

FY 2012 PENNSYLVANIA NUTRITION EDUCATION TRACKS
Programming Tracks: Goals, Objectives, Interventions, Evaluation & Collaboration

Language in the SNAP-Ed Guidance refers to interventions as “Projects”. In PA SNAP-Ed, the term “Track” describes a statewide intervention implemented by local partners (i.e., in PA a Track is a project) and detailed in Section D. Three life-cycle based programming tracks, developed cooperatively by the Management Entity of the PA Nutrition Education TRACKS (TRACKS) and local partners (LP), are presented here. Goals and objectives include key behavioral outcomes from the *Guiding Principles* and *SNAP-Ed Plan Guidance*, as well as others based on *2005 Dietary Guidelines for Americans* and *MyPyramid*.

Adult/Senior Track - The Adult/Senior Track is the project implemented across Pennsylvania for provision of nutrition education to Supplemental Nutrition Assistance Program (SNAP) eligible individuals aged 18 and older. Caregivers with dependent children are the primary audience with other eligible audiences served as well.

School-Age Track - The School-Age Track is the project implemented across Pennsylvania for provision of nutrition education to SNAP eligible children aged 5-17, or those in Kindergarten through 12th grade. Caregiver involvement with activities in this Track is encouraged to enhance the possibility of reaching SNAP eligible women with children.

Preschool Track - The Preschool Track is the statewide project for provision of nutrition education to preschool age children from SNAP eligible families. Caregivers are also targeted since they have the primary responsibility for food choice for preschool children.

Adult/Senior Track

1. Description of Track/Intervention

(a) Adult/Senior Track Goals and Objectives - All nutrition education goals and objectives specific to the adult/senior programming track are outlined in this section; these are related to statewide goal #1 – Implementation of the Programming Tracks.

Goal 1: Adopt behaviors consistent with current USDA guidance outlined in *MyPyramid* and *2005 Dietary Guidelines for Americans*.

Objective 1: Consume or intend to consume recommended amounts and variety of fruits daily

Objective 2: Consume or intend to consume recommended amounts and variety of vegetables daily

Objective 3: Consume or intend to consume recommended amounts of whole grain foods daily

Objective 4: Consume or intend to consume recommended amounts of low-fat calcium-rich foods daily

Objective 5: Be or intend to be physically active every day as part of a healthy lifestyle

Objective 6: Balance or intend to balance calorie intake from foods and beverages with calories expended

Objective 7: Choose or intend to choose a diet with adequate fiber

Objective 8: Use or intend to use the food label or package to make healthy food choices

Objective 9: Consume or intend to consume a diet low in saturated fat, trans fat and cholesterol and moderate in total fat

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Objective 10: Choose or intend to choose beverages and foods to moderate intake of sugars

Objective 11: Adopt or intend to adopt food safety practices

Goal 2: Adopt behaviors that stretch food resources.

Objective 1: Use or intend to use shopping strategies to stretch food dollars

Goal 3: Adopt cognitive eating behaviors compatible with good health.

Objective 1: Increase practice of eating competence constructs

(b) Audience

The primary target is caregivers with dependent children. Secondary adult audiences (e.g. seniors) are also served. Participant demographics served by this Track vary depending on geographic location and programming site (such as senior centers vs. public housing). TRACKS Statewide Needs Assessment (Appendix 1) provides specific demographic characteristics of the target audience.

(c) Focus on SNAP Eligibles

TRACKS intervention sites are chosen to maximize reach to SNAP eligibles. The number of County Assistance Offices (CAOs) selected as programming sites increased in FY 2011, demonstrating increased targeting to SNAP eligibles. Category 2 sites such as food pantries and low income housing are additional examples of sites in which interventions are delivered.

(d) Track Description

This Track includes direct and indirect education strategies. Project implementation features are described in each local partner Statement of Work (such as key messages, duration, projected participants served, and total number of contacts) found in Binder 2.

Direct education. Delivery approaches include series or single session group classes, one-on-one education, and small group problem-based learning classes using curricula listed in section 1g. Engaging the target audience through experiential approaches is encouraged.

TRACKS About Eating. Online modules consisting of 4-7 lessons that focus on the core constructs of the Satter eating competence model: eating attitudes, food acceptance, regulation of food intake and contextual skills (e.g. meal planning). Lessons provide education on enjoyment of meals, encouraging consumption of a wider variety of foods, self-trust to manage food and eating, and other related topics (such as weight satisfaction and physical activity). This online intervention will provide a means for consistent, repeated exposure to nutrition education for the TRACKS adult audience, a group that is often difficult to reach for face-to-face series classes.

Indirect education. Education disseminated via digital photo receiver (DPR) programs, community events, food tastings, and printed materials such as newsletters, fact sheets, or *State Nutrition Action Committee (SNAC)* materials will be provided to supplement direct interventions or as a means of recruitment.

(e) Summary of Research

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Adult/Senior Track nutrition education methods include single and series classes, one-on-one individual sessions, multimedia (online modules), community health fairs, food demonstrations and tastings, and distribution of educational materials such as handouts, fact sheets, and newsletters. Most local partners delivering Adult/Senior Track programming use several of these strategies to address their nutrition education objectives. Presenting nutrition information using several different methods allows informational and experiential approaches. Research conducted with the Maryland WIC *Food for Life* program supports this approach (1).

Isobel Contento outlines several educational strategies that support meaningful learning for adults (2). First, provide information that will be immediately useful for the learner. Many local TRACKS partners conduct single classes on one main nutrition objective, message, or behavior, such as how to read the food label while food shopping to help make healthier choices. Some local partners provide food pantry clients with newsletters that contain low-cost recipes incorporating food pantry items. A second strategy that supports meaningful learning is to recognize that adult learners are the decision makers in their own lives and often the nutritional gatekeepers for their families (2).

Building on previous experience and knowledge is also an important educational strategy for this audience. Series classes allow participants to build on previous information and skills learned in prior sessions while key nutrition messages are continually reinforced. Sequencing the learning tasks from simple to more complex, including observations and opportunities for participants to practice can be another effective method for educating adults (2). Food demonstrations and tastings are an integral component of TRACKS' direct and indirect education programming whereby participants have the opportunity to develop skills that address nutrition objectives. For example, demonstration of a simple, low-cost recipe fosters increased consumption of fruits and vegetables.

The Satter Model of Eating Competence (ecSatter) is a biopsychosocial model that addresses intrapersonal approaches to eating and food-related behaviors. Previous research suggests that interventions to enhance eating competence of low-income adults are needed and would be well-received (3). The Adult/Senior Track includes an online curriculum, *About Eating*, based on the constructs of ecSatter. Nineteen low-income adults evaluated this curriculum via the internet during FY 2008. Participants rated it as interesting (87%), useful (84%), well-designed (90%), of appropriate length (96%), easy to read (91%) and easy to navigate (97%). Only 35% of the 19 participants were considered eating competent supporting the need for nutrition education to enhance eating competence (4). Accessibility of online nutrition education for the target audience is supported by cognitive interview findings from TRACKS formative evaluation. Findings revealed that 80% of low-income persons interviewed had access to the internet at home or another location (5).

(f) Modification of Track Methods/Strategies

About Eating web module revisions will be based on findings from the USDA funded Demonstration study that was completed in FY 2011 to include existing module revision and addition and testing of two new modules based on weight satisfaction and weight

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management. Work will begin on tailoring *About Eating* to address the unique implementation needs of those with low versus high eating competence.

DPR modifications to include: *A Guide to Healthy Foods and Herbs* will be translated to Spanish, *Shop for Folic Acid* will be updated and a program on sodium intake will be initiated.

(g) Use of Existing Educational Materials

Curricula and supporting materials listed in the table below will be used to provide direct and/or indirect nutrition education to the target audience.

TITLE	AUTHOR/ DEVELOPER	DESCRIPTION
ADULT/SENIOR TRACK CURRICULA		
<u><i>About Eating</i></u>	Barbara Lohse, PhD – PSU	5 web based lessons that address the core constructs of the eating competence model: eating attitudes, food acceptance, internal regulation of food intake, eating context (meal planning), and an additional lesson focused on the importance of physical activity. English only. Cost: None
<u><i>A New You: Health for Every Body</i></u>	Wellness in the Rockies	10-lesson curriculum based on Health at Every Size model and non-diet approach; involves group discussion, journaling. English only. Cost: None to download, CDs \$25
<u><i>Eating Smart, Being Active</i></u>	Colorado State and UC-Davis EFNEP	8 lessons for caregivers that focus on nutrition and physical activity. Topics include exercise, food resource management, vegetables, whole grains, calcium, limiting high sugar/fat/salt-containing foods, lean protein, & healthy snacks. English only. Cost: \$51.96 for Educator Guide
<u><i>Eat Smart. Live Strong</i></u>	USDA/FNS	4 lesson behavioral intervention for adults ages 60-74; focuses on fruit and vegetable consumption and physical activity. English only. Cost: None
<u><i>FRIDGE (Food Related Inter-generational Discussion Group Experiences)</i></u>	Matt Kaplan, PhD -Penn State University (PSU)	Program involving multiple generations within the family with the goal of fostering better communication and healthier food choices English only. Cost: None
Healthy Living	Barbara Myers, RD	10 lesson curriculum focusing on nutrition and physical activity for older adults; intended for group classes. English only. Cost: None
<u><i>Loving Your Family, Feeding Their Future, Nutrition Education Through the Food Stamp Program</i></u>	USDA/FNS	4 discussion sessions covering nutrition and physical activity; includes staff support materials, participant handouts. Materials targeted and designed for English and Spanish speaking caregivers with children ages 2-18. In English & Spanish. Cost: None
<u><i>Money for Food</i></u> (Oct 2007 ed.)	University of Wisconsin Cooperative Extension	13 lessons focusing on food resource management and food security. English only. Cost: None

