Northeast Regional Nutrition Education Center of Excellence:
Building Evidence and Taking Action in Communities
USDA NIFA Award No. 2014-48757-22611
Project Director: Jamie Dollahite
Host Institution: Cornell University
Executive Summary

Although programs such as the Expanded Food and Nutrition Education Program (EFNEP) and the Supplemental Nutrition Assistance Program – Education (SNAP-Ed) have successfully delivered nutrition education and demonstrated positive changes in food behavior among participants, there is a growing recognition that tackling the obesity epidemic requires going beyond individual knowledge and behavior change to make the places people live, work and play more conducive to health. Yet there is a dearth of evidence about what works, for whom, and how. The Northeast Regional Nutrition Education Center of Excellence (NE-RNECE) at Cornell University aims to strengthen the evidence base on effective nutrition education/obesity prevention programs and develop related translational and training activities in order to improve the health of low-income Americans. The NE-RNECE is led by faculty and staff at Cornell University and guided by a regional Steering Committee of 11 members representing relevant research disciplines (e.g., nutrition, public health, economics, policy, communications, and evaluation) and nutrition education programs (rural, urban, large, and small). Members of two additional committees (research and stakeholder) serve as project advisors. During Year 1, efforts focused on the development of a signature research program. First, an environmental scan and needs assessment of the SNAP-Ed and EFNEP implementing agencies in the northeast region identified whether programs are engaging in efforts related to policy, systems and environmental (PSE) changes and, if so, how these efforts are being coordinated with delivery of direct education. All respondents reported direct education programs without PSE efforts, only five reported PSEs without direct education, and less than half reported programs that integrate direct education and PSE strategies. Results also indicated a lack of clear understanding regarding what activities actually constitute PSE strategies. Second, a systematic review of current literature to assess the evidence base for the synergistic effect of PSEs combined with direct nutrition education was initiated with the development of the systematic review protocol underway. The findings will be used in planning future research of the NE-RNECE, as well as informing translation and dissemination of the evidence. Third, five research projects were selected to rigorously test the effectiveness of emergent or practice-based obesity prevention interventions delivered through SNAP-ED and/or EFNEP. Funding of these projects began towards the end of Year 1 and initial results are expected in Year 2. Finally, the NE-RNECE website was launched and in coordination with other RNECEs and the eXtension Community Nutrition Education Community of Practice will facilitate dissemination of the NE-RNECE’s research results, evidence-based interventions, and best practices for combining direct nutrition education with PSE strategies. Year 2 will see the continuation of Year 1 activities as well as the development of a proposed nationwide research translation and training program on synergistic nutrition education and public health/PSE approaches in order to enhance the impact of state and community nutrition education and obesity prevention efforts.
## Contents

Executive Summary ................................................................. 1

NE-RNECE Vision, Mission, Goal & Objectives .................. 3

NE-RNECE Audience ............................................................. 4

NE-RNECE Leadership .......................................................... 4

NE-RNECE Steering Committee .......................................... 5

NE-RNECE Accomplishments – Year 1 ............................... 5

Budget Overview ................................................................. 10

Next Steps............................................................................. 10
NE-RNECE Vision, Mission, Goal & Objectives

The vision of the NE-RNECE is a society where all individuals are able to eat healthfully and be physically active in environments that make healthy choices the easy choices. The mission of the NE-RNECE is to promote a culture of health among low-income populations by bringing researchers and program implementers together to engage in sound intervention research congruent with implementation and dissemination science. The focus of the NE-RNECE’s research is to study the combination of direct nutrition education with PSE approaches by assessing the potentially synergistic effect of these two approaches that encourage healthful food and activity behaviors and wise use of food resources, and to disseminate results to program providers nationally.

The overarching goal of the NE-RNECE is to expand the evidence base that supports effective nutrition education of diverse low-income program participants delivered in conjunction with policy, systems, and environmental (PSE) approaches that make healthy choices easier in order to prevent obesity. This NE-RNECE’s goal aligns with USDA’s Strategic Goal 4, “Ensure that all of America’s children have access to safe, nutritious, and balanced meals.” The NE-RNECE’s mission and goals are operationalized through the established objectives, described below.

NE-RNECE Objectives

• Objective 1: Foster sustainable regional and local collaborations among researchers working in a variety of relevant disciplines and nutrition and health program implementers serving low-income audiences across the northeastern United States, a region of stark geographical contrasts from dense urban to remote and isolated rural areas.

• Objective 2: Develop a Signature Research Program that combines direct education with PSE changes able to be effectively implemented by programs such as EFNEP and SNAP-Ed that serve low-income rural and urban participants from a wide range of ethnic, racial and linguistic backgrounds.

