy, systems and environmental interventions should be combined with other activities or components that reflect the needs and readiness for PSE change within an organization. Additional components of PSE change may include evidence-based education, marketing, parent/community involvement, and staff training on continuous program and policy implementation. Ongoing or continuous evaluation of PSE changes and their respective additional components are necessary to assess long-term organizational effectiveness and maintenance of PSE change. The primary role of SNAP-Ed Implementing Agencies is to provide consultation and technical assistance in creating appropriate policy, systems, environmental changes, and promotion in SNAP-Ed qualified sites and organizations. It is ultimately the responsibility of the staff at the site or organization that receives technical assistance to adopt, maintain, and enforce the PSE change. Agencies may also leverage other resources and experience unexpected benefits that demonstrate the value of SNAP-Ed.

Sectors of Influence. Obesity is a complex problem that requires a multi-pronged solution. The *2015-2020 Dietary Guidelines for Americans* recognize that all sectors of society—including individuals and families, educators and health professionals, communities, organizations, businesses, and policy makers—contribute to opportunities for healthy eating and active living at the local, state, territorial, and tribal levels. SNAP-Ed Implementing Agencies working through partnerships 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 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 consider the collective impact of partnerships among multiple agencies that receive FNS funding, as well as funding from complementary nutrition and public health initiatives. Corresponding to SNAP-Ed Approach 3, the Sectors of Influence indicators measure changes at the community or jurisdiction level. The framework assumes community and state-level outcomes will be achieved through a collective impact approach. For instance, state partners working through a State Nutrition Action Council (SNAC) can work collaboratively with other federal programs such as the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), National School Lunch Program, USDA's Farm to School program and CDC's state and local grantees for Obesity Prevention and non-governmental groups to achieve common goals.

Population Results. The long-term outcomes and impacts—achieving *Dietary Guidelines*' recommendations and related health improvements—should be measured at the population level. The framework recognizes that strategies and interventions at the three previous levels must work in harmony to achieve population-level results. Population results can be measured and tracked through brief self-reported surveillance screeners or routine program evaluation assessments that monitor nutrition and health status of SNAP-Ed eligible persons. Screeners may be administered annually, biennially, or at other intervals, and necessitate sampling methodologies to measure the proportion of low-income people within 185 percent of the federal poverty level. Because SNAP-Ed funds can only pay for the low-income portion of the surveillance sample, it is incumbent on states to use other public health funding streams, such as the cooperative agreements administered by CDC. Comparisons are necessary to track whether goals for reducing the gaps in nutrition, physical activity, and health status between low-income households and the general population are achieved. Reducing disparities based on income and other sociodemographic factors represent a meaningful endpoint for SNAP-Ed. All people, regardless of socioeconomic position, have the potential for healthy and productive lives.

Social Norms and Values. These components represent the priorities, lifestyle choices, and values for healthy living held by the public and leaders of private industry, foundations, government, and non-governmental organizations. Changes in norms and values reflect, as a society, what we view as healthy, how we invest our time, and what we choose to fund. Changes in norms and values may reflect the cumulative effects of interventions at all of the previous levels of the SEM. Many of these outcomes may take years or decades to achieve. At present, there are no specific indicators within this chapter because the results are outside the scope of SNAP-Ed. Instead, the authors present a

qualitative approach to measuring norms changes, and where practitioners might identify norms changes in the previous indicators.

Format of the Interpretive Guide

There are five chapters in this guide. The evaluation indicators appear in a logic model format, which is a visual depiction of the short-term (ST) outcomes; medium-term (MT) outcomes; long-term (LT) outcomes; and population results (R) of SNAP-Ed activities.

READINESS & CAPACITY SHORT TERM (ST)	CHANGES MEDIUM TERM (MT)	EFFECTIVENESS & MAINTENANCE LONG TERM (LT)	POPULATION RESULTS (R)

Each indicator summary follows a consistent template that includes the components in the box below. Some indicators are expressed as a percentage or ratio; these indicators have a numerator and denominator defined in Appendix D. Other indicators are expressed as a number or count; if this is the case, numerators and denominators are not listed in Appendix D. Medium-term, long-term, and population results measures are meant to assess changes over time; where applicable, report baseline, post-intervention, and follow-up values.

Framework Component: Readiness & Capacity, Changes, Effectiveness & Maintenance, Population Results.

Indicator Description: Purpose of the indicator.

Background and Context: Summary of when the indicator should be used and why it is relevant to SNAP-Ed.

Outcome Measures: The desired benefits, improvements, or achievements of a specific program or goal. Each indicator has multiple outcome measures.

What to Measure: Guidance on survey questions or other data collection methodologies (e.g., interviews or direct observation) when not using surveys.

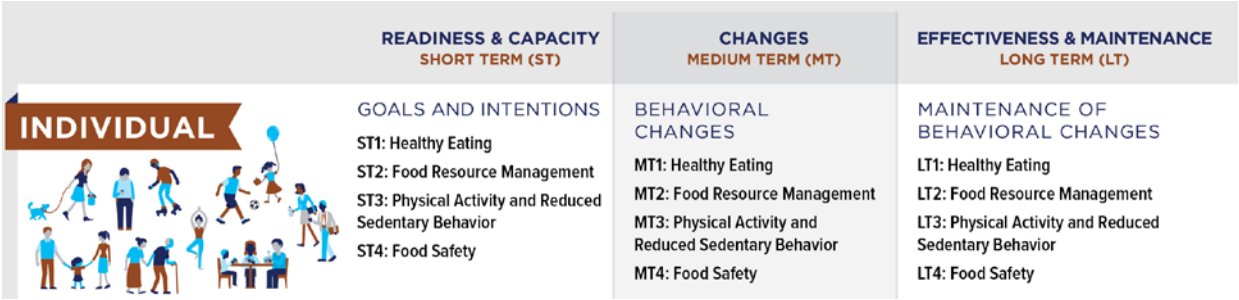
Population: Subgroup for which this indicator is relevant.

Surveys and Data Collection Tools: Data collection tools or instruments with live links and sample survey questions that align with each outcome measure.

Key Glossary Terms: Commonly used terms within the guide that can be found in the glossary.

Additional Resources or Supporting Citations: Limitations, guidance, references for further information on the indicator.

Chapter 1. Individual Level



Introduction

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. All state SNAP-Ed Plans must include individual-level activities (identified as Approach 1 within the Food and Nutrition Act). Individual and group-based activities are designed to change goals and intentions toward behavioral changes among SNAP-Ed participants. The overarching evaluation question in this chapter is: To what extent does SNAP-Ed programming improve and sustain participants' healthy eating and physical activity behaviors?

The outcomes at this level are measured through validated and reliable questionnaires, such as the Food Behavior Checklist or the International Physical Activity Questionnaire, designed for low-income and low-literacy populations to self-report their behaviors. The indicators at this level focus on improving nutrition, stretching food dollars, and increasing physical activity through free or low-cost exercise or leisure-time sports. Short-term (ST) indicators illustrate goals and intentions that motivate or demonstrate readiness for behavior changes but fall short of action. ST indicators may result from low-dose, brief SNAP-Ed interventions, such as one-time workshops or the beginning lessons of an educational series. Many of the surveys associated with short-term indicators reflect the Transtheoretical (Stages of Change) Model, a theory that emphasizes individual readiness for health behavior change and associated progress in making and maintaining behavior change (Prochaska and Velicer, 1997).

Medium-term (MT) indicators are behavioral changes resulting upon completion of a series of evidence-based direct nutrition education and physical activity lessons. Sessions can include face-to-face instruction with a live instructor or via digital or interactive media. MT indicators represent changes in actions or behaviors as measured by pre- and post-questionnaires before and after individual, group, and family-based education and health promotion programs. Additionally, there are options for 24-hour dietary recalls, some of which use images and visual cues to estimate portion

sizes. Certain physical activity behaviors can also be measured directly using pedometers, for instance, or parental observation of child behaviors.

The MT indicators are actionable for ongoing program evaluation and continuous program improvement. A sample of participants who begin and complete a SNAP-Ed program should have their targeted behaviors assessed at baseline (entry) and again at program completion (exit). Please see Appendix E for more information on sampling. For each indicator, a list of preferred questionnaires, sample questions, and data collection methodologies are suggested. Some questionnaires may be proprietary, have specific requirements for use, or items of cost; please contact the survey developer before initial implementation.

The medium-term indicators are actionable for ongoing program evaluation and continuous program improvement.

Evaluators should measure, analyze, and report changes in either mean (average) scores, where appropriate, or the distribution of participant responses or self-reported behaviors before and after the series. These summary statistics should be based on the number of participants who complete both the baseline and the program exit questionnaire. The reporting of means and/or the distribution of responses or behaviors should include the number of participants who responded to the survey question. Statistical testing is encouraged to rule out that the observed changes are due to chance. More information is available in Appendix E. Step-by-step guidance for SNAP-Ed program evaluation is available in *Addressing the Challenges of Conducting Effective Supplemental Nutrition Assistance Program Education (SNAP-Ed) Evaluations.*

While there is no time period or required number of SNAP-Ed program sessions for tracking MT indicators, states are expected to use principles from *Best Practices for Nutrition Education for Low-Income Audiences*. These principles include delivering a program fully and as intended, based on behavioral theory, and with an appropriate number of educational sessions and contacts.

At the individual level, the distinction between medium-term and long-term is that medium-term represents immediate outcomes following program completion, and long-term is at a minimum of 6 months post-intervention. The maintenance stage of the Transtheoretical (Stages of Change) Model lasts from 6 months to 5 years. Long-term indicators reveal whether SNAP-Ed participants continue to demonstrate targeted behavioral changes even after graduating from a direct education program. The University of Wyoming's Cent$ible Nutrition Program has successfully evaluated long-term behaviors (Wardlow and Baker, 2012).

Short-Term (ST) Indicators:

GOALS AND INTENTIONS

ST1: HEALTHY EATING
ST2: FOOD RESOURCE MANAGEMENT
ST3: PHYSICAL ACTIVITY AND REDUCE SEDENTARY BEHAVIOR
ST4: FOOD SAFETY

ST1: Healthy Eating	
Framework Component	Readiness & Capacity – Goals and Intentions
Indicator Description	Individual intentions and goals that serve as motivators to behavior changes recommended by the *Dietary Guidelines for Americans*.
Background and Context	Indicator ST1 measures changes in intentions and goals resulting from a one-time lesson or a series of direct nutrition education classes with SNAP-Ed adults and youth. Depending on the setting and time availability, surveys and questions noted below may be conducted in a pre- and post-test design or in a post-test only design, such as used in the University of California (UC) CalFresh Intent to Change surveys. Some of the questions will need to be updated to reflect the latest dietary guidelines. For example, changing servings to cups and adding fruit juice limits for children in certain age groups will be necessary. Using multiple measures of intent and goal setting strengthens the likelihood of determining that participants are motivated to improve their healthy eating practices. At present, there is no standardized survey instrument or composite score used in SNAP-Ed programming because of the variety of curricula and population subgroups served. Evaluators are encouraged to measure the degree of correlation among the individual measures presented in this indicator. Results may be limited due to self-report biases (e.g., recall and social desirability).
Outcome Measures	The number or percentage of participants who set goals or intent to change the following healthy eating behaviors: Five Food Groups. Intention or goal setting related to eating from the five food groups throughout the day: ST1a. Fruit ST1b. Vegetables ST1c. Lean proteins ST1d. Whole grains ST1e. Low-fat or fat-free dairy Messaging. Intent to change or setting goals for any of the following *Dietary Guidelines* messages: ST1f. Find your healthy eating style and maintain it for a lifetime. ST1g. Make half your plate fruits and vegetables—vary your veggies. • Try adding fresh, frozen, or canned vegetables to salads, sides, and main dishes. • Choose a variety of colorful veggies prepared in healthful ways: steamed, sautéed, roasted, or raw. ST1h. Make half your plate fruits and vegetables—focus on whole fruits. • Choose whole fruits—fresh, frozen, dried, or canned in 100 percent juice. • Enjoy meals with fruit as snacks, with meals, or as a dessert. ST1i. Make half your grains whole grains.

	• Look for whole grains listed first or second on the ingredients list—try oatmeal, popcorn, whole-grain bread, and brown rice. • Limit grain desserts and snacks, such as cakes, cookies, and pastries. ST1j. Move to low-fat or fat-free milk or yogurt. • Choose fat-free milk, yogurt, and soy beverages (soy milk) to cut back on saturated fat. • Replace sour cream, cream, and regular cheese with low-fat yogurt, milk, and cheese. ST1k. Vary your protein routine. • Mix up your protein foods to include seafood, beans and peas, unsalted nuts and seeds, soy products, eggs, and lean meats and poultry. • Try main dishes made with beans or seafood, like bean chili or tuna salad. • Choose fresh poultry, seafood, pork, and lean meat, rather than processed meat and poultry. ST1l. Drink water instead of sugary beverages. ST1m. Reduce sodium consumption. ST1n. Cut back on foods high in solid fats and added sugars. ST1o. Choose vegetable oils instead of butter, and oil-based sauces and dips instead of ones with butter, cream, or cheese.
What to Measure	SNAP-Ed participants who indicate an intent to change or set behavior change goals related to the benefits from consuming each of the five food groups that compose MyPlate, reduction of unhealthy sugary beverages consumption, and/or changes consistent with the key *Dietary Guidelines* messages. Choose at least one outcome measure from the list provided, and select a measurement approach based on the type of survey questions and responses. The example surveys and sample questions listed below can be used to measure post-test only responses of intent or for matched pre- and post-test outcome measurements of intent and goals by age group. The measures reflect the Transtheoretical (Stages of Change) model. For a description on ordinal and nominal outcomes, please see Appendix F.
Population	Adults, adolescents, and children (grades 3–12)

Surveys and Data Collection Tools
<u>Adults</u> **Fruit and Vegetable Inventory** http://www.cdph.ca.gov/programs/cpns/Documents/FruitandVegetableInventory.pdf Mark one [ST1h] • I am not thinking about eating more fruit. • I am thinking about eating more fruit…planning to start within 6 months. • I am definitely planning to eat more fruit in the next month. • I am trying to eat more fruit now. • I am already eating 3 or more servings of fruit per day. Mark one [ST1g] • I am not thinking about eating more vegetables. • I am thinking about eating more vegetables…planning to start within 6 months. • I am definitely planning to eat more vegetables in the next month. • I am trying to eat more vegetables now. • I am already eating 3 or more servings of vegetables per day. **Example Stages of Change Measures for ST1** "Are you interested in changing your eating behaviors [Insert specific Healthy Eating behavior]?" "Are you thinking about changing your eating behaviors [Insert specific Healthy Eating behavior]?" "Are you ready to change your eating behaviors [Insert specific Healthy Eating behavior]?" "Are you in the process of changing your eating behaviors [Insert specific Healthy Eating behavior]?" "Are you trying to maintain changes in your eating behaviors [Insert specific Healthy Eating behavior]?" 1) Yes, I have been for MORE than 6 months. 2) Yes, I have been for LESS than 6 months. 3) No, but I intend to in the next 30 days. 4) No, but I intend to in the next 6 months. 5) No, and I do NOT intend to in the next 6 months. Scoring Choice #1: stage = Maintenance Choice #2: stage = Action

Choice #3: stage = Preparation
Choice #4: stage = Contemplation
Choice #5: stage = Precontemplation

Another Example:

- How likely is it that you will eat low fat or fat free dairy products regularly (2-3 servings a day) for the next month?
- How many servings of dairy products do you plan to eat for the next month?

Responses range from never/rarely to more than 3 servings a day. Intention was defined as the summated score of the 2 items.

Adapted from Kim K, Reicks M, Sjoberg S. Applying the theory of planned behavior to predict dairy product consumption by older adults. *J Nutr Educ Behav*. 2003;35:294-301

Children and Adolescents

Example Stages of Change for ST1 (Cullen & Bartholmew, et al. 1998)

For fruit [ST1h]
1. I don't think about eating fruit and I don't eat fruit.
2. I don't think about eating fruit, but eat it because my mom makes me.
3. I think about eating fruit but don't.
4. I think about eating fruit but eat them only when my mom reminds me.
5. I think about eating fruit and plan to start.
6. I try to eat fruit every day.

For vegetables [ST1g]
1. I don't think about eating vegetables and I don't eat vegetables.
2. I don't think about eating vegetables, but eat them because my mom makes me.
3. I think about eating vegetables but don't.
4. I think about eating vegetables, but eat them only when my mom reminds me.
5. I think about eating vegetables and plan to start.
6. I try to eat vegetables every day.

Key Glossary Terms

Transtheoretical Model

Additional Resources or Supporting Citations

Campbell MK, Reynolds KD, Havas S, et al. Stages of change for increasing fruit and vegetable consumption among adults and young adults participating in the national 5-a-Day for Better Health community studies. *Health Educ Behav* 1999; 26: 513–34.

Cullen KW, Bartholomew LK, Parcel GS, Koehly L. Measuring stage of change for fruit and vegetable consumption in 9- to 12-year-old girls. *Journal of Behavioral Medicine* 1998;21:241–254.

Savoie M, Mispireta M, Rankin L, Neill K, LeBlanc H, Christofferson D. Intention to Change Nutrition-Related Behaviors in Adult Participants of a Supplemental Nutrition Assistance Program--Education. *Journal Of Nutrition Education & Behavior* [serial online]. January 2015;47(1):81-85. Available from: Academic Search Alumni Edition, Ipswich, MA. Accessed May 15, 2016.

Individual

ST2: Food Resource Management	
Framework Component	Readiness & Capacity – Goals and Intentions
Indicator Description	Individual and family goals and intentions that reflect smarter shopping and food resource management strategies, enabling participants to stretch their food resource dollars to support a healthier diet.
Background and Context	Indicator ST2 measures intent to change and goals resulting from a single education lesson or a series of food resource management classes with SNAP-Ed adults and youth. Differences in reportable outcomes may be explained by the intensity of food resource management programming received by participants. Depending on setting and time availability, surveys and questions noted below may be conducted in a pre- and post-test design or in a post-test only design such as used in the University of California (UC) CalFresh Intent to Change surveys. Some of the questions may need to be updated to reflect the latest dietary guidelines. Using multiple measures of intent and goal setting strengthens the likelihood of determining that participants are motivated to improve their food resource management practices. At present, there is no standardized survey instrument or composite score used in SNAP-Ed programming due to the variety of curricula and population subgroups served. Evaluators are encouraged to measure the degree of correlation among the individual measures presented in this indicator. Results may be limited due to self-report biases (e.g., recall and social desirability).
Outcome Measures	The number of adults/heads of households who set goals and/or changes in level of intent to practice food resource management behaviors. **Healthful Shopping Practices:** Setting goals or changes in intent related to the following shopping behaviors: ST2a. Choose healthy foods for my family on a budget ST2b. Read nutrition facts label or nutrition ingredients lists ST2c. Buy 100 percent whole grain products ST2d. Buy low-fat milk or dairy products ST2e. Buy foods with lower added: 2e1. Solid fats (saturated and/or trans) 2e2. Sugar 2e3. Salt/sodium ST2f. Buy fruits and vegetables—fresh, frozen, dried, or canned in 100 percent juice

Individual

	Stretch Food Dollars: Setting goals or changes in intent related to the following shopping behaviors: ST2g. Not run out of food before month's end ST2h. Compare prices before buying foods ST2i. Identify foods on sale or use coupons to save money ST2j. Shop with a list ST2k. Batch cook (cook once; eat many times) ST2l. Use unit pricing to find best values ST2m. Cook healthy foods on a budget
What to Measure	SNAP-Ed participants who indicate an intent to practice at least one method for managing their food resources through food shopping practices, food storage, food preparation, and budgeting. Choose at least one outcome measure from the list provided, and select a measurement approach based upon the type of survey question and responses. The example surveys and sample questions listed below are for matched pre- and post-test outcome measurements of intention and goals. Some surveys, such as intent, can be used to measure post-test only responses of intent (e.g., University of California CalFresh Nutrition Education intent surveys). For a description on ordinal and nominal outcomes, please see Appendix F.
Population	Adults (ages 18+), high school or transitional aged youth who are the primary shoppers/meal preparers
Surveys and Data Collection Tools	
Adults **Cooking Matters for Adults** http://cookingmatters.org/courses Q31 How confident are you that you can choose the best-priced form of fruits and vegetables (fresh, frozen, or canned)? [ST2f] Q33 How confident are you that you can buy healthy foods for your family on a budget? [ST2a] Q34 How confident are you that you can cook healthy foods for your family on a budget? [ST2m] *Responses:* Not at all confident, Not very confident, Neutral, Somewhat confident, Very confident, Does not Apply **Leah's Pantry Food Smarts Workshops** http://leahspantrysf.org/fsw/ How confident are you that you can: a. Read a label for nutrition information. [ST2b]	

b. Use serving size to compare foods for sugar or sodium amount. [ST2e2, 2e3]
c. Identify whole grain foods from the ingredients label. [ST2b, c]

Responses: Not at all confident, Not very confident, Neutral, Somewhat confident, Very confident, Does not Apply

Eat Fresh.org (online) Mini-Course
http://eatfresh.org/
The following questions are derived from pre- and post-tests administered before the beginning and at the end of a series of five short online modules. These questions are taken from the following modules:

- Find Low-Sodium Foods Using Nutrition Facts Labels
- How Much Sugar Is Really in Your Favorite Drink?
- Outsmart the Grocery Store!
- Can You Identify These Healthy Whole Grains?
- Eating a Healthy Breakfast Is Easier Than You Think!

1. When grocery shopping, how confident are you that you can:
   a. Read a label for nutrition information on sodium, fats, fiber, etc. [ST2b]
   b. Read a label on a beverage can and convert grams of sugar into teaspoons. [ST2b]
   c. Develop a grocery list and stick to it when I shop [ST2j]
   d. Use serving size to compare foods for sugar or sodium content [ST2e2, 2e3]
   e. Identify whole grain foods from the ingredients [ST2b, c]
   f. Distinguish between foods and beverages that have natural sugar and those that have added sugar. [ST2b, 2e3]
   g. Compare unit prices of similar foods to find the best value [ST2h,l]

Responses: Not at all confident, Not very confident, Neutral, Somewhat confident, Very confident

University of California CalFresh Nutrition Education
http://uccalfresh.org/evaluation/Adult%20Evaluation (please click on the Contact Us link to request access to the instruments)

Intent to Change Surveys: Evaluation tool for single-session workshops
One form with question related to food resource management: Nutrition Facts Label

Questions are given to participants on a 4x6 card format:

EXAMPLE
Q2. The next time you go shopping, will you use the "Nutrition Facts Label" to choose foods? ☐Yes ☐Maybe ☐No [MT2b]

Individual

Key Glossary Terms Food Resource Management (FRM)
Additional Resources or Supporting Citations: NA

Individual

ST3: Physical Activity & Reduced Sedentary Behavior	
Framework Component	Readiness & Capacity – Goals and Intentions
Indicator Description	Two-part indicator measuring intentions and goals to increase physical activity and/or reduce sedentary behavior. Physical activity is defined as any body movement that works muscles and requires more energy than resting. Sedentary behavior is defined as too much sitting or lying down at work, at home, in social settings, and during leisure time. Both increasing physical activity and decreasing sedentary behaviors is important for overall health.
Background and Context	ST3 will be used primarily for program evaluation to measure intention or goal setting changes. These changes may result from a short-term intervention such as a one-time workshop or contact or after one or two sessions within a series-based program. This information, however, provides interim markers of program success as interventions work toward behavioral changes. To demonstrate improvement in intentions and goal setting, a post-test only measure can be used. Studies indicate that moving more during the day, *in addition* to getting the daily 30 minutes of moderate activity on a daily basis, is necessary. Both increasing physical activity and reducing sedentary behavior should be considered in obesity prevention programming and evaluation. A lack of physical activity (too little exercise) and too much sedentary behavior change the body in different ways and should be measured separately. For example, programs designed to reduce obesity by increasing physical activity may not be effective if sedentary behavior remains high.
Outcome Measures	The number or percentage of SNAP-Ed participants who report intentions or set goals to increase physical activity and reduce sedentary behavior. **Increased Physical Activity, Fitness, and Leisure Sport.** Number or percentage of people reporting intentions or setting goals to increase duration, intensity, and frequency of exercise, physical activity, or leisure sport appropriate for the population of interest, and types of activities. ST3a. Physical activity and leisure sport (general physical activity or leisure sport) ST3b. Physical activity when you breathed harder than normal (moderate-vigorous physical activity) ST3c. Physical activity to make your muscles stronger (muscular strength) ST3d. Physical education or gym class activities (school PE) ST3e. Recess, lunchtime, classroom, before- and afterschool physical activities (school activities—non-PE) ST3f. Walking steps during period assessed (e.g., increasing daily goal by ≥2,000 steps)

Individual

	Reduced Sedentary Behavior. Number or percentage of people reporting intentions or setting goals to decrease time spent in sedentary behavior (computers, desk sitting, television watching) during the period assessed. ST3g. Television viewing ST3h. Computer and video games ST3i. Sitting on weekdays while at work, at home, while doing course work, and during leisure time.
What to Measure	Physical activity or leisure sport intention or goal setting assessments should be measured using the dimensions of the activity performed including type (what), intensity (how hard), frequency (how often), and duration (how long) using self-report in minutes, days, etc. Sedentary behavior intentions or goals are assessed using a self-report survey. Sedentary behavior should not be confused with screen time which, although is generally sedentary in nature, measures exposure to electronic screens such as phones, televisions, or computers. Sedentary behavior may involve screen time, but should include lying down, sitting, reading books, drawing, writing, and other non-screen-related inactivity (<1.5 Mets, or the Metabolic Equivalent of Task). Possible physical activity intention or goal setting topics include: • Increasing frequency (number of days) • Increasing time (number of minutes) • Increasing types of activity (cardiovascular, flexibility, muscular strength) • Increasing intensity (moderate or vigorous) • Increasing number of steps • Decreasing screen time (computer, video games, TV)
Population	Older adults, adults, adolescents, children, preschoolers and toddlers (via parents or child care providers)
Surveys and Data Collection Tools	
<u>Adults</u> **Pre/Post - Example** Depending on program length, a pre/post only measure may be used, such as one or two questions looking at current practice against intentions indicated after the program. As an example a one-time session on integrating physical activity into your day, might include the following questions Current Practice: During the *past* week how many days did you do physical activity or leisure sport? [ST3a] 0 1 2 3 4 5 6 or more	

Individual

Intended Practice: During the *next* week, how many days do you plan or intend to do physical activity or leisure sport?
0 1 2 3 4 5 6 or more

The questions and responses could also be modified to a specific SNAP-Ed program based on program content. For example "physical activity and leisure sport" might be replaced with "activities that made you breathe harder than normal [ST3b]," or "strength building activity [ST3c]," etc. Questions could also be modified to look at time (# of minutes per day.)

Post Only
Exercise: Stages of Change (short form)
Regular exercise is any planned physical activity (e.g., brisk walking, aerobics, jogging, bicycling, swimming, rowing, etc.) performed to increase physical fitness. Such activity should be performed 3 to 5 times per week for 20-60 minutes per session. Exercise does not have to be painful to be effective but should be done at a level that increases your breathing rate and causes you to break a sweat.

Question: Do you exercise regularly according to that definition?
- Yes, I have been for MORE than 6 months.
- Yes, I have been for LESS than 6 months.
- No, but I intend to in the next 30 days.
- No, but I intend to in the next 6 months.
- No, and I do NOT intend to in the next 6 months.

Scoring
- Answered with choice #1: stage = Maintenance
- Answered with choice #2: stage = Action
- Answered with choice #3: stage = Preparation
- Answered with choice #4: stage = Contemplation
- Answered with choice #5: stage = Precontemplation

The responses could also be modified to a specific program based on program content. For example "exercise regularly" might be replaced with "strength train" or "participate in cardio activity," etc.

Children and Youth

PACE - Adolescent Psychological and Stage-of-Change Measures Related to Physical Activity and Sedentary Behavior (Adolescent only)

1. In a typical week, how many days do you do physical activity for 60 minutes or more? [ST3a]
   0 1 2 3 4 5 6 or more

Individual

If you answered between "0" and "4" to question 1, go to question 3.
If you answered "5" or "6 or more" to question 1, go to question 2.

2. How many months have you been doing 60 minutes of physical activity on 5 or more days per week?
   a. Less than 6 months
   b. 6 months or more

3. Do you think you will start doing 60 minutes of physical activity 5 or more days a week in the next 6 months?
   a. No and I do not intend to in the next 6 months
   b. Yes, I intend to in the next 6 months
   c. Yes, I intend to do in the next 30 days

4. How many months have you been doing 60 minutes of physical activity on 5 or more days per week?
   a. Less than 6 months
   b. 6 months or more

Sedentary Habit Changes

1. On a school day, how many hours do you do sedentary habits (like being a couch potato)?
   0 1 2 3 4 5 6 or more

2. Do you consistently do 2 hours or less of sedentary habits each day?
   No, and I do NOT intend to in the next 6 months
   No, but I intend to in the next 6 months
   No, but I intend to in the next 30 days.

Key Glossary Terms

Aerobic activity
Duration
Flexibility
Frequency
Intensity
Muscular endurance
Muscular strength

Individual

Physical activity Sedentary behavior Structured physical activity Unstructured physical activity

Additional Resources or Supporting Citations
 	
• Sallis, 2001 San Diego State University
  o **Physical Activity Stages** http://fmph.ucsd.edu/pacedocs/PAS.pdf
  o **Sedentary Habit Stages** http://fmph.ucsd.edu/pacedocs/SED.pdf
  o **Scoring** http://fmph.ucsd.edu/pacedocs/Scoring.pdf
 	
Other assessments that can be used for evaluating programs at the ST3 level include:
 	
• **Additional PACE questionnaires,** Sallis, 2001 SDSU (e.g., Change Strategies, Pros & Cons, Family Support, Confidence, etc.) **Stages** http://fmph.ucsd.edu/pacedocs/PAS.pdf
• **Intention to Exercise Scale**, Kerner & Grossman, 2001 (Assesses intention to adhere to a physical activity program for the next 12 months)
• **Self-efficacy for Exercise Scale**, Resnick and Jenkins, 2000 (Assesses confidence in ability to exercise for 20 minutes 3 times a week)
• **Decisional Balance Questionnaire**, Marcus et al, 1992 (Assesses decision to exercise or not) See below.
• **Motivating People to Be Physically Active**, Bess Marcus (Book, has same great tools for measuring change, intention and motivation to change.)
 	
Marcus BH, Selby VC, Niaura RS, Rossi JS. (1992). Self-efficacy and the stages of exercise behavior change. *Research Quarterly for Exercise and Sport*, 63, 60-66.
 	
Norman GJ, Benisovich SV, Nigg CR, Rossi JS. (Mar, 1998). Examining three exercise staging algorithms in two samples. Poster presented at SBM. New Orleans, LA.
 	
Physical Activity Guidelines for Americans http://health.gov/paguidelines/guidelines/
 	
Rhodes RE, Mark RS, Temmel CP. (2012). Adult sedentary behavior: A systematic review. *American Journal of Preventive Medicine, 42*(3), e3.

Individual

ST4: Food Safety Goals and Intentions	
Framework Component	Readiness & Capacity – Goals and Intentions
Indicator Description	Individual intention and goals that serve as motivators to food safety behavior changes recommended by the *Dietary Guidelines for Americans*.
Background and Context	The *2015-2020 Dietary Guidelines for Americans* and *Healthy People 2020* prioritize personal food safety practices, including washing hands and surfaces often, avoiding cross-contamination, cooking to proper temperatures, and refrigerating foods promptly. Indicator ST4 measures participants' goals and intentions to change one or more food safety practices resulting from a lesson taught in a single workshop or as part of an education series. SNAP-Ed and EFNEP curricula, such as Eating Smart * Being Active and Plan, Shop, Save, Cook, include content focused on food safety and personal hygiene practices.
Outcome Measures	The number or percentage of participants intending to change one or more food safety practices at home: ST4a. Clean: wash hands and surfaces often ST4b. Separate: don't cross-contaminate ST4c. Cook: cook to proper temperatures ST4d. Chill: refrigerate promptly
What to Measure	SNAP-Ed participants who indicate an intent to change or set behavior change goals related to one or more food safety practices. Choose at least one outcome measure from the list provided, and select a measurement approach based on the type of survey questions and responses. The example surveys and sample questions listed below are for matched pre- and post-test outcome measurements of intention and goals by age group. Some surveys, such as intent, can be used to measure post-test only responses of intent (model after University of California CalFresh Nutrition Education intent surveys).
Population	Older adults, adults, high school students and transitional aged youth, middle school students
Surveys and Data Collection Tools	
Example Measures Which of the following food safety practices do you intend to do at home? a. Wash hands, cutting board, and knives after using them to prepare raw chicken, meat, or fish. [ST4a] b. Prepare raw foods separately from other foods. [ST4b] c. Cook ground beef or meat loaf until it is no longer pink. [ST4c]	

Individual

d. Use a food thermometer to check if meat and chicken is completely cooked. [ST4c]
e. Refrigerate meat and dairy within 2 hours of shopping. [ST4d]

Stages of Change (middle school students) (Kim, et al., 2012)
Choose one of three statements: [ST4a]

- I do not consider hand hygiene practices to be important for health (scored as pre-contemplation)
- I agree that hand hygiene behavior is very important for health, and although I do not currently practice it well now, I will in the near future (contemplation and preparation)
- I realize that hand hygiene behavior is very important for health, and I have been practicing it for at least six months (maintenance).

Key Glossary Terms

Cross-contamination

Additional Resources or Supporting Citations

Fight BAC! Partnership for Food Safety Education
http://www.fightbac.org/

Community Nutrition Education Logic Model Detail
https://nifa.usda.gov/sites/default/files/resource/CNE%20Logic%20Model%20-%20Detailed%20Version.pdf

Kim EJ, Pai AJ, Kang N-E, Kim WK, Kim, YS, Moon H-K, Ha AW. The effects of food safety education on adolescents' hand hygiene behavior: an analysis of Stages of Change 4. *Nutrition Research and Practice* 2012;6(2):169-174. Available at http://dx.doi.org/10.4162/nrp.2012.6.2.169 pISSN 1976-1457 eISSN 2005-6168

Wardlow et al. 2012. EFNEP Behavior Checklist Review: https://nifa.usda.gov/sites/default/files/resource/Behavior%20Checklist%20Review.pdf

Medium-Term (MT) Indicators:

BEHAVIORAL CHANGES

MT1: HEALTHY EATING BEHAVIORS
MT2: FOOD RESOURCE MANAGEMENT BEHAVIORS
MT3: PHYSICAL ACTIVITY AND REDUCE SEDENTARY BEHAVIOR
MT4: FOOD SAFETY BEHAVIORS

MT1: Healthy Eating Behaviors☑	
Framework Component	Changes – Nutrition-Related Behavioral Changes
Indicator Description	Changes in individual and family healthy eating behaviors on the pathway to achieving the current *Dietary Guidelines for Americans* recommendations.
Background and Context	Indicator MT1 measures healthy eating behavioral changes reported by SNAP-Ed participants before and after participation in a series of direct nutrition education classes offered face-to-face or over the Internet. Agencies measure the extent to which participants are improving their dietary patterns across food groups on the pathway toward achieving current *Dietary Guidelines for Americans* recommendations. MT1 builds upon ST1 by assessing whether participants are making the behavioral changes they intended. The number of SNAP-Ed classes and contacts vary by program model, underlying behavioral theory, or curriculum, ranging from four to eight sessions and sometimes longer. Differences in reportable outcomes may be explained by the intensity of nutrition education programming received by participants.
Outcome Measures	The number or percentage of participants reporting a healthy eating behavior during the period assessed, the frequency, type of behavior(s), or cups of fruits and vegetables consumed: **During main meals:** MT1a. Protein foods prepared without solid fats (e.g., saturated and/or trans fats) or fresh poultry, seafood, pork, and lean meat, rather than processed meat and poultry MT1b. Ate a serving size of protein less than the palm of a hand or a deck of cards **Throughout the day or week:** MT1c. Ate more than one kind of fruit MT1d. Ate more than one kind of vegetable MT1e. Ate nuts or nut butters MT1f. Used MyPlate to make food choices **Frequency*:*** MT1g. Drinking water MT1h. Drinking fewer sugar-sweetened beverages (e.g., regular soda or sports drinks)* MT1i. Consuming low-fat or fat-free milk (including with cereal), milk products (e.g., yogurt or cheese), or fortified soy

	beverages MT1j. Eating fewer refined grains (e.g., spaghetti, white rice, white tortilla)* MT1k. Eating fewer sweets (e.g., cookies or cake)* **Servings:** MT1l. Cups of fruit consumed per day MT1m. Cups of vegetables consumed per day *Note: For certain outcome measures, a reduction in the behavior is desired. An example is drinking sugary beverages, such as regular soda or sports drinks, or consuming refined grains or grain-based desserts.)
What to Measure	At present, there is no standardized survey instrument or composite score used in SNAP-Ed programming due to the variety of curricula and population subgroups served. Evaluators are encouraged to select one or more measures to determine if participants changed their targeted dietary outcome behaviors during the period assessed. Choose at least one outcome measure from the list provided, and select a measurement approach based upon the type of survey question and responses. For a description on ordinal and nominal outcomes, please see Appendix F. Given the variety of measures that make up healthy eating behaviors, it will be useful to measure the degree of correlation among the survey responses listed in this indicator. Evaluators should prioritize survey questions that provide a range of options, such as frequency measures using a Likert scale (e.g., never, seldom, sometimes, etc.) or times per day or week or behavior that occurs. These response options are more sensitive to detecting change during the period assessed than questions with "yes" or "no" answers. **Where possible, FNS strongly encourages SNAP-Ed providers to also measure cups of fruit and cups of vegetables consumed.** Pictures or visual cues of per-cup equivalents of fruits and vegetables aid survey respondents. Typically, a pre-test is administered at program entry and a post-test is administered at program exit. In some instances, a post-only test is administered in which respondents are asked to look back on their behaviors before the series compared to their current behaviors.
Population	Older adults, adults, adolescents, children, preschoolers, and toddlers (via parents, teachers, or child care providers)

Surveys and Data Collection Tools

Adults	Children and Youth
Visually-Enhanced Food Behavior Checklist (13 items) http://townsendlab.ucdavis.edu/ • Do you eat more than one kind of fruit each day? [MT1c]	**Beverage and Snack Questionnaire** (19 items) 10–18 year olds http://sharedresources.fhcrc.org/documents/beverage-and-snack-

- Do you eat more than one kind of vegetable each day? [MT1d]
  Responses: no; yes, sometimes; yes, often; yes, always

Starting the Conversation (8 items)
http://evaluationpse.org/dietary.do

- How much margarine, butter, or meat fat do you use to season vegetables or put on potatoes, bread, or corn? [MT1a]
  Responses: very little, some, a lot
- How many times a week do you eat desserts or sweets (not the low-fat kind)? [MT1j]
  Responses: 1 time or less, 2–3 times, 4 or more times

University of California Cooperative Extension - Plan, Shop, Save, and Cook Survey (7 items)
http://fsnep.ucdavis.edu/evaluation/evaluation/Adult%20Evaluation/adult-and-family-centered-evaluation

- How often do you use MyPlate to make food choices? [MT1f]
  Responses: never, seldom, sometimes, usually, always

Share our Strength Cooking Matters for Adults Survey (39 items)
https://foodshuttlesatellites.wordpress.com/forms/cooking-matters-resources/surveys/

- How often do you typically eat french fries or other fried potatoes, like home fries, hash browns, or tater tots? [MT1a]
- How often do you typically drink a bottle or glass of water? (Count tap, bottled, and sparkling water.) [MT1g]
- When you eat grain products like bread, pasta, rice, etc., how often do you choose whole grain products? [MT1i]
  Responses: not at all, once a week or less, more than once a week, once a day, more than once a day

National Cancer Institute Automated Self-Administered (ASA) 24-hour Dietary Recall
http://appliedresearch.cancer.gov/asa24/ questionnaire

- How often did you drink these beverages in the past week? [MT1g-i]
- How often did you eat these foods in the past week? [MT1j-k]
  Responses: never or less than 1 per week, 1 per week; 2–4 per week, 5–6 per week, 1 per day, 2–3 per day, 4+ per day

California Youth Nutrition and Physical Activity Survey [condensed version of the School and Physical Activity Nutrition project (SPAN) survey]
4th–8th graders
http://www.cdph.ca.gov/programs/cpns/Pages/Chapter1RequiredSurveysforImpactOutcomeEvaluation.aspx

- Yesterday, did you eat any corn tortillas or bread, tortillas, buns, bagels or rolls that were brown (not white)? [MT1j]
- Yesterday, did you eat sweet rolls, doughnuts, cookies, brownies, pies, or cake? [MT1k]
  Responses: no, I didn't eat any of these foods yesterday; yes, I ate one of these foods 1 time yesterday; yes, I ate one of these foods 2 times yesterday; yes, I ate one of these foods 3 or more times yesterday

EFNEP Nutrition Education Survey Graders
https://www2.ag.purdue.edu/programs/hhs/efnep/Pages/Resource-Evaluation.aspx
Grades 6–8, 9–12

- Yesterday, how many times did you drink nonfat or 1% low-fat milk? Include low-fat chocolate or flavored milk, and low-fat milk on cereal. [MT1g]
  Responses: none, 1 time, 2 times, 3 times, 4 or more times
- Yesterday, how many times did you drink sweetened drinks like soda, fruit-flavored drinks, sports drinks, energy drinks, and vitamin water? Do not include 100 percent fruit juice. [MT1h]

University of California Cooperative Extension EFNEP Food Tracker: 5-step Multiple Pass 24-hour Dietary Recall
http://townsendlab.ucdavis.edu/
(NOTE: Any multiple-pass method in which all data collectors have been trained to collect the information consistently using a standardized, documented protocol that includes probing is acceptable. It is recommended that, if at all possible, visual aids, such as portion size guides [paper or online], measuring cups, dishes/glasses, and/or food models be used.)

Rethink Your Drink (RYD) Survey [originally known as the Beverage Intake Questionnaire (BEVQ-15)] (15 items)
http://www.cdph.ca.gov/programs/cpns/Pages/Chapter4SurveysforAdults.aspx

- Indicate how often you drank the following beverages. [MT1g-i]
  Responses: Never or less than 1 time per week, 1 time per week, 2–3 times per week, 4–6 times per week, 1 time per day, 2+ times per day, 3+ times per day
  Responses: none, 1 time, 2 times, 3 times

Healthy Kids (45 items)
3–5 year olds
http://townsendlab.ucdavis.edu/
Think about what you and your child do. Do not include school time.

- My child eats vegetables. [MT1d]
- My child eats fruit. [MT1c]
  Responses: rarely, some days, most days, almost every day, every day
- My child drinks milk ___ times per day. [MT1i]
- My child drinks milk.
  Responses: no, while, 2 % reduced fat, 1 % low fat, skim/non-fat, soy

Key Glossary Terms

Refined grains
Solid Fats
Sugar-sweetened beverages

Additional Resources or Supporting Citations

English and Spanish Food Behavior Checklists citations for formative research and validation studies:
http://townsendlab.ucdavis.edu/PDF_Files/spa/spa_fbc_ref.pdf.

BSQ - Neuhouser ML, Lilley S, Lund A, Johnson DB. Development and validation of a beverage and snack questionnaire for use in evaluation of school nutrition policies. *J Am Diet Assoc.* 2009; 109(9): 1587-1592.SPAN - Thiagarajah K, Fly AD, Hoelscher DM, et al. Validating the food behavior questions from the elementary school SPAN questionnaire. *J Nutr Educ Behav.* Sep-Oct 2008;40(National Cancer Institute & 5 a Day Program Evaluation Group):305-310.

MT2: Food Resource Management Behaviors ☑	
Framework Component	Changes – Nutrition-Related Behavioral Changes
Indicator Description	Changes in individual and family behaviors that reflect smarter shopping and food resource management strategies, enabling participants to stretch their food resource dollars to support a healthier diet.
Background and Context	Indicator MT2 measures behavioral changes resulting from smarter shopping and food resource management strategies used when purchasing foods for consumption at home. State SNAP Agencies will particularly find the results of this indicator useful in ensuring SNAP participants, or those who are potentially eligible, are stretching their food dollars and making healthful purchases. Similar to MT1, this indicator measures changes reported by participants before and after participation in a series of nutrition education and food resource management classes. Two common survey questions for this indicator are using nutrition facts labels or shopping with a grocery list. A more sophisticated interpretation of this measure entails multiple survey questions using a Likert-type scale. Using multiple measures of related behavioral changes strengthens the likelihood of determining that participants are more frequently using targeted shopping and food resource management practices.
Outcome Measures	The number or percentage of participants reporting a food resource management behavior during the period assessed, the frequency, and the type of behavior(s): **Healthful Shopping Practices***:* MT2a. Choose healthy foods for my family on a budget MT2b. Read nutrition facts labels or nutrition ingredients lists MT2c. Buy 100 percent whole grain products MT2d. Buy low-fat dairy or milk products MT2e. Buy foods with lower added: 2e1. Solid fats (saturated and/or trans) 2e2. Sugar 2e3. Salt/sodium MT2f. Buy fruits and vegetables—fresh, frozen, dried or canned in 100% juice **Stretch Food Dollars**: MT2g. Not run out of food before month's end

	MT2h. Compare prices before buying foods MT2i. Identify foods on sale or use coupons to save money MT2j. Shop with a list MT2k. Batch cook (cook once; eat many times) MT2l. Use unit pricing to find best values MT2m. Cook healthy foods on a budget
What to Measure	SNAP-Ed participants who report one or more targeted food resource management behaviors during the period assessed. Choose at least one outcome measure from the list provided, and select a measurement approach based upon the type of survey question and responses. For a description on ordinal and nominal outcomes, please see Appendix F. Evaluators should prioritize survey questions that provide a range of options, often appearing in a Likert scale or along a continuum, such as frequency responses (e.g., never, seldom, sometimes, etc.) that use a Likert-type scale. These response options are more sensitive to detecting change than questions with "yes" or "no" answers. At present, there is no standardized survey instrument or composite score used in SNAP-Ed programming due to the variety of curricula and population subgroups served. However, Land-rant Institutions (cooperative extension system) that conduct Expanded Food and Nutrition Education Program (EFNEP) classes, as well as other Implementing Agencies, may find it practical and cost-effective to use the same EFNEP food resource management questions in SNAP-Ed. Evaluators are also encouraged to measure the degree of correlation among the individual measures presented in this indicator.
Population	Adults (ages 18+) and high school students or transitional-aged youth who are the primary shoppers/meal preparers
Surveys and Data Collection Tools	
Visually-Enhanced Food Behavior Checklist (13 items) http://townsendlab.ucdavis.edu/ • Do you run out of food before the end of the month [MT2fg] *Responses*: no; yes, sometimes; yes, often; yes, always Do you use this label when food shopping? [image of Nutrition Facts Label] [MT2b] *Responses*: no; yes, sometimes; yes, often; yes, always **University of California Cooperative Extension - Plan, Shop, Save, and Cook Survey (7 items)** http://uccalfresh.org/ • How often do you compare unit prices before you buy food? [MT2g] *Responses:* never, seldom, sometimes, most of the time, almost always • How often do you shop with a grocery list? [MT2j] *Responses:* never, seldom, sometimes, most of the time, almost always	

- How often do you use the "Nutrition Facts" on the food label to make food choices? [MT2b]
  Responses: never, seldom, sometimes, most of the time, almost always

EFNEP Evaluation Tools Checklist (15 items)
http://townsendlab.ucdavis.edu/

- I choose healthy foods for my family. [MT2a]
  Responses: no, sometimes, often, very often, almost always
- I shop with a list. [MT2j]
  Responses: no, sometimes, often, very often, almost always
- I compare prices. [MT2h]
  Responses: no, sometimes, often, very often, almost always
- I run out of food before the end of the month. [MT2g]
  Responses: no, sometimes, often, very often, almost always
- I use this food label [image of Nutrition Facts Label] [MT2b]
  Responses: no, sometimes, often, very often, almost always

Share our Strength Cooking Matters for Adults Survey (39 items)
https://foodshuttlesatellites.wordpress.com/forms/cooking-matters-resources/surveys/

- How often do you compare prices before you buy food? [MT2h]
  Responses: never, rarely, sometimes, often, always, does not apply
- How often do you use a grocery list when you go grocery shopping? [MT2j]
  Responses: never, rarely, sometimes, often, always, does not apply
- How often do you adjust meals to include specific ingredients that are more "budget-friendly," like on sale or in your refrigerator or pantry? [MT2i, m]
  Responses: never, rarely, sometimes, often, always, does not apply

Key Glossary Terms

Food resource management

Additional Resources or Supporting Citations

The Food and Nutrition Service's SNAP-Ed Connection maintains a page of resources on Food Resource Management:
https://snaped.fns.usda.gov/professional-development-tools/hot-topics-z/food-resource-management

Barale K. Food Resource Management: An Evaluation of Measures of Behavior Change for EFNEP Participants.
https://www2.ag.purdue.edu/programs/hhs/efnep/Conferences/1A%20Barale%20FRM%20eval%20of%20behavior%20change%20Poster.pdf

Hersey J, Anliker J, Miller C, Mullis RM, Daugherty S, Das S, et al. Food Shopping Practices Are Associated with Dietary Quality in Low-Income Households. *Journal of Nutrition Education* 2001; 33(Supplement 1):S16-S26. Available at: http://www.jneb.org/article/S1499-4046(06)60066-3/abstract.

MT3: Physical Activity & Reduced Sedentary Behavior ☑	
Framework Component	Changes – Physical Activity and Reduced Sedentary Behavioral Changes
Indicator Description	Two-part indicator measuring behavioral changes to increase physical activity and/or reduce sedentary behavior. Physical activity is defined as any body movement that works muscles and requires more energy than resting. Sedentary behavior is defined as too much sitting or lying down at work, at home, in social settings, and during leisure time. Both increasing physical activity and decreasing sedentary behaviors is important for overall health.
Background and Context	Physical activity education and training is an important component of SNAP-Ed. Since the passage of both the Healthy, Hunger Free Kids Act of 2010 and the Agricultural Act of 2014 (the Farm Bill), SNAP-Ed programs are consistently emphasizing physical activity that is appropriate for age and ability levels. Studies indicate that moving more during the day, *in addition* to getting the daily 30 minutes of moderate activity on a daily basis, is necessary. Both increasing physical activity and reducing sedentary behavior should be considered in obesity prevention programming and evaluation. A lack of physical activity (too little exercise) and too much sedentary behavior change the body in different ways and should be measured separately. For example, programs designed to reduce obesity by increasing physical activity may not be effective if sedentary behavior remains high.
Outcome Measures	This indicator focuses on progress toward meeting the *Physical Activity Guidelines for Americans* (see Appendix C), which is the physical activity counterpart to the *Dietary Guidelines for Americans*. The following is a list of sample areas for measuring outcomes by age group related to behavior change. **Increased Physical Activity, Fitness, and Leisure Sport.** Increases in duration, intensity, and frequency of exercise, physical activity, or leisure sport appropriate for the population of interest, and types of activities. MT3a. Physical activity and leisure sport (general physical activity or leisure sport) MT3b. Physical activity when you breathed harder than normal (moderate-vigorous physical activity) MT3c. Physical activity to make your muscles stronger (muscular strength) MT3d. Physical education or gym class activities (school PE) MT3e. Recess, lunchtime, classroom, before/after school physical activities (school activities—non-PE) MT3f. Walking steps during period assessed (e.g., increasing daily goal by ≥2,000 steps) **Reduced Sedentary Behavior**. Decreases in time spent in sedentary behavior (computers, desk sitting, television watching) during the period assessed.

	MT3g. Television viewing MT3h. Computer and video games MT3i. Sitting on weekdays while at work, at home, while doing course work, and during leisure time. **Increased Physical Fitness.** Increases in health-related physical fitness levels (aerobic or cardio fitness, muscular strength, muscular endurance and flexibility). MT3j. Aerobic or cardio fitness, muscular strength, muscular endurance and/or flexibility
What to Measure	Evaluators may choose among data collection methods, including self-reported questionnaires and direct measurement using parent observation, pedometers, or fitness tests. There are tradeoffs for each data collection tool in terms of cost, time, and participant burden. While evaluators are encouraged to triangulate outcomes using multiple data sources, at a minimum, this indicator can be satisfied through self-administered participant questionnaires. Measure SNAP-Ed participants who increase physical activity, fitness, and leisure sport and/or reduce sedentary behavior during the period assessed. • *Physical activity* or *leisure sport* assessments should measure the dimensions of the activity performed including intensity (how hard), frequency (how often), and duration (how long) using self-report in minutes, days, etc., using a Likert scale or an observation tool. • *Sedentary behavior* is assessed using a self-report survey or observational tool to measure the amount of time spent sitting over a set period. This should not be confused with *screen time* which, although is generally sedentary in nature, measures exposure to electronic screens such as phones, televisions, or computers. Sedentary behavior may involve screen time, but should include lying down, sitting, reading books, drawing, writing, and other non-screen-related inactivity (<1.5 Mets, or the Metabolic Equivalent of Task). • *Physical fitness* assessments should measure the dimensions of the fitness of the individual, which may reflect their physical activity levels including muscular strength, muscular endurance, aerobic or cardio fitness, and flexibility. Possible behavior change measurements for physical activity and reduced sedentary behavior include: • Increases in frequency (number of days) • Increases in time (number of minutes) • Increases in physical fitness (cardiovascular, flexibility, muscular strength) • Increases in intensity (moderate or vigorous) • Increases in number of steps • Decreases in screen time (computer, video games, TV)
Population	Older adults, adults, adolescents, children, preschoolers and toddlers (via parents, teachers, or child care providers)

Surveys and Data Collection Tools
Adults **International Physical Activity Questionnaire (IPAQ)** https://sites.google.com/site/theipaq/questionnaire_links **Young and middle-aged adults (15-64 years)** • During the last 7 days, on how many days did you do vigorous physical activities like heavy lifting, digging, aerobics, or fast bicycling? [MT3b] • During the last 7 days, on how many days did you walk for at least 10 minutes at a time? [MT3a] **On the Go (20 items)** http://townsendlab.ucdavis.edu/ • Think about the last 7 days at work, at home, and in your spare time. How many hours did you spend sitting on a weekday? [MT3i] *Responses:* 0, 1, 2, 3, 4, 5, 6+ hours • Think about the last 7 days. On how many days did you breathe a little harder than normal on one of those days? [MT3b] *Responses:* 0, 1, 2, 3, 4, 5, 6, 7 days **Michigan Fitness Foundation Physical Activity Screener for Adults (4 items)** • During the last 7 days, how much time in total did you usually spend *sitting* on a week day? [MT3i] *Responses:* # hours, # minutes • During the last 7 days, on how many days did you walk for at least 10 minutes at a time? This includes walking at work and at home, walking to travel from place to place, and any other walking that you did solely for recreation, sport, exercise or leisure. [MT3a] *Responses:* # days per week; hours and minutes • During the last 7 days, on how many days did you do vigorous physical activities like jogging or running, fast bicycling, heavy shoveling or digging, or heavy lifting? Think about *only* those physical activities that you did for at least 10 minutes at a time. [MT3b] *Responses:* # days per week; hours and minutes • Again, think only about those physical activities that you did for at least 10 minutes at a time. During the last 7 days, on how many days did you do moderate physical activities like bicycling, active play with children, and light yard work or housework (for example, gardening, raking, washing windows, vacuuming, or carrying light loads)? Do not include walking. [MT3b] *Responses:* # days per week; hours and minutes **Physical Activity Questions Recommended by Multistate Cooperative Extension Workgroup** • In the past week, how many days did you exercise when you breathed harder than normal for at least 30 minutes? [MT3b] • In the past week, how many days did you exercise to make your muscles stronger, such as lifting weights, working with elastic bands, doing push-ups, sit ups, etc.? [MT3c] *Responses:* 0, 1, 2, 3, 4, 5, 6, 7 days

Older Adults (Ages 60+)

Rapid Assessment of Physical Activity (9 items)
http://depts.washington.edu/hprc/rapa

- I do activities to increase muscle strength, such as lifting weights or calisthenics, once a week or more. [MT3c]
  Responses: yes, no

Direct measurements
Following are three options for direct measurement of MT3 outcome measures.

Pedometers (Guide to Help Step it Up, University of Nevada Cooperative Extension)
Adults or children
http://www.unce.unr.edu/publications/files/hn/2008/fs0832.pdf
Pedometers are a cost-effective approach for measuring steps taken by SNAP-Ed participants. Lindsay et al. (2014) recommend a time frame of 1–7 days of pedometer use to establish a baseline average of daily total steps. After being trained on proper pedometer placement, participants are encouraged to wear a pedometer for weeks to calculate new daily averages and measure increases in daily number of steps. [MT3f]

President's Challenge Adult Fitness Test - http://www.adultfitnesstest.org NOTE: This assessment should only be given to people 18 years of age and older who are in good health. In addition, a pre-participation screening questionnaire www.adultfitnesstest.org/riskQuestionaire.php should be administered prior to the administration of the fitness assessment. [MT3j]

Children and Youth

EFNEP Nutrition Education Survey (1 item)
Grades 3–5
https://www2.ag.purdue.edu/programs/hhs/efnep/Pages/Resource-Evaluation.aspx

- I do physical activities…
  Responses: never or almost never, most days, some days [MT3a]

Michigan Fitness Foundation Physical Activity Screener for Youth (10 items)
Grades 4–12

- In the last 7 days, during your physical education (PE) or gym classes, how often were you active (playing hard, running, jumping, throwing)? [MT3d]
  Responses: hardly ever, sometimes, quite often, always, I don't do PE or gym
- In the last 7 days, what did you normally do at lunch (besides eating lunch)? [MT3e]
  Responses: sat down (talking, reading, doing schoolwork), stood around or walked around, ran or played a little bit, ran around and

played quite a bit, ran and played hard most of the time, this does not apply to me; I am only able to eat during lunch

- On an average school day, how many hours do you watch TV? [MT3g]
  Responses: I do not watch TV on an average school day, less than 1 hour per day, 1 hour per day, 2 hours per day, 3 hours per day, 4 hours per day, 5 or more hours per day

Physical Activity Questionnaire for Children (10 items)
Grades 4–8
http://www.performwell.org/index.php/find-surveyassessments/outcomes/health-a-safety/good-health-habits/physical-activity-questionnaire-for-children

- Physical activity in your spare time: Have you done any of the following activities (see link above) in the past 7 days (last week)? If yes, how many times? [MT3a]
  Responses: No, 1, 2, 3, 4, 5, 6, 7 times or more
- In the last 7 days, during your physical education (PE) classes, how often were you very active (playing hard, running, jumping, throwing)? [MT3d]
  Responses: I don't do PE, hardly ever, sometimes, quite often, always
- In the last 7 days, what did you do most of the time at recess? [MT3e,i]
  Responses: Sat down (talking, reading, doing schoolwork), stood around or walked around, ran or played a little bit, ran around and played quite a bit, ran and played hard most of the time

California Youth Nutrition and Physical Activity Survey [condensed version of the School and Physical Activity Nutrition project (SPAN) survey]
Grades 4–8
http://www.cdph.ca.gov/programs/cpns/Pages/Chapter1RequiredSurveysforImpactOutcomeEvaluation.aspx

- During the week days, about how much time do you spend on a typical or usual school day sitting and watching TV, playing video games, or on a computer? Examples are: playing on a PSP or other handheld game, using an iPad or tablet, using the Internet (not for school), or watching movies or TV shows on a TV, computer, or phone. [MT3g,h,i]
  Responses: Less than 1 hour per day, 1 hour per day, 2 hours per day, 3 hours per day, 4 hours per day, 5 or more hours per day, I do not watch TV, play video games, or use a computer for something that is not for school work on school days
- Below, check all the days you exercised or took part in physical activity that made your heart beat fast and made you breathe hard for *at least 60 minutes*? Examples are: basketball, soccer, running or jogging, fast dancing, swimming, bicycling, jumping rope, trampoline, hockey, fast skating, or rollerblading. [MT3b]
  Responses: Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday, I didn't do any exercise last week that made my heart beat fast for 60 minutes

EFNEP Nutrition Education Survey (3 items)
Grades 6–8; Grades 9–12
https://www2.ag.purdue.edu/programs/hhs/efnep/Pages/Resource-Evaluation.aspx

- During the past 7 days, how many days were you physically active for at least 1 hour? [MT3a]
  Responses: 0 days, 1 day, 2 days, 3 days, 4 days, 5 days, 6 days, 7 days
- During the past 7 days, how often were you so active that your heart beat fast and you breathed hard most of the time? [MT3b]
  Responses: 2 times last week, 3 times last week, 4 times last week, 5 or more times last week
- How many hours a day do you spend watching TV or movies, playing electronic games, or using a computer for something that is not school work? [MT3g,h,i]
  Responses: never, 1 hour or less, 2 hours, 3 hours, 4 hours, 5 or more hours

Previous Day Physical Activity Recall (PDPAR) (recall log)
Grades 7–12
http://www.sph.sc.edu/USC_CPARG/pdpar.html

- For each time period write in the number(s) of the main activities you actually did in the boxes on the time scale. [MT3a]
- Then rate how physically hard these activities were. Place an "X" on the rating scale to indicate if the activities for each time period were: [MT3b]
  Responses: Very Light = Slow breathing, little or no movement, Light = Normal breathing, regular movement, Medium = Increased breathing, moving quickly for short periods of time, Hard = Hard breathing, moving quickly for 20 minutes or more

Youth Risk Behavior Surveillance System
http://www.cdc.gov/healthyyouth/data/yrbs/index.htm

1. On an average school day, how many hours do you watch TV? [MT3g]
   A. I do not watch TV on an average school day
   B. Less than 1 hour per day
   C. 1 hour per day
   D. 2 hours per day
   E. 3 hours per day
   F. 4 hours per day
   G. 5 or more hours per day

2. On an average school day, how many hours do you play video or computer games or use a computer for something that is not school work? (Count time spent on things such as Xbox, PlayStation, an iPod, an iPad or other tablet, a smartphone, YouTube, Facebook or other social networking tools, and the Internet.)[MT3h]
   A. I do not play video or computer games or use a computer for something that is not school work
   B. Less than 1 hour per day
   C. 1 hour per day
   D. 2 hours per day
   E. 3 hours per day
   F. 4 hours per day

G. 5 or more hours per day

Direct Measurements

Following are three options for direct measurement of MT3 outcome measures.