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MyPyramid	USDA	Official USDA food guidance; graphic representation of principles of the 2005 Dietary Guidelines; tracker feature gives guidance tailored to the user's gender and age; In English & Spanish. Cost: None
Seniors Eating Well	Lynn James, PSU Cooperative Extension	9 lessons on nutrition & health for middle-aged and older adults. Lessons are 45 minutes; include visuals, recipes, & evaluation tools. Do not use 5 –A-Day handouts. English only. Cost: \$40
Shopping Matters	Share Our Strength	An interactive, guided grocery store tour that teaches adults to make real changes to their food shopping habits by helping families learn how to make healthy food choices on a limited budget. This facilitator-led tour covers four main objectives: identify at least 3 economical ways of purchasing fruits and vegetables; practice comparing unit prices; practice comparing food labels and practice identifying whole grains. English. Cost: None
Simply Good Eating	University of Minnesota Cooperative Extension	Comprised of four units: For Moms & Kids, For Seniors, For Health, and Now You're Cooking! Lessons focus on nutrition and physical activity as part of a healthy lifestyle and cooking on a limited budget. The Moms & Kids section <i>Baby Feeding Tips that Really Work</i> is not approved for TRACKS. English only. Cost: \$97.00 for entire curriculum, units sold separately.
ADULT/SENIOR SUPPORTING EDUCATIONAL MATERIALS		
Be Active, Healthy and Happy!	USDA/ DHHS	8 chapter resource guide that outlines the 2008 Physical Activity Guidelines for Americans; An accompanying toolkit also contains posters, flyers, and fact sheets that promote and explain the guidelines. English only. Cost: None
Digital Photo Receiver programs	Barbara Lohse, PhD, RD Robin Rifkin, MS <i>Kansas State University, funded in part by USDA</i>	A Guide to Whole Grain Foods (Eng/Sp) A Guide to Eating Well (Eng/Sp) A Guide to Healthy Foods and Herbs (Eng) Breakfast is Smart* (Eng) Shop for Folic Acid (Eng/Sp)* *Kansas State University programs In English & Spanish. Cost: None
Finding Your Way to a Healthier You	USDA/ DHHS	80 page book with the complete 2005 Dietary Guidelines. Addresses dietary quality, energy balance, food labels, food safety, and alcohol use. English only. Cost: None to download; \$12.50 for 1 copy; \$106.00 for 25 copies.
Fruits and Veggies: More Matters -CDC site -PBH site	CDC/DHHS/ NCI/ Produce for Better Health Foundation	Previously 5-a-Day sites; promote fruit and vegetable consumption; feature nutrition information & resources for professionals. English only. Cost: None
Good Food in Action Toolkit	USDA and SNAP-Ed projects in California	20 min. DVD demonstrating quick low-cost food preparation, poster display, brochures containing nutrition and food resource management tips, recipe cards, and resource guide; In English & Spanish. Cost: Contact PA NEN

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Health Promotion Council's Low Literacy Educational Materials	Philadelphia's Health Promotion Council	Food For Health newsletters, lessons, and fact sheets that address fat, calcium, sodium, food safety, healthy weight, fruits, vegetables, label reading; In English & Spanish. Cost: None
Make Your Calories Count	FDA/DHHS	An online training module that reviews the Nutrition Facts label. English only. Cost: None
My Child, My Choices: Healthy eating when you are pregnant	University of Wisconsin-Extension	Colorful booklet for pregnant adolescents about nutrition, weight gain, taking care of self and baby, building decision-making skills. English only. Cost: \$5.65 per copy.
MyPyramid for Older Adults	University of Florida IFAS Extension	Adaptation of <i>MyPyramid</i> for use with older adults. The mini-poster outlines the <i>2005 Dietary Guidelines for Americans</i> that are specific to older adults; English only. Cost: \$15/pkg of 50.
<i>MyPyramid</i> handouts	Universities of Missouri & Florida ; Food and Health Communications	Power Point slides, handouts, lesson plans for teaching <i>MyPyramid</i> ; items for teaching adults/youth; English only. Cost: None for MO & FL materials; variable cost for Food and Health materials.
Pick a Better Snack	Iowa Dept. of Public Health	Newsletters, recipes, focused on increasing fruit and vegetable consumption; participants can subscribe to website and receive "Food, Recipe, Activity of the Week". In English/Spanish. Cost: None
State Nutrition Action Committee (SNAC) materials	PA NEN, PA Depts. of Public Welfare, Ed., Health, Ag., Aging, WIC	Downloadable newsletters, display materials for promotion of vegetables. Follows "Vegetable of the Month" format; includes information on purchase, storage, cooking, growing, and nutrition highlights of each vegetable. In English/Spanish. Cost: None
Stretching your Food Dollars	University of Wisconsin Cooperative Extension	Activity sheets and handouts that focus on food resource management. Includes recipes and money saving tips. English only. Cost: \$3.00
The Fruit and Vegetable Connection Magazine & Fruit and Vegetable Express Bites Website	Funded through a multi-state grant by USDA	Magazine format material for young adults; content based on Stages of Change model; focus on fruit and vegetable consumption and physical activity. English only Website provides interactive module providing assessment of and education on fruit and vegetable intake; In English Cost: None

(h) Development of New Educational Materials

New material development is not planned.

(i) Key Performance Measures/Indicators

Behavioral intention and/or mediators of behavior, such as knowledge and self-efficacy, will be assessed as outcome indicators for objectives listed in section 1a above.

2. Evaluation Plans

(a) Process Evaluation

Process evaluation data, including education intervention and audience demographic information, will be collected via the STARtracks system from all TRACKS partners.

(b) Outcome Evaluation

Eat Smart, Live Strong. Lesson feedback, as well as, fruit, vegetable, and physical activity intended behaviors will be collected using an adapted version of the Participant Feedback Sheet included in the FNS *Eat Smart, Live Strong* Activity Kit.

Post/Retrospective-Pre Evaluation Tools. A post/retrospective-pre protocol will be used to assess behavioral objectives related to food resource management, calcium intake, and food safety for TRACKS education delivered as single classes or individual classes within a series. Research suggests this methodology can extend the learning process by providing a means for participant self-reflection on behaviors targeted by an intervention and for reinforcement of self-efficacy (6). Administration of a retrospective pretest also reduces educator and respondent burden and provides more complete evaluation datasets (7) (8). After receiving education, a topic-specific survey will be completed; participants will report behavioral intention and (retrospectively) their previous behavior. The Theory of Planned Behavior (9) is the theoretical basis for measuring intention as a means of predicting future behavior. A Spanish language version of the food resource management survey is available.

Newsletter Surveys. The FY 2009 revised newsletter survey will be used to elicit client reported behavior changes resulting from newsletter programming, and to provide client feedback for TRACKS partner use in developing locally tailored newsletters. Newsletter surveys are customizable by local partners to obtain feedback on specific recipes included in newsletters and to provide information on direct education opportunities in their service area, thus facilitating recruitment for more in-depth education.

(c) Formative Evaluation

New or revised evaluation tools will be formatively tested with the target audience by cognitive interviewing, focus groups, web-based interviewing, or other qualitative methods (10).

About Eating. Baseline eating competence status will be assessed with online administration of the Satter Eating Competence Inventory for Low-Income Audiences. *About Eating* web module revisions will be based on findings from the USDA funded demonstration study that was completed in FY 2011 to include existing module revision and addition and testing of two new modules based on weight satisfaction and weight management. Work will begin on tailoring *About Eating* to address the unique implementation needs of those with low versus high eating competence. These projects will undergo expert review and formative assessment with SNAP-Ed eligible adults. Additional formative assessment will include interviews with participants to discuss cultural relevance, perceived utility, etc. of the *About Eating* modules.

TRAILS For Males. Needs assessment data collected from SNAP males in FY 2011 will inform development of a TRAILS (Tracks Ready to Adopt & Implement Learning Structure)

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for a male audience. Formative testing of nutrition education content and delivery methods will be conducted as part of this activity.

3. Coordination Efforts

Refer to the **Statewide Coordination Efforts** section following the **Preschool Track**.

School-Age Track

1. Description of Track/Intervention

(a) School-Age Track Goal and Objectives - All nutrition education goals and objectives specific to the school age programming track are outlined in this section; these are related to statewide goal #1 – Implementation of the Programming Tracks.

Goal 1: Goal 1: Students will comprehend concepts consistent with USDA guidance related to eating and physical activity for good health.

