4.0 Nutrition, Food Safety & Security, and Obesity Prevention

Brief Summary of Program
Programs that are framed by this plan include research and extension linked to childhood obesity; youth, family and community nutrition; food security and food safety.

Childhood Obesity Prevention: Childhood obesity prevention research and education are based on an ecological approach, focusing on individuals and their interactions among the multiple environments that surround them. This approach recognizes that there are inherent multiple levels of influence that affect a child's body weight. Research topics include nutrition and hunger, nutrition education and behavior, built and natural environments, food psychology, physical activity promotion, and child nutrition in low wage working families.

Cornell Cooperative Extension (CCE) programs are designed to 1) connect research and practice, 2) result in behavior change, 3) build on the strengths of families and youth, 4) develop strong collaborations resulting in community changes for optimal health promotion and 5) provide policymakers with the knowledge to develop appropriate policies to promote healthy lifestyles. Extension programs target children, families and the community at large, with an emphasis on low-income audiences. The programs are collaborative and work directly with key community organizations.

Food Security: CCE programs address access to food, certainty of availability and access to food, sufficiency of food, social and cultural acceptability of food, and nutritional quality and safety of food. Work in this program area ties well with our work in agriculture, and youth, families and communities.

Food Safety: Cornell's statewide food safety research and education program serves a broad constituency including food producers, processors and retailers, as well as consumers and research scientists. The program encompasses the National Institute of Food and Agriculture food safety components: investigating causes of microbiological contamination and microbiological resistance; educating producers, consumers and food safety professionals; and developing food processing and storage technologies.

Programs are developed and delivered through many channels, including workshops, webinars, research-based publications and ongoing, technical support for constituents, policy makers and regulators.

For example, National Good Agricultural Practices Program based on the Department of Food Science at Cornell University provides growers, packing house operators, government officials and industry trade association personnel with information and strategies to protect consumer health and reduce hazards and risks in the production of fresh fruits and vegetables. National GAPs Program personnel have written and developed 12 nationally recognized, multi-lingual educational materials through collaboration with research and extension faculty at 33 Land Grant Universities, the United States Department of Agriculture, and the Food and Drug
Administration. The National GAPs Program has distributed over 250,000 copies of these materials to all 50 states including territories such as Puerto Rico as well as internationally. These materials were developed in response to needs identified by stakeholders.

Consumer education programs focus on safe handling and preparation of foods, conveying important practices in preventing illness along with avoiding food cross-contamination. Programs target low-income adults, 4-H and other youth.

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**Situation and Priorities Statement**

**Nutrition and Obesity Prevention:** Roughly one-fifth of children and adolescents in the United States are obese and over one-third are either overweight or obese. Children and adolescents who are obese are likely to be obese as adults and have a greater risk for health problems that are placing a major strain on the U.S. health system and economy. Obesity is positively correlated with increased risk of chronic diseases such as cardiovascular disease, diabetes, stroke, hypertension, and some forms of cancer. An estimated 70% of overweight young people have at least one additional risk factor for heart disease, such as high cholesterol or high blood pressure. There is an increasing frequency of type 2 diabetes in children, even pre-adolescent children. Obese children are at greater risk for bone and joint problems, sleep apnea, and social and psychological problems such as stigmatization and poor self-esteem.

Factors contributing to obesity in children include unhealthy dietary behaviors such as high consumption of sweetened beverages; low fruit, vegetable and dairy consumption; and limited physical activity. Healthy lifestyle habits, including healthy eating and physical activity, can lower the risk of becoming overweight and developing diseases associated with increased obesity. Food insecurity and obesity or overweight can exist at the same time. This necessitates addressing hunger issues for some populations within programs on childhood obesity.

The socio-ecological model provides a framework for understanding influences on food choice and activity behaviors. At the individual child level, both psychosocial influences (including food norms, preferences, knowledge, attitudes, skills,) and biological influences (including age, gender, genes, and physiology) interact. The family provides the next layer of influences on child eating and activity, including role modeling, feeding practices, parent/caregiver interaction related to feeding, attitudes and attention to health care. The organizational and community environments and policies have the potential to further influence children through factors such as access to healthy foods, as well as to opportunities for physical activity, in schools and after-school programs, parks, or programs delivered through youth-serving organizations.