Parental Report of Outdoor Playtime: Parent observation
Preschool-age children
http://archpedi.jamanetwork.com/article.aspx?articleid=485682

- How much time did your child spend playing in the yard or street around your house? [MT3a]
- How much time did your child spend playing at a park, playground, or outdoor recreation area? [MT3a]

Pedometers (Guide to Help Step it Up, University of Nevada Cooperative Extension)
Adults or children
http://www.unce.unr.edu/publications/files/hn/2008/fs0832.pdf
Pedometers are a cost-effective approach for measuring steps taken by SNAP-Ed participants. Lindsay et al. (2014) recommend a time frame of 1–7 days of pedometer use to establish a baseline average of daily total steps. After being trained on proper pedometer placement, participants are encouraged to wear a pedometer for weeks to calculate new daily averages and measure increases in daily number of steps. [MT3f]

Fitnessgram
http://www.pyfp.org/assessment/free-materials.shtml
This is the national health related fitness assessment for school-age children grades 4–12. [MT3j]

Key Glossary Terms

Aerobic activity
Duration
Flexibility
Frequency
Intensity
Muscular endurance
Muscular strength
Physical activity
Sedentary behavior
Structured physical activity
Unstructured physical activity

Additional Resources or Supporting Citations

Physical Activity Guidelines for Americans – http://health.gov/paguidelines/guidelines/

Rhodes RE, Mark RS, Temmel CP. (2012). Adult sedentary behavior: A systematic review. *American Journal of Preventive Medicine, 42*(3), e3.

MT4: Food Safety Behaviors	
Framework Component	Changes – Nutrition-Related Behavioral Changes
Indicator Description	Changes in individual and group behaviors that reflect MyPlate principles and are on the pathway to achieving the current *Dietary Guidelines for Americans* recommendations.
Background and Context	The *2015 Dietary Guidelines for Americans* and *Healthy People 2020* prioritize personal food safety practices, including washing hands and surfaces often, avoiding cross-contamination, cooking to proper temperatures, and refrigerating foods promptly. Indicator MT4 measures food safety practices reported by participants before and after participation in a series of nutrition education classes. Poor food safety and personal hygiene practices contributes to food waste, spoilage, and the risk of foodborne illnesses. MT4 builds upon ST4 by assessing whether participants are making the behavioral changes they intended.
Outcome Measures	The number or percentage of participants reporting a food safety practice at home during the period assessed, the frequency, and the type of practice: MT4a. Clean: wash hands and surfaces often MT4b. Separate: don't cross-contaminate MT4c. Cook: cook to proper temperatures MT4d: Chill: refrigerate promptly
What to Measure	SNAP-Ed participants who increased one or more of the targeted food safety outcome behaviors during the period assessed. Choose at least one outcome measure from the list provided. Land-grant Institutions that conduct Expanded Food and Nutrition Education Program (EFNEP) classes, as well as other Implementing Agencies measuring food safety practices, may find it practical and cost-effective to use the same EFNEP food safety questions in SNAP-Ed. Evaluators are also encouraged to measure the degree of correlation among the individual measures presented in this indicator.
Population	Older adults, adults, adolescents, children, preschoolers and toddlers (via parents or child care providers)

Surveys and Data Collection Tools	
Adults	**Children and Youth**
EFNEP Food Behavior Checklist http://townsendlab.ucdavis.edu/ • Meat and dairy: I let them sit out for more than 2 hours. [MT4d] *Responses:* no, sometimes, often, very often, almost always • I thaw frozen foods at room temperature. [MT4d] *Responses:* no, sometimes, often, very often, almost always **FDA Food Safety Survey** http://www.fda.gov/downloads/Food/FoodScienceResearch/ConsumerBehaviorResearch/UCM407008.pdf • Before you begin preparing food, how often do you wash your hands with soap? [MT4a[*Responses:* all of the time, most of the time, some of the time, rarely • After handling raw meat or chicken, do you usually continue cooking, or do you first rinse your hands with water, or wipe them, or wash them with soap? [MT4a] *Responses:* continue cooking, rinse or wipe hands, wash with soap, don't handle raw meat or chicken • After you have used a cutting board or other surface for cutting raw meat or chicken, do you use it as it is for other food to be eaten raw for the same meal, or do you first rinse it, or wipe it, or wash it with soap? [MT4b] *Responses:* use as it is, rinse or wipe it, wash with soap, wash with bleach/disinfectant, use a different board, don't cut raw meat or poultry • Thinking of your usual habits over the past year, when you prepare the following foods, how often do you use a thermometer? Roasts, or other large pieces of meat—how often do you use a thermometer when you cook roasts? [MT4c] *Responses:* always, often, sometimes, never, never cook the food	**EFNEP Nutrition Education Survey** Grades 3–5 https://www2.ag.purdue.edu/programs/hhs/efnep/Pages/Resource-Evaluation.aspx • I wash my hands before making something to eat. [MT4a] Responses: almost never, sometimes, most of the time, always **EFNEP Nutrition Education Survey** Grades 6–8 https://www2.ag.purdue.edu/programs/hhs/efnep/Pages/Resource-Evaluation.aspx • How often do you wash your hands before eating? Think about eating at school or at home. [MT4a] *Responses:* never, once in a while, sometimes, most of the time, always • How often do you wash vegetables and fruits before eating them? [MT4a] *Responses:* never, once in a while, sometimes, most of the time, always • When you take foods out of the refrigerator, how often do you put them back within 2 hours? [MT4d] *Responses:* never, once in a while, sometimes, most of the time, always **EFNEP Nutrition Education Survey** Grades 9–12 https://www2.ag.purdue.edu/programs/hhs/efnep/Pages/Resource-Evaluation.aspx • How often do you wash your hands before eating? Think about

	preparing snacks or meals. [MT4a] *Responses:* never, once in a while, sometimes, most of the time, always • How often do you wash vegetables and fruits before eating them? [MT4a] *Responses:* never, once in a while, sometimes, most of the time, always • When you take foods out of the refrigerator, how often do you put them back within 2 hours? [MT4d] *Responses:* never, once in a while, sometimes, most of the time, always
Key Glossary Terms Cross-contamination	
Additional Resources or Supporting Citations Visit the Fight BAC! Partnership for Food Safety Education – http://www.fightbac.org/ Wardlow et al. 2012. EFNEP Behavior Checklist Review. Available from https://nifa.usda.gov/sites/default/files/resource/Behavior%20Checklist%20Review.pdf	

Long-Term (LT) Indicators:

MAINTENANCE OF BEHAVIORAL CHANGES

LT1: HEALTHY EATING BEHAVIORS
LT2: FOOD RESOURCE MANAGEMENT BEHAVIORS
LT3: PHYSICAL ACTIVITY AND REDUCE SEDENTARY BEHAVIOR
LT4: FOOD SAFETY BEHAVIORS

LT1–LT4 Long Term Outcomes: Sustained Behaviors	
Framework Component	Effectiveness & Maintenance – Maintenance of Behavioral Changes
Indicator Description	Long-term indicators inform whether SNAP-Ed participants continue to demonstrate targeted behavioral changes even after graduating from a direct education program. LT1–LT4 indicators measure which behaviors are sustained at a minimum of 6 months post-intervention. The maintenance stage of the Transtheoretical (Stages of Change) Model lasts from 6 months to 5 years.
Background and Context	Long-term follow-up adds rigor to the evaluation of SNAP-Ed interventions not yet published in peer-reviewed journals. Interventions designated as practice-tested (i.e., evidence derived from practice in the form of evaluation data or reports) or emerging (i.e., practice-based interventions that show promise based on initial implementation and delivery but have yet to undergo full evaluation) would especially benefit from long-term follow-up. Locating SNAP-Ed participants after the completion of a series-based program requires meticulous records of participants' follow-up information. Participants can be reached through a telephone, mail, email, or face-to-face survey and may require a list of collateral contacts, such as family, friends, or neighbors to help locate them. Local SNAP-Ed agencies may seek to host a follow-up or booster educational session or activity for participants who return to complete a long-term assessment of their behaviors. Long-term follow-up for school-age children could occur during a subsequent semester or school year. Adults or transitional-age youth who reside in group living arrangements can potentially be contacted in the same residence. SNAP-Ed agencies should consult with their Institutional Review Boards to ensure human subjects protections are in place. The additional benefit of long-term follow-up of SNAP-Ed participants is determining through surveys or interviews how changes in food and physical activity environments measured in the Environmental Settings chapter impact participants' behaviors. Changes in pricing, availability, and marketing of healthy foods and physical activity resources will impact the extent to which participants can continue to practice the skills and behaviors they learned in direct education programs. SNAP-Ed agencies should consider aligning their long-term follow-up of program participants with the long-term measures of maintenance and effectiveness in Environmental Settings (see LT5 and LT6).
Outcome Measures	LT1. Healthy Eating Behaviors LT2. Food Resource Management Behaviors LT3. Physical Activity and Reduced Sedentary Behavior LT4. Food Safety Behaviors

	See Medium-Term Indicators MT1–MT4 for complete write-ups.
Population	Older adults, adults, adolescents, children, preschoolers and toddlers (via parents or child care providers)

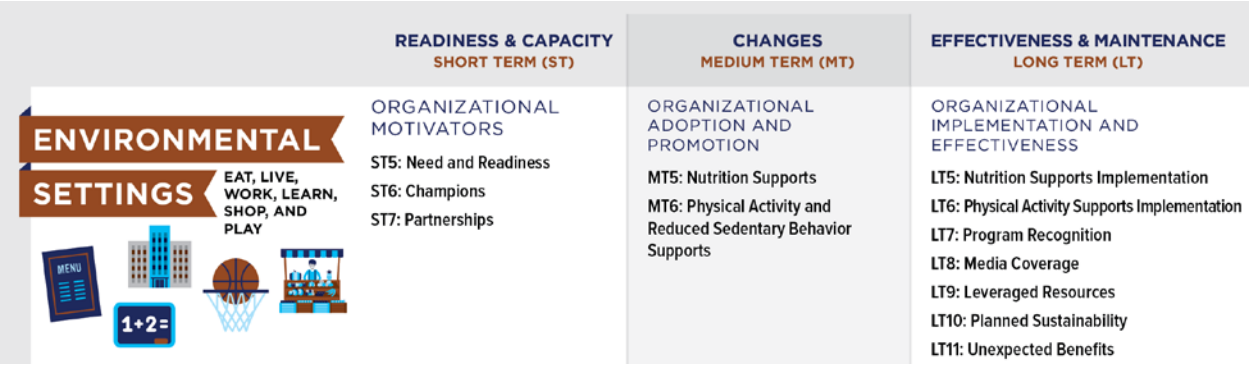
Key Glossary Terms

Emerging
Follow-up
Practice-tested
Transtheoretical Model

Additional Resources or Supporting Citations

Wardlow MK, Baker S. Long-Term Follow-up of EFNEP and SNAP-Ed. *The Forum for Family and Consumer Issues* (FFCI). Fall 2012, Vol. 17(2). https://ncsu.edu/ffci/publications/2012/v17-n2-2012-summer-fall/wardlaw-baker.php

Chapter 2. Environmental Settings Level



Introduction

Within a social-ecological framework, environmental approaches may include multiple, complementary activities within a site or organization. Changes in written policies, organizational practices, and the observable (physical or "built") or communications environments may include the adoption and implementation of new or enhanced organizational practices, rules, or procedures that make healthy choices easier and more desirable. Examples of such activities may include marketing and promotion of healthy foods and activities, greater accessibility and convenience to purchase or select healthier foods, healthier food-service policies, participation in wellness councils, point-of-choice prompts to action, and access to recreational facilities.

In the Environmental Settings level of the framework, the focus is measuring changes in policies, systems, and environments (PSE) and complementary promotional strategies in SNAP-Ed qualified sites and organizations. This level corresponds to SNAP-Ed Approach 2 as defined in the Food and Nutrition Act: comprehensive, multi-level interventions at multiple complementary organizational and institutional levels.

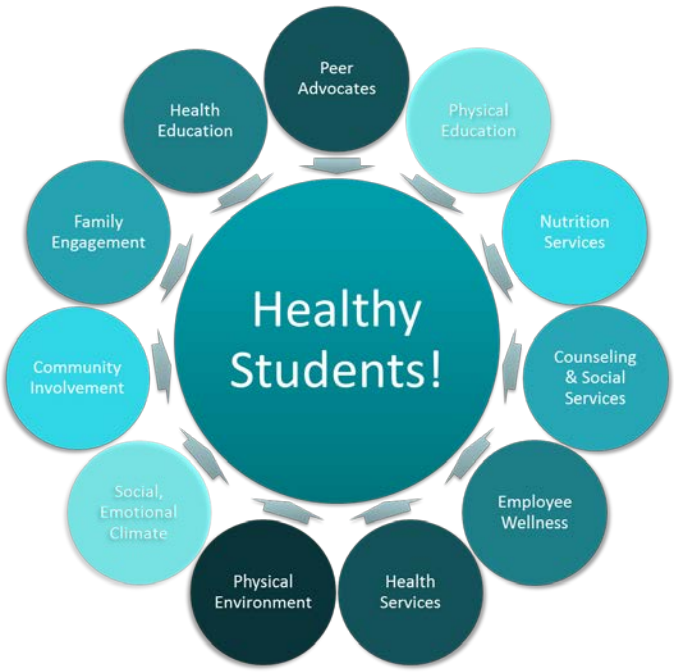
The overarching evaluation question is:

> To what extent does SNAP-Ed programming facilitate access and create appeal for improved healthy eating and physical activity choices in the settings where people eat, learn, live, play, shop, and work?

Program implementers and evaluators seek to learn whether SNAP-Ed's influence in creating organizational changes, policies, rules, marketing, and education make healthier choices easier and preferred. The initial goal of the evaluation is to assess whether healthier choices are available and appealing. Some of these changes may result from organizational partnerships or individual champions. If PSE changes are made with fidelity to research- or practice-based models, we can expect individual-level outcomes (as defined in the previous chapter) to improve. Eventually, evaluators could also measure changes in individuals at these settings, using the indicators in the previous chapter, if desired.

Example of Organizational Changes

Changes can occur within and across sites and organizations to prompt healthy behaviors. Layering different types of complementary activities within a single organization or site helps to maximize impact (Riley et al., 2010). Facilitating changes across an organization—that is, similar changes across multiple school sites within a school district and preschool or afterschool programs, or complementary changes with reinforcing nutrition messages among a chain of food retailers or changes across a company with multiple field facilities that employ working parents and caregivers—are examples of more comprehensive approaches that are known to amplify results.



HealthMPowers – Featured in the *SNAP-Ed Strategies & Interventions: An Obesity Prevention Toolkit for States*, schools in the HealthMPowers' program implement a variety of complementary activities—some of which are SNAP-Ed funded and others funded by the school—to create healthier settings for students, staff, and families. This "whole school" approach emphasizes the link between health and student achievement. Specific PSE changes include integrating physical activity into the school day and conducting the School Health Index to identify the strengths and areas for improvement regarding health programming and policies at their school. Learn more at: http://healthmpowers.org/.

Organizational changes are not intended to replace direct nutrition education or marketing initiatives, but rather to maximize overall reach and effectiveness.

An example of a whole-setting approach is applied in a school setting in Georgia (shown above). Schools are a prime setting for implementing multi-level interventions for obesity prevention; many SNAP-Ed services are delivered in schools. To be most effective, policy, systems and environmental interventions should be combined with other activities or components that reflect the needs and readiness for PSE change within an organization. Additional components of PSE change may include evidence-based education, marketing, parent/community involvement, and staff training on continuous program and policy implementation. Ongoing or continuous evaluation of PSE changes and their respective additional components are necessary to assess long-term organizational effectiveness and maintenance of PSE change.

The primary role of SNAP-Ed Implementing Agencies is to provide initial assistance, consultation, technical assistance, and a supportive inter-organizational infrastructure to help create appropriate organizational or environmental changes that benefit low-income households and communities. It is ultimately the responsibility of the participating site or organization to adopt, maintain, and enforce the changes.

Domains of Environmental Settings

To maintain consistency across states in reporting PSE changes, the framework categorizes SNAP-Ed settings into six domains: eat, learn, live, play, shop, and work. This categorization will help to aggregate activities across settings in a meaningful way and ensure that SNAP-Ed providers diversify PSE-related activities across priority settings. It will also help with tracking and reporting outcomes *across* multiple sites or different physical locations where SNAP-Ed services are provided. All settings should be categorized into a domain as shown on the next page:

Domains of Environmental Settings	
Eat	Fast food chains, restaurants, mobile vending/food trucks, congregate meal sites and other senior nutrition centers, USDA summer meal sites, cafeterias, or other places where people primarily go to "eat" outside the home
Learn	Early care and education, schools, afterschool programs, cooperative extension sites, colleges and universities, libraries, or other places where people go to "learn"
Live	Faith/places of worship, shelters, public housing, Indian Reservations, community organizations, residential treatment centers, group living arrangements, family resource centers, low-income health clinics, or other neighborhood settings where people "live" or live nearby
Play	Parks and open spaces, bicycle and walking paths, community centers, gardens (community or school), fairgrounds, Boys and Girls Clubs, YMCA, or other places where people go to "play"
Shop	Large food stores (4+ registers), small food stores (≤3 registers), food banks and pantries, Food Distribution Program on Indian Reservations (FDPIR) distribution sites, farmers markets, or other places where people "shop" for or otherwise access food to prepare and eat at home
Work	Worksites with low-wage workers*, job training programs/Temporary Assistance for Needy Families (TANF) worksites, SNAP offices, military bases, or other places where people go to "work"

* 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 percent of the federal poverty level for the state.

RE-AIM Model

RE-AIM (**R**each, **E**ffectiveness, **A**doption, **I**mplementation, and **M**aintenance) is a useful model for planning and evaluating the dissemination and implementation of evidence-based interventions. Indicators in the Environmental Settings level of the framework reflect a modified version of the RE-AIM model. For SNAP-Ed purposes, agencies would measure reach and adoption by the people and organizations/sites that could and do offer evidence-based interventions, then implementation of the essential components, effectiveness in terms of checks on progress, and lastly maintenance using the definitions beginning on the next page.

	Environmental Settings Indicators	RE-AIM Model Component	SNAP-Ed Evaluation Framework Definition
Short-Term	• ST5: Readiness • ST6: Champions • ST7: Partnerships	Organizational Readiness and Capacity Building	• Sites where there is identified need or readiness for changes in organizational settings or policies, or associated organizational or staff readiness for adopting PSE changes has been assessed. • Champions who have engaged in efforts, outside of the delivery model of the SNAP-Ed program, to improve access or create appeal for nutrition and physical activity supports. • Partnerships with service providers, community or organizational leaders, and SNAP-Ed representatives in SNAP-Ed settings where people eat, learn, live, play, shop, and work.
Medium-Term	• MT5: Nutrition Supports • MT6: Physical Activity and Reduced Sedentary Behavior Supports	Reach	• The number of people who encounter the improved environment on a regular basis and are assumed to be influenced by it.
		Adoption	• When organizations make at least one change in policy or practice to expand access or improve appeal for healthy food and beverages. These may include, but are not limited to, those in *SNAP-Ed Strategies and Interventions: An Obesity Prevention Toolkit for States*. Adoption does not mean that full-scale implementation has occurred.
Long-Term	• LT5: Nutrition Supports Implementation and Effectiveness • LT6: Physical Activity Supports Implementation and Effectiveness • LT7: Program Recognition • LT8: Media Coverage	Implementation	• Whether the intervention was delivered with fidelity or as intended and whether the essential elements known to be important to the achievement of positive outcomes were actually and consistently implemented. To be effective, organizational policy changes and environmental supports should be made as part of multi-component and multi-level interventions to sustain the new changes or standards over time.

	Environmental Settings Indicators	RE-AIM Model Component	SNAP-Ed Evaluation Framework Definition
	• LT9: Leveraged Resources • LT10: Planned Sustainability • LT11: Unexpected Benefits	Effectiveness	• Achievement of the intended outcomes. Implementation and effectiveness are closely linked since the quality of implementation will directly affect the outcomes achieved. At the environmental level, effectiveness is defined as, and is measured by, improvements in the food environment and/or organizational changes, policies, rules, marketing, and access that make healthy choices easier. Increased environmental assessment scores provide objective, systematic evidence of documented environmental improvements.
		Maintenance	• Relates to the number and average percentage increase of SNAP-Ed qualified sites or organizations with a plan in place for staff, training, procedures, diversified funding, human and facility resources, and other maintenance-of-effort essentials. May include measures of institutional resources invested in nutrition and physical activity supports or standards in terms of paid and volunteered/redirected staff (number of fulltime equivalents), cash, or in-kind supports, as well as spin-off projects, unexpected benefits, and return on investment.

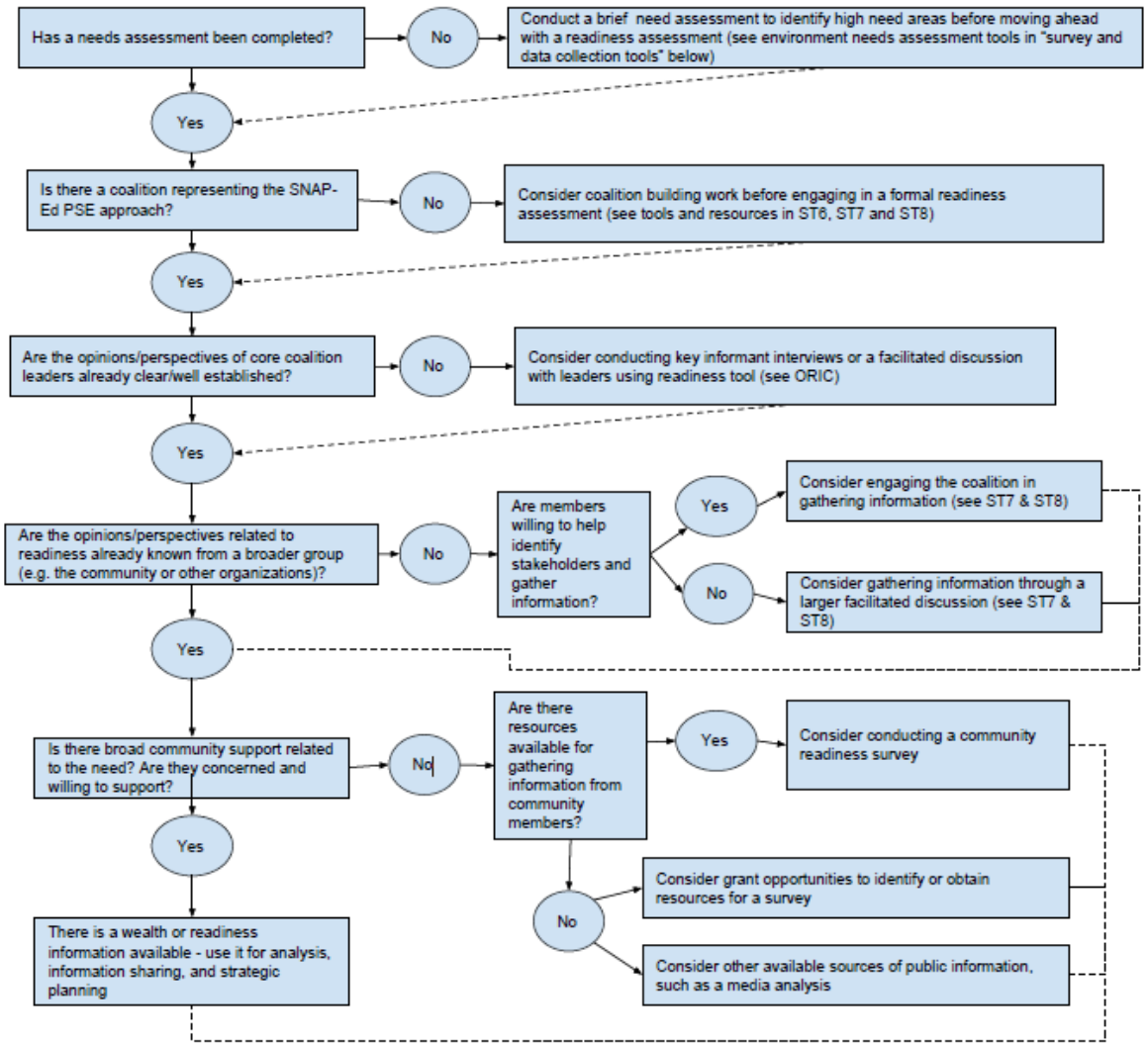
Short-Term (ST) Indicators:

ORGANIZATIONAL MOTIVATORS

ST5: READINESS AND NEED
ST6: CHAMPIONS
ST7: PARTNERSHIPS

ST5: Readiness and Need	
Framework Component	Readiness & Capacity – Organizational Motivators
Indicator Description	Two-part indicator measuring sites or organizations where there is identified need for PSE changes and associated organizational and staff readiness for adopting PSE changes has been assessed.
Background and Context	Indicator ST5 is an appropriate place to start for SNAP-Ed implementers working on PSE changes. It uses a process to develop partnerships (see: ST7) and engage organizations in addressing environmental needs around eating, learning, living, playing, shopping, or working categories. This step-wise process develops staff, determines environmental needs, and assesses partner's readiness to engage in PSE changes. This indicator is meant to guide the development of work plans and/or expand existing programs that address the other indicators presented in this guide. SNAP-Ed local project staff trained on ways to determine environmental need, engage organizations, and conduct readiness assessment are needed for PSE implementation. SNAP-Ed providers can assess needs in organizations or sites that serve low-income people. Although the needs assessment itself is not a program outcome, it is a first step toward implementation and thus a key program output for SNAP-Ed. Readiness tools measure an organization's or site's readiness to create changes that will address unmet needs for improved access or appeal of nutrition and physical activity supports. SNAP-Ed local project staff can work with partners identified in ST7 and the organization's staff to use the results from prior needs assessments and fill in any observable gaps. Because of the breadth of SNAP-Ed settings, the categorization of strategies is useful to track organizations, and each organization or site should be assigned an eat, learn, live, play, shop, and work category. This information could be used to identify other organizations working in the same domain in a larger area. The flow chart on the following page can help you navigate ST5.

Environmental Settings



Adapted from: Assessing community needs and Readiness *docs.sumn.org/**CommunityNeedsAssessment**Toolkit.pdf*

Environmental Settings

Outcome Measures	ST5a. Number of SNAP-Ed staff who have documented readiness for changes in PSE ST5b. Number of sites or organizations with an identified need for improving access or creating appeal for nutrition and physical activity supports ST5c. Number of organizations or sites that have documented readiness for changes in PSE
What to Measure	ST5a. Number and types of PSE trainings SNAP-Ed staff and SNAP-Ed partner organizations have completed ST5b. Organizations or sites that have conducted a needs assessment or environmental scan focused on SNAP-Ed priority areas, the results of which have documented needs for changes in policies, systems, and environmental supports. Factors to consider in selecting a needs assessment tool or environmental scan process include institutional resources and capacity, trained staff or community residents, prior needs assessments, and plans for how the results will be used or shared. A consistent process for needs assessments or environmental scans is one that is documented and can be replicated across jurisdictions and over time. ST5c. Organizations or sites that have been assessed for organizational readiness for change. Organizational readiness is often identified as an important precursor for change in policy, practice, and programs. Readiness assessments look at different areas such as commitment to make the change (resolve) and the capacity of the collective to make the change. The readiness assessment will allow for planning to meet the readiness to implement PSE. For example, an organization may be ready to change the school policies around food and beverages but lack the training and resources (capacity) to begin working on the policy. This information would provide SNAP-Ed programs and organizations direction on what resources and trainings would be required to achieve a change in school policies. While there is no specific numerator or denominator in this indicator, some states may seek to evaluate readiness in all *potential/eligible* SNAP-Ed sites for the federal fiscal year. Other states may evaluate *actual* SNAP-Ed sites for the federal fiscal year (all sites and systems with SNAP-Ed services). A third option is to use a sampling methodology: choose a percentage of organizations or sites to assess readiness for change. Sampling is important because it would be cost-prohibitive to conduct assessments across the state or jurisdiction. (see Appendix E for details on sampling).
Population	NA
Surveys and Data Collection Tools	

Environmental Settings

SNAP-Ed Staff Readiness to Implement Tools
(Note: Some needs assessment tools and resources listed below have their own staff trainings. If not, the North Carolina Institute for Public Health hosts an online staff training with a staff survey that can be administered at completion.)

North Carolina Institute for Public Health: Introduction to Program Evaluation
https://nciph.sph.unc.edu/tws/HEP_EVAL1/certificate.php
https://nciph.sph.unc.edu/tws/HEP_EVAL2/certificate.php

Readiness Assessment

Organizational Readiness for Implementing Change (ORIC)
The 12-question ORIC tool is available at:
http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3904699/bin/1748-5908-9-7-S1.doc

Environmental Needs Assessment Tools

EAT Strategies

- Communities of Excellence in Nutrition, Physical Activity, and Obesity Prevention (CX3)*
  http://www.cdph.ca.gov/programs/cpns/Pages/CX3_Main_Navgation.aspx
- Nutrition Environment Measure Survey – Restaurant (NEMS-R)*
  http://www.med.upenn.edu/nems/measures.shtml#nemsr

LEARN Strategies

- Smarter Lunchrooms Self-Assessment Scorecard*
  http://smarterlunchrooms.org/sites/default/files/lunchroom_self-assessmt_score_card.final_.4-3-14.pdf
- School Physical Activity and Nutrition Environment Tool (SPAN-ET)*
  http://extension.oregonstate.edu/growhkc/tools/span-et
- Nutrition and Physical Activity Self-Assessment for Child Care (GO NAP SACC)*
  https://gonapsacc.org/
- Contra Costa County's C.H.O.I.C.E. Toolkit and Self-Assessment Questionnaire*
  http://www.cocokids.org/child-health-nutrition/c-h-o-i-c-e-toolkit-self-assessment-questionnnaire/
- San Francisco Healthy Apple Awards*

http://www.healthyappleaward.com/

- UConn Rudd Center's Wellness Child Care Assessment Tool (WellCCAT)
  http://www.uconnruddcenter.org/resources/upload/docs/what/communities/WellnessChildCareAssessmentToolForResearch.pdf
- Wellness School Assessment Tool (WellSAT 2.0) – The Rudd Center
  http://wellsat.org/
- School Health Index – Centers for Disease Control and Prevention/Alliance for a Healthier Generation – Healthy Schools Program Framework of Best Practices Assessment Tool*
  https://schools.healthiergeneration.org/dashboard/about_assessment/
- School Physical Activity Policy Assessment (S-PAPA)
  http://activelivingresearch.org/files/S-PAPA_Instrument.pdf
- Local Wellness Policy: How to Get Started – Arizona Department of Education
  http://www.azed.gov/health-nutrition/wellness-policy/
- Promoting Health in Minnesota Schools: School Wellness Policies
  http://publichealthlawcenter.org/resources/promoting-health-minnesota-schools-school-wellness-policies
- Gretchen Swanson Center Farm to School Toolkit
  http://toolkit.centerfornutrition.org/

LIVE Strategies

- USDA's Community Food Assessment Toolkit
  http://ers.usda.gov/publications/efan-electronic-publications-from-the-food-assistance-nutrition-research-program/efan02013.aspx
- Communities of Excellence in Nutrition, Physical Activity, and Obesity Prevention (CX3)*
  http://www.cdph.ca.gov/programs/cpns/Pages/CX3_Main_Navgation.aspx
- Youth PhotoVoice
  http://depts.washington.edu/ccph/photovoice/photovoice_guide.pdf
- Healthy Eating Active Living: Mapping Attributes Using Participatory Photographic Surveys HEAL MAPPS™*
  http://extension.oregonstate.edu/growhkc/tools/heal-mapps
- North Carolina Faith-Based Facility Assessment Tool
  http://www.eatsmartmovemorenc.com/SharedUseAgreementsAndAssesments/Texts/FaithBasedReport0514%20FINAL.pdf
- Community Health Needs Assessments (through nonprofit hospitals)
  http://www.communitycommons.org/chna/

Environmental Settings

PLAY Strategies

- Physical Activity Resource Assessment (PARA)
  http://activelivingresearch.org/physical-activity-resource-assessment-para-instrument
- Community Park Audit Tool (CPAT)
  http://activelivingresearch.org/community-park-audit-tool-cpat
- Walkability Checklist – Safe Routes to School*
  http://www.saferoutesinfo.org/program-tools/education-walkability-checklist
- October Walk to School Month Walkability Checklist
  http://www.caactivecommunities.org/wp-content/uploads/2011/09/Walkability-Checklist-for-Students-and-Adults.pdf
- Bikeability Checklist – Safe Routes to School
  http://www.saferoutesinfo.org/program-tools/education-bikeability-checklist
- Pedestrian Environmental Data Scan (PEDS)
  http://activelivingresearch.org/pedestrian-environment-data-scan-peds-tool
- California Youth Participatory Action Research*
  http://www.cdph.ca.gov/programs/cpns/Pages/YouthEngagement.aspx

SHOP Strategies

- Communities of Excellence in Nutrition, Physical Activity, and Obesity Prevention (CX3)*
  http://www.cdph.ca.gov/programs/cpns/Pages/CX3_Main_Navgation.aspx
- Nutrition Environment Measure Survey – Store (NEMS-S)*
  http://www.med.upenn.edu/nems/measures.shtml
- Nutrition Environment Measures Survey – Corner Store (NEMS –CS)*
  http://www.med.upenn.edu/nems/measures.shtml
- Oregon Food Bank's Healthy Pantry Initiative/Healthy Pantry Snapshot Assessment Tool
  http://healthyfoodbankhub.feedingamerica.org/wp-content/uploads/mp/files/tool_and_resources/files/healthy-pantry-initiative.pdf
- Oregon State University Rapid Farmers Markets Assessments
  http://ir.library.oregonstate.edu/xmlui/bitstream/handle/1957/8665/SR_no.1088_ocr.pdf
- ChangeLab Solutions: Health on the Shelf
  http://changelabsolutions.org/publications/health-on-the-shelf
- FM Tracks, Prevention Research Center at Case Western Reserve University
  http://www.prchn.org/FMTracks.aspx

- Farmers Market Audit Tool
  http://www.med.upenn.edu/nems/docs/FarmersMarketAuditTool.pdf

WORK Strategies

- CDC Worksite Check for Health Scorecard
  http://www.cdc.gov/dhdsp/pubs/worksite_scorecard.htm
- California Fit Business Kit/Check for Health*
  http://www.cdph.ca.gov/programs/cpns/pages/worksitefitbusinesskit.aspx

*Tools with an asterisk appear in *SNAP-Ed Strategies and Interventions: An Obesity Prevention Toolkit for States*

Key Glossary Terms

Environmental scan
Needs assessment
Organization
Readiness
Site

Additional Resources or Supporting Citations

Shea CM, Jacobs SR, Esserman DA, Bruce K, Weiner, B. Organizational readiness for implementing change: a psychometric assessment of a new measure. *Implement Sci.* 2014; 9:7. Published online 2014 January 10. doi: 10.1186/1748-5908-9-7. Available from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3904699/.

ST6: Champions	
Framework Component	Readiness & Capacity – Organizational Motivators
Indicator Description	This indicator is intended to identify people who provide sustained, and often charismatic leadership that successfully advocates for, creates appeal of, or improves access to nutrition and physical activity in various organizations or environmental settings. SNAP-Ed champions are community members, participants, partners, and organizational leaders who extend their influence beyond direct delivery sites of SNAP-Ed interventions. In many SNAP-Ed programs, there are award and recognition programs to thank and celebrate efforts of people whose contributions went above and beyond the normal course of collaborative action.
Background and Context	Research has consistently shown that successful social change movements need leaders who "champion" the cause over a long period as it develops and grows over time. In SNAP-Ed, such leaders can emerge naturally at any stage of intervention, from planning an innovation through to its diffusion on a larger scale. It does not have to be demonstrated that the SNAP-Ed program was responsible for developing or "creating" the champion. But there should be a description of how the SNAP-Ed program interacted with the champion and benefited from the champion's activities, or alternatively, how the efforts and accomplishments of the champion benefited from the activities of the SNAP-Ed program. ST6 defines the added value that such champions contributed to help achieve SNAP-Ed outcomes, primarily in Environmental Settings, but also in multiple Sectors of Influence, to help population results (R1-11). For a champion's activities to be considered a SNAP-Ed outcome, there must be a connection between the champion's work and the presence of the SNAP-Ed program such that the SNAP-Ed objectives are supported and benefits accrue to SNAP-Ed eligible people, sites, and communities. For example, the champion's efforts might directly augment the SNAP-Ed program activities, or the champion might be identified through interactions with SNAP-Ed staff to work for change in the broader SNAP-Ed eligible site, organization, or community-at-large. The achievement would not have occurred without them. Some examples of champions and their activities follow: • **Youth:** To encourage more students to play during recess, through the SNAP-Ed youth empowerment initiative a school's student advisory committee recommended that school administrators build "buddy benches." Students who wanted to engage in physical activity could sit on the bench, and active students could invite them to play. The benches were built during the 2015 school year, and not only did active play increase, but also there were improvements in students' social interactions outside of class and in classroom dynamics. Use of youth engagement techniques expanded in elementary schools throughout the district. • **Parent:** A parent whose child had participated in a SNAP-Ed gardening program initiated and led a parent steering

	committee to maintain the garden over the summer. The parent stayed involved to set up an ongoing garden "booster" club, so it continued even after her children went on middle school. The booster club model was adopted widely in the district. Three booster clubs joined with the *Let's Move! Salad Bars to School* initiative so that the harvest could be used in the school lunch program. Two clubs went on to successfully advocate for new Summer Meal programs. • **Community leader**: After a SNAP-Ed agency had partnered with the farmers market association to set up a mobile farmers market event, a community member donated 300 tickets (at $1 each) to students who attended, to be used toward the purchase of produce at the event. The effort was so successful that the community member worked with the district's School Wellness Council and other community members to set up a fund for ongoing nutrition, physical activity, and food security programming. • **Service provider**: A teacher in a SNAP-Ed qualified school invited her peers and hosted an in-service to encourage them to create opportunities for their students around healthy eating. This team was recognized as a model and led to district-wide changes in the academic and physical activity curricula. • **Retailer:** An executive at a medium-sized grocery chain initiated a policy that welcomed SNAP-Ed demonstrations in selected stores. It was expanded to include in-store merchandizing, store tours, and community service partnerships with SNAP-Ed in the entire chain. The executive joined the SNAP-Ed partner team to meet with the area's Congress members and gave the business case for SNAP-Ed which resulted in two new SNAP-Ed champions in Congress. • **Local celebrity**: A local high school track star joined a SNAP-Ed physical activity coalition and offered to talk to elementary school students about the importance of physical activity and diet. She co-presented "25-Mile Club" certificates to students at the school's awards assembly and began working with elementary-age girls on track and field; the school formed three new girls' sports teams. Ultimately, she enlisted other high school athletes and got her high school to "adopt" the district's elementary schools in three different sports. • **Farmer**: A local farmer worked with the regional food bank to increase their produce donations as part of the *SNAP-Ed Harvest of the Month* program. He enlisted help from the county agriculture commissioner, restauranteurs, and chain grocers, then did a segment with one of the local TV stations. Those activities resulted in establishment of the area's first food policy council. • **Pastor**: As an outgrowth of a SNAP-Ed program in faith settings, a pastor led an event to promote healthy eating and physical activity, which included extensive media coverage. When SNAP-Ed funding was later threatened, she and other parishioners testified before the county board of supervisors that resulted in a resolution of concern that was sent to the city's state and federal legislators. The pastor stayed involved such that the Board supported changes in the county's General Plan to improve park lighting, bike lanes, and community gardens in lower-income neighborhoods. • **Media Outlet**: After covering local activities for several years, a local TV station adopted SNAP-Ed as one of 10 community organizations it would feature for the year. This included planned TV coverage of issues that SNAP-Ed programs were addressing, production and placement of public service advertisements, several talk show

	appearances, invitations to events with other station clients and advertisers, and appearances by station celebrities at SNAP-Ed community events. This led to joint projects with two local sports teams, an auto dealership, and a bank specializing in agriculture.
Outcome Measures	ST6a. Champions: The number of champions that specifically advanced SNAP-Ed activities and mission, by domain and setting type, and their role ST6b. Sites: The number and percent of SNAP-Ed qualified organizations or sites that benefited from the activities of champions, by domain and setting type. ST6c. Accomplishments: Written, audio, or visual descriptions of the activities and accomplishments of the champions, by domain and setting type.
What to Measure	Numerical counts and qualitative descriptions. Reporting is done only when there are examples of champions who achieved significant results during the period assessed. The documentation for this indicator includes brief descriptions of selected champions' activities, accomplishments, and benefits to the site, organization, or community. Their activities may involve the following areas of activity: • Providing leadership • Promoting collaborations (e.g., establishing or strengthening partnerships, coalitions, committees) • Producing innovations (e.g., initiating creative strategies to achieve nutrition and physical activity goals or to overcome barriers) • Engaging in advocacy (working with community leaders and decision-makers to advance policies and institute best practices) For aggregation purposes, the instances of champion activities may be assigned a level within the following categories. (If a champion has multiple roles, such as parent and community leader, the designated role can be the one that is most closely tied to that individual's champion activity.) • **Domain:** Eat, learn, live, play, shop, and work • **Role:** Youth, parent/caregiver, community member, staff/service provider, community leader/decision maker, local celebrity.
Population	Champions may be specific to different environmental settings or organizations, or to multiple sectors of influence.
Surveys and Data Collection Tools	
Often champions will bubble up naturally because of the unusual contributions or close working relationships with SNAP-Ed staff and partners. In other cases, it may be necessary to use qualitative approaches, identifying key informants and using individual or focus group interview	

approaches in the local setting. The key informants might represent organizations, agencies, stakeholder groups, individuals in the community, etc.

For example, interviews with key informants can be used to identify who the champions in a community are. Individual interviews with the champion can be used to find out about the details of the champion's activity.

CDC. Data collection methods for program evaluation: Interviews. 2009. Evaluation brief #17.
http://www.cdc.gov/HealthyYouth/evaluation/pdf/brief17.pdf

CDC. Data collection methods for program evaluation: Focus groups. 2008. Evaluation brief #13.
http://www.cdc.gov/healthyyouth/evaluation/pdf/brief13.pdf

Key Glossary Terms

Champions

Additional Resources or Supporting Citations

Resources that discuss champions:
These Web sites will differ in their direct relevance to SNAP-Ed, but they all provide helpful perspective for understanding the general concept of champions more deeply, and how champions can impact a community.

- Center for Collaborative Planning
  http://connectccp.org

- Arizona Champions for Change (Arizona Nutrition Network)
  http://www.eatwellbewell.org/

- Champions for Change (Calif. Dept. of Public Health, Nutrition Education and Obesity Prevention Branch)
  http://cachampionsforchange.cdph.ca.gov/Pages/default.aspx

- White House Champions of Change
  https://www.whitehouse.gov/champions

- Change Lab Solutions
  http://changelabsolutions.org

- Texas Health Champion Award
  https://sph.uth.edu/research/centers/dell/texas-obesity-awareness-week/about-the-texas-health-champion.htm

Environmental Settings

- CDC
  Parents for Healthy Schools
  http://www.cdc.gov/healthyschools/parentengagement/parentsforhealthyschools.htm

  Comprehensive School Physical Activity Program Guide
  http://www.cdc.gov/healthyschools/physicalactivity/pdf/13_242620-A_CSPAP_SchoolPhysActivityPrograms_Final_508_12192013.pdf

  Increasing Access to Drinking Water in Schools
  http://www.cdc.gov/healthyschools/npao/pdf/Water_Access_in_Schools.pdf

Resource on analyzing data from interviews:

- CDC's general "Data Collection and Analysis" page:
  http://www.cdc.gov/HealthyYouth/evaluation/data.htm

Publication describing factors found to influence successful social movements:

- Economos C, Brownson R, DeAngelis M, Foerster S, Foreman CT, Kumanyika S, Pate R, Gregson J. What lessons have been learned from other attempts to guide social change? *Nutrition Reviews*. 2001: (II) S40-S56.

ST7: Organizational Partnerships ☑	
Framework Component	Readiness & Capacity – Organizational Motivators
Indicator Description	Partnerships with service providers, organizational leaders, and SNAP-Ed representatives in settings where people eat, learn, live, play, shop, and work.
Background and Context	Local SNAP-Ed nutrition educators are accustomed to developing partnerships with leadership, staff, volunteers, clients, and community representatives when delivering nutrition education at specific sites. When implementing PSE change strategies, the scope of partnerships expands from coordinating logistics for direct education delivery to planning for and adopting changes in nutrition and/or physical activity practices, leveraging resources, and planning for sustainability—many of the key indicators that come later in the SNAP-Ed Evaluation Framework. Unlike ST8—which focuses on multi-sector partnerships at the local, state, territorial, or tribal level—indicator ST7 defines partnerships at the site level (e.g., elementary school), organization (e.g., school district), or complementary sites. Organizational partnerships of relevance to SNAP-Ed may include school health advisory councils, wellness committees, and site councils that focus on bringing together collaborators and local champions (see ST6) to change the context or environment surrounding individual physical activity and nutrition choices offered to clients at the site. An organizational partnership may exist between a local SNAP-Ed provider and leadership of a local site; in some instances, a written agreement may delineate the roles and responsibilities of the SNAP-Ed provider and the site's leadership. For instance, a local SNAP-Ed agency may agree to install a food garden at a senior housing site and teach seniors how to grow and harvest foods using seeds and starts they purchase with their SNAP dollars. The senior housing community site manager agrees to irrigate the garden and organize a shuttle bus to the local farmers market accepting SNAP for seniors to purchase seeds and plants that will produce food to eat. Partnership evaluation can help to identify whether it is worth the SNAP-Ed staff time and resources to participate in an organizational partnership effort—as a member, or in some instances, as a lead or co-lead. Partnership strategies may include identifying new opportunities for partnership, sharing information and resources, participating in or leading meetings with partners, developing an action plan with partners, or tracking and communicating partnership outcomes.
Outcome Measures	ST7a. The number of active partnerships in SNAP-Ed qualified sites or organizations that regularly meet, exchange information, and identify and implement mutually reinforcing activities that will contribute to adoption of one or more organizational changes or policies such as those listed in MT5 and MT6.

Environmental Settings

	For each partnership being evaluated, the following should be measured: ST7b. Description of the depth of the relationship (network, cooperator, coordination, coalition, collaboration) ST7c. Description of partnership accomplishments and lessons learned.
What to Measure	This indicator measures *active* partnerships, depth of the relationship, and for more mature partnerships, specific accomplishments and lessons learned from the partnership. Active partnerships may include two or more individuals who regularly meet, exchange information, and identify and implement mutually reinforcing activities that will contribute to adoption of one or more organizational changes or policies such as those listed in MT5 and MT6. Partnership members should understand their roles and responsibilities. The unit of analysis is the site or organization with an active partnership. RE-AIM suggests that the site or organization participating in the partnership should be increasing its own capacity to adopt nutrition and/or physical activity supports by redirecting activities or staff, contributing in-kind or out-of-pocket resources, and leading or participating in the development of a plan to maintain/sustain the new supports once original grant funding is over, including how to maintain or diversify the funding base for the project of interest. For partnerships subject to evaluation, assess the depth of the organization's progress along a continuum shown below. Deeper relationships produce more opportunities and outcomes. In this indicator, each organizational partnership should be assigned an environmental settings domain: eat, learn, live, play, shop, and work. This is to ensure that there is diversification of partnerships across the different types of settings relevant in SNAP-Ed. Some partnerships may affect multiple SNAP-Ed settings with representation from parks and recreation (Play) and school personnel (Learn).
Population	NA
Surveys and Data Collection Tools	
<u>Qualitative Approach</u> Qualitative approaches through direct observation, content analysis, and documentation review can include one or more of the following methods to identify: • Key informant interviews with partnership members to identify activities, partnership maturity level, barriers and success factors, and outcomes • Key informant interviews with nonparticipating members to identify partnership activities and outcomes • Content analysis of partnership communication, meeting minutes, and/or partnership plans • Review of organizational chart or partnership structure	

Environmental Settings

Depth of Organizational Relationship (Adapted from Gregson et. Al. 2001):

- Network: Organization has signed on as a member of a formalized nutrition education network, such as those supported by SNAP-Ed. There is ongoing dialogue and information sharing.

- Cooperator: Organization assists with information such as referrals, providing space, distributing marketing and client education materials, and hosting events open to the clients and community members.

- Coordination: Organization maintains autonomous leadership, but there is a common focus on group decision-making; emphasizes sharing resources to aid in the adoption of policy, systems, environmental changes, and associated promotion listed in MT5 and MT6.

- Coalition: Organization has longer-term commitment to join action in adopting nutrition or physical activity practices, supports and/or standards. Key characteristics include: shared leadership, definition of roles, and generation of new resources.

- Collaboration: Organization contributes to joint activities and has identified personnel who help advise and make decisions about effective strategies and interventions. Key characteristics include: a system with shared impacts, a consensus-decision making process, and formal role assignments.

CDC recommends an Annual Partnership Self-Assessment with the following questions:

1. What is the purpose of the partnership (e.g., plan development and implementation, advisory group for a specific task or objective)?
2. What does success look like for the partnership? Are there specific activities or objectives for the partnership?
3. What roles do members need to fulfill? What resources or skills do they need to provide to ensure the success of your partnerships?
4. What organizations, agencies, and leaders need to be represented to ensure success? What assets are needed?

Key Glossary Terms

Active partnerships
Coalition
Collaboration
Cooperator
Coordination
Network

Additional Resources or Supporting Citations

CDC developed a Guide to Evaluating Partnerships; a useful tool for identifying success factors in partnerships and how to measure them.
http://www.cdc.gov/dhdsp/programs/spha/evaluation_guides/evaluating_partnerships.htm

Environmental Settings

Gregson J, Foerster SB, Orr R, Jones L, Benedict J, Clarke B, Hersey J, Lewis J, Zotz K. (2001). System, environmental, and policy changes: Using the social-ecological model as a framework for evaluating nutrition education and social marketing programs with low-income audiences. *Journal of Nutrition Education*, 33, S4-S15.

Medium-Term (MT) Indicators:

ORGANIZATIONAL ADOPTION AND PROMOTION

MT5: NUTRITION SUPPORTS
MT6: PHYSICAL ACTIVITY AND REDUCED SEDENTARY BEHAVIOR SUPPORTS

MT5: Nutrition Supports ☑	
Framework Component	Changes – Adoption and promotion of nutrition-related supports in sites and organizations
Indicator Description	Sites and organizations that adopt PSE changes and complementary promotion often including favorable procurement, meal preparation activities, or other interventions that expand access and promote healthy eating; associated potential audience reached.
Background and Context	Adoption takes place when sites or organizations make at least one change in policy or practice to expand access or improve appeal for healthy food and beverages. These may include, but are not limited to, those in *SNAP-Ed Strategies & Interventions: An Obesity Prevention Toolkit for States*. Measuring PSE adoption goes hand-in-hand with estimating reach. Reach is often based on estimation when actual counts are unavailable, considering the population that is potentially exposed to the intervention (UNC, 2013). Evaluators should also consider ways to maximize measures of reach by monitoring a policy or environmental change that can spread across sites or an entire organization. For instance, the reach of a local school wellness policy will be greater when the policy is adopted district-wide rather than one school at a time. We calculate total reach to demonstrate the broader exposure on the entire organization. Many estimates of reach require accessing partner data, such as customers at a farmers market, clients at a food pantry, or customer estimates for shopping for food if these data are not known or publically available. Often data-sharing agreements across public and private sectors are necessary and may require letters of agreement. Institutional Review Board (IRB) other levels of approval that may be necessary.

Environmental Settings

Outcome Measures	Adoption Takes place when SNAP-Ed sites or organizations put into effect an evidence-based PSE change, such as those included in the *SNAP-Ed Strategies & Interventions: An Obesity Prevention Toolkit for States*. MT5a. Number and proportion of sites or organizations that make at least one change in writing or practice to expand access or improve appeal for healthy eating MT5b. Total number of policy changes MT5c. Total number of systems changes MT5d. Total number of environmental changes MT5e. Total number of promotional efforts for a PSE change Potential Reach MT5f. Reach: Total potential number of persons who encounter the improved environment or are affected by the policy change on a regular (typical) basis and are assumed to be influenced by it.
What to Measure	Adoption The documentation of change(s) adopted in the SNAP-Ed qualified site or organization. Documentation (direct observation, photographic evidence, repeated self-assessments or surveys) or interviews with key informants to confirm the uptake of the PSE change in the site or organization. Nutrition-related changes can include one or more of the following PSE changes, often including favorable procurement or meal preparation activities or others that expand access and promote healthy eating. The following table is not exhaustive; other evidence-based or practice-based changes may arise.

Policy	Systems	Environmental	Promotion (Marketing)
a. Improvements in hours of operation/time allotted for meals or food service b. Policies for working parents c. Rules for foods served in meetings or in classrooms d. Standards for healthier eating across the organization e. School wellness or child care wellness policy	f. Change in menus (variety, quality, offering lighter fares) g. Removing sugar-sweetened beverages from children's menus h. Improvements in free water access, taste, quality, smell, or temperature i. Restrictions on use of food as rewards or during celebrations j. Change in food purchasing specification towards healthier foods(s) k. Change in vendor agreement towards healthier foods(s) l. Prioritizing farm-to-table/increase in fresh or local produce m. Enhanced training on menu design and healthy cooking techniques n. Use of standardized, healthy recipes o. Collecting excess wholesome food to donate to charitable organizations	p. Improvements in layout or display of food (Smarter Lunchrooms) q. Edible gardens (establish, reinvigorate or maintain food gardens) r. Lactation supports or dedicated lactation space s. Healthier vending machine initiatives (e.g., access to healthier foods and beverages)	t. Point-of-purchase and distribution prompts u. Menu labeling with calorie, fat, sodium, added sugar counts v. Vending machine labeling (e.g., calories, traffic light color coding) w. Increased awareness of the changes by target audiences

It is important to document each change that occurs within a site. One change alone may not have enough magnitude to produce an impact. Thus, evaluators can document multiple changes that occur (e.g., signage, changes in layout and display of food and beverages). Measuring adoption may be labor-intensive; thus, it can be appropriate to choose a sample of sites for evaluation purposes (see Appendix E for details on sampling).

Measuring Reach

Site-level

Estimate the total number of persons at the site who are expected to encounter the change on a regular (typical) basis and are assumed to benefit from it. The total number of persons who have the potential to benefit from the change in the site cannot exceed the total number of persons at the site. When there are multiple changes occurring in the same site, it is important to only count those persons who potentially encounter the change on a regular basis.

- For example, a local SNAP-Ed agency consults with a school cafeteria representative to adopt changes in the layout or display of food during lunch service to prompt healthier selections; report the total maximum number of students who purchase lunch from the cafeteria. According to the school records, there are 1,000 students; of these, 900 purchase lunch on a consistent basis. Potential reach = 900. Potential reach would not be 1,000 as not all students purchase lunch on a consistent basis.

	• Another example: As part of a comprehensive worksite wellness program led by SNAP-Ed at a textiles plant, the worksite manager agrees to setup a hydration station offering fruit-infused water in the staff breakroom. The total number of employees at the organization, who we assume visit the breakroom on a regular basis, is 150. This would be your total potential reach. **Organization-level** Estimate the total number of persons at all sites affiliated with an organization who are expected to encounter the change on a regular (typical) basis and are assumed to benefit from it. The total number of persons who have the potential to benefit from the change in the organization cannot exceed the total number of persons at the organization. • For example, a school district office (i.e., an organization) adopts a policy that all teachers of elementary and middle grades will cease using candy as a reward for performance in the classroom. There are 7 schools in the district (4 elementary and 3 middle) with a combined enrollment of 4,300 students. This would be your total potential reach since all 4,300 students would be potentially affected by this policy. At this stage of evaluation, do not measure full-scale implementation of the policy at each site; this comes later in the evaluation framework (see LT5). • Building upon the same worksite example from above: The local SNAP-Ed program has developed a partnership with the regional corporate office of the textiles company to adopt a vending machine–labeling campaign using a traffic light color coding system. All but one of the organization's six offices and plants has at least one vending machine. We exclude the site without a vending machine; among the five sites with vending, there are a total of 2,026 employees. This would be your total potential reach. *Reporting Reach Characteristics* When aggregating reach of PSE changes across sites and organizations, you are encouraged, but not required, to describe the characteristics of persons potentially reached. Because PSE activities are to be adopted only in SNAP-Ed qualified sites, we assume the majority of persons exposed to the change are low-income. However, reporting reach information by race/ethnicity, gender, languages spoken, household income levels, eligibility for free and reduced priced school meals, ZIP codes, or other factors will be important to address stakeholders' concerns and questions. Reporting reach data by different socioeconomic, race, and Latino/Hispanic origin may explain to what extent PSE changes have the potential to benefit disparate populations.
Population	Persons in sites or organizations
Data Collection Tools See ST5 for a listing of the environmental and policy assessment tools.	
Key Glossary Terms	

Environmental Settings

Adoption Environmental Policy Reach Systems
Additional Resources or Supporting Citations Food and Nutrition Service Local School Wellness Policy http://www.fns.usda.gov/tn/local-school-wellness-policy Institute of Child Nutrition http://www.nfsmi.org/ University of North Carolina Center for Training and Research Translation: Evaluating Policy, Systems, and Environmental Changes http://evaluationpse.org/ National Farm to School Network http://www.farmtoschool.org/ Smarter Lunchrooms Movement http://smarterlunchrooms.org/

MT6: Physical Activity and Reduced Sedentary Behavior Supports	
Framework Component	Changes – Adoption and promotion of physical activity and reduced sedentary behavior supports in sites and organizations
Indicator Description	Sites and organizations that adopt PSE changes and complementary promotion that expand access and promote physical activity and reduced time spent being sedentary; associated potential audience reached.
Background and Context	Adoption takes place when sites or organizations make at least one change in policy or practice to expand access or improve appeal for healthy food and beverages. These may include, but are not limited to, those in *SNAP-Ed Strategies & Interventions: An Obesity Prevention Toolkit for States*. Measuring PSE adoption goes hand-in-hand with estimating reach. Reach is often based on estimation when actual counts are unavailable, considering the population that is potentially exposed to the intervention (UNC, 2013). Evaluators should also consider ways to maximize measures of reach by monitoring a policy or environmental change that can spread across sites or an entire organization. For instance, the reach of a local school wellness policy will be greater when the policy is adopted district-wide rather than one school at a time. We calculate total reach to demonstrate the broader exposure on the entire organization. Many estimates of reach require accessing partner data, such as enrollment at child care facilities, if these data are not known or publically available. Often data-sharing agreements across public and private sectors are necessary and may require letters of agreement. Institutional Review Board (IRB) other levels of approval that may be necessary.
Outcome Measures	Adoption Takes place when SNAP-Ed sites or organizations put into effect an evidence-based PSE change, such as those included in the *SNAP-Ed Strategies & Interventions: An Obesity Prevention Toolkit for States.* MT6a. Number and proportion of sites or organizations that make at least one change in writing or practice to expand access or improve appeal for physical activity or reduced sedentary behavior MT6b. Total number of policy changes MT6c. Total number of systems changes MT6d. Total number of environmental changes MT6e. Total number of promotional efforts for a PSE change

Environmental Settings

	Potential Reach MT6f. **Total Reach**: Total potential number of persons who encounter the improved environment or are affected by the policy change on a regular (typical) basis and are assumed to be influenced by it.
What to Measure	Adoption The documentation of change(s) adopted in the SNAP-Ed qualified site or organization. Documentation (direct observation, photographic evidence, repeated self-assessments or surveys) or interviews with key informants to confirm the uptake of the PSE change in the site or organization. Physical activity–related changes can include one or more of the following PSE changes, often including policies, practices, and programs that make physical activity more convenient and desirable. The following list is not exhaustive; other evidence-based or practice-based changes may arise.