Objective: As a result of Pennsylvania's SNAP-Ed plan, students will know, understand, analyze, and apply concepts, as developmentally appropriate, that are consistent with USDA guidance about the benefits of:

1. Eating a variety of whole grain products, fruits and vegetables, low fat milk, and calcium-rich foods for meals and/or snacks,
2. Eating from each food group every day,
3. Eating foods that are high in fiber,
4. Drinking plenty of water,
5. Eating breakfast every day,
6. Eating healthy snacks,
7. Practicing food safety,
8. Balancing calorie intake with calories expended,
9. Being physically active every day as part of a healthy lifestyle.
10. Limiting foods high in fat, sodium and added sugar.

Goal 2: Students will apply skills consistent with USDA guidance related to eating and physical activity for good health.

Objective: As a result of Pennsylvania's SNAP-Ed plan, students will be able to:

1. Assess personal health practices.
2. Develop a goal to adopt, maintain, or improve a personal health practice.
3. Plan strategies for performing health-enhancing practices.
4. Make a commitment to improve health.
5. Choose strategies to overcome barriers to action.
6. Monitor progress in achieving desired health practices and outcomes.

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7. Measure accomplishment in meeting health outcomes.
8. Analyze the influence of personal values and beliefs on personal health practices.

Healthy behavior outcomes:

- Achieve personal goals related to eating for health.
- Achieve personal goals related to physical activity.
- Select foods for healthful eating.
- Prepare foods in healthful ways.
- Enjoy eating at meal and snack times.

Goal 3: Caregivers will be able to access materials that will reinforce concepts to their school-age children related to eating and physical activity for good health.

Objective: As a result of Pennsylvania's SNAP-Ed plan, caregivers will:

1. Access valid, reliable and appropriate resources that promote health.
2. Analyze socio-cultural influences (such as family, community) on personal health practices.
3. Analyze the influence of personal values and beliefs on personal health practices.

Healthy behavior outcome: Support their children's adoption of healthful eating and physical activity behaviors.

(b) Audience

The primary target audience for this Track is children ages 5-17 (K-12th grade). Many TRACKS partners include education of caregivers in their school-age programming to address family nutrition behaviors and enhance reach to adults. Caregiver education is a required component of the School-Age Track. TRACKS Statewide Needs Assessment (Appendix 1) provides specific demographic characteristics of the target audience.

(c) Focus on SNAP Eligibles

Eligible schools (i.e. those with $\geq 50\%$ free/reduced lunch enrollment) are primary target delivery sites for this Track.

(d) Track Description

This Track includes both direct and indirect education strategies. Project implementation features are described in each local partner's Programming Summaries and Statements of Work (such as key messages, duration, and projected participants served and total number of contacts).

Direct education. School age education can be provided during the school day and/or in after school settings. Delivery approaches include series or single session classes (often incorporating games and/or food tastings) and brief, focused individual one-on-one education that may stand alone or may be used to reinforce messages delivered in other settings. School gardens and school markets are sometimes used as venues for experiential learning opportunities. Multimedia approaches incorporate web-based educational activities, computer games, video presentations, music, performance art, or other "non-traditional" educational

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elements (e.g. storytelling). Assembly programs provide a means for reaching large groups at a relatively low cost per student. In order to extend and reinforce messages provided by these delivery approaches, follow up classes integrated with state education standards are conducted by classroom teachers. TRACKS School-Age Track direct education also includes a statewide core intervention.

Core Intervention. TRACKS established a core intervention for 4th grade students in FY 2009 informed by results from previous TRACKS evaluation (Gromis, Wall, Lohse, et al, 2008). The intervention consists of 4 lessons about vegetables; 3 lessons are from USDA's Team Nutrition *MyPyramid for Kids* curriculum with an additional lesson that reinforces vegetable subgroups. Food tastings accompany all lessons. Lessons align with the Pennsylvania Department of Education (PDE) standards. Primary objectives are to increase knowledge and consumption of vegetables. Effectiveness of this intervention in changing students' vegetable-related attitudes, self-efficacy, food preference, and knowledge was evidenced in a two year impact evaluation study conducted in FY 2009 and 2010 (11).

TRAILS For Bones is a compilation of existing nutrition education materials repurposed for SNAP-Ed and structured to include all needed materials for lesson delivery, including a teacher guide with explicit instructions and guidance for implementation. Previous experience has shown that packaging nutrition education materials in this way results in ease of program implementation and consistency of lesson delivery by local partners. *TRAILS For Bones* consists of four lessons for middle school students that address the importance of adequate calcium intake.

Indirect education is provided to students or caregivers via community events, food tastings, and printed materials such as newsletters or fact sheets. Posters, bulletin board displays, or classroom TV programming are used in tandem with classroom or after school programming to reinforce messages. Digital Photo Receivers (DPRs)/videos are "learn-while-you-wait" options in locations where students normally wait, such as a nurse's office or cafeteria line.

(e) Summary of Research

School-Age Track methods include a variety of direct and indirect education strategies including single and series classes, assemblies, food demonstrations, taste testing, school gardens, nutrition education reinforcements, and multimedia. TRACKS school-age interventions employ both the Social Cognitive Theory (SCT) and the social-ecological model. SCT is the most widely used theory for the development of nutrition education and health behavior programming, providing not only a framework for understanding determinants of behaviors, but also a description of potential mediators of behavior change (2). In line with FNS guidance that SNAP-Ed interventions are behaviorally focused and science-based (SNAP-Ed Guidance, pg 5), the constructs of SCT are applied in the School-Age Track. Behavioral capability is improved through the provision of nutrition knowledge and cognitive skills through various means (such as posters, handouts, demonstrations, multimedia, gardens, etc.). Development of behavioral skills such as cooking or food purchasing reinforces nutrition knowledge (2). Findings from a recent literature review of studies involving garden-based nutrition education programs for school-age children, suggest that these programs may have potential to increase fruit and vegetable consumption among

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school-age participants (12). Several TRACKS local partners apply this theory construct through the delivery of nutrition education classes that include a cooking and/or gardening component in which students learn about a nutrition concept but also gain hands-on experience. Another SCT construct, observational learning/modeling, is utilized when a nutrition educator conducts a food demonstration and provides an opportunity for school-age participants to practice the recipe (2). Food demonstrations are widely used in PA SNAP-Ed to reinforce nutrition education concepts taught in the classroom.

Self-regulation/self-control involves goal setting, problem solving, and goal review (2). TRACKS applies this SCT construct in the Statewide Fourth Grade Vegetable Core intervention through a goal setting activity in which the students specify a vegetable they would like to try and name actions that will support them in meeting this goal. Reinforcements, such as rewards or incentives, are also included in the SCT as potential mediators of behavior change (2). Many TRACKS local partners distribute nutrition education reinforcement items of nominal value as a means of external reinforcement of a nutrition message delivered during a class. SCT's construct of self-efficacy describes the importance of an individual's confidence in carrying out an intended behavior or overcoming barriers to achieving the behavior. Practice application may involve assisting individuals in successfully making a change through small steps such as providing opportunities for modeling or mastering a behavior (2). To improve self-efficacy relating to the preparation of vegetables as healthy snacks, students measure vegetables for a recipe while learning about recommended cup amounts from *MyPyramid* as part of the TRACKS Statewide *Fourth Grade Vegetable Core* intervention.

School-Age Track programming also utilizes the social-ecological model that outlines the multiple levels of intervention for nutrition education (2). TRACKS programming intervenes at all levels from individual to policy and systems. Through direct education programming, individuals gain knowledge of nutrition through experiential learning. In addition, most TRACKS local partners now offer a caregiver nutrition education component (through classes, newsletters, websites, etc) that fosters learning at the intrapersonal level (e.g. family). Nelson, Lytle, and Pasch found that parental nutrition knowledge of energy balance was a significant predictor of adolescent knowledge (13). TRACKS local partners include school districts and community organizations thus representing the institutional, organizational, and community level of the socio-ecological model. Finally, policy and systems level is represented through the partnership between the TRACKS and DPW in implementing and administering SNAP-Ed in Pennsylvania.

TRACKS indirect education will continue to utilize DPRs for delivery of nutrition education messages. DPRs have been shown to be a feasible and useful method of nutrition education in Pennsylvania. WIC participant feedback indicated that DPRs were easy to read and understand and a good way to learn about nutrition. Site coordinators were supportive of using DPRs in their clinics and observed participant interest in viewing the shows (14) (15). DPR content will continue to target caregivers of school-age children and focus on the importance of family meals and making time for meals. Recent Project EAT (Eating Among Teens) findings revealed that family meals were positively associated with adolescent fruit and vegetable intake and negatively associated with soft drink consumption. Family meals

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may improve dietary quality of adolescents through parental role modeling and/or the availability of foods adolescents may not otherwise choose on their own (16). Regular family meals are also associated with increased frequency of breakfast, lunch, and dinner for males and increased frequency of breakfast and dinner meals for females 5 years later (17).

(f) Modification of Track Methods/Strategies

In FY 2009, FNS (USDA) released the publication *Maximizing the Message: Helping Moms and Kids Make Healthier Food Choices* that outlined 16 audience-tested core nutrition messages for use in the Federal nutrition assistance programs. Four of these messages are for mothers of elementary school-aged children, and five messages are for 8-10 year old children. TRACKS local partners are encouraged to incorporate FNS core nutrition messages into direct and indirect education programming (e.g. classes, bulletin boards, and newsletters) for SNAP-Ed school-age participants and their caregivers.