Effective programs are those that target eating and activity-based behaviors through approaches aimed at children directly, involve parents/caregivers and the community, and include policy and environmental changes. By taking an ecological approach to childhood obesity prevention, CCE professionals consider the many factors associated with childhood obesity and determine how to best create many points of impact that can result in positive change. In some communities, CCE may be a leader and form a coalition to take action on childhood obesity. In other locations, CCE will join existing coalitions and augment projects to increase effectiveness and target populations reached.
Food Security: Food security, refers to sustained access at all times to food adequate in quantity and quality to maintain a healthy life in socially acceptable ways. Hunger is the uneasy or painful sensation caused by a lack of food, and is a potential although not necessary, consequence of food insecurity. Having enough calories is not sufficient to assure nutritional adequacy. Foods available may not provide essential nutrients for health. Called “hidden hunger,” this type of malnutrition affects more than 3 billion people in developing countries. In developed countries, the problem of overweight may be characterized by high caloric consumption but inadequate levels of important nutrients. It is a priority of this plan to work with vulnerable populations to educate families and influence policies that will allow youth, families and communities to make sound nutritional decisions on a tight budget.

Food Safety: The food supply must be safe to ensure a healthy, well-nourished population. While the United States has one of the safest food supplies in the world, foodborne illness occurs and has a significant impact on both the health of Americans and the economy. By some estimates, foodborne illnesses cost the United States $77.7 billion annually in health care and other losses. Center for Disease Control compiled data indicate that known pathogens account for an estimated 48 million illnesses, 128,000 hospitalizations, and 3,000 deaths annually. An untold number of foodborne illnesses go unreported because people may not seek medical attention and because of varying capabilities of local and state health departments to collect and report incidences. Food contamination also affects the viability of firms in the food system, from small, to regional to international companies. Safety from farm to retail and then in the home can be improved through research, education and training that results in better practices that reduce contamination risks.

A variety of good agricultural and manufacturing practices can reduce the spread of microorganisms throughout the food system, farm to fork. This encompasses training of farmers, wholesalers, processors, retailers and consumers, areas where Cornell University has active research and training programs. Beginning at the farm level, both the National Good Agricultural Practices (GAPs) Program and the Produce Safety Alliance provide education and extension produce safety training programs for farmers statewide and nationally through both in-person and online delivery. Faculty in the Department of Food Science also provide Juice HACCP training for entities who are interested in juice production. The Northeast Center for Food Entrepreneurship (NECFE) offers safety and stability evaluation of food products in order to comply with state and federal regulation and to optimize product parameters such as shelf life for consumer use. The NECFE offers Better Process Control School to satisfy FDA requirements for the safe production of shelf-stable acidified (pickled) foods. The NECFE is currently working with restaurants to ensure the safety of sous vide processes which enable production flexibility, as well as ongoing work with over 700 New York State entities annually.

Assumptions

Childhood Obesity/Obesity
- Childhood overweight and obesity is best addressed ecologically through support of integrated community and family systems. These systems are necessary to promote improved eating and physical activity behaviors of New York State children and to reduce the prevalence of childhood obesity.
The National Institute of Food and Agriculture supports childhood obesity research and education programs on affordable and available nutritious foods and guidance for individuals and families enabling science-based decisions about health and well-being.

In New York State, research on the etiology of obesity and chronic disease is applied by CCE to locally based nutrition and wellness education developed in partnership with families, youth, and other community-based individuals and groups including nutrition and health practitioners.

Research from Cornell and other academic institutions is applied to CCE programs promoting healthful and secure community food systems to address childhood obesity. Neighborhood and community resources complement federal, state, and local government support to implement this outreach.

Food Safety

- Food safety can be increased by improving: agricultural practices before harvest; how foods are processed, stored and marketed and how foods are handled and served in the home and commercially.
- Increasing understanding about regulations contained with the Food Safety Modernization Act will increase constituent ability to meet regulatory requirements to ensure farm and company viability.
- Policies and practices across the food system affect the safety of foods and can be improved through education and training.
- Community, federal, state, and local government support will be provided to implement extension outreach.

Ultimate Goals of Program

- Affordable, available, safe and nutritious foods.
- Food, nutrition, and physical activity knowledge and skills necessary for people to make choices consistent with a healthy lifestyle.
- Food and activity environments that support healthful eating and active living.
- Improved food safety and food-handling practices throughout the food system.
- Reduced incidence of food-borne illnesses.
- Improved community food security and healthful food-choice options.