Policy	Systems	Environmental	Promotion (Marketing)
a. Improvements in hours of operation of recreation facilities b. New or increased use of school facilities during non-school hours for recreation, or shared use policies c. New or stronger limits on entertainment screen time (in accordance with American Academy of Pediatrics) d. Increase in school days/time spent in physical education e. Improvements in time spent in daily recess f. Workplace access to physical activity facilities at reduced or no cost	g. *Let's Move!* Active Schools h. Incorporating physical activity into the school day or during classroom-based instruction i. New or improved access to structured physical activity programs	j. Improvements in access to safe walking or bicycling paths, or Safe Routes to School or work k. Addition of bike racks l. Improvements in access to or appeal of stairwells m. Improvements in access to exercise or recreation facilities	n. Signage and prompts for use of walking and bicycling paths o. New or improved stairwell prompts p. Increased awareness of the PSE change by the target audience

It is important to document each change that occurs within a site. One change alone may not have enough magnitude to produce an impact. Thus, evaluators can document multiple changes that occur (e.g., signage, structured physical activity opportunities). Measuring adoption may be labor-intensive; thus, it can be appropriate to choose a sample of sites for evaluation purposes (see Appendix E for details on sampling).

Measuring Reach

Site-level

Estimate the total number of persons at the site who are expected to encounter the change on a regular (typical) basis and are assumed to benefit from it. The total number of persons who have the potential to benefit from the change in the site cannot exceed the total number of persons at the site. When there are multiple changes occurring in the same site, it is important to only count those persons who are potentially encounter the change on a regular basis.

- For example, a SNAP-Ed agency consults with a child care provider to strengthen limits on time spent each day watching television; report the total number of children at the child care facility on a regular basis. In this case, it is 65 children; this would be your total potential reach.
- Another example: A local YMCA location that is affiliated with SNAP-Ed agrees to offer a free physical activity program to community residents of all ages and abilities one day a week. The total number of community residents

	in the town in 6,000. This would be your total potential reach. **Organization-level** Estimate the total number of persons at all sites affiliated with an organization who are expected to encounter the change on a regular (typical) basis and are assumed to benefit from it. The total number of persons who have the potential to benefit from the change in the organization cannot exceed the total number of persons at the organization. • For example, a child care wellness council (i.e., an organization) adopts a policy that all child care providers holding membership in the council will adopt a new structured physical activity program on an ongoing basis. There are 22 child care providers in the council with a combined enrollment of 375 children; 375 would be your total potential reach. At this stage of evaluation, do not measure full-scale implementation of the policy at each site; this comes later in the evaluation framework (see LT6). • Building upon the same YMCA example from above: the local SNAP-Ed program has developed a partnership with the YMCA's city administrative office that oversees 22 locations across 12 towns. Through the partnership, the YMCA's Director or Programs agrees to expand the free activity day in all 22 locations. The total number of community residents in all 12 towns in 62,000. This would be your total potential reach. *Reporting Reach Characteristics* When aggregating reach of PSE changes across sites and organizations, you are encouraged, but not required to describe the characteristics of persons potentially reached. Because PSE activities are to be adopted only in qualifying SNAP-Ed eligible sites, we assume the majority of persons exposed to the change are low-income. However, reporting reach information by race/ethnicity, gender, languages spoken, household income levels, eligibility for free and reduced priced meals, ZIP codes, or other factors will be important to address stakeholders' concerns and questions. Reporting reach data by different socioeconomic, race, and Latino/Hispanic origin may explain to what extent PSE changes have the potential to benefit disparate populations.
Population	Persons in sites or organizations
Data Collection Tools See ST5 for a listing of the environmental and policy assessment tools.	
Key Glossary Terms Adoption Environmental	

Environmental Settings

Reach Policy Systems
Additional Resources or Supporting Citations SHAPE America's National Physical Education Standards http://www.shapeamerica.org/standards/pe/ American Academy of Pediatrics – Media and Children https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/Pages/Media-and-Children.aspx National Center for Safe Routes to School http://www.saferoutesinfo.org/ University of North Carolina Center for Training and Research Translation: Evaluating Policy, Systems, and Environmental Changes http://evaluationpse.org/

Long-Term (LT) Indicators:

ORGANIZATIONAL IMPLEMENTATION AND EFFECTIVENESS

LT5: NUTRITION SUPPORTS IMPLEMENTATION AND EFFECTIVENESS
LT6: PHYSICAL ACTIVITY SUPPORTS IMPLEMENTATION AND EFFECTIVENESS
LT7: PROGRAM RECOGNITION
LT8: MEDIA COVERAGE
LT9: LEVERAGED RESOURCES
LT10: PLANNED SUSTAINABILITY
LT11: SPIN-OFF BENEFITS

LT5: Nutrition Supports Implementation	
Framework Component	Effectiveness & Maintenance – Organizational Implementation and Effectiveness
Indicator Description	This indicator measures implementation and effectiveness of PSE changes. Implementation is defined as the aggregate number of sites or organizations in each type of setting within the eat, learn, live, play, shop, and work domains that report a multi-component and multi-level intervention. Effectiveness is defined as the aggregate number of sites or organizations with improved food environment assessment scores.
Background and Context	**Implementation** pertains to whether the intervention was delivered with fidelity or as intended and whether the essential elements known to be important to the achievement of positive outcomes were actually and consistently implemented. To be effective, organizational policy changes and environmental supports should be made as part of multi-component and multi-level interventions to sustain the new changes or standards over time. This indicator is "long-term" in that it follows the medium-term adoption indicator; but, in addition, the implementation features are intended to enhance the likelihood of impact and sustainability that derives when PSE change is part of a multi-component/multi-level intervention. **Effectiveness** pertains to the achievement of the intended outcomes. Implementation and effectiveness are closely linked since the quality of implementation will directly affect the outcomes achieved. At the environmental level, effectiveness is defined as, and is measured by, improvements in the food environment and/or organizational changes, policies, rules, marketing, and access that make healthy choices easier. Increased environmental assessment scores provide objective, systematic evidence of documented environment-level improvements.
Outcome Measures	LT5a. Total number of sites or organizations that implemented a multi-component and multi-level intervention with one or more changes in MT5 (site or organizational adoption of PSE changes and promotion) and <u>one</u> or more of the following additional components: • Evidence-based education • Marketing • Parent/community involvement • Staff training on continuous program and policy implementation LT5b. Total number of components per site or organization, and types of components implemented during the period assessed LT5c. Number of sites or organizations that made at least one PSE change (MT5) and show improved food environment assessment scores using a reliable and, if possible, valid environmental assessment tool

Environmental Settings

What to Measure	Implementation (LT5a–b): LT5a. Number of sites or organizations that report a multi-component and multi-level intervention with one or more changes in MT5 (PSE changes). Multi-component intervention refers to sites making at least one PSE change (MT5) implemented together with evidence-based education, marketing, parent/community involvement, and/or staff training on continuous program and policy implementation. LT5b. Total number of components per site or organization, and types of components: • Evidence-based education • Marketing • Parent/community involvement • Staff training on continuous program and policy implementation These four components were identified through practitioner input during development of the *Western Region SNAP-Ed Evaluation Framework.* Report implementation in two ways: 1. With the ideal being implementation of one MT5 change plus all four additional components, record the number of sites or organizations implementing one MT5 change and one, two, three, or all four components. Also note how many sites did not implement a multi-component intervention (i.e., only made change in MT5 but did not implement any additional components). 2. Record the number of sites or organizations implementing each type of specific additional component—evidence-based education, marketing, parent/community involvement, and staff training. Effectiveness (LT5c): Number of sites or organizations with improved food environment assessment scores using a reliable and, if possible, valid environmental assessment tool. Follow-up assessment scores should be compared to baseline scores to determine whether, and what, improvement has been made. Report date and actual score for each administration of the assessment tool. Trained community members, employees, or participants should conduct assessments using a consistent process to ensure that results across jurisdictions and over time are reliable and comparable. The timing for the follow-up assessment(s) depends on the program's implementation schedule and should be conducted after changes have been implemented.

Environmental Settings

	Programs may elect to assess and report the implementation and effectiveness indicators in a sample of sites or organizations. If so, a sampling approach should be used that ensures the subset of sites selected are representative of the type of SNAP-Ed setting where one or more PSE changes is being made (MT5). Alternatively, programs may elect to assess and report the implementation and effectiveness indicators for all sites or organizations where one or more PSE changes is being made (MT5). In this case, programs might want to calculate either the "Coverage of all potential/eligible SNAP-Ed sites" or "Coverage of actual SNAP-Ed sites" similar to the denominators described for indicators MT5 and MT6. See Appendix E for description of sampling strategies and Appendix D (MT5) for description of calculating coverage of SNAP-Ed sites.

Surveys and Data Collection Tools

Implementation: Implementation can be measured through ongoing activity tracking and process monitoring systems. Measuring implementation requires a system for documenting changes by organizational site or system. Good and clear definitions of the implementation components are required for consistent and comparable tracking and reporting of multi-component and multi-level interventions.

- While it would be desirable to have examples of good process-monitoring tools for tracking the implementation of multi-component and multi-level interventions, few, if any, are available. Process-monitoring tools are typically internal documents that are rarely disseminated beyond associated programs.

Effectiveness: See the listing of reliable tools for needs assessments and environmental scans in ST5 Readiness appropriate to the eat, learn, live, play, shop, and work domains (e.g., Nutrition and Physical Activity Self-Assessment for Child Care [NAP SACC], Communities of Excellence in Nutrition, Physical Activity, and Obesity Prevention [CX3], School Health Index, Nutrition Environment Measures Survey [NEMS]).

- While many good and reliable environmental assessment scans are available, few have been validated.
- For some settings or MT5 PSE changes, such as edible gardens, no specific assessment tools are available.

Key Glossary Terms

Domain
Environmental
Evidence-based education
Marketing
Policy
RE-AIM
Settings

Environmental Settings

Sites Supports Systems
Additional Resources or Supporting Citations: NA

LT6: Physical Activity Supports Implementation	
Framework Component	Effectiveness & Maintenance – Organizational Implementation and Effectiveness
Indicator Description	This indicator measures implementation and effectiveness of PSE changes. Implementation is defined as the aggregate number of sites or organizations in each type of setting within the eat, live, work, learn, shop, and play domains that report a multi-component and multi-level intervention. Effectiveness is defined as the aggregate number of sites or organizations with improved physical activity environment assessment scores
Background and Context	**Implementation** pertains to whether the intervention was delivered with fidelity or as intended and whether the essential elements known to be important to the achievement of positive outcomes were actually and consistently implemented. To be effective, organizational policy changes and environmental supports should be made as part of multi-component and multi-level interventions to sustain the new changes or standards over time. This indicator is "long-term" in that it follows the medium-term adoption indicator; but, in addition, the implementation features are intended to enhance the likelihood of impact and sustainability that derives when PSE change is part of a multi-component/multi-level intervention. **Effectiveness** pertains to the achievement of the intended outcomes. Implementation and effectiveness are closely linked because the quality of implementation will directly affect the outcomes achieved. At the environmental level, effectiveness is defined as, and is measured by, improvements in the physical activity environment and/or organizational changes, policies, rules, marketing, and access that make healthy choices easier. Increased environmental assessment scores provide objective, systematic evidence of documented environment-level improvements.
Outcome Measures	LT6a. Total number of sites or organizations that implemented a multi-component and multi-level intervention with one or more changes in MT6 (site or organizational adoption of PSE changes and promotion) and <u>one</u> or more of the following additional components: • Evidence-based education • Marketing • Parent/community involvement • Staff training on continuous program and policy implementation LT6b. Total number of components per site or organization, and types of components implemented during the period assessed

	LT6c. Number of sites or organizations that made at least one PSE change (MT6) and show improved physical activity environment assessment scores using a reliable and, if possible, valid environmental assessment tool
What to Measure	Implementation (LT6a–b): LT6a. Number of sites or organizations that report a multi-component and multi-level intervention with one or more changes in MT6 (PSE changes). Multi-component intervention refers to sites making at least one PSE change (MT6) implemented together with evidence-based education, marketing, parent/community involvement, and/or staff training on continuous program and policy implementation. LT6b. Total number of components per site or organization, and types of components: • Evidence-based education • Marketing • Parent/community involvement • Staff training on continuous program and policy implementation These four components were identified through practitioner input during development of the Western Region SNAP-Ed Evaluation Framework. Report implementation in two ways: 1. With the ideal being implementation of one MT6 change plus all four additional components, record the number of sites or organizations implementing one MT6 change and one, two, three, or all four components. Also note how many sites did not implement a multi-component intervention (i.e., only made change in MT6 but did not implement any additional components). 2. Record the number of sites or organizations implementing each type of specific additional component—evidence-based education, marketing, parent/community involvement, and staff training. Effectiveness (LT6c): Number of sites or organizations with improved physical activity assessment scores using a reliable and, if possible, valid environmental assessment tool. Follow-up assessment scores should be compared to baseline scores to determine whether, and what, improvement has been made. Trained community members, employees, or participants should conduct assessments using a consistent process to ensure that results across jurisdictions and over time are reliable and comparable. The timing for the follow-up assessment(s) depends on the program's implementation schedule and should be conducted after changes have been implemented.

Environmental Settings

	Programs may elect to assess and report the implementation and effectiveness indicators in a sample of sites or organizations. If so, a sampling approach should be used that ensures the subset of sites selected are representative of the type of SNAP-Ed setting where one or more PSE changes are being made (MT6). Alternatively, programs may elect to assess and report the implementation and effectiveness indicators for all sites or organizations where one or more PSE changes are being made (MT6). In this case, programs might want to calculate either the "Coverage of all potential/eligible SNAP-Ed sites" or "Coverage of actual SNAP-Ed sites" similar to the denominators described for indicators MT5 and MT6. See Appendix E for description of sampling strategies and Appendix D (MT6) for description of calculating coverage of SNAP-Ed sties.
Population	NA

Surveys and Data Collection Tools

Implementation: Implementation can be measured through ongoing activity tracking and process monitoring systems. Measuring implementation requires a system for documenting changes by organizational site or system. Good and clear definitions of the implementation components are required for consistent and comparable tracking and reporting of multi-component and multi-level interventions.

- While it would be desirable to have examples of good process-monitoring tools for tracking the implementation of multi-component and multi-level interventions, few, if any, are available. Process-monitoring tools are typically internal documents that are rarely disseminated beyond associated programs.

Effectiveness: See the listing of reliable tools for needs assessments and environmental scans in ST5 Readiness appropriate to the eat, learn, live, play, shop, and work domains (e.g., Nutrition and Physical Activity Self-Assessment for Child Care [NAP SACC], School Health Index, School Physical Activity Policy Assessment [S-PAPA], Physical Activity Resource Assessment [PARA], Walkability Checklist – Safe Routes to School).

- While many good and reliable environmental assessment scans are available, few have been validated.
- For some settings or MT6 PSE changes, such as physical activity facilities, no specific assessment tools are available.

Key Glossary Terms

Domain
Environmental
Evidence-based education
Marketing
Parent/community involvement
Policy
RE-AIM

Environmental Settings

Settings Sites Staff training Supports Systems
Additional Resources or Supporting Citations: NA

LT7: Program Recognition	
Framework Component	Effectiveness & Maintenance – Organizational Implementation and Effectiveness
Indicator Description	This indicator focuses on organizations that have met and been publicly recognized for achieving authoritative, externally established performance standards. This indicator reports the number of organizations and sites in each domain whose work achieving new standards is attributable, in whole or in part, to the efforts of SNAP-Ed during the period assessed. Since comprehensive changes take time, many recognition programs have established increments for awards that help organizations show progressive accomplishments. For such recognition programs, this indicator also captures movement from one level of performance to another, as well as maintenance of effort. At the national level, recognition programs that bring together efforts among multiple agencies in entire communities and multiple sectors include *Let's Move!* Cities, Towns, and Counties; *Let's Move!* in Indian Country; and STAR Communities (please see LT19, Community-wide Recognition Programs).
Background and Context	Recognition programs are important because they acknowledge that multiple kinds of organizational supports need to be in place simultaneously to enable and reinforce long-term, sustained behavior change by individuals and that public recognition provides an incentive and encourages healthy competition for organizations to make such a large commitment. Many recognition programs provide ongoing reinforcement, mentorships, networking, training, technical assistance, and rewards to help participating organizations maintain their upward momentum. Such recognition may be especially important for organizations serving SNAP-Ed eligible persons, not only for the positive benefits to families and children but also because external recognition can help generate new resources, overcome negative stereotypes, build morale, and bring positive public attention to the organization and its people. From a SNAP-Ed perspective, organizations that achieve recognition can inspire others and ultimately become even stronger opinion leaders for positive change. These measures are intended, on a setting-by-setting basis, to provide a vehicle for overall, comprehensive, and long-term improvement in PSEs that will make the healthy choice the easy choice in environmental settings *and* narrow the gap in best practices or quality standards seen between organizations in SNAP-Ed qualified sites compared to those in more highly resourced locations. Second, by meeting externally determined standards, SNAP-Ed partners become empowered and are sustained to establish new norms through new peer networks. Recognition programs may acquire meaningful advantages in terms of business, public relations, and so forth.

Environmental Settings

Outcome Measures	LT7a. The number of program recognition awards received, by setting or domain. LT7b. The number and percentage of SNAP-Ed partner organizations and sites that secured a higher rank in their level of recognition (e.g., from silver to gold, etc.) LT7c. The number and percentage of SNAP-Ed partner organizations and sites that maintained participation at the same level of recognition. LT7d. Total number and reach of partner organizations and sites that received program recognition awards and the number of people who were expected to benefit by setting or domain.
What to Measure	As a first step, become familiar with recognition programs that may be helpful in achieving SNAP-Ed goals. In addition to professional channels where national recognition programs may be publicized, for state and local programs it may be necessary to use qualitative approaches, such as searching online websites or identifying key informants. Key informants might represent organizations, agencies, stakeholder groups, individuals in the community, region, or statewide. Assess whether this activity would benefit SNAP-Ed goals. For aggregation purposes, the sites and organizations in which program recognition awards are given and that could be assigned a level within the following categories are: 1. Environmental settings where external recognition programs exist: • Restaurants • Communities (e.g., health care, faith, nonprofits) • Early care and education, child care • Schools and after-school programs • Worksites • Recreation sites for adults, children and youth; transportation (walking, bicycles) • Food stores, markets, and food banks 2. National, state, or locally defined standards for recognition programs 3. Recognition level: All levels (for example, bronze, silver, gold….) Number and proportion of SNAP-Ed organizations and sites in LT5 and LT6 that achieve program recognition from a national, state or local authoritative body for voluntarily meeting externally determined standards on an annual basis • Newly achieved (initial recognition) • Sustain same level of program recognition • If appropriate for the recognition program, organizations that progress toward meeting increasingly higher levels of program recognition, e.g., bronze to silver, silver to gold, or gold to platinum OR Tier 1 to 2, Tier 2 to 3, and so forth.

Environmental Settings

Population	NA
Surveys and Data Collection Tools Recognition programs set their own standards, self-assessment tools, and application forms. Most list names of recognized organizations, by award level, on their websites. The number of sites and reach (people) would be available from partners.	
Key Glossary Terms Program recognition Program recognition levels Settings Sites	

Additional Resources or Supporting Citations

National program recognition awards for food, nutrition, and physical activity, by domain (eat, learn, live, play, shop, and work):

EAT and SHOP

Restaurants and retail grocery outlets

- American Heart Association's "Heart-Check Meal Certification" program, implemented at restaurants and grocery stores http://www.heart.org/HEARTORG/GettingHealthy/NutritionCenter/Heart-CheckMarkCertification/Heart-Check-Meal-Certification-Program-Foodservice_UCM_441027_Article.jsp
- American Restaurant Association's restaurant recognition programs for all restaurants and for children's menus http://www.restaurant.org/Industry-Impact/Food-Healthy-Living/Healthy-Dining and http://www.restaurant.org/Industry-Impact/Food-Healthy-Living/Kids-LiveWell-Program

LIVE

- Baby Friendly Hospitals https://www.babyfriendlyusa.org/about-us/baby-friendly-hospital-initiative
- *Let's Move!* Faith http://www.letsmove.gov/faith-communities-toolkit

LEARN

Pre-K

- *Let's Move!* Child Care https://healthykidshealthyfuture.org/

Schools

- Healthier US School Challenge http://www.fns.usda.gov/hussc/healthierus-school-challenge-criteria-application-criteria
- Alliance for a Healthier Generation https://www.healthiergeneration.org/
- Let's Move! Active Schools http://www.letsmoveschools.org/

Resources to support Recognition Awards:

- *Let's Move!* Salad Bars to Schools http://www.saladbars2schools.org/
- Chefs Move to Schools http://www.chefsmovetoschools.org/

Environmental Settings

WORK

- WELCOA's Well Workplace awards
  https://www.welcoa.org/services/recognize/well-workplace-awards/
- American Heart Association Fit Friendly Worksite Program
  https://volunteer.heart.org/apps/fitfriendly/default.aspx

PLAY

- *Let's Move!* Outside
  http://www.letsmove.gov/lets-move-outside

Organizations that may sponsor or be familiar with state or local program recognition awards:

EAT and SHOP

- State restaurant association
- State food retailer association
- State departments of health (retail stores, restaurants)
- State agriculture department (farmers markets)
- State social services department (licensed ECEs, food banks)

WORK

- State associations of cities or counties
  EXAMPLE: Golden Apple Award: Washington State Worksites
  http://www.awcnet.org/worksitesummit/2007/goldapple.htm

- State association of business
  EXAMPLE: Works towards hunger relief through food banks, meals on wheels
  https://www.awb.org/awards/

- State department of health
  EXAMPLE: worksite wellness
  http://www.doh.wa.gov/CommunityandEnvironment/WorksiteWellness/HealthyNutritionGuidelines/Recognition
  Resource: http://www.doh.wa.gov/Portals/1/Documents/Pubs/340-224-HealthyNutritionGuidelines.pdf

LEARN

- Pre-K department of education

EXAMPLE: SHINE Award (California)
http://www.ccdaa.org/assets/documents/Fall_TA_2014/PowerPoints_and_Handouts/program%20overview.pdf

- Healthy Behavior Initiative, Step-by-Step Guide (After-School, see SNAP-Ed Toolkit)
  http://www.ccscenter.org/HBI
- California Distinguished After School Health (DASH) Recognition Program
  http://publichealthlawcenter.org/sites/default/files/resources/fs-FL-Vol-Health-Recog-Prog-Aug-2015.pdf

County & city level: (EXAMPLES from Washington State)

LIVE

- County/community coalitions
  EXAMPLE 1: BEAL Award (Built Environment & Active Living offered by Healthy King County Coalition)
  http://www.healthykingcounty.org/our-five-workgroups/
  EXAMPLE 2: Spokane Food Access Committee. Works to get nutritious food to all.
  http://www.realfoodspokane.org/
- City, county, and regional planning departments

EAT

- County health departments
  EXAMPLE: Clark County, Washington State Healthy Restaurant Program
  http://www.clark.wa.gov/public-health/community/healthyeating/restaurants.html

LT8: Media Coverage	
Framework Component	Effectiveness & Maintenance – Organizational Implementation and Effectiveness
Indicator Description	Number and percentage of commercial and organizational outlets with estimated reach to SNAP-Ed and total audiences that reported favorable attributions to SNAP-Ed marketing and PSE projects: • Local outlets (commercial TV, radio, and print) • National outlets (commercial TV and print) • Web sites • Social media, including those of partnering organizations (Facebook, Twitter, Pinterest)
Background and Context	Media coverage by commercial and organizational outlets may be generated by the SNAP-Ed Implementing Agency, by a local awardee or affiliate, or by partners. The media coverage may result from media outreach/public relations, media advocacy, or a media outlet's usual news, feature, or editorial practices.
Outcome Measures	Number and percentage of Implementing Agencies and states with local, statewide, or national mass media components focusing on SNAP-Ed—relevant marketing and PSE through news, Web sites, and social media channels: LT8a. Electronic and print outlets • Number and percentage of media outlets that run positive stories about SNAP-Ed marketing and PSE projects • Audience reach, by type (print, TV, radio) in numbers and percentage of total and SNAP-Ed segments exposed to favorable media mentions about SNAP-Ed marketing and PSE projects • Dollar value of mentions (i.e., public relations/earned media secured) in commercial TV, radio, and print outlets LT8b. Websites • Percentage and reach of partner websites that feature positive content about SNAP-Ed marketing, media advocacy, and PSE projects LT8c. Social media • Percentage and reach of SNAP-Ed Implementing Agencies with social media sites that push marketing, media advocacy, and PSE content to consumers/intermediaries (e.g., Facebook, Twitter, Pinterest)

Environmental Settings

What to Measure	Measures for earned media show the number of people reached and the volume of messaging generated about SNAP-Ed efforts to influence consumer, organization, and community expectations and norms. Media coverage can showcase the value of local programs, increase their influence, and bring in new partners. Print, electronic, and outdoor media coverage can be monetized using advertising rates provided by the outlet to demonstrate how SNAP-Ed dollars can be leveraged. In evaluation, media coverage can be added to other measures like volume of direct education and social marketing to provide estimates of the total dosage a community receives to continually improve program effectiveness. Healthy eating/physical activity tips and recipes are counted only if there is significant content about marketing and PSE changes. This metric includes media outlet coverage only of SNAP-Ed–related marketing and PSE changes and such measures can: • Build on existing EARS data collection wherever possible. • Use conventional web and social media analytics, such as Google analytics, unique visitors, clicks, page views, downloads, and links. • Document SNAP-Ed–related media advocacy activities by state and local SNAP-Ed agencies and their partners.
Population	NA
Surveys and Data Collection Tools: NA	
Key Glossary Terms Earned media/public relations Market segments Media advocacy Media coverage Total audience/general market/general audience	
Additional Resources or Supporting Citations: NA	

LT9: Leveraged Resources	
Framework Component	Effectiveness & Maintenance – Organizational Implementation and Effectiveness
Indicator Description	This indicator focuses on the planned or intentional contributions of SNAP-Ed partners and other stakeholders. It captures the dollar value and type of resources that partners and other stakeholders invested over the period assessed for implementation of discrete interventions in MT5, MT6, LT5, and LT6 in one or more domains or settings. Implementing Agencies may choose which interventions have required significant, measurable fiscal inputs by SNAP-Ed and partners and use a case study approach to document how SNAP-Ed funding and activities encouraged partners to co-invest in new, ongoing, or sustained interventions and community efforts within each domain or setting.
Background and Context	"Leveraged resources" is sometimes referred to as return on investment (ROI). For practical purposes in ongoing programs, the term ROI is used with the understanding that it does not have the rigor of cost-benefit or cost-effectiveness research. This indicator is intended to demonstrate in fiscal terms that SNAP-Ed funding and staff stimulate other agencies, nonprofits, businesses, and foundations to co-fund evidence-based interventions benefitting low-income people in SNAP-Ed qualified settings. Using the RE-AIM model, co-investment may occur in association with any phase: Adoption, Implementation, Effectiveness, and Maintenance. Ultimately, it is expected that the provision of SNAP-Ed services and funding will lead other stakeholders to help out with their own resources. Eventually, this should result in the organizational changes being institutionalized within the partner organizations and requiring little or no ongoing SNAP-Ed support.
Outcome Measures	This indicator looks at/quantifies the resources for sustaining nutrition and physical activity supports or standards in selected settings. The focus is on leveraged resources that include staff, funding, and in-kind support. LT9a. Staff (number of full-time equivalents [# FTE]) LT9b. Funding (total dollars spent) LT9c. In-kind support including the value of: • Physical contributions such as dedicated space, new equipment, etc. • Partnership activities and contributions • Leader and/or champion activities and contributions • Volunteer staffing time (hours)

	• Communication activities designed to continue awareness and support for the program (number of activities)
What to Measure	**SNAP-Ed Costs (pro-rated for the specific project but excluding fixed costs and SNAP-Ed infrastructure):** • Personnel, consultants providing direct assistance to the partners • Out-of-pocket costs for materials, training, travel to this project • Grant award to partner organization • Other costs **In-kind resources:** • Personnel: The dollar-value equivalent of employee time for those who spend a significant amount of their on-the-job time (≥10%) to help plan, conduct, report on, or evaluate the SNAP-Ed intervention, paid by a partner institution or organization. Estimated using the value of salary and benefits times the percent time spend on SNAP-Ed work. • Volunteers: Calculated using conventional Federal calculations for volunteer time • Physical space, equipment, or services that are redirected for dedication for SNAP-Ed purposes and provided by the institution or organization for SNAP-Ed use. Includes space only when it could otherwise be rented out. Baseline and annual change in the amount of these resources should be monitored. An annual comparison may determine whether there is maintenance-of-effort or an increase in resources contributed by partners. See ST6 and ST7 for more information on partnership and local champion resources and how to measure them. See LT8 for more information on media and how to measure its costs.
Population	NA

Surveys and Data Collection Tools

Reviews of administrative documents like budgets and work plans to pull information on staffing, budget, and support operations such as needs assessments, strategic plans, evaluation reports, media buys, etc. Where available, a review of the sustainability plan could determine the commitment of resources by partners, champions, and other critical stakeholders.

On-site assessments and inventories can provide information about personnel, space, physical conditions, and the equipment available to conduct ongoing programmatic activities. Alternatively, any documentation of facility size, conditions, and equipment could be reviewed.

On-site interviews with staff, partners, and champions about the nature and value of their organization's engagement.

Staffing: The dollar-value of personnel whose job is dedicated to help plan, conduct, report on, or evaluate the SNAP-Ed intervention and not paid by SNAP-Ed. They may be paid through a partner's budget, from grants, or from donations.

Environmental Settings

Funding: The total dollars in out-of-pocket costs paid to co-fund the SNAP-Ed intervention like rented facilities, transportation, media, consultants or contractors. Dollars may come from a partner's budget, from grants, or from donations.

The **Community Tool Box** includes a checklist to assist in assessing in-kind support
http://ctb.ku.edu/en/table-of-contents/sustain/long-term-sustainability/solicit-contributions/tools

Key Glossary Terms

Funding
In-kind support
Leveraged resources

Additional Resources or Supporting Citations

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Environmental Settings

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LT10: Planned Sustainability	
Framework Component	Effectiveness & Maintenance – Organizational Implementation and Effectiveness
Indicator Description	This indicator focuses on the planned activities undertaken during the period assessed to sustain effective SNAP-Ed programming conducted by Implementing Agencies. It captures the process of sustaining SNAP-Ed strategies and interventions adopted and implemented in MT5, MT6, LT5, and LT6. Organizations that implement SNAP-Ed interventions can only deliver benefits if they are able to sustain activities over time. Sustaining these investments and services becomes critical if they are to effectively address the nutrition and physical activity needs of SNAP-Ed constituents.
Background and Context	Sustainability is the continued use of intervention components and activities for the continued achievement of desirable programmatic and population outcomes. That can look different for different organizations and contexts. In some situations, it is simply a continuity of a program or services—the ability to carry on program services through funding and resource shifts or losses. In others, it is about institutionalizing services or the continuation of activities and impacts; creating a legacy; including continuing organizational ideals, principles, and beliefs; upholding existing relationships; and/or maintaining consistent outcomes. There is no single formula or answer to the sustainability challenge. However, creating a written sustainability plan will provide a road map to guide you and your partners as you work on sustainability efforts. A sustainability plan is a written document that describes the priorities and action steps that will be taken to ensure the long-term sustainability of a SNAP-Ed intervention or initiative. The plan should reflect the input and engagement of partners (ST7), champions (ST6), and other critical stakeholders who have been engaged in the intervention and can develop long-term buy-in and support for continued intervention activities and efforts. Once a sustainability plan has been developed and implemented, monitoring of the plan should occur with a focus on which activities are being conducted and whether benchmarks and targets are being met. Strong plans can determine success in sustaining interventions in specific settings. When developing a sustainability plan, be sure that it addresses critical components of sustainability and is comprehensive. Strong sustainability plans should address the following questions: • Are benchmarks/targets established to indicate sustainability success?

	• Are there implementation mechanisms identified for the sustainability of the setting or intervention? • Are roles and responsibilities assigned to implement the plan? • Is funding attached? • Is there a time line identified for achieving sustainability? • Does the plan identify a monitoring system for tracking success?
Outcome Measures	LT10. Total number (or proportion) of organizations or sites that have adopted and/or implemented a strong sustainability plan to maintain effective educational, marketing, nutrition, or physical activity standards/policies, systems, or environmental changes.
What to Measure	First, conduct a sustainability assessment to determine the sustainability capacity of an intervention and identify criteria for success. Several resources are available below to conduct an assessment. Next, develop and implement a sustainability plan. A number of resources are available to assist with plan development and implementation (please see Resources section). Once a sustainability plan has been developed and implemented, monitor it to determine the following: • Are benchmarks and targets being met? • Are partners and other stakeholders continuing to support the intervention? Monitoring should occur at regular intervals to determine progress and identify areas for improvement. Conduct a review of the plan's progress on a regular basis.
Population	NA
Surveys and Data Collection Tools	
Sustainability Assessments The Sustainability Assessment Tool has undergone reliability testing and can be used by programs in a variety disciplines and settings to understand and plan for sustainability. The Center TRT website includes the tool and other resources that can assist in the planning and development of sustainability plans. http://www.centertrt.org/?p=sustainability_overview **Developing/Implementing a Sustainability Plan** The CDC Healthy Communities Sustainability Planning Guide provides step-by-step instructions for developing a sustainability plan. http://www.cdc.gov/nccdphp/dch/programs/healthycommunitiesprogram/pdf/sustainability_guide.pdf	

Environmental Settings

Georgia State University has developed a sustainability framework and self-assessment tool that describes nine areas of strategy, capacity, and action that help to position an organization or program for sustainability. This framework and assessment tool can assist SNAP-Ed settings in determining critical components of a sustainability plan and can help assess a program's level of readiness for sustainability
https://www.raconline.org/sustainability/pdf/georgia-health-policy-center-sustainability-framework.pdf
https://www.raconline.org/sustainability/pdf/sustainability-self-assessment-tool.pdf

AmeriCorp has developed a toolkit to assist in the development of a program that is sustainable, builds organizational and local capacity, and has the full involvement of community volunteers. It will lead you through the processes for developing a sustainability and capacity building plan and applying a variety of methods, approaches and strategies to carry out that plan.
http://www.jrsa.org/njjec/tk-sustainability-sp/toolkitprogramsustainability.pdf

The U.S. Department of Health and Human Services, Office of Adolescent Health (OAH) developed this framework on sustainability for grantees. It is one tool in a series of sustainability resources aimed to support grantees in planning for their long-term success.
http://www.hhs.gov/ash/oah/snippets/508%20documents/creating_sustainableimpacts_framework.pdf

Key Glossary Terms

Sustainability
Sustainability plan

Additional Resources or Supporting Citations

The U.S. Department of Health and Human Services (HHS), Office on Women's Health (OWH) commissioned a comprehensive review of existing literature relevant to understanding how to define, conceptualize, and measure sustainability across health programs and initiatives. This report presents the findings of this review, as well as the conceptual frameworks, specific assessment methods, tools, and strategies used to increase the likelihood of achieving sustainability.
http://womenshealth.gov/publications/federal-report/sustainabilityreview-060109.pdf

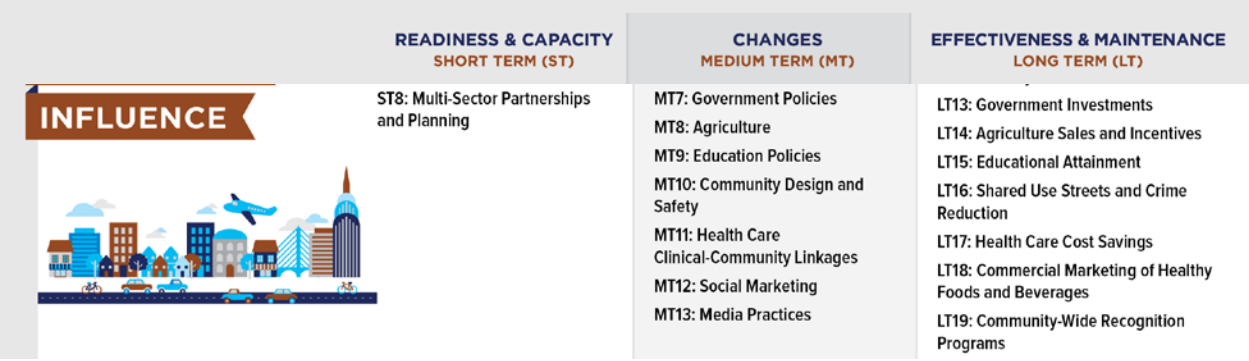
LT11: Unexpected Benefits	
Framework Component	Effectiveness & Maintenance – Organizational Implementation and Effectiveness
Indicator Description	This indicator focuses on unanticipated or unexpected benefits occurring during the period assessed that accrued incidental to Adoption, Implementation, and/or Maintenance of SNAP-Ed programming conducted by Implementing Agencies. It reports the number, type, and sectors in which the benefits occurred. The benefits may take many different forms, be associated with SNAP-Ed activities conducted in environmental settings or in a broader, multi-sector context at the local, state, territorial, or tribal levels, and take form in the public, nonprofit or business sectors. The benefits will be serendipitous, resulting from new priorities, indirect relationships, or word-of-mouth information that occurred with little direct involvement or intentional planning by SNAP-Ed staff.
Background and Context	Unexpected benefits grow out of efforts in which SNAP-Ed was a key player. Distinguishing questions to determine attribution might be, "Was this unexpected benefit a result of SNAP-Ed leadership, initiative, or results?" and "How likely is it that this unexpected benefit would have occurred without SNAP-Ed?" Very sophisticated and longer-term evaluations are needed to establish causation by and attribution to any single effort, such as SNAP-Ed. This indicator is intended to capture distal and indirect results of SNAP-Ed activity. Some unexpected benefits will be activities that only SNAP-Ed partners may conduct, such as advocating for new public policies, or that fund activities or programs that go beyond what SNAP-Ed may do, such as to non-SNAP-Ed eligible population segments or higher-income geographic areas. Characterizing unexpected benefits will encourage cooperation and collaboration with communities and partners. This leverages the impact of SNAP-Ed, increasing all partners' effectiveness and efficiency, and builds momentum for broader diffusion of positive programs. The goal is to continually move toward new, positive norms in the public, nonprofit, and business sectors; in environmental settings, organizations, and systems that reach large numbers of people; and in larger geographic areas. LT11, Unexpected Benefits, differs from LT9, Leveraged Resources, in that the benefits are unexpected or serendipitous rather than planned or intentional, and the outcome measures are primarily descriptive rather than quantitative. Although this indicator is located in the Environmental Settings chapter and includes unexpected benefits in any of the Environmental Settings in LT5–LT8, unexpected benefits may occur as outgrowths of work with partners and champions in Sectors of Influence (LT12–LT19). Both are reported in LT11.
Outcome Measures	This indicator measures unexpected benefits that occur in any setting, sector, or jurisdiction. Where feasible, the number of people expected to experience the unexpected benefit (reach) may be cited. Outcomes include, but are not limited to:

Environmental Settings

	LT11a: Government: Number and topics of unexpected new statutes, regulations, and changes in administrative interpretations of governmental policy; new grants or permanent budget allocations; Executive Orders, local ordinances, regional policies; initiatives started by governors, mayors, city councils, county commissions, school boards, regional governments; new or redirected staff assignments toward SNAP-Ed related goals; legal reinterpretations or decisions LT11b: Nonprofit: Number and topics of unexpected new organizational initiatives; resource allocations such as "dedicated" personnel, budget, or grant-making; new organizations established to carry forward SNAP-Ed-related initiatives (coalitions or collaboratives establishing themselves as nonprofit organizations, like food policy councils or standing committees within civic organizations) LT11c: Business: Number and topics of unexpected new company initiatives; new resource allocations such as "dedicated" personnel or budget; peer leadership within a domain or setting that results in new practices or resource allocation by a chain of stores, fitness centers, or home supply centers LT11d: Other multi-sector attributions: Number and types of other unexpected benefits that go beyond those specified in other indicators (MT7–13 and LT12–19), such as higher rates of school attendance, reduced walking/biking injuries, measures of community livability, food insecurity, economic stimulus, or unemployment
What to Measure	Keeping track of unexpected benefits need not be labor intensive or complicated. For example: • Measurement of unexpected benefits may be quantitative, as with the dollar value of a new grant, or qualitative such as a case study showing how SNAP-Ed activities contributed to a new policy, initiative, or business decision. In some cases, the unexpected benefit may have occurred after SNAP-Ed funding ended because the experience prepared partners to take advantage of new opportunities for which they otherwise might not have been able to qualify. • Where scoring tools have already been completed, for example at baseline and subsequent to implementation, they can be repeated after SNAP-Ed has stepped back and any change in scores explored using key informant interviews to understand how unexpected benefits evolved from SNAP-Ed. Relevant instruments dealing with sustainability may be available in various repositories (NCCOR, RWJF centers, various policy and social science institutes). In the future, the "diffusion of innovations" literature and collective impact metrics may provide other ways to approach this question. • Survey instruments or interviews should use metrics that are linked to SNAP-Ed objectives and interventions, thus making an association with SNAP-Ed reasonable. • In some cases, often in casual communications, third parties independently cite the SNAP-Ed interventions or give testimonials and anecdotes that attribute unexpected benefits to SNAP-Ed and can be used to explore the link with SNAP-Ed as a contributor. The types and scale of unexpected benefits accrued by site, organization, system, and jurisdiction, and attributed by

	partners in whole or in part to SNAP-Ed can be expressed through: a. **New, unexpected resources** dedicated to maintaining SNAP-Ed initiatives, either supporting former SNAP-Ed functions or addressing newly justified needs, specify (grants, donations, budget allocations, personnel reassignments, community benefit commitments) b. **New, unexpected policies and initiatives** with "dedicated" resources (budget, personnel) c. **Educational outcomes**, specify (average daily attendance, academic performance, graduation rates) – see LT15 d. **Social outcomes**, specify (employment, career advancement, encounters with justice system) e. **Social capital** in communities, specify (newly established leadership bodies to address problems identified partially or wholly through SNAP-Ed, community organizations, advocacy bodies f. **Health-related statistics** in a population segment, community, county, region, or statewide that reasonably could be seen as co-occurring with significant, comprehensive, and long-term SNAP-Ed intervention activity – see LT17 and Population Results
Population	NA
Surveys and Data Collection Tools: NA	
Key Glossary Terms Sectors Settings Unexpected benefits	
Additional Resources or Supporting Citations For reporting purposes, consider classifying unexpected benefits using the SNAP-Ed domains (eat, learn, live, play, shop, and work) in the priority intervention settings and sites at local, regional, or statewide levels. This would permit SNAP-Ed programs and partners to more effectively communicate impact with different stakeholder segments.	

Chapter 3. Sectors of Influence



Introduction

The epidemics of obesity, diet-related disease, and other chronic diseases are complex problems that require a multi-pronged solution. Low-income neighborhoods, villages, and communities of color disproportionately suffer from unequal access to healthy and affordable options for nutritious foods and free or low-cost physical activity. The *2015-2020 Dietary Guidelines for Americans* recognize that all sectors of society—including individuals and families, educators and health professionals, communities, nonprofits, businesses, and policy makers—shape the context and characteristics of the environmental settings and jurisdictions where people eat, learn, live, play, shop, and work. To prevent and reduce obesity in SNAP-Ed eligible communities, approaches must move away from one-time interventions in single settings toward large-scale local, state, territorial, and tribal approaches that have the potential to transform conditions for a large segment of the population and be sustained over time.

This chapter of the framework focuses on reforming food systems, increasing access to healthy foods in low-income areas, and promoting safe and livable communities through public health approaches. The over-arching evaluation question is: To what extent is SNAP-Ed programming working with other sectors to collectively impact lifelong healthy eating and active living in low-income communities? The sectors of influence focus on local, state, territorial, and tribal-level PSE and marketing changes that can be achieved through public, private, and non-governmental partnerships.

Low-income neighborhoods and communities of color disproportionately suffer from unequal access to healthy and affordable options for nutritious foods and free or low-cost physical activity.

Community and public health SNAP-Ed interventions should focus on low-income areas, such as a set of census tracts in which 50 percent or more of the households have income less than 185 percent of the federal poverty level or it could be a city or federally designated zone of economic need. The intervention does not have to only affect the low-income area, but the low-income area must be prioritized.

SNAP State Agencies and SNAP-Ed Implementing Agencies have an essential role in halting the obesity epidemic among vulnerable populations by partnering with other sectors of influence, such as agriculture, media, food industry, education, and community design. See the complete list of sectors of influence below. Consistent with SNAP-Ed Approach 3, as defined in the Food and Nutrition Act and the 2016 SNAP-Ed guidance, the evaluation indicators in this sphere of influence focus on tracking policies, improvements, and associated outcomes resulting from multi-sectoral changes across geographic levels. These levels include: local (e.g., neighborhoods, communities, parishes, cities, towns, counties, and boroughs), state, territory/commonwealth, and recognized Indian Nations (often referred to as tribes, nations, bands, pueblos, Rancherias [in California], native villages, and Alaska Native Corporations).

Sectors of Influence		
Food industry	Education	Media
Government	Community design	Agriculture
Public health and health care	Public safety	Commercial marketing

There are many essential components for state and community coalitions working across sectors—from leadership to communication to alignment of funding toward a common vision. When SNAP-Ed and non-SNAP-Ed funded partners collaborate, they can work toward achieving a common community change goal that no agency can achieve on its own. One of the driving forces in SNAP-Ed community and public health approaches is community engagement. Low-income communities that are disenfranchised, where conditions contribute to health inequities and social injustices, benefit from participating in community-level changes. Community members are often at the center of SNAP-Ed strategies and interventions.

Collective Impact

At this level of the Social-Ecological Model, it is difficult to tease out the relative contributions of SNAP-Ed from other state- or community-based programs, including other USDA/FNS programs (e.g., child nutrition, food distribution, and WIC), as well as programs funded by the CDC and private foundations, such as the Robert Wood Johnson Foundation. For the Sectors of Influence indicators, we consider the combined impact of partnerships among multiple agencies that receive complementary funding streams. The Stanford Social Innovation Review published a commentary on a model known as collective impact, defined as "the commitment of a group of important actors from different sectors to a common agenda for solving a specific social problem" (Kania and Kramer, 2001). In order for collective impact to work, five elements must be in place:

1. Common Agenda: A mutually agreed upon solution to solving widespread problems (e.g., food insecurity, childhood obesity)

2. Shared Measurement Systems: A uniform data tracking system to constantly monitor and review data outcomes to inform continuous quality improvement.
3. Mutually Reinforcing Activities: SNAP-Ed, other FNS programs, and non-FNS funded programs play a complementary role, and in developing state plans of operations and grant activities, all partners should identify their strengths, resources, unique activities, and the collective results.
4. Continuous Communication: Public health nutrition and obesity prevention programs use their own jargon and adhere to their own regulations, which differ from those of other sectors. There is a need for a shared vocabulary and regular productive meetings over time.
5. Backbone Support Organizations: One of the most frequently cited reasons that collaborations fail is the lack of a supporting organization that builds the infrastructure and "manages" the collaboration. Given power dynamics and time and resource constraints, it can be difficult to identify one agency that best fits this role. In some instances, SNAP-Ed may take the role of backbone organization when there is funding available for dedicated staff to manage the collaboration. Other times, multiple funding streams are pooled to create a new entity with staff for the coalition. One example of a backbone support organization is the Washington State Food System Roundtable, for which SNAP-Ed funding pays for a portion of a dedicated project manager to oversee the multi-sector, statewide collaboration.

Evaluating Obesity Prevention Efforts

In August 2013, the Institute of Medicine (IOM) released *Evaluating Obesity Prevention Efforts: A Plan for Measuring Progress*. This report provides specific recommendations for CDC, NIH, USDA, and NCCOR. The overall emphasis is to improve the collective impact of obesity prevention efforts across the following five areas. A pictorial representation of these strategies appears on the next page.

1. Improve the physical activity environment.
2. Improve the food and beverage environment.
3. Improve the messaging environment.
4. Improve health care and worksites.
5. Improve school and child care environments.

Source: Institute of Medicine. Evaluating Obesity Prevention Efforts: A Plan for Measuring Progress. August 2, 2013. http://iom.nationalacademies.org/Reports/2013/Evaluating-Obesity-Prevention-Efforts-A-Plan-for-Measuring-Progress.aspx

Each goal area contains a number of specific and measurable indicators of progress at the community and population level, some of which are appropriate for SNAP-Ed and informed the content in the Sectors of Influence indicator write-ups. Most of the indicators in this chapter can be measured using existing or secondary data sources, including policy tracking and other public health tools. Otherwise, the measures are identified as developmental; SNAP-Ed agencies can help to develop practical approaches over time. SNAP-Ed agencies are also encouraged to use Community Commons, which provides public access to thousands of meaningful data layers that allow mapping and reporting capabilities. Visit http://www.communitycommons.org/.

Chapter Overview

The Sectors of Influence chapter begins with an assessment of capacity and readiness for community-driven, multi-sectoral changes through partnerships and planning in the short-term. Medium-term indicators identify PSE changes championed by different sector representatives that take effect at the local, state, territorial, or tribal level. Each indicator includes outcome measures of specific PSE changes and associated reach, which is described as the estimated number of people in the target population who have increased access to or are protected by a strategy or intervention (Soler, et al., 2016). Following the

parameters established in the CDC's *Communities Putting Prevention to Work* program, reach is calculated by using census data or aggregating setting-specific data (e.g., school enrollment). When multiple communities benefit from an intervention, combine all reach data. The maximum reach a community could have for any one intervention is the census population. Where feasible, calculate a proportion of the population reached that is SNAP-Ed eligible—that is, within 185 percent of the federal poverty level. This helps ensure SNAP-Ed interventions are reaching disparate populations, Last, the long-term indicators focus on the impacts to communities, states, territories, and Indian Tribal Organizations resulting from the PSE changes. These long-term measures demonstrate the societal value of SNAP-Ed through improvements in educational attainment, reductions in health care costs, increased agricultural sales, and establishment or strengthening of regional and local food systems.

Short-Term (ST) Indicators:

MULTI-SECTOR CAPACITY

ST8: MULTI-SECTOR PARTNERSHIPS AND PLANNING

Sectors of Influence

ST8: Multi-Sector Partnerships and Planning ☑	
Framework Component	Readiness & Capacity -- Multi-Sector Capacity
Indicator Description	This indicator measures community capacity by assessing the readiness of multi-sector partnerships or coalitions to plan and achieve the changes in nutrition, physical activity, food security, and/or obesity prevention policies and practices that are evaluated as subsequent indicators in the Sectors of Influence level of the framework.
Background and Context	ST8 identifies specific, quantifiable measures for evaluating multi-sector partnerships or coalitions that are planning for community-level changes in policies and/or practices for nutrition, physical activity, food security, and or/obesity prevention. While ST7 measures readiness and capacity for changes at the organizational level within SNAP-Ed sites and organizations (e.g., school building, public housing office, park, or food bank), ST8 assesses partnerships and coalitions at the local, state, territorial, or tribal level composed of at least five diverse sector representatives. See glossary for a definition of sectors. Multi-sector partnerships or coalitions at the *jurisdiction* level include those operating and/or seeking to make changes at the local (e.g., community, district, parish, city, town, county, borough, region), state, territorial/commonwealth, or tribal levels. Those operating at a local or community level may be defined by geographic, demographic, and/or civic/political boundaries. For example, a multi-sector coalition within a "community" could consist of the residents of a neighborhood, the members of a particular demographic group within a geographic region, or all individuals served by a group of community-based and/or governmental institutions. A SNAP-Ed State Nutrition Action Council (SNAC) or relevant collective impact initiative can also be evaluated using ST8 measures.
Outcome Measures	ST8. Number of state SNAP-Ed programs or local communities with multi-sector partnerships or coalitions that include at least five diverse sector representatives (who reach low-income audiences through their services) that address nutrition or physical activity-related community changes, such as policies, practices, or other elements of the framework. For each multi-sector partnership or coalition being evaluated, the following should be measured: ST8a. Types and number of organizations or individuals per sector represented

Sectors of Influence

	ST8b. Documented level of multi-sector representation of the partnership (as documented by partners) ST8c. Documented level of active engagement of the partnership ST8d. Level of influence of SNAP-Ed in the partnership (as documented by partners)
What to Measure	Multi-sector partnerships and coalitions can be measured along the following dimensions: 1. Types and number of sectors represented in the partnership or coalition (ST8a) 2. Number of partner agencies within each sector, and the roles and resources contained within the partnership or coalition (ST8b) 3. Stage of coalition or partnership maturity, as measured by the documented level of active engagement (ST8c). 4. Partners' assessment of the state or local SNAP-Ed Agency's level of influence in the state, local, territorial, or tribal nutrition or obesity prevention partnership (ST8d) 5. Network analytics documenting the overall level of integration and active participation of the partnership (ST8a-d), as measured by: • Degree of communication within the partnership (communication network density) • Degree of collaboration within the partnership (collaboration network density) • Extent to which communication within the partnership is focused around one sector or one lead agency (communication network centralization) • Extent to which collaboration within the partnership is focused around one sector or one lead agency (collaboration network centralization) • Agencies with the strongest and weakest connections within the partnership (centrality) • Level of influence of SNAP-Ed within the partnership, as measured by the centrality of the SNAP-Ed agency in the partnership (the degree to which the SNAP-Ed agency serves as an important link within the partnership) **While partnerships and coalitions of any maturity can be assessed, those in existence for more than 6 months may yield richer data when measuring dimensions ST8b-d.**
Population	NA

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Surveys and Data Collection Tools
For this measure, surveys and/or interviews are conducted with members of the partnership(s) or coalition(s). **Outcome Measures ST8a and ST8b:** Type and number of organizations/individuals in the coalition, roles and resources contained within the coalition, stage of coalition development, and partners' assessment of the SNAP-Ed agencies' role can all be assessed using one of the following two free, validated tools for measuring coalitions and outcomes: • **Wilder Collaborative Factors Inventory** http://wilderresearch.org/tools/cfi/ • **Butterfoss Coalition Effectiveness Inventory** http://coalitionswork.com/wp-content/uploads/coalition_effectiveness_inventory.pdf While not included in the measurement outcomes, if a coalition or partnership is in the very early stages, the following tool may also prove useful: • **CoalitionsWork Evaluability Assessment Tool** http://coalitionswork.com/wp-content/uploads/are_you_ready_to_evaluate_your_coalition.pdf **Outcome Measures ST8c and ST8d:** Level of active engagement within the partnership and level of influence of the SNAP-Ed partner within the partnership can be assessed using the following: • **Levels of Collaboration Scale** https://www.teamsciencetoolkit.cancer.gov/public/TSResourceMeasure.aspx?tid=2&rid=467 A common, validated survey item for measuring the degree of collaboration within their partnership or coalition. The data generated by this measure are often used as the basis for a network analysis. • **The PARTNER tool** http://www.partnertool.net/ A network analysis (density, centrality, centralization), along with other partnership-specific measures, may be conducted using this free, online network analysis tool. It is specifically for community-based partnerships to use in assessing their partnership development. This tool assumes no knowledge of network analysis.

Sectors of Influence

Key Glossary Terms
Centralization Collaboration Collective impact Community Network analysis Sectors
Additional Resources or Supporting Citations More information on how to evaluate partnerships, including formative measures to assist in the strategic planning and development of a partnership initiative, may be found on the following sites: • **CDC Fundamentals of Evaluating Partnerships** http://www.cdc.gov/dhdsp/programs/spha/evaluation_guides/evaluating_partnerships.htm • **CoalitionsWork – Additional Resources** http://coalitionswork.com/resources/

Medium-Term (MT) Indicators:

MULTI-SECTOR CHANGES

MT7: GOVERNMENT POLICIES
MT8: AGRICULTURE
MT9: EDUCATION POLICIES
MT10: COMMUNITY DESIGN AND SAFETY
MT11: HEALTH CARE CLINICAL-COMMUNITY LINKAGES
MT12: SOCIAL MARKETING
MT13: MEDIA PRACTICES

Sectors of Influence

MT7: Government Policies	
Framework Component	Changes – Multi-Sector
Indicator Description	This indicator measures the number of individual jurisdictions (not settings) where governments (city, town, county, region, state, territory/commonwealth, Indian Tribal Organization, Alaska Native Corporation) enacted policies and practices to increase access to healthy food and/or opportunities for physical activity for areas where the residents are primarily low-income. PSE changes result from SNAP-Ed multi-sector partnerships and that are attributable in whole or in part to SNAP-Ed activity. In the case of MT7a and, potentially MT7e, it concurrently reduces access to less healthy food or sedentary behavior.
Background and Context	The indicator is significant because people who live in low-income neighborhoods have less access to healthy food and physical activity than others. Policies and standards that establish healthy choices in public settings where low-income residents receive services and nutrition education to guide best choices when they are available is a way to increase access and the probability that it will be used. The USDA Healthy Incentives Pilot demonstrated that when a financial incentive to purchase fruit and vegetables was added to SNAP benefits, it was used, particularly increasing vegetable consumption.[1] Improvement of a jurisdiction's General Plan that specifically addresses or encompasses an area where residents are primarily low-income might include elements such as zoning, neighborhood plans that would make it more feasible to develop walkable communities, raise poultry, or establish community gardens on vacant lots.
Outcome Measures	MT7a. Number or percentage of governmental jurisdictions that have healthy food procurement and/or vending policies and standards in place consistent with the *2015-2020 Dietary Guidelines for Americans*. MT7b. Number or percentage of governmental jurisdictions that provide nutrition education/nutrition resources at the point of enrollment for SNAP; e.g., 1) in offices [jurisdictional], 2) online [statewide], 3) by telephone [statewide] MT7c. Number or percentage of governmental jurisdictions 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)[2] MT7d. Number or percentage of governmental jurisdictions that have evidence-based policies and standards in place to support physical activity (e.g., establishment of bike-friendly transport facilities, use of point-of-decision prompts for stairwells) MT7e. Number or percentage of communities that have achieved a nutrition or health element in their General Plan to improve access and/or opportunities in areas where residents are primarily low-income[3] MT7f. Estimated number of people in the target population who have increased access to or are protected by the

Sectors of Influence

	government policy or intervention • Total number of persons in the census-defined area(s) • Number and proportion of persons who are SNAP-Ed eligible
What to Measure	a. Written procurement policies and standards b. The routine mechanism through which nutrition education resources and/or referrals are made at each of the potential points of initial enrollment contact c. The funding sources of financial incentive contribution to promotion of local production and distribution of food, e.g., Double Up Food Bucks or similar program in the jurisdiction(s) of interest d. Written policies or built infrastructure supportive of physical activity e. Review General Plans when they undergo an update
Population	Low-income residents receiving services in cities, towns, and counties
Surveys and Data Collection Tools	
Procurement and Vending • Contact one of the sources below to inquire about the policy and obtain a copy o Office that maintains government-wide policies in jurisdiction of interest (e.g., city/county manager's office, mayor's office) o Department of facilities management o Purchasing staff person who manages the food service or vending contract for jurisdiction **Nutrition Education in SNAP-Ed Enrollment Settings** • Contact the office in the jurisdiction(s) you are evaluating that enrolls SNAP applicants. At the state level, it may be called the Department of Social Services, Family and Social Services Administration, Health and Human Services Department, etc. A Google search term [State Name SNAP] should produce the agency name, and there should be contact information online. At the county or regional level, look for the County Welfare Office. Example: Arkansas – State level URL http://humanservices.arkansas.gov/dco/Pages/SupportServices.aspx includes a direct link to online SNAP-Ed http://www.uaex.edu/health-living/food-nutrition/eating-well/snap-ed.aspx and information about how to find a local SNAP-Ed program. For selected Arkansas County information, use the map URL for contact information http://humanservices.arkansas.gov/Pages/DHSCountyOffices.aspx. **Policies and Standards to Support Physical Activity** • The jurisdiction's human resources office will be the best contact.	