DPR programs for school-age children and their caregivers will be created from existing nutrition education materials and made available for partner use. Topics will relate to making time to prepare and eat healthy meals, encouraging families to eat together at meal times, and positive messages related to role modeling healthy eating and physical activity behaviors. Target audience and TRACKS staff feedback will be gathered to guide this process.

(g) Use of Existing Educational Materials

Additional curricula and/or supporting materials listed after *School-Age Track Initiatives* in the table below will be used to provide direct and/or indirect nutrition education that supplements the core intervention or that occurs in settings not conducive to core intervention delivery.

TITLE	AUTHOR/ DEVELOPER	DESCRIPTION	CAREGIVER MATERIALS INCLUDED
SCHOOL-AGE TRACK INITIATIVES			
Statewide 4 th Grade Vegetable Core Intervention	PA Nutrition Education TRACKS (USDA funded)	Four lesson for 4 th graders that focus on the benefits of the vegetable group and its subgroups; food tastings accompany each lesson and introduce a variety of vegetables to students; lessons align with PDE academic standards. English only. Cost: None	
Maximizing the Message: Helping Moms and Kids Make Healthier Food Choices	FNS, USDA	A guidebook outlining 16 audience-tested core nutrition messages for use in the Federal nutrition assistance programs. Four of these messages are for mothers of elementary school-aged children, and five messages are for 8-10 year old children. English only. Cost: None.	✓
TRAILS For Bones	PA Nutrition Education TRACKS (USDA funded)	A ready-to-use nutrition education intervention consisting of four lessons that address the importance of calcium for middle school students. In English. Contact the ME for more information (patracks@psu.edu).	
SCHOOL-AGE ADDITIONAL CURRICULA			

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BodyWorks	Office on Women's Health, U.S. Dept. of HHS	10 session program for caregivers of adolescent females focusing on good nutrition, family food and physical activity habits, dialogue between caregivers and teens; teens attend 2 of 10 sessions. English only. Cost: None	✓
Book in A Bag	Kansas State University Extension	Curriculum using age-appropriate storybooks with food-related themes, hands-on food and nutrition activities. Each lesson is centered around the food groups of MyPyramid, family times or mealtimes and includes an activity, recipes and a Dear Parent letter. English only. Cost: None	✓
California Children's—Power Play! Campaign	CA Dept of Health Care Services and CA Dept of Public Health	10 lesson plans and classroom activities for 4 th and 5 th grade students. Includes parent tip sheets and teacher resource kits that promote fruit and vegetable consumption. In English & Spanish. Cost: None	✓
Choice, Control, & Change (C3)	Teachers College Columbia University	C3 is a module from Linking Food and the Environment (LiFE) curriculum series, an inquiry-based approach to teaching science and health concepts. C3 is targeted to 6-8 th grade students. English only. Cost: \$30 for teacher guide	
Cooking With Kids	Lynn Walters and Jane Stacey	The program contains 3 spiral-bound, black and white curriculum guides and student journals (grades K-1, grades 2-3, and grades 4-6) which can be purchased individually or as a complete set. Engages elementary school children in hands-on learning with fresh and affordable food items from diverse cultures. Available in English and Spanish. Cost: \$150 for full set or \$55 for one grade	
EAT.RIGHT. NOW.	Compiled from various sources by the School District of Philadelphia	K-12 curriculum focusing on MyPyramid, healthy breakfast, snacks, beverages, calcium, fruits and vegetables, whole grains, food safety; lessons grouped by grade level; include lesson plans, worksheets. English only. Cost: None	✓
FRIDGE (Food Related Inter-generational Discussion Group Experiences)	Matt Kaplan, PhD -Penn State University	Program involving multiple generations within the family with the goal of fostering better communication and healthier food choices. English only. Cost: None	✓
Growing Healthy Habits	University of Maryland Extension	The curriculum consists of nine units. Each unit contains introductory materials for the teacher, four lessons, and associated handouts. One lesson per unit includes a healthy recipe demonstration, making use of garden produce when available. English only. Cost: None	

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Horizon Student Nutrition Guide	Horizon Software International	Horizon Student Nutrition Guide is a comprehensive interactive nutrition and activity education resource for grades K-12 using the CDC National Health Education Standards and state standards from all 50 states. English only. Cost: \$99 for pkg	
Kids Café	Commission on Economic Opportunity	18 lesson after school curriculum for grades 1-6 with focus on food safety and nutrition; lessons include interactive games. English only; Cost: None	
Media Smart Youth: Eat, Think and Be Active! chapters 1, 2 (only activity B), 4, 5, 6, 8, and 9	US DHHS, NIH, and NICHD	7 chapters for students ages 11 to 13 that discuss the connection between media and health by using nutrition and physical activity examples that encourage youth to build their media analysis skills. Includes classroom materials, student and caregiver handouts, recipes, food tasting ideas, and group activities. English only. Cost: None	✓
MyPyramid MyPyramid for Kids	USDA	Official USDA food guidance system; includes interactive “Tracker” feature, “Blast Off” game for kids. <i>MyPyramid for Kids</i> recommended for grades K-6. In English & Spanish. Cost: None	
Nourish Interactive	Nourish Interactive Inc.	Website uses interactive video game technology to teach children about the importance of nutrition and exercise. It involves characters and stories that will engage children during the learning process. English & Spanish . Cost: None	✓
Nutrition Explorations: a) Little D’s Nutrition Expedition b) Arianna’s Nutrition Expedition c) Bridges to Wellness d) Food Model Activities	National Dairy Council	a) 10 lesson curriculum for 2nd grade; introduces the five food groups using stories, hands-on activities, and interactive video games. b) 8 lesson curriculum for 4th grade; explores MyPyramid for Kids using child characters, interactive games. c) Interactive lessons providing classroom instruction with school nutrition program-based activities for grades 5-10. d) Hands on activities for using life-size color photographs of commonly eaten foods. English only. Cost: None	
Pennsylvania Interdisciplinary Nutrition Curriculum	PDE (funded by USDA)	Interdisciplinary curriculum of 16 lessons for K-12 that incorporate nutrition and physical activity topics into lesson plans that align with PDE state academic standards. English only. Cost: None	
Power Panther Pals	Kansas State Dept. of Ed (funded by USDA Team Nutrition grant)	8-week health education program for 4-6th grade students to increase their fruit and vegetable consumption and physical activity; includes lesson plans, tastings, games and materials for caregivers. English only. Cost: None	✓

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Professor Popcorn	Purdue University Cooperative Extension Service	Curriculum for grades 1-6 exploring MyPyramid; each lesson includes nutrition concepts, a nutrition activity, food safety activity, brief physical activity, cooking activity, take home material, and evaluation tool. English only. Cost: \$50	
ReCharge!	Action for Healthy Kids, NFL	After-school curriculum for grades 3-6 focusing on healthy food choices, energy balance, teamwork and goal setting. Curricula available in English. Parent newsletters available in English/Spanish. Cost: \$225 for kit	✓
Show Me Nutrition	University of Missouri Cooperative Extension	Curricula for grades K-8 emphasizing nutrition, physical activity, and related decision making skills. English only. Cost: \$20 for printed copies, \$30 for CD's	✓
Smart Food Shopping for Teens Lessons 1-5, 7	University of Florida Extension Services (2004)	Six approved lessons for teens that include topics and activities about making healthy food choices when shopping, fruits, vegetables, breakfast, and a grocery store scavenger hunt. Exclude lesson 6 for SNAP-Ed. English only. Cost: None	
Team Nutrition: Nutrition Essentials	USDA	Targeted to middle and high school; 6 lessons on MyPyramid, label reading, physical activity. Includes posters & handouts. English only. Cost: None	✓
Team Nutrition: The Power of Choice	USDA	Targeted to pre-teens/young teens; 10 topic lessons on dietary choices, decision making skills related to diet, and consumer skills. English only. Cost: None	✓
The Heat Club (Healthy Eating, Active Time)	Tufts University, Friedman School of Nutrition	Includes 26 hands-on activities to use with elementary school children in after school programs in order to improve eating habits and increase physical activity levels. Also includes family tip sheets matched with specific activities. Available in English, Haitian Creole, Portuguese & Spanish. Cost: \$50	✓
Up For The Challenge – Lifetime Fitness, Healthy Decisions (Selected lessons approved)	4H/Army Youth Development Project and Univ. of Maryland Extension	Includes lesson plans targeting school age children covering nutrition, consumer information, healthy decision making and physical activity. The curriculum comes with a Resource Kit and handouts. Approved lessons include Chapter 1, Lessons 2, 3 & 5, Chapter 3, Lessons 1-4 (omit the technology challenge in Lesson 3), Chapter 4, Lesson 6 (omit the 1 st discussion) and Chapter 5, Lesson 1. English only. Cost: None	
SCHOOL-AGE SUPPORTING EDUCATIONAL MATERIALS			
All 4 Kids: Happy, Healthy, Active Fit Videos	University of Nevada Cooperative Extension	Four music videos - youth demonstrating a variety of ways to be physically active. English except Ven Conmigo which includes both English and Spanish. Cost: Free to download, \$5 for DVD/CD package.	