Activities

Programs for children and youth are delivered through a variety of settings: 4-H camps, clubs, fairs and afterschool as well as through child-parent/grandparent involvement projects and in-school student education. Family-focused programs promote a positive parent/care-giver/child feeding relationship and an understanding of age appropriate nutrition and physical activity. Extension staff collaborate with community leaders to improve the local environments for
healthy eating and active living. Activities include sequential learning events, "community workshops" and engagement with community and civic leaders to improve the environment for nutrition and wellness and support of the local food system.

Food safety activities provide educational programs in collaboration with regulatory agencies involved with assuring the safety and wholesomeness of food grown, processed, prepared, sold and handled and consumed by the public in New York State. They are delivered via courses, presentations and educational materials, support transfer of new research-based information for appropriate applications in the agricultural production, manufacturing, retailing and food service industries.

Sample Statewide/Regional Initiatives that fall within this Plan of Work

- Adopting Healthy Habits (AHH)
- Choose Health Action Teens (CHAT)
- Choose Health: Fun, Food & Fitness (CHFFF)
- Choose Health at 4-H Camps
- Choose Health Officers (CHO)
- Cornell Healthy After School Self-Assessment (CHASE)
- Cornell Farm to School Research and Extension Program
- Cornell NutritionWorks Online Professional Development Program
- Creating Healthy Places to Live, Work, and Play
- Expanded Food and Nutrition Education Program (EFNEP)
- Families Growing Together for Healthy Living
- Farmers Market Nutrition Program
- National GAPs Program Online Produce Safety Course
- Produce Safety Alliance Grower and Train-the-Trainer Programs
- Supplemental Nutrition Assistance Program Education (SNAP-Ed)/ Eat Smart New York (ESNY)
- Youth Healthy Eating and Active Living Program Work Team (YHEAL PWT)

Target Audiences

Childhood obesity prevention program audiences reached include: low-income families; 4-H youth; children in and out of school; nutrition and health professionals; school food service staff; community leaders; and government and agency leaders at the local, state, and national levels. Food security program audiences reached include: low-income individuals and families; caregivers, nutritionists, community leaders, human service providers and food policy makers at the local, state, and national levels.

Food safety program audiences reached include: produce growers, dairy farmers, food processors, producers and consumers with targeted programs for low- and moderate-income families; 4-H youth; nutrition and health professionals; food service and food production staff
and their managers and directors; and government and agency leaders at the local, state, and national levels.

### Output and Outcome Indicators

Highlighted indicators are collected annually. Others are shown in logic model format to demonstrate the progression from typical planned programs (outputs) → skill & knowledge development (near-term) → behavior changes (mid-term) → societal changes (long-term). Staff are expected to use program evaluations report on selected indicators.

#### 4.1 Healthy Eating and Active Living

<table>
<thead>
<tr>
<th>Output Indicators</th>
<th>Near-Term Outcome Indicators</th>
<th>Mid-Term Outcome Indicators</th>
<th>Long-Term Outcome Indicators</th>
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</thead>
<tbody>
<tr>
<td>Number children, youth, parents/caregivers and other adults reached via healthy eating and active living programs</td>
<td><strong>(4.1a)</strong> Number of children and youth who demonstrate knowledge or skill gains related to healthy eating and active living</td>
<td><strong>(4.1c)</strong> Number of youth program participants documented to have applied healthy eating and/or active living, recommendations</td>
<td>Number of vulnerable children and youth documented to have reduced incidence of overweight and obesity as a result of participating in relevant educational programs.</td>
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<tr>
<td>Number of women and health providers completing education programs addressing healthy weight gain during pregnancy and breastfeeding</td>
<td><strong>(4.1b)</strong> Number parents/caregivers and other adults who demonstrate knowledge or skill gains related to healthy eating and active living</td>
<td><strong>(4.1d)</strong> Number of adult program participants documented to have applied healthy eating and/or active living, recommendations</td>
<td>Number of adult program participants documented to have reduced one or more chronic disease indicators associated with overweight.</td>
</tr>
<tr>
<td>Number of extension educators and/or volunteers participating in training programs to enhance obesity prevention educational opportunities for children and youth, and adults who care for them</td>
<td>Number of women and health providers demonstrating increased knowledge or skill gains related to healthy weight gain during pregnancy and breastfeeding</td>
<td>Number of extension educators and/or volunteers reporting increased delivery of healthy living-related programs.</td>
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</table>