Sectors of Influence

Public-Private Partnerships to Provide Incentives for the Local Production and Distribution of Food

- Contact the jurisdiction(s) you are evaluating to see if they are a contributing funder to a farmers market SNAP-based incentive program.
- Double-Up Food Bucks is now operating in 22 states; contact them to see if they are operating in yours and follow up to see if your state health department or a local jurisdiction is supporting their efforts—info@doubleupfoodbucks.org. http://www.doubleupfoodbucks.org/national-network/ (see MT12)

General Plan

- Review General Plans in the jurisdictions of interest. Use Google to easily find a copy to review.
- An excellent resource published by ChangeLab Solutions provides many examples of the types of elements that would be regarded as improving access to healthy food and/or opportunity for physical activity for residents of low-income neighborhoods. See specific examples of what might be considered improvements under LT13, Government Investments and Incentives. http://www.changelabsolutions.org/sites/default/files/Healthy_General_Plans_Toolkit_Updated_20120517_0.pdf

Key Glossary Terms

General plan
Healthy food procurement
Local food production
Nutrition assistance

Additional Resources or Supporting Citations

[1] Bartlett S, Klerman J, Olsho L, et al. *Evaluation of the Healthy Incentives Pilot (HIP): Final Report*. Alexandria, VA: Prepared by Abt Associates for the U.S. Department of Agriculture, Food and Nutrition Service; September 2014. 552 p.

[2] Martinez S, Hand M, Da Pra M, et al. *Local Food Systems: Concepts, Impacts, and Issues.* U.S. Department of Agriculture, Economic Research Service; May 2010. 80 p. ERR 97.

[3] "Low-income" area will depend on the scope of the element defined by the General Plan. For example, it could be a set of census tracts in which 50 percent or more of the households have income less than 185 percent of the federal poverty level or it could be a city or federally designated zone of economic need. The improvement does not have to only affect the low-income area, but the low-income area must be prioritized in the improvement.

Centers for Disease Control and Prevention. *Improving the Food Environment Through Nutrition Standards: A Guide for Government Procurement.* U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division for Heart Disease and Stroke Prevention; February 2011. 24 p.

Sectors of Influence

MT8: Agriculture	
Framework Component	Changes – Multi-Sector
Indicator Description	Changes in agricultural PSE activities emphasizing farmers markets, direct-to-consumer agriculture, and farm-to-school resulting from SNAP-Ed multi-sector partnerships at the local, state, territorial, or tribal level.
Background and Context	Agriculture is one of the most important sector representatives for SNAP-Ed program purposes. Farmers markets, farm-to-school programs, and farms that sell directly to the public represent a growing food distribution channel to bring fresh and locally grown foods to SNAP-Ed–eligible children and their families. SNAP-Ed agencies can contribute to activities that increase the availability of farm-to-where-you-are models in low-income communities by consulting with farmer-producers and farmers market managers on business and marketing models and participating in farm-to-school programs. This indicator provides a pulse of national and state-specific activity in agricultural models reaching consumers. While agriculture is a component of food systems in indicator LT12, we tease it out in the evaluation framework for the purposes of evaluating and tracking specific agricultural metrics. Many local food-promotion activities compose Know Your Farmer, Know Your Food (KYF2), a USDA-wide effort to strengthen local and regional food systems. Across the country, farmers, roadside farm stands, and farmers markets are experiencing consumer growth, particularly among SNAP-eligible shoppers. National SNAP redemptions at farmers markets totaled $18.8 million during fiscal year 2014, a nearly six-fold increase since 2008. The number of farmers markets has grown by 67 percent since 2008; there are now more than 7,800 listed in USDA's National Farmers Market Directory. Instituting a bonus incentive project is one approach farmers markets are using to attract SNAP customers. These projects provide matching "bonus dollars," in the form of tokens or paper coupons, for purchases made with SNAP benefits. The incentives, funded by private foundations, nonprofit organizations and local governments, are structured to improve the purchasing power of low-income families at farmers markets, so that they can afford to buy more fruits and vegetables and other healthy foods. SNAP-Ed funds cannot be used to pay for the cash value of the incentive. The 2014 Farm Bill authorized the Food Insecurity Nutrition Incentive (FINI) grants. The FINI Grant Program supports projects to increase the purchase of fruits and vegetables among low-income consumers participating in the SNAP by providing incentives at the point of purchase. The Senior Farmers Market Nutrition Program (SFMNP) and the WIC Farmers Market Nutrition Program (FMNP)

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	provide locally grown fruits and vegetables through farmers markets to low-income seniors and WIC participants, respectively. The Food and Nutrition Service also administers Farm-to-School grants to state agencies and local operators primarily focused on procuring local foods in the National School Lunch Program, and more recently, the Summer Food Service Program and Child and Adult Care Food Program.
Outcome Measures	MT8a-1. Total number of farmers markets that accept SNAP benefits per 10,000 SNAP recipients MT8a-2. Total number of on-farm markets that accept SNAP benefits per 10,000 SNAP recipients MT8a-3. Total number of community-supported agriculture (CSA) initiatives that accept SNAP benefits per 10,000 SNAP recipients MT8b. Number of farmers markets that offer SNAP-bonus incentive programs MT8c. Number of school districts that participate in farm-to-school activities MT8d. Proportion of low-income communities with farmers markets (*developmental*) MT8e. Estimated number of people in the target population who have increased access to or benefit from the agricultural policy or intervention • Total number of persons in the census-defined area(s) • Number and proportion of persons who are SNAP-Ed eligible
What to Measure	At the national and state level, calculate the number of farmers markets, on-farm markets, and CSAs that accept SNAP benefits per 10,000 SNAP participants. SNAP participation changes monthly; calculating a monthly average caseload during the farmers market season in your state may be appropriate. This indicator calculation is adjusted for variation in SNAP population. For instance, to calculate MT8a-1, if a state has 178 farmers markets that accept SNAP, and an average monthly SNAP caseload of 950,000 participants, the adjustment would be equal to 178/(950,000/10,000), yielding 1.87 farmers markets for every 10,000 SNAP participants. Similarly, track the number of farmers markets that offered a bonus incentive program, such as Double Up Food Bucks or Bonus Bucks, at any time during the farmers market season, and divide this amount by the total number of farmers markets. Bonus incentive programs may start and stop contingent on availability of private incentive funds.

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	State departments of agriculture, farmers market associations, or farm bureaus may be an excellent source of this information. Double-Up Food Bucks is now operating in 22 states Track the total number of school districts that participated in farm-to-school activities during the previous school year. Divide this number by the total number of school districts in the state or local jurisdiction. One of the outcome measures—MT8d—is developmental; there is no current system for tracking coverage of farmers markets in low-income areas in the state or jurisdiction. Use geographic information system (GIS) mapping tools, such as those at www.communitycommons.org to assess the overlay of farmers markets with areas that are predominantly low-income. This measure is to ensure that farmers markets are accessible to disparate populations.
Population	NA
Surveys and Data Collection Tools	
SNAP Retailer Locator http://www.fns.usda.gov/snap/retailerlocator USDA's Local Food Directories http://www.ams.usda.gov/services/local-regional/food-directories Listing of farmers markets, on-farm markets, and CSAs that include SNAP as a form of payment. The directories are managed and operated by the Agricultural Marketing Service (AMS). Double up Food Bucks http://www.doubleupfoodbucks.org/national-network/ The Farm to School Census https://farmtoschoolcensus.fns.usda.gov/ USDA distributed the 2015 Farm to School Census to over 18,000 public, private, and charter school districts in the United States. CDC State Fruit and Vegetable Indicator Report http://www.cdc.gov/nutrition/downloads/State-Indicator-Report-Fruits-Vegetables-2013.pdf FM Tracks – Prevention Research Center at Case Western Reserve University http://www.prchn.org/FMTracks.aspx	

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SNAP Program Data http://www.fns.usda.gov/pd/supplemental-nutrition-assistance-program-snap
Key Glossary Terms Community-supported agriculture (CSA) Farmers market Farm-to-school Local food production On-farm market
Additional Resources or Supporting Citations Food and Nutrition Service: SNAP and Farmers Markets http://www.fns.usda.gov/ebt/snap-and-farmers-markets Farmers Market Coalition https://farmersmarketcoalition.org/ Nutrition, Physical Activity and Obesity Data, Trends and Maps web site. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention (CDC), National Center for Chronic Disease Prevention and Health Promotion, Division of Nutrition, Physical Activity and Obesity, Atlanta, GA, 2015. Available at http://www.cdc.gov/nccdphp/DNPAO/index.html. National Farm to School Network http://www.farmtoschool.org/about/what-is-farm-to-school

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MT9: Educational Policies	
Framework Component	Changes – Multi-Sector
Indicator Description	This indicator represents high-level school policies and systems implemented at a state level and achieved through the work of a number of diverse organizations, of which SNAP-Ed will have been one—sometimes in a highly significant way, other times as part of a coalition or collaborative.
Background and Context	This indicator is significant because of the power that a state-level policy decision implies for increased student exposure to physical activity opportunities and heathy eating and concurrent reduced contact with unhealthy eating experiences and sedentary behavior. For example, states with a specific time requirement for physical education reported significantly more weekly PE time than those with a non-specific time requirement at the elementary (over 27 min.) and middle school (over 60 min.) levels or than those with no time requirement, 40 more and 60 more min./week, respectively.[1] Success with this indicator reduces the amount of individual effort at the school level spent on attaining these policies, that can instead be directed towards monitoring as well as exploring additional PSE change interventions.
Outcome Measures	MT9a. Number of low-income schools that require K–12 students receive physical activity instruction totaling 150 minutes per week at the elementary level and 225 minutes per week at the secondary level (middle and high school) MT9b. Number of low-income schools that require K–12 students to be moderately or vigorously physically active for at least 50 percent of time spent in PE classes MT9c. Number of low-income schools that require a formal written agreement between schools and communities or organizations that allows access to school's recreational facilities outside of school hours (joint use) MT9d. Number of low-income schools that integrate nutrition education into K–12 academic standards MT9e. Number of low-income schools that prohibit the sale or service of food through school-based, on-campus fundraisers or limits it to Classification of Laws Associated with School Students (C.L.A.S.S.) School Nutrition Environment State Policy guidelines MT9f. Number of low-income schools that prohibit the sale or service of a la carte (individual, non-entrée) food outside the reimbursable school meal programs, during the service of meals in the cafeteria, or limits it to C.L.A.S.S. School

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	Nutrition Environment State Policy guidelines MT9g. Number of low-income schools that require free access to potable drinking water at all access points at all meal times during all times of the day MT9h. Estimated number of students in the target population who have increased access to or benefit from the educational policy or intervention • Total number of persons in the census-defined area(s) or school enrollment data
What to Measure	First identify which PSE changes are being met at the state level by using the secondary data state database to identify changes in meeting MT9a–MT9h from the 2-year period before; then use the most current data your state has available to identify the number of schools that qualify as SNAP-Ed eligible (at least 50% free and reduced price meals [FRPM]). Report data separately for elementary, middle, and high schools.
Population	Elementary-, middle-, and high school–age children attending schools
Surveys and Data Collection Tools	
Adoption of Policies and Systems MT9a–MT9h • At the state level, each of the measures MT9a–MT9g can be obtain biennially from **The Classification of Laws Associated with School Students (CLASS) website** http://class.cancer.gov/. Each policy has a systematic score. The scoring system is documented in detail on the same webpage as the data. There are two downloadable databases that contain state data, one for physical education and the other for nutrition in schools http://class.cancer.gov/download.aspx. Currently, the available data cover 2003–2013. **Reach** • Most states will have an electronic Department of Education database that will contain a list of schools along with their percentage of FRPM meals. The schools that meet the 50 percent and greater FRPM meals criteria equal the number of schools for reach. • If there are difficulties using your Department of Education database, you can use the **Table Generator on the National Center for Education Statistics (NCES) website** for this purpose http://nces.ed.gov/ccd/elsi/tableGenerator.aspx. • Example: West Virginia's high schools met the criteria for MT9f at the top level (Variable ALASNAHS = 6). Using the NCES table, 48 of the schools qualify as SNAP-Ed eligible; report enrollment data for 48 high schools characterized with a majority low-income student enrollment.	

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Key Glossary Terms
Free and reduced price (school) meals (FRPM)
Additional Resources or Supporting Citations
[1.] Perna FM, Oh A, Chriqui JF, et al. The association of state law to physical education time allocation in US public schools. *Am J Public Health.* 2012. 102;(8):1594-9. doi: 10.2105/AJPH.2011.300587. Epub 2012 May 17.

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MT10: Community Design and Safety	
Framework Component	Changes – Multi-Sector
Indicator Description	Community-based design and safety policies and systems changes that create safer, more appealing places for physical activity.
Background and Context	Indicator MT10 is a "developmental" indicator that examines community-level multi-sector efforts to adopt policies and systems changes that result in safer, more appealing places for physical activity. This indicator measures the number of communities within a defined geographic area (e.g., local, state, territorial, or tribal) that have adopted policies or systems change approaches that directly address community design and safety. The role SNAP-Ed plays is focused on cultivating partnerships and providing education to support the creation and adoption of community design and safety policies and systems changes. As a "developmental" indicator, there is not an existing authoritative secondary data source that provides the necessary data to measure this indicator. Instead, information such as lists of communities that have adopted Crime Prevention Through Environmental Design or Complete Streets policies or Community Policing approaches could be found on websites like the Community Commons, the National Complete Streets Coalition, or the Department of Justice.
Outcome Measures	MT10a. Number or percentage of communities that have adopted policies that include at least one of the following elements that promote safety for parks, open space, trails, or greenways: • Improved access • Improved signage • Improved lighting • Improved operating hours MT10b. Number or percentage of communities that have adopted a Complete Streets policy MT10c. Number or percentage of SNAP-Ed eligible areas (neighborhoods) with community policing initiatives MT10d. Estimated number of people in the target population who have increased access to or benefit from the community

	design and safety policy or intervention • Total number of persons in the census-defined area(s) • Number and proportion of persons who are SNAP-Ed eligible

What to Measure	Whether local zoning and planning codes and regulations include elements consistent with **Crime Prevention Through Environmental Design (CPTED) principles**
	
	<u>Access</u>: Local zoning and planning codes and regulations include access control standards, such as:
	• Clearly defining point of entry
	• Fencing defining access is opaque or designed to have open space so as to avoid a visual barrier
	• Foliage defining access that is between the heights of 3 and 6 feet is designed and maintained so as to not impede line of site
	• Installing a locking gate (if appropriate for the context)
	
	<u>Signage</u>: Local zoning and planning codes and regulations include signage standards, such as:
	• Ensuring signs are clear, consistent, and legible (e.g., design, messaging)
	• Locating signs by entrances and activity nodes
	• Placing signs at the proper height to maximize visibility
	• Creating a wayfinding signage system
	  o Information signs that orientate someone to the built environment
	  o Directional signs that provide distance and direction to destinations
	  o Identification signs with information about individual locations
	  o Warning signs that indicate safety procedures or regulations
	
	<u>Lighting</u>: Local zoning and planning codes and regulations include lighting standards, such as:
	• Lighting that is installed to ensure consistent levels of Illumination to prevent areas of shadow or glare-blindness
	• Using shielded lights to control glare
	• Placing lighting at proper heights to illuminate the faces of people using the space
	• Adequately lighting inset spaces, signs, entrances, and exits
	• Proper maintenance of lighting fixtures to prescribed standards (e.g., practices of the Illuminating Engineering Society of North America)

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	Operating Hours: Local zoning and planning codes and regulations include details such as: • Standard operating hours for each facility type (e.g., 6 a.m. to 10 p.m. or dawn until dusk) • Indication at the entrance of when and where exits are closed **Complete Streets** Whether the policy includes at least five Complete Streets elements: • Includes a vision for how and why the community wants to complete its streets • Specifies that "all users" includes pedestrians, bicyclists, and transit passengers of all ages and abilities, as well as trucks, buses, and automobiles • Applies to both new and retrofit projects, including design, planning, maintenance, and operations, for the entire right of way • Makes any exceptions specific and sets a clear procedure that requires high-level approval of exceptions • Encourages street connectivity and aims to create a comprehensive, integrated, connected network for all modes • Is adoptable by all agencies to cover all roads • Directs the use of the latest and best design criteria and guidelines while recognizing the need for flexibility in balancing user needs • Directs that Complete Streets solutions will complement the context of the community • Establishes performance standards with measurable outcomes • Includes specific next steps for implementation of the policy **Community Policing** • The number of partnerships between the law enforcement agency and those they serve, including government agencies, community members/groups, nonprofits/service providers, private businesses, and media. • Measures of police performance include improvement in the quality of life for residents, less fear of crime, and greater neighborhood satisfaction.
Population	NA
Surveys and Data Collection Tools: NA	
Key Glossary Terms Community policing Complete Streets Crime Prevention Through Environmental Design (CPTED)	

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Greenway
Additional Resources or Supporting Citations National Complete Streets Coalition http://www.smartgrowthamerica.org/complete-streets Trust for Public Land ParkScore http://parkscore.tpl.org/methodology.php LISC Community Safety Initiative Safety Team Assessment Tool http://www.lisc.org/csi/images/strategies_&_solutions/asset_upload_file573_16673.pdf LISC Community Developer-Police Partnership Survey http://www.lisc.org/csi/images/strategies_&_solutions/asset_upload_file679_15303.pdf LISC Quality of Life Survey http://www.lisc.org/csi/images/strategies_&_solutions/asset_upload_file890_15303.pdf Trust for Public Land Park Vulnerability Index Methodology http://www.tpl.org/sites/default/files/cloud.tpl.org/pubs/convis-kalamazoo.pdf LISC Crime Prevention Through Environmental Design Resources List http://www.lisc.org/csi/images/strategies_&_solutions/asset_upload_file127_16184.pdf National Crime Prevention Council Crime Prevention Through Environmental Design Guidebook http://www.ncpc.gov.sg/images/media/CPTED.pdf Department of Justice Community Oriented Policing Services http://www.cops.usdoj.gov/pdf/vets-to-cops/e030917193-CP-Defined.pdf

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MT11: Health Care Clinical-Community Linkages	
Framework Component	Changes – Multi-Sector
Indicator Description	Community health initiatives that link health care systems with community groups to meet the community's nutrition, physical activity, or obesity prevention needs.
Background and Context	With the passage of the Patient Protection and Affordable Care Act (PPACA) and the release of 2010 *National Prevention Strategy,* health care providers play an even more important role in improving the population's health. The Department of Health and Human Services reimburses providers for the quality and effectiveness of their services with special attention given to the community and social determinants of health. The PPACA imposes new requirements on certain nonprofit organizations that operate one or more hospitals to conduct a community health needs assessment and adopt an implementation strategy at least once every 3 years. These strategies may align with the tenets of SNAP-Ed and provide grant or community benefit funding to community-serving organizations that work to improve health and prevent disease among indigent populations. This indicator showcases some important structural and process relationships between health care providers, often working in primary care, and community resources provided in a non-clinical setting. The relationship between primary care providers and community resources may take the form referrals and linkages between clinicians and community preventive services. Local SNAP-Ed agencies can enable health centers to meet their PPACA mandates and provide community-based services to address nutrition and weight through educational and policy approaches.
Outcome Measures	MT11a. Community resource capacity to deliver preventive services MT11b. Number of health centers that provide screening and follow-up for: • Food security status • Adolescent weight status • Adult weight status MT11c. Number of health centers that give families innovative prescriptions or vouchers for: • Fruits and vegetables • Physical activity MT11d. Number of nonprofit hospitals with community benefit programs focused on community health or obesity

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	prevention in SNAP-Ed eligible communities, and program characteristics, including funding MT11e. Estimated number of people in the target population who have increased access to or benefit from the community health policy or intervention • Total number of persons in the census-defined area(s) or patient population • Number and proportion of persons who are SNAP-Ed eligible
What to Measure	The HRSA Clinical-Community Relationships Measures Atlas (CCRMA) includes measures and tactics to evaluate programs based on clinical-community relationships for the delivery of clinical preventive services. To measure community resource capacity to deliver preventive services, CCRMA recommends conducting a survey of community-serving organizations in a given jurisdiction to assess the number and type of community preventive resources and the extent to which they are able to meet the community's nutrition, physical activity, or obesity prevention needs. Alternatively, conduct in-depth interviews or observations of community resource providers and prepare a narrative of the availability of community resources linked with health centers. Community preventive service providers may include community health workers or community health education liaisons, or another service provider working in a non-clinical setting. Evaluating systems changes, such as those listed in MT11b, requires tracking of health centers, such as Federally Qualified Health Centers, that routinely screen for conditions of interest and provide a referral to a community resource, such as SNAP-Ed, or enrollment in federal nutrition assistance programs. Some models may include provider prompts as part of an electronic medical system. The "screen and intervene" model, pioneered by the Oregon Food Bank and the Oregon Childhood Hunger Coalition, offers health care staff two nationally used and validated screening questions and options for administering them. Meanwhile, measurements of height, weight, and body mass index (BMI) for everyone over 2 years of age are core components of the clinical quality improvement necessary for health care institutions to receive incentive payments for their electronic health records. Checking for the categorical presence or absence of a screening program is a good place to start; an advanced evaluation would consider the proportion of patients who are screened and offered follow-up. Evaluating health care prescriptions for fruits and vegetables or physical activity begins with identifying clinics that offer these programs and approaches. For a sample of prescription programs, track the number of patients or families who enroll, the types of prescriptions they receive, number of redemptions, and associated client satisfaction with the program.

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	Finally, to evaluate community health initiatives, contact state hospital associations or state or local health departments to identify the types of community benefit programs and funding levels in effect within your state or local project area. Use the Community Health Needs Assessment toolkit, a free web-based platform designed to assist hospitals, nonprofit organizations, state and local health departments, financial institutions, and other organizations seeking to better understand the needs and assets of their communities and to collaborate to make measurable improvements in community health and well-being.
Population	NA
Surveys and Data Collection Tools	
HRSA Health Center Program Grantee Data http://bphc.hrsa.gov/uds/datacenter.aspx Data are available at the national, state, grantee, and ZIP code level for: a. Adolescent Weight Screening and Follow Up [MT11c2] b. Adult Weight Screening and Follow Up [MT11c3] **Childhood Hunger Screening and Intervention Algorithm** http://www.oregonfoodbank.org/chc/digests/Algorith2011D[1].pdf Two-item screener [MT11c1] A. "Within the past 12 months we worried whether our food would run out before we got money to buy more." *Responses:* often true, sometimes true, never true, don't know, or refused B. "Within the past 12 months the food we bought just didn't last and we didn't have money to get more." *Responses:* often true, sometimes true, never true, don't know, or refused **Agency for Healthcare Research and Quality Clinical-Community Relationships Measures Atlas** http://www.ahrq.gov/professionals/prevention-chronic-care/resources/clinical-community-relationships-measures-atlas/index.html **Wholesome Wave FVRx Data and Publications** http://www.wholesomewave.org/our-initiatives/fvrx-data-and-publications/ **Kaiser Permanente Community Health Needs Assessment Data Platform** http://www.communitycommons.org/groups/community-health-needs-assessment-chna/	

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Key Glossary Terms
Clinical-community linkages Federally qualified health centers (FQHCs)
Additional Resources or Supporting Citations
American Academy of Pediatrics. (2015) Promoting Food Security for All Children http://pediatrics.aappublications.org/content/pediatrics/136/5/e1431.full.pdf Hager ER, et al. (2010). Development and validity of a 2-item screen to identify families at risk for food insecurity. *Pediatrics*, 126: e26-e32. Himmelman A. (2002). Collaboration for a change: Definitions, decision-making models, roles, and collaboration process guide. Unpublished work. Partnership Continuum Inc., Minneapolis, MN. Catholic Health Association of the United States. Evaluating the impact of your community benefit program. https://www.chausa.org/communitybenefit/evaluating-community-benefit-programs

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MT12: Social Marketing	
Framework Component	Changes – Multi-Sector
Indicator Description	This indicator is intended to identify the presence, characteristics, reach, and impact of social marketing campaigns conducted statewide or in local project areas. The focus is on comprehensive, multi-level social marketing campaigns; the number of discrete campaigns that were conducted during the year; the topics and changes they sought; their scale—the reach to different population segments, the geographic areas targeted, and the delivery channels used; and, wherever possible, evaluation results. Social marketing campaigns are defined as being multi-level, coordinated initiatives that combine education, marketing, and public health approaches, including PSEs. Campaigns may be designed for statewide implementation or for locally defined priorities. They use specific, action-oriented messaging with a unified look and feel, memorable taglines or calls to action, and distinctive logos. They are delivered in multiple channels and include objectives for population and community goals, not solely individual behavior change. Stage-specific formative, process, and outcome evaluation is used continually to assess operations and consumer impact and fine-tune delivery in order to maximize results. The mix of marketing components, the visual elements used, and specific geographic areas may be reported.
Background and Context	This indicator showcases the scope and scale of SNAP-Ed interventions that use a larger-scale, comprehensive, multi-level, multi-component social marketing framework where activities are synchronized to reach large proportions of the SNAP-Ed population and obtain maximum impact. It may include specialized, targeted campaigns or initiatives that engage multiple delivery channels, organizations, and sites using methods and materials that are well-integrated to drive behavioral and organizational change. Effective social marketing often involves joining efforts with others under the common banner of a branded campaign at a national, multi-state, statewide, regional/media market, or local level. Partners often co-fund some of the social marketing components with out-of-pocket or in-kind support by offering engaging activities, reinforcing visual identifiers, and coordinating consistent messaging. This indicator also builds on selected data elements in EARS. These include the population segments, number of

	people, amount of communication, delivery channels, organizations, and locations where social marketing is delivered. By using consistent measures, the nature and amount of SNAP-Ed social marketing activity can be summarized for the country. To implement a social marketing campaign, SNAP-Ed implementing agencies should: • Determine which SNAP-Ed objectives lend themselves to longer-term, multi-sector communications efforts. These may target personal behavior or aim to influence expectations and larger-scale action for healthy change to help achieve individual, organizational, and multi-sector changes that support results in the population segments chosen for the campaign. • Conduct formative research to identify the needs and values of consumers and intermediaries and to identify the locations, times, and messengers that consumers believe and that provide cues to action at as many decision points as possible. • Custom-design interventions and materials that are user-friendly for intermediaries in key channels and that resonate with the consumer segments that the campaign is intended to impact. • If possible, leverage SNAP-Ed resources and support partners with similar goals by enlisting participation of as many influential intermediaries as possible to deliver sequential, multi-level education, marketing, and PSE support activities. • Conduct a regular cycle of formative, process, and outcome evaluation in line with budget availability. Decisions about which delivery channels, organizations, and sites to engage may be made by using a combination of authoritative public and commercial national, state, and local registries such as USDA-qualified food stores; maps, geographic information systems, and atlases; state school statistics; licensing records (early care and education, restaurants); and commercial databases that show types of business with strategic knowledge about the needs, values, and demand characteristics of each. SNAP-Ed agencies or partners may need to conduct channel-specific surveys or needs assessments. Metrics will be temporal; that is, they will change with phases of a campaign, promotional waves, audience feedback/monitoring, and periodic refinements in the call to action. Examples of and materials from social marketing campaigns conducted by states around the country are found in SNAP-Ed Connection Library.
Outcome Measures	MT12a. All SNAP-Ed social marketing campaigns in the state • Number of statewide social marketing campaigns conducted during the reporting period • Number of local agencies that sponsor a discrete, locally defined social marketing campaign and the

	number of counties or boroughs where they conducted local campaigns MT12b. Projected statewide reach of all social marketing campaigns conducted by SNAP-Ed agencies • Number and percentage of people in each market segment where a social marketing campaign was conducted (SNAP-Ed eligible and all others) • Number of total media impressions, by outlet type (television, radio, outdoor, transit) used in a social marketing campaign, by demographic segment and geographic area (SNAP-Ed eligible and all others) • Number and percentage of statewide population reached through statewide social media campaigns, by market segment and topic (SNAP-Ed eligible and all others) • Number and percentage of county residents reached by local social marketing campaigns, by market segment and topic (SNAP-Ed eligible and all others) • Number and percentage of people who received on-the-ground, direct or indirect education/promotion (not mass media) as part of social marketing campaigns, if available (SNAP-Ed eligible and all others) MT12c. Unaided recall of social marketing campaigns conducted by SNAP-Ed agencies • Number and percentage of people in each market segment who were exposed to and can recall specific messages from statewide or local social marketing campaigns (SNAP-Ed eligible and all others)
What to Measure	Based on the campaign and available resources, use a variety of sources with process metrics to compile a comprehensive picture of results. Outcomes for audience segments, such as changes in sales, or in specific PSEs in each channel, usually result from the combined effects and synergy created through multiple, complementary approaches. Design outcome and process metrics into the campaign. **What behavioral changes are being sought? (See R1–11)** • Fruit and vegetable consumption • Healthy beverage consumption • Physical activity • Food security • Other, specify **What environmental or multi-sector changes are being sought? (See MT5–MT6 and MT7–MT11)**

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	What market segment or population group is targeted? • Preschoolers, children aged 2–5 years, and their parents/caretakers • Children in elementary school (often grades K–6) • Middle School students (often grades 7–8) • High school students (often grades 9–12) • Women (may include moms, women generally, female caretakers, others) • Men (may include fathers, men generally, male caretakers, others) • Elders • Multi-generation/residents/shoppers/congregants • Workers/employees • Ethnic/language groups, specify **In what qualifying settings or channels are social marketing messages and interventions being delivered? (See also LT6 and LT7)** • Mass media (paid or earned media)—TV, radio, outdoor, transit • Social media—Twitter, Facebook • Supermarkets • Other retail food stores • Farmers markets • Restaurants • Worksites • Faith organizations • Park and recreation facilities • Health care facilities • Government property and programs • Other community sites, specify • Early care and education, Head Start • Schools • Community youth organizations, afterschool programs • Other, specify

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	What are the geographic areas being targeted for each campaign in the state? • Towns/cities • Counties • In-state media markets/metropolitan statistical areas/multi-county regions • Multi-state media markets • Entire state (multiple media markets) **What is the mix of mass communications methods and elements (materials) that each campaign uses?** • Paid and public service advertising via TV, radio, transit, outdoor, other (specify) • Public relations, or "earned media"—media coverage secured through news events and outreach • Periodic promotion—new themes, events, seasonal messaging, commemoratives, varied market segments • Consumer education • Interactive websites for consumers, intermediaries, media • Social media "push" to consumer segments, intermediaries • Small media—posters, bulletins, brochures, newsletters, cookbooks, children's books, games, and quizzes • NERI—Nutrition Education Reinforcement Items (≤$4 each) such as small shopping, food preparation, and cooking items and small physical activity equipment with campaign messaging
Population	The market segment(s) chosen for the social marketing campaign

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Surveys and Data Collection Tools

Examples of evaluation materials from social marketing campaigns conducted by states around the country are found in the SNAP-Ed Connection Resource Library. These include smaller scale and lower cost methods such as intercept and phone surveys; pre-post tallies; online surveys; 800-number responses; web requests; social media likes, comments, and re-tweets; and mailer-backs.

Key Glossary Terms

Adoption
Channels
Intermediaries
Partners
Recall
Sites
Social marketing
Social marketing campaigns
Specific message

Additional Resources or Supporting Citations

Example of How a Local Social Marketing Campaign Using Low-Cost Media Could Report Its Metrics

Highlights: In (region/county), we were able to partner with 170 high schools, afterschool programs, small stores, and parks to conduct a teen-led campaign for healthy eating and physical activity. Of the 330 SNAP-Ed eligible entities we identified, 170—over 50 percent!—signed on to adopt campaign interventions. Our projected reach at the high schools was all (X0,000) of the enrolled students, of whom (X0,000) were estimated to be eligible for free or reduced price meals. Of the students reached outside the school setting, our projected reach was (X0,000) in participating community youth organizations, (X,000) through small stores that signed on, and (X,000) in participating parks.

Methods: We used evidence-based resources (names of campaigns and programs), including those from *SNAP-Ed Strategies and Interventions: An Obesity Prevention Toolkit for States*, to conduct a peer-led campaign in the (name of media market). It aimed to increase the availability of fruits and vegetables, healthy beverages, and physical activity at school and in organizations, businesses, and public spaces near their schools. The campaign is called (branded name). Among the 50 SNAP-Ed qualified high schools in (media market), 20

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signed on to participate and give students service learning credit for participating. During the fall, we recruited and trained teacher mentors/adult allies and student leaders in each school. They used specific assessment tools (titles of the tools) to examine the food and physical activity environments of the school and of neighborhood locations within a one-mile radius. They used the results to set priorities and make a schedule and invited fellow students to help. Starting in January, teams invited a total of 280 popular organizations to participate: 80 afterschool organizations, 140 small stores, and 60 parks. We (Implementing Agency) purchased 100 student-designed billboards and 30 bus shelters adjacent to the schools for the January–April period. During this period, the student teams also made a plan to continue implementation in the following school year.

Adoption: Of the 280 organizations that students approached, 150 agreed to participate—more than half! These were 45 afterschool, 60 small stores, and 45 parks.

Projected Reach: Since 20 high schools signed on to make changes internally, we project that (total enrollment and number of students qualifying for FRPM) will have been exposed to positive influences at school. Among students frequenting the community organizations, we project that if each student uses only one of the three types of organizations, then as many as (#) were exposed to the campaign. These would have been (#) estimated to use the 80 afterschool programs, (#) estimated to buy snacks at the 60 small stores, and the (#) who use the 45 parks. The media impressions provided by the commercial vendor totaled (#) for billboards and (#) for bus shelters.

Next Steps: In our second year, we will continue working in the (media market) with the 20 initial high schools to identify their degree of implementation in terms of continued participation by students, teachers, and community partners and the PSE changes that the four participating channels implemented, as well as develop a plan for maintenance of effort in future years. In addition, we will look for adoption by additional systems and sites in each channel. In our third year, we will assess the degree to which changes were maintained. In each of years 2 and 3, we will use evaluation results to upgrade, then roll out, the (name of campaign) to an additional media market.

Education provided in social marketing campaigns is reported as indirect education. The goal of social marketing is to surround individuals and reach them as many times and in as many ways and places as possible to stimulate behavior change. Therefore, it is not appropriate to obtain unduplicated counts by age, gender, race/ethnicity, income, or SNAP participation as is required for direct education.

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MT13: Media Practices	
Framework Component	Changes – Multi-Sector
Indicator Description	This indicator is intended to capture significant, sustained changes in the routine business practices of media outlets that influence public opinion, business behavior, and community norms. Such changes may evolve naturally from LT8 (Media Coverage) and can be attributed in whole, or in part, to efforts by SNAP-Ed and its partners.
Background and Context	Building on the State SNAP-Ed Plan, especially objectives for marketing and PSEs, and on existing EARS data collection, identify TV, radio, and print outlets that have the potential to provide sustained media business practices that cover the SNAP-Ed activities and outcomes of Implementing Agencies and partnering organizations. For partners, this could be among shared metrics of a collective impact project. Examples of sustained media strategies include: a. Consulting regularly with SNAP-Ed staff/principals "on background," using quotes/stories/photos from partners and SNAP-Ed consumers in their reporting of community issues b. Offering longer-term or ongoing pro bono commitments of support for SNAP-Ed community activities, such as media celebrities at events and fundraisers; SNAP-Ed ads as on-air, print, outdoor, or transit public service messaging; feature stories and specials; production assistance for educational, marketing, and PSE campaigns c. Intentionally improving the placement of SNAP-Ed public service messages to increase the reach to SNAP-Ed audiences and stakeholders d. Brokering tie-ins with other company campaigns and community dignitaries, e.g., at sports, business, lifestyle, cultural, and employment events e. Producing TV or radio segments or publishing editorials taking positive positions on SNAP-Ed issues f. Increasing coverage of SNAP-Ed issues and partnership opportunities in opinion leader print media, including business/trade, charitable, foundation, civic, service, and nonprofit outlets

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	Since changes often come about through influence from many sources, like other stakeholders and advocate groups, here they are counted *only* when the change was unlikely to have occurred without the added value of SNAP-Ed efforts. Such practices focus on community betterment and thus can help achieve statewide SNAP-Ed objectives in education, marketing, and PSE change.
Outcome Measures	An increase in the number of positive business practices by key media outlets such as: MT13a. Increase in the number of mass communications that promote the marketing of healthy food and physical activity and positive changes in PSEs in their routine business practices, e.g., outlet-initiated news, editorial, and feature coverage; sponsorships; community campaigns; and philanthropy. MT13b. Number of key media outlets that discourage or restrict the marketing of unhealthy foods and beverages to children and youth <12 years, as above. MT13c. Number of key media outlets that discourage or restrict the marketing of unhealthy foods and beverages to vulnerable groups, including through ethnic and in-language outreach and programming MT13d. Estimated number of people in the target population who have increased access to or benefit from the media practice policy or intervention • Total number of persons in the census-defined area(s) or total audience exposed using media outlets audience records • Number and proportion of persons who are SNAP-Ed eligible
What to Measure	Media practices should be those that support statewide objectives for marketing and PSE change in the community, especially for SNAP-Ed audiences. Like LT8 (Media Coverage), this indicator focuses on positive community changes and norms, rather than on nutrition education and tips per se. For example, to be counted, a report of nutrition education events attributable to SNAP-Ed/partner efforts would have to go beyond superficial coverage into issues around larger-scale or more sustained systems change in marketing and PSE changes.
Population	NA
Surveys and Data Collection Tools: NA	

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Key Glossary Terms
Key Media Outlets Media Practices
Additional Resources or Supporting Citations: NA

Long-Term (LT) Indicators:

MULTI-SECTOR IMPACTS

LT12: FOOD SYSTEMS
LT13: GOVERNMENT INVESTMENTS
LT14: AGRICULTURE SALES AND INCENTIVES
LT15: EDUCATIONAL ATTAINMENT
LT16: SHARED-USE STREETS AND CRIME REDUCTION
LT17: HEALTH CARE COST SAVINGS
LT18: COMMERCIAL MARKETING OF HEALTHY FOOD AND BEVERAGES
LT19: COMMUNITY-WIDE RECOGNITION PROGRAMS

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LT12: Food Systems	
Framework Component	Effectiveness & Maintenance – Multi-Sector Impacts
Indicator Description	This indicator is intended to capture statewide and local improvements in the food system that specifically benefit low-income consumers and communities and that are due, in whole or in part, to SNAP-Ed efforts with partners. The changes may occur in the public, nonprofit, and business sectors. Outcomes throughout the food chain are represented, from production through to the consumer. Food system changes in SNAP-Ed eligible settings often are intended to increase access to and appeal of "foods-to-increase" as recommended by the *Dietary Guidelines for Americans* and thereby lead to large-scale Population Results (R1–R6).
Background and Context	Disparities in food access, variety, pricing, and quality, along with higher rates of diet-related health problems including food insecurity and obesity, are well documented among low-income consumers and in SNAP-Ed eligible communities. A wide variety of policy solutions has emerged to help resolve contributors to those differences. SNAP, as the largest federal food assistance program, provides economic wherewithal to pay for food (supply), while the SNAP-Ed infrastructure helps develop consumer demand for healthier options. Together, SNAP and SNAP-Ed are a powerful combination that can partner with low-income consumers and other stakeholders to advance adoption of such solutions, help take them to scale, and find new solutions in more communities. A USDA/ERS report found that a variety of characteristics in local food systems that support local agriculture can benefit both low-income residents and farmers, large and small; it provided national, state, and sub-national examples.[1] The ERS report adds to the literature of recommended community strategies, such as those from a Congressional Report on trends in food systems[2] of which food policy councils and food hubs are examples. Other literature has documented that the availability of supermarkets and certain healthy retail food businesses corresponds with lower rates of obesity and other chronic diseases. The ratio of healthy to unhealthy outlets and ratio of healthy outlets to population are metrics in increasingly common use by planners and economic development agencies. PSE changes may occur across the food system continuum for locally grown foods, from farm to fork, including attention to the adequacy of food supply systems, facilities, land use, and regulatory activities to support healthy eating, such as permitting, financial incentives, zoning, and enforcement. This indicator includes system-wide

	changes in planning, financing, sourcing, distribution, marketing, and stakeholder participation that can contribute to SNAP-Ed objectives for individuals, peer groups, and environmental settings where food decisions are made.
Outcome Measures	This indicator quantifies the number of a variety of food system improvements that specifically support SNAP-Ed eligible communities and are due, in whole or in part, to efforts by SNAP-Ed and its partners, including: LT12a. Food policy councils: Number of local food policy councils that adopt policies and/or conduct new activities specifically addressing food system disparities within the geographic areas they cover. LT12b. Food hubs: Number of food hubs that enact new provisions specifically focused on low-income communities and residents to aggregate, distribute, process, or store locally grown food products recommended by the *Dietary Guidelines for Americans.* LT12c. Production incentives: Number of counties that newly gain access to fiscal assistance such as reduced fees for permitting and licenses, loans, grants, and tax credits for value-added food processing facilities and other infrastructure to support locally grown healthy foods. Examples include assistance for slaughter houses, co-ops, and other self-help entities. LT12d. Farm-to-community initiatives: Number of cities, counties, or regions that newly support marketing of locally grown foods to reach high proportions of low-income consumers indirectly, such as retail food stores, farmers markets, restaurants, hospitals, worksites, and other commercial institutions in SNAP-Ed qualified locations. LT12e. Location and development incentives: Number of cities, counties, or regions in the state that newly provide incentives to locate grocery stores, mobile markets, farmers markets and other healthy food outlets in SNAP-Ed eligible communities; newly provide assistance to existing food outlets for structural improvements (e.g., refrigeration and storage, display cases, kitchen equipment); newly offer training and technical assistance programs; or newly support the development of healthy retail in under-served areas through zoning, tax breaks, loans, and licensing/permitting incentives. LT12f. Census tracts with healthier food retailers: Improvements in the ratio of healthy to unhealthy retail food outlets in SNAP-Ed qualifying census tracts. LT12g. Resident-friendly neighborhood food infrastructure: Number of jurisdictions that provide assistance to

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	establish, maintain, and/or expand community gardens, urban agriculture, and/or farmers market access in under-served areas. May include changes in zoning, land use, and water or electricity assistance. LT12h. Food banks: Number of food banking organizations that institute new, sustainable policy, systems and environmental changes with community partners to secure, distribute, and promote client use of locally grown and other healthy foods and beverages. Changes may include new nutrition standards for foods made available to schools, shelters, soup kitchens and pantries that are served by the food bank; new procurement policies for purchased and donated foods from manufacturers, retailers, and restaurants; new community partnerships with farmers, gleaners, city/county governments, community gardens, dietitians, chefs, and culinary groups; and new fundraising to upgrade nutritional quality and services, such as financial donations and grants.
What to Measure	The number of data sets containing the food system-related measures for state and local levels is growing, and SNAP-Ed stakeholders will be working together to find ways to collect consistent data so they may be aggregated across state lines and nationally. For SNAP-Ed purposes, some food system metrics will have to be obtained by primary data collection from state, local, or commercial data sources or from partners, and then benchmarked against other statewide or national figures. Whenever original data must be collected, the measures should align as closely as possible—identically, if possible—with definitions used by authoritative national sources.
Population	NA
Surveys and Data Collection Tools	
Food systems as a discipline is a rapidly growing and emerging area of public interest. With experience, instruments that are specific to this and other indicators in the interpretive guide will emerge. In particular, the Resource Library of USDA's SNAP-Ed Connections website can be used as a repository for instruments, reports, and other documents, including those for food systems work. Here are some places to begin: **Food Policy Councils** • Doing Food Policy Councils Right: A Guide to Development and Action (Pages 43–48 provide evaluation questions, measures, and tools http://www.markwinne.com/wp-content/uploads/2012/09/FPC-manual.pdf • Survey Food Policy Council activity based on the Community Food Project Evaluation Toolkit http://nesfp.org/sites/default/files/uploads/cfp_evaluation_toolkit.pdf • http://www.markwinne.com/list-of-food-policy-councils-in-the-usa/ and http://www.foodpolicynetworks.org/directory/	

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Food Hubs

- USDA's Food Hubs Directory
  https://www.ams.usda.gov/local-food-directories/foodhubs
- http://www.ngfn.org/resources/food-hubs

CDC DNPAO Data Trends and Maps
http://nccd.cdc.gov/NPAO_DTM/) for: http://nccd.cdc.gov/NPAO_DTM/

- Census tracts with healthier food retailers
- Number of local food policy councils
- Number of state-level food policy councils
- Number of food hubs in each state (USDA Food Hubs Directory: http://search.ams.usda.gov/foodhubs/)
- States that authorize farmers to accept WIC coupons

State Fruit and Vegetable Indicator Reports
http://www.cdc.gov/nutrition/downloads/State-Indicator-Report-Fruits-Vegetables-2013.pdf

Community Commons
http://www.communitycommons.org/

- Modified Retail Food Environment Index Score, DNPAO
- SNAP-authorized retailers
- Fast food restaurants
- Full-service restaurants

USDA

- USDA sources such as the Food Environment Atlas
  http://www.ers.usda.gov/data-products/food-environment-atlas.aspx?utm_source=SNEB+Members&utm_campaign=0d857ec2b1-Weekly_Policy_Update6_25_2015&utm_medium=email&utm_term=0_86e3ab9f3f-0d857ec2b1-333126529

Geographic Access

- The USDA Agricultural Marketing Service provides a list and geographic coordinates on farmers markets nationally
  http://www.ams.usda.gov/services/local-regional/farmers-markets-and-direct-consumer-marketing

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Zoning

- *Bridging The Gap Community Obesity Measures Project-Comp Food Code/Policy Audit Form*: Tool to evaluate components of local policies thought to influence the food environment, including provisions related to food store and fast food zoning/citing, permits for farmers markets, urban agriculture and mobile food vendors, and menu labeling in restaurants. The tool has undergone inter-rater reliability testing and was fielded in over 150 communities across the country in 2010.
- Pitts et al., 2015. Disparities in healthy food zoning, farmers' market availability, and fruit and vegetable consumption among North Carolina residents. Archives of Public Health 2015; 73(1): 35. Includes unweighted Healthy Outlet Zoning Score. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4548560/
- Mayo ML, Pitts SBJ, Chriqui JF. Associations Between County and Municipality Zoning Ordinances and Access to Fruit And Vegetable Outlets in Rural North Carolina, 2012. *Prev Chronic Dis* 2013;10:130196. DOI: http://dx.doi.org/10.5888/pcd10.130196 .

Key Glossary Terms

Direct-to-Consumer Marketing
Food policy council (FPC)
Food hubs
Healthy food outlets
Healthy food ratio
Regional food systems
Total food outlets

Additional Resources or Supporting Citations

[1] Martinez S, Hand M, Da Pra M, Pollack S, Ralston K, Smith T, et al. Local Food Systems: Concepts, Impacts, and Issues. ERR 97. U.S. Department of Agriculture, Economic Research Service; May 2010.

[2] Low S, Adalja A, Beaulieu E, Key N, Martinez S, Melton A, et al. Trends in U.S. and Local Regional Food Systems, A Report to Congress. AP-068. U.S. Department of Agriculture, Economic Research Service; January 2015.

ChangeLabSolutions—for a variety of reports, instruments and webinars that cover healthy food retail in underserved neighborhoods, community gardens, local permitting, farmers markets, local government initiatives, and more.
http://www.changelabsolutions.org/landing-page/healthier-food-environments

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Feeding America—for hunger and food banking. http://www.feedingamerica.org

Share Our Strength—for campaigns to end childhood hunger. https://www.nokidhungry.org

Food Research and Action Center—for reports, advocacy, initiatives, state programs, and data about hunger and poverty, food access and costs, nutrition assistance programs. http://frac.org/reports-and-resources/

Center for Agriculture and Food Systems, University of Vermont—for tools that advance smart market and policy systems to help an array of stakeholders. http://www.vermontlaw.edu/academics/centers-and-programs/center-for-agriculture-and-food-systems

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LT13: Government Incentives and Investments	
Framework Component	Effectiveness & Maintenance – Multi-Sector Impacts
Indicator Description	This indicator includes government investments and incentives that improve food access and promote healthy eating behaviors including the implementation and enforcement of government food procurement policies, plans that incorporate health in key land use, transportation, housing, and other community development decisions, and financial incentives to promote healthy food retail.
Background and Context	Government investments and incentives can help stimulate the development of healthy food retail and improve access to healthy food options particularly among low-income and underserved populations. For example, according to CDC, procurement policies help create healthier food environments, have the potential to drive the reformulation of foods, and impact diverse settings (e.g., employee cafeterias, correctional facilities, schools, child care centers, public hospitals, senior centers, parks). There are several key factors to strong government procurement policies[1]: • "Food procurement policies should be comprehensive and include standards for a variety of food components such as sodium, trans fat, and sugar." • "From a purchasing perspective, having such a policy means considering not only the cost and quality of products but also the overall healthfulness of each food purchased. How much sodium does it have? Is it free of industrially produced trans-fat?" • "As a practical matter, the procurement policy requires seeking healthful foods that will contribute to more nutritious environments and healthful diets." Healthy procurement policies include: • Healthy vending • Guidelines or nutrition standards for gatherings (conferences, meetings, parties, etc.) • Guidelines for nutrition standards for cafeterias or lunch rooms • Menu labeling • Limiting unhealthy food marketing • Worksite wellness Additionally, government investments and incentives that incorporate nutrition and physical activity outcomes in key land

	use, transportation, housing, and other community development decisions provide opportunities for supporting dietary and physical activity behaviors to benefit SNAP-eligible populations. In this indicator, SNAP-Ed programs can work with other stakeholders/partners to support cities, counties, and municipalities to add opportunities or remove barriers to healthy retail, local food systems, and physical activity in order to benefit SNAP-Ed eligible settings, communities and/or residents. "Upstream" land use decisions by city/county governing bodies, primarily in the built environment, can affect healthy eating and physical activity in low-income communities. Modifications in General Plans could potentially address any factor in the food system continuum for locally grown foods, from producer to consumer. Typically, the local food continuum may include farmers markets, CSAs, farm stands, and nonprofits or businesses that aggregate, process, distribute, and/or store locally produced food. Examples of SNAP-Ed relevant topics that may be included in General Plans include the siting of food stores, restaurants, and schools; home and community gardens; urban farms and forests; parks and green space; sidewalks, bike lanes, traffic calming and road placement; and health impact assessments. In this indicator, barriers and opportunities within the elements of General Plans may include, but are not limited to zoning, neighborhood plans, and development standards; road designs and standards; master plans; project reviews; taxes and fees.[1,2] State requirements may specify how often a General Plan must be updated and the processes to do so. Processes may include visioning, formation of a review committee, analysis of existing conditions, drafting of a policy, review and revision of the proposed policy, adoption by the jurisdiction's governing body, and implementation. Involvement by SNAP-Ed stakeholders may occur at any stage. Lastly, several states have focused on providing financial incentives to improve access to healthy food retail. These states provide financial assistance or other type(s) of incentives to attract healthier food retail outlets to underserved areas or to improve healthier food offerings in existing stores.[1,2] Incentives included grants, loans, or tax incentives to assist with costs associated with establishing new food retail outlets, such as land acquisition, building and construction, or feasibility studies. Costs associated with improving healthier food offerings in existing retail outlets may include remodeling, refurbishing equipment, and the purchase of refrigeration to store fresh produce. A few states have enacted legislation that provides other types of incentives, such as technical assistance to small corner stores to assist with purchasing, stocking, or marketing fresh produce, or offers to waive existing zoning requirements to make it easier for grocery stores and supermarkets to locate in underserved areas.
Outcome Measures	LT13a Number and percentage of local, state, territorial, or tribal government agencies/organizations that implement and adhere to healthy food procurement policies including healthy food vending and meeting policies, menu-labeling, and worksite wellness programs LT13b Number and percentage of local, state, territorial, or tribal government agencies/organizations agencies/organizations that implement and adhere to policies that support healthy lifestyle behaviors in land use,

	transportation, housing plans, etc. LT13c The total amount of financial incentives (in dollars) provided to support healthy food retail in areas within census tracts where at least 50 percent of residents are SNAP-eligible LT13d The number of new healthy food retailers within census tracts where at least 50 percent are SNAP-eligible or the number of new healthy food retailers per 10,000 residents located within the three largest underserved census tracts within a local jurisdiction
What to Measure	The outcomes for this indicator may include, implementation and enforcement of policies related to: a. Healthy food/local food procurement b. Financial incentives to expand food availability c. General Plan implementation and enforcement Measurement for this indicator focuses on understanding how many government organizations/agencies within a geographic area implement and adhere to the policies. ***Recommended Community Strategies and Measurement to Prevent Obesity in the United States,*** **CDC** Of the 24 strategies recommended in this guide, 14 have the potential to assess the impact of the government investments and incentives: a. Increase availability of healthier food and beverage choices in public service settings – Implementation of nutrition standards in government facilities to reduce the availability of unhealthy options and increase the availability of healthy options. Potential data sources: • Office that maintains government-wide policies (e.g., city/county manager's office, mayor's office) • Department of facilities management • Purchasing staff person who manages the food service or vending contract for jurisdiction • School district's administrative office, such as the district school food authority b. Improve availability of affordable healthier food and beverage choices in public service settings – Reduce the price of healthy food options relative to the price of unhealthy food options. Potential data sources: • School district administrative offices • Facilities managers and/or parks and recreation staff • Local government office that maintains government policies c. Provide incentives to food retailers to locate in and/or offer healthier food and beverage choices in underserved

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	areas – Provide tax incentives, loans, and grants. Potential data sources: • City/county manager's office • Economic development office • Chamber of commerce • Department of public health Other strategies include: d. Improve availability of mechanisms for purchasing foods from farms e. Provide incentives for the production, distribution, and procurement of foods from local farms f. Restrict availability of less healthy foods and beverages in public service settings g. Institute smaller portion size options in public service settings h. Limit advertisements of less healthy foods and beverages in public settings i. Reduce screen time in public service settings j. Enhance infrastructure supporting bicycling k. Enhance infrastructure supporting walking l. Support locating schools within easy walking distance of residential areas m. Improve access to public transportation n. Zone for mixed-use development Information on measurement of these strategies can be found at: http://www.cdc.gov/obesity/downloads/community_strategies_guide.pdf
Population	Governments and communities
Surveys and Data Collection Tools	
ChangeLab General Plan Toolkit Data sources to assess implementation and adherence to General Plans recommendations can be found within the ChangeLab solutions General Plan toolkit at http://www.changelabsolutions.org/sites/default/files/Healthy_General_Plans_Toolkit_Updated_20120517_0.pdf. Examples include: • Local association of governments (e.g., ABAG, SCAG, SLOCOG, SANDAG): Typically collects data on demographics, land use, and economic conditions in the region and specific cities. • County assessor data: Contains parcel level data that includes existing land use, building size, parcel size, land and improvement value.	

The information can be geocoded by parcel number.

- City/county planning department: Typically collects data on existing land use, land use designations, zoning, affordable housing, economic and demographic characteristics, and building code violations. Data are often included in GIS databases managed by the city or the county.
- City/county public works department: Typically collects information on street networks, infrastructure, and traffic volumes.
- County transportation commission: Typically collects regional-level transportation data including transit system characteristics, mode split, and vehicle miles traveled in different parts of the region.
- County transit agency: Typically collects transit information such as the location of transit facilities, frequency of transit service, and the number of transit trips from each transit stop and on each route.

Other Tools and Resources

- CDC Workplace Walkability Tool: www.cdc.gov/nccdphp/dnpa/hwi/toolkits/walkability/audit_tool.htm
- Pedestrian and Bicycle Information Center Walkability and Bikeability Checklists: www.walkinginfo.org and www.bicyclinginfo.org/pdf/bikabilitychecklist.pdf
- National Center for Bicycling & Walking Community Assessment Tool: www.activelivingresources.org/assets/community_assessment_tool.pdf
- Active Independent Aging: A Community Guide for Falls Prevention and Active Living, from the Community Health Research Unit, includes a walkability checklist that focuses on aging: www.falls-chutes.com/guide/english/resources/handouts/pdf/WalkabilityChecklist.pdf
- California's Champions for Change initiative has resources on physical activity assessments and walkability assessments that community residents can undertake themselves: www.cachampionsforchange.net
- Shasta County walkability checklist: www.healthyshasta.org/downloads/WalkabilityChecklist.pdf
- The Local Government Commission hosts a web-based resource center on creating bike- and pedestrian-friendly communities: www.lgc.org/transportation
- Walkable Communities, Inc., offers a range of tools for creating walkable neighborhoods: www.walkable.org

Key Glossary Terms: NA

Additional Resources or Supporting Citations

[1]ChangeLab Solutions. How to Create and Implement Healthy General Plans: A Toolkit for Building Healthy, Vibrant Communities. 2012. Available from http://www.changelabsolutions.org/sites/default/files/Healthy_General_Plans_Toolkit_Updated_20120517_0.pdf.

[2]Keener D, Goodman K, Lowry A, Zaro S, Kettel Khan L. (2009). Recommended community strategies and measurements to prevent obesity in the United States: Implementation and measurement guide. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. Available from http://www.cdc.gov/obesity/downloads/community_strategies_guide.pdf

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ChangeLab Solutions. Understanding Healthy Procurement: Using Government's Purchasing Power to Increase Access to Healthy Food. 2012. Available from http://www.changelabsolutions.org/sites/default/files/Understanding%20Healthy%20Procurement%202011_20120717.pdf

ChangeLab Solutions. Healthy Planning Guide. 2009. Available from http://www.changelabsolutions.org/publications/healthy-planning-guide.

ChangeLab Solutions. From Start to Finish. How to Permanently Improve Government Through Health in All Policies. 2015. Available from http://www.changelabsolutions.org/publications/HiAP_Start-to-Finish.