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Chew This!	School District of Philadelphia	DVD presentations on variety of nutrition subjects; include live actors, animation, celebrities, recipes, and follow-up activities; generally for elementary age. English only. Cost: None	
Chop Chop Magazine	Chop Chop Kids	A quarterly magazine aimed at 5-12 year-olds packed with nutritious, family-focused, ethnically diverse and inexpensive recipes as well as interesting and little-known food facts, Q&A's and games.	
Digital Photo Receiver programs	Barbara Lohse, PhD, RD Robin Rifkin, MS	A Guide to Whole Grain Foods (Eng/Sp) A Guide to Eating Well (Eng/Sp) A Guide to Healthy Foods and Herbs (Eng) Breakfast is Smart (Eng) Shop for Folic Acid (Eng/Sp) Mealtime is Family Time (Eng) Cost: None	
The Dairy Spot	Mid-Atlantic Dairy Association	Downloadable activity sheets, guides, handouts, posters, games and tip sheets available for all grades. Focus on Calcium. Also includes materials for parents. English only. Cost: None	✓
Eat a Rainbow Coloring Book	Dannon Institute	Downloadable coloring book featuring Spring fruits and vegetables. Cost: Free	
Eat Smart. Play Hard	USDA-FNS	Activity sheets, lesson plans, games, for elementary age. Focus on physical activity and general nutrition. Power Panther and Slurp mascots. English only. Cost: None	✓
Food Smarts: MyPyramid for Kids DVD	Discovery Education	DVD for grades K-2 that features a diverse group of children in a summer camp setting learning about MyPyramid for Kids; uses concrete examples, games. English only. Cost: \$59.95	
Fruits and Veggies: More Matters -CDC site -PBH site	CDC/DHHS/ NCI/ Produce for Better Health Foundation	Previously 5-a-Day sites; promote fruit and vegetable consumption; feature nutrition information, daily need calculator, shopping/cooking tips, Q&A list, resources for professionals, and an "ask the expert" interactive feature. English only. Cost: None	✓
Fruit and Vegetables Coloring Book	Penn State Extension - Agriculture	20 page fruit and vegetable coloring book. English only. Cost: \$1.05 per book. (Publication #UK083)	
Game On! The Ultimate Wellness Challenge Fuel Up to Play toolkit	Action for Healthy Kids, USDA, DHHS, National Dairy Council, and NFL	-Year-long school-wide program that challenges schools, students, and families to increase healthy food choices and physical activity into their daily lives; English only. Cost: None -Wellness toolkit for that includes poster clings, banners, fact sheets, logos, newsletter drop-ins, and press releases. English only. Cost: None	

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How to Teach Nutrition to Kids	Connie Evers, MS, RD	Resource for integrating nutrition into the classroom, cafeteria, and home environments. Gives guidelines for instilling positive food attitudes, and explains how to make <i>MyPyramid</i> and Nutrition Facts food labels meaningful to children. Includes over 200 activities. English only. Cost: \$19.95	✓
Learning Zone Express (School Nutrition and <i>MyPyramid</i> products only)	Learning ZoneXpress	Materials appropriate for K-12 th with key messages about healthy eating, physical activity, and <i>MyPyramid/MyPyramid for Kids</i> . Products include color worksheets, games, posters, table tents, banners, and nutrition education reinforcement items. In English & some in Spanish. Cost: Varies based on product.	
Milk Matters	NIH, NICHD, DHHS	Public health education campaign to promote calcium consumption among tweens/teens (ages 11-15). Website includes 3 lesson plans for teachers and supporting classroom materials including caregiver handouts, glossary of terms, and a calcium fact sheet. English only. Cost: None	✓
My Child, My Choices: Healthy eating when you are pregnant	University of Wisconsin-Extension	Colorful booklet for pregnant adolescents about nutrition, weight gain, taking care of self and baby, building decision-making skills. English only. Cost: \$2.00 per copy	
<i>MyPyramid</i> lesson plans, worksheets, handouts	University of Florida Extension & University of Missouri Extension	Food Group word scramble sheets, coloring sheets, <i>MyPyramid</i> word search, “how much of each food group” sheets English only. Cost: None <i>MyPyramid</i> lesson plans by grade level. Tip sheets for following <i>MyPyramid</i> , coloring pages English only. Cost: None	
Nutrition Fun with Brocc and Roll	Connie Evers, MS, RD	A 64-page activity guide including 42 pages of ready-to-copy activity sheets. Topics include self-assessment of current eating habits, goal setting, healthy snacking, gardening, food labels, and recipes. English only. Cost: \$14.95	✓
Nutrition Nuggets newsletters	Resources for Educators	Prepared nutrition newsletters targeting caregivers of elementary students; include nutrition tips, recipes, ideas for increasing physical activity. Schools/school districts purchase subscription allowing unlimited reproduction. In English & Spanish. Cost: \$198-\$618 (based on size of school district) \$99 extra for Spanish	✓

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School Breakfast Promotion	School Nutrition Association	Breakfast promotion campaign for students that encourages participation in school breakfast as part of National School Breakfast Week. Materials include student/parent brochures, activity sheets, downloadable presentations, banners, lesson plans (grade 5-10), and a book cover contest. English. Cost: None for downloadable.	✓
School Lunch: Promotion	School Nutrition Association	Lunch promotion campaign for students that encourages eating a healthy and nutritious school lunch as part of National School Lunch Week. Materials include student/parent brochures, a contest, a website that has activities and information for kids, downloadable presentations, and ideas/resources. English. Cost: None for downloadable.	✓
State Nutrition Action Committee (SNAC) materials	PA NEN, PA DPW, PA Depts. of Ed., Health, Ag., Aging, WIC	Materials promoting fruit and vegetable consumption; newsletters appropriate for caregivers with some games, puzzles for children; downloadable materials to make bulletin boards or table displays. In English/Spanish. Cost: None	✓
Team Nutrition: Empowering Youth	USDA	Manual for after school programs and classrooms with youth 11-18. Contains hands-on activities that teach nutrition concepts. English only. Cost: None	✓
Team Nutrition: Team Up at Home	USDA	Targeted to caregivers of younger elementary age children. Includes dietary and activity guidance, recipes, activity tips, activity sheets for children. English only. Cost: None	✓
Wellness Ways Resource Book	University of Illinois Extension	Materials for teaching nutrition and healthy lifestyles include newsletters, activities, recipes and coloring books. English only. Cost: None	✓

CAREGIVER CURRICULA

TITLE	AUTHOR/ DEVELOPER	DESCRIPTION	
Eating Smart, Being Active	Colorado State and UC-Davis EFNEP	8 lessons for caregivers that focus on nutrition and physical activity. Topics include exercise, food resource management, vegetables, whole grains, calcium, limiting high sugar/fat/salt-containing foods, lean protein, & healthy snacks. English only. Cost: \$51.96 for Educator Guide	
Loving Your Family, Feeding Their Future, Nutrition Education Through the Food Stamp Program	USDA/FNS	4 discussion sessions covering nutrition and physical activity; includes staff support materials, participant handouts. Materials targeted and designed for English and Spanish speaking caregivers with children ages 2-18. In English & Spanish. Cost: None	

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Money for Food (Oct 2007 ed.)	University of Wisconsin Cooperative Extension	13 lessons focusing on food resource management and food security. English only. Cost: None	
Simply Good Eating (except Mom & Kids section <i>Baby Feeding Tips that Really Work</i>)	University of Minnesota Cooperative Extension	Three units focusing on: moms and kids, nutrition and physical activity as part of a healthy lifestyle, and cooking on a limited budget. The Moms & Kids section <i>Baby Feeding Tips that Really Work</i> is not approved for TRACKS. English only. Cost: Approximately \$25 per unit.	
CAREGIVER SUPPORTING EDUCATIONAL MATERIALS			
Be Active, Healthy, and Happy!	USDA/DHHS	8 chapter resource guide that outlines the 2008 Physical Activity Guidelines for Americans; An accompanying toolkit also contains posters, flyers, and fact sheets that promote and explain the guidelines. English only. Cost: None	
Digital Photo Receiver programs	Barbara Lohse, PhD, RD Robin Rifkin, MS	A Guide to Whole Grain Foods (Eng/Sp) A Guide to Eating Well (Eng/Sp) A Guide to Healthy Foods and Herbs (Eng) Breakfast is Smart (Eng) Shop for Folic Acid (Eng/Sp) Mealtime is Family Time (Eng) Cost: None	
Finding Your Way to a Healthier You	USDA/ DHHS	80 page book with the complete 2005 Dietary Guidelines. Addresses dietary quality, energy balance, food labels, food safety, and alcohol use. English only. Cost: None to download; \$12.50 for 1 copy; \$106.00 for 25 copies.	
Pick a Better Snack	Iowa Dept. of Public Health	Newsletters, recipes, focused on increasing fruit and vegetable consumption; participants can subscribe to website and receive “Food, Recipe, Activity of the Week”. In English/Spanish. Cost: None	

(h) Development of New Educational Materials

DPR programs will be developed from existing curricula and supporting materials.