• Objective 3: Create a system of sub-awards to fund projects that rigorously test the effectiveness of emergent or practice-based interventions that combine nutrition education and public health approaches to support a culture of health among low income populations.

• Objective 4: Develop a communication and dissemination system including mentoring and staff development through eXtension, social media, on-line platforms, as well as research articles to share: (1) the work of the NE-RNECE, (2) research results from NE-RNECE projects and (3) best practices for nutrition education approaches that include PSE change efforts.
NE-RNECE Audience

The NE-RNECE’s target audiences include:

- Nutrition education and obesity prevention researchers in the northeast region and nationally,
- EFNEP and SNAP-Ed leadership and practitioners in the northeast region and nationally, and
- Low-income families eligible for EFNEP and SNAP-Ed.

While the NE-RNECE’s research, education and extension is intended to broadly benefit low-income families served by EFNEP and SNAP-Ed, the NE-RNECE’s implementation research project partners will work directly with diverse participant populations in specific urban and rural areas in the northeast region.

NE-RNECE Leadership

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Division of Nutritional Sciences
Project Director

Karene Booker, Program Manager
Division of Nutritional Sciences
Project Manager

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Policy, Systems, and Environmental Specialist

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Department of Communications
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EFNEP Program Coordinator

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Brofenbrenner Center for Translational Research
Evaluation Specialist
NE-RNECE Steering Committee

Donna Brown, Interim Associate Dean for Cooperative Extension
Delaware State University

Grace Damio, Director of Research & Service Initiatives
Hispanic Health Services, Hartford, CT

Ann Ferris, Professor, Director
Center for Public Health/Health Policy, University of Connecticut

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West Virginia University

Barbara Lohse, Professor and Director, Wegmans School of Health and Nutrition
Rochester Institute of Technology, NY

Kate Yerxa, Associate Extension Professor
University of Maine

NE-RNECE Accomplishments – Year 1

Objective 1: Foster sustainable regional and local collaborations among researchers working in a variety of relevant disciplines and nutrition and health program implementers serving low-income audiences across the northeastern United States, a region of stark geographical contrasts from dense urban to remote and isolated rural.

The NE-RNECE has mobilized a region-wide (12 states and the District of Columbia) network of stakeholders, nationally recognized researchers, and experienced practitioners, all with expertise relevant to nutrition education and obesity prevention programs that incorporate multi-level approaches designed to reach low-income audiences. This group includes
representatives of all 15 Land Grant Universities in the northeast region, most SNAP-Ed implementing agencies, and several other research universities including Columbia, Harvard, Yale, Rochester Institute of Technology, and Johns Hopkins. Broad representation on and active engagement in the NE-RNECE’s advisory groups and extensive planning with the other Centers demonstrates the NE-RNECE’s momentum toward and commitment to the objective of fostering local, regional, and national collaboration to coordinate research and test complementary nutrition education and public health/PSE interventions.

The Steering Committee, including the newly hired Program Manager, provides oversight for the NE-RNECE and includes the Cornell leadership team as well as six other members involved in EFNEP and/or SNAP-Ed implementation and research – five from other northeast Land Grant Universities and one from a Hispanic-serving organization. The Steering Committee has met semi-monthly as a group and in smaller targeted sub-committee meetings as needed, e.g. some members worked on development of the regional environmental scan and needs assessment that is guiding the work of the NE-RNECE, while others began work on the systematic review.

The Stakeholder Advisory Committee was established prior to the NE-RNECE being funded and participated in shaping the original proposal. Since then membership has been expanded to include additional SNAP-Ed implementing agencies, as well as the EFNEP coordinators in the northeast not previously included. It now represents all EFNEP coordinators and leadership from most SNAP-Ed implementing agencies in the northeast. Conference calls were held quarterly, and two in-person meetings were held with members attending the national EFNEP meeting and the Association of SNAP-Ed Nutrition Networks and Other Implementing Agencies (ASNNA) meeting. This group was instrumental in the development of the approach to the NE-RNECE’s original proposal in 2014. During 2015, this group responded to the regional environmental scan and needs assessment survey and provided input into the need for and priority topics to be included in the proposed nationwide research translation and training program on synergistic nutrition education and PSE approaches, to begin 2016.

The Research Advisory Group was convened via conference call to discuss the NE-RNECE’s research. The group includes internationally known researchers from universities such as Harvard, Yale, Tufts, Johns Hopkins, and Cornell, who are working in applicable areas, for example health economics, behavioral economics, public policy, public health, community-based nutrition and physical activity intervention, etc. This group is organized on an ad hoc basis, providing consultation to support the NE-RNECE in meeting its objectives through input on areas such as appropriate instruments for evaluation, and references to include in the NE-RNECE’s systematic review.

NE-RNECE leadership participated in monthly conference calls with the other RNECE Centers and communicates regularly with the respective project directors to facilitate cooperation and collaboration across the Centers.
Objective 2: Develop a signature research program that combines direct education with PSE changes able to be effectively implemented by programs such as the Expanded Food and Nutrition Education Program (EFNEP) and Supplemental Nutrition Assistance Program - Education (SNAP-Ed) that serve low-income rural and urban participants from a wide range of ethnic, racial and linguistic backgrounds.

Objective 3: Create a system of sub-awards to fund projects that rigorously test the effectiveness of emergent or practice-based interventions that combine nutrition education and public health approaches to support a culture of health among low income populations.

The research focus for the NE-RNECE’s research was confirmed, and the resulting Signature Research Program is designed to test whether nutrition education and public health/PSE approaches delivered together are more effective than either alone. For increased clarity and to reflect the role of the sub-awards within the Signature Research Program, the accomplishments of Objectives 2 and 3 of the NE-RNECE’s original proposal are addressed together in this report. The NE-RNECE Signature Research program is comprised of four research implementation projects selected through the competitive sub-award solicitation across the northeast, as well as the one selected by NE-RNECE staff to be conducted through Cornell Cooperative Extension.

An environmental scan and needs assessment was conducted to guide the work of the NE-RNECE. Respondents represented most of the SNAP-Ed and EFNEP implementing agencies in the northeast region. The survey identified the characteristics of EFNEP and SNAP-Ed programs in the region, whether programs are engaging in efforts related to PSEs and, if so, how this is being coordinated with delivery of direct education. Of responding agencies, all reported direct education programs without PSE efforts, only five reported stand-alone PSE programs (i.e. PSE without direct education), and just under half reported programs that integrate direct education and PSE strategies. Survey results indicated that even those agencies reporting use of PSEs may not clearly understand what activities actually constitute PSE strategies. These results guided the refinement of the NE-RNECE’s Signature Research Program, including the sub-award process. In addition, results informed the proposed expansion of initial training plans.

The systematic review of current literature to assess the evidence base for the additive effect of PSEs combined with direct nutrition education was initiated, and the development of the systematic review protocol is underway. The overarching goal is to review the existing literature for evidence of an additive effect of direct education and PSE strategies. The results of this review will be used in planning future NE-RNECE research, as well as informing translation and dissemination of the evidence.

The NE-RNECE’s signature research program includes five research projects with existing formative research and program implementation experience that position them to combine direct education with changes in environments conducive to healthy food and activity choices. The five research projects represent different program sizes, urban/rural settings, variation in race, ethnicity, and cultural contexts, target audience and methods of delivery. Two projects target SNAP-Ed, and three target EFNEP. Four projects target urban and peri-urban areas, and
one targets rural counties with micropolitan areas. All include rigorous methods of program delivery, dosage, monitoring and evaluation. Additional evaluation will include common measures across projects to help assess the effects of direct education combined with PSEs.

Four of the projects were selected through a rigorous sub-award process that included: developing the sub-award solicitation process, developing the RFA, disseminating the RFA, establishing an expert review panel, administering the proposal process and making the awards. In response to the competitive RFA released in March 2015, the NE-RNECE received 12 letters of intent and subsequently received 10 full proposals representing eight states in the northeast. Eight proposals involved primarily urban populations and suburban populations while two involved rural populations. Proposals were peer-reviewed by a panel of 10 experts from outside the northeast region. Projects were selected based on relevance to program goals and core objectives; merit in terms of the completeness and adequacy of the proposal’s response to the programmatic requirements; project feasibility and qualifications of key personnel; quality and extent of both program implementer and researcher involvement in proposal development, and implementation; capacity of the host organization; and appropriateness of the requested budget. The following four projects were awarded approximately $50,000 each for one year, beginning in July 2015:

2. **Sustaining a Successful Youth-Leader Program as part of a Multi-Level, Multi-Component Food Environment/Behavioral Intervention.** PI: Joel Gittelsohn, Professor of International Health, Global Obesity Prevention Center at Johns Hopkins Bloomberg School of Public Health, Baltimore, MD.
3. **Transforming Lifestyles: Integrating Direct Nutrition Education with Physical Activity Using the Health Care System Expansion Model.** PI: Mira Mehta, Director, EFNEP, University of Maryland Extension, College Park, MD.
4. **Empowering Urban Schoolchildren to Increase Fruit and Vegetable Consumption though EFNEP-enhanced PSE Interventions.** PI: Linda Sebelia, PI for SNAP-Ed and Program Coordinator for EFNEP, University of Rhode Island, Kingston, RI.

The fifth project represents ongoing formative research that positioned NE-RNECE leadership to successfully respond to the RNECE RFP in 2014. The Adopting Healthy Habits non-competitive project builds on formative research and includes implementation in three sites in Upstate New York conducted in collaboration with Cornell Cooperative Extension in Jefferson County and Orange County.

The selection of these five research implementation projects is a significant step in meeting the objectives of developing a signature research program and creating a system of sub-awards to fund projects that rigorously test the effectiveness of emergent or practice-based obesity prevention interventions delivered through SNAP-ED and EFNEP.
Objective 4: Develop a communication and dissemination system including mentoring and staff development through eXtension, social media, and on-line platforms as well as research articles to share: (1) the work of the Center, (2) research results from Center projects, and (3) best practices for nutrition education approaches that include PSE change

Establishing the NE-RNECE website was the first milestone in accomplishing the objective to develop a communication and dissemination system. An initial NE-RNECE website for posting the sub-award RFA was developed and went live in March 2015. The full NE-RNECE website (http://nernece.human.cornell.edu) was developed and went live in May 2015. The site will allow researchers and practitioners to find results from the NE-RNECE’s research when available, as well as links to evidence-based interventions and best practices for combining direct nutrition education with PSE strategies.

A preliminary needs assessment of PSE-related training needs in the northeast region was conducted to plan for developing new avenues to share best practices and provide professional development opportunities as part of our original work plan under Objective 4. The Stakeholder Advisory Committee brainstormed training needs related to PSE implementation on a conference call. This was followed with a brief online survey asking all members of the Stakeholder Advisory Committee (representing all states and most implementing agencies in the region) to rank order the ideas generated plus others provided by the NE-RNECE leadership team.

Project Director Dollahite coauthored a poster regarding the Regional Nutrition Education Centers of Excellence, presented at the 2015 Association of SNAP-Ed Nutrition Networks and Other Implementing Agencies (ASNNA) in February 2015 in Arlington, VA and at the 2015 National Coordinator’s Conference: Expanded Food and Nutrition Education Program (EFNEP) in March 2015 in Arlington, VA.

Two news stories featured the NE-RNECE ran in the Cornell Chronicle: “USDA designates Cornell as obesity prevention hub” on October 22, 2014, and “Obesity center tests ways to make healthy choices easier” on August 10, 2015.


Budget Overview

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Next Steps

Given the strength of the Cornell leadership team, Steering and Advisory Committees, original plan of work, and progress to date, the NE-RNECE is well positioned to continue to meet our objectives and to enhance the work of the NE-RNECE overall and the programmatic impact.

Specifically, during Year 2 the NE-RNECE will:

- Continue convening the NE-RNECE’s Steering Committee on a bi-monthly basis to guide the NE-RNECE’s work.
- Convene the Stakeholder Advisory Committee quarterly to report on and solicit input regarding the NE-RNECE’s activities.
- Solicit input from the Research Advisors as needed regarding the NE-RNECE’s Signature Research Program.
- Communicate and coordinate with the other RNECEs and the National Coordinating Center.
- Complete the analysis of the needs assessment/environmental scan data.
- Continue work on the systematic review of literature.
- Provide technical assistance to the five Signature Research Program projects to ensure that activities are underway and that data are being collected as planned.
- Evaluate project activities and outcomes.
- Maintain the NE-RNECE website and post links to evidence-based interventions and best practices forcombining direct nutrition education with PSE strategies as well as results from the NE-RNECE’s research when they become available.
- Collaborate with the eXtension Community Nutrition Education Community of Practice on dissemination once materials and research results from the NE-RNECE’s signature research are available.
If additional funding is available for Year 2 and beyond, the NE-RNECE will expand its work. In response to the USDA NIFA Request for Applications released in May 2015, the NE-RNECE proposed three specific ways that expand and emphasize work falling under objectives 2, 3, and 4. If awarded, the continuation funds will be used to:

- Provide additional evidence for the synergistic effects of nutrition education and public health/PSE approaches through the work of the Signature Research Program, including projects selected through the sub-award solicitation, as well as projects in New York State. Preliminary results from current projects will be reviewed to determine whether funding should continue. Funding for projects with evidence of limited effectiveness will be discontinued. New competitively selected projects will be considered if all allocated signature research dollars have not been awarded to existing projects.

- Develop a nationwide research translation and training program on synergistic nutrition education and public health/PSE approaches that are equitable, efficient and sustained over time, in order to enhance the impact of state and community nutrition education and obesity prevention efforts.

- Contribute to the collaborative work of the other centers through engagement in national RNECE activities and collaboration on working groups established by each RNECE to ensure non-duplication of effort and build synergy.