

Association of SNAP-Ed Nutrition Networks and Other Implementing Agencies

June 17, 2011

David Burr, Director Program Accountability and Administration Division Supplemental Nutrition Assistance Program U.S. Department of Agriculture 3101 Park Center Drive Alexandria, VA 22302-1500

Dear Mr. Burr:

The Association of SNAP-Ed Nutrition Networks and Other Implementing Agencies (ASNNA) appreciates the opportunity to provide our recommendations as USDA formulates policy for the future operations of SNAP-Ed. ASNNA is writing in response to the U. S. Department of Agriculture's (USDA) request for comments about key programmatic provisions of Section 241 of the Healthy, Hunger-Free Kids Act of 2010 (HHFK), which defines the Nutrition Education and Obesity Prevention Grant Program. This response represents input from the broad membership of ASNNA member states and implementing agencies. We believe that changes to be made to SNAP-Ed, incorporating the public health approaches called for in the HHFK, will allow states to use their SNAP-Ed resources to more effectively serve low-income adults and children.

We are providing our recommendations in four areas.

- Evidence-based, Comprehensive, Multi-level Interventions and Public Health Approaches
- Targeting
- Program Evaluation
- Other Areas of Consideration

Evidence-based, Comprehensive, Multi-level Interventions and Public Health Approaches

ASNNA has its roots in the cooperative agreements between USDA/FNS and 22 state agencies in two "rounds" of awards in 1995 and 1996 (Appendix A). These cooperative agreements were ground breaking in the intent to build collaboration across public, private and non-profit agencies/organizations that were providing nutrition education to the low-income populations using new approaches for nutrition education. The purpose of the cooperative agreement was to "establish [nutrition education] network; [and to] develop funding and nutrition promotion plan to use 50/50 food stamp administrative matching funds." The Networks created under the cooperative agreements were to "implement coordinated nutrition education and promotion activities throughout the state using social marketing." (Cooperative Agreement No. FCS 95-035SUZ)

The state Nutrition Networks and other Implementing Agencies for Food Stamp Nutrition Education (FSNE) were encouraged to work in five core areas: dietary quality, food resource management, food safety, food security and environmental and systems change. After FFY 2003, environmental and systems change was removed from the FSNE Guidance as a core area for FSNE and the use of mass media in social marketing campaigns was prorated at that time. In effect, this removed states' ability to use mass media in their social marketing campaigns.

The call for public health approaches in HHFK harks back to the cooperative agreements and the need to reach individuals at all levels of the Social Ecological Model with effective messages that can be achieved – incremental behavior change that is supported throughout the Social Ecological framework.



Public health interventions prioritize breadth over depth and reach a large number of individuals with consistent low-dosage interventions. They are more effective at generating change in a

population, and are more cost-effective than other interventions aimed at individual behavior change. (Frieden TR. A framework for public health action: the health impact pyramid. *Am J Public Health*. 2010 Apr;100(4):590-5. Epub Feb 18, 2010). See Appendix B.



The Health Impact Pyramid

Recommendations for Public Health Approaches

- 1. Allow SNAP-Ed Implementing Agencies to work in all spheres of influence of the Social Ecological Model, including environmental and systems/policy change. Educate SNAP-Ed personnel from State SNAP-Ed Coordinators / SNAP offices to Implementing Agencies and any sub-contractors using the Social Ecological Framework from the DGA 2010 Policy Document, Chapter 6. SNAP-Ed work in the outer spheres of the framework helps create conditions and opportunities that facilitate healthier food and physical activity choices and complements direct nutrition education.
- Revise Guidance to allow SNAP-Ed funds to be used to educate about foods that should be limited in the diet, consistent with the Dietary Guidelines 2010. The FY12 SNAP-Ed Guidance states that ... "all messages ... are consistent with the Dietary Guidelines for Americans..." and "SNAP-Ed funds may not be used to convey negative written, visual, or verbal expressions about any specific foods, beverages, or commodities (pages 18 and 72).
- 3. Allow SNAP-Ed funds to be used for physical activity in addition to nutrition and healthy eating.
- 4. Align the federal funding for SNAP-Ed with other federal agencies for obesity prevention for increased effectiveness and efficiency.

- 5. Allow use of the recommended CDC strategies, including the evidence based MAPPS strategies (Appendix C), the CDC Recommended Community Strategies (Appendix D) and the Health Impact Pyramid (Appendix B).
- 6. Require coordination and collaboration of nutrition education and obesity prevention initiatives in communities. (e.g., SNAP-Ed participants residing in communities funded by the CDC Communities Putting Prevention to Work Program).
- 7. Ensure communication of planned interventions to intermediaries or gatekeepers, who provide access to the low-income audience to achieve buy-in of community stakeholders.
- 8. Continue to promote national collaboration among federal, state and community partners related to comprehensive approaches for nutrition and physical activity. We believe collaboration is key to delivering these approaches to foster behavior change.

Targeting

Under the 2012 SNAP-Ed Guidance for Plan Preparation (Part II, Section B, page 9), the Guidance specifies three (3) categories of persons eligible to receive State SNAP-Ed activities. Category 1 encompasses all "Certified Eligibles," meaning SNAP participants; categories 2 and 3 are described as "Likely Eligibles" and "Potential Eligibles by Site/Location," respectively. To the great frustration of the various implementing agencies, the way the various categories are defined and managed renders the great majority of SNAP-Ed eligibles outside the reach of meaningful, effectively scaled SNAP-Ed interventions.

The clause in S.3307, Section 241 under "eligible populations" which reads "and other lowincome populations as defined by the Secretary" should open the door to targeting approaches that reach a much larger percentage of eligible individuals, and thus more cost-effective utilization of the funds.

Recommendations for Targeting

- 1. Include additional criteria and proxy sites that will allow implementing agencies to reach a much greater percentage of eligible groups more cost effectively. For example, the population in a school district or school catchment that has 50% or more free and reduced price meals should be eligible for SNAP-Ed since the school/district student population is reflective of the total population in that community.
- 2. Targeting rules need to reflect a recognition that:
 - a. Implementing agencies fully embrace the need to focus on low-income populations which experience the greatest inequities in health outcomes;
 - b. Implementing agencies desire to reach the largest number of individuals eligible for SNAP-Ed as cost effectively as possible;
 - c. Systems and environmental change approaches to SNAP-Ed can be effectively targeted to low income individuals; and

- d. Flexibility is needed in the site approval process so that services can be offered in settings as conditions change and new opportunities become available throughout the year.
- 3. Use the Social Ecological Model as a framework for establishing target groups within SNAP-Ed that will help to both reach a greater number of SNAP-Ed eligibles and achieve a greater impact. See Appendix E or further detail on our recommended targeting guidelines using this approach.

Program Evaluation

Program evaluation is a systematic method for collecting, analyzing, and using information to answer questions about projects, policies and programs, particularly about their effectiveness and efficiency. The goals of the ASNNA Evaluation Subcommittee are: 1) to enhance evaluation efforts nationally and strengthen the evidence base, 2) to help move forward the objectives of SNAP-Ed, and 3) to increase collaboration as partners nationally.

Recommendations for Program Evaluation

1. Implementing agencies will conduct program evaluation appropriate for the scope and scale of the interventions they conduct.

Rationale: Conducting routine program evaluation is a systematic way to improve and account for programmatic actions that involve procedures that are useful, feasible, ethical, and accurate, and that provide measurements that indicate whether program activities are directly or indirectly resulting in the desired outcomes.

- 2. Implementing agencies should align their program goals and objectives with state and national goals and objectives in order to optimize program evaluation collaboration across related programs. See <u>www.asnna.org</u> (Evaluation Tools/Resources and Evaluation Endpoints for SNAP-Ed.) ASNNA recommends four domains for SNAP-Ed evaluation in alignment with the Healthy Hunger Free Kids Act of 2010 and the USDA Strategic Plan 2010-2015:
 - Foods and Beverages
- Food Security
- Physical Activity
- Obesity Prevention

Rationale: Rather than USDA SNAP-Ed developing another national set of nutrition, physical activity and obesity prevention goals and objectives, it is practical to align with existing national goals and objectives that have already been developed with rigorous expert, agency and public input. The recommended four domains align with existing USDA reference documents.

 Implementing agencies should incorporate existing public health evaluation frameworks and approaches from federal agencies (e.g., CDC, Institute of Medicine) and other authoritative sources. See <u>www.asnna.org</u> (Evaluation Tools/Resources and Evaluation Endpoints for SNAP-Ed.) *Rationale*: Since there are many excellent program evaluation frameworks developed and in use by federal agencies charged with food security, nutrition, physical activity, and obesity prevention, it is efficient and practical to adhere to these. Referencing such frameworks enables implementing agencies to use the most current versions and keep up with the dynamic nature of this work as indicators improve. Updated methods and tools will continue to be added to the evidence base.

4. Incorporate use of existing reporting systems from USDA, CDC, and states to identify and report on common indicators across and within states, thus promoting sound practices and enhancing collaboration.

Rationale: While a new national SNAP-Ed reporting system will be valuable for reporting community, state-wide, and population changes attributable to SNAP-Ed, neither USDA nor states are at the readiness level to develop and implement such a reporting system until after the regulations are introduced. We recommend a development period for a reporting system for program evaluation in the near future using an Evaluation Consultation Group consisting of diverse Implementing Agencies, USDA, and other federal agencies with aligned missions. In the interim alignment with sister federal programs and agencies using effective approaches would be efficient. Relaxing the travel limits to enable staff of Implementing Agencies to attend training, convene and collaborate would also enhance evaluation.

5. Allow data collection with formal comparison groups and allow limited incentives for program evaluation.

Rationale: Current USDA regulations disallow incentivizing non-program participants and pay only for the fraction of a survey sample with income below 130% FPL, excluding other SNAP-Ed-eligible persons whose income falls between 130-185% FPL, as well as non-low-income comparison groups. In order to test the effectiveness of SNAP-Ed interventions, comparison groups are essential. Incentives and comparison groups will assure adequate power to accurately assess the impact of SNAP-Ed activities.

6. Release, or allow purchase, of state and local level SNAP sales data to be used for program evaluation purposes.

Rationale: SNAP sales data are an important source for food buying behavior of SNAP participants. They can be used quickly to plan interventions and to measure effectiveness of interventions on food purchasing habits of SNAP participants.

7. Allow collection of a full set of metrics from all spheres of influence, including limited use of noninvasive biometrics (e.g., BMI, blood pressure, waist-to-hip ratio) for program evaluation purposes.

Rationale: Certain non-invasive, biometric measures are important indicators of health. Measurement methods and protocols are easily taught and carried out, and can be collected per sampling designs to assess the effectiveness of interventions on program participant's health indicators. Other meaningful metrics include public/private partnerships, leveraged resources, new program development, norms and expectations for healthy eating and physical activity, and improvements in community and state environments, policies, and system changes.

8. Encourage and promote longitudinal approaches to evaluation with endpoints framed by the Social Ecological Framework. See <u>www.asnna.org</u> (Evaluation Tools/Resources and Evaluation Endpoints for SNAP-Ed.)

Rationale: SNAP-Ed evaluation at the local and state levels can show the effectiveness of this funding in improving health. However, determining the overall impact of SNAP-Ed funding over time to satisfy OMB review requires longitudinal assessments and collaboration across state lines.

9. Extend evaluation requirements to social marketing efforts that have a significant role in supporting sustainable population-based behavior change.

Rationale: Evidence-based local interventions reinforced by solidly developed, global social marketing messages are "best practice" in health behavior change.

10. Use the ASNNA web site (<u>www.asnna.org</u>) as a mechanism for implementing agencies to share evaluation tools, resources and results with links to evidence-based libraries (e.g., NAL, ADA).

Rationale: ASNNA is the sole organization whose membership is open to all SNAP-Ed Implementing Agencies and collaborators. Rather than requiring implementing agencies to report tools, resources and results, a more dynamic and informal method can serve as a teaching and resource mechanism for states. Easily accessed resources are more likely to correspond to a state's capacity and experience level with program evaluation.