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LT14: Agricultural Sales and Incentives	
Framework Component	Effectiveness & Maintenance – Multi-Sector Impacts
Indicator Description	Sales and investments in local foods, including fresh fruits and vegetables, and the associated economic benefit to farmers and producers.
Background and Context	Increased consumer access to local foods purchased directly from farmers, ranchers, and fishermen represents a win-win-win for all. Consumers benefit from nutritious food options, farmers develop positive relationships with their customers, and food-related expenditures benefit local and regional economies. Direct-to-consumer marketing supports local farmers and food producers by compensating them with a larger fraction of the purchase price from each transaction rather than sales at grocery stores where retailers, wholesalers, and distributers are compensated.[1] As a result of the multi-sectoral changes initiated in part by SNAP-Ed agencies and agricultural businesses (see MT8), on-farm markets, consumer-supported agriculture programs (CSAs), and farmers markets are experiencing consumer growth, particularly among SNAP-eligible shoppers. National SNAP redemptions at farmers markets totaled $18.8 million during fiscal year 2014, a nearly six-fold increase since 2008. Instituting a bonus incentive project is one approach farmers markets are using to attract SNAP customers. These projects provide matching "bonus dollars" to improve the purchasing power of low-income families at farmers markets, so that they can afford to buy more fruits and vegetables and other healthy food. Because there is no system for tracking SNAP benefits redeemed on local food items at grocery and convenience stores, this measure is not included in the framework. Instead, indicator LT14 measures total annual expenditures on fresh fruits and fresh vegetables by different geographic groups and income levels. SNAP-Ed affiliated farm-to-school programs and policies also benefit local farmers and food producers who can sell their products directly to a variety of institutions, including schools, preschools, afterschool programs, child care centers, and USDA summer feeding sites. In indicator LT14, we prioritize agricultural sales in farm-to-school programs, which have the potential to scale up across school districts within a state or other jurisdiction, and USDA systematically collects data through the Farm-to-School Census. Other institutions, such as work sites, shelters, and hospitals, may also buy farm-fresh produce, but measuring agricultural sales across these systems would prove

	challenging without an available data system. SNAP-Ed agencies may certainly evaluate other types of sales beyond those listed in this indicator. SNAP-Ed affiliated activities that strengthen local food systems (see LT12) also have the potential to contribute to economic impacts. We assume a multiplier effect results from local food sales, which is described below.
Outcome Measures	LT14a. Total dollars spent by SNAP participants at farmers markets and direct marketing farmers during the period assessed LT14b. Total dollars invested by SNAP-Ed eligible school districts in local food purchases during the period assessed LT14c. Average annual per-person expenditures for fresh fruits and fresh vegetables for home consumption LT14d. Percentage of total farmers market sales from nutrition assistance benefits (SNAP, WIC cash value vouchers Farmers Market Nutrition Program, Senior Farmers Market Nutrition Program) LT14e. Total dollar value of incentives redeemed by SNAP participants for purchase of targeted food items at farmers markets during the period assessed Developmental (no secondary data sources available; primary data collection is necessary) LT14f. Economic impact of SNAP-Ed affiliated changes in local and regional food production, processing, distribution, and sales
What to Measure	LT14a. Aggregate total SNAP/EBT redemptions at farmers markets, on-farm markets, and CSAs during the period assessed, generally on an annual basis in regions with year-round markets and growing seasons, or seasonally when the growing and market season is shorter than a year. Only aggregated data should be reported when are least three farmers markets or direct-marketing farmers operating within a state or territory. LT14b. Using the USDA's Farm-to-School Census, calculate the total dollar investments in local food by SNAP-Ed eligible schools or school districts within your local, state, territorial, or tribal area. Cross-walk your SNAP-Ed qualifying schools in the state where more than half of the students are eligible for free or reduced price meals with schools that responded to the Farm-to-School Census. Census results combine local food purchases direct from 1) individual food producers; 2) farmer, rancher, or fisher cooperatives; 3) farmers markets; 4) CSA model; or 5) food processors and manufacturers; and through 6) distributors; 7) food buying cooperatives; 8) food hub; 9) food service management companies; 10) Department of Defense (DoD) Fresh Program vendors; 11) USDA Foods; 12) State Farm to School Program office; and 13) other. LT14c. Using the Bureau of Labor Statistics Consumer Expenditure Survey, retrieve the annual aggregate

	expenditures for fresh fruits and fresh vegetables for home consumption. Data are available at the Regional level only—Midwest, Northeast, South, and West—and not by state. This outcome measure may also be beneficial for national reporting by FNS. LT14d-e: Track the percentage of total farmers markets sales from nutrition assistance benefits (d) and the total value of bonus incentives redeemed by SNAP participants during the period assessed (e). Contact your state farmers market association or the Farmers Market Coalition for information on bonus incentives and sales categories. https://farmersmarketcoalition.org/. If no information is publically available, use the FM Tracks reporting tool operated by the Prevention Research Center at Case Western Reserve University. LT14f: The final outcome measure is developmental; there is no current methodology for measuring the economic impact of SNAP-Ed affiliated agricultural sales across the local, state, territorial, or tribal area. There are two proposed methods that will require practitioner testing, input, and modification over time: • *Multiplier effect*: A multiplier is the number of times money circulates within a region following a transaction; it is a marker of local economic impact. Find an existing published study with a multiplier reported for your agricultural area of interest. For instance, Georgia has reported a multiplier of 2.66 for statewide farmers market activities; another study showed the Baltimore–Washington region has a multiplier effect of 1.6 for farmers market sales. Multiply the total annual sales resulting from your SNAP-Ed affiliated agricultural initiative in your state or area by an existing multiplier. For instance, if your combined sales at new farmers markets accepting SNAP, cash, and commercial credit and debit cards in low-income areas is $500,000, the conservative multiplier of 1.6 would yield a total economic impact of $800,000. • *Input-output analysis*: A more sophistical approach is calculating the economic impact of farmers markets and related agricultural activities in low-income areas in terms of local employment and income. Working with a statistician or economist, SNAP-Ed agencies could calculate what is known as an input-output analysis, otherwise referred to as economic impact modeling. One popular economic impact modeling software is called IMPact Analysis for PLANning (IMPLAN). The University of Arizona Extension's SNAP-Ed program published results from its IMPLAN analysis. Although not specific to farmers markets, Arizona's analysis found that SNAP-Ed spending "generated $5.7 million in direct economic activity (sales), with $2.4 million representing the labor income earned by the 62 full-time equivalent (FTE) jobs directly supported by UA Extension SNAP-Ed. These direct impacts supported an additional 39 FTE jobs, $2.3 million in income, and $6.1 million in sales in other Arizona industries through indirect and induced effects. The total economic impact of UA Extension SNAP-Ed spending in 2012, including multiplier effects, was 101 FTE jobs, $4.7

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	million in income, and $11.8 million in total sales."[2]
Population	NA

Surveys and Data Collection Tools

Bureau of Labor Statistics, Consumer Expenditure Survey (CES)
http://www.bls.gov/cex/
The CES is the only federal survey to provide information on the complete range of consumers' expenditures and incomes, as well as the characteristics of those consumers.

FM Tracks – Prevention Research Center at Case Western Reserve University
http://www.prchn.org/FMTracks.aspx
Used for tracking sales data (e.g., amount of SNAP and incentives distributed).

IMPLAN Group, LLC.
www.IMPLAN.com

USDA Farm-to-School Census
https://farmtoschoolcensus.fns.usda.gov/
The 2015 Census target survey population included primarily public, private, and charter school districts from all 50 states, Guam, Puerto Rico, the Virgin Islands, and Washington, DC. A few states included residential child care institutions and other non-school-based sites participating in the national school lunch program. In total, the master list frame included 18,104 potential respondents.

Key Glossary Terms

Community-supported agriculture
Farmers market
On-farm market
Farm-to-school
Multiplier

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Additional Resources or Supporting Citations

Note that individual 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).

Additionally, USDA's National Household Food Acquisition and Purchase Survey (FoodAPS) survey may be a useful reference for national benchmarks. Detailed information was collected about foods purchased or otherwise acquired for consumption at home and away from home, including foods acquired through food and nutrition assistance programs. The survey includes nationally representative data from 4,826 households, including Supplemental Nutrition Assistance Program (SNAP) households, low-income households not participating in SNAP, and higher income households
http://www.ers.usda.gov/data-products/foodaps-national-household-food-acquisition-and-purchase-survey.aspx

References:

[1] McFadden DT, Conner D, Deller S, Hughes D, Meter K, Morales A, et al. The Economics of Local Food Systems: A Toolkit to Guide Community Discussions, Assessments, and Choices. U.S. Department of Agriculture, Agricultural Marketing Service; March 2016. Available from https://www.ams.usda.gov/sites/default/files/media/Toolkit%20Designed%20FINAL%203-22-16.pdf.

[2] Kerna A, Frisvold G, Jacobs L, Farrell VA, Houtkooper L, Misner S. Application of IMPLAN to extension programs: Economic impacts of the University of Arizona cooperative extension SNAP-Ed spending. *Journal of Extension*. 2015;53(6). Available from http://www.joe.org/joe/2015december/tt4.php.

Additional Resource:

Friends of the Earth – The Economic Benefits of Farmers Markets
https://www.foe.co.uk/sites/default/files/downloads/farmers_markets.pdf

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LT15: Educational Attainment	
Framework Component	Effectiveness & Maintenance – Multi-Sector Impacts
Indicator Description	This indicator reflects the collective impact of strategies enacted by state and community partners (including SNAP-Ed) that demonstrate changes in educational attainment resulting from SNAP-Ed activities in, around, and affecting schools and local education agencies.
Background and Context	Schools are an environmental setting in which efforts that are reflected elsewhere in the framework frequently occur, such as Nutrition Supports/Implementation (MT5/LT5), Physical Activity and Reduced Sedentary Behavior Supports/Implementation (MT6/LT6), and Program Recognition (LT7). Schools are also sites where multiple sectors of influence intersect. This indicator is directly related to Education Policies (MT9), but the school nutrition environment can also be affected by Government Policies (MT7), farm-to-school activities included as part of Agriculture (MT8) and/or Food Systems (LT12), and the Commercial Marketing of Healthy Foods and Beverages (LT18). Schools can also be key considerations that drive community-built infrastructure as reflected in Community Design and Safety (MT10) and Shared-Use Streets and Crime Reduction (LT16). Because of schools' connections to the variety of intervention strategies as reflected by multiple indicators of the framework, SNAP-Ed can be an important partner for schools. Building on research that supports the relationships between dietary quality, food security, and physical activity to academic performance,[1-3] incorporating SNAP-Ed as a supportive strategy can help schools to close the achievement gap that is often seen when comparing SNAP-Ed eligible audiences to the student population as a whole. It is suggested that closer adherence to the current *Dietary Guidelines for Americans* and *Physical Activity Guidelines for Americans* will result in improved focus and academic performance, fewer health-related school absences, and lower school dropout rates. The most recent reauthorization of the 1965 Elementary and Secondary Education Act is the Every Student Succeeds Act (ESSA; http://www.ed.gov/essa), which was passed in December 2015 and replaced the No Child Left Behind Act of 2001. Included in the ESSA are provisions that monitor and reallocate resources to schools and Local Educational Agencies (LEAs; these are usually analogous to school districts but include other entities such as charter schools) to support schools and groups of students that exhibit achievement gaps and high dropout rates. The ESSA supports student performance targets and school ratings, but allows individual states to set the criteria and measure(s) that will be used.

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	Currently, the National Assessment of Educational Progress (NAEP) provides state-level estimates of student achievement, based on representative samples of students from each state. These data are based on standard measurement, and are aggregable across states. In contrast, cross-state comparisons are not appropriate for data collected by states' accountability systems because each state determines its own standards. When analyzing trend data, take careful note of changes in educational standards and testing methods, as these may affect the ability to make comparisons from year to year. Similarly, for those who wish to track a cohort of students longitudinally, be cautioned that successive grade-level assessments used by a state may not be scaled to be directly comparable or to reflect student growth over time. When using data generated by a state educational agency, please clarify in your documentation whether you are reporting data from the entire student body or targeted subpopulation(s), and use the level of data aggregation that is appropriate to the type of SNAP-Ed activity that occurs at the site(s).
Outcome Measures	Annual measures (where available): LT15a. Percentage of fourth-grade students who are eligible for the National School Lunch Program (NSLP) who are at least "proficient" or "advanced" in reading Information on reading proficiency LT15b. Percentage of eighth-grade students who are eligible for the NSLP who are at least "proficient" or "advanced" in reading LT15c. The aggregate number of hours or days attended by students relative to the number of hours or days of operation LT15d. The number of students who drop out of school during/between grades 9–12 100 students
What to Measure	Fourth-grade reading skills: Percentage of fourth-grade students who are eligible for the National School Lunch Program (NSLP) who are at least "proficient" or "advanced" in reading Information on reading proficiency, as assessed by the NAEP Eighth-grade reading skills: Percentage of eighth-grade students who are eligible for the NSLP who are at least"proficient" or "advanced" in reading, as assessed by the NAEP Attendance rates: The aggregate number of hours or days attended by students relative to the number of hours or days of operation (rate = hours or days attended/hours or days possible), as defined by the state's standards and reporting period Dropout rates: The number of students who drop out of school during/between grades 9–12, expressed as a rate per 100 students, as defined by the state's standards and reporting period
Population	NA

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Surveys and Data Collection Tools
National Center for Education Statistics (NCES) http://nces.ed.gov/nationsreportcard/states/ The NCES collects and presents tools for analyzing the National Assessment of Educational Progress (NAEP). The NAEP State Profiles page features "Snapshot Reports" that include state-level data for the percent of fourth- and eighth-grade students designated as "proficient" or "advanced" in reading, disaggregated by participation in the NSLP. These state-level estimates are based on representative samples, and data are released for odd-numbered years. **U.S. Department of Education** http://www2.ed.gov/about/contacts/state/index.html The U.S. Department of Education provides contact information for the education departments of each state, commonwealth, and territory; contact these agencies for attendance rate and dropout rate data that are used for this indicator.
Key Glossary Terms Every Student Succeeds Act Local Educational Agency National Assessment of Educational Progress
Additional Resources or Supporting Citations

[1] Florence MD, Asbridge M, Veugelers PJ. Diet Quality and Academic Performance. *Journal of School Health* 2008; 78(4): p. 209-215.

[2] Newman L, Baum F, Javanparast S, O'Rourke, Carlon L. Addressing social determinants of health inequities through settings: a rapid review. *Health Promotion International* 2015; 30(suppl 2): p. ii126-ii143.

[3] Nyaradi A, et al. Good-quality diet in the early years may have a positive effect on academic achievement. *Acta Paediatrica* 2016; 105(5): p. e209-e218.

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LT16: Shared-Use Streets and Crime Reduction	
Framework Component	Effectiveness & Maintenance – Multi-Sector Impacts
Indicator Description	Policy and environmental changes related to shared use streets, crime reduction, and safety can help support physical activity behaviors. This indicator is also focused on the implementation of the policies that are highlighted in MT10.
Background and Context	Studies show that characteristics of the built and social environment within communities (including infrastructure and condition of the sidewalks and streets and the prevalence/type of crime) can have a significant impact on physical activity. A shared-use or mixed-use street (also referred to as Complete Streets) provides an infrastructure that supports multiple recreation and transportation opportunities, such as walking, cycling, and use of wheelchairs to enable safe access for all users, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities. Shared-use streets make it easy to cross the street and support active transportation. In many cases, developing and adopting policies that promote Complete Streets and active transportation requires cities, towns, counties, and municipalities to change transportation planning, design, maintenance, and funding decisions and involve multiple stakeholders. Additionally, another strategy to promote shared use is open streets. Open streets are community-based programs that promote the use of public space for physical activity, recreation, and socialization by closing streets temporarily to motorized vehicles, allowing access to pedestrians. Likewise, crime and safety within communities has also been identified as an important barrier to low-income individuals and families engaging in physical activity. The prevalence and type of crime can contribute to community residents' perception of safety, which consequently could deter participation in outdoor activities, such as walking. Crime within locations in the neighborhood that are specifically designated for recreation such as parks, trails, and playgrounds, can be particularly relevant when considering associations between crime and physical activity. Additionally, several studies have reported relationships between traffic safety and physical activity. As described in MT10, Community Design Policies help create and provide support for system changes that result in safer

	and more appealing places for physical activity. CDC's 2014 State Indicators Report on Physical Activity outlined two key PSE change strategies related to shared-use streets, crime prevention, and safety; 1) creating or enhancing access to safe places for physical activity (including quality parks, trails, sidewalks, walking paths); and 2) supporting street-scale and community-scale design policy. LT16 should focus on measuring progress toward these indicators. LT16 measures the number of cities, counties, municipalities, states, etc. that implement policies or systems changes that improve safety and reduce crime such as shared-use streets, open streets activities, safe routes to school activities, and community policing. The role SNAP-Ed plays is focused on cultivating the partnerships and providing education to support the creation and adoption of community design and safety policies and systems changes. SNAP-Ed programs will work collectively with other organizations/agencies to achieve collective impact vs. working alone.
Outcome Measures	The long-term outcomes for this indicator may include: a. Total miles of shared-use paths, sidewalks, and bike lanes within local, state, territorial, or tribal jurisdictions (specify geographic areas where at least 50% of the residents are eligible for SNAP-Ed) b. Amount of funding or annual number of Complete Streets programs/projects initiated and completed in local, state, territorial, or tribal jurisdictions (specify geographic areas where at least 50% of the residents are eligible for SNAP-Ed) c. Amount of funding or annual number of safe route to school programs/projects initiated and implemented in local, state, territorial, or tribal jurisdictions (specify geographic areas where at least 50% of the residents are eligible for SNAP-Ed) d. Funding and annual number of open street programs initiated and implemented in local, state, territorial, or tribal jurisdictions e. Amount of funding or annual number of CPTED projects initiated and principles implemented in local, state, territorial, or tribal jurisdictions f. Funding and annual number of community policing programs in local, state, territorial, or tribal jurisdictions g. Total annual crimes and crimes in spaces designated for recreation within local, state, territorial, or tribal jurisdictions h. Total pedestrian injuries, and injuries in spaces designated for recreation within local, state, territorial, or tribal jurisdictions (specify geographic areas where at least 50% of the residents are eligible for SNAP-Ed)
What to Measure	Using the databases listed below, identify and track the following: a. Shared use paths, sidewalks, and bike lanes, relative to the total street miles b. Number of Complete Streets initiatives funded or implemented

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	c. Number of Safe Routes to Schools initiatives funded or implemented d. Open street programs funded or implemented e. Crime Prevention through Environmental Design (CPTED) programs funded or principles implemented f. Community policing programs funded and implemented g. Reduction in the crime/victimization rate, reduction in the crime/victimization rate in recreation spaces h. Reduction in pedestrian injury rate (pedestrian deaths and crashes) Certain outcomes can be reported in census tracts in which 50 percent or more of the households have income less than 185 percent of the federal poverty level or it could be a city or federally designated zone of economic need. For others, data are not available at the census tract level. The outcome does not have to only affect the low-income area, but the low-income area must be prioritized in the PSE intervention and evaluation.
Population	NA
Surveys and Data Collection Tools	
Shared Use Data • Local data on funding levels and number of programs implemented (e.g., community policing, safe routes to schools, open streets) are commonly available from state or local governments. However, the National Center for Safe Routes to School (http://www.saferoutesinfo.org/data-central/find-state-contacts) provides information on funding and programs. Some limited data on community policing are available through the Office of Community Oriented Policing Services within the Department of Justice (http://www.cops.usdoj.gov/default.asp?Item=1429) • Data on shared use for cities, towns, and municipalities may be available from local/state government (such as the city planning commission) and/or collected as part of city- or state-level coalitions that are focused on active transportation and physically active lifestyles. Shared-Use Street Level of Service Calculator: https://www.fhwa.dot.gov/publications/research/safety/pedbike/05138/05138.pdf https://www.fhwa.dot.gov/publications/research/safety/pedbike/05137/05137.pdf **Crime and Safety Data** • Data on the incidents and type of crime within a geographic area (in some cases crime is available by block) are frequently reported by local law enforcement and government offices. • Crime data are also available from the Federal Bureau of Investigation by offense, region, state, and local agency (https://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s); ESRI demographics (https://doc.arcgis.com/en/esri-demographics/data/us-intro.htm); Bureau of Justice Statistics (www.bjs.gov); and Community Commons for some areas (www.communitycommons.org).	

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- Data related to pedestrian and bicycle crashes are commonly available at the state and local level from the Department of Transportation.
  - Example of a city report: http://www.cityofchicago.org/content/dam/city/depts/cdot/bike/general/BikeCrashReport2012.pdf
  - State agency information can be obtained from the Pedestrian and Bicycle Information Center: http://www.pedbikeinfo.org/data/state.cfm?ID=14#state

Tools for Collecting Neighborhood-Level Data

Few sources provide data at the neighborhood or community level, which would require SNAP-Ed Implementing Agencies to collect data directly using some of the tools included below.

- Rural Active Living Assessment Tool http://activelivingresearch.org/rural-active-living-assessment-rala-tools)
- Evaluating Complete Street Projects: A Guide for Practitioners http://www.smartgrowthamerica.org/documents/evaluating-complete-streets-projects.pdf
- Systematic Pedestrian and Cycling Environmental Scan (SPACES)
- http://activelivingresearch.org/systematic-pedestrian-and-cycling-environmental-scan-spaces-instrument
  The SPACES instrument measures the physical environmental factors that influence walking and cycling in local neighborhoods. The instrument is used in combination with additional tools based on GIS.
- Complete Street Policy Analysis:
  - The Best of Complete Street Policies http://www.smartgrowthamerica.org/complete-streets-2014-analysis
  - Complete Street Local Policy Workbook http://www.smartgrowthamerica.org/guides/complete-streets-local-policy-workbook

Key Glossary Terms

Crime Prevention Through Environmental Design (CPTED)
Shared-use path
Complete Streets
Open streets
Safe Routes to School (SRTS)
Community policing

Additional Resources or Supporting Citations: NA

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LT17: Health Care Cost Savings	
Framework Component	Effectiveness and Maintenance – Multi-Sector Impacts
Indicator Description	Reduction in rates of selected chronic diseases and associated impacts on health care costs.
Background and Context	As described by the CDC's National Center for Chronic Disease Prevention and Health Promotion, one in four Americans has multiple chronic conditions, which are also associated with substantial health care costs.[1] Approximately 71% of the total health care spending in the United States is associated with care for Americans with more than one chronic condition.[2] The estimated annual medical cost of obesity in the U.S. was $147 billion in 2008 U.S. dollars; the annual medical costs for people who are obese were $1,429 higher than those of normal weight.[3] The total estimated cost of diagnosed diabetes in 2012 was $245 billion, including $176 billion in direct medical costs and $69 billion in decreased productivity.[4] Decreased productivity includes costs associated with people being absent from work, being less productive while at work, or not being able to work at all because of diabetes. As a result of the multi-sectoral changes initiated in part by SNAP-Ed agencies, public health, health care, and community organizations (see MT11)—especially the community prevention components and improved health care coverage afforded by the Patient Protection and Affordable Care Act (ACA)—we can anticipate associated improvements in low-income persons' health status and impacts in health care cost savings. **Applying the Triple Aim Framework to Health Promotion and Disease Prevention** The Institute for Healthcare Improvement's Triple Aim Framework (http://www.ihi.org/Topics/TripleAim/Pages/default.aspx) identifies three tenets for reforming health systems: • Improving the patient experience of care (including quality and satisfaction); • Improving the health of populations; and • Reducing the per capita cost of health care. In this indicator, we focus on reducing per capita cost of health care and improving the health of populations. Patient care is important to SNAP-Ed partners, but is outside the scope of SNAP-Ed's influence.

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	Existing studies show that for every $1 spent to implement programs such as EFNEP and SNAP-Ed education programs, up to $10.64 is saved in health care costs.[5] These studies pre-date the provisions of HHFKA and SNAP-Ed's expanded reach through comprehensive scope of services, thus we anticipate potential health care costs savings to be even greater.
Outcome Measures	LT17a. Total prevalence and reductions in prevalence of persons told by a medical professional they have high blood pressure, or as reported in an electronic medical registry LT17b. Total prevalence and reductions in prevalence of persons told by a medical professional they have type 2 diabetes or pre-diabetes or as reported in an electronic medical registry • Hemoglobin A1c LT17c. Total prevalence and reductions in prevalence of persons told by a medical professional they have high blood cholesterol or as reported in an electronic medical registry • Total cholesterol • Triglycerides LT17d. Total prevalence and reductions in prevalence of persons told by a medical professional they have obesity or as reported in an electronic medical registry • Height, weight, Body Mass Index (BMI), BMI z-score • Waist circumference LT17e. Total prevalence and reductions in prevalence of persons told by a medical professional they have asthma or as reported in an electronic medical registry Developmental LT14f. Health benefits in quality adjusted life years (QALYs) LT14g. Benefit-cost ratio for nutrition education and obesity prevention services

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What to Measure	LT17a-e: Track rates of diseases and conditions among SNAP-Ed eligible persons; prioritize Medicaid recipients and other low-income health plans administered by states, counties, territories, or tribes. Use the Health Resources Services Administration (HRSA) data warehouse and other existing electronic medical registries from Federally-Qualified Health Centers to track changes in the prevalence of chronic conditions, including those listed above. Other conditions may be of relevance, too. Calculate the year-to-year changes in prevalence and associated reductions by priority populations based on gender, race or ethnicity, or ZIP code. Comply with all applicable Health Insurance Portability and Accountability Act (HIPAA) rules and human subjects' protections. Institutional Review Board review and approval may be necessary. **As a reminder, clinical health assessments of the SNAP-Ed target audience are not allowable**. Therefore, it will be incumbent on SNAP-Ed agencies to enter into data sharing agreements with health care systems, or to use publically available data sources, to identify disease prevalence rates. The WIC program and programs funded through the CDC to maintain disease registries may also be valuable partners for evaluation. LT14f. For SNAP-Ed agencies seeking to develop a more robust assessment on health care cost effectiveness of nutrition education and obesity prevention services, a good place to start is measuring quality-adjusted life year (QALYs), which is an outcome measure that considers both the quality and the quantity of life lived. The QALY is based on the number of years of life added by interventions. LT14g. Measuring the cost-benefit ratio of SNAP-Ed community-wide programs or the health care cost savings associated with community-wide SNAP-Ed interventions is an emerging area that practitioners will have the opportunity to develop over time. Some states, such as California, Michigan, South Carolina, and Washington, are working on these types of analyses for SNAP-Ed. These types of projects assume partnerships are in place with researchers working on SNAP-Ed related evaluations. Here, we measure lost productivity from morbidity (i.e., earnings foregone from lost workdays) related to diet-related diseases and the benefit of delaying the health care costs associated with treating diet-related diseases. A good place to start in understanding health care costs is using the CDC's Chronic Disease Cost Calculator version 2, which is a downloadable tool that provides state-level estimates of medical expenditures and absenteeism costs for: • Arthritis • Asthma • Cancer • Cardiovascular diseases (congestive heart failure, coronary heart disease, hypertension, stroke, and other cerebrovascular disease)

	• Depression • Diabetes Specifically, the Cost Calculator provides the following estimates for each chronic condition: • Medical expenditures for the entire state population (all payers and the uninsured) and separately for Medicaid, Medicare, and privately insured. • Absenteeism costs and estimates of missing work days • Projections of medical costs until 2020 Another example of a cost effectiveness simulation tool is the Prevention Impacts Simulation Model (PRISM), which was used to measure the cost-effectiveness of CDC-funded *Communities Putting Prevention to Work* grants. The researchers found that when community-based health promotion programs are sustained at their 2013 levels through 2020, there is potential to avert 14,000 premature deaths, $2.4 billion in medical costs, and $9.5 billion in productivity losses.[6] States may also develop approaches to measure changes in actual health care costs and charges for SNAP-Ed eligible populations; this would require data sharing agreements with insurers and state Medicaid agencies.
Population	NA

Surveys and Data Collection Tools

The Health Resources Services Administration (HRSA) Data Warehouse
The enterprise repository for HRSA data, with data reported by states, territories, and county or service areas), population (e.g. low income or Medicaid eligible) or facilities (e.g. federally qualified health center).
http://datawarehouse.hrsa.gov

CDC's Chronic Disease Cost Calculator
The Chronic Disease Cost Calculator version 2 is a downloadable tool that provides state-level estimates of medical expenditures and absenteeism costs for a variety of diet-related and other chronic diseases.
http://www.cdc.gov/chronicdisease/calculator/index.html

Prevention Impacts Simulation Model (PRISM) for Chronic Disease Policymaking
http://www.systemdynamics.org/conferences/2011/proceed/supp/S1157.pdf

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Key Glossary Terms
Qualify adjusted life year
Additional Resources or Supporting Citations
References:

[1]Ward BW, Schiller JS, Goodman RA. Multiple chronic conditions among US adults: a 2012 update. *Prev Chronic Dis.* 2014;11:130389. DOI: http://dx.doi.org/10.5888/pcd11.130389.

[2]Centers for Disease Control and Prevention. Death and Mortality. NCHS FastStats Web site. http://www.cdc.gov/nchs/fastats/deaths.htm. Accessed December 20, 2013.

[3]Finkelstein EA, Trogdon JG, Cohen JW, Dietz W. Annual medical spending attributable to obesity: payer- and service-specific estimates. *Health Aff.* 2009;28(5):w822-31. http://content.healthaffairs.org/content/28/5/w822.full.html. Accessed December 23, 2013.

[4]American Diabetes Association. The Cost of Diabetes. http://www.diabetes.org/advocacy/news-events/cost-of-diabetes.html. Accessed December 23, 2013.

[5]Applying Cost Benefit Analysis to Nutrition Education Programs: Focus on the Virginia Expanded Food and Nutrition Education Program http://pubs.ext.vt.edu/490/490-403/490-403.html

[6]Soler R, Orenstein D, Honeycutt A, Bradley C, Trogdon J, Kent CK, et al. Community-Based Interventions to Decrease Obesity and Tobacco Exposure and Reduce Health Care Costs: Outcome Estimates From Communities Putting Prevention to Work for 2010–2020. Prev Chronic Dis 2016;13:150272. DOI: http://dx.doi.org/10.5888/pcd13.150272

CDC HIV Cost-Effectiveness: http://www.cdc.gov/hiv/programresources/guidance/costeffectiveness/index.html

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LT18: Commercial Marketing of Healthy Foods and Beverages	
Framework Component	Changes – Multi-Sector
Indicator Description	This Indicator focuses on sub-national, policy, systems, and environmental (PSE) changes in organizational systems where commercial food and beverage marketing practices—advertising, PR, promotion, and personal sales—are most likely to influence the food choices of SNAP-Ed audiences, especially children, youth, and low-income, limited-English and ethnic adults. Changes in commercial marketing activity are distinct from those reported in LT5 and LT6, which may include institution-sponsored marketing introduced as part of an evidence-based intervention. The changes will be made by community institutions that decide what commercial marketing to feature or decline. The marketing changes reported here are likely to result from public/private partnerships and are deemed to have occurred due, at least in part, to SNAP-Ed efforts.
Background and Context	**Authoritative recommendations:** Recommendations for changes in commercial marketing practices come from many authoritative sources. These include the Alliance for a Healthier Generation, the Partnership for a Healthier America, the Better Business Bureau (Children's Food and Beverage Advertising Initiative), American Restaurant Association (*Healthy Dining*, *Kids LiveWell Program*), the Federal Trade Commission, and the federal government's *Health and Sustainability Guidelines for Federal Concessions and Vending Operations.* There are few data about in-language and ethnic-specific food marketing. As yet there are no publicly available data sources that track the mix of methods used in commercial marketing of foods and beverages at the sub-national level. This Indicator is strategically important because it can focus local attention on pervasive and powerful marketing influences that only community residents, organizations and businesses can impact. When conducted in combination with other interventions, a change in food/beverage marketing is recommended by experts as necessary to achieve population-wide results. **State plan:** If interventions are being planned for any of the channels below, then changes in commercial marketing practices may be included among the SMART objectives for those interventions. **On-site assessments, targets:** On-site assessments can routinely Include commercial marketing practices. This provides baseline values and allows tracking of change. Some assessment tools provide an overall score which may be used to incent positive change over time. Examples for different settings include the School Health Index and other school assessments, *CX*^{3}, GO NAPP-SAC, and others.

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	Engage community members: On-site assessments may be conducted by students as part nutrition education and service learning projects, or by community residents incidental to nutrition education or community engagement projects. **Comprehensive wellness policies** may already cover many of the commercial marketing activities listed above in institutional settings such as ECE, schools, CYOs, and worksites. **Implementing Agencies** may identify the number of **total and SNAP-Ed qualified sites** in some key settings/channels, such as: • ECE, schools, and afterschool programs by virtue of free or reduced price meal free or reduced price meal eligibility • Community youth organizations (the Y, Boys' and Girls' Clubs) • Public properties like parks and recreation centers in qualifying census tracts; SNAP, social service, and public health offices • SNAP-certified stores, including supermarkets, corner stores, and non-food stores • Fast food chains with high patronage by SNAP-Ed audiences **Other marketing** to children, youth, and vulnerable groups is addressed in MT13 Media Practices.
Outcome Measures	**Increases** in positive marketing practices, as above (advertising, PR, promotion, personal sales), in the following channels that are due, in whole or in part, to activities of SNAP-Ed and its partners: LT18a. Early care and education (ECE), school, and afterschool settings where USDA regulations apply: The number of organizations (ECE, CYO) and districts (schools) that have established written marketing policies (beyond those required by USDA) to create an environment where healthy choices are the easiest, most available, and most affordable for children and youth. Often, such decisions may grow out of wellness policies (See also MT9, Education Policies). LT18b. Nonprofit community youth organizations (CYOs): The number of CYOs that have established written policies for procurement standards for foods/beverages, point-of-choice labeling, and favorable pricing of foods/beverages-to-encourage, as well as other marketing cited in LT18a, above. Often, adoption of such policies may grow out of work by nearby School Wellness Policy Councils LT18c. Other public properties where the SNAP-Ed audience is a high proportion of the public being served: The number of other government agencies and jurisdictions (city, town, county, district) that have written

	policy decisions or zoning requirements that encourage marketing of foods/beverages-to-encourage for cafeterias, concessions, and vending on public property. Examples would include procurement contracts that go beyond product specifications to also specify visual, promotional, pricing, and sponsorship marketing of foods/beverages-to-encourage (See also MT7, Government Policies). LT18d. Low-wage worksites: Number of low-wage worksites that made policy decisions about the marketing of foods/beverages, point-of-choice labeling, favorable pricing of foods/beverages-to-encourage, and company sponsorships. Such decisions may grow out of SNAP-Ed interventions and be similar to contract provisions to public agencies in LT19c, above. LT18e. Retail food stores: Number of retail food stores that have established marketing practices that promote the choice of healthier foods and beverages. These may include, but are not limited to, in-store merchandising, labeling, promotion, and family-friendly placements, including check-out lanes, that intentionally encourage the choice of foods/beverages-to-encourage; partnerships with SNAP-Ed projects to support community marketing events; and projects to support consumer uptake of foods/beverages-to-encourage. These business changes should extend past those that occur only while a SNAP-Ed intervention is being conducted and may include changes a company makes on its own that can be attributed in whole or in part to SNAP-Ed influence. (Retail outcomes also are found in L12, Food Systems.) LT18f. Fast food chain restaurants/franchisees: The number of fast food companies or franchisee organizations that institute marketing practices that promote healthier kids' meals and meal-deals. May include franchisee organizations that advocate for corporate promotions (movie tie-ins, toy giveaways, kids' meals, and specially priced meals and snacks) that encourage the purchase of healthier choices. These changes may grow out of SNAP-Ed school or CYO interventions, social marketing campaigns, and assessments of restaurants or of the community food environment, such as *CX*[3]. **Decreases** in marketing practices that promote the purchase of foods/beverages-to-discourage in the following channels: LT18g. ECE, schools, and afterschool settings where USDA regulations apply: The number of organizations (ECE, CYO) and districts (schools) that prohibit on-site advertising, food/beverage donation policies tied to brands or purchasing contracts, and contracts that contain business incentives to increase exposure to calorie-dense/nutrient-poor foods and beverages that go beyond the scope of regulations (See also MT9, Education Policy).

	LT18h. Community youth organizations: The number of CYOs that have established written policies to limit or prohibit marketing practices that encourage purchase and consumption of foods-to-discourage through vending machines, snack shops, signage, pricing, promotions and sponsorships. Similar to those for schools, above. LT18i. Other public properties: The number of other government agencies and jurisdictions (city, town, county, district) that place prohibitions or controls on advertising and signage for foods/beverages-to-avoid on public property; procurement contracts that prohibit marketing of and incentives of foods/beverages-to-discourage (See also MT7, Government Policies). LT18j. Low-wage worksites: Number of low-wage worksites that establish standards and policies to prohibit commercial marketing practices that encourage the purchase of foods/beverages-to-discourage. a. Retail food stores: Number of retail food stores that establish policies and practices to limit in-store merchandising, labeling, promotion, and placements of foods/beverages-to-discourage. (See also LT 12, food systems) b. Value-oriented fast food chain restaurants/franchisees: The number of fast food companies/ franchisee organizations that do not participate in corporate promotions (movie tie-ins, toy giveaways, kids' meals and specially priced meals and snacks) that encourage consumption of foods-to-avoid.
What to Measure	This indicator will report the number of SNAP-Ed qualified organizations in key channels that intentionally introduce written policy changes. As per authoritative recommendations, the new marketing policies are designed to: • Make the healthy choice the easy, appealing, desired, and affordable choice to SNAP-Ed audience segments, including through behavioral economics and default choices. • Restrict or discourage the marketing of unhealthy foods to children and youth <12 years. • Restrict or discourage the marketing of unhealthy foods and beverages to vulnerable groups, including through ethnic and in-language outreach and programming. Sub-national marketing practices to general audiences, children or in-language segments: • Advertising: TV, radio, outdoor, transit ads; on-site signage, placements, banners, posters, wraps (vending, vehicles) • Public relations; Online games, contests, give-aways, community events/sponsorships • Promotion (to consumers): Special pricing, seasonal specials, rebates, incentives, celebrity appearances, movie or event tie-ins

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	• Personal sales (to intermediaries): Sponsorships, trips, contests, donations (school supplies, athletic equipment), charitable contributions, sales incentives Examples of how changes may be verified: • Procurement standards • Contracts with suppliers/vendors • Pre-post on-site assessments • Key informant interviews with organizational leaders • Policy documents, such as worksite or school wellness policies • Executive orders, resolutions, initiatives
Population	NA
Surveys and Data Collection Tools *CX³* Food Environment Assessment (food stores, quick service restaurants, school environment); NAP—SACC, CHOICE (ECE);	
Key Glossary Terms Marketing activities include: • Advertising • In-language • Personal sales • Promotion • Public relations ("earned media")	
Additional Resources or Supporting Citations These changes embody recommendations from a variety of credible sources, including the federal government, foundations, universities, and advocacy organizations, including those focusing on the prevention of childhood obesity and other chronic diseases.	

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LT19: Community-Wide Recognition Programs	
Framework Component	Changes – Multi-Sector
Indicator Description	This indicator focuses on entire cities, multi-county regions, or tribal jurisdictions in which civic leaders are working toward community-wide improvements in living and business conditions. It identifies the number of such jurisdictions where work on SNAP-Ed relevant objectives, activities, and outcomes is being conducted that is attributable, in whole or in part, to the efforts of SNAP-Ed and its partners. This indicator is similar to LT7 (Program Recognition), which recognizes achievement in settings such as early childhood education (ECE), schools, worksites, faith (churches/mosques/temples), and parks.
Background and Context	Community-wide recognition programs are popular among governors, mayors, other elected officials, and community leaders as a way of bringing together the public, nonprofit, and business sectors, mobilizing efforts, and working together to improve living, social, environmental, health, and business conditions. Standards and benchmarks may be set by authoritative third parties, often based on extensive consensus-building among a cross-section of experts and opinion leaders. This kind of approach is believed to result in comprehensive solutions for long-term, complex collective impact–type problems like obesity prevention or "livable communities." Most recognition programs maintain a publicly posted roster of members, often by achievement level. There is no single national source that lists the communities participating in national or statewide recognition programs. Authoritative recognition processes can mobilize a cross-section of community leaders and organizations toward important, long-term change. Recognition itself can be an incentive to stimulate sustainable, comprehensive, multi-sector efforts that benefit residents, community livability, and economic development. Well-developed recognition programs provide education, leadership, peer support, and publicity. They may provide an infrastructure within which to achieve many of the outcomes sought in Environmental Settings and Sectors of Influence cited in the SNAP-Ed Evaluation Framework. This indicator is strategically important for at least two reasons: First, in localities that already participate in a recognition program, understanding of, concern about, and work on SNAP-Ed social determinants would be high. Second, where communities have achieved a level of recognition but disparities persist, SNAP-Ed expertise, infrastructure, and know-how may be very welcome. In both cases, results should be achieved relatively quickly and efficiently, thus benefitting large numbers of low-income residents and building recognition of SNAP-Ed as an effective brand.

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	Some states have award programs for exemplary or striving localities. Examples of national recognition programs include: • *Let's Move!* Cities, Towns, and Counties (http://www.healthycommunitieshealthyfuture.org/about-us/lets-move-cities-towns-and-counties/) – 500+ cities, county, and town sites "to create healthier communities for healthy kids": administered through the National League of Cities. • *Let's Move!* in Indian Country (http://lmic.ihs.gov) – For tribal governments, Urban Indian Centers, business, youth, and nonprofit sector "to raise the next generation of healthy Native children"; administered through the Department of the Interior with help from the Partnership for a Healthier America. • STAR Communities (http://www.starcommunities.org/rating-system/framework/) – 90+ certified or member communities engaged in the first national certification system to recognize sustainable communities; administered by STAR Communities, a nonprofit based in Washington, DC. State Plan: Consider adding a SMART objective to work with communities in your state that are engaged in recognition programs. These may have SNAP-Ed interventions in place, or they may be ones where there are qualifying low-income neighborhoods that do not yet have SNAP-Ed programming. Assessment, targeting: Become familiar with the standards, expectations, resources, tools, current participants, and infrastructure of the formal recognition programs; identify elements that align with SNAP-Ed priorities, programs, and partnerships and identify SNAP-Ed and partner resources that help achieve each. Engage with stakeholders: With partners, reach out to the local leadership bodies of community-wide recognition programs to determine common interests, feasibility, and potential benefits of working together; if appropriate, agree on a plan of action. Set and record benchmarks that harmonize with the recognition program.

Sectors of Influence

Outcome Measures	The outcomes for this indicator may include: LT19a. The number of communities with which SNAP-Ed Implementing Agencies have formally partnered to qualify for certification in specific objectives relevant to SNAP-Ed objectives LT19b. The number of communities that have newly applied for recognition in SNAP-Ed relevant topics due, at least in part, to partnering with SNAP-Ed LT19c. The number of communities that achieve initial recognition in SNAP-Ed relevant topics at the bronze, silver, or gold levels or All-Star (*Let's Move!*) due, at least in part, to partnership with SNAP-Ed LT19c. The number of communities that secure maximum points in SNAP-Ed relevant topics to achieve 5-Star, 4-Star, or 3-Star certification, in partnership with SNAP-Ed
What to Measure	• ***Let's Move!* Cities, Towns, and Counties** and **STAR:** As each designation level is achieved, record the completed SNAP-Ed relevant milestones that contributed to achieving that level. Report changes in the four "pillars," namely: o Parents and caregivers (including child care and afterschool, public settings, restaurants) o Nutrition in schools (HUSSC, summer meals, NSLP and SBP, and Chefs) o Physical activity (including *Let's Move!* Outside, joint-use agreements, Safe Routes to School, daily PE in schools, classroom sessions) o Healthy, affordable, accessible food (food policy councils, SNAP, gardens, government procurement, free water) • ***STAR Communities***: Specify and record specific SNAP-Ed related changes in each of the Objective Areas that earn points contributing to achievement of a higher recognition level. Report achievement of qualifying scores for objectives relevant to the SNAP-Ed Evaluation Framework in the following Goal Areas: o Built environment o Climate and energy o Economy and jobs o Education, art, and community o Equity and empowerment o Health and safety o Natural systems o Innovation and progress • ***Let's Move!* in Indian Country*:*** Use the four pillars and the Indian Country Toolkit, and record specific SNAP-Ed related changes as they are achieved, including securing new resources (grants, donations, partnerships) and earning a Presidential Active Lifestyle Award. The four pillars are entitled: o Healthy start on life o Developing healthy schools

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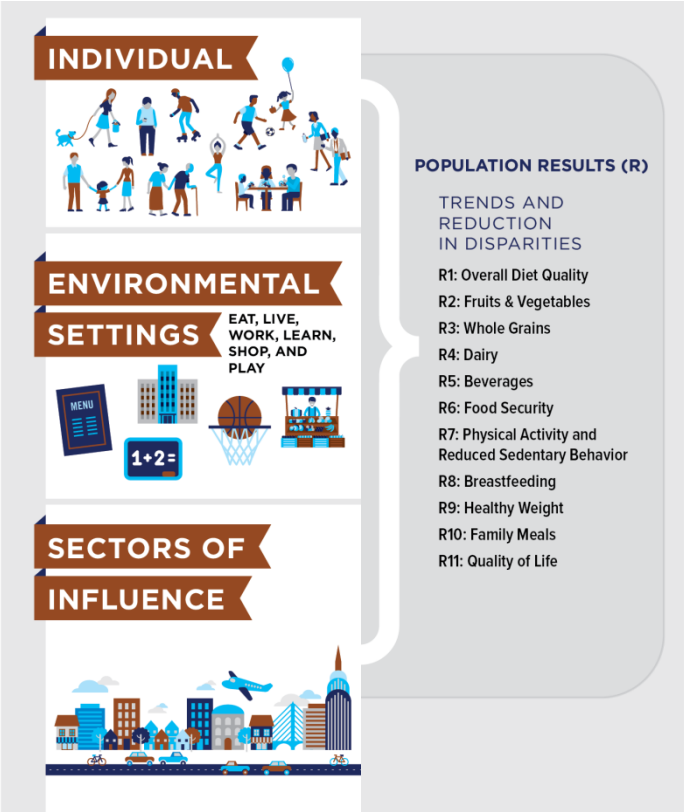
	o Increasing physical activity o Increasing access to affordable, healthy foods and establishment of a food policy council. Report completion of items that contribute to the SNAP-Ed Evaluation Framework from the menu of specific steps in the Indian Country Toolkit.
Population	Low-income residents of communities that are engaged in community-wide national or state recognition programs
Surveys and Data Collection Tools The assessment tools and application forms of each recognition program.	
Key Glossary Terms Community-wide recognition programs Program recognition Program recognition levels	
Additional Resources or Supporting Citations: NA	

Chapter 4. Population Results



The Population Results indicators are markers of low-income people's achievement of recommendations put forth in the *Dietary Guidelines for Americans* and *Physical Activity Guidelines for Americans*, and their associated health and well-being. Population-level indicators measure changes over time in the behaviors that promote positive health outcomes. The over-arching evaluation question in this chapter is: To what extent does SNAP-Ed programming improve the low-income population's achievement of the *Dietary Guidelines for Americans* recommendations and other health risk behaviors, compared to the general population?

Population-level indicators should present the overall profile of the SNAP-Ed eligible population and the distribution of outcomes for different subgroups based upon socioeconomic and demographic factors, such as income, race or ethnicity, age, educational level, languages spoken, and geographic scale. Comparing SNAP-Ed eligible persons to the general population is important to measure the degree to which the SNAP-Ed eligible population is doing better than, worse than, or about the same as the general population. These data will also be useful for SNAP-Ed needs assessments and intervention planning.

The distinguishing factors between the Individual-level indicators in Chapter 1 and the indicators in Chapter 4 are who gets surveyed, under what circumstances, and what the outcomes intend to show. In Chapter 1, the indicators measure program effectiveness for participants of SNAP-Ed's direct education activities. In Chapter 4, the population results track and measure the behaviors and health status of low-income audiences that may participate in direct education but also benefit from PSEs and marketing activities in the communities where they live. In this chapter, the 11 indicators measure improvements in population behaviors and associated health statuses year-after-year, resulting from strategies and

interventions across the framework. Here, we assess the combination of educational activities, marketing, and policy, systems, and environmental (PSE) changes in settings or sectors.

States can collect the needed data in many ways. Local, state, territorial, and tribal agencies that conduct surveys among cohorts of SNAP-Ed participants in SNAP-Ed qualified schools or community settings are able to routinely track and measure population-level results on a quarterly, bi-annual, annual, or biennial basis. Agencies may also 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) on adults or the Youth Risk Behavior Surveillance System (YRBSS) on high school students. The BRFSS and YRBSS questionnaires are in the public domain and no permission is required to use them. Several state SNAP-Ed programs—including those in Arizona, California, and Hawaii—have funded additional items and modules on the BRFSS for surveillance in SNAP-Ed eligible populations. For instance, the Arizona Nutrition Network, found it cost effective to pay for demographic screeners to be included in its statewide BRFSS to identify respondents with a household member participating in the SNAP, WIC, or the National School Lunch Program. By adding these demographic screeners, the Arizona Nutrition Network was able to identify health behaviors and trends in nutrition assistance program participants that could be compared to the general Arizona population at no additional cost to SNAP-Ed. Contact your state or territorial BRFSS coordinator to learn how to add questions for the SNAP-Ed eligible audience to your state's CDC-funded BRFSS survey: http://www.cdc.gov/brfss/state_info/coordinators.htm.

You can also measure population results by conducting a population-level 24-hour dietary recall with your local, state, territorial, or tribal SNAP-Ed eligible population. For instance, Land-grant Institutions that report results in the Web-Based Nutrition Education Evaluation and Reporting System (WebNEERS) are monitoring population results in low-income audiences over time. You can also conduct annual or regular data collection of your total SNAP-Ed eligible population or a representative random sample of it using the measures prioritized in this chapter. The same questionnaire or module should be used year-to-year for consistency. For instance, the Michigan Nutrition Network at the Michigan Fitness Foundation requires its SNAP-Ed partners to administer the National Cancer Institute (NCI) Fruit and Vegetable Screener as a pre-post instrument based on a convenience sample of program participants. If a partner's direct SNAP-Ed eligible reach is less than 500, it is required to complete 75 survey pairs. If it is greater than 500, a representative sample of 15 percent is required. Representative is a key word for surveillance and monitoring. If necessary, oversampling must be done to obtain a sample reflective of the characteristics of the partner's population. The University of Maryland's Food Supplement Nutrition Education program also administers semi-annual surveys in affiliated SNAP-Ed schools to assess progress and trends over

time resulting from comprehensive school-based approaches; their surveys are not tied to a specific educational curriculum. Some states, such as California and Washington, or large cities and counties, such as Los Angeles and New York City, also conduct their own omnibus state or city-wide health surveys.

Given the restrictions on using SNAP-Ed funds for general surveillance, and that funds can only pay for the portion of the surveillance activity reaching those within 185 percent of the federal poverty level, you may seek partnerships with other funding programs or use existing data sources that provide such breakouts. The following table contains a list of free, public data sources useful in tracking population results included in the framework:

Data Sources for Tracking Population Results and Reductions in Disparities

Data Source	Web Link
Nutrition, Physical Activity and Obesity: Data, Trends and Maps	https://nccd.cdc.gov/NPAO_DTM/Default.aspx
State of Obesity	http://stateofobesity.org/
County Health Rankings	http://www.countyhealthrankings.org/
Chronic Disease Indicators	http://www.cdc.gov/cdi/index.html
Behavioral Risk Factor Surveillance System	http://www.cdc.gov/brfss/index.html
Youth Risk Behavior Surveillance System	http://www.cdc.gov/healthyyouth/data/yrbs/index.htm

Healthy People 2020 Reference Points

The reference points used in this chapter for health outcomes or targeted food groups, beverages, or physical activity and reduced sedentary behaviors may align with population benchmarks used in surveillance surveys, and, where available, *Healthy People 2020* targets. Healthy People provides science-based, 10-year national objectives for improving the health of all Americans. Most *Healthy People 2020* targets rely on national data sets, such as the National Health and Nutrition Examination Survey (NHANES). Because it is not possible to use certain national surveys, such as NHANES, to report at the state or local data level, SNAP-Ed agencies may use *Healthy People 2020* for goal-setting purposes. A table of selected *Healthy People 2020* objectives appears below.

Selected Population Goals: *Healthy People 2020* Objectives

Goal
HRQOL/WB-1.1 Increase the proportion of adults who self-report good or better physical health
HRQOL/WB-1.2 Increase the proportion of adults who self-report good or better mental health
NWS-8 Increase the proportion of adults who are at a healthy weight
NWS-9 Reduce the proportion of adults who are obese
NWS-10.1 Reduce the proportion of children aged 2–5 years who are considered obese
NWS-10.4 Reduce the proportion of children and adolescents aged 2–19 years who are considered obese
NWS-13 Reduce household food insecurity and in doing so reduce hunger
NWS-16 Increase the contribution of whole grains to the diets of the population aged 2 years and older
NWS-15.1 Increase the contribution of total vegetables to the diets of the population aged 2 years and older
PA-2.4 Increase the proportion of adults who meet the objectives for aerobic physical activity and for muscle-strengthening activity
PA -3.1 Increase the proportion of adolescents who meet current federal physical activity guidelines for aerobic physical activity
MICH-21.1 Increase the proportion of infants who are ever breastfed

Population Results:

TRENDS AND REDUCTIONS IN DISPARITIES

R1: OVERALL DIET QUALITY
R2: FRUITS AND VEGETABLES
R3: WHOLE GRAINS
R4: DAIRY
R5: BEVERAGES
R6: FOOD SECURITY
R7: PHYSICAL ACTIVITY AND REDUCED SEDENTARY BEHAVIOR
R8: BREASTFEEDING
R9: HEALTHY WEIGHT
R10: FAMILY MEALS
R11: QUALITY OF LIFE

Population Results

R1: Overall Diet Quality	
Framework Component	Population Results – Trends and Reductions in Disparities
Indicator Description	This indicator represents overall diet quality of individuals at the population level that reflects secular trends and disparities in diet quality at the national level; and potentially trends in overall diet quality of SNAP-eligible populations at the state or regional level as a measure of cumulative effects (beneficial or adverse) of SNAP-Ed targeting particular components of diet quality. Individual indicators for diet components will be the most useful as a measure of SNAP-Ed impact in the short term, medium term, and long term.
Background and Context	This indicator is to be used for surveillance and benchmarking, addressing the question: How is diet quality changing nationally and are disparities increasing or decreasing? The indicator could also be used by states to monitor other changes in the diet of the SNAP-eligible population, total diet quality occurring along with diet components targeted by SNAP-Ed, and potential positive and adverse changes. It would not be advised for evaluation of local SNAP-Ed programs. Overall diet quality of individuals is most often measured via the Healthy Eating Index (HEI), which assesses conformance to the *Dietary Guidelines for Americans*. The USDA uses the HEI to monitor the diet quality of the U.S. population and the low-income subpopulation. To calculate the HEI, the Center for Nutrition Policy and Promotion uses the data collected via 24-hour dietary recalls in national surveys, such as the National Health and Nutrition Examination Survey (NHANES; http://www.cnpp.usda.gov/healthyeatingindex). Information is needed on respondents on all of the following dietary components in order to score diet quality using the HEI: total fruit, whole fruit, total vegetables, greens and beans, whole grains, dairy, total protein foods, fatty acids, refined grains, sodium, and empty calories. The overall diet quality data reported in NHANES provide a national benchmark for comparing the low-income population to the general population, and comparing state and regional data with national estimates. Representative and detailed dietary intake data would be needed at the state level for this indicator to be useful as a surveillance tool at state level.

Population Results

Outcome Measures	R1a. Mean score on the HEI—2010 and change over time R1b. Proportion of people who are in the lowest category of scores Notes: • Update to 2015 when available. • The National Cancer Institute is investigating the quantity of change needed for meaningful change in diet. • Investigate the cut point for low scores in association with researchers and developers of the HEI. • If other validated indices of diet quality are available, consider them for use as the basis for indicators.
What to Measure	Diet quality is a summary indicator on how individuals are doing on all of the key current dietary guidelines. The HEI assigns a score from 0 to 100, based on 12 measures of diet. The higher the score, the better the diet quality overall, which has been shown to link to health status and mortality. In the context of the SNAP-Ed program, HEI would measure several aspects of diet quality that are not often targeted by SNAP-Ed (e.g., fatty acids, seafood and plant proteins, sodium). Therefore it would not be considered a high priority indicator for SNAP-Ed. The value of measuring it in states with the dietary assessment and analysis capacity is that it could provide a benchmark of how overall diets are changing in the SNAP-eligible population, given that SNAP-Ed is focusing only on a select few aspects of diet. It could reveal a beneficial effect on overall diet quality of SNAP-Ed or it could identify an adverse effect, from a focus on a select few dietary behaviors. At the national level, the value of this measure is to track secular trends and disparities in diet quality of the population to alert SNAP-Ed to dietary behaviors that may need further attention in the low-income population. All foods and nutrients included in the HEI—2010 index must be measured using an appropriate dietary assessment method. Data to determine overall diet quality are obtained through 24-hour dietary recalls, food records, or selected comprehensive food frequency questionnaires. Data from 24-hour recalls are used most often, and the reported foods and quantities are coded using the USDA's Food and Nutrient Database for Dietary Studies (FNDDS) or the Nutrition Coordinating Center's Food and Nutrient Database. Overall diet quality is defined most often through scores on the HEI, which is calculated based on coded dietary intake data collected via survey. The FNDDS is used as the database to analyze the foods and nutrients for each respondent's dietary intake data. These data further link to the MyPyramid Equivalents Database (MPED) to quantify the amounts of various food groups in cup equivalents—information that is used to calculate the HEI scores. A food frequency questionnaire can be used to measure HEI—2010 if it has the following characteristics: 1) it is intended to measure the total diet, not only components of it; 2) it measures quantities of food as well as frequency; and 3) it is analyzed using FNDDS and MPED and supplies data on all of the nutrients and food groups required for

	the HEI scores. HEI scores are based on total diet; therefore, data from brief instruments that focus on specific parts of the diet are not appropriate. http://epi.grants.cancer.gov/hei/uses.html#intake
Population	Children aged 10 years and older, adults Potentially younger children through parent proxy

Surveys and Data Collection Tools

Adults	Children and Youth
24-hour recall **Automated Self-Administered 24-hour Recall** (ASA24) http://epi.grants.cancer.gov/asa24/ https://asa24.nci.nih.gov/researcherSite/ASA242013.aspx The ASA24 system is a web-based tool that enables multiple automated self-administered 24-hour recalls **AMPM—Automated multiple-pass method** for 24-hour recalls developed by USDA for use in NHANES—can be used by researchers, but it is expensive and labor intensive and requires considerable training. **University of California Cooperative Extension EFNEP Food Tracker: 5-step Multiple Pass 24-hour Dietary Recall** http://townsendlab.ucdavis.edu/ **Examples of comprehensive Food Frequency Questionnaires** **NIH Diet History Questionnaire** http://epi.grants.cancer.gov/dhq2/about/ **Harvard Willett Food Frequency Questionnaire** https://regepi.bwh.harvard.edu/health/nutrition.html **Block Food Frequency Questionnaire** http://www.nutritionquest.com/ **EFNEP/WebNEERS** WebNEERS is a data collection tool used by land grant universities conducting EFNEP to collect 24-hour recall data. It exports summary data for state/territory and national assessment.	**24-hour recall** **Automated Self-Administered 24-hour Recall** (ASA24 – Kids) http://epi.grants.cancer.gov/asa24/respondent/childrens.html. The ASA24-Kids-2014 is recommended for children 10 years of age and older. Children aged 12 and older can respond themselves, Children aged 10 or 11 would need a proxy reporter, such as a parent or guardian. NHANES uses a proxy respondent for children 5 years of age and younger and has a parent or guardian assist with recalls for children 6 to 11 years of age.