(i) Key Performance Measures/Indicators

Intake behaviors and mediators of behavior (e.g. attitude, self-efficacy, preference, and knowledge) will be assessed for select objectives.

2. Evaluation Plans

(a) Process Evaluation

Process evaluation data, including education intervention and audience demographic information, will be collected via the STARtracks system from all TRACKS Partners.

Caregiver Education. Caregiver programming will be examined using STARtracks.

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TRAILS For Bones. Use of TRAILS For Bones will be examined via STARtracks. Teacher and student feedback will be collected via surveys.

(b) Outcome Assessment

4th grade. Statewide outcome evaluation will be conducted for the *Fourth Grade Vegetable Core* intervention (18). Evaluation instruments tested for validity and reliability with 4th graders in New Mexico and Colorado (19) (20) were modified for the TRACKS vegetable intervention. The modified survey measures attitude, self-efficacy, food preference, and knowledge and shows face validity and reliability (21). It will be administered to a statewide sample of 4th grade classrooms using a pretest/posttest protocol. FY09 and FY10 evaluation showed significant intervention impact from pretest to post-test in intervention classrooms as compared to control classrooms (11). FY12 evaluation will not include data collection from control schools. Trained staff will administer the evaluation surveys.

The Pennsylvania Department of Education (PDE) Interdisciplinary Curriculum (planned for use by 10 local partners) is being used with 4th graders in a non-TRACKS funded project conducted through the PSU Food Innovation Center. The NEEDS Center will design and implement an outcome evaluation protocol with SNAP-Ed eligible schools participating in this project. Results will provide outcomes evidence for use of the PDE curriculum in TRACKS schools.

8th-12th grade. A sample of students will be surveyed using a cross-sectional approach. Nutrition and physical activity items from the Youth Risk Behavior Survey (22) will assess targeted student behaviors. Nutrition and physical activity related behaviors will be compared from year-to-year for students in TRACKS schools. This cross-sectional data will also be used as needs assessment to guide future program planning and evaluation efforts. A calcium food frequency questionnaire tested for reliability and validity (23) as well as, self-report height and weight items will be included in the 8th-12th grade evaluation.

(c) Formative Assessment

New or revised evaluation tools will be formatively tested with the target audience by cognitive interviewing, focus groups, web-based interviewing, or other qualitative methods (10).

TRAILS For Bones. FY12 work will include field testing the curriculum and focus groups with local educators/administrators to assess acceptance and sustainability of this initiative. Findings will inform dissemination strategies and student outcome and/or impact evaluation planning.

3. Coordination Efforts

Refer to the **Statewide Coordination Efforts** section following the **Preschool Track**.

Preschool Track**1. Description of Track/Intervention**

(a) Preschool Track Goals and Objectives – All nutrition education goals and objectives specific to the preschool programming track are outlined in this section; these are related to

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statewide goal #1 – Implementation of the Programming Tracks.

Goal 1: Preschool children and their caregivers will have increased awareness of and exposure to a variety of healthy foods consistent with *2010 Dietary Guidelines for Americans* and *MyPyramid for Kids*.

Preschoolers will:

Objective 1: Recognize a variety of fruits and vegetables

Objective 2: Taste a variety of fruits and vegetables

Objective 3: Recognize healthy snack /beverage choices

Objective 4: Taste a variety of healthy snack /beverage choices

Objective 5: Recognize a variety of calcium-rich foods

Objective 6: Taste a variety of calcium-rich foods

Objective 7: Recognize healthy breakfast foods

Caregivers of preschool children will:

Objective 8: Identify a variety of foods from each *MyPyramid* food group

Objective 9: List at least two reasons why it is recommended that preschoolers eat a variety of foods within and among *MyPyramid* food groups every day

Goal 2: Preschool age children and their caregivers will be aware of the importance of physical activity as part of a healthy lifestyle.

Objective 1: Preschoolers will state why it is important to be physically active every day.

Objective 2: Caregivers of preschoolers will be able to identify the benefits of engaging their child in regular physical activity.

Goal 3: Educators will include caregiver feeding psychodynamics in nutrition education (i.e., caregiver leadership with feeding, child autonomy with eating).

(b) Audience

The primary audience is preschoolers and their caregivers. Caregiver education is a required component of the Preschool Track. The Statewide Needs Assessment (Appendix 1) provides specific demographic characteristics of the target audience.

(c) Focus on SNAP Eligibles

Primary delivery sites are preschools or day care centers; eligibility of sites is generally determined based on free/reduced school lunch data for preschool sites located in elementary schools and/or enrollment data for the Child and Adult Care Food Program.

(d) Track Description

This Track includes both direct and indirect education strategies. Project implementation features are described in each local partner's Programming Summaries and Statements of Work (such as key messages, duration, and projected participants served and total number of contacts).

Direct education. Curricula employ a sensory approach, including food tasting and recognition of a variety of healthy foods, with short but frequent interactions, and are most appropriate for children in group settings. Series lessons involve hands-on activities, songs, games, poems, books, and/or crafts all related to the nutrition content of the lesson. Classes or individual one-on-one education for caregivers reinforce messages presented to children

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and address questions or concerns relevant to family meals and family activity as part of a healthy lifestyle.

TRAILS For Tots is a compilation of repurposed existing nutrition education materials focused on the psychodynamics of feeding behaviors for preschoolers and their caregivers. In FY2010, an expert in nutrition education and child feeding provided review and critique of preliminary lessons. Feedback guided lesson revision. Field testing will occur in FY 2012.

Indirect education. Family events, food tastings, and distribution of newsletters or fact sheets to caregivers supplement direct interventions or provide a means of recruitment into direct education activities.

(e) Summary of Research

Research with preschoolers suggests that division of responsibility in feeding can be an effective means of increasing both preference for, and subsequent consumption of, targeted foods (24). Allowing preschoolers to choose whether to eat foods put on the table and how much of those foods was shown to increase the likelihood that children would try new foods (24). Preschool-aged children consumed more servings/day of low-fat dairy and fewer servings/day of sweetened drinks, salty and sweet snack foods daily than school-aged children as assessed by parent report. Interventions for meeting dietary recommendations should start with families of preschool-aged children and future research should focus on identifying factors that might be contributing to increased reporting of problematic food patterns in school-aged children (25).

Previously, TRACKS conducted interviews with low-income caregivers of preschoolers to assess knowledge of appropriate feeding behaviors and dietary requirements of preschoolers, use of appropriate feeding behaviors, strategies used to help their children meet nutritional requirements, and interest in developing appropriate feeding behaviors and knowledge of dietary requirements for preschoolers. Interviews encompassed both qualitative interview questions and quantitative questionnaires. Qualitative results revealed a vague knowledge of what preschool-age children should be eating and clear racial/ethnic differences in knowledge, attitudes, perceptions and goals. Caregivers described using a wide array of strategies to get their children to eat, including pressure, encouragement, substitution, restriction, modeling, food modification, and problem avoidance. Quantitative analyses also revealed racial/ethnic differences in caregiver feeding practices. Findings from these interviews support the need for tailored nutrition education that addresses specific child feeding practices and concerns of diverse, low-income preschool caregivers in PA (26).

One research study indicated that child feeding practices may be modifiable. An analysis of child feeding factors among 3 groups of mothers using newsletters, booklets and control revealed a significant decrease in the “pressure to eat” score for participants in the newsletter group (27). Distribution of parent newsletters is an integral part of TRACKS preschool programming.

A digital photo receiver program, *Mealtime is Family Time*, was developed to encourage preschool caregivers to develop a mealtime habit using the Division of Feeding Responsibility

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tenets. The program was evaluated by 164 low-income caregivers (80% SNAP participants) of preschoolers who completed a survey (n=147) and/or participated in focus groups (n=17). Survey findings showed the program to be understandable, interesting, and useful with high interest in knowing more about the importance of family meals and trying new foods. However, parents were not as interested in dealing with picky eaters or in the concept of child-determined satiety. Focus group discussion corroborated program utility and parent difficulty in adopting Division of Feeding Responsibility concepts, thus supporting continued program development and study of child feeding in the Preschool Track (28).

(f) Modification of Track Methods/Strategies

DPR modifications to include: *Mealtime is Family Time* will be translated to Spanish.

(g) Use of Existing Educational Materials

Curricula and/or supporting materials listed in the table below will be used to provide direct and/or indirect nutrition education to preschoolers and their caregivers during FY 2011.