Other Areas of Concern

Recommendations for Other Areas of Concern

- 1. Change due date for SNAP-Ed plans from August 15 to June 1. This will allow states to fully execute state contracts prior to the start of the fiscal year on October 1.
- 2. Provide the Guidance or any administrative policy memos that affect the upcoming SNAP-Ed state plan no later than January 1. This allows states to conduct technical assistance for implementing agencies rather than re-working the plan in the midst of development.
- 3. Provide technical assistance to state SNAP-Ed coordinators on the Management Evaluation Review process. This technical assistance would essentially be an "all you ever wanted to know about SNAP-Ed" and would inform state staff of their roles as provided in the Guiding Principles in the Guidance. In particular, state coordinators would benefit from a clear understanding of OMB circulars A-121, A-110, A-122 and A-133 to complement their

understanding of A-87 which is more familiar to them as state employees.

- 4. Encourage multi-state, evidence-based interventions with strong evaluation components supported by SNAP-Ed funds.
- 5. Remove the restriction on number of professional staff allowed to participate in national conferences that focus on comprehensive approaches to nutrition and physical activity to explore best practices, and to strategize for successful outcomes for SNAP-Ed participants. The limit of four persons to attend a national conference is restrictive considering the benefits of participation. For example, conferences such as Society for Nutrition Education and American Dietetic Association conferences are offered only once per year, but deliver multiple professional development tracks suitable for many nutrition and physical activity specialties.
- 6. Assure that additional comment can be made prior to January 1, 2012 by putting the rules out for review in October or November 2011.
- 7. Align the SNAP-Ed funding with other federal funding to maximize the impact for nutrition education and obesity prevention.

We have heard that FNS will provide the proposed rules for further comment prior to the January 1, 2012 date in the Act. Availability for further comment in October or November would provide valuable input to the rule making process. We look forward to the opportunity to continue to contribute to this important national conversation.

Thank you for considering these recommendations. The SNAP-Ed implementing agencies represented by ASNNA look forward to a revamped SNAP-Ed Program with regulations based on promising public health practices and policies. We will continue to work with USDA in making the most effective use of SNAP-Ed resources.

SNAP-Ed has a unique opportunity to make outstanding contributions to the health and wellness of low-income adults and children. We applaud the new landscape provided in the Healthy Hunger Free Children's Act, Section 241, and welcome the opportunity to implement comprehensive nutrition and physical activity approaches of exceptional quality and outcome.

Sincerely,

Christian & Sady

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List of Appendices

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Appendix A:

State Nutrition Networks – FFY 1996 and 1997





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A Framework for Public Health Action: The Health Impact Pyramid

A 5-tier pyramid best describes the impact of different types of public health interventions and provides a framework to improve health. At the base of this pyramid, indicating interventions with the greatest potential impact, are efforts to address socioeconomic determinants of health. In ascending order are interventions that change the context to make individuals' default decisions healthy. clinical interventions that require limited contact but confer long-term protection, ongoing direct clinical care, and health education and counseling.

Interventions focusing on lower levels of the pyramid tend to be more effective because they reach broader segments of society and require less individual effort. Implementing interventions at each of the levels can achieve the maximum possible sustained public health benefit. (*Am J Public Health.* 2010;100:590–595. doi:10. 2105/AJPH.2009.185652) Thomas R. Frieden, MD, MPH

LIFE EXPECTANCY IN DEVEL-

oped countries has increased from less than 50 years in 1900 to nearly 80 years today.¹ The greatest improvement occurred in the first half of the 20th century, when life expectancy in the United States and many parts of Europe increased by an average of 20 years,² largely because of universal availability of clean water and rapid declines in infectious disease,³ as well as broad economic growth, rising living standards, and improved nutritional status.4 Smaller gains in the latter half of the 20th century resulted primarily from advances in treatment of cardiovascular disease and control of its risk factors (i.e., smoking, high blood pressure, and high cholesterol).⁵

The traditional depiction of the potential impact of health care interventions is a four-tier pyramid, with the bottom level representing population-wide interventions that have the greatest impact and ascending levels with decreasing impact that represent primary, secondary, and tertiary care.⁶ Other frameworks more specific to public health have been proposed. Grizzell's 6-tier intervention pyramid emphasizes policy change, environmental enhancement, and community and neighborhood collaboration.⁷ Hamilton and Bhatti's 3-dimensional population health and health promotion cube incorporates 9 health determinants (e.g., healthy child development, biology and genetics, physical environments, working conditions, and social support networks) and evidence-based actions to address them (e.g., reorienting health services, creating supportive environments, enacting healthy public policy, and strengthening community action).⁸ The maternal and child health pyramid of health services, developed by the US Health Resources and Services Administration, consists of 4 levels

of services used by states to allocate resources for mothers and children.⁶ Infrastructure building (e.g., monitoring, training, systems) of care, and information systems) is at the bottom of the pyramid, followed by population-based services (e.g., newborn screening, immunization, and lead screening) and enabling services (e.g., transportation, translation, case management, and coordination with Medicaid), with direct health care services at the top.

All of these models, however, focus most of their attention on various aspects of clinical health services and their delivery and, to a lesser extent, health system infrastructure. Although these are of critical importance, public health involves far more than health care. The fundamental composition, organization, and operation of society form the underpinnings of the determinants of health, yet they are often overlooked in the development frameworks to



describe health system structures. As a result, existing frameworks accurately describe neither the constituent elements nor the role of public health.

A FIVE-TIER PYRAMID

An alternative conceptual framework for public health action is a 5-tier health impact pyramid (Figure 1). In this pyramid, efforts to address socioeconomic determinants are at the base, followed by public health interventions that change the context for health (e.g., clean water, safe roads), protective interventions with long-term benefits (e.g., immunizations), direct clinical care, and, at the top, counseling and education. In general, public action and interventions represented by the base of the pyramid require less individual effort and have the greatest population impact. However, because these actions may address social and economic structures of society, they can be more controversial, particularly if the public

does not see such interventions as falling within the government's appropriate sphere of action.