Population Results

Key Glossary Terms: NA
Additional Resources or Supporting Citations: NA

Population Results

R2: Fruits and Vegetables ☑	
Framework Component	Population Results – Trends and Reductions in Disparities
Indicator Description	This indicator represents changes in fruit and vegetable consumption, including subgroups of under-consumed vegetables, over time, from year to year, among the low-income population of the state. Unlike MT1 and LT1 (Healthy Eating Behaviors), which measure increases in fruit and vegetable intake attributed to SNAP-Ed series-based programs, R2 is intended to measure the proportion of the SNAP-Ed eligible population that is achieving the *Dietary Guidelines for Americans, 2015* recommendations. Thus, R2 measures fruit and vegetable consumption status for low-income households surveyed within the state or area of focus. R2 is a population-level surveillance measure.
Background and Context	The current *Dietary Guidelines for Americans* recommends intake of 1 to 2½ cups of fruit per day and 1 to 4 cups per day of vegetables based on daily calories consumed. Most Americans are not eating enough fruits and vegetables. According to CDC's *Fruit and Vegetable Indicator Report, 2013,* adults eat fruit 1.1 times per day, and vegetables approximately 1.6 times per day. Three vegetable subgroups—legumes, dark green vegetables, and orange-colored vegetables—are particularly nutrient dense and significantly under-consumed by Americans across most age and gender groups. "Making half your plate fruits and vegetables" is an important aspect of the *Dietary Guidelines for Americans*, and fruit and vegetable consumption is often used as a marker of a general healthy diet.
Outcome Measures	Number or percentage of SNAP-Ed eligible persons who ate: R2a. Fruits one or more times per day (or, median number of times or cups consumed daily) 1. 100 percent PURE fruit juices 2. Fruit, including fresh, frozen, or canned fruit (not counting juice) R2b. Vegetables one or more times per day (or, median number of times or cups consumed daily) 1. Cooked or canned beans (not including long green beans) 2. Dark green vegetables 3. Orange-colored vegetables 4. Other vegetables
What to Measure	**Adults** a. Number or percentage of adults who ate fruit or drank 100 percent fruit juice • Number or percentage of adults who drank 100 percent fruit juice • Number or percentage of adults who ate whole fruit (not juice) b. Number or percentage of adults who ate vegetables • Number or percentage of adults who ate cooked or canned beans (legumes)

	• Number or percentage of adults who ate dark green vegetables • Number or percentage of adults who ate orange-colored vegetables • Number or percentage of adults who ate other vegetables Children/Adolescents a. Number or percentage of children/adolescents who ate fruit or drank 100 percent fruit juice • Number or percentage of children/adolescents who drank 100 percent fruit juice • Number or percentage of children/adolescents who ate whole fruit (not juice) b. Number or percentage of children/adolescents who ate vegetables • Number or percentage of children/adolescents who ate cooked or canned beans (legumes) • Number or percentage of children/adolescents who ate dark green vegetables • Number or percentage of children/adolescents who ate orange-colored vegetables • Number or percentage of children/adolescents who ate other vegetables
Population	Youth (pre-school and above) or Adults

Surveys and Data Collection Tools

The Behavioral Risk Factor Surveillance System (BRFSS) is one national surveillance survey that can potentially collect fruit and vegetable consumption data from adults; however, the fruit and vegetable module is optional, so it is not asked annually. The Youth Risk Behavior Surveillance System collects fruit and vegetable consumption data from high school–age youth, but it is administered every 2 years and at least one state does not participate. As an alternative, evaluation data can be collected by 1) adding a module of questions like those listed below to a statewide survey collecting population data that can identify the low-income segment of its sample, such as your state's BRFSS; 2) conducting a population-level 24-hour recall with your state SNAP-Ed population or another representative low-income population sample; or 3) conducting another type of annual data collection that includes these questions from either your total SNAP-Ed population or a representative random sample of it. The same question module should be used year-to-year for consistency.

Adults	Children and Adolescents
National Surveillance Surveys[1] **Behavioral Risk Factor Surveillance System; Fruit and Vegetable Section**[1] (6 items) http://www.cdc.gov/brfss/questionnaires/index.htm • "These next questions are about the fruits and vegetables you ate or drank during the last 30 days. Please think about all forms of fruits and vegetables including cooked or raw, fresh, frozen, or canned. Please think about all meals, snacks, and food consumed at home and away from home." [R2a, R2a1	National Surveillance Surveys[1] **Youth Risk Behavior Survey** http://www.cdc.gov/healthyyouth/data/yrbs/index.htm • During the past 7 days, how many times did you eat potatoes? (Do not count French fries, fried potatoes, or potato chips.) [LT2b] Responses: A. I did not eat potatoes during the past 7 days; B. 1 to 3 times during the past 7 days; C. 4 to 6 times during the past 7 days; D. 1 time per day; E. 2 times per day; F. 3

R2a2, R2b, R2b1–R2b4]

- Respondents are asked to report consumption as times per day, week, or month:
  1) 100 percent PURE fruit juices
  2) Fruit, including fresh, frozen, or canned fruit (not counting juice)
  3) Cooked or canned beans (not including long green beans)
  4) Dark green vegetables
  5) Orange-colored vegetables
  6) Other vegetables

  Calculate total daily fruit consumption based on responses to questions 1 and 2, and total daily vegetable consumption based on questions 3–6.

Other Instruments

Fruit and Vegetable Checklist (6 items)
http://www.cdph.ca.gov/programs/cpns/Pages/Chapter1RequiredSurveysforImpactOutcomeEvaluation.aspx

- Fruit: How much do you eat each day? [R2a]
  Responses: None; ½ cup; 1 cup; 1½ cups; 2 cups; 2½ cups; 3 cups or more
- Vegetables: How much do you eat each day? [R2b]
  Responses: None; ½ cup; 1 cup; 1½ cups; 2 cups; 2½ cups; 3 cups or more

National Cancer Institute (NCI) Fruit & Vegetable Intake Screeners from the Eating at America's Table Study
All Day Screener (19 items) [R2a, R2a1, R2a2, R2b, R2b1]
http://epi.grants.cancer.gov/diet/screeners/fruitveg/allday.pdf
10 foods, 2 questions for each except "mixtures that included vegetables" does not ask for amount; 100 percent juice, fruit, lettuce salad, French fries, other white potatoes, cooked dried beans, other vegetables, tomato sauce, vegetable soups)

- Over the last month, how many times per month, week, or day did you drink/eat [food]?
  Responses: Never, 1-3 times last month, 1-2 times per week, 3-4 times per week, 5-6 times, per week, 1 time per day, 2 times per day, 3 times per day, 4 times per day, 5 or times per day; G. 4 or more times per day
- During the past 7 days, how many times did you eat carrots? [LT2b, LT2b3]
  Responses: A. I did not eat carrots during the past 7 days; B. 1 to 3 times during the past 7 days; C. 4 to 6 times during the past 7 days; D. 1 time per day; E. 2 times per day; F. 3 times per day; G. 4 or more times per day
- During the past 7 days, how many times did you eat green salad? [LT2b]
  Responses: A. I did not eat green salad during the past 7 days; B. 1 to 3 times during the past 7 days; C. 4 to 6 times during the past 7 days; D. 1 time per day; E. 2 times per day; F. 3 times per day; G. 4 or more times per day
- During the past 7 days, how many times did you eat other vegetables? (Do not count green salad, potatoes, or carrots) [LT2b]
  Responses: A. I did not eat other vegetables during the past 7 days; B. 1 to 3 times during the past 7 days; C. 4 to 6 times during the past 7 days; D. 1 time per day; E. 2 times per day; F. 3 times per day; G. 4 or more times per day

Other Instruments

California Youth Nutrition and Physical Activity Survey (condensed version of the School and Physical Activity Nutrition project [SPAN] survey) 4th–8th Grades
http://www.cdph.ca.gov/programs/cpns/Pages/Chapter1RequiredSurveysforImpactOutcomeEvaluation.aspx10

- Yesterday, did you eat fruit? Include fresh, frozen, or canned. *Do not count* fruit juice. [R2a]
  Responses: No, I didn't eat any fruit yesterday; Yes, I ate fruit 1 time yesterday; Yes, I ate fruit 2 times yesterday; Yes, I ate fruit 3 times yesterday; Yes, I ate fruit 4 times yesterday; Yes, I ate fruit 5 or more times yesterday
- Yesterday, did you eat any vegetables? Vegetables are all cooked and uncooked vegetables; salads; and boiled, baked, and mashed potatoes. *Do not count* French fries or chips. [R2b]
  Responses; No, I didn't eat any vegetables yesterday; Yes, I

more times per day

- Each time you ate/drank [food], how much did you usually eat/drink?
  Responses: Varies depending on the item

By Meal Screener (27 questions) [R2a, R2a1, R2a2, R2b, R2b1]
http://epi.grants.cancer.gov/diet/screeners/fruitveg/bymeal.pdf
More detailed and somewhat more accurate than the All Day Screener as evaluated by 24-hour recall.
Same question format as above for juice, salad, French fries, white potatoes, and beans. Then, for each meal, the respondent is asked to "divide your waking hours into three time periods: MORNING, LUNCHTIME AND AFTERNOON, and SUPPERTIME AND EVENING" and "Please think about the foods you ate during each of those time periods over the last month." For each time period, four questions are asked. Responses are the same for vegetables and fruit:

- Think about all the foods you ate at your [TIME OF DAY] meal and snacks over the last month. On how many days did you eat fruit for your [TIME OF DAY] meal or [TIME OF DAY] snacks? Count any kind of fruit—fresh, canned, and frozen. Do not count juices
  Responses: Never, 1-3 days last month, 1-2 days per week, 3-4 days per week, 5-6 days per week, every day

- When you ate fruit in the [TIME OF DAY], what is the total amount of fruit that you usually ate in a [TIME OF DAY]?
  Responses: Less than ½ cup, ½ to 1cup, 1 to 2 cups, more than 2 cups

- Think about all the foods you ate at your [TIME OF DAY] meal and snacks over the last month. On how many days did you eat vegetables for your [TIME OF DAY] meal or [TIME OF DAY] snacks? Do not count lettuce salads, white potatoes, cooked dried beans, vegetables in mixtures, such as in sandwiches, omelets, casseroles, and rice. Count all other vegetable

- When you ate vegetables in the [TIME OF DAY], what is the total amount of vegetables that you usually ate in a [TIME OF DAY]?
  ate vegetables 1 time yesterday; Yes, I ate vegetables 2 times yesterday; Yes, I ate vegetables 3 times yesterday; Yes, I ate vegetables 4 times yesterday; Yes, I ate vegetables 5 or more times yesterday.

6th to 8th Grade EFNEP Nutrition Education Survey
https://www2.ag.purdue.edu/programs/hhs/efnep/Pages/Resource-Evaluation.aspx

- Yesterday, how many times did you eat fruit, not counting juice? Include fresh, frozen, canned, and dried fruits. If you ate 2 different fruits in a meal or a snack, count them as 2 times. [R2a]
  Responses: None; 1 time; 2 times; 3 times; 4 or more times
- Yesterday, how many times did you eat vegetables, not counting French fries? Include cooked vegetables, canned vegetables, and salads. If you ate 2 different vegetables in a meal or a snack, count them as 2 times. [R2b]
  Responses: None; 1 time; 2 times; 3 times; 4 or more times

Population Results

Key Glossary Terms

Population-based data collection
SNAP-Ed eligible persons
Surveillance

Additional Resources or Supporting Citations

[1] Indicator R2 measures fruit and vegetable consumption among low-income children and adults using public health surveillance tools, such as the Behavioral Risk Factor Surveillance System (BRFSS) and the Youth Risk Behavior Surveillance System (YRBSS). CDC maintains a Nutrition, Physical Activity, and Obesity Data, Trends and Maps website, available at http://www.cdc.gov/nccdphp/DNPAO/index.html. The CDC data include cross-tabulations by race/ethnicity, income, and gender, which are useful for tracking disparities.

While not every state, territory, or tribe administers these surveys, they represent the most definitive sources on health risk behaviors at the state level. Other states could incorporate the aforementioned survey questions in their own locally administered health surveys.

Previously, the BRFSS used five times per day combined fruit and vegetable consumption as a target; however, in the July 2015 *Morbidity and Mortality Weekly Report* (http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6426a1.htm?s_cid=mm6426a1_e), experts from CDC and the National Cancer Institute describe a new methodology that aligns participant responses in the BRFSS survey with recommendations that are age- and sex-specific and are appropriate for adults who engage in <30 minutes of moderate physical activity daily, beyond normal daily activities.

One area of potential confusion in R2 is the referent time period. The BRFSS asks participants to identify the number of times in the past day, week, and month when they consumed fruit and vegetables; the YRBSS uses the past seven days; and EFNEP Youth Surveys use yesterday. Evaluators should denote their time period when reporting results and use the same time periods for long-term trend analysis.

Additional Source
CDC State Indicator Report on Fruits and Vegetables, 2013
http://www.cdc.gov/nutrition/downloads/state-indicator-report-fruits-vegetables-2013.pdf

R3: Whole Grains	
Framework Component	Population Results – Trends and Reductions in Disparities
Indicator Description	This indicator represents whole grains consumption over time, from year to year, of the SNAP-Ed eligible population of the state or project area. Unlike MT1 and LT1 (Healthy Eating Behaviors), which measure frequency of grains consumption attributed to SNAP-Ed series-based programs, R3 is intended to measure the proportion of the SNAP-Ed eligible population that is achieving the *Dietary Guidelines for Americans, 2015* recommendations. Thus, R3 measures whole grains status for low-income households surveyed within the state or area of focus. R3 is a population-level surveillance measure.
Background and Context	The current *Dietary Guidelines for Americans* recommends that Americans make half their grains whole, and total daily grains intake should range from 3 to 7 ounces depending on daily calories consumed. The recommended amount of grains in the Healthy U.S.-Style Eating Pattern at the 2,000-calorie level is 6 ounce-equivalents per day. Half of these grains should be whole either in the form of single grain foods or products that include grains as an ingredient. Most Americans are not meeting whole grains recommendations. The *Dietary Guidelines for Americans* describe that eating more whole grains, particularly those high in dietary fiber, especially helps adults to feel full longer and prevent weight gain. Increasing whole grains consumption is an important obesity prevention strategy. Indicator R3 measures whole grains consumption among low-income children and adults. Unlike R2 (Fruits and Vegetables), there are no validated public health surveillance questions for assessing intake of grains currently in practice. Surveys such as the BRFSS and YRBSS abandoned these questions in previous years. USDA previously administered the Continuing Survey of Food Intakes by Individuals and the Diet and Health Knowledge Survey to assess consumers' adherence to whole grains recommendation. Several industry trade groups, such as the Whole Grains Council, administer market research surveys, but these surveys have not been tested for the SNAP-Ed eligible audience. Practitioners may use the aforementioned survey questions, choose among 24-hour dietary recall instruments or food frequency questionnaires, or use results from Healthy Eating Index (see R1) to track the whole grains outcome measures and calculate if half of grains consumed were whole. Alternatively, customized surveys may include pictorial representations of grains of interest for the population and allow participants to choose which types of grains they eat per day, per week, or other frequency. One of the biggest challenges for this indicator is determining whether participants eat 100 percent whole grain products; according to Kantor et al. (2001), consumers may struggle with identifying whole grain foods. Thus,

	program evaluators should use commonly known whole grain foods (e.g., pasta, rice, bread, or tortillas).
Outcome Measures	Number or percent of SNAP-Ed eligible persons who: R3a. Ate whole grains more than one time per day 1. Cooked grains (pasta, rice, other) 2. Ready-to-eat grains (bread, cereal, tortillas, other) R3b. Ate refined grains less than one time per day 1. Cooked grains (pasta, rice, other) 2. Ready-to-eat grains (bread, cereal, tortillas, other) R3c. Made half their grains whole
What to Measure	Conduct a population-level assessment of whole grains intake using either a validated survey instrument or a 24-hour recall. Administer surveys to participants using interval measures, which are standard units, such as times per day that grains were consumed. Compare whole grain consumption to refined grain consumption, particularly grain-based desserts that represent empty calories and should only be consumed once in a while. Survey questions should tease out different types of grains, including those that are ready-to-eat and those that are cooked, which can be tracked separately or aggregated for purposes of reporting.
Population	Youth (pre-school and above) or Adults

Surveys and Data Collection Tools

Adults	Children and Youth
Shortened Rapid Eating Assessment for Participants (REAP-S) http://appliedresearch.cancer.gov/diet/shortreg/instruments/segal-isaacson_reap-s.pdf • In an average week, how often do you eat less than 2 servings of whole grain products or high-fiber starches a day? Serving = 1 slice of 100 percent whole grain bread; 1 cup whole grain cereal like Shredded Wheat, Wheaties, Grape Nuts, high fiber cereals, oatmeal, 3–4 whole grain crackers, ½ cup brown rice or whole wheat pasta, boiled or baked potatoes, yucca, yams, or plantain. [R3a1,2] *Responses:* Usually/often; sometimes; rarely/never • Eat regular potato chips, nacho chips, corn chips, crackers,	**California Youth Nutrition and Physical Activity Survey** [condensed version of the School and Physical Activity Nutrition project (SPAN) survey] 4th–8th Grades http://www.cdph.ca.gov/programs/cpns/Documents/1aYouthNutritionandPhysicalActivitySurvey.docx • Yesterday, did you eat any corn tortillas or bread, tortillas, buns, bagels, or rolls that were brown (not white)? [R3a2] *Responses:* No, I didn't eat any of these foods yesterday; Yes, I ate these foods 1 time yesterday; Yes, I ate these foods 2 times yesterday; Yes, I ate these foods 3 or more times yesterday

regular popcorn, nuts instead of pretzels, low-fat chips or low-fat crackers, air-popped popcorn? [R3b1,2]
Responses: Usually/often; sometimes; rarely/never

- Eat sweets like cake, cookies, pastries, donuts, muffins, chocolate, and candies more than 2 times per day. [R3b1,2]
  Responses: Usually/often; sometimes; rarely/never

Rate Your Plate
http://www.einstein.yu.edu/nutrition/rateplat.htm

- Think about the way you usually eat. For each food topic, put a check mark in column A, B, or C.
- Grains: 1 Serving = 1 slice bread or tortilla; ½ bagel, roll, English muffin, or pita; 1 cup cooked rice or pasta; 1 cup cereal
  Responses: Usually eat: less than 4 servings of grain products a day; 4–5 servings of grain products a day; 6 or more servings of grain products a day [R3b1,2]
- Whole Grains
  Responses: Usually eat: White breads, white rice, low fiber cereals like corn flakes, Rice Krispies, etc.; Whole grain breads, brown rice, whole grain cereals like oatmeal, bran cereals, Wheaties, etc. [R3b1,2]

University of California Cooperative Extension EFNEP Food Tracker: Group 5-step Multiple-Pass 24-hour Dietary Recall [R3a,b,c]
(Instrument is available in English, Spanish, Russian, Hmong, Chinese, also instructional video and other materials)
http://townsendlab.ucdavis.edu/

Note: Any multiple-pass method in which all data collectors have been trained to collect the information consistently using a standardized, documented protocol that includes probing is acceptable. It is recommended that, if at all possible, visual aids, such as portion size guides (paper or online), measuring cups, dishes/glasses, and/or food models be used.

- Yesterday, did you eat rice, farro, macaroni, spaghetti, or pasta noodles that were brown (not white)? [R3a1]
  Responses: No, I didn't eat any of these foods yesterday; Yes, I ate these foods 1 time yesterday; Yes, I ate these foods 2 times yesterday; Yes, I ate these foods 3 or more times yesterday
- Yesterday, did you eat sweet rolls, doughnuts, cookies, brownies, pies, or cake? [R3b]
  Responses: No, I didn't eat any of these foods yesterday; Yes, I ate these foods 1 time yesterday; Yes, I ate these foods 2 times yesterday; Yes, I ate these foods 3 or more times yesterday

6th to 8th Grade EFNEP Nutrition Education Survey
https://www2.ag.purdue.edu/programs/hhs/efnep/Pages/Resource-Evaluation.aspx

- When you eat grain products, how often do you eat whole grains, like brown rice instead of white rice, whole grain bread instead of white bread, and whole grain cereals? [R3a]

Preschoolers

Obesity Risk Assessment Tools – *Health Kids, My Child at Mealtime*
http://healthykids.ucdavis.edu/

Population Results

Key Glossary Terms
Population-based data collection Refined grains SNAP-Ed eligible persons Surveillance Whole grains
Additional Resources or Supporting Citations
Kantor L, Variyam J, Allshouse J, et al. Choose a variety of grains daily, especially whole grains: a challenge for consumers. *J Nutr.* 2001;131:473S-86S.

R4: Dairy	
Framework Component	Population Results – Trends and Reductions in Disparities
Indicator Description	This indicator represents change in dairy product consumption and/or adequacy of consumption over time, from year to year, of the low-income population of the state. Unlike MT1 and LT1 (Healthy Eating Behaviors), which measure increases in low-fat/fat-free dairy consumption attributed to SNAP-Ed series-based programs, R4 is intended to measure the proportion of the SNAP-Ed eligible population that is achieving the *Dietary Guidelines for Americans, 2015* recommendations. Thus, R4 measures dairy consumption status for low-income households surveyed within the state or area of focus. R4 is a population-level surveillance measure.
Background and Context	Under-consumption of calcium is a public health concern for the majority of Americans. Calcium plays a major role in bone health and also is essential for proper functioning of the cardiovascular system, nerve transmission, muscle contraction, cell signaling pathways, and vascular integrity. Although there are other sources of calcium, the calcium from plant foods is less bioavailable than that of animal foods, like dairy. Fifty-seven percent of women and 41 percent of men aged 19 and older in the United States have calcium intake below the estimated average requirement. Preadolescent and adolescent females, pregnant females, middle aged and older females, and elderly males are at particular risk.[1] This is an appropriate indicator to use when SNAP-Ed in the program being evaluated provided a sufficient dose of R4 low-fat dairy intervention to expect behavior change that will last over an extended time period. Examples include Rethink Your Drink interventions in which fat-free/low-fat milk is emphasized as a preferred alternative; provider/parent education in early child care settings that include a strong component about fat-free/low-fat dairy items and number of servings for preschool age children; and PSE interventions to increase access to fat-free/low-fat dairy items in corner stores.
Outcome Measures	R4a. Number or percentage of SNAP-Ed eligible persons who drank low-fat (1%) or fat-free versions of milk or fortified soy beverages (or, average cups consumed daily) R4b. Number or percentage of SNAP-Ed eligible persons who ate low-fat (1%) or fat-free versions of yogurt or cheese (or, average cups consumed daily) R4c. Number or percentage of SNAP-Ed eligible persons who switched from whole or 2% milk to fat-free or low-fat (1%) white milk (with or without cereal)

Population Results

	R4d. Number or percentage of SNAP-Ed eligible persons who consumed any dairy products three or more times per day
What to Measure	Adults a. Number or percentage of adults who report drinking low-fat (1%) or fat-free versions of milk or fortified soy beverages b. Number or percentage of adults who report eating low-fat (1%) or fat-free versions of yogurt or cheese c. Number or percentage of adults who report switching from whole or 2% milk to low-fat (1%) or fat-free milk d. Number or percentage of adults who report drinking/eating any dairy products, regardless of fat level, three or more times per day Children/Adolescents a. Number or percentage of children/adolescents who report drinking low-fat (1%) or fat-free versions of milk or fortified soy beverages b. Number or percentage of children/adolescents who report eating low-fat (1%) or fat-free versions of yogurt or cheese c. Number or percentage of children/adolescents who report switching from whole or 2% milk to low-fat (1%) or fat-free milk d. Number or percentage of children/adolescents who report drinking/eating any dairy products, regardless of fat level, three or more times per day
Population	Youth (3rd grade and above) or Adults

Surveys and Data Collection Tools

At this time, no national surveillance systems routinely collecting data provides state-level statistics on dairy indicators. Consequently, evaluation data can only be collected by 1) adding a module of questions like those listed below to a statewide survey collecting population data that can identify the low-income segment of its sample, such as your state's BRFSS; 2) conducting a population-level 24-hour recall with your state SNAP-Ed population or another representative low-income population sample; or 3) conducting another type of annual regular data collection that includes these questions from either your total SNAP-Ed eligible population or a representative random sample of it. The same question module should be used year-to-year for consistency.

Example: All Michigan Fitness Foundation (MFF) funded partners are required to administer the National Cancer Institute (NCI) Fruit and Vegetable Screener as a pre-post instrument based on a convenience sample of program participants per funded partner. If a partner's direct SNAP-eligible reach is less than 500, it is required to administer 75 survey pairs. If it is greater than 500, a representative sample of 15 percent is required. Representative is a key word. If necessary, oversampling must be done in order to obtain a sample reflective of the characteristics of the partner's population.

Population Results

Adults	Children and Youth
University of California Cooperative Extension EFNEP Food Tracker: Group 5-step Multiple Pass 24-hour Dietary Recall [R4a,b,c,d] (Instrument is available in English, Spanish, Russian, Hmong, Chinese; also instructional video and other materials) http://townsendlab.ucdavis.edu/ Note: Any multiple-pass method in which all data collectors have been trained to collect the information consistently using a standardized, documented protocol that includes probing is acceptable. It is recommended that, if at all possible, visual aids, such as portion size guides (paper or online), measuring cups, dishes/glasses, and/or food models be used. **Virginia Polytechnic Institute and State University Beverage Intake Questionnaire (BEVQ-15)** (15 items—3 are dairy)[2] [R4a,c] http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3379009/pdf/nihms379195.pdf For each item: • In the past month indicate how often you drank the following beverages. *Response choices:* Never or less than 1 time per week; 1 time per week; 2–3 times per week; 4-6 times per week; 1 time per day; 2+ times per day; 3+ times per day • Indicate approximately how much you drank each time. *Response choices:* Less than 6 fl. oz. (¾ cup), 8 fl. oz. (1 cup), 12 fl. oz. (1½ cups), 16 fl. oz. (2 cups), more than 20 fl. oz. (2½ cups) Beverage line items include whole milk, reduced-fat milk (2%), low-fat/fat-free milk (skim, 1%, buttermilk, soymilk) **Share our Strength Cooking Matters for Adults Survey** (39 items; 2 questions apply to R4) [R4a,b], English and Spanish https://foodshuttlesatellites.wordpress.com/forms/cooking-matters-resources/surveys/ • When you have milk, how often do you choose low-fat milk	**Fred Hutchinson Cancer Research Center Beverage and Snack Questionnaire 2 (BSQ2)** (13 beverages [4 dairy]; 23 total items including snacks and fruits and vegetables; developed for use with 10- to 18-year-olds)[3] [R4a,c] http://sharedresources.fhcrc.org/documents/beverage-and-snack-questionnaire • How often did you drink these beverages in the past week? *Response choices:* Never or less than 1 time per week; 1 time per week; 2–3 times per week; 4–6 times per week; 1 time per day; 2–3 times per day; 4+ times per day Beverage line items include four dairy drinks, among others. Instrument covers in-school and out-of-school time separately for each item. o 1% or nonfat flavored milk (sometimes called skim, fat-free, or low-fat milk; includes chocolate and other flavors but not unflavored, white milk) o Regular or 2% flavored milk (sometimes called whole, reduced-fat, or 4% milk fat; includes chocolate and other flavors but not unflavored, white milk) o 1% or nonfat milk (sometimes called skim, fat-free, or low-fat milk; do not include chocolate or other flavored milks) o Regular or 2% milk (sometimes called whole, reduced-fat, or 4% milk fat; do not include chocolate or other flavored milks) **California Youth Nutrition and Physical Activity Survey** [condensed version of the School and Physical Activity Nutrition project (SPAN) survey] English and Spanish; 4th–8th graders[5] [R4a,b,c] http://www.cdph.ca.gov/programs/cpns/Pages/Chapter1RequiredSurveysforImpactOutcomeEvaluation.aspx • Yesterday, did you drink any kind of milk? Count chocolate or other flavored milk, milk on cereal, or drinks made with milk along with the second question below [R4d]

(skim or 1%)? [R4a]

- When you eat dairy products like yogurt, cheese, cottage cheese, sour cream, etc., how often do you choose low-fat or fat-free options? [R4b]

Responses: no, I didn't drink any milk yesterday; yes, I drank 1 milk time yesterday; yes, I drank milk 2 times yesterday; yes, I drank milk 3 or more times yesterday

- What type of milk do you drink most of the time? [R4a,c]
  Responses: Regular (whole) milk; 2% milk; 1% (low-fat) or fat-free (skim/non-fat) milk; Soy milk, almond milk, rice milk, or other milk; I don't drink milk; I don't know
- Yesterday, did you eat cheese by itself or on your food? Count cheese on pizza or in dishes such as tacos, enchiladas, sandwiches, cheeseburgers, or macaroni and cheese. [R4d]
- Yesterday, did you eat yogurt or cottage cheese or drink a yogurt drink? *Do not count* frozen yogurt. [R4d]

EFNEP Youth Nutrition Education Surveys, 6th–8th, 9th–12th graders
https://www2.ag.purdue.edu/programs/hhs/efnep/Pages/Resource-Evaluation.aspx

- Yesterday, how many times did you drink nonfat or 1% low-fat milk? Include low-fat chocolate or flavored milk, and low-fat milk on cereal. [R4a]
  Responses: none; 1 time; 2 times; 3 times; 4 or more times

Share Our Strength Cooking Matters for Teens Survey (20 items, 2 are dairy) English and Spanish
https://foodshuttlesatellites.wordpress.com/forms/cooking-matters-resources/surveys/

- When you have milk, how often do you choose low-fat milk (skim or 1%)? [R4a]
- When you eat dairy products like yogurt, cheese, cottage cheese, sour cream, etc., how often do you choose low fat or fat-free options? [R4b]

Key Glossary Terms

Population-based data collection
SNAP-Ed eligible persons
Surveillance

Population Results

Additional Resources or Supporting Citations
[1] What We Eat in America, NHANES 2007–2010, individuals 1 year and over (excluding breast-fed children and pregnant or lactating females), dietary intake data. Prepared by the Food Surveys Research Group, Beltsville Human Nutrition Research Center, Agricultural Research Service. U.S. Department of Agriculture as Part E. Section 2: Supplementary Documentation to the 2015 DGAC Report.
[2] Hedrick VE, Savla J, Comber DL, et al. Development of a brief questionnaire to assess habitual beverage intake (BEVQ-15): Sugar-sweetened beverages and total beverage energy intake. *J Acad Nutr Diet*. 2012;112;(6):840-9.
[3] BSQ - Neuhouser ML, Lilley S, Lund A, et al. Development and validation of a beverage and snack questionnaire for use in evaluation of school nutrition policies. *J Am Diet Assoc* 2009. 109;(9):1587-1592.

R5: Beverages	
Framework Component	Population Results – Trends and Reductions in Disparities
Indicator Description	This indicator represents change in water and unhealthy beverage consumption and/or over-consumption of 100 percent fruit juice by youth over time, from year to year, of the low-income population of the state. Unlike MT1 and LT1 (Healthy Eating Behaviors), which measure increases in water intake and decreases in sugar-sweetened beverage intake attributed to SNAP-Ed series-based programs, R5 is intended to measure the proportion of the SNAP-Ed eligible population that is achieving the *Dietary Guidelines for Americans, 2015* recommendations. Thus, R5 measures water and sugar-sweetened beverage consumption status for low-income households surveyed within the state or area of focus. R5 is a population-level surveillance measure.
Background and Context	This indicator of non-dairy beverages measures consumption or changes in consumption of non-caloric water, sugar-sweetened beverages, and limiting of excessive 100 percent juice intake. It is highly significant for obesity prevention. Soda, energy drinks, and sports drinks are the number four source of calories in the American population aged 2 and older; they are the number three source in the population aged 2–18 years. Together with sugar-sweetened fruit drinks, they contribute 46 percent of the added sugar in the American diet, contributing significant calories, but few nutrients. Although 100 percent fruit juice is considered a fruit-equivalent in the *Dietary Guidelines for Americans*, and some juices contain vitamin C, vitamin A, and calcium, they do not contain the fiber of whole fruits fiber. Excessive consumption of juice may contribute to obesity as it can be easy to not notice how much one is drinking. The American Academy of Pediatrics recommends children ages 1–6 should drink no more than 4–6 ounces/day of fruit juice, while youth ages 7–18 years old should have a limit of 8–12 ounces/day.[1] This is an appropriate indicator to use when SNAP-Ed in the program being evaluated provided a sufficient dose of R5 beverage intervention to expect behavior change that will last over an extended time period. Examples include Rethink Your Drink interventions; provider/parent education in early child care settings that include a strong component about appropriate beverages and portion sizes for preschool-age children; and PSE interventions to increase access to drinking water in schools.
Outcome Measures	R5a. Number or percentage of SNAP-Ed eligible persons who drink plain water (or, average cups consumed daily) R5b. Number or percentage of SNAP-Ed eligible persons who reduced their consumption of sugar-sweetened beverages (or,

	average cups consumed daily) R5c. Number or percentage of SNAP-Ed eligible persons who switched from fruit drink or juice drinks to 100 percent fruit juice R5d. Number or percentage of SNAP-Ed eligible persons who consumed less than 8 ounces of 100 percent fruit juice daily
What to Measure	Adults a. Number or percentage of adults who report drinking plain water b. Number or percentage of adults persons who report drinking soda and other sugar-sweetened beverages c. Number or percentage of adults who report drinking fruit drink or fruit juice drink or switching from these drinks to 100 percent fruit juice d. Number or percentage of adults who report drinking less than 8 ounces of 100 percent of fruit juice daily Children/Adolescents a. Number or percentage of children/adolescents who report drinking plain water b. Number or percentage of children/adolescents who report drinking soda and other sugar-sweetened beverages c. Number or percentage of children/adolescents who report drinking fruit drink or fruit juice drink or switching from these drinks to 100 percent fruit juice d. Number or percentage of children/adolescents who report drinking less than 8 ounces of 100 percent of fruit juice daily or the appropriate amount for age group
Population	Youth (3rd grade and above) or Adults

Surveys and Data Collection Tools

The Behavioral Risk Factor Surveillance System (BRFSS) is one national surveillance survey that can potentially collect sugar-sweetened beverage data from adults; however, that data module is optional for BRFSS, so it is not routinely asked and, when it is asked, the findings are not available on the interactive database. The Youth Risk Behavior Surveillance System (YRBSS) collects such data from high school–age youth, but it is administered every 2 years, and at least one state does not participate. As an alternative, evaluation data can be collected by 1) adding a module of questions like those listed below to a statewide survey collecting population data that can identify the low-income segment of its sample, such as your state's BRFSS; 2) conducting a population-level 24-hour recall with your state SNAP-Ed population or another representative low-income population sample; or 3) conducting another type of annual regular data collection that includes these questions from either your total SNAP-Ed population or a representative random sample of it. The same question module should be used year-to-year for consistency.

Population Results

Adults	Children and Youth
National Surveillance Surveys **Behavioral Risk Factor Surveillance System - Sugar Sweetened Beverage Module 5** (national surveillance, every other year) [R5b] http://www.cdc.gov/brfss/questionnaires/pdf-ques/2013-brfss_english.pdf (page 40) http://www.cdc.gov/brfss/questionnaires/pdf-ques/2013_brfss_spanish.pdf (page 41) • About how often do you drink regular soda or pop that contains sugar? Do not include diet soda or diet pop. • About how often do you drink sweetened fruit drinks, such as Kool-Aid, cranberry drink, and lemonade? Include fruit drinks you made at home and added sugar to. *Response choices:* Number of times/day; times/week; or times/month, whichever is easiest for respondent Other Instruments The following instruments can be used to collect statewide population data. **University of California Cooperative Extension EFNEP Food Tracker: Group 5-step Multiple Pass 24-hour Dietary Recall** [R5a,b,c,d] (Instrument is available in English, Spanish, Russian, Hmong, Chinese, also instructional video and other materials) http://townsendlab.ucdavis.edu/ Note: Any multiple pass method in which all data collectors have been trained to collect the information consistently using a standardized, documented protocol that includes probing is acceptable. It is recommended that, if at all possible, visual aids, such as portion size guides (paper or online), measuring cups, dishes/glasses, and/or food models be used. **Virginia Polytechnic Institute and State University Beverage Intake**	National Surveillance Surveys **Youth Risk Behavior Survey** (national surveillance, every other year) [R5b] http://www.cdc.gov/healthyyouth/data/yrbs/questionnaires.htm (2015 questionnaire Q.77, page 17) • During the past 7 days, how many times did you drink a can, bottle, or glass of soda or pop, such as Coke, Pepsi, or Sprite? (Do not count diet soda or diet pop.) *Response choices:* I did not drink soda or pop; 1 to 3 times in the past 7 days; 4 to 6 times in the past 7 days; 1 time/day; 2 times/day; 3 times/day; 4 or more times/day Other Instruments The following instruments can be used to collect statewide population data. **Fred Hutchinson Cancer Research Center Beverage and Snack Questionnaire 2 (BSQ2)**[3] (13 beverages; 23 total items including snacks and FV) [R5a,b,c] http://sharedresources.fhcrc.org/documents/beverage-and-snack-questionnaire • How often did you drink these beverages in the past week… *Response choices:* Never or less than 1 time per week; 1 time per week; 2–3 times per week; 4–6 times per week; 1 time per day; 2–3 times per day; 4+ times per day Beverage line items include unflavored water, flavored water, soda, fruit drinks, sports drinks, energy drinks, and 100% juice among others. Instrument covers in-school and out-of-school time separately for each item. **California Youth Nutrition and Physical Activity Survey**[4] (condensed version of the School and Physical Activity Nutrition project [SPAN]

Population Results

Questionnaire (BEVQ-15) (15 items) [R5a,b,c,d]
http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3379009/pdf/nihms379195.pdf

For each item:

- In the past month indicate how often you drank the following beverages.
  Response choices: Never or less than 1 time per week; 1 time per week; 2–3 times per week; 4–6 times per week; 1 time per day; 2+ times per day; 3+ times per day
- Indicate approximately how much you drank each time.
  Response choices: Less than 6 fl. oz. (¾ cup); 8 fl. oz. (1 cup); 12 fl. oz. (1½ cups); 16 fl. oz. (2 cups); more than 20 fl. oz. (2½ cups)

Beverage line items include, among others, water, juice drinks, soda, 100% juice, sweet tea, energy and sports drinks, and room to add respondent-specific beverages

Share Our Strength Cooking Matters for Adults Survey (39 items; 2 questions apply to R5), English and Spanish [R5a,b]
https://foodshuttlesatellites.wordpress.com/forms/cooking-matters-resources/surveys/

- How often do *you* typically drink a bottle or glass of water? (Count tap, bottled and sparkling water.)
- How often do *you* typically drink a can, bottle, or glass of regular soda or pop, sports drink, or energy drink? (Do not count diet or zero-calorie drinks.)
  Response choices: Not at all; Once a week or less; More than once a week; Once a day; More than once a day

University of California Cooperative Extension Food Behavior Checklist/Lista de habitos alimenticios[2] [R5b]
http://townsendlab.ucdavis.edu/

- Do you drink fruit drinks, sports drinks, or punch?
- Do you drink regular soda?
  Response choices: no; yes, sometimes; yes, often; yes, everyday

survey) English and Spanish; 4th–8th graders [R5a,b,c]
http://www.cdph.ca.gov/programs/cpns/Pages/Chapter1RequiredSurveysforImpactOutcomeEvaluation.aspx

Yesterday, did you drink…

- Fruit juice? Fruit juice is a drink, which is 100% juice, like orange juice, apple juice, or grape juice. *Do not count* punch, sports drinks, or other fruit-flavored drinks.
- Any water, such as from a glass, a bottle, or a water fountain?
- Any punch, sports drinks or other fruit-flavored drinks? *Do not count* 100% fruit juice or diet drinks?
- Any regular (not diet) sodas or soft drinks?
  Responses: No, I didn't drink any; Yes, I drank xx 1 time up to I drank xx 3 or more times for punch, etc. and soda.; Yes, I drank xx 1 time up to I drank xx 5 or more times for 100% juice and water

EFNEP Youth Nutrition Education Surveys, 6th–8th, 9th–12th graders [R5b]
https://www2.ag.purdue.edu/programs/hhs/efnep/Pages/Resource-Evaluation.aspx

- Yesterday, how many times did you drink sweetened drinks like soda, fruit-flavored drinks, sports drinks, energy drinks, and vitamin water? Do not include 100% fruit juice.
  Response choices: none; 1 time; 2 times; 3 or more times

Population Results

Key Glossary Terms
Fruit drink or juice drink Population-based data collection SNAP-Ed eligible persons Sugar-sweetened beverages Surveillance
Additional Resources or Supporting Citations
Sweetened juice products with low levels of juice, are categorized as sugar-sweetened beverages instead of fruit juice because they are mainly water with added sugars. The package label will show the percent of juice, such as "contains 25% juice" or "100% fruit juice," in a beverage that implies it is a fruit or vegetable product. In the *2015–2020 Dietary Guidelines for Americans*, the amounts of fruit juice allowed in the USDA Food Patterns for young children are in line with American Academy of Pediatrics guidelines that young children consume no more than 4–6 fluid ounces of 100 percent fruit juice per day. [1] Committee on Nutrition. Use and misuse of fruit juice in Pediatrics. *Pediatrics*. 2001;107;(5):1210-3. [2] References for development of English and Spanish Food Behavior Checklists – http://townsendlab.ucdavis.edu/PDF_Files/spa/spa_fbc_ref.pdf [3] BSQ - Neuhouser ML, Lilley S, Lund A, et al. Development and validation of a beverage and snack questionnaire for use in evaluation of school nutrition policies. *J Am Diet Assoc* 2009;109;(9):1587-1592. [4] SPAN - Thiagarajah K, Fly AD, Hoelscher DM, et al. Validating the food behavior questions from the elementary school SPAN questionnaire. *J Nutr Educ Behav*. 2008;40;5:305-310.

R6: Food Security	
Framework Component	Population Results – Trends and Reductions in Disparities
Indicator Description	This indicator represents changes in food security status, when SNAP-Ed eligible persons have access to sufficient, safe, and nutritious food which meets their dietary needs and food preferences for an active and healthy life.
Background and Context	"Food security exists when all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food which meets their dietary needs and food preferences for an active and healthy life. Household food security is the application of this concept to the family level, with individuals within households as the focus of concern."[1] Food security status (or change therein) is both an outcome of, and a confounding factor in, other framework behavioral outcomes—e.g., individuals who participate in direct nutrition education or food budgeting may exhibit a positive change in food security status as a result. However, they may also be less likely than other participants to exhibit a positive change in other indicators such as fruit or vegetable consumption because they are food insecure. Lastly, please note that persons (e.g., children) may live in a food insecure household but may or may not be food insecure themselves. Detailed backgrounders, implementation guides, and contact information for further assistance may be obtained at the USDA Economic Research Service website.[2]
Outcome Measures	R6a. Number or percentage of SNAP-Ed eligible persons whose food security status improved over baseline from Very Low Food Security, Low Food Security, or Marginal Food Security.[3] (Each food security status is defined in the glossary in Appendix A.)
What to Measure	At the program level, it is important to consider pre-post changes in SNAP-Ed participants' food security across all of its ranges (i.e., high, marginal, low, or very low) to demonstrate an effect. At the population level, a potential impact of SNAP-Ed programming would be an overall reduction in the household food insecurity rate (or an overall improvement in the household food security rate). 1. Pre-Intervention Food Security Status • Standard EARS demographic data

	• Unique, anonymous identifier to facilitate matching of pre-post pairs (e.g., MM/DD/YYYY birthdate) • Date of survey administration • Baseline food security status of program participants (a composite/index indicator created by tabulating responses to individual module questions) 2. Post-Intervention Food Security Status (30-day or 12-month reference period) • Unique, anonymous identifier to facilitate matching of pre-post pairs (e.g., MM/DD/YYYY birthdate) • Date of survey administration • Number of completed interventions (where applicable) • Post-intervention food security status of program participants (a composite/index indicator created by tabulating responses to individual module questions) 3. Food Security Status of Non-Participant Comparison Group(s) • Pre-Intervention Comparison Group (OPTIONAL): If program participants are known at least 30 days (or 1 year) in advance of program participation, consider administering the pre-post surveys in the same manner to these future participants who are, in effect, a "delayed intervention comparison group." • Cross-sectional Data/De-Identified Public Data (OPTIONAL): Consider comparing the pre-post percentage of food secure participants or households within an at-risk population category to the overall percentage of food secure participants or households within the total at-risk population in a given community. Due to the time "lag" in availability of population-based data, such comparisons between food security status of program participants and the general population do not align. Even though these data will therefore not be as relevant or sensitive as within-group pre-post comparisons for actual program participants, the comparison may still be worthwhile.
Population	• English-speaking adults ages 18+ (or heads of household less than 18 years of age) • Spanish-speaking adults ages 18+ (or heads of household less than 18 years of age) • English-speaking children ages 12–17 • Spanish-speaking children ages 12–17

Surveys and Data Collection Tools	
Adults	Children and Youth
U.S. Household Food Security Survey Module (18 items) http://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/survey-tools.aspx#household	U.S. Household Food Security Survey Module (18 items) http://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/survey-tools.aspx#household

Population Results

U.S. Household Food Security Survey Module (18 items – Spanish) http://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/survey-tools.aspx#Spanish **U.S. Adult Food Security Survey Module** (10 items) http://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/survey-tools.aspx#adult **Short Form of the U.S. Food Security Survey Module** (6 items) http://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/survey-tools.aspx#six	**U.S. Household Food Security Survey Module** (18 items – Spanish) http://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/survey-tools.aspx#Spanish **Self-Administered Food Security Survey Module for Youth Ages 12 and Older** http://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/survey-tools.aspx#youth **YRBS: Behavioral Risk Factors Surveillance System** http://www.cdc.gov/mmwr/preview/mmwrhtml/mm4941a2.htm "In the past 30 days, have you been concerned about having enough food for you or your family?"

Key Glossary Terms

Food security
Food insecurity
High food security
Hunger
Low food security
Marginal food security
SNAP-Ed eligible persons
Very low food security

Additional Resources or Supporting Citations

Cross-sectional Data/De-identified Public Data Examples:

- CPS Food Security Supplement Data: http://www.ers.usda.gov/data-products/food-security-in-the-united-states.aspx
- Map the Meal Gap – County Level Food Security (Supplementary data – not an authoritative source) http://map.feedingamerica.org/county/2013/overall

References:

Population Results

[1] FAO Economic and Social Development Department. Chapter 2. Food security: concepts and measurement Rome: Food and Agriculture Organization of the United Nations; 2003. Available from http://www.fao.org/docrep/005/y4671e/y4671e06.htm.

[2]United States Department of Agriculture Economic Research Service. Food Security in the U.S.—Overview [webpage]. 2016, May 4. Available from http://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us.aspx.

[3]United States Department of Agriculture Economic Research Service. Definitions of Food Security [webpage]. 2015, September 8. Available from http://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/definitions-of-food-security.aspx

[4] United States Department of Agriculture Economic Research Service. Food Security in the U.S.—Survey Tools [webpage]. 2015, September 8. Available from http://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/survey-tools.aspx.

R7: Physical Activity and Reduced Sedentary Behaviors	
Framework Component	Population Results – Trends and Reductions in Disparities
Indicator Description	Achievement of the *Physical Activity Guidelines for Americans, 2008*[1] for adults and children and Society of Health and Physical Educators *Active Start*[2] guidelines for toddlers and preschoolers.
Background and Context	The *Physical Activity Guidelines for Americans, 2008* recommend that children and adolescents do 60 minutes (1 hour) or more of physical activity daily. These activities should be enjoyable, age-appropriate, and offer variety. All adults should avoid inactivity. Adults who participate in any amount of physical activity gain some health benefits. For substantial health benefits, adults should do at least 150 minutes (2 hours and 30 minutes) a week of moderate-intensity, or 75 minutes (1 hour and 15 minutes) a week of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous intensity aerobic activity. Ten-minute intervals throughout the week can meet the requirements. Muscle-strengthening exercises that involve all major muscle groups on 2 or more days a week are important, too. *Healthy People 2020* objectives show that we have more work to do. More than 80 percent of adults do not meet the guidelines for both aerobic and muscle-strengthening activities. Similarly, more than 80 percent of adolescents do not do enough aerobic physical activity to meet the guidelines for youth. Complementary strategies will include reducing time spent in sedentary behaviors, particularly entertainment screen time (television, video games, and use of computers for non-school work) and increasing the proportion of trips made by walking or bicycling. R7 also measures active commuting, also known as active transportation, which is any form of human-powered transportation, including bicycling. Public transportation is included in active commuting because users have to use human power to access public transportation stops and their end destination (often known as the "first" and "last" mile). Safety and security issues (real and perceived) are significant barriers to active transportation, as is lack of access to adequate active transportation facilities.
Outcome Measures	Reported among SNAP-Ed eligible persons **Physical Activity** R7a. At least 150 minutes per week of moderate-intensity aerobic physical activity or 75 minutes per week of vigorous-intensity aerobic physical activity or an equivalent combination of moderate-and vigorous-intensity aerobic activity R7b. Muscle-strengthening activities on 2 or more days a week that work all major muscle groups (legs, hips, back, abdomen, chest, shoulders, and arms)

Population Results

	Sedentary Behavior R7c. Entertainment-based screen time viewing for 2 or fewer hours on an average school day **Active Commuting** R7d. Use public transportation, walking, or bicycling to travel to and from work on a regular basis (for destination-based active transportation, not recreation)
What to Measure	**Adults** a. Number or percentage of adults who report or demonstrate achievement of minutes per week of moderate or vigorous physical activity – 150 minutes for moderate intensity; 75 minutes for vigorous intensity b. Number or percentage of adults who participate in 2 days per week of muscle-strengthening involving all major muscle groups c. Number or percentage of adults achieving an average or above average score on a health-related fitness test d. Number or percentage of adults who use public transportation, walking, or bicycling to travel to and from work on a regular basis (active commuting) **Children/Adolescents** a. Number or percentage of children/adolescents who report or demonstrate achievement of 60 minutes per day of moderate to vigorous physical activity b. Number or percentage children/adolescents who participate in 2 days per week of muscle-strengthening involving all major muscle groups c. Number or percentage of children who improve aerobic capacity score as measured by Fitnessgram, the national physical fitness assessment d. Number or percentage of children/adolescents who achieve the healthy fitness zone for aerobic capacity on the Fitnessgram **Toddlers/Preschoolers** a. Number or percentage of parents who report toddlers' achievement of 90 minutes per day of physical activity (30 mins structured, 60 mins unstructured) b. Number or percentage of parents who report preschoolers' achievement of 120 minutes per day of physical activity (60 mins of structured, 60 mins of unstructured)
Population	Adults, children/adolescents, toddlers/preschoolers

Population Results

Surveys and Data Collection Tools	
Adults	Children and Adolescents
Indirect Measure: Physical Activity Questionnaires Behavioral Risk Factor Surveillance System (BRFSS) Survey Questions • Percentage of adults who met the 150 minute aerobic activity guideline • Percentage of adults who met the 300 minute aerobic activity guideline • Percentage of adults who met the muscle-strengthening guideline Direct Measure: Physical Fitness Assessment President's Challenge Adult Fitness Test http://www.adultfitnesstest.org NOTE: This assessment should only be given to people 18 years of age and older who are in good health. In addition a pre-participation screening questionnaire (www.adultfitnesstest.org/riskQuestionaire.php) should be administered prior to the administration of the fitness assessment. Active Commuting To measure how many people are active commuting: U.S. Census Commuting (Journey to Work) http://www.census.gov/hhes/commuting/ National Bicycle and Pedestrian Documentation Project Forms and Materials http://bikepeddocumentation.org/downloads/ National Cooperative Highway Research Program Guidebook on Pedestrian and Bicycle Volume Data Collection	Indirect Measure: Physical Activity Questionnaires Youth Risk Behavior Surveillance System (YRBSS) On how many of the past 7 days did you do exercises to strengthen or tone your muscles, such as push-ups, sit-ups, or weight lifting? A. 0 days B. 1 day C. 2 days D. 3 days E. 4 days F. 5 days G. 6 days H. 7 days During the past 7 days, on how many days were you physically active for a total of at least 60 minutes per day? (Add up all the time you spent in any kind of physical activity that increased your heart rate and made you breathe hard some of the time.) A. 0 days B. 1 day C. 2 days D. 3 days E. 4 days F. 5 days G. 6 days H. 7 days For children 10–11 years of age, it is recommended that the previous day's recall be used.[3] Decisions on how many days and on which day's activity will be measured must be made.

http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_797.pdf Other Potential Tools International Physical Activity Questionnaire (IPAQ) http://www.sdp.univ.fvg.it/sites/default/files/IPAQ_English_self-admin_long.pdf This questionnaire is available in a short form for surveillance and in a longer form when more detailed physical activity information is required; both forms are available in a number of languages. The questionnaire was rigorously tested for reliability and validity[4] and has been replicated in a number of countries; this questionnaire is not designed to provide a detailed assessment of physical activity in all domains.	Direct Measure: Physical Fitness Assessment Fitnessgram http://www.pyfp.org/assessment/free-materials.shtml This is the national health-related fitness assessment for school-age children grades 4–12 that must be performed by the school or agency personnel. Other Potential Tools Previous Day Physical Activity Recall Designed to assess physical activity and sedentary behaviors for children.[5] International Physical Activity – Children Questionnaire This questionnaire is available in a short form for surveillance, and in a longer form when more detailed physical activity information is required, both forms are available in a number of languages. The questionnaire was rigorously tested for reliability and validity[4] and this has been replicated in a number of countries; this questionnaire is not designed to provide a detailed assessment of physical activity in all domains. 1. On an average school day, how many hours do you watch TV? A. I do not watch TV on an average school day B. Less than 1 hour per day C. 1 hour per day D. 2 hours per day E. 3 hours per day F. 4 hours per day G. 5 or more hours per day 2. On an average school day, how many hours do you play video or computer games or use a computer for something that is not school work? (Count time spent on things such as Xbox, PlayStation, an iPod, an iPad or other tablet, a smartphone,

	YouTube, Facebook or other social networking tools, and the Internet.) A. I do not play video or computer games or use a computer for something that is not school work B. Less than 1 hour per day C. 1 hour per day D. 2 hours per day E. 3 hours per day F. 4 hours per day G. 5 or more hours per day Other Evaluation Measures Multimedia Activity Recall for Children and Adolescents (MARCA) A computerized 24-hour activity recall linked to a compendium of energy expenditure.[6] Adolescent Sedentary Activity Questionnaire (ASAQ) Includes five categories: small screen recreation, education, travel, cultural activities, and social activities.[7]

Key Glossary Terms

Active commuting
Population-based data collection
SNAP-Ed eligible persons
Surveillance

Additional Resources or Supporting Citations

While not every state, territory, or tribe administers the BRFSS, this survey represents the most definitive source on health at the state level. States or communities that do not administer the BRFSS could incorporate the aforementioned survey questions in their own locally administered health surveys. Lastly, because SNAP-Ed funds cannot pay for surveillance in the general population or the population whose income exceeds 185 percent of the federal poverty level, a broader purchase of telephone numbers for sampling purposes must be cost-allocated between SNAP-Ed and other funding sources. However, SNAP-Ed funds can be used to pay for an oversample of respondents from low-income areas to ensure representativeness of the SNAP-Ed priority population.

Population Results

[1] U.S. Department of Health and Human Services. 2008 Physical Activity Guidelines for Americans. Available from http://health.gov/paguidelines/.

[2] SHAPE America - Society of Health and Physical Educators. Active Start: A Statement of Physical Activity Guidelines for Children From Birth to Age 5, 2nd Edition. Reston, VA: SHAPE America; 2009.

[3] Sallis JF, Buono MJ, Roby JJ, Micale FG, Nelson JA. Seven-day recall and other physical activity self-reports in children and adolescents. Med Sci Sports Exerc. 1993;25(1):99-108.

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[6] Ridley K, Olds TS, Hill A. The Multimedia Activity Recall for Children and Adolescents (MARCA): development and evaluation. *Int J Behav Nutr Phys Act.* 2006;26;3-10.

[7] Hardy LL, Booth ML, Okely AD. The reliability of the Adolescent Sedentary Activity Questionnaire (ASAQ). *Prev Med.* 2007 Jul;45(1):71-74. Epub 2007 Apr 14.

Population Results

R8: Breastfeeding	
Framework Component	Population Results – Trends and Reductions in Disparities
Indicator Description	The proportion of the SNAP-Ed eligible infants that were ever breastfed, fully breastfed, or partially breastfed.
Background and Context	Breastfeeding protects infants from obesity; a meta-analysis shows the risk of childhood obesity is 22 percent lower in breastfed children than in children who were never breastfed (Yan et al., 2014). The American Academy of Pediatrics (AAP) recommends that breastfeeding continue for at least 12 months, and thereafter for as long as mother and baby desire. The SNAP-Ed State Plan Guidance requires that breastfeeding activities must be planned and implemented in collaboration with the state WIC agency and state breastfeeding coordinator. The WIC Program should have the lead and primary role in all breastfeeding activities with SNAP-Ed supplementing existing WIC activities. SNAP-Ed can advance breastfeeding in its programming through such activities as working on lactation policies and promotion at low-wage worksites, child care facilities, or other community settings. The five measures in R8 align with the breastfeeding goals outlined in *Healthy People 2020,* in maternal, infant, and children's health: • Increase the proportion of infants who are breastfed ever to 81.9 percent • At 6 months to 60.6 percent • At 1 year to 34.1 percent • Exclusively through 3 months to 46.2 percent • Exclusively through 6 months to 25.5 percent
Outcome Measures	Five measures of breastfeeding rates among infants: R8a. Ever breastfed R8b. Breastfeeding at 6 months R8c. Breastfeeding at 12 months R8d. Exclusive breastfeeding at 3 months R8e. Exclusive breastfeeding at 6 months

Population Results

What to Measure	CDC administers the National Immunization Survey, which is a nationally representative sample of all 50 states and the District of Columbia. To maximize the sample size for state-level estimates by socio-demographic categories, 3 birth years are combined for analysis. Breastfeeding indicators are calculated by year of child's birth rather than survey year. Because children are 19–35 months of age at the time of the parent interview, each survey year represents children born over 3 years, and each birth year can consist of respondent data from up to 3 survey years. SNAP-Ed agencies can use CDC state-by-state breastfeeding data listed in the Breastfeeding Report Card: http://www.cdc.gov/breastfeeding/pdf/2014breastfeedingreportcard.pdf. Breastfed at 6 months is defined as breastfeeding to any extent with or without the addition of complementary liquids or solids. Exclusive breastfeeding is defined as ONLY breast milk—no solids, no water, and no other liquids. FNS also collects state and local WIC agency breastfeeding performance measurements based on program participant data of the number of partially and fully breastfed infants for each WIC state and local agency. Local agencies reporting 30 or fewer total infant participants are excluded.
Population	Infants
Surveys and Data Collection Tools	
U.S. National Immunization Survey - National and State Breastfeeding Rates http://www.cdc.gov/breastfeeding/data/nis_data/index.htm 1. Was [child] ever breastfed or fed breast milk? 2. How old was [child's name] when [child's name] completely stopped breastfeeding or being fed breast milk? 3. How old was [child's name] when (he/she) was first fed formula? 4. This next question is about the first thing that [child] was given other than breast milk or formula. Please include juice, cow's milk, sugar water, baby food, or anything else that [child] may have been given, even water. How old was [child's name] when (he/she) was first fed anything other than breast milk or formula? **FNS Breastfeeding Promotion and Support in WIC** http://www.fns.usda.gov/wic/breastfeeding-promotion-and-support-wic 1. Fully breastfed 2. Partially breastfeed	
Key Glossary Terms: NA	

Population Results

Additional Resources or Supporting Citations

Yan J, Liu L, Zhu Y, Huang G, Wang PP. The association between breastfeeding and childhood obesity: a meta-analysis. *BMC Public Health* 2014;14:1267. Available at: http://bmcpublichealth.biomedcentral.com/articles/10.1186/1471-2458-14-1267.