TITLE	AUTHOR/ DEVELOPER	DESCRIPTION	CAREGIVER MATERIALS INCLUDED
PRESCHOOL TRACK INITIATIVES			
Maximizing the Message: Helping Moms and Kids Make Healthier Food Choices	FNS, USDA	A guidebook outlining 16 audience-tested core nutrition messages for use in the Federal nutrition assistance programs. Of the 16 core messages, seven target mothers of preschool-age children. These message concepts relate to role modeling, cooking and eating together, and the division of feeding responsibility. English only. Cost: None	✓
TRAILS For Tots	PA Nutrition Education TRACKS (USDA funded)	A ready-to-use nutrition education intervention for preschoolers and their caregivers focused on the psychodynamics of feeding behaviors. In English. Contact the ME for more details (panutritiontrack@psu.edu).	✓
Mealtime is Family Time	PA Nutrition Education TRACKS (USDA funded)	A DPR program for caregivers of preschool-age children that aligns with TRAILS For Tots content and is based on FNS core nutrition messages; content relates to making time to prepare and eat healthy meals, encouraging families to eat together at meal times, and positive messages related to role modeling healthy eating and physical activity behaviors to their children. In English. Contact the ME for more details (panutritiontrack@psu.edu).	✓
PRESCHOOL-AGE ADDITIONAL CURRICULA			
Chef Combo	National Dairy Council	18 activities for ages 4-5; foci are basic nutrition concepts and basic culinary and food safety skills; involves food tasting and simple cooking activities. English only. Cost: None	

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Eat Well, Play Hard	New York State Department of Health	This ten-module curriculum was designed for three- and four-year olds and their parents. In addition to the ten lesson plans and related activities, the curriculum includes handouts, references, additional resources, and a handout disc. English only. Cost: None	✓
F.U.N. (Families Understanding Nutrition)	Albert Einstein Healthcare System staff	26 lesson series for ages 3-5; uses the alphabet to teach about fruits and vegetables; lessons include taste testing, song, movement, games, crafts English only. Cost: None	✓
Grow It, Try It, Like It	USDA	A garden-themed nutrition education kit for child care center staff that introduces children to 3 fruits and 3 vegetables. The kit includes 7 booklets with fun activities through the imaginary garden at Tasty Acres Farm. It also has a CD-ROM with Supplemental Information and a DVD. Each booklet contains hands-on activities, planting activities, and nutrition education activities that introduce <i>MyPyramid for Preschoolers</i> . English. Cost: See website for ordering free copy.	
Keystone Color Me Healthy	Adapted from original Color Me Healthy developed by NC Extension Service + N.C. DPH	Adapted from the original Color Me Healthy Curriculum; lessons encourage healthy foods and physical activity for ages 4-5; materials emphasize colors of fruits and vegetables; incorporates music, taste testing. English only. Cost: None	✓
MyPyramid for Preschoolers	USDA	USDA food guidance system that targets children ages 2-5; includes personalized worksheets, information on developing healthy eating habits & physical activity preschool-age children and their caregivers. In English & Spanish. Cost: None	✓
Show Me Nutrition (Pre-K)	University of Minnesota Extension	11 lessons featuring children's books with healthy eating messages. Each lesson includes a book about healthy eating, a physical activity, a food-tasting activity, and a chance to practice healthy habits like hand washing. Lessons also include family newsletters. English: only Cost: \$50.00 for Print and CD; CD only \$30.00	✓
Team Nutrition Fruit and Vegetable Lessons	North Dakota Department of Public Instruction	10 lesson curriculum designed as a supplement to the Color Me Healthy Curriculum. A hands-on, stand-alone curriculum to encourage preschool children to develop healthy eating and physical activity habits. English only. Cost: None	✓

PRESCHOOL-AGE SUPPORTING EDUCATIONAL MATERIALS

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Iowa Veggie Grant Project	Developed by Iowa Dept. of Public Health and Iowa State University	42 modules for counseling caregivers on providing fruits and vegetables to children; based on Stages of Change model; includes screening tool, lesson plans, and supplementary materials. English only. Cost: None	✓
Lunchbox Chatter	Penn State University, PSU Cooperative Extension	5 newsletters that target caregivers of preschoolers; addresses the topic of packing healthy lunches for preschoolers & includes suggestions for ways to incorporate fruits, vegetables, grains, protein, and dairy foods; contains a worksheet for the child to complete. English only. Cost: None	✓
Nibbles for Health: Nutrition Newsletters for Parents of Young Children	USDA/FNS	<i>Nibbles</i> consists of 40 reproducible newsletters on healthy eating along with a CD that offers child care center staff guidance on conducting discussions with parents in four sharing sessions. Cost: None.	✓
Nutrition in Every Theme	Penn State Cooperative Extension	6 activity booklets for caregivers that focus on specific nutrition objectives including fruits, vegetables, whole grains, food safety and cooking skills using a single theme; each includes recipes, nutrition tips, relevant storybooks, art or craft activities. English only. Cost: None to download.	✓
State Nutrition Action Committee (SNAC) materials	PA NEN, PA Depts. of Public Welfare, Ed., Health, Ag., Aging, WIC	Downloadable newsletters, display materials for promotion of vegetables. Follows “Vegetable of the Month” format; includes information on purchase, storage, cooking, growing, and nutrition highlights of each vegetable. English only. Cost: None	✓

CAREGIVER CURRICULA

TITLE	AUTHOR/DEVELOPER	DESCRIPTION
Eating Smart, Being Active	Colorado State and UC-Davis EFNEP	8 lessons for caregivers that focus on nutrition and physical activity. Topics include exercise, food resource management, vegetables, whole grains, calcium, limiting high sugar/fat/salt-containing foods, lean protein, & healthy snacks. English only. Cost: \$51.96 for Educator Guide
Loving Your Family, Feeding Their Future, Nutrition Education Through the Food Stamp Program	USDA/FNS	4 discussion sessions covering nutrition and physical activity; includes staff support materials, participant handouts. Materials targeted and designed for English and Spanish speaking caregivers with children ages 2-18. In English & Spanish. Cost: None
Money for Food (Oct 2007 ed.)	University of Wisconsin Cooperative Extension	13 lessons focusing on food resource management and food security. English only. Cost: None

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Simply Good Eating	University of Minnesota Cooperative Extension	Three units focusing on: moms and kids, nutrition and physical activity as part of a healthy lifestyle, and cooking on a limited budget. The Moms & Kids section <i>Baby Feeding Tips that Really Work</i> is not approved for TRACKS. English only. Cost: Approximately \$25 per unit.
CAREGIVER SUPPORTING EDUCATIONAL MATERIALS		
Be Active, Healthy, and Happy!	USDA/ DHHS	8 chapter resource guides that outlines the 2008 Physical Activity Guidelines for Americans; An accompanying toolkit also contains posters, flyers, and fact sheets that promote and explain the guidelines. English only. Cost: None
Digital Photo Receiver programs	Barbara Lohse, PhD, RD Robin Rifkin, MS	A Guide to Whole Grain Foods (Eng/Sp) A Guide to Eating Well (Eng/Sp) A Guide to Healthy Foods and Herbs (Eng) Breakfast is Smart (Eng) Shop for Folic Acid (Eng/Sp) Mealtime is Family Time (Eng)
Finding Your Way to a Healthier You	USDA/ DHHS	80 page book with the complete 2005 Dietary Guidelines. Addresses dietary quality, energy balance, food labels, food safety, and alcohol use. English only. Cost: None to download; \$12.50 for 1 copy; \$106.00 for 25 copies.
Fruits and Veggies: More Matters -CDC site -PBH site	CDC/DHHS/ NCI/ Produce for Better Health Foundation	Previously 5-a-Day sites; promote fruit and vegetable consumption; feature nutrition information, daily need calculator, shopping and cooking tips, Q&A list, resources for professionals, and an “ask the expert” interactive feature. English only. Cost: None
Pick a Better Snack	Iowa Dept. of Public Health	Newsletters, recipes, focused on increasing fruit and vegetable consumption; participants can subscribe to website and receive “Food, Recipe, Activity of the Week”. In English/Spanish. Cost: None

(h) Development of New Educational Materials

New material development is not planned.

(i) Key Performance Measures/Indicators

Key performance measures include recognition and identification elements of stated objectives.

2. Evaluation Plans

(a) Process Evaluation

Process evaluation data, including direct and indirect education intervention and audience demographic information, will be collected via the STARtracks system from all TRACKS partners.

Caregiver Education. Caregiver programming will be examined using STARtracks.

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TRAILS For Tots. *TRAILS For Tots* use will be examined via STARtracks. Additionally, educator and caregiver feedback on lesson delivery and Digital Photo Receiver (DPR) show content will be collected through interviews and surveys.

(b) Outcome/Impact Evaluation

Evidence-base for F.U.N. curriculum. In the Preschool Track, 91% of participants and 98% of the contacts are generated by programming conducted by Albert Einstein using the F.U.N. curriculum. This curriculum has had some rudimentary testing, but the evidence-base of the curriculum has never been examined. An impact evaluation of this curriculum will be conducted in collaboration with local partners using F.U.N. for eligible preschoolers.

(c) Formative Evaluation

New or revised evaluation tools will be formatively tested with the target audience by cognitive interviewing, focus groups, web-based interviewing, or other qualitative methods (10).

Feeding Dynamics/fdSI. In FY 2012, work will continue on formative development of the Satter Feeding Dynamics Inventory (fdSI) and progress to reliability testing and construct validation. Another round of formative interviews will be followed with a test-retest reliability study either from a selected SNAP-Ed sample or from parents participating in *TRAILS for Tots*. Following the reliability study, a video-based discriminant validation study to test construct and content validity of fdSI will be initiated.

TRAILS For Tots. Formative development continues with initiation of field testing to include *About Eating* online curriculum and *Mealtime is Family Time* assessment. Baseline data from fdSI (which measures feeding dynamics constructs such as autonomy and leadership) will be collected by administering the survey before lesson delivery to *TRAILS For Tots*-participating caregivers of children 2-5 years old. Scores calculated from the tool will provide information about caregivers' feeding styles and dynamics.