Interventions at the top tiers are designed to help individuals rather than entire populations, but they could theoretically have a large population impact if universally and effectively applied. In practice, however, even the best programs at the pyramid's higher levels achieve limited public health impact, largely because of their dependence on long-term individual behavior change.⁹ As Rose writes,

Personal life-style is socially conditioned.... Individuals are unlikely to eat very differently from the rest of their families and social circle.... It makes little sense to expect individuals to behave differently than their peers; it is more appropriate to seek a general change in behavioural norms and in the circumstances which facilitate their adoption.^{10(p135)}

Socioeconomic Factors

The bottom tier of the health impact pyramid represents changes in socioeconomic factors (e.g., poverty reduction, improved education), often referred to as social determinants of health, that help form the basic foundation of a society.^{11,12} Socioeconomic status is a strong determinant of health, both within and across countries.¹³ Although the exact mechanisms by which socioeconomic status exerts its effects are not always apparent, poverty, low educational attainment, relative deprivation, and lack of access to sanitation increase exposure to environmental hazards.14 Educational status is also tightly correlated with cardiovascular risk factors, including smoking.15,16

Although poverty increases ill health within a society, economic development can also increase illness and death from noncommunicable disease. As living standards and life expectancy improve, risk for cardiovascular disease and some cancers increases.¹⁷ Much of this increase results from modifiable risk factors related to overconsumption of tobacco, unhealthy food, and alcohol, with a concurrent decrease in physical activity. Greater wealth can also lead to more roads and an increase in motor vehicle use, which can result in increased outdoor air pollution and more injury and death from traffic crashes.

A third of the world's urban population lives in slums.¹⁸ Substantial health improvements in high-poverty areas will require improved economic opportunities and infrastructure, including reliable electric power, sanitation, transport, and other basic services.¹⁹ Clean water and improved sanitation introduced in the United States in the late 19th and early 20th centuries may have been primarily responsible for reducing mortality rates by about half and child mortality rates by nearly two thirds in major cities.²⁰ Still, more than 900 million people worldwide have no access to clean drinking water and about 2.5 billion have no access to adequate sanitation.²¹ As the World Health Organization's Commission on Social Determinants of Health reported, "Social injustice is killing people on a grand scale."^{11(p26)}

Changing the Context to Encourage Healthy Decisions

The second tier of the pyramid represents interventions that change the environmental context to make healthy options the default choice, regardless of education, income, service provision, or other societal factors. The defining characteristic of this tier of intervention is that individuals would have to expend significant effort not to benefit from them. For example, fluoridated water-which is difficult to avoid when it is the public supply-not only improves individual health by reducing tooth decay,²² but also provides economic benefits by reducing health spending and productivity losses. In countries without either adequate natural or added fluoridation, health authorities are limited to counseling interventions, such as encouraging toothbrushing.

Other contextual changes that create healthier defaults include clean water, air, and food; improvements in road and vehicle design; elimination of lead and asbestos exposures; and iodization of salt.²² The potential societal impact of decreasing cardiovascular risk factors by changing from saturated to unsaturated cooking oils was demonstrated in Mauritius²³; eliminating artificial trans fat in food is another way to prevent cardiovascular disease.²⁴ Strategies to create healthier environmental contexts also include

designing communities to promote increased physical activity; enacting policies that encourage public transit, bicycling, and walking instead of driving; designing buildings to promote stair use; passing smoke-free laws; and taxing tobacco, alcohol, and unhealthy foods such as soda and other sugarsweetened beverages.

Cardiovascular disease risk factors (e.g., hypertension) are currently addressed at the individual level through screening and medication. But even assuming perfect treatment, this approach fails to prevent almost half of the disease burden caused by elevated blood pressure; cardiovascular risk increases with systolic blood pressure above 115 mm Hg, a level at which medical treatment is not recommended currently.25,26 Changing the environmental context so that individuals can easily take heart-healthy actions in the normal course of their lives can have a greater population impact than clinical interventions that treat individuals.

For example, modern diets contain many times the minimum daily requirement of sodiummostly from packaged foods and restaurant meals-making it difficult for individuals to control their intake.²⁷ Reducing dietary sodium can reduce hypertension at the population level.^{28,29} A healthier food environment can be created by decreasing salt in packaged foods. This is happening in the United Kingdom, which introduced four-year sodium reduction targets,³⁰ and in Finland, where dietary sodium intake decreased approximately 25% in the past 30 years.31

Long-Lasting Protective Interventions

The third level of the pyramid represents 1-time or infrequent

protective interventions that do not require ongoing clinical care; these generally have less impact than interventions represented by the bottom 2 tiers because they necessitate reaching people as individuals rather than collectively. Historic examples include immunization, which prevents 2.5 million deaths per year among children globally.32 Another example is colonoscopy, which can significantly reduce colon cancer and is only needed every 5 to 10 years for most people. Smoking cessation programs increase quit rates; life expectancy among men who quit at age 35 is almost 7 years longer than for those who continue to smoke.33

Male circumcision, a minor outpatient surgical procedure, can decrease female-to-male HIV transmission by as much as 60%.³⁴ Scale-up could potentially prevent millions of HIV infections in sub-Saharan Africa.^{35,36} A single dose of azithromycin or ivermectin can reduce the prevalence of onchocerciasis, a major cause of blindness.³⁷

Clinical Interventions

The fourth level of the pyramid represents ongoing clinical interventions, of which interventions to prevent cardiovascular disease have the greatest potential health impact. Although evidence-based clinical care can reduce disability and prolong life, the aggregate impact of these interventions is limited by lack of access, erratic and unpredictable adherence, and imperfect effectiveness. Access can be limited even in systems that guarantee health coverage for all³⁸ and is a much greater problem in the United States and other countries without universal health care coverage.^{39,40} Nonadherence is especially problematic for chronic conditions that are

usually asymptomatic, such as hypertension, hyperlipidemia, and diabetes. At least a third of patients do not take medications as advised, and nonadherence cannot be predicted from socioeconomic or demographic characteristics.^{41,42}

Rigorous accountability, incentives for meaningful outcomes (e.g., blood pressure and cholesterol control), and systems to enable improved performance are all essential to improve health care system performance. Electronic health records have the potential-if and only if they are implemented with prevention and accountability as guiding principles-to facilitate greatly improved preventive and chronic care.⁴³ This goal is more likely to be attained if electronic record keeping is implemented along with changes in both financial incentives and physician practices to proactively support preventive care and control of chronic diseases.44

Counseling and Educational Interventions

The pyramid's fifth tier represents health education (education provided during clinical encounters as well as education in other settings), which is perceived by some as the essence of public health action but is generally the least effective type of intervention.⁹ The need to urge behavioral change is symptomatic of failure to establish contexts in which healthy choices are default actions. For example, counterbalances to our obesogenic environment include exhortations to increase physical activity and improve diet, which have little or no effect. More than one third of US adults, or 72 million people, were obese in 2006, a dramatic increase over

1980.⁴⁵ Two thirds of these individuals were counseled by a health care provider to lose weight,⁴⁶ yet daily calorie and fat intake continues to rise.