The CDC Division of Nutrition, Physical Activity and Obesity's Data, Trends and Maps online tool – Breastfeeding indicators https://nccd.cdc.gov/NPAO_DTM/

Population Results

R9: Healthy Weight	
Framework Component	Population Results – Trends and Reductions in Disparities
Indicator Description	This indicator measures change in the condition of being at a healthy weight, neither underweight nor overweight or obese, over time, from year to year of the low-income population of the state. R9 is intended to measure the proportion of the SNAP-Ed eligible population that is achieving the CDC recommendation. R9 is a population-level surveillance measure.
Background and Context	Obesity is a risk factor for a number of serious chronic diseases, among them coronary heart disease, hypertension, stroke, diabetes, and several cancers,[1] while significant underweight may be indicative of an eating disorder or underlying illness. Overweight and obese youth are at increased risk for developing high cholesterol, high blood pressure, and abnormal glucose tolerance, all increasing their risk for heart disease as they get older.[2] In 2011–2012, 69 percent of U.S adults and 32 percent of U.S. youth aged 2–19 years old were overweight or obese.[3,4]
Outcome Measures	Increase in the following since the last surveillance period: R9a. Number or percentage of SNAP-Ed eligible persons at healthy weight, adults 18 and older R9b. Number or percentage of SNAP-Ed eligible persons at healthy weight, children and teens (ages 2 and older)
What to Measure	Adults R9a. Number or percentage of adults whose body mass index (BMI) = 18.5–24.9 (self-reported or measured) Children/Adolescents R9b. Number or percentage of children/adolescents whose BMI for age percentile is from the 5th percentile to less than the 85th percentile or whose Fitnessgram Body Composition score is within the healthy fitness zone
Population	Children over 2 years old and Adults
Surveys and Data Collection Tools	

Population Results

Adults	Children and Youth

Surveillance
 	
Behavioral Risk Factor Surveillance System (national surveillance, annual, self-reported) height and weight used to calculate BMI [R9a]
http://www.cdc.gov/brfss/data_tools.htm
• About how much do you weigh without shoes?
• About how tall are you without shoes?
 	
Other Instruments for Measured BMI
1. Beam scale with height rod – for height and weight [R9a]
  • Be sure the scales are calibrated before using.
2. Beam scale without height rod – if height is known or stadiometer is available [R9a]
  • Be sure the scales are calibrated before using.
3. High quality digital scale – if height is known or stadiometer is available [R9a]
4. Stadiometer – for height if no scale with height rod is available
	Surveillance
	
	Youth Risk Behavior Surveillance System
	http://www.cdc.gov/healthyyouth/data/yrbs/index.htm
	(national surveillance, biennial, self-reported) height and weight used to calculate BMI [R9a] – middle and high school age youth; administered in the school setting
	• How tall are you without your shoes on?
	• How much do you weigh without your shoes on?
	
	Other Instruments for Measured BMI
	Fitnessgram
	http://www.pyfp.org/doc/fitnessgram/fg-09-interpreting.pdf
	Annual body composition standards are available for youth as young as 5 years old, so can be used for elementary school data. [R9b]
	
	Fitnessgram is a set of physical fitness assessments used by California, Georgia, Texas, and New York City, and a number of school districts in other cities and states. One of the six assessments is body composition, which can be measured in several ways, including BMI from measured height and weight, skinfolds, and bioelectrical impedance. However, BMI from height and weight is most typical, and a student who is assessed as being "within the healthy fitness zone" by any of the measures can be assumed to fall within the BMI healthy weight criteria.
	
	See Adult Other Instruments for Measured BMI

Key Glossary Terms

Body mass index (BMI)
Population-based data collection
Healthy fitness zone
SNAP-Ed eligible persons
Surveillance

Population Results

Additional Resources or Supporting Citations

Adult BMI General Information: http://www.cdc.gov/healthyweight/assessing/index.html

Calculating BMI for adults manually
BMI = Weight (kg) / (Height (m))^2
BMI = (Weight (lbs) / (Height (in))^2 x 703 (kg/m^2)/(lb./in^2)

Adult BMI Table: https://www.nhlbi.nih.gov/health/educational/lose_wt/BMI/bmi_tbl.pdf
Adult BMI Calculator: http://www.pyfp.org/doc/fitnessgram/fg-09-interpreting.pdf

BMI	
Below 18.5	
18.5 – 24.9	Healthy Weight
25.0 – 29.9	Overweight
30.0 and Above	Obese

CDC Growth Charts for identifying healthy BMI range for youth:
http://www.cdc.gov/growthcharts/percentile_data_files.htm
http://www.cdc.gov/growthcharts/data/zscore/bmiagerev.xls
http://www.cdc.gov/growthcharts/data/zscore/bmiagerev.csv

BMI-for-age charts, 2 to 20 years, LMS (lambda-mu-sigma) parameters, and selected smoothed BMI (kilograms/meters squared) percentiles, by sex and age (1 = female)

References:
[1] Must A, McKeown NM. The Disease Burden Associated with Overweight and Obesity. [Updated 2012 Aug 8]. In: De Groot LJ, Beck-Peccoz P, Chrousos G, Dungan K, Grossman A, Hershman JM, et al., editors. Endotext [Internet]. South Dartmouth (MA): MDText.com, Inc.; 2000-. http://www.ncbi.nlm.nih.gov/books/NBK279095/

[2] Dietz WH. Health Consequences of Obesity in Youth: Childhood Predictors of Adult Disease. *Pediatrics* 1998;101:518–525.

[3] National Center for Health Statistics. Health, United States, 2014: with Special Feature on Adults Aged 55–64. Table 59. Hyattsville, MD. 2015.

[4] Fryar CD, Carroll MD, Ogden CL. Prevalence of Overweight and Obesity Among Children and Adolescents: United States, 1963–1965 Through 2011–2012, Table 2. National Center for Health Statistics E-Stat. Hyattsville, MD. 2014.

R10: Family Meals	
Framework Component	Population Results – Trends and Reductions in Disparities
Indicator Description	Changes in frequency of family meals at the population level that reflect the cumulative effects of achieving short-, medium-, and long-term outcomes in other indicators.
Background and Context	Family meals are a time when families can come together to eat, socialize, bond, and establish healthy norms and routines. Therefore, family meals have received much attention as a behavior that can be encouraged to improve nutrition and nutrition-related factors. It is important to note, however, that family meals are complex and contextually based. That is, while in general eating together without watching TV is beneficial to child and adolescent nutrition, simply performing the behavior might not be sufficient to improve nutrition and nutrition-related factors. Families must also have the education, resources, access, and environment necessary to serve healthy foods at meal time. The questions below are meant to measure frequency of family meals and whether or not a TV is watched during dinner time. They can be used to obtain a prevalence estimate of a group or can be used to measure change over time (e.g., pre- and posttest design after an intervention). A review of the literature found that families who report eating together three or more time per week have children and adolescents who were more likely to be in a normal weight range and have healthier dietary and eating patterns.[1] The literature review also highlighted that parents and caregivers generally spent more time with younger children and emphasized family mealtimes as a priority. This prioritization of family mealtimes changes in adolescence when other factors begin to emerge, such as changing work schedules for parents and caregivers, children and adolescents taking part in more afterschool activities, and adolescents' own desires to have more control of the food they choose to eat. There is less evidence that watching TV specifically during mealtime is predictive of poorer dietary intake, although some studies do find a negative association.[2,3] Research does show that the total hours of TV watched is associated with poorer dietary intake; a primary hypothesis for this association is that these children and adolescents are more exposed to unhealthy food advertising and therefore more likely to request and consume less healthy foods. Other forms of media or electronic devices (e.g., smart phones, mp3 players, tablets) might also be associated with lower dietary quality, but more research is needed to establish such an association.

Population Results

Outcome Measures	R10a. Families that report eating a family meal three or more times per week R10b. Families that report they "disagree" they often watch TV or other screen while eating dinner
What to Measure	There are two core components of family meals that are measured: 1) frequency of family meals across one week; and 2) the degree to which a parent or caregiver "agrees" or "disagrees" that their family watches TV during dinner.
Population	Families with children and/or adolescents; although these are family-level questions, only parents or caregivers complete the questions.

Surveys and Data Collection Tools

Adults

Family Meals Frequency

- During the past seven days, how many times did all, or most, of your family living in your house eat a meal together?
  Response choices:
  a. Never
  b. 1–2 times
  c. 3–4 times
  d. 5–6 times
  e. 7 times
  f. More than 7 times

  Note: Once responses are collected, combine "a" and "b" into one category titled "2 times or fewer per week." Combine options "c–f" into one category, "3 times or more per week."

- In my family, we often watch TV while eating dinner.
  Response choices:
  a. Strongly disagree
  b. Somewhat disagree
  c. Somewhat agree
  d. Strongly agree

  Note: Once responses are collected, combine "a" and "b" into one category labeled "disagree." Combine "c" and "d" into one category labeled "agree."

These questions were borrowed from Project EAT, administered by the University of Minnesota, School of Public Health. More information on these questions and Project Eat can be found here: http://www.sphresearch.umn.edu/epi/project-eat/

Population Results

Key Glossary Terms: NA

Additional Resources or Supporting Citations

Ten additional questions (below) can be asked that measure the "atmosphere" of family meals as well as rules related to family meals. These questions give more information about the quality of interactions at meal time, the purpose of meal time, and rules related to meal time. The atmosphere of family meals as measured by these questions is associated with less disordered eating.[4] These questions also give a descriptive idea of the context of family meals that is not measured by the frequency of family meals question.

1. In my family, it is important that the family eats at least one meal a day together.
2. I am often just too busy to eat dinner with my family.
3. In my family, different schedules make it hard to eat meals together on a regular basis.
4. In my family, it is often difficult to find time when family members can sit down to eat a meal together.
5. In my family, we are expected to be home for dinner.
6. I enjoy eating meals with my family.
7. In my family, eating together brings people together in an enjoyable way.
8. In my family, mealtime is a time for talking with other family members.
9. In my family, dinner time is about more than just getting food, we all talk together.
10. In my family, there are rules at mealtime we are expected to follow.

The response categories for these questions are "strongly disagree," "disagree," "agree," "strongly agree."

National or state-level estimates are not available for these questions; however, SNAP-Ed Implementing Agencies can incorporate the preferred questions above into their local survey administration.

References:

[1] Hammons AJ, Fiese BH. Is frequency of shared family meals related to the nutritional health of children and adolescents? *Pediatrics*. 2011;127(6) e1565–e1574.

[2] Feldman S, Eisenberg ME, Neumark-Sztainer D, Story M. Associations between watching TV during family meal and dietary intake among adolescents. *J Nutr Educ Behav.* 2007;39(5):257-263.

[3] Fitzpatrick E, Edmunds LS, Dennison BA. Positive effects of family dinner are undone by television viewing. *J Am Diet Assoc.* 2007;107(4):666-671.

[4] Neumark-Sztainer D, Wall M, Story M, Fulkerson JA. Are family meal patterns associated with disordered eating behaviors among adolescents? *J Adolesc Health.* 2004;35(5):350-359.

R11: Quality of Life	
Framework Component	Population Results – Trends and Reductions in Disparities
Indicator Description	Changes in population behaviors that reflect achievement of improved quality of life.
Background and Context	According to *Healthy People 2020*, "Health-related quality of life (HRQOL) is a multi-dimensional concept that includes domains related to physical, mental, emotional, and social functioning." The concept of HRQOL was first introduced in the 1980s but is a relatively new objective for monitoring the population's health in *Healthy People 2020*. According to CDC, self-assessments of health status can be just as powerful as other objective measures of health. *Healthy People 2020* has set a pair of objectives for HRQOL: • Increase the percentage of adults who self-report good or better physical health to 79.8 percent • Increase the percentage of adults who self-report good or better mental health to 80.1 percent
Outcome Measures	R11a. Proportion of SNAP-Ed eligible adults or youth who self-report good or better physical health R11b. Proportion of SNAP-Ed eligible adults or youth who self-report good or better mental health R11c. Mean number of healthy days in the past 30 days R11d. Mean number of unhealthy days in the past 30 days
What to Measure	The preferred measure is the CDC's "Healthy Days Measures," which includes the following questions: • Would you say that in general your health is excellent, very good, good, fair, or poor? • Now thinking about your physical health, which includes physical illness and injury, how many days during the past 30 days was your physical health not good? • Now thinking about your mental health, which includes stress, depression, and problems with emotions, how many days during the past 30 days was your mental health not good? • During the past 30 days, approximately how many days did poor physical or mental health keep you from doing your usual activities, such as self-care, work, or recreation? The CDC recommends using the following calculations: Unhealthy days are an estimate of the overall number of days during the previous 30 days when the respondent felt that either his or her physical or mental health was not good. To obtain this estimate, responses to questions 2 and 3 are combined to calculate a summary index of overall unhealthy days, with a logical maximum of 30 unhealthy days. For example, a person who reports 4 physically unhealthy days and 2 mentally unhealthy days is assigned a value of 6

	unhealthy days, and someone who reports 30 physically unhealthy days and 30 mentally unhealthy days is assigned the maximum of 30 unhealthy days. Healthy days are the positive complementary form of unhealthy days. Healthy days estimates the number of recent days when a person's physical and mental health was good (or better) and is calculated by subtracting the number of unhealthy days from 30 days. While not every state, territory, or tribe administers the BRFSS, this survey represents the most definitive source on health at the state level. States or communities that do not administer the BRFSS could incorporate the aforementioned survey questions in their own locally administered health surveys. One area of potential confusion in R11 is that the survey was designed for telephone methodology. The nature of "healthy days" versus "unhealthy days" may require some explanation by a well-trained survey interviewer. Thus, if a SNAP-Ed program were to implement a paper and pencil or electronic survey, some additional explanation of these concepts may be necessary. Other approaches to measuring quality of life in adults include the WHO (Five) Well-Being Index, a questionnaire that measures mental well-being in the previous 2 weeks. For youth aged 12–18 years, the Youth Quality of Life-Short Form Instrument (YQOL-SF) is a generic quality of life self-administered questionnaire. The tool is appropriate for surveillance in adolescent populations and can be added to ongoing school-based or other surveys. Choose a survey that is appropriate for your population of interest, and conduct population-level assessments on an annual or biennial basis. Year one would become the baseline, and trends could be measured over time.
Population	Adults and youth (ages 12–18)
Surveys and Data Collection Tools	
Adults **Healthy Days Core Module (CDC HRQOL– 4) Behavioral Risk Factor Surveillance System (BRFSS)** [R11a-d] http://www.cdc.gov/hrqol/ 1. Would you say that in general your health is: *Responses:* Excellent, Very good, Good, Fair, Poor 2. Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good? *Responses:* Number of Days _ _ , None 3. Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good? *Responses:* Number of Days _ _ , None	

4. During the past 30 days, for about how many days did poor physical or mental health keep you from doing your usual activities, such as self-care, work, or recreation?
   Responses: Number of Days _ _ , None

WHO (Five) Well-being Index (WHO-5) [R11b]
https://www.psykiatri-regionh.dk/who-5/who-5-questionnaires/Pages/default.aspx

1. I have felt cheerful and in good spirits.
2. I have felt calm and relaxed.
3. I have felt active and vigorous.
4. I woke up feeling fresh and rested.
5. My daily life has been filled with things that interest me.
   Responses: All of the time, Most of the time, More than half of the time, Less than half of the time, Some of the time, At no time

Youth (ages 12–18 years)

Youth Quality of Life – Short Form (YQOL-SF) – University of Washington Seattle Quality of Life Group [R11b]
http://depts.washington.edu/seaqol/
Contact the University of Washington to access the YQOL-SF

Key Glossary Terms

Health-related quality of life (HRQOL)

Additional Resources or Supporting Citations

CDC Health-Related Quality of Life
http://www.cdc.gov/hrqol/

Chapter 5. Social Norms and Values

Making positive changes to social norms and values related to nutrition, physical activity, and obesity prevention is a primary motivating factor of the SNAP-Ed Evaluation Framework. Before we discuss how the guide can help users think about changes to social norms and values, it is useful to define a few key terms. Social norms are expectations held by social groups that dictate appropriate behavior and are thought of as rules or standards that guide behavior (Cialdini and Trost, 1999). Norms are further specified as either descriptive or injunctive (Reno, Cialdini, and Kallgren, 1993). Descriptive norms refer to the most common, actual behaviors and policy, system, or environment (PSE) scenarios; they represent how people perceive what is common and actually occurring, which is important for shaping and influencing behavior. Injunctive norms refer to what ought to be; they convey what is approved and disapproved by a group or society. Note that norms can be both descriptive and injunctive and can be in "opposing" directions. For example, eating healthy might be an approved injunctive norm but the descriptive norm might be that the majority of people do not eat healthy. Or, being overweight or obese might be a disapproved injunctive norm but the descriptive norm may be that most people are overweight or obese.

From a sociological perspective, a value is a standard of judgment by which people or organizations decide on desirable goals or outcomes (Hewitt and Hewitt, 1986). Values often justify or provide context for behaviors and PSEs. In the context of the implementation guide, values reflect long-term and sustained effort and resources directed towards goals that improve nutrition, physical activity, and obesity prevention. Values help determine which social norms are created, prevented, approved, and disapproved. For example, an organization might value obesity prevention for their employees. Therefore, they provide a gym membership or offer free physical activity classes to employees that most employees use. This value translates into a descriptive norm (i.e., most people use the gym membership or participate in classes) and injunctive norm (i.e., using the organization's gym membership is approved behavior). While a fuller discussion of values and their importance is outside the scope of this chapter, we regard values as a critical piece in improving and sustaining positive changes related to nutrition, physical activity, and obesity prevention.

There are no evaluation indicators in the norms and values chapter. It is still possible, however, to understand how indicators in other chapters might be changing norms and values. We can understand these changes by 1) linking changes in indicators within and across levels of the evaluation framework; and 2) understanding changes within individual indicators. In addition, these

changes should be sustained over a long period. Norms and values typically develop slowly over time. This is not always the case, but within this framework, we consider changes in norms and values to reflect cumulative change in sectors and indicators.

Changes that occur within a level across multiple indicators might change norms and values. For example, ST1, MT1, and LT1 each deal with nutrition education in the short, medium, and long term. More specifically, ST1 deals with goals and intentions; MT1 deals with behavioral changes; and LT1 deals with sustained behavioral changes. Imagine that a SNAP-Ed program targeted a specific population within a community to receive healthy eating education. If programming and measurement was successful for each of these indicators and the majority of the target population used MyPlate to improve their diet, we might conclude that using MyPlate is valued and has become a descriptive norm. Or, for example, take a community nutrition organization within a state that partners with other sector representatives (ST8: Multi-Sector Partnerships and Planning), including local city councils (MT7: Government Policies) to implement funding for community gardens (LT12: Food Systems). If the partnerships, policies, and gardens are adopted and maintained, it could signal a change in both descriptive and injunctive norms and values.

Changes that occur between levels and across multiple indicators might change norms and values. For example, MT3 and MT6 both deal with promoting physical activity, but do so across levels. For example, a direct education program can teach children creative ways to incorporate 60 minutes of physical activity into their day (MT3: Physical Activity and Reduced Sedentary Behavior), and schools can enact a policy to have at least 15 minutes of recess daily. If this occurred across a whole school district and was maintained, we might conclude that norms and values related to physical activity are changing in that district. Or, for example, if media coverage (LT8) of farmers markets that accept SNAP becomes routine, and this increases government investments (LT13) into farmers markets, we might conclude a change in norms and values is occurring.

Changes in individual indicators might be enough to change norms and values. For example, changes in food procurement policies (LT13: Government Investments) that favor fruits and vegetables over less healthy foods can change food options for children in schools, low-wage workers, and many other settings. Such a large change can have a considerable impact on norms and may represent a change in values related to healthy food procurement of government agencies. It should be noted, however, that although changes in norms and values can occur within just one indicator, they are more likely to occur when multiple indicators are changed. This is because

changes in norms and values usually reflect a considerable shift in behaviors and PSEs, which typically requires targeting multiple levels of the social-ecological model or making changes to multiple indicators within one level. Nonetheless, it is important to consider how changes to specific indicators might have an outsized effect on norms and values.

Changing norms and values will likely create sustained and meaningful change that contributes to nutrition, physical activity, and obesity prevention. This will, ultimately, improve health and well-being outcomes as described in the Population Results indicators. Although we do not present a systematic way of measuring norms and values, we encourage users of this guide to consider how SNAP-Ed programming and activities might ultimately affect the norms and values of individuals and organizations. We give some examples of how various indicators might change norms and values, but we recognize that the effect of SNAP-Ed programming and activities can occur in many other ways, and the process is often complex. Furthermore, it is possible that norms and values shape the type of SNAP-Ed programing and activities that are chosen. That is, there is a feedback loop between the indicators and norms and values. We also encourage users to consider how norms and values can vary based on culture, geography, income, class, and other social and demographic characteristics. Given its scope and reach, SNAP-Ed has the potential to make a real difference in creating positive changes in norms and values over years or even decades.

APPENDICES

Appendix A. Glossary

Active Commuting: Physical activity as a means of transport, which may include walking or bicycling. Public transportation is also included in active commuting because users have to use human transportation to access public transportation stops and their end destination. Also known as active transportation.

Active partnerships: may include two or more individuals who regularly meet, exchange information, and identify and implement mutually reinforcing activities that will contribute to adoption of one or more organizational changes or policies

Adoption: When at least one change is made in writing or practice to expand access or improve appeal for healthy food and beverages. These changes may include, but are not limited to, those in *SNAP-Ed Strategies and Interventions: An Obesity Prevention Toolkit for States*. Adoption does not mean that full-scale implementation has occurred.

Aerobic Activity: Physical activity in which people move their large muscles in a rhythmic manner for a sustained period (such as running, brisk walking, bicycling, playing basketball, dancing, and swimming). During aerobic activity, a person breathes harder and the heart beats more rapidly to meet the demands of the body's movement.

Body Mass Index (BMI): A low-cost and easy-to-perform method of screening for weight category, for example underweight, normal or healthy weight, overweight, and obesity. It is not a direct measure of body fatness, but correlates moderately with direct measures, such as bioelectrical impedance, underwater weighing, dual energy x-ray absorptiometry, and skinfold measures. The only measures required to calculate BMI are height and weight.

Centralization: A network analytics term that measures the extent to which communication and collaboration within the partnership is focused around one sector or one lead agency.

Champion: In the SNAP-Ed context, an individual who takes action to facilitate access and/or create appeal for improved healthy eating and physical activity choices, in the settings where SNAP-Ed programming is provided or in the broader community. Champions are community members whose activities go beyond the services delivered by the SNAP-Ed Implementing Agency in the local setting.

Channel: A means of communication or expression; a path along which information passes.

Clinical-Community Linkages: Relationships that exist when primary care clinicians make a connection with a community resource to provide certain preventive services such as tobacco screening and counseling

Coalition: Group of individuals and organizations that commit to joint action, typically for a longer term, in adopting nutrition or physical activity practices, supports and/or standards. Key characteristics include: shared leadership, definition of roles, and generation of new resources.

Collective Impact: The commitment of a group of important actors from different sectors to a common agenda for solving a specific social problem.

Collaboration: Two or more organizations contributing to joint activities, each with identified personnel who help advise and make decisions about effective strategies and interventions. Key

characteristics include: a system with shared impacts, a consensus decision-making process, and formal role assignments.

Community: A group of people defined by geographic, demographic, and/or civic/political boundaries. For example, a "community" could consist of the residents of a town or a neighborhood, the members of a particular demographic group within a geographic region, or all individuals served by a group of community-based and/or governmental institutions.

Community Policing: A philosophy that promotes organizational strategies that support the systematic use of partnerships and problem-solving techniques to proactively address the immediate conditions that give rise to public safety issues such as crime, social disorder, and fear of crime. It comprises three elements:

- Community partnerships between the law enforcement agency and those they serve to develop solutions and increase trust in police
- Organizational transformation that aligns management, structure, personnel, and information systems to support community partnerships and problem solving (internal changes within the law enforcement agency)
- Problem solving, which includes the process of engaging in the proactive and systematic examination of identified problems to develop and evaluate effective responses (an internal framework within the law enforcement agency)

Community-Supported Agriculture (or CSA): A retail operation that sells shares in a future harvest that may or may not be realized. Farm or network/association of multiple farms that offers consumers regular (usually weekly) deliveries of locally grown farm products during one or more harvest season(s) on a subscription or membership basis.

Community-Wide Recognition Programs: Programs with standards set by authoritative third parties to help civic leaders partner with the public, nonprofit, and business sectors to achieve collective impact–type goals such as obesity prevention or "livable communities."

Complete Streets: A transportation policy and design approach that requires streets to be planned, designed, operated, and maintained to enable safe, convenient, and comfortable travel and access for users of all ages and abilities regardless of their mode of transportation.

Cooperation: Arrangement between organizations working together in which one assists the other with information such as referrals, providing space, distributing marketing and client education materials, and hosting events open to the clients and community members.

Coordination: Arrangement between organizations working together in which one organization maintains autonomous leadership, but there is a common focus on group decision-making; emphasizes sharing of resources to aid in the adoption of policy, systems, and environmental changes, and associated promotion listed in MT4 and MT5.

Crime Prevention Through Environmental Design (CPTED): Proper design, maintenance, and use of the built environment to enhance quality of life and reduce the incidence and fear of crime. Includes the following elements:

- Natural surveillance achieved through lighting, removing concealed areas, and placing view points and entrances/exits for easy observation
- Territoriality designated by signage, low fencing, or other landscape elements that delineate the transition between areas of different use

- Access control through man-made (e.g., locks, fencing, or other security barriers) or natural (e.g., landscaping) mechanisms that discourage unwanted access
- Activity support (e.g., aesthetics or activities) that promotes use to increase "eyes on the street"
- Management and maintenance of landscaping, lighting, and other features

Cross-Contamination: The physical movement or transfer of harmful bacteria from one person, object, or place to another. Cross-contamination is how bacteria can be spread.

Direct-to-Consumer Marketing: Local food marketing arrangements in which growers/producers sell agricultural products directly to the final consumers, such as sales through farmers markets, CSAs, and farm stands.

Domain: Categories of settings where people eat, learn, live, play, shop, and work.

Descriptive norms: refer to the most common, actual behaviors and policy, system, or environment (PSE) scenarios; they represent how people perceive what is common and actually occurring, which is important for shaping and influencing behavior.

Duration: How long a person does an activity in any one session (e.g., mins/session).

Earned Media/Public Relations: Unpaid coverage resulting from media outreach by SNAP-Ed programs/partners. May result from community events, forums, and media appearances and interviews or occur incidental to SNAP-Ed intervention activities.

Emerging: Newly created and growing in strength or evidence base.

Environmental: Includes the built or physical environments, which are visible/observable, but may include economic, social, normative, or message environments.

Environmental Scan: A process that surveys programs, services, supports and other resources that are currently in place.

Every Student Succeeds Act: The most recent reauthorization of the 1965 Elementary and Secondary Education Act is the Every Student Succeeds Act (ESSA; http://www.ed.gov/essa), which was passed in December 2015 and replaced the No Child Left Behind Act of 2001. Included in the ESSA are provisions that monitor and reallocate resources to schools and Local Educational Agencies to support schools and groups of students that exhibit achievement gaps and high dropout rates.

Evidence-based Education: The integration of the best research evidence with the best available practice-based evidence into education interventions. The best research evidence refers to relevant rigorous research including systematically reviewed scientific evidence. Practice-based evidence refers to case studies, pilot studies, and evidence from the field that demonstrate obesity prevention potential.

Farmers Market: A multi-stall market that sells fresh produce to the public at a central/fixed location.

Farm-to-School: Programs through which schools buy and feature locally produced, farm-fresh foods such as fruits and vegetables, eggs, honey, meat, and beans on their menus. Farm-to-school implementation differs by location but always includes one or more of the following:

- *Procurement*: Local foods are purchased, promoted, and served in the cafeteria or as a snack or taste test.
- *Education*: Students participate in educational activities related to agriculture, food, health, or nutrition.
- *School gardens:* Students engage in hands-on learning through gardening.

Federally Qualified Health Centers (FQHCs): All organizations receiving grants under Section 330 of the Public Health Service Act (PHS). FQHCs must serve an underserved area or population, offer a sliding fee scale, provide comprehensive services, have an ongoing quality assurance program, and have a governing board of directors. FQHCs qualify for enhanced reimbursement from Medicare and Medicaid, as well as other benefits.

Flexibility: Ability to move a joint through its full range of motion.

Follow-up: A minimum of 6 months post-intervention.

Food Hubs: Collaborative regional enterprises that aggregate locally sourced food to meet wholesale, retail, institutional, and even individuals' demand. They have become key entities in local food systems' infrastructure allowing small and midsize farmers to adapt to increases in demand by outsourcing marketing to them.

Food Insecurity: A household-level economic and social condition of limited or uncertain access to adequate food. (This condition is assessed in the food security survey and represented in USDA food security reports.)

Food Policy Council (FPC): A formalized entity established to focus on the food webs of a locality (city, county), region (multi-county), or state. FPCs typically have a primary goal of examining the operation of a local food system and providing ideas and recommendations for improvement through public policy change. They are innovative collaborations between citizens and government officials that give voice to the concerns and interests of many who have long been under-served or un-represented by agricultural institutions.

Food Resource Management (FRM): The handling of all foods, and resources that may be used to acquire foods, by an individual or family. FRM education typically addresses topics such as meal planning, shopping strategies, food selection, budgeting, food preparation, and cooking strategies for improved household food security and to maximize the nutrition/health return on limited resources.

Food Security: A condition in which all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life. Household food security is the application of this concept to the family level, with individuals within households as the focus of concern.

Free and Reduced Price (School) Meals (**FRPM):** School meals that are fully or partially reimbursed with federal funds administered through the USDA Food and Nutrition Service, particularly through the National School Lunch Program (NSLP). Students living in households with income less than 130 percent of the federal poverty level (FPL) are eligible for federally reimbursable free school meals, while those whose household income is between 131 percent and 185 percent of the FPL qualify for reduced price meals.

Frequency: How often a person does an activity (e.g. days/week).

Fruit Drink or Juice Drink: Sweetened juice products with minimal juice content.

Funding: Money provided, especially by an organization or government, for a particular purpose.

General Plan: Plan adopted at the city, county, or regional level, written to guide local growth and land development currently and over a long-term period, 10–20 years after adoption. The plans should be reviewed, and possibly updated every 5 years. It covers a range of topics, including public and private land development proposals, zoning, expenditure of public funds, availability of tax incentives, cooperative efforts, green measures for sustainable practices, and issues of great concern, such as farmland preservation or the infill in older neighborhoods areas. It is also called a comprehensive plan, land-use plan, or master plan.

Geographic Scale or Levels: Size or scope of an area or activity, categorized as local (ward, district, parish, neighborhood, city, county, or region), state, territorial, or tribal.

Greenway: A linear open space established along a natural corridor (e.g., an urban riverside corridor along a city waterfront or and an ecologically significant natural corridor that provides nature study and hiking).

Health-Related Quality of Life (HRQOL): A multi-dimensional concept that includes domains related to physical, mental, emotional, and social functioning.

Healthy Fitness Zone: A designated criterion-referenced score on a Cooper Institute Fitnessgram test that indicates the child has a sufficient fitness level to provide important health benefits.

Healthy Food Outlets: Supermarkets, farmers markets, and produce stores.

Healthy Food Procurement: The practices used by public institutions to obtain the foods they serve and ensure that these foods promote healthy diets.

Healthy Food Ratio: This metric is a standardized measure to show the balance of food outlets in a census tract. It is calculated as: Healthy Food Ration (Healthy food outlets ÷ Total food outlets) x 100.

High food security: No reported indications of food-access problems or limitations.

Hunger: An individual-level physiological condition that may result from food insecurity, or a potential consequence of food insecurity that, because of prolonged, involuntary lack of food, results in discomfort, illness, weakness, or pain that goes beyond the usual uneasy sensation.

Impacts: the extent to which program outcomes lead to long-term and sustained changes.

Implementation: pertains to whether the intervention was delivered with fidelity or as intended and whether the essential elements known to be important to the achievement of positive outcomes were actually and consistently implemented. To be effective, organizational policy changes and environmental supports should be made as part of multi-component and multi-level interventions to sustain the new changes or standards over time.

Implementing Agency: Sub-awardee or grantee funded by State agencies to provide nutrition education and obesity prevention services.

Injunctive norms: refer to what ought to be; they convey what is approved and disapproved by a group or society.

In-Kind Support: Resources in the form of goods and services, rather than cash.

Intensity: How hard a person works to do an activity.

Intermediaries: People in a site or organization who approve, plan, and/or deliver interventions. In schools, these may be principals, teachers, or staff; in worksites, these may be employers, paid staff, or employee leaders; in community organizations, these may be paid staff or volunteers; in food stores, these may be company officials, managers and supervisors, or paid staff.

Intermediated Sales: Strategy to promote the presence and affordability of healthier foods in retail and food service settings, allowing people more opportunities to make healthier food choices. Various programs and policies can contribute to healthier foods in these environments including providing incentives for supermarkets or small grocery stores to establish businesses in underserved areas; improving the quality, variety, and amount of healthier foods at existing retail and food service establishments; and promoting local foods.

Key Media Outlets: Outlets with the greatest reach into and/or credibility with SNAP-Ed audiences and with intermediaries in key intervention channels.

Local Educational Agency: A public board of education or other public authority legally constituted within a State for either administrative control or direction of, or to perform a service function for, public elementary schools or secondary schools in a city, county, township, school district, or other political subdivision of a State, or for a combination of school districts or counties that is recognized in a State as an administrative agency for its public elementary schools or secondary schools.

Leveraged Resources: All resources used to support nutrition or physical activity supports or standards. These resources may include funding, staffing, and in-kind contributions such as physical space and services.

Local: Relating to or occurring in a particular area, city, or town.

Local Food Production: Food is grown or raised and harvested close to consumers' homes, then distributed over much shorter distances than is common in the conventional global industrial food system.

Low Food Security: In a given household, report of reduced quality, variety, or desirability of diet, but the quantity of food intake and normal eating patterns are not substantially disrupted.

Maintenance: refers to the extent to which a learner continues to perform a behavior after a portion or all of the intervention responsible for the initial change in behavior has been removed.

Marginal Food Security: One or two reported indications of food insecurity—typically of anxiety over food sufficiency or shortage of food in the house. Little or no indication of changes in diets or food intake.

Market Segments: The subsets of the total/general audience broken out by demographics such as income, education, ethnicity, language, age, or geography, or by psychographic profile.

Marketing Activities, by type, include:

- **Advertising**: Circulars and on-site ads, on-site signage, end-aisle and check-out displays
- **In-Language:** Outlets that use a language other than English.
- **Public relations ("earned media")**
- **Promotion**: Price, seasonal, commemorative specials; techniques of behavioral economics; incentives; loyalty programs; toy giveaways; movie tie-ins; coupons
- **Personal sales**: Food demonstrations and taste tests, expert speakers, trainings, individualized loyalty programs, online outreach

Media Advocacy: Technique by which stakeholders conduct activities that influence the selection of SNAP-Ed topics by the mass media and shape the debate/discussion about these topics to create policy, systems, and environmental change.

Media Coverage: Measure of the degree to which SNAP-Ed funds are able to address issues that generate public interest and support for larger-scale change using the media environment, as well as reach large numbers of general market and SNAP-Ed eligible audience segments, thus adding to the impact of direct services and on-site programs. Media coverage captures the sources and amounts of mass communications generated in whole or in part by SNAP-Ed that build awareness, momentum, and normalization of positive community change and new social norms sought by SNAP-Ed agencies and partners.

Media Practices: The routine, voluntary business activities of media outlets including, but not limited to, outlet-initiated news, editorial, and feature coverage; sponsorships; community campaigns; and philanthropy.

Multiplier: A multiplier is the number of times money circulates within a region following a transaction; it is a marker of local economic impact.

Muscular Endurance: Ability to exert submaximal force repeatedly against resistance.

Muscular Strength: Ability of a muscle or muscle group to exert maximal force.

National Assessment of Educational Progress (NAEP): is the largest nationally representative and continuing assessment of what America's students know and can do in various subject areas.

Network: A formalized group of individuals and organizations characterized by ongoing dialogue and information sharing.

Network Analysis: The process of investigating social structures through the use of network and graph theories. It characterizes networked structures in terms of nodes (individual actors, people, or things within the network) and the ties or edges (relationships or interactions) that connect them.

Needs Assessment: The process of identifying and describing the extent and type of health and nutrition problems and needs of individuals and/or target populations in the community.

Nutrition Assistance: A program designed to help low-income people meet their nutritional needs. Examples include the Supplemental Nutrition Assistance Program (SNAP) and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC).

On-Farm Market: A farmer/producer with a one-stand operation that sells a variety of fruits and vegetables (produced by the farmer) directly to the public.

Organization: An entity consisting of multiple people, such as an institution or an association, that has a collective goal and is linked to an external environment

Open Streets: Community-based programs that promote the use of public space for physical activity, recreation, and socialization by closing streets temporarily to motorized vehicles, allowing access to pedestrians.

Outcome: The desired benefit, improvement, or achievement of a specific program or goal
Partners: Organizational entities that offer site(s) or services for conducting SNAP-Ed activities with or without SNAP-Ed funding.

Physical Activity: Any body movement that works muscles and requires more energy than resting.

Policy: A written statement of an organizational position, decision, or course of action.

Population-based Data Collection: The inclusion of a total population, e.g., your entire core SNAP-Ed population, or a representative sample (at least 15%) from each funded partner/subcontractor. If a sample is used, ideally, the sample is selected randomly. The sample should reflect the characteristics (age, ethnicity, working status, etc.) of your client population as a whole. Selection bias is to be avoided; if possible, translate question items so that non-English-speaking respondents can participate. This is particularly important if the instrument is being administered directly to your SNAP-Ed population and you have a significant number of non-English speakers. The same instrument or question items should be used year-to-year for surveillance purposes.

Practice-tested: An approach based upon published or unpublished evaluation reports and case studies by practitioners working in the field that have shown positive effects on individual behaviors, food/physical activity environments, or policies.

Program Recognition: Any aggregate of nutrition and physical activity environmental changes and/or practices implemented by SNAP-Ed partners that fit award criteria established by specific national, state, or local agencies for PSE change. Recognition programs vary in how often recertification is required, e.g., annually, every 3 years or every 5 years, as well as whether recognition is awarded based on self-certification or if it is monitored objectively by a third-party organization.

Program Recognition Levels: Levels of activity or achievement typically set by external bodies for recognition awards. Examples might include bronze, silver, and gold or 3-star, 4-star, and 5-star.

Project Reach: How far the project stretches in achieving the end goal.

Quality-adjusted life year (QALYs), which is an outcome measure that considers both the quality and the quantity of life lived. The QALY is based on the number of years of life added by interventions.

Reach: Number of SNAP-Ed eligibles who encounter the improved environment on a regular (typical) basis and are assumed to be influenced by it.

Readiness: The state of being fully prepared to make a behavior change

RE-AIM Model: A model to help structure evaluation to answer practical questions about program implementation and sustainability (see http://www.re-aim.org/).

Recall: In memory refers to the mental process of retrieval of information from the past. Along with encoding and storage, it is one of the three core processes of memory.

Recreation Spaces*:* Outdoor, open-air space that is used principally for active and/or passive recreation use, developed either by the public or private sector, and is counted towards the open space standard of provision. It is sometimes simply referred to as "open space." Subject to compliance with certain criteria, it includes open space provided both at the ground level and on a podium.

Refined Grains: Grains that have been milled to give them a finer texture and improve their shelf life. This process removes dietary fiber, iron, and many B vitamins.

Regional Food Systems: The networks of food production, delivery, and sales that bring food and beverages to consumers and institutions. Regional food systems usually include a focus on direct-to-consumer marketing, namely local food marketing arrangements in which growers/producers sell agricultural products directly to the final consumers, such as sales through farmers markets, CSAs, and farm stands.

Safe Routes to School: A program to make walking and bicycling to school safer and more accessible for children, including those with disabilities, and to increase the number of children who choose to walk and bicycle.

Sectors: Areas of the economy in which businesses share the same or a related product or service.

Sedentary Behavior: Too much sitting or lying down at work, home, in social settings and during leisure time.

Settings: Types of sites, for example schools, work sites, food stores, and parks.

Shared-Use Street: A strategy providing an infrastructure that supports multiple recreation and transportation opportunities, such as walking, cycling, and use of wheelchairs, to enable safe access for all users, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities. Shared-use streets make it easy to cross the street and supports active transportation. Also called mixed-use street.

Sites: The physical locations or places where SNAP-Ed activities occur.

SNAP-Ed Eligible Persons: The target audience for SNAP-Ed, specifically SNAP participants and low-income individuals who qualify to receive SNAP benefits or other means-tested federal assistance programs, such as Medicaid or Temporary Assistance for Needy Families. It also includes individuals residing in communities with a significant low-income population.

Social Marketing: The process of combining commercial marketing methods with public health approaches in order to achieve significant, large-scale public benefits. Commercial marketing techniques include, but are not limited to, formative research and pilot testing; paid or public service advertising; other forms of mass communications, including interactive websites and social media; public relations or earned media; promotions; and consumer education. Public health approaches are consumer engagement; community development; public/private partnerships; and policy, systems, and environmental change.

Social Marketing Campaigns: Campaigns delivered to one or more SNAP-Ed market segments on a population basis, across a large geographical area (town/city, county, region/media market, statewide, multi-state, national). They are typically branded (with a name, tagline, visual logo, look-and-feel); communicate a common call to action; and are delivered in multiple complementary settings/channels, engaging intermediaries in those settings/channels and focusing on one or more priority behavior changes.

Social norms: are expectations held by social groups that dictate appropriate behavior and are thought of as rules or standards that guide behavior.

Solid Fats: Fats that are solid at room temperature, like beef fat, butter, and shortening. Solid fats mainly come from animal foods and can also be made from vegetable oils through a process called hydrogenation.

Specific Message: A communication with some identifiable aspect (e.g., logo, jingle, character) that the respondent could not name unless he or she had been exposed to the communication.

State Agency: the agency of State government, including the local offices thereof, which is responsible for the administration of the federally aided public assistance programs within the State, and in those States where such assistance programs are operated on a decentralized basis; it includes the counterpart local agencies, which administer such assistance programs for the State agency.

Structured Physical Activity: Teacher-led activities for toddlers and preschoolers that are developmentally appropriate and fun. Such activities should include:

- Planned, focused activities designed to improve age-appropriate motor skill development. The activity should be engaging and involve all children with minimal or no waiting.
- Daily, fun physical activity that is vigorous (gets children "breathless" or breathing deeper and faster than during typical activities) for short bouts of time.

Sugar-Sweetened Beverages: Liquids that are sweetened with various forms of added sugars. These beverages include, but are not limited to, soda (regular, not sugar-free), fruitades, sports drinks, energy drinks, sweetened waters, and coffee and tea beverages with added sugars. Also called calorically sweetened beverages.

Supports: Changes in written policies, organizational systems, and the observable (physical or "built") or communications environments that make healthy choices easier and more desirable.

Sustainability: The continued use of intervention components and activities for the continued achievement of desirable intervention and population outcomes.

Sustainability Plan: A written document that describes the priorities and action steps that will be taken to ensure the long-term sustainability of a SNAP-Ed intervention or initiative.

Systems: A group of related parts that move or work together within a whole organization or a network of organizations.

Systems Changes: Unwritten, ongoing, organizational decisions or changes that result in new activities or new ways of conducting business that reach large proportions of people the organization or network of organizations serve.

Surveillance: Monitoring of behavior, activities, or other changing information using an ongoing, systematic data collection, analysis, and dissemination tool. Surveillance data can identify the need for SNAP-Ed intervention and measure their effects on the populations or conditions monitored.

Total Audience/General Market/General Audience: The total number of people that listen, view, read, or otherwise engage with media formats, not broken out by demographics or other segmentation.

Total Food Outlets: Healthy food outlets as well as fast food restaurants, convenience stores, and corner stores.

Transtheoretical Model: An integrative, biopsychosocial model to conceptualize the process of intentional behavior change. Whereas other models of behavior change focus exclusively on certain dimensions of change (e.g., theories focusing mainly on social or biological influences), the TTM seeks to include and integrate key constructs from other theories into a comprehensive theory of change that can be applied to a variety of behaviors, populations, and settings.

Unexpected Benefits: Unanticipated, indirect, serendipitous, or incidental positive changes in SNAP-Ed communities, with partners, or among populations that occurred in association with or as an outgrowth of SNAP-Ed interventions, above and beyond the direct outcomes of sustained implementation. Typically, these benefits are the result of increased partner participation; positive reputation or publicity; outreach by SNAP-Ed staff, champions, and organizational partners; and planned efforts to multiply, leverage, or extend the reach of SNAP-Ed resources.

Unstructured Physical Activity: Child-led free play for toddlers and preschoolers in which children are left to their own devices within a safe, active environment. Unstructured activity should include:

- Activities that respect and encourage children's individual abilities and interests.
- Teacher engagement with children, support for extending play, and gentle prompts and encouragement by teachers, when appropriate, to stay physically active.

Very Low Food Security: Reports of multiple indications of disrupted eating patterns and reduced food intake.

Whole Grains: Grains that contain the entire kernel—the bran, germ, and endosperm.

Appendix B. 2015-2020 Dietary Guidelines & Healthy Eating Patterns

The *2015–2020 Dietary Guidelines for Americans* is designed to help Americans eat a healthier diet. Intended for policy makers and health professionals, this edition of the *Dietary Guidelines* outlines how people can improve their overall eating patterns—the complete combination of foods and drinks in their diet. This edition offers five overarching Guidelines and a number of Key Recommendations with specific nutritional targets and dietary limits.

What Is a Healthy Eating Pattern?

An eating pattern can be defined as the combination of foods and beverages that make up an individual's complete dietary intake over time. An eating pattern is more than the sum of its parts; it represents the totality of what individuals habitually eat and drink, and these dietary components act synergistically in relation to health. A healthy eating pattern should be tailored to the individual's personal, cultural, and traditional preferences as well as food budget. An individual's healthy eating pattern will vary according to his or her calorie level to help achieve and maintain a healthy body weight, support nutrient adequacy, and reduce risk for chronic disease.

The Key Recommendations for healthy eating patterns should be applied in their entirety to reflect an overall healthy eating pattern.

- Consume a healthy eating pattern that accounts for all food and beverages within an appropriate calorie level.

  A healthy eating pattern includes:
  - A variety of vegetables from all of the subgroups—dark green, red and orange, legumes (beans and peas), starchy, and other
  - Fruits, especially whole fruits
  - Grains, at least half of which are whole grains
  - Fat-free or low-fat dairy, including milk, yogurt, cheese, and/or fortified soy beverages
  - A variety of protein foods, including seafood, lean meats and poultry, eggs, legumes (beans and peas), and nuts, seeds, and soy products
  - Oils

- *A healthy eating pattern limits:*
  - Saturated and trans fats
  - Added sugars
  - Sodium

The Guidelines

1. **Follow a healthy eating pattern across the lifespan.** All food and beverage choices matter. Choose a healthy eating pattern at an appropriate calorie level to help achieve and maintain a healthy body weight, support nutrient adequacy, and reduce risk for chronic disease.

2. **Focus on variety, nutrient density, and amount.** To meet nutrient needs within calorie limits, choose a variety of nutrient-dense foods across and within all food groups in recommended amounts.

3. **Limit calories from added sugars and saturated fats and reduce sodium intake.** Consume an eating pattern low in added sugars, saturated fats, and sodium. Cut back on foods and beverages higher in these components to amounts that fit within healthy eating patterns.

4. **Shift to healthier food and beverage choices.** Choose nutrient-dense foods and beverages across and within all food groups in place of less healthy choices. Consider cultural and personal preferences to make these shifts easier to accomplish and maintain.

5. **Support healthy eating patterns for all.** Everyone has a role in helping to create and support healthy eating patterns in multiple settings nationwide, from home to school to work to communities.

U.S. Department of Health and Human Services and U.S. Department of Agriculture. 2015–2020 Dietary Guidelines for Americans. Executive Summary. 8th Edition

USDA Food Patterns

- **Healthy U.S.-Style Eating Pattern –** This pattern is based on the types and proportions of foods Americans typically consume, but in nutrient-dense forms and appropriate amounts. It is designed to meet nutrient needs while not exceeding calorie requirements and while staying within limits for overconsumed dietary components.
- **Healthy Mediterranean-Style Eating Pattern –** This pattern is adapted from the Healthy U.S.-Style Pattern, modifying amounts recommended from some food groups to more closely reflect eating patterns that have been associated with positive health outcomes in studies of Mediterranean-style diets. The Healthy Mediterranean-Style Pattern contains more fruits and seafood and less dairy than does the Healthy U.S.-Style Pattern.
- **Healthy Vegetarian Eating Pattern –** Adapted from the Healthy U.S.-Style Pattern, this pattern modifies amounts recommended from some food groups to more closely reflect eating patterns reported by self-identified vegetarians in the National Health and Nutrition Examination Survey (NHANES). Dairy and eggs were included because they were consumed by the majority of these vegetarians. This pattern can be vegan if all dairy choices are comprised of fortified soy beverages (soymilk) or other plant-based dairy substitutes.

Appendix C. Physical Activity Guidelines for Americans (2008)

The *Physical Activity Guidelines for American* provide science-based guidance to help Americans ages 6 and older maintain or improve their health through regular physical activity. These guidelines are intended to be achievable and customized according to a person's interests, lifestyle, and goals.

Adults and Older Adults – At least 2 hours and 30 minutes (150 minutes) each week of moderate-intensity (brisk walking) aerobic activity, OR 1 hour and 15 minutes (75 minutes) each week of vigorous-intensity (jogging or running) aerobic activity, OR an equivalent mix of moderate- and vigorous-intensity aerobic activity. Aerobic activity should be performed for at least 10 minutes at a time, preferably spread throughout the week. Muscle strengthening should be done 2 or more days a week and include all major muscle groups. Flexibility is also an important part of physical fitness.

Adolescents and Children – 60 or more minutes a day, most of which should be either moderate- or vigorous-intensity aerobic physical activity (such as running, dancing, or biking), and include vigorous-intensity physical activity at least 3 days a week; should also include muscle-strengthening physical activity (such as climbing trees, using playground equipment, or lifting weights) and bone-strengthening physical activity (such as running or jumping rope) on at least 3 days of the week.

Preschoolers – At least 60 minutes daily of structured physical activity and at least 60 minutes and up to several hours per day of daily, unstructured physical activity; should not be sedentary for more than 60 minutes at a time except when sleeping.

Appendix D: Indicator Resources Chart

Indicator Name	Indicator Description	Databases/Data Sources	Numerator	Denominator	Administrative Level
Chapter 1 Individual Level					
ST1, MT1, LT1 Healthy Eating	Individual intentions, goals, behavior changes, and maintenance of behaviors recommended by the current Dietary Guidelines for Americans.	For all individual level outcome measures, data are collected by SNAP-Ed Implementing Agencies.	For all individual level outcome measures the numerator is the number of participants who achieved the outcome measure (e.g., eating more than one type of vegetable).	For all individual level outcome measures the denominator is the total number of participants who responded to the question (e.g., the number of participants who responded to the question about consuming vegetables).	
ST2, MT2, LT2 Food Resource Management	Individual intentions, goals, behavior changes, and maintenance of behaviors that reflect smarter shopping and food resource management strategies, enabling participants to stretch their food resource dollars to				
ST3, MT3, LT3 Physical Activity and Reduced Sedentary Behavior	Individual intentions, goals, behavior changes, and maintenance of behaviors related to increased physical activity and/or reduce sedentary behavior. Physical activity is defined as any body movement that works muscles and requires more energy than resting. Sedentary behavior is defined as too much sitting or lying down at				
ST4, MT4, LT4 Food Safety	Individual intentions, goals, behavior changes, and maintenance of food safety behavior changes recommended by the Dietary Guidelines for Americans.				

Appendix D. Indicator Resources Chart

Indicator Name	Indicator Description	Databases/Data Sources	Numerator	Denominator	Administrative Level
Chapter 2 Environmental Settings Level					
Short-Term (ST) Indicators					
ST5: Readiness	Two-part indicator measuring sites or organizations where there is identified need for PSE changes and associated organizational and staff readiness for adopting PSE changes has been assessed.		ST5b. Number of sites or organizations with an identified need for improving access or creating appeal for nutrition and physical activity supports ST5c. Number of sites or organizations that have documented readiness for change in PSE	Two options: 1.Coverage of **all potential/eligible SNAP-Ed sites and organizations:** All SNAP-Ed potential/eligible sites and organizations within eat, learn, live, play, shop, and/or work domains Sources for all eligible sites may vary by state and are not readily available for all settings within domains. Some examples of sources include: EAT: FDA list by state provided by the office responsible for state retail and food service codes and regulations (health inspection). Compile list of restaurants in eligible census tracts. LEARN: Department of Education - access database that identifies schools as at least 50% FRPM; Head Start sites http://eclkc.ohs.acf.hhs.gov/hslc/data/center-data LIVE: Federally qualified health center list (MT11c.) SHOP: SNAP-Ed retailers on USDA website; Farmers Markets on USDA Farmers Market Directory https://www.ams.usda.gov/services/local-regional/food-directories 2. Coverage of actual SNAP-Ed sites and organizations (all sites and organizations with SNAP-Ed services): sites and organizations in which SNAP-Ed activities occurred in each setting within eat, learn, live, play, shop, and/or work domains	
ST6: Champions	People who provide sustained, and often charismatic leadership that successfully advocates for, creates appeal of, or improves access to nutrition and physical activity in various environmental or organizational settings. Champions extend their influence beyond direct delivery sites of SNAP-Ed interventions.		ST6b. The number of SNAP-Ed qualified organizations or sites that benefited from the activities of champions, by domain and setting type	Two options: 1. Coverage of **all potential/eligible** SNAP-Ed sites: all SNAP-Ed potential/eligible sites and organizations in each setting within eat, learn, live, play, shop, and/or work domains 2. Coverage of **actual** SNAP-Ed sites (all sites and systems with SNAP-Ed services): sites and organizations in which SNAP-Ed activities occurred in each setting within eat, learn, live, play, shop, and/or work domains	
ST7: Partnerships	Partnerships with service providers, organizational leaders, and SNAP-Ed representatives in sites and organizations where people eat, learn, live, play, shop, and work.				

Indicator Name	Indicator Description	Databases/Data Sources	Numerator	Denominator	Administrative Level

Medium-Term (MT) Indicators					
MT5: Nutrition Supports **Adoption and Reach**	Sites and organizations that adopt PSE changes and complementary promotion often including favorable procurement, meal preparation activities, or other interventions that expand access and promote healthy eating; associated potential audience reached.		MT5a. Number of sites or organizations that make at least one change in writing or practice to expand access or improve appeal for healthy eating	Two options: 1. Coverage of **all potential/eligible** SNAP-Ed sites: all SNAP-Ed potential/eligible organizational sites and systems in each setting within eat, learn, live, play, shop, and/or work domains 2. Coverage of **actual** SNAP-Ed sites (all sites and systems with SNAP-Ed services): organizational sites and systems in which SNAP-Ed activities occurred in each setting within eat, learn, live, play, shop, and/or work domains	
MT6: Physical Activity and Reduced Sedentary Behavior Supports **Adoption and Reach**	Sites and organizations that adopt policy, systems, or environmental (PSE) changes and complementary promotion that expand access and promote physical activity and reduced time spent being sedentary; associated potential audience reached		MT6a. Number of sites or organizations that make at least one change in writing or practice to expand access or improve appeal for physical activity.	Two options: 1. Coverage of **all potential/eligible** SNAP-Ed sites: all SNAP-Ed potential/eligible organizational sites and systems in each setting within eat, learn, live, play, shop, and/or work domains 2. Coverage of **actual** SNAP-Ed sites (all sites and systems with SNAP-Ed services): organizational sites and systems in which SNAP-Ed activities occurred in each setting within eat, learn, live, play, shop, and/or work domains	

Indicator Name	Indicator Description	Databases	Numerator	Denominator	Administrative Level
Long-Term (LT) Indicators					
LT5: Nutrition Supports Implementation	This indicator measures implementation and effectiveness of PSE changes. Implementation is defined as the aggregate number of sites or organizations in each type of setting within the eat, learn, live, work, play, and shop domains that report a multi-component and multi-level intervention. Effectiveness is defined as the aggregate number of sites or organizations with improved food environment assessment scores.				
LT6: Physical Activity Supports Implementation	This indicator measures implementation and effectiveness of PSE changes. Implementation is defined as the aggregate number of sites or organizations in each type of setting within the eat, learn, live, work, play, and shop domains that report a multi-component and multi-level intervention. Effectiveness is defined as the aggregate number of sites or organizations with improved physical activity environment assessment scores.				

Appendix D. Indicator Resources Chart

Indicator Name	Indicator Description	Databases/Data Sources	Numerator	Denominator	Administrative Level
LT7: Program Recognition	This indicator focuses on entire organizations that have met and been publicly recognized for achieving authoritative, externally established performance standards. The state or nationally established recognition programs in LT7 focus on single organizational categories such as early childhood education (ECE), schools, worksites, faith organizations (churches, mosques, temples), and parks, while state or local recognition programs may be more diverse. This indicator reports the number of organizations and sites in each domain whose work achieving new standards is attributable, in whole or in part, to the efforts of SNAP-Ed during the reporting year. Since comprehensive changes take time, many recognition programs have established increments for awards that help organizations show progressive accomplishments. For such recognition programs, this indicator also captures movement from one level of performance to another, as well as maintenance of effort.	***All LT7 database resources apply to all LT7 outcomes depending on which program recognition you are seeking.*** **WELCOA's Well Workplace Awards** https://www.welcoa.org/well-workplace-award-winners/ **Healthier US School Challenge** http://www.fns.usda.gov/hussc/award-winning-schools **Alliance for a Healthier Generation Healthy Schools Program** https://schools.healthiergeneration.org/ **Let's Move Active Schools** https://myactiveschool.letsmoveschools.org/ **Baby Friendly Hospitals** https://www.babyfriendlyusa.org/find-facilities **Let's Move Child Care Recognized Providers** https://healthykidshealthyfuture.org/recognized-providers/	LT7b.The number of SNAP-Ed partner organizations and sites that secured a higher rank in their level of recognition (e.g., from silver to gold, etc.)	LT7b.Total number of SNAP-Ed partner organizations and sites that are at a level of recognition that is not the top rank	City/Municipality Healthier US School Challenge: State, City/Municipality, County, School District Alliance for a Healthier Generation Healthy Schools Program: State, ZIP code Let's Move Active Schools: State, ZIP code
			LT7c. The number of SNAP-Ed partner organizations and sites that maintained participation at the same level of recognition.	LT7c. Total number of SNAP-Ed partner organizations and sites that are at least at the lowest level of recognition	Baby Friendly Hospitals: State, City/Municipality Let's Move Child Care Recognized Providers: State, ZIP code

Appendix D. Indicator Resources Chart

Indicator Name	Indicator Description	Databases/Data Sources	Numerator	Denominator	Administrative Level
LT8: Media Coverage	Number and percentage of commercial and organizational outlets with estimated reach to SNAP-Ed and total audiences that reported favorable attributions to SNAP-Ed marketing and PSE projects	*Includes print, TV, radio; can be personalized to a particular state and to topics including Nutrition, Physical Activity, and Obesity* https://news.google.com/news/advanced_news_search?	LT8a. • Number of media outlets that run positive stories about SNAP-Ed marketing and PSE projects • Audience reach, by type (print, TV, radio) in numbers of total and SNAP-Ed segments exposed to favorable media mentions about SNAP-Ed marketing and PSE projects	LT8a. • Number of media outlets, by type (print, TV, radio) *Television* https://en.wikipedia.org/wiki/Lists_of_television_stations_in_North_America http://www.stationindex.com/tv/by-state *Radio* https://en.wikipedia.org/wiki/Category:Lists_of_radio_stations_in_the_United_States *Newspapers* https://en.wikipedia.org/wiki/List_of_newspapers_in_the_United_States#California • All persons and SNAP-Ed eligible population that could be reached by media type (TV, radio, print)	
		Obtain dollar value from media outlet	LT8b. Number of partner websites that feature positive content about SNAP-Ed marketing, media advocacy, and PSE projects	LT8b. Number of dedicated partner websites reaching key intermediaries or SNAP-Ed audience segments	
			LT8c.Number of SNAP-Ed Implementing Agencies with social media sites that push marketing, media advocacy, and PSE content to consumers/intermediaries (e.g., Facebook, Twitter, Pinterest)	LT8c. Number of SNAP-Ed Implementing Agencies with social media sites	
LT9: Leveraged Resources	This indicator focuses on the planned or intentional contributions of partners and other stakeholders in relationship to those of SNAP-Ed. It captures the dollar value and type of resources that partners and other stakeholders invested over the past reporting year for implementation of discrete interventions in MT5, MT6, LT5, and LT6 in one or more settings/channels.				
LT10: Planned Sustainability	This indicator focuses on the planned activities undertaken during the reporting year to sustain effective SNAP-Ed programming conducted by Implementing Agencies. It captures the process of sustaining SNAP-Ed strategies and interventions adopted and implemented in MT5, MT6, LT5, and LT6.		LT10a. Total number of organizations or sites that have adopted and/or implemented a strong sustainability plan to maintain effective educational, marketing, nutrition, or physical activity standards/policies, systems, or environmental changes.	LT10a. Total number of organizations or sites where nutrition and physical activity supports and standards were adopted and implemented	

Indicator Name	Indicator Description	Databases/Data Sources	Numerator	Denominator	Administrative Level
LT11: Unexpected Benefits	This indicator focuses on unanticipated or unexpected benefits occurring during the reporting year that accrued incidental to Adoption, Implementation, and/or Maintenance of SNAP-Ed programming conducted by Implementing Agencies. It reports the number, type, and sectors in which the benefits occurred. The benefits may take many different forms, be associated with SNAP-Ed activities conducted in environmental settings or in a broader, multi-sector context a t the local or statewide levels, and take form in the public, nonprofit or business sectors. The benefits will be serendipitous, resulting from new priorities, indirect relationships, or word-of-mouth information that occurred with little direct involvement or intentional planning by SNAP-Ed staff.				