3. Coordination Efforts

Refer to the **Statewide Coordination Efforts** section below.

Statewide Coordination Efforts

Pennsylvania utilizes a locally driven model for SNAP-Ed delivery, enhancing collaborative efforts with other community agencies with similar goals. TRACKS partners coordinate nutrition education with several other nutrition-related programs serving low-income Pennsylvanians.

- Pennsylvania's State Nutrition Action Committee (SNAC) is a collaborative effort involving the PA Departments of Education, Health, Agriculture, Welfare, and Aging; the Pennsylvania Nutrition Education Network (PA NEN) is the SNAP-Ed representative. The goal of the SNAC efforts is "encouraging partnerships and collaborative interventions between the nutrition assistance programs and other related groups, such as public health programs, healthcare providers, schools, faith-based groups, and other community organizations in the consumption of at least five fruits and vegetables a day." SNAC materials promote a

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vegetable-of-the-month, featuring PA-grown produce with related recipes and purchasing, storage, and gardening tips. The intended outcome for consumers is to increase vegetable intake by providing consumers with widespread exposure to consistent messages. PA NEN will continue to provide these materials in downloadable format from their website, which now include some materials in Spanish.

- Penn State University Nutrition Links coordinates EFNEP programming in PA. In the locations that have both EFNEP and SNAP-Ed, efforts are made to ensure that individuals do not receive both types of programming; seniors, schools, and individuals who are not categorically eligible for EFNEP (e.g. males without dependent children) are designated for SNAP-Ed programs. EFNEP and SNAP-Ed strive to meet similar nutrition goals and present shared key messages to the target audience.
- Since women and children make up a large portion of Pennsylvania's SNAP eligible population, potential collaboration with WIC exists to reinforce and build upon shared nutrition messages to make the greatest impact on this key target audience. TRACKS partners that have WIC-based interventions complete Memoranda of Understanding (MOU) that outline responsibilities of all parties to coordinate nutrition education efforts.
- TRACKS partners that have school-based interventions complete Memoranda of Understanding (MOU) that outline responsibilities of all parties to coordinate nutrition education. Team Nutrition curricula and supporting materials are used jointly when possible.
- TRACKS partners that have Head Start based interventions complete a Memorandum of Understanding (MOU) that outlines responsibilities of all parties to coordinate nutrition education efforts.
- TRACKS partners provide SNAP-Ed services to eligible senior centers in conjunction with the Congregate Meals program.
- Many TRACKS partners provide nutrition education to clients of local food pantries. Efforts are made to provide nutrition information that will enhance the ability of food pantry clients to use the foods provided to them as part of a healthy diet.
- TRACKS will explore opportunities for collaboration with PDE (Pennsylvania Department of Education) to develop outcome evaluation of the PDE Interdisciplinary Nutrition Education Curriculum
- DPW County Assistance Offices have been utilized to recruit participants for school-age interventions such as "Cook Like a Chef" cooking camp.

References

1. Havas S, Anliker J, Greenberg D, Block G, Block T, Blik C, Langenberg P, DiClemente C. Final results of the Maryland WIC food for life program. *Prev Med.* 2003; 37: 406-416.
2. Contento I. *Nutrition Education: Linking Research, Theory, and Practice.* Boston: Jones and Bartlett Publishers, 2007. pp. 65, 115-121, 236-237.
3. Lohse B, Satter E, Horacek T, Gebreselassie T, Oakland MJ. Measuring eating competence: Psychometric properties and validity of the ecSatter inventory. *J Nutr Educ Behav,* 2007; 39(5S): S154-S166.
4. Lohse B, Stotts J, Patterson J, Horacek T, Do M, White A, Greene G. Development of a web-based module about eating competence for low-income adults. *FASEB J* 23:550.7; 2009
5. Krall JS, Lohse B. Interviews with low-income Pennsylvanians verify a need to enhance eating competence. *J Amer Diet Assoc.* 2009; 109 (3): 468-473.
6. Hill LG and Betz DL. Revisiting the retrospective pretest. *Amer J Eval,* 2005; 26(4):

- 501-517.
7. Swindle S, Baker SS, Auld GW. Operation Frontline: Assessment of longer-term curriculum effectiveness, evaluation strategies, and follow-up methods. *J Nutr Educ Behav*. 2007; 39: 205-13.
 8. Raidl M, Johnson S, Gardiner K, Denham M, Spain K, Lanting R, Jayo C. Use retrospective surveys to obtain complete data sets and measure impact in extension programs. *JOE* 2004; 42(2): <http://www.joe.org/joe/2004april/rb2.php> Accessed 4/24/2009.
 9. Ajzen I. The theory of planned behavior. *Organ Behav Hum Decision Processes*. 1991;50: 179-211.
 10. Harris JE, Gleason PM, Sheean PM, Boushey C, Beto JA, Bruemmer B. An introduction to qualitative research for food and nutrition professionals. *J Am Diet Assoc*, 2009; 109: 80-90.
 11. Wall DE, Least C, Gromis J, Lohse B. (in press). Nutrition education intervention improves vegetable-related attitude, self-efficacy, preference, and knowledge of Pennsylvania fourth grade students. *Journal of School Health*.
 12. Robinson-O'Brien R, Story M, Heim S. Impact of garden-based youth nutrition intervention programs: a review. *J Amer Diet Assoc*. 2009; 109 (2): 273-280.
 13. Nelson M, Lytle L, Pasch K. Improving literacy about energy-related issues: the need for a better understanding of the concepts behind energy intake and expenditure among adolescents and their parents. *J Amer Diet Assoc*. 2009; 109(2): 281-287.
 14. Rifkin R, Lohse B, Bagdonis J, Stotts J. Digital Photo Receivers are a Viable Technology for Nutrition Education of Low-Income Persons. *J Nutr Educ Behav*. 2006; 38: 326-328.
 15. Lohse B, Rifkin R, Cooper R., Stotts J. Herbal Education is Reasonable and Necessary for Food Stamp Program Participants. *J Nutri Educ Behav*. 2009; 41(6):438-440.
 16. Neumark-Sztainer D. Preventing obesity and eating disorders in adolescents: what can health care providers do? *J of Adolescent Health*. 2009; 44: 206-213.
 17. Burgess-Champoux T, Larson N, Neumark-Sztainer D, Hannan P, Story M. Are family meal patterns associated with overall diet quality during the transition from early to middle adolescence? *J Nutr Educ Behav*, 2009; 41(2): 79-86.
 18. Gromis J, Wall D, Lohse B, Gingrich T. Pennsylvania food stamp nutrition education evaluation leads to core vegetable intervention for 4th graders. *J Amer Diet Assoc* 2008; 108; 9 (Suppl3): A-84.
 19. Lohse B, Cunningham-Sabo L, Walters L, Stacey J. Surveys of fruit and vegetable preference, attitude, and self efficacy for food preparation show test-retest reliability with fourth and fifth graders. *J Nutr Educ Behav* 2008; 40 (4 Suppl): S27 – S28.
 20. Cunningham-Sabo L, Lohse B, Walters L, Stacey J, Hewitt-Redl C. What children have to say: Use of cognitive interviews to develop research instruments. *J Nutr Educ Behav* 2007; 39 (4 Suppl): S122.
 21. Wall DE, Gromis J, Lohse B. Statewide Vegetable Intervention Evaluation Instruments for 4th Graders in Pennsylvania Show Face Validity and Reliability. *J Am Diet Assoc*. Volume 109, Issue 9, Supplement 1, September 2009, Page A97.
 22. Kann L, Kolbe LJ, Collins JL. Measuring the health behavior of adolescents: the Youth Risk Behavior Surveillance Survey and recent reports on high-risk adolescents. *Public Health Report*. 1993;108(S1): 2-10,37-41,60-66.

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23. Harnack LJ, Lytle LA, Story M, Galuska DA, Schmitz, Jacobs DR, Gao S. Reliability and validity of a brief questionnaire to assess calcium intake of middle-school-aged children *J Am Diet Assoc.* 2006; 106: 1790-1795.
24. Satter E. *Secrets of Feeding a Healthy Family.* 2nd edition. Kelcy Press 2008.
25. Raynor H, Jelalian E, Vivier P, Hart C, Wing R. Parent-reported eating and leisure-time activity selection patterns related to energy balance in preschool and school-aged children. *J Nutr Educ Behav.* 2009; 41: 19-26.
26. Ventura AK, Gromis J, Lohse B. Feeding practices and styles used by a diverse sample of low-income parents of preschool-age children. *J Nutr Educ Behav.* 2010; 42(4):242-9.
27. Essery E, DiMarco N, Rich S, Nichols D. Mothers of preschoolers report using less pressure in child feeding situations following a newsletter intervention. *J Nutr Educ Behav,* 2008; 40: 110-115.
28. Least CM, Rifkin R, Gromis J, Lohse B. Preliminary testing shows family meals education delivered with a digital photo receiver was well-received by low-income caregivers in Pennsylvania. *FASEB J.* 25:989.13; 2011