Counseling, either within or outside the clinical context, is generally less effective than other interventions; successfully inducing individual behavioral change is the exception rather than the rule. For example, although clear, strong, and personalized smoking cessation advice, even in the absence of pharmacological treatment, doubles quit rates among smokers who want to stop and should be the norm in medical care, it still fails to help 90% of those who are motivated to quit.47,48

Nevertheless, educational interventions are often the only ones available, and when applied consistently and repeatedly may have considerable impact. An example of a successful evidence-based educational intervention is trained peer counselors advising men who have sex with men about reducing HIV risk.⁴⁹

PROGRAM IMPLEMENTATION

Comprehensive tobacco control programs, which contain elements that work at all levels of the pyramid, illustrate the potential application of this paradigm and the synergies among different levels of intervention. People with low incomes and low educational attainment have higher rates of smoking than do people with higher incomes and education.⁵⁰ Interventions that address social determinants of health, such as increasing a population's educational and economic status, should therefore reduce smoking rates. However, because these changes often require fundamental social

TABLE 1-Structural Approaches to Health Promotion for Communicable Disease, Noncommunicable Disease, and Injury Prevention

Approaches to Prevention	Communicable Disease	Noncommunicable Disease	Injuries
Counseling and educational interventions	Behavioral counseling to reduce sexually transmitted infections	Dietary counseling Counseling to increase levels of physical activity Public education about avoiding lifestyle-mediated disease	Counseling and public education to avoid drinking and driving and encourage compliance with traffic laws School-based programs to prevent or reduce violent behavior
Clinical interventions	HIV treatment to decrease viral load and reduce transmission Treatment of tuberculosis, resulting in decreased spread of infection	Treatment of hypertension and hyperlipidemia Aspirin therapy for people with coronary heart disease	Methadone and buprenorphine treatment to decrease opiate overdose Screening and treatment of women older than 65 years for osteoporosis to reduce fractures
Long-lasting protective interventions	Immunizations Male circumcision in countries with high HIV prevalence and significant female-to-male transmission Mass antibiotics to prevent or treat tropical diseases (e.g., onchocerciasis)	Colonoscopy Treatment of tobacco addiction Surgical sterilization, intrauterine device insertion, or other long-acting contraception to reduce maternal mortality Dental sealants	Brief behavioral counseling to reduce alcohol consumption Home modification, such as installation of grab bars and handrails, to prevent falls among the elderly
Changing the context	Clean water Reduced indoor smoke pollution from biomass cooking Ubiquitous condom availability	 Trans fat elimination in processed food to reduce cardiovascular disease Sodium reduction in packaged foods and food served in restaurants to reduce cardiovascular disease Fluoridation of water to prevent dental cavities Elimination of lead paint and asbestos exposures Increased unit price for tobacco, alcohol, and sugar-sweetened beverages Smoke-free workplaces Community and transit design to promote greater physical activity 	Road and vehicle design requirements to reduce crashes and protect pedestrians and bicyclists Laws prohibiting the sale of alcohol to minors and increased alcohol price Laws prohibiting driving at even low blood alcohol levels Effectively implementing laws to mandate helmet use by motorcyclists and motorcycle passengers Occupational safety requirements
Socioeconomic factors	Reduced poverty to improve immunity, decreased crowding and environmental exposure to communicable microbes, and improved nutrition, sanitation, and housing	Reduced poverty, increased education levels, and more nutritional options to reduce cardiovascular disease, some cancers, and diabetes	Reduced poverty levels to reduce drug use and violence, improved housing options, and lowered vulnerability to extreme weather conditions

change, they are generally not within the traditional purview of tobacco control or public health programs.

Context-changing interventions, such as increasing tobacco taxes, establishing smoke-free workplaces, and changing the social norms regarding smoking through hard-hitting antitobacco campaigns and elimination of advertising and promotional cues to smoke, are highly effective in reducing tobacco use.⁵¹ Hard-hitting ad campaigns, particularly as part of a comprehensive tobacco control program, not only reduce tobacco use by changing the social context of smoking⁵² but also provide in effect a social immunization against smoking that persists over time. Clinical care that includes cessation medications can triple quit rates in individual smokers, but even the best systems treat only a small proportion of smokers, and only one third of those who are motivated to quit and are treated will succeed.⁴⁸ Education about the harms of smoking provides people with information to help them change their behavior. Other examples of this 5-tiered framework applied to communicable disease, chronic disease, and injury prevention are given in Table 1. Inevitably, some programs blur the distinctions between tiers. For example, mass media campaigns for tobacco control could be viewed as an educational intervention (tier 5), but if done effectively, such actions can change the context by altering the social norms related to tobacco use (tier 2).

PRACTICAL APPLICATION OF THE HEALTH IMPACT PYRAMID

The health impact pyramid, a framework for public health action, postulates that addressing socioeconomic factors (tier 1, or

the base of the pyramid) has the greatest potential to improve health. Interventions that change the context for individual behavior (tier 2) are generally the most effective public health actions; 1-time clinical interventions (tier 3), such as immunizations, can be more effectively applied than those requiring ongoing care; and clinical interventions (tier 4) are generally, although not inevitably, more effective than counseling and education (tier 5).

Although the effectiveness of interventions tends to decrease at higher levels of the pyramid, those at the top often require the least political commitment. Achieving social and economic change might require fundamental societal transformation. Contextual change is often controversial, as evidenced by disputes over smokefree laws, restrictions on artificial trans fat, and water fluoridation.53,54 One-time interventions tend to be less controversial, although immunization programs that attempt to reach all members of a society often meet resistance arising from suspicion and disbelief.55

Although the structure and financing of health care systems can be controversial, clinical care itself rarely is. While exceptions exist, health education usually requires minimal political backing. Hence the greater popularity of schoolbased antismoking programs (despite consistent evidence they provide little to no benefit⁵⁶) than of proven tobacco control interventions such as taxation, smokefree environments, and comprehensive marketing bans. Similarly, exhorting people to exercise more and eat less is politically popular, but taxation of soda and other sugar-sweetened beverages,⁵⁷ bans on marketing junk food to

children, and community redesign to encourage walking and bicycling, although far more effective, are also politically more difficult.