#### 4.2 Food Resource Management
<table>
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<tr>
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<tbody>
<tr>
<td>Number of program participants reached to improve their food resource management and food security</td>
<td>Number of program participants who demonstrate knowledge or skill gains related to food resource management and food security</td>
<td><strong>(4.2a)</strong> Number of program participants who adopt food resource management and/or food security practices</td>
<td><strong>(4.2b)</strong> Number of program participants documented to have improved food resource management and/or food security</td>
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**4.3 Decision Makers/Policy Education**

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<tr>
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<tbody>
<tr>
<td>Number of community and/or government/agency members completing educational programs on issues related to childhood obesity prevention programs and policy related to healthy living</td>
<td>Number of program participants who demonstrate increased knowledge or skill gains related to childhood obesity prevention programs and policies</td>
<td><strong>(4.3a)</strong> Number of program participants documented to have increased involvement in public/community childhood obesity prevention actions</td>
<td><strong>(4.3b)</strong> Number of participating schools and/or communities documented to have made practice and/or policy changes to promote healthy eating and active living</td>
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**4.4 Food Security and Hunger**

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<tr>
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<tbody>
<tr>
<td>Number of children, youth, and adults completing education programs on: identifying food insecurity, how to obtain food assistance, how to balancing available resources by planning food choices, and improve the sufficiency and quality of the diet.</td>
<td>Number of program participants who demonstrate knowledge or skill gains related to status of food security in their communities and possible actions to promote increased food security. Number of program participants who know what to do related to food insecurity</td>
<td><strong>(4.4a)</strong> Number of program participants who have acted to improve their food security status. <strong>(4.4b)</strong> Number of community action plans implemented as a result of community based assessment.</td>
<td><strong>(4.4c)</strong> Number of individuals or households documented to have improved food security status.</td>
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Number of participating communities reporting declines in food insecurity indicators.
Number of policy makers and citizens participating in education programs on status of food security in their communities and possible actions to promote increased food security.

problems such as how to obtain food assistance, how to balance available resources by planning food choices, and how to improve the sufficiency and quality of the diet.

### 4.5 Food Safety and Consumers

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<tr>
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<tbody>
<tr>
<td>Number of consumers participating in programs on: reducing food safety and/or food borne risks and illnesses including recommended purchasing, handling, storage, and preparation practices.</td>
<td>(4.5a) Number of consumers who demonstrate knowledge or skill gains related to reducing food safety and/or foodborne risks and illnesses including recommended purchasing, handling, storage, and preparation practices.</td>
<td>(4.5b) Number of consumers documented to have implemented new and/or increased application of ongoing safe food purchasing, handling, storage, and preparation practices.</td>
<td>Number of consumers who reduced incidence of foodborne illness among program participants. (no target).</td>
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### 4.6 Food Safety and Producers/Processors/Retailers/Food Service Providers

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<tr>
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<tr>
<td>Number of producers/processors/food service providers participating in programs on: reducing food safety and/or food borne risks and illnesses including recommended production, processing, storage, handling, marketing, and preparation practices.</td>
<td>Number of producers/processors/food service providers who demonstrate knowledge or skill gains related to reducing food safety and/or foodborne risks and illnesses including recommended production, processing, storage, handling, marketing, and preparation practices.</td>
<td>(4.6a) Number of producers/processors/food service providers documented to have implemented new and/or increased application of ongoing safe food production, processing, storage, handling, marketing, and preparation practices.</td>
<td>Number of producers/processors/retailers/food service providers who improved safety of foods available through wholesale and retail outlets and institutional foods.</td>
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4.7 Food Safety and Decision Makers

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<tbody>
<tr>
<td>Number food safety decision-makers, policy makers and other officials reached with</td>
<td>Number of food safety decision-makers, policy makers and other officials who demonstrate</td>
<td>(4.7a) Number of communities/ firms/or organizations documented to have assessed practices or</td>
<td>(4.7b) Number of communities/ firms/or organizations documented to have implemented improved</td>
</tr>
<tr>
<td>science-based information to improve food safety practices and policies.</td>
<td>knowledge gains relative to improved food safety practices and policies.</td>
<td>food safety policies as a result of participating in relevant educational programs.</td>
<td>practices or food safety policies as a result of participating in relevant educational programs.</td>
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External Factors

The scope and scale of outcomes is greatly enhanced by augmenting Federal Formula Funds with external sources of support. However, external grant funds may only support certain activities or aspects of this plan. Local governments, an important funder for local extension staff, face diminished revenues and increased mandated costs outside of the non-mandated extension programs. Thus having professionals available to implement new research-based programming is not always possible.