Indicator Name	Indicator Description	Databases/Data Sources	Numerator	Denominator	Administrative Level
Chapter 3 Sectors of Influence					
Short-Term (ST) Indicators					
ST8: Multi-Sector Partnerships and Planning	This indicator measures community capacity by assessing the readiness of multi-sector partnerships or coalitions to plan and achieve the changes in nutrition, physical activity, food security, and/or obesity prevention policies and practices that are evaluated as subsequent indicators in the Sectors of Influence level of the framework.				
Medium-Term (MT) Indicators					
MT7: Government Policies	This indicator measures the number of individual jurisdictions (not settings) where governments (city, town, county, regional, and/or state) enacted policies and practices to increase access to healthy food and/or opportunities for physical activity for areas where the residents are primarily low-income. PSE changes result from SNAP-Ed multi-sector partnerships and that are attributable in whole or in part to SNAP-Ed activity. In the case of MT7a and, potentially MT7e, it concurrently r e d u c e s access to less healthy food or sedentary behavior.	**State Legislative Search Guide** https://prcstl.wustl.edu/Documents/Condensed%20State%20Search%20Guide%20Final_2012.pdf **CDC Chronic Disease State Policy Tracking System** http://nccd.cdc.gov/CDPHPPolicySearch/default.aspx **National Conference of State Legislatures Healthy Community Design and Access to Healthy Food Legislation Database** http://www.ncsl.org/research/health/healthy-community-design-and-access-to-healthy-foo.aspx **UConn Rudd Center for Food Policy and Obesity Legislation Database** http://www.uconnruddcenter.org/legislation-database	MT7a. Number of governmental jurisdictions (state, county, local) that have healthy food procurement and/or vending policies and standards in place consistent with Dietary Guidelines for Americans. MT7b. Number of governmental jurisdictions (state, regional, county, local) that provide nutrition education/nutrition resources at the point of enrollment for SNAP (e.g., 1) in offices [jurisdictional], 2) online [statewide], 3) by telephone [statewide]) MT7c. Number of governmental jurisdictions (state, county, local) 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) MT7d. Number of governmental jurisdictions (state, county, local) that have evidence-based policies and standards in place to support physical activity (e.g., establishment of bike-friendly transport facilities, use of point-of-decision prompts for stairwells) MT7e. Number of communities that have achieved a nutrition or health element in their General Plan to improve access and/or opportunities in areas where residents are primarily low-income MT7f. (second bullet) Estimated number of persons in the target population who are SNAP-Ed eligible and have increased access to or are protected by a the government policy or intervention	Number of total governmental jurisdictions appropriate to the level of aggregation (state aggregation = number of counties in state; county aggregation = number of local jurisdictions in the county) MT7f. Total number of persons in the target population who have increased access to or are protected by the government policy or intervention	

Indicator Name	Indicator Description	Databases/Data Sources	Numerator	Denominator	Administrative Level
MT8: Agriculture	Changes in agricultural PSE activities emphasizing farmers markets, direct-to-consumer agriculture, and farm-to-school resulting from SNAP-Ed multi-sector partnerships at the local, state, territorial or tribal level.	**USDA National Farmers Markets Directory** https://www.ams.usda.gov/local-food-directories/farmersmarkets	MT8d. Number of low-income communities with farmers markets MT8e. (second bullet) Estimated number of persons in the target population who are SNAP-Ed eligible and have increased access to or benefit from the agricultural policy or intervention	MT8d. Total number of low-income areas within the jurisdiction MT8e. Total number of persons who have increased access to or benefit from the agricultural policy or intervention	City/Municipality, County, State
		USDA On-Farm Market Directory https://www.ams.usda.gov/local-food-directories/onfarm			City/Municipality, County, State
		USDA Community- Supported Agriculture Directory https://www.ams.usda.gov/local-food-directories/csas			City/Municipality, County, State
		USDA Raw 2015 census data to be released around May 2016 https://farmtoschoolcensus.fns.usda.gov/sites/default/files/asset/document/F2SC%20District%20Data_v%20web.xlsx			
		USDA Farm-to-school information for single district https://farmtoschoolcensus.fns.usda.gov/find-your-school-district			
MT9: Education Policies	This indicator represents high-level school policies and systems implemented at a state level and achieved through the work of a number of diverse organizations, of which SNAP-Ed will have been one—sometimes in a highly significant way, other times as part of a coalition or collaborative.	**Physical Activity Enhanced Data File** http://class.cancer.gov/data/Physical_Education_Enhanced_Data_File.xlsx **Nutrition Enhanced Data File** http://class.cancer.gov/data/Nutrition_Enhanced_Data_File.xlsx Your state's Dept. of Education database for FRPM school population			State

Appendix D. Indicator Resources Chart

Indicator Name	Indicator Description	Databases/Data Sources	Numerator	Denominator	Administrative Level
MT10: Community Design and Safety	Community-based design and safety policies and systems changes that create safer, more appealing places for physical activity.	**State level access to parks, sidewalks, Complete Streets policies, Active Transportation design** http://saferoutespartnership.org/sites/default/files/sr2s-report-card-2016/sr2s-report-card-2016-alaska.pdf	MT10 a. Number of communities that adopted policies that include at least one of the following: improved access, signage, lighting, operating hours MT10b. Number of communities that adopted a complete streets policy MT10c. Number of SNAP-Ed eligible areas with community policing initiatives. MT10d. (Second bullet) Estimated number of persons in the target population who are SNAP-Ed eligible and have increased access to or benefit from the community design and safety policy or intervention	Number of total communities appropriate to the level of aggregation (state aggregation = number of counties in state; county aggregation = number of local jurisdictions in the county) MT10d. Total estimated number of persons in the target population who have increased access to or benefit from the community design and safety policy or intervention	
		Population With Park Access (Within 1/2 Mile), 2013 at the census tract level http://maps.communitycommons.org/viewer/?mapid=3298 **Population With Park Access (Within 1/2 Mile), 2010 at the county level** http://maps.communitycommons.org/viewer/?mapid=1111			Population with Park access 2013 at census tract level: Census Tract Population with Park Access 2010 at county level: state
MT11: Health Care Clinical-Community Linkages	Community health initiatives that link health care systems with community groups to meet the community's nutrition, physical activity, or obesity prevention needs.	**Total number of delivery sites in state** http://www.nachc.com/client/2013%20Key%20facts%20by%20state%20data.pdf **Detailed listing of FQHCs by state:** https://npidb.org/organizations/ambulatory_health_care/federally-qualified-health-center-fqhc_261qf0400x/ca/	MT11e. (second bullet) Estimated number of persons in the target population who are SNAP-Ed eligible and have increased access to or benefit from the community health policy or intervention	MT11e. Estimated total number of persons in the target population who have increased access to or benefit from the community health policy or intervention	
		Check with county health department for listing of FQHCs in county			
MT12: Social Marketing	This indicator is intended to identify the presence, characteristics, reach, and impact of social marketing campaigns conducted statewide or in local project areas. The focus is on comprehensive, multi-level social marketing campaigns; the number of discrete campaigns that were conducted during the year; the topics and changes they sought; their scale—the reach to different population segments, the geographic areas targeted, and the delivery channels used; and, wherever possible, evaluation results.		MT12b.Number of people reached by statewide or local social media/marketing campaigns or direct or indirect education as part of social marketing campaigns	MT12b. Number of people who could have been reached by the social media/marketing method	
			MT12c. Number of people who successfully reported recall of specific messages from statewide or local social marketing campaigns (total and SNAP-Ed)	MT12c. Total number of participants who responded to the question (i.e., unaided recall of messages)	
MT13: Media Practices	This indicator is intended to capture significant, sustained changes in the routine business practices of media outlets that influence public opinion, business behavior, and community norms. Such changes may evolve naturally from LT8 (Media Coverage) and can be attributed in whole, or in part, to efforts by SNAP-Ed and its partners.	**Can tailor local aspect of search by City, State, or ZIP Code; can add searches for the topics** "Nutrition, Physical Activity" and "Obesity https://news.google.com/ - daily news feed	MT13d. (second bullet) Estimated number of persons in the target population who are SNAP-Ed eligible and have increased access to or benefit from the media practice policy or intervention	MT13d. Total estimated number of persons in the target population who have increased access to or benefit from the media practice policy or intervention	

Indicator Name	Indicator Description	Databases/Data Sources	Numerator	Denominator	Administrative Level
Long-Term (LT) Indicators					
LT12: Food Systems	This indicator is intended to capture statewide and local improvements in the food system to specifically benefit low-income consumers and communities and that are due, in whole or in part, to SNAP-Ed efforts with partners. The changes may occur in the public, nonprofit and/or business sectors. Outcomes throughout the food chain are represented, from production through to the consumer. Food system changes in low-resource settings often are intended to increase access to and appeal of 'foods-to-increase' as recommended by the Dietary Guidelines for Americans and thereby lead to large-scale Population Results (R1-R6).	Food policy council directory; listings contain links to the council's contacts, top priorities, and notable achievements. http://www.foodpolicynetworks.org/directory/online/			State, City/Municipality, County, Regional, Tribunal
		National Food Hub Network/US Food Hubs List Many of the listings contain links to the hub's website where you may be able to learn more about its policies http://www.ngfn.org/resources/food-hubs#section-14 **USDA Food Hub Directory** Also https://www.ams.usda.gov/local-food-directories/foodhubs			State, City/Municipality, County, Regional
		Healthy Food Financing Initiatives http://www.acf.hhs.gov/programs/ocs/programs/community-economic-development/healthy-food-financing			City/Municipality, County
		Farmers Market Promotion Program https://www.ams.usda.gov/services/grants/fmpp/awards			City/Municipality, County. Tribunal, Regional
		Census tracts with healthier food retailers For comparison with state and national data and formula for calculating the Modified Retail Food Environment Index (MRFEI) National data - Percent of census tracts that have at least one healthier food retailer located within the tract or within 1/2-mile of tract boundaries https://nccd.cdc.gov/NPAO_DTM/# **MRFEI by census tract by state** http://www.cdc.gov/obesity/downloads/2_16_mrfei_data_table.xls **MRFEI by census tract - graphic representation** http://maps.communitycommons.org/viewer/?mapid=503			Census Tract
		National Conference of State Legislatures, research on agriculture and rural development: farmers markets http://www.ncsl.org/research/agriculture-and-rural-development/farmers-market.aspx **Listing by state of food banks with contact information and websites** feedingamerica.org/find-your-local-foodbank/			State

Indicator Name	Indicator Description	Databases/Data Sources	Numerator	Denominator	Administrative Level
LT13: Government Investments and Incentives	This indicator includes government investments and incentives that improve food access and promote healthy eating behaviors including the implementation and enforcement of government food procurement policies, plans that incorporate health in key land use, transportation, housing, and other community development decisions, and financial incentives to promote healthy food retail.		LT13a. Number of local, state, territorial, or tribal government agencies/organizations that implement and adhere to healthy food procurement policies including healthy food vending and meeting policies, menu-labeling, and worksite wellness programs	LT13a. Total number of local, state, territorial, or tribal government agencies/organizations in the jurisdiction being measured	
			LT13b. Number of cities, towns, counties, municipalities, states, and Indian Tribal Organizations government agencies/organizations that implement and adhere to policies that support healthy lifestyle behaviors in land use, transportation, housing plans, etc.	LT13b. Total number of city, town, county, municipality, state, and Indian Tribal Organization government agencies/organizations in the jurisdiction being measured	
LT14: Agricultural Sales and Incentives	Sales and investments in local foods, including fresh fruits and vegetables, and the associated economic benefit to farmers and producers.	**2012 Census of Agriculture** **See in particular County Data** **Table 43: Selected Practices:** https://www.agcensus.usda.gov/Publications/2012/Full_Report/Census_by_State/California/	LT14d.Total farmers market sales from nutrition assistance benefits (SNAP, WIC cash value vouchers Farmers Market Nutrition Program, Senior Farmers Market Nutrition Program)	LT14d. Total farmers market sales	
LT15: Educational Attainment	This indicator reflects the collective impact of strategies enacted by state and community partners (including SNAP-Ed) that demonstrate changes in educational attainment resulting from SNAP-Ed activities in, around, and affecting schools and local education agencies.	**State Profiles - select state, then select Snapshot Report for subject and grade level to see comparison between NSLP eligible and not eligible** *Example:* http://nces.ed.gov/nationsreportcard/subject/publications/stt2015/pdf/2016008NV8.pd http://nces.ed.gov/nationsreportcard/naepdata/report.aspx The U.S. Department of Education provides contact information for the education departments of each state, commonwealth, and territory; these can be contacted for information on the attendance rate and dropout rate data that are used for this indicator. http://www2.ed.gov/about/contacts/state/index.html	LT 15a., LT15b. Data sources provide percentages	LT15a., LT15b. Data sources provide percentages	State

Indicator Name	Indicator Description	Databases/Data Sources	Numerator	Denominator	Administrative Level
LT16: Shared-Use Streets and Crime Reduction	Policy and environmental changes related to shared use streets, crime reduction, and safety can help support physical activity behaviors. This indicator is also focused on the implementation of the policies that are highlighted in MT10.	**Policy atlas and policy inventory** - includes chart of complete streets policies updated monthly http://www.smartgrowthamerica.org/complete-streets/changing-policy/complete-streets-atlas **State level report card for Safe Routes to Schools policies** http://saferoutespartnership.org/resources/2016-state-report-map		Data source provides rates	
		Comprehensive source of crime data by type and jurisdiction https://www.fbi.gov/stats-services/crimestats **Comprehensive source of bicycle and pedestrian crash data** http://www.pedbikeinfo.org/data/index.cfm	Data source provides rates		State, City/Municipality, County, Regional
LT17: Health Care Cost Savings	Reduction in rates of selected chronic diseases and associated impacts on health care costs.	**The Health Resources Services Administration (HRSA) Data Warehouse** http://datawarehouse.hrsa.gov	LT17a - LT17e Number of SNAP-Ed eligible persons in the defined geographic area reporting the specific chronic condition	LT17a - LT17e Total number of SNAP-Ed eligible persons in the defined geographic area	
LT18: Commercial Marketing of Healthy Food and Beverages	This Indicator focuses on sub-national, policy, systems, and environmental (PSE) changes in organizational systems where commercial food and beverage marketing practices—advertising, PR, promotion, and personal sales—are most likely to influence the food choices of SNAP-Ed audiences, especially children, youth, and low-income, limited-English and ethnic adults. Changes in commercial marketing activity are distinct from those reported in LT5 and LT6, which may include institution-sponsored marketing introduced as part of an evidence-based intervention. The changes will be made by community institutions that decide what commercial marketing to feature or decline. The marketing changes reported here are likely to result from public/private partnerships and are deemed to have occurred due, at least in part, to SNAP-Ed efforts.				

Indicator Name	Indicator Description	Databases/Data Sources	Numerator	Denominator	Administrative Level
LT19: Community-wide Recognition Programs	This indicator focuses on entire cities, multi-county regions, or tribal jurisdictions in which civic leaders are working toward community-wide improvements in living and business conditions. It identifies the number of such jurisdictions where work on SNAP-Ed relevant objectives, activities, and outcomes is being conducted that is attributable, in whole or in part, to the efforts of SNAP-Ed and its partners	**Let's Move: Cities, Towns, and Counties** **C**ommunities that achieve recognition at the bronze, silver, gold or All-Star (Let's Move!) levels. **See new additions to your state's list; check list "medal-standings" to identify what level(s) their initial entry achieved** http://www.healthycommunitieshealthyfuture.org/see-progress/directory/			City/Municipality, County
		STAR Communities Communities that secure maximum points to achieve 5-Star, 4-Star, or 3-Star certification https://reporting.starcommunities.org/communities/search/			

Indicator Name	Indicator Description	Databases/Data Sources	Numerator	Denominator	Administrative Level
Chapter 4. Population Results					
R1: Overall Diet Quality	This indicator represents overall diet quality of individuals at the population level that reflects secular trends and disparities in diet quality at the national level; and potentially trends in overall diet quality of SNAP-eligible populations at the state or regional level as a measure of cumulative effects (beneficial or adverse) of SNAP-Ed targeting particular components of diet quality.		R1a. The sum of HEI scores for all respondents; also sum separately for lower and higher income category	R1a. The number of respondents with calculated HEI score; also number by lower and higher income category	
			R1b. The number of respondents whose overall diet quality score is in the "Poor" category of HEI scores	R1b. The number of respondents with a calculated HEI score, by lower and higher income	
R2: Fruits and Vegetables	This indicator represents changes in fruit and vegetable consumption, including subgroups of under-consumed vegetables, over time, from year to year, among the low-income population of the state. Unlike MT1 and LT1 (Healthy Eating Behaviors) that measure increases in fruit and vegetable intake attributed to SNAP-Ed series-based programs, R2 is intended to measure the proportion of the SNAP-Ed eligible population that is achieving the *Dietary Guidelines for Americans, 2015* recommendations. Thus, R2 measures fruit and vegetable consumption status for low-income households surveyed within the state or area of focus. R2 is a population-level surveillance measure.	**BRFSS: By state; Percent of adults who report consuming fruit less than one time daily; Total and by income, using < $15,000 to represent SNAP-Ed eligible** **YRBSS: By state: Percent of students in grades 9-12 who consume fruit less than 1 time daily †; Total, by income is N/A; data N/A for 14 states; use alternative statewide survey if available** https://nccd.cdc.gov/NPAO_DTM/ (BRFSS) By state; Percent of adults who report consuming vegetables less than one time daily; Total and by income, using < $15,000 to represent SNAP-Ed eligible YRBSS: By state: Percent of students in grades 9-12 who consume t less than 1 time daily †; Total, by income vegetables N/A; data N/A for 14 states; use alternative statewide survey if available https://nccd.cdc.gov/NPAO_DTM/	For all population level outcome measures the numerator is the number of participants who achieved the outcome measure (e.g., consumed vegetables one or more times a day).	For all population level outcome measures the denominator is the total number of participants who responded to the question (e.g., the number of participants who responded to the question asking about consuming vegetables).	National, State, Territories
R3: Whole Grains	This indicator represents whole grains consumption over time, from year to year, of the SNAP-Ed eligible population of the state or project area. Unlike MT1 and LT1 (Healthy Eating Behaviors) that measure frequency of grains consumption attributed to SNAP-Ed series-based programs, R3 is intended to measure the proportion of the SNAP-Ed eligible population that is achieving the *Dietary Guidelines for Americans, 2015* recommendations. Thus, R3 measures whole grains status for low-income households surveyed within the state or area of focus. R3 is a population-level surveillance measure.		For all population level outcome measures the numerator is the number of participants who achieved the outcome measure (e.g., consumed vegetables one or more times a day).	For all population level outcome measures the denominator is the total number of participants who responded to the question (e.g., the number of participants who responded to the question asking about consuming vegetables).	

Appendix D. Indicator Resources Chart

Indicator Name	Indicator Description	Databases/Data Sources	Numerator	Denominator	Administrative Level
R4: Dairy	This indicator represents change in dairy product consumption and/or adequacy of consumption over time, from year to year, of the low-income population of the state. Unlike MT1 and LT1 (Healthy Eating Behaviors) that measure increases in low-fat/fat-free dairy consumption attributed to SNAP-Ed series-based programs, R4 is intended to measure the proportion of the SNAP-Ed eligible population that is achieving the *Dietary Guidelines for Americans, 2015* recommendations. Thus, R4 measures dairy consumption status for low-income households surveyed within the state or area of focus. R4 is a population-level surveillance measure.	**Youth YRBSS MMWR report Table 88 - but cannot distinguish between income groups, only gender and race/ethnicity** http://www.cdc.gov/mmwr/pdf/ss/ss6304.pdf	For all population level outcome measures the numerator is the number of participants who achieved the outcome measure (e.g., drank low-fat milk).	For all population level outcome measures the denominator is the total number of participants who responded to the question (e.g., the number of participants who responded to the question asking about drinking low-fat milk).	National, State
R5: Beverages	This indicator represents change in water and unhealthy beverage consumption and/or over-consumption of 100 percent fruit juice by youth over time, from year to year, of the low-income population of the state. Unlike MT1 and LT1 (Healthy Eating Behaviors), which measure increases in water intake and decreases in sugar-sweetened beverage intake attributed to SNAP-Ed series-based programs, R5 is intended to measure the proportion of the SNAP-Ed eligible population that is achieving the *Dietary Guidelines for Americans, 2015* recommendations. Thus, R5 measures water and sugar-sweetened beverage consumption status for low-income households surveyed within the state or area of focus. R5 is a population-level surveillance measure.	**YRBSS: Choose High School Youth Online Results - only drink/did not drink available online** http://www.cdc.gov/healthyyouth/data/yrbs/results.htm **Youth YRBSS MMWR report Table 90 (did not drink and drank 1 or more times/day) and Table 92 (drank 2 or more and drank 3 or more times/day) - but cannot distinguish between income groups, only gender and race/ethnicity** http://www.cdc.gov/mmwr/pdf/ss/ss6304.pdf	For all population level outcome measures the numerator is the number of participants who achieved the outcome measure (e.g., drink plain water).	For all population level outcome measures the denominator is the total number of participants who responded to the question (e.g., the number of participants who responded to the question asking about drinking plain water).	National, State, School District (Large, Urban)
R6: Food Security	This indicator represents changes in food security status, when SNAP-Ed eligible persons have access to sufficient, safe, and nutritious food which meets their dietary needs and food preferences for an active and healthy life.	http://www.ers.usda.gov/media/1896841/err194.pdf	For all population level outcome measures the numerator is the number of participants who achieved the outcome measure (e.g., were concerned about having enough food).	For all population level outcome measures the denominator is the total number of participants who responded to the question (e.g., the number of participants who responded to the question asking about having enough food).	National
		Map the Meal Gap http://map.feedingamerica.org/county/2013/overall			National, State, County, and Congressional
R7: Physical Activity and Reduced Sedentary Behaviors Physical Activity	Achievement of the *Physical Activity Guidelines for Americans, 2008* for adults and children and Society of Health and Physical Educators *Active Start* guidelines for toddlers and preschoolers.	**(BRFSS) By state; Percent of adults who report being aerobically active 150 minutes; Total and by income, using < $15,000 to represent SNAP-Ed eligible** https://nccd.cdc.gov/NPAO_DTM/# **(BRFSS) By state; Percent of adults who report meeting muscle strengthening guidelines; Total and by income, using < $15,000 to represent SNAP-Ed eligible** https://nccd.cdc.gov/NPAO_DTM/# National data sources do not have the 2-hour cut point	For all population level outcome measures the numerator is the number of participants who achieved the outcome measure (e.g., engaged in 150 minutes per week of moderate physical activity).	For all population level outcome measures the denominator is the total number of participants who responded to the question (e.g., the number of participants who responded to the question asking moderate physical activity).	National, State, Territories

Appendix D. Indicator Resources Chart

Indicator Name	Indicator Description	Databases/Data Sources	Numerator	Denominator	Administrative Level
		Alliance for Biking & Walking - 2016 Benchmarking Report - overall use of transit, walking, or bike and low-income commuters who walk or who use transit http://www.bikewalkalliance.org/storage/documents/reports/2016benchmarkingreport_web.pdf			
R8: Breastfeeding	The proportion of the SNAP-Ed eligible infants that were ever breastfed, fully breastfed, or partially breastfed.	**CDC Breastfeeding Report Card: All breastfeeding indicators** http://www.cdc.gov/breastfeeding/pdf/2014breastfeedingreportcard.pdf	For all population level outcome measures the numerator is the number of participants who achieved the outcome measure (e.g., ever breastfed).	For all population level outcome measures the denominator is the total number of participants who responded to the question (e.g., the number of participants who responded to the question asking if ever breastfed.)	National, State
R9: Healthy Weight	This indicator measures change in the condition of being at a healthy weight, neither underweight nor overweight or obese, over time, from year to year of the low-income population of the state. R9 is intended to measure the proportion of the SNAP-Ed eligible population that is achieving the CDC recommendation. R9 is a population-level surveillance measure.	**BRFSS: By state;** Percent of adults whose self-reported height and weight = response choice "normal weight"; Total and by income, using < $15,000 to represent SNAP-Ed eligible; NOTE: This outcome measure is not on the same url as given for FV and PA, only overweight and obesity http://www.cdc.gov/brfss/brfssprevalence/index.html	For all population level outcome measures the numerator is the number of participants who achieved the outcome measure (e.g., healthy weight).	For all population level outcome measures the denominator is the total number of participants who responded to the question (e.g., the number of participants who responded to the question asking about weight).	State, Territories
		National Survey of Children's Health: (Age 10-17) Indicator 1.4: What is the weight status of children based on Body Mass Index (BMI) for age? 4 categories Response category = "Healthy weight = 5th to 84th percentile." Can compare one state at a time with national data; income category 0-199% FPL available for low-income as is 0-99% and 100-199% http://childhealthdata.org/browse/survey			National, State, Regional
R10: Family Meals	This indicator measures change in family interaction at mealtime over time, from year to year of the low-income population of the state. R10 is intended to measure the proportion of the SNAP-Ed eligible population that self-reports consuming meals together as a family at least three times a week and that does not agree with a statement that they often watch television while eating dinner. R10 is a population-level surveillance measure.		For all population level outcome measures the numerator is the number of participants who achieved the outcome measure (e.g., healthy weight).	For all population level outcome measures the denominator is the total number of participants who responded to the question (e.g., the number of participants who responded to the question asking about weight).	

R11: Quality of Life	This indicator measures change in the condition of being in good or better physical and mental health such that the ability to carry out usual activities is not impaired, over time, from year to year of the low-income population of the state. R11 is intended to measure the proportion of the SNAP-Ed eligible population that self-reports good or better physical or mental health. R11 is a population-level surveillance measure.		For all population level outcome measures the numerator is the number of participants who achieved the outcome measure (e.g., healthy weight).	For all population level outcome measures the denominator is the total number of participants who responded to the question (e.g., the number of participants who responded to the question asking about weight).	State, Territories

Appendix E. Evaluation Methods

There are four main types of evaluation that may be included in State SNAP-Ed Plans. The following table from *Addressing the Challenges of Conducting Effective Supplemental Nutrition Assistance Program Education (SNAP-Ed) Evaluations: A Step-by-Step Guide* (Cates et al., 2014) provides definitions and SNAP-Ed relevant example questions:

Type of Evaluation	Definition	Example Questions
Formative research	Application of qualitative and quantitative methods to gather data useful for the development and implementation of intervention programs	Do elementary-age school children served by our Implementing Agency eat the recommended daily servings of fruit and vegetables?
Process (implementation) study	Measurement and tracking of activities associated with the implementation and fidelity of an intervention program	How many SNAP participants and low-income eligibles are enrolled in the intervention? How many attended each of the six classes offered?
Outcome assessment	Examination of the extent to which an intervention program achieves its stated goals; does not establish cause and effect conclusions	Did the Healthy Kid program meet stated goals of increasing use of fat-free or 1% milk by 25% among participating families?
Impact evaluation	Measurement of the net change in outcomes for a particular group of people that can be attributed to a specific program	Did children in the Color Your Plate program increase the number and types of vegetables eaten by at least 0.25 cups per day compared with children who did not participate in the program?

SNAP-Ed providers can use all four types of evaluation to measure indicators in the SNAP-ED Evaluation Framework. Baseline measurement of relevant individual-level indicators could inform the current state of target behaviors and serve to answer formative assessment questions. Additionally, at the environmental settings level, identifying a need for improved access or creating appeal in SNAP-Ed eligible sites and organizations and identifying and measuring the strength of key partnerships are additional examples of relevant indicators for formative assessment.

The framework contains fewer process indicators as most process data for SNAP-Ed are collected through reporting systems that inform the Education and Administrative Reporting System (EARS). Some process indicators included in the framework are reach and resources put towards policy, systems, and environmental (PSE) change activities and sustainability.

Outcome assessments examine the extent to which an intervention achieves its stated goals. The example in the table above depicts outcomes at an Individual level, and the medium- and long-term individual-level indicators of the framework can be measured pre- and post-intervention to assess whether your intervention achieved its behavioral change goals. The framework also specifies outcomes at the Environmental Settings and Sectors of Influence levels. At these levels, for example, we may assess the food and/or physical activity environments in sites, organizations, communities, or other jurisdictions at baseline and follow-up to determine the extent to which those environments changed as a result of PSE changes that were adopted and implemented.

Impact evaluation measures changes in outcomes attributable to the program and includes the use of control or comparison groups. The step-by-step guide by Cates and colleagues (2014) mentioned above focuses on impact evaluation and discusses important considerations for quality impact evaluation studies.

Considerations in SNAP-Ed Evaluation

Both process and outcome evaluation of SNAP-Ed programming is essential to ensure the fidelity and assess the effectiveness of program delivery, respectively. Some SNAP-Ed programs may have internal evaluators on staff who work hand-in-hand with program staff; others may contract with external evaluators from a separate agency; and some may use both. You can find experts with experience in community-based evaluation programs like SNAP-Ed in your state or a neighboring state who can help you evaluate your SNAP-Ed interventions. Many community outreach evaluation services at colleges and universities, including Land-grant institutions, are already evaluating SNAP-Ed services. CDC Prevention Research Centers, state and local health departments, and public health institutes can also assist with community-based evaluation for SNAP-Ed programs.

SNAP-Ed evaluations should focus on specific current interventions or initiatives in your approved SNAP-Ed Plan. Evaluation of projects or initiatives beyond the scope of SNAP-Ed interventions or the low-income population, or projects that intend to generate new knowledge or theory in the field of obesity prevention, are considered research and, therefore, will not be approved for funding. For example, requests to fund the creation or validation of an evaluation tool that is not specific to the SNAP-Ed intervention would not be approved. States interested in broad research may wish to seek alternate sources of funding. SNAP-Ed will pay for the data collection from a low-income control group (no intervention) or comparison groups (different intervention) when such data are necessary and justified to conduct an impact evaluation of the SNAP-Ed intervention. Whenever a state carries out a SNAP-Ed evaluation activity that costs more than $400,000 in total—whether spent in one year or multiple years—FNS strongly recommends that an impact evaluation be conducted. However, SNAP-Ed funds cannot be used to pay for the portion of data collection or surveillance of populations whose incomes exceed 185 percent of the federal poverty level or the general population.

As with most population-based public health programs, SNAP-Ed programs or interventions generally are not designed to establish cause-and-effect relationships between programming or exposure and outcomes as in a randomized control group design due to ethics (programming cannot be withheld from SNAP-Ed participants to serve as a control group) and the multi-level complexity of SNAP-Ed programming. However, SNAP-Ed programming may be evaluated to assess correlations or associations among variables (e.g., programming and outcomes) at one, or preferably more, points in time and at multiple programming levels throughout the funding period.

SNAP-Ed Plans may range from 1- to 3-year plans. One-year SNAP-Ed plans and funding cycles pose a challenge for states who are limited in the length of their program delivery, and evaluation designs, particularly in the evaluation of PSE interventions and social marketing campaigns. Within the Environmental Settings, Sectors of Influence, and Social Norms and Values levels of the framework, medium- and long-term outcomes and population results cannot be adequately measured within a 1- or even 3-year period, depending upon the indicator(s) and/or measure(s).

As the multi-level, multi-sectoral field of SNAP-Ed programming expands, so does the need for the reliable and validated environmental scanning and evaluation tools, measures, and secondary data sources that are referenced throughout this interpretive guide.

Effective evaluation will help to build the evidence base and identify effective and promising or emerging obesity prevention strategies and interventions. Knowledge on effective obesity prevention strategies and interventions is evolving. Examples of success can be found across the nation in states, cities, towns, tribes, and communities. But there is still much to learn, and programs are challenged to stay up-to-date, to be culturally relevant, and to help to establish evidence-based practices that are needed to meet the evidence-based requirement of the Healthy, Hunger-Free Kids Act.

Sampling

As part of your SNAP-Ed evaluation plan, it is helpful to develop a sampling plan, a description of who will participate in the evaluation. Some evaluations may include all participants in an activity or all sites, while others may assess a sample or subset of participants or sites. Sampling in evaluation is useful for programs that do not have the time, funds, or staff to include all participants or sites in their evaluations. If your program does not have internal evaluation expertise, partnering with evaluators or researchers to plan evaluation methods, including sampling plans, will benefit your SNAP-Ed outcomes.

Individual Level

At the Individual level of the framework, when measuring goals, intentions, behavior change, and sustained behaviors, evaluators may wish to collect pre-, post-, and in some cases, follow-up data on a subset or sample of participants. Ideally, this sample will represent the entire group that participated in the SNAP-Ed intervention. Members of the sample are representative of the total population from which they are sampled, when using methods, such as:

- Simple random sampling: All individuals in the population have an equal opportunity of being selected (e.g., a lottery system or draw numbers/names from a hat).
- Systematic sampling: Individuals selected according to a random starting point and a fixed, periodic interval (e.g., from random start point on a list every 8th individual is selected).
- Stratified sampling: The population is divided into groups (e.g., by grade level), then individuals from each group are randomly selected.
- Cluster sampling: Clusters or groups are randomly selected (e.g., classrooms in a school); all individuals within the selected clusters are included in the study (e.g., all students within the classrooms that were randomly selected).

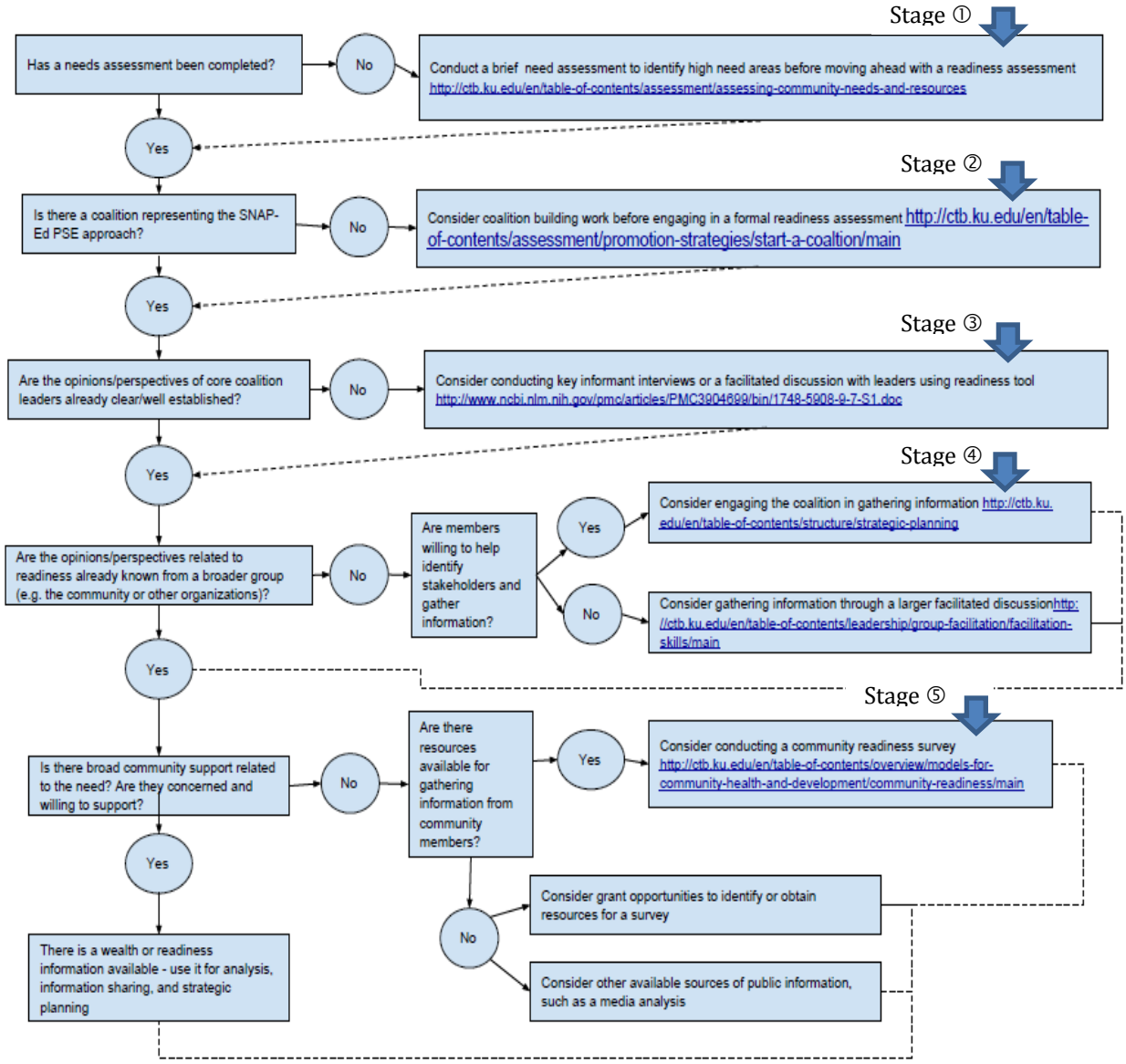
Often in SNAP-Ed evaluation, random sampling is not feasible or practical. For example, if you wanted to administer a survey to people who attended a one-time community nutrition event and you did not have a roster of all attendees, you would not be able to select a random sample of attendees. The conclusions from the sample may not generalize to all participants. Specific sampling methods for non-random samples include

- Convenience sampling: Individuals who are readily available are selected from the population you are studying.
- Purposive sampling: The evaluator selects a sample he or she believes represents the population.
- Snowball sampling: A small group of participants who have the desired characteristics is selected; those participants in turn recommend others with similar characteristics to participate.
- Quota sampling: A sample is selected based on pre-specified characteristics in the same proportion as the population (e.g., if 60% of the population is female then 60% of sample will be female; recruitment stops when 60% is reached).
- Self-selection sampling: Participants volunteer to participate.

Environmental Level

At the environmental or organizational settings level, programs may choose to measure PSE changes in a sample of sites in which they are working to affect change. Based on the stage at which programs are engaged in PSE changes, the sampling will vary. The Needs and Readiness Flow Chart that follows outlines a process to establish readiness to implement PSE interventions.

Needs and Readiness Assessment Flow Chart



Adapted from: Assessing community needs and readiness docs.sumn.org/CommunityNeedsAssessmentToolkit.pdf

As indicated on the flow chart, the 5 stages in the readiness process: 1) needs assessment, 2) coalition building, 3) assessing coalition readiness, 4) gaining support from other groups and community members, and 5) assessing site, organization, or community readiness build on one another and require information from different sources, thus the sampling will vary. Below each stage's sampling recommendation is provided.

1. Needs assessment: For a defined issue, the sampling will be 10 issue-specific sites in the community, or within the relevant domains of environmental settings (i.e., eat, learn, live, play, shop, and work. If the community or domain has fewer than 10 sites then all the issue-specific sites will be assessed.

> For example, a group wants to address access to parks. Google Maps or other maps could be used to identify public parks in the community. Community A has 20 parks and community B has 5 parks. For community A, 10 parks will be chosen using one of the sampling methods listed in the individual level. For community B, all 5 parks will be assessed.

2. Coalition building: A minimum of 3 partnerships, community groups and/or members actively engaged in the issue. Using the access to parks issue above, the three groups and/or members could be: (1) a representative from the department of parks and recreation; (2) a member of a neighborhood board; and (3) a mother who organizes a playgroup at the park.

3. Assessing coalition readiness to collaborate: One representative from each group in the coalition. For example if a park coalition consists of 5 groups, one member of each of the 5 groups would complete the assessment.

4. Gaining support from other groups and community members: Five key informants active in the issue. For example, the park coalition could get input from the following: local business leader, after-school program director, president of a local running club, principal of a nearby school, and a representative from the local police department.

5. Assessing community readiness: At least 5 key informants who are familiar with the community and the issue.

The sites selected should represent the SNAP-Ed sites where one or more PSE changes are being made (MT5).

When sampling sites that are already actively addressing the issue, you may want to include the sites or organizations that represent the most advanced sites in terms of their progression through the stages of change at the organizational level (e.g., Weiner, 2009). In this case, the sample of sites would not necessarily be representative of all sites in which you are working, but it would represent those sites that have made significant progress in adopting and implementing PSE changes.

<u>Sectors of Influence</u>

As stated in the introduction to the Sectors of Influence chapter, most indicators will be measured using existing or secondary data sources, and you will likely include all relevant jurisdictions in your evaluation. For example, indicator MT8a1 is the total number of farmers markets that accept SNAP benefits per 10,000 SNAP recipients. To calculate the rate, if a state has 178 farmers markets that accept SNAP, and an average monthly SNAP caseload of 950,000 participants, the adjustment would be equal to 178/(950,000/10,000), yielding 1.87 farmers markets for every 10,000 SNAP participants. This is calculated based on state data, not a sample of state data.

Population Results

Most of the data for the indicators at the population level will come from existing data sources at the state level, such as the Behavioral Risk Factor Surveillance System and the Youth Risk Behavior Surveillance System. If states choose to collect data to represent population-level changes, sampling methods described for individual-level sampling would apply. For example, in California, the Champions for Healthy Change study is a 4-year longitudinal survey of mothers, teens, and children from randomly selected SNAP households in 17 local health departments. Telephone interviews include collecting comprehensive information on dietary behaviors during the previous day using the Automated Self-Administered Recall System (ASA24), types and levels of physical activities, and self-reported height and weight to calculated BMI (https://www.cdph.ca.gov/programs/NEOPB/Pages/CompEvalNewNEOPFundModel.aspx).

Determining the Size of Your Sample

Consider partnering with an evaluator or researcher to assist in your evaluation design and selection of an appropriate sample. An experienced evaluator or researcher will be able to assist with a power analysis, which determines how likely it is to achieve a significant program effect given a specific sample size. Power represents the chance that you will find an effect of your intervention if it's there. Typically, researchers aim for a power of .80, meaning you have an 80 percent chance of finding a statistically significant difference between two groups when there is one. A similar analysis can be conducted to determine the necessary sample size for different types of studies—one-time surveys, comparisons of pre/post means, comparisons of two proportions, and more sophisticated statistical tests.

Several factors influence sample size, depending on the type of analysis. For example, if you want to determine how many people you should include in a survey in order to report the percentage of the population who intends to eat more fruit, you will need to know the population size, the margin of error, and the desired confidence level to calculate the sample size (see, for example, https://www.surveymonkey.com/mp/sample-size-calculator/). If you want to compare averages, such as the average cups of fruit per day, before and after an intervention, you will need to know the Type I error rate (typically .05), the Type II error rate (typically .20), the effect size, and the standard deviation for the change (see, for example, http://www.sample-size.net/sample-size-study-paired-t-test/). There are other online calculators available for many study designs. Since the body of evidence is building for PSE interventions, associated or anticipated effect sizes may not always be known to accurately calculate a sample size needed to detect significant changes in outcomes.

The following figure depicts the factors that influence sample size.

Source: http: //toolkit.pellinstitute.org/evaluation-guide/collect-data/determine-appropriate-sample-size/

There are other considerations such as time and resources that may influence your sampling decisions. For example, in Maryland, the Text2BHealthy program delivers nutrition and physical activity tips via text messages to parents of elementary children who are receiving classroom-based nutrition education. The program staff is also working with grocery stores and parks near the participating schools. To evaluate behavior change, pre- and post-intervention surveys were conducted with parents in a sample of participating schools. The number of schools selected, 50, was based on available funds to provide one prize for a drawing at each school. Schools that had at least two intervention elements were included in the initial list of eligible schools; schools were randomly selected for participation. All parents at the randomly selected schools were invited to participate in the survey.

Appendix F. Survey Methodology

Interval: Interval measures are standard units, such as cups of milk. When survey responses include standard units (e.g., ¼ cup, ½ cup, 1 cup), it is preferred to use paired or matched statistical tests to determine whether there are changes in mean (average) scores before and after the program. Use paired or matched statistical tests, such as a t-test, to determine whether the changes are statistically significant.

Ordinal: Assessments of attitudes or agreement with statements using a Likert-type rating scale use *ordinal* measures. For ordinal levels of measurement, the simplest approach is to compare percentage distributions of responses before and after the program. For instance, before the program, a certain percentage of participants may strongly agree with a statement; at follow-up, a different percentage may strongly agree. Calculate the percentage change from before to after the program. Unlike interval data, calculating means is not appropriate for ordinal responses. However, comparing the median (middle) or mode (most frequent) response before and after the program can be appropriate. The Wilcoxon Signed-Rank statistical test will identify the level of statistical significance.

Nominal: When an outcome measure is *nominal* (e.g., names of fruit or answers to "yes or no" questions), these are categorical responses. For nominal data, the simplest approach is to compare percentage distributions of responses before and after the program. For instance, before the program, a certain percentage of participants may drink low-fat milk; at follow-up, a different percentage may drink low-fat milk. Calculate the percentage change from before to after the program. The McNemar's statistical test will identify the level of statistical significance.

Open-ended versus closed-ended questions: A key part of creating an excellent survey or questionnaire is the appropriate use of open-ended and closed-ended questions. An example of the difference between closed-ended and open-ended questions would be the offer of fish or meat for dinner (closed-ended), as opposed to asking, "What would you like for dinner?" (open-ended). Questions that are **closed-ended** are conclusive in nature as they are designed to create data that are easily quantifiable. The fact that questions of this type are easy to code makes them particularly useful when trying to determine statistical significance. The information gained by closed-ended questions allows evaluators to categorize respondents into groups based on the options. One drawback to the use of closed-ended questions is the possibility that the response options may not be comprehensive enough to reflect the respondent's true response. For example, a question may ask if the participant takes the bus, bikes or takes the metro to work, but doesn't include car-pooling as a response option. **Open-ended** questions are exploratory in nature. Open-ended questions provide rich qualitative data because the respondent can provide any answer. Since questions that are open-ended ask for critical thinking they are ideal for gaining information from specialists in a field, small groups of people, and preliminary research. Although respondents' answers are rich in information, it takes great effort to distill the information provided.

Pre- and post-tests: Pre- and post-tests are used to measure changes as a result of an intervention. The pre-test is a set of questions given to participants before the training or activity, and the post-test is administered after the training or activity and contains the same questions as the pre-test. Comparing participants' post-tests and pre-tests enables the evaluator to assess changes in specific outcomes. In the evaluation framework, healthy eating, physical activity, and food security goals, intentions, and behaviors are the main indicators for which pre- and post-tests are recommended. Evaluators should use a unique, anonymous identifier to facilitate matching of pre-post pairs (e.g., MM/DD/YYYY birthdate).

Limitations of surveys: When in the planning stages of creating and implementing a survey, evaluators should keep in mind survey limitations. Some of these limitations include limited access to the population of interest, compressed or limited time schedule to conduct the survey, and lack of funding.

Bias in survey sampling: Bias refers to a sample statistic that either over- or under-estimates the populations' parameters. This means that the results from the sample of participants that is drawn either over- or under-represent the true population parameter (such as the true population mean). Bias often occurs when the survey sample does not accurately represent the population.

The bias that results from an unrepresentative sample is called **selection bias.** Some common examples include: nonresponse bias, undercoverage, and voluntary response bias. This type of bias can be reduced through random sampling. There can also be bias that is introduced through problems in the measurement process such as asking leading questions and respondent social desirability.

Statistical Significance (T-tests): With a t-test, statistical significance indicates that the difference between two groups' averages most likely reflects an actual difference in the populations from which the groups were sampled. A *statistically significant* t-test means that the difference between two groups is unlikely to have occurred because the sample happened to be atypical. Statistical significance is determined by the size of the difference between the group averages, the sample size, and the standard deviations of the groups.

Appendix G. SNAP-Ed Interventions Summary Chart

INTERVENTION NAME, Abbreviation (State)	TARGET BEHAVIOR*			INTERVENTION TYPE†			SETTING‡					
	BF	Food	PA	Direct Ed	Social Marketing	PSE Change	Child Care	School	Community	Worksite	Retail	Health Care
Baby-Friendly Hospital Initiative (MA)	✓			✓		✓						✓
Balanced Energy Physical Activity Toolkit, BEPA Toolkit (OR)		✓	✓	✓			✓					
Baltimore Healthy Stores (MD)		✓			✓	✓					✓	
Bienestar Health Program (TX)		✓	✓	✓				✓				
California Fit Business Kit (CA)	✓	✓	✓			✓				✓		
Cent$ible Nutrition Program (WY)		✓	✓		✓			✓				
Champions for Change™ (CA)		✓	✓		✓			✓	✓			
Children's Power Play Campaign (CA)		✓	✓		✓			✓	✓			
CHOICES, Contra Costa Child Care Council's Best Practices (CA)	✓	✓	✓			✓	✓					
Classroom Energizers (MN)			✓	✓				✓				
Color Me Healthy (NC)		✓	✓	✓			✓					
Communities of Excellence in Nutrition, Physical Activity, & Obesity Prevention, CX3 (CA)		✓	✓			✓			✓		✓	
Connecticut Breastfeeding Initiative (CT)	✓					✓						✓
CookShop (NY)		✓		✓	✓	✓		✓				
Cooking Matters (national)		✓		✓					✓			
Cooking Matters at the Store (national)		✓		✓					✓			

*Target behavior includes Breastfeeding (BF), Food (e.g., healthy eating, nutrition standards), and Physical Activity (PA).
†Intervention type includes Direct Education (Direct Ed); Social Marketing; and Policy, Systems, and Environmental Change (PSE). For Direct Ed interventions, participants are actively engaged in the learning process with an educator and/or interactive media.
‡Setting is the type of site where the intervention takes place; interventions may be implemented in more than one setting. The Community setting includes interventions designed to help children and families and/or interventions implemented in neighborhoods, parks, faith-based organizations, or other community locations. This also includes recreation and emergency food provision settings.

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	BF	Food	PA	Direct Ed	Social Marketing	PSE Change	Child Care	School	Community	Worksite	Retail	Health Care
Cooking with Kids, Inc. (NM)		✓		✓	✓	✓		✓	✓			
Coordinated Approach to Child Health, CATCH® (TX)		✓	✓	✓		✓		✓				
CATCH® Early Childhood (TX)		✓	✓	✓		✓	✓					
EatFresh (CA)		✓		✓	✓				✓			
Eat Smart in Parks (MO)		✓			✓	✓			✓			
Eat Together, Eat Better (WA)		✓		✓					✓			
Eating Smart, Being Active (CO)	✓	✓	✓		✓			✓				
Eat Well & Keep Moving (MA & MD)		✓	✓	✓				✓				
Eat Well Play Hard in Child Care Settings (NY)		✓	✓	✓		✓	✓					
Empower Program (AZ)	✓	✓	✓			✓	✓					
Faithful Families Eating Smart & Moving More (NC)		✓	✓	✓		✓			✓			
Farm to School (national)		✓		✓		✓	✓	✓				
Farm to Work (TX)		✓				✓				✓		
First Years in the First State: Improving Nutrition & Physical Activity Quality in Delaware Child Care (DE)	✓	✓	✓			✓	✓		✓			
Food Hero (OR)		✓		✓	✓				✓			
Fruit, Vegetable, and Physical Activity Toolbox for Community		✓	✓	✓	✓				✓			

*Target behavior includes Breastfeeding (BF), Food (e.g., healthy eating, nutrition standards), and Physical Activity (PA).
†Intervention type includes Direct Education (Direct Ed); Social Marketing; and Policy, Systems, and Environmental Change (PSE). For Direct Ed interventions, participants are actively engaged in the learning process with an educator and/or interactive media.
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	BF	Food	PA	Direct Ed	Social Marketing	PSE Change	Child Care	School	Community	Worksite	Retail	Health Care
Educators												
Harvest of the Month (CA)		✓	✓		✓		✓	✓	✓	✓	✓	✓
Harvest of the Month (MI)		✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Health Bucks (NY)		✓				✓			✓		✓	
Healthy EmPowers You! (GA)		✓	✓	✓		✓		✓	✓			
Healthy Apple Awards (CA)	✓	✓	✓			✓	✓					
Healthy Behaviors Initiative, HBI (CA)		✓	✓	✓		✓		✓	✓			
Healthy Eating Active Living – Mapping Attributes using Participatory Photographic Surveys, HEAL MAPPS™ (OR)		✓	✓			✓			✓			
Healthy Food Environments Pricing Incentives (NC)		✓			✓	✓				✓		✓
Healthy Habits for Life (Sesame Street) (national)		✓	✓	✓			✓					
Healthy Nutrition Guidelines for LA City Government (CA)		✓				✓			✓	✓		✓
Healthy Retail Recognition Pilot (CA)		✓				✓					✓	
Hip Hop to Health Jr. (WI)		✓	✓	✓			✓					
I am Moving, I am Learning (national)		✓	✓	✓		✓	✓					
Just Say Yes to Fruits and Vegetables, JSY (NY)		✓		✓		✓			✓			

*Target behavior includes Breastfeeding (BF), Food (e.g., healthy eating, nutrition standards), and Physical Activity (PA).
†Intervention type includes Direct Education (Direct Ed); Social Marketing; and Policy, Systems, and Environmental Change (PSE). For Direct Ed interventions, participants are actively engaged in the learning process with an educator and/or interactive media.
‡Setting is the type of site where the intervention takes place; interventions may be implemented in more than one setting. The Community setting includes interventions designed to help children and families and/or interventions implemented in neighborhoods, parks, faith-based organizations, or other community locations. This also includes recreation and emergency food provision settings.

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Kaiser Permanente Cafeteria Menu Labeling (CA, OR, HI)		✓			✓	✓			✓	✓		
Kids Cook® (NM)		✓	✓	✓				✓				
Kindergarten Initiative (PA)		✓		✓				✓				
Latino Campaign (CA)		✓	✓		✓				✓		✓	
Learning about Nutrition through Activities, LANA (MN)		✓		✓		✓	✓					
Let's Move! Salad Bars in Schools (national)		✓				✓		✓				
Lifestyle Education for Activity Program, LEAP (SC)			✓	✓		✓		✓				
Media-Smart Youth® (national)		✓	✓	✓				✓				
Mind, Exercise, Nutrition….Do It!, MEND (national)		✓	✓	✓					✓			
National Early Care & Education Learning Collaborative Project, (national)	✓	✓	✓			✓	✓					
Nutrition and Physical Activity Self-Assessment for Child Care, NAP SACC (NC)	✓	✓	✓			✓	✓					
Obesity Prevention Plus Parenting Support (VT)		✓	✓	✓					✓			
Out of School Nutrition and Physical Activity Initiative, OSNAP (MA)		✓				✓		✓				
PE-Nut™ (MI)		✓	✓	✓		✓		✓				

*Target behavior includes Breastfeeding (BF), Food (e.g., healthy eating, nutrition standards), and Physical Activity (PA).
†Intervention type includes Direct Education (Direct Ed); Social Marketing; and Policy, Systems, and Environmental Change (PSE). For Direct Ed interventions, participants are actively engaged in the learning process with an educator and/or interactive media.
‡Setting is the type of site where the intervention takes place; interventions may be implemented in more than one setting. The Community setting includes interventions designed to help children and families and/or interventions implemented in neighborhoods, parks, faith-based organizations, or other community locations. This also includes recreation and emergency food provision settings.

Appendix G. SNAP-Ed Interventions Summary Chart

INTERVENTION NAME, Abbreviation (State)	TARGET BEHAVIOR*			INTERVENTION TYPE†			SETTING‡					
	BF	Food	PA	Direct Ed	Social Marketing	PSE Change	Child Care	School	Community	Worksite	Retail	Health Care
Pick a better snack™ & Act (IA)		✓	✓	✓	✓			✓	✓			
Pick it! Try it! Like it! (SD)		✓		✓	✓			✓	✓		✓	
Policy Regulations for Day Care in New York City (NY)		✓	✓			✓	✓					
Preschools Shaping Healthy Impressions through Nutrition & Exercise, SHINE (CA)		✓	✓			✓	✓					
Ready, Set, Go! (national)		✓				✓	✓					
ReFresh (MD)		✓		✓				✓				
Retail Program (CA)		✓			✓	✓			✓		✓	
Rethink Your Drink (CA)		✓		✓	✓			✓	✓			
Riverside Unified School District Farmers Market Salad Bar Program (CA)		✓		✓		✓		✓				
School Nutrition Policy Initiative (PA)		✓				✓		✓				
School Physical Activity and Nutrition-Environment Tool, SPAN-ET (OR)		✓	✓			✓		✓				
Shaping Healthy Choices (CA)		✓	✓	✓		✓		✓				
Simple Goodness Campaign (AZ)		✓			✓				✓			
Smarter Lunchrooms Movement (national)		✓		✓	✓	✓		✓				
Sports Play Active Recreation for Kids, SPARK (national)			✓	✓	✓	✓		✓				

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†Intervention type includes Direct Education (Direct Ed); Social Marketing; and Policy, Systems, and Environmental Change (PSE). For Direct Ed interventions, participants are actively engaged in the learning process with an educator and/or interactive media.
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Stock Healthy, Shop Healthy (MO)		✓			✓	✓			✓		✓	
Take 10!® (national)		✓	✓	✓				✓				
Texas Mother-Friendly Worksite Program (TX)	✓					✓				✓		
Text2BHealthy (MD)		✓	✓	✓	✓	✓		✓				
They Learn from Watching You (MI)		✓	✓		✓				✓			
VERB Scorecard™ (KY)			✓		✓				✓			
Walk with Ease (national)			✓	✓					✓	✓		
Ways to Enhance Children's Activity & Nutrition, We Can! (national)		✓	✓	✓	✓		✓	✓	✓	✓		✓
Youth Participatory Action Research Projects, YPAR (CA)		✓	✓	✓			✓	✓				

*Target behavior includes Breastfeeding (BF), Food (e.g., healthy eating, nutrition standards), and Physical Activity (PA).
†Intervention type includes Direct Education (Direct Ed); Social Marketing; and Policy, Systems, and Environmental Change (PSE). For Direct Ed interventions, participants are actively engaged in the learning process with an educator and/or interactive media.
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Appendix H. References

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