Interventions that address social determinants of health have the greatest potential public health benefit. Action on these issues needs the support of government and civil society if it is to be successful.⁵⁸ The biggest obstacle to making fundamental societal changes is often not shortage of funds but lack of political will; the health sector is well positioned to build the support and develop the partnerships required for change.⁵⁹

To say that social and contextual changes are more effective at improving public health is not to imply that other interventions should be ignored. For different public health problems, different interventions may be the most effective or feasible in any given context. Education to encourage condom use, although of only limited effectiveness, can reduce HIV transmission and save lives. Changing the context to make condoms ubiquitously available and acceptable makes education about their use more effective. Comprehensive public health programs should generally attempt to implement measures at each level of intervention to maximize synergy and the likelihood of long-term success.

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Appendix C MAPPS Interventions for Communities Putting Prevention to Work*

Five evidence-based MAPPS strategies, when combined, can have a profound influence on improving health behaviors by changing community environments: Media, Access, Point of decision information, Price, and Social support/services. The evidence-based interventions below are drawn from the peer-reviewed literature as well as expert syntheses from the community guide and other peer-reviewed sources, cited below. Communities and states have found these interventions to be successful in practice. Awardees are expected to use this list of evidence-based strategies to design a comprehensive and robust set of strategies to produce the desired outcomes for the initiative.

	Tobacco	Nutrition	Physical Activity
Media	 Media and advertising restrictions consistent with federal law. Hard hitting counter- advertising Ban brand-name sponsorships Ban branded promotional items and prizes 	 Media and advertising restrictions consistent with federal law. Promote healthy food/drink choices Counter-advertising for unhealthy choices 	 Promote increased physical activity Promote use of public transit Promote active transportation (bicycling and walking for commuting and leisure activities) Counter-advertising for screen time
Access	 Usage bans (i.e. 100% smoke-free policies or 100% tobacco-free policies) Usage bans (tobacco-free school campuses) Zoning restrictions Restrict sales (e.g. internet; sales to minors; stores/events w/o tobacco) Ban self-service displays & vending 	 Healthy food/drink availability (e.g., incentives to food retailers to locate/offer healthier choices in underserved areas, healthier choices in child care, schools, worksites) Limit unhealthy food/drink availability (whole milk, sugar sweetened beverages, high-fat snacks) Reduce density of fast food establishments Eliminate trans fat through purchasing actions, labeling initiatives, restaurant standards Reduce sodium through purchasing actions, labeling initiatives, restaurant standards 	 Safe, attractive accessible places for activity (i.e., access to outdoor recreation facilities, enhance bicycling and walking infrastructure, place schools within residential areas, increase access to and coverage area of public transportation, mixed use development, reduce community design that lends to increased injuries) City planning, zoning and transportation (e.g., planning to include the provision of sidewalks, parks, mixed use, parks with adequate crime prevention measures, and Health Impact Assessments) Require daily quality PE in schools

		 Procurement policies and practices Farm to institution, including schools, worksites, hospitals, and other community institutions 	 Require daily physical activity in afterschool/childcare settings Restrict screen time (afterschool, daycare)
Point of Purchase/ Promotion	 Restrict point of purchase advertising as allowable under federal law. Product placement 	 Signage for healthy vs. less healthy items Product placement & attractiveness Menu labeling 	 Signage for neighborhood destinations in walkable/mixed-use areas (library, park, shops, etc) Signage for public transportation, bike lanes/boulevards
Price	 Use evidence-based pricing strategies to discourage tobacco use Ban free samples and price discounts 	Changing relative prices of healthy vs. unhealthy items (e.g. through bulk purchase/procurement/ competitive pricing)	 Reduced price for park/facility use Incentives for active transit Subsidized memberships to recreational facilities
Social Support & Services	Quitline and other cessation services	 Support breastfeeding through policy change and maternity care practices 	 Safe routes to school Workplace, faith, park, neighborhood activity groups (e.g., walking hiking, biking)

*Adapted from **Appendix A** of the US Department of Health and Human Services, Centers for Disease Control and Prevention (CDC), American Recovery and Reinvestment Act (Recovery Act), *Communities Putting Prevention to Work*, State Supplemental Funding for Healthy Communities, Tobacco Control, Diabetes Prevention and Control, and Behavioral Risk Factor Surveillance System Funding Opportunity Announcement (FOA)¹

FMI regarding the references that accompany Appendix A, please contact Lori A. Kaley at <u>lkaley@usm.maine.edu</u> or call (207) 626-5258.

¹ Announcement DP09-901 can be accessed at the following CDC internet address:

http://www.cdc.gov/od/pgo/funding/DP09-901.htm (this address redirects you to the grants.gov website which has the original FOA without the appendices attached)

Appendix D: CDC's Recommended Strategies for Obesity Prevention

Communities should do the following:

- 1. Increase availability of healthier food and beverage choices in public service venues
- 2. Improve availability of affordable healthier food and beverage choices in public service venues
- 3. Improve geographic availability of supermarkets in underserved areas
- 4. Provide incentives to food retailers to locate in and/or offer healthier food and beverage choices in underserved areas
- 5. Improve availability of mechanisms for purchasing foods from farms
- 6. Provide incentives for the production, distribution, and procurement of foods from local farms
- 7. Restrict availability of less healthy foods and beverages in public service venues
- 8. Institute smaller portion size options in public service venues
- 9. Limit advertisements of less healthy foods and beverages
- 10. Discourage consumption of sugar-sweetened beverages
- 11. Increase support for breastfeeding
- 12. Require physical education in schools
- 13. Increase the amount of physical activity in physical education programs in schools
- 14. Increase opportunities for extracurricular physical activity
- 15. Reduce screen time in public service venues
- 16. Improve access to outdoor recreational facilities
- 17. Enhance infrastructure supporting bicycling
- 18. Enhance infrastructure supporting walking
- 19. Support locating schools within easy walking distance of residential areas
- 20. Improve access to public transportation
- 21. Zone for mixed-use development
- 22. Enhance personal safety in areas where persons are or could be physically active
- 23. Enhance traffic safety in areas where persons are or could be physically active
- 24. Participate in community coalitions or partnerships to address obesity

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For more information or to download this document, please visit:

http://www.cdc.gov/NCCDPHP/DNPAO/Publications/index.html

Appendix E: A Reasonable Approach to SNAP-Ed Targeting

While the USDA's Food and Nutrition Service (FNS) has facilitated many successes for SNAP-Ed (now NEOP), current *Guidance* has significantly hampered Implementing Agencies' ability to deliver effective nutrition education programming to populations that could benefit greatly from it. Chief among such barriers are the complex and labor-intensive targeting criteria for SNAP-Ed-eligible eligible persons.

Under the 2012 SNAP-Ed Guidance for Plan Preparation (Part II, Section B), FNS specifies three (3) categories of persons eligible to receive State SNAP-Ed activities. Category 1 encompasses all "Certified Eligibles," meaning SNAP participants; categories 2 and 3 are described as "Likely Eligibles" and "Potential Eligibles by Site/Location." To the great frustration of the various Implementing Agencies, the way the various categories are defined and managed renders the great majority of SNAP-Ed eligibles outside the reach of meaningful, effectively scaled SNAP-Ed interventions.

The clause in S.3307, Sec. 241 under "eligible populations" which reads "and other low-income populations as defined by the Secretary" should open the door to targeting approaches that reach a much larger percentage of eligible individuals and thus more cost effective utilization of the funds. In this document, we propose additional criteria and proxy sites that will allow implementing agencies to reach a much greater percentage of eligible groups more cost effectively.

Background:

In 2008 the Association of State Nutrition Network Administrators (ASNNA) issued a request to USDA to change the targeting rules to allow census tracts surrounding any SNAP-Ed-qualifying school, WIC clinic, or high-volume retail store to also qualify for outdoor social marketing. This request was based upon ASNNA's 2007 survey of the nine states which were able to access data on their SNAP-Ed-eligible populations and census tracts These nine states reported that from 44% to 96% of these state's SNAP-Ed-eligible population lived outside of qualifying census tracts (an average of 75%). This trend was particularly pronounced in rural states. For instance, Arkansas, Nebraska, Oregon, Iowa, and Mississippi reported 79.7%, 90%, 90.0%, 92.3%, and 96% of their SNAP-Ed eligible audiences lived outside SNAP-Ed qualifying tracts, respectively.

Additional facts from the survey: an average of 21% of the states' total populations have gross incomes at or below 130% of FPL (Federal Poverty Level), and 32% have gross incomes at or below 185% of FPL. Yet an average of only 18% of total census tracts qualify for SNAP-Ed under existing targeting rules; and only 25% of SNAP-Ed-eligible individuals live in the qualifying census tracts.

ASNNA documented one such limitation of the qualifying census tract approach to qualifying service sites in 2010. Iowa's Nutrition Network was prevented from launching a social marketing intervention for its *Pick a Better Snack* campaign, because 92% of Iowa's SNAP-Ed eligible population lives outside of qualifying census tracts. The use of census tracts, combined with restrictive criteria for use of mass media (television, radio, outdoor), results in an unfair disadvantage for social marketing Nutrition Networks and other providers in rural states.

More recently, the University of Hawaii conducted a nationwide analysis using the American Communities Survey, 2005-2009. It found that USDA census tract criteria structurally exclude about three-quarters of all eligible persons, impacting both urban and rural states. These

criteria will, by definition, prevent states from achieving population effects simply because they cannot serve the great majority of eligible persons. This analysis has been submitted to USDA.

Recommendations:

Targeting rules need to reflect a recognition that

- 1) Implementing agencies fully embrace the need to focus on low-income populations which experience the greatest inequities in health outcomes, and
- Implementing agencies desire to reach the largest number of individuals eligible for SNAP-Ed as cost effectively as possible,
- 3) Systems and environmental change approaches to SNAP-Ed can be effectively targeted to low income individuals, and
- Flexibility is needed in the site approval process so that services can be offered in settings as conditions change and new opportunities become available throughout the year.

Targeting Within the Spheres of the Social Ecological Model

With the points outlined above as a backdrop, ASNNA recommends that the Social Ecological Model be used as a framework for establishing target groups within SNAP-Ed that will help to reach a greater number of eligible persons, achieve maximum impact, reduce administrative costs, and increase efficiency.



Social and Cultural Norms and Values:

- Media. Within this outer sphere of influence, SNAP-Ed programs should target media that are directed to and/or reach significant numbers of eligible individuals. In some instances, the mainstream media outlets may be the most cost effective media resource but at the same time are excluded from SNAP-Ed because they also reach non-eligible individuals. If Media Outlet A will reach 10,000 SNAP-Ed eligible individuals for a cost of \$5,000, and Media Outlet B will reach 12,000 SNAP-Ed eligible individuals at a cost of \$6,000 but also reach 15,000 non-eligible individuals, it is simply a good business practice to utilize Media Outlet B. The current criterion that any media outlet must document that the majority of its audience has income <185% FPL effectively eliminates much of the Caucasian and African-American media, as well as media for children and youth.
- 2. **Opinion Leaders and Other Intermediaries.** There are many instances where opinion leaders or other intermediaries, such as ministers, teachers, principals, health care providers, public figures, elected or appointed public officials, and others regularly make decisions and touch the lives of SNAP-Ed eligible individuals and have the potential to influence the priorities and change the cultural norms within our target population. But before intermediaries who provide services to SNAP-Ed eligible audiences are able to have an impact, they need to be approached as partners and provided with training. As a result, however, their actions can lead to very positive changes in the organizations, communities and lives of eligible families.

Sectors of Influence

- Local and State governments. Local and state governments can often pave the way for changes in non-governmental institutions and the private sector – for example, policies requiring healthy offerings in vending machines or policies providing incentives to use public or active transit often start locally or in states and are later adopted by private employers, businesses, or non-profits. Furthermore, local and state government have a particular responsibility to conduct business in a way that considers particularly the needs and vulnerabilities of low-income groups, so it makes sense to include state and local governments as a target of SNAP-Ed interventions designed to ultimately impact eligible Americans.
- 2. Agriculture. There are many small farmers that would like to sell their farm products to low-resource schools, small stores and value-oriented restaurants, public and non-profit hospitals, and similar venues but need assistance in making the connections needed to get started. Allow as a target group low-income farmers and small- to mid-sized farmers who wish to sell their farm products to institutions serving eligible persons or directly to low-income persons. Allow Implementing Agencies to promote their becoming SNAP-certified, thereby also reducing problems of food deserts in low-income communities.
- 3. **Community Design.** Many low-income communities lack the food and physical activity infrastructures needed for healthy eating and enjoyable, safe physical activity. Implementing Agencies should be encouraged to work with low-income community residents to help them learn how to access other resources and capital, such as redevelopment funds, transportation resources, and grants for upgrading deteriorated community environments.
- 4. **Foundations/Funders**. Increasingly, foundations and non-profit health plans are becoming engaged in issues of obesity prevention and poverty. Implementing Agencies should be encouraged or incentivized to collaborate and share costs to institute needed community or statewide projects without cumbersome pro-rating requirements. Rather, the results of such collaborations, the value of leveraged resources, and shared credit should be used as evidence of appropriate use of SNAP-Ed resources.

5. Industry and food retailers. Chain food stores are where the vast majority of eligible persons shop for food. The current criterion of >\$50,000 in SNAP transactions per month effectively precludes Implementing Agencies from engaging companies system-wide in offering in-store promotion and nutrition education. Implementing Agencies should be encouraged to offer their services and materials to companies. Providing there is a return of value, such as the provision of sales data, company-sponsored promotion or signage, or community donations. Similarly, out-of-home eating is a significant barrier to healthy eating; with new menu labeling laws, Implementing Agencies should be encouraged to work with quick-service and other value-oriented restaurants to promote the purchase of healthy choices by lower-income customers, including children and youth.

Environmental Settings

As previously noted, FNS provides two categories of proxy qualifications: income and location. The income-based proxy covers individuals who live \leq 130% of the FPL; location-based proxy covers individuals at food banks, food, pantries, soup kitchens, public housing, and SNAP/TANF job readiness programs. Additionally, FNS provides a third category of eligibility (use of which requires a waiver) – "potentially eligible by site/location" to reach individuals at "venues primarily frequented by low-income audiences" when "it is not possible or practical to separate out Program eligibles and/or identify Program eligibility." Current *Guidance* requires that these waiver sites include

"1. A site/location that serves low-income persons. At least 50% of those persons should have incomes at or below 185% of poverty.

2. Retail grocery stores with average monthly levels of \$50,000 in SNAP benefit redemptions."

While the identification of census tracts with >50% \leq 185% FPL is not explicitly stated as the qualifier in Waiver Category 1, this is the interpretation overlaid by USDA regional offices on waiver requests. However, services provided to low-income individuals and families are not always located in such census tracts, so the end result is that SNAP-Ed service sites used under waiver are required to be in a qualifying census tract **and** the physical addresses of sites where implementing agencies wish to provide services must be submitted with the annual plan **or** other qualifying income or program data must be identified and produced for the plan. In order to significantly reduce the time spent on qualifying SNAP-Ed service sites, we recommend that the following be expressly listed as qualifying sites, that Implementing Agencies be encouraged to identify all such locations, and that the requirement for pre-approval for changed locations during the year be eliminated :

- Homeless Services Sites (alternative school sites, shelters, non-profit homeless onestop centers, etc.)
- Public Health Clinics (operated by public health jurisdictions and federally qualified health centers)
- Resource centers and other "one stop" public/private service sites intended to assist low income individuals and families in accessing services and achieving self-sufficiency
- Zero population census tracts adjacent to eligible census tracts
- Child care centers and alternative school sites (exclusive of charter schools that don't otherwise qualify) in school catchment areas that meet the free and reduced school meal density criteria
- Domestic violence shelters and group transition homes (women escaping violence and/or transitioning from drug treatment or incarceration)
- Any site that provides means tested services and which reports a client population density of 50% or more at or below 185% of the FPL

- Bus routes that originate and end in eligible census tracts (for interior and exterior bus placarding purposes) or that serve the highest proportions of low-income riders.
- Other targeting approaches, including those drawn from commercial marketing and social marketing practice.

Individuals

Retaining the ability to target groups with a likelihood of SNAP-eligibility in order to reach those individuals who are indeed SNAP recipients and those who experience income instability such that they may be SNAP eligible in any given month is critical. Research published over the past decade indicates that individual weight and health outcomes are strongly influenced not just be individual behavior and heredity, but by factors in their social groups and neighborhoods. For this reason, SNAP-Ed should continue to be available to individuals through

- Direct, individual education through person-to-person instruction and multi-media applications
- Direct, group education, again through person-to-person instruction and multi-media applications
- Vertically-integrated, multi-level interventions and campaigns that target low-income individuals in worksites, schools, other community institutions, neighborhoods, cities, counties, states, regions and nationally.

Among the stated concerns of regional offices reviewing state plans is the issue of "duplication" in the delivery of SNAP-Ed services. Individual behavior change is far more likely to occur when individuals are reached with information in multiple formats on multiple occasions over extended periods. We recommend that FNS adopt the following principle:

- FNS encourages a collaborative approach, planning, program quality and scale among all agencies delivering SNAP-Ed services, while discouraging inadvertent duplication. An example of this approach: three Implementing Agencies working cooperatively at a large church site where one specializing in direct nutrition education would deliver a series of nutrition classes to members, another which focuses on food security would work with the church's food pantry to help develop sustainable approaches to improving nutrient density of the foods offered, and a third specializing in working with youth would engage them in nutrition projects in the community. Under such circumstances, FNS would expect collaborative evaluation of the effectiveness of the collective efforts.
- For the purposes of SNAP-Ed guidance, duplication is defined as more than one implementing agency offering the same services to the same person/s.

Similar examples for other community channels such worksites, schools, resource centers and other locations are easy to envision.

It is the goal of ASNNA and its members – the states' Implementing Agencies – to work with FNS to have the greatest possible impact in improving the nutritional well-being and reducing rates of obesity and chronic diseases among low income Americans. We are far more likely to achieve this goal with more cost effective targeting that reaches a much greater percentage of eligibles.