A very slow recovery from the recession and pockets of high unemployment in the state affect how public and private funds are allocated to educational activities. In some instances, family subsistence will be a higher priority than improved nutrition and physical activity behaviors, or improved access to healthy food and activity opportunities. As an example of the latter, in New York State, cost cutting proposals include closing some public parks and reducing recreational physical activity programs. In addition, some decision-makers and others in the community may not agree with all aspects of an ecological approach to childhood obesity prevention. They may disagree with community or institutional policy changes such as eliminating non-nutritious snacks from after school activities and place all responsibility on the individual and the family, disregarding environmental influences outside the family.

In 2014, the NYS Office of Temporary and Disability Assistance released an RFA to competitively fund SNAP-Ed. Previously about half the state SNAP-Ed funding had supported CCE programs on a non-competitive basis. Seven regions across the state outside of NYC received awards and will continue to deliver SNAP-Ed programming. However, the approach has shifted dramatically in two ways: (1) The focus has shifted to include major efforts to address policy, systems and environmental approaches. Direct education of participants is still required but at a reduced effort. (2) Educators must have degrees in nutrition, public health, or health education and we are no longer able to employ paraprofessional nutrition educators to conduct nutrition programming.
Produce safety training programs are supported almost entirely through external, federal funds. Genesee Valley Regional Marketing Authority has provided some statewide funding for grower training but most comes from grants such as those offered by Risk Management Agency and cooperative agreement funding for the Food and Drug Administration and the United States Department of Agriculture and Markets.

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**Evaluation Methods**

Each of the plans addresses a broad combination of applied research and extension initiatives spanning multiple audiences, methods, and intended outcomes. A combination of routine program monitoring and documentation, near-term outcome assessment, and targeted follow-up activities provides comprehensive assessment. We work towards this goal by doing two things – professional development to enhance evaluation capacity of our system and looking for program documentation of local, regional and statewide programs.

**Evaluation Capacity Building:** The CORE Evaluation Capacity-Building project with CCE came to a close at the close of the 2015 fiscal year. CCE staff continue to have full use of the web-based Netway program for program modeling and evaluation planning, and that the Netway includes online training components and resources such as the measures archive. Additional staff training in evaluation planning and practices to meet system wide outcomes will continue.

**Regional/Statewide documentation examples.** Many of our regional and statewide programs are receiving federal capacity funds. Documentation of outcomes will continue to be a requirement of funding. Results shape future program efforts and impact program design.

**There is also a requirement for our local and regional programs to report on statewide outcomes/indicators:** Program documentation results are aggregated in a statewide accountability database which includes both qualitative and quantitative data for reporting and helping us to better understand impacts. In 2016, we will continue to review the national outcome framework and connect it, as possible, to our statewide outcome framework.

**Recent Example – from Good Agricultural Practices (GAPs) Training and Implementation – use of mid-event and post-event survey and follow-up event survey**

New York has had an active GAPs training program for produce farmers since 1999, but as with research and technology, our training evolved to meet growers’ needs for having a farm food safety plan. Developing a written farm food safety plan is valuable because it helps guide the implementation of GAPs and is required if the farm needs to have a third party audit to meet buyer demands. In December of 2009, personnel from the National GAPs Program at Cornell University in collaboration with Cornell Cooperative Extension Regional Fruit and Vegetable Teams and the New York State Department of Agriculture and Markets began a new multi-day GAPs training program for produce growers in New York.
Given the time, effort, and expense of both conducting and attending the trainings, it was critically important to evaluate the trainings to make sure they were productive and valuable. Every training was evaluated after each day of instruction to determine if growers found the information valuable and made some progress towards understanding GAPs and developing a written farm food safety plan. A long term evaluation was completed by surveying training participants at least 6 months after they finished the multi-day course to determine what progress they had made, costs they had incurred, market access impacts, and assess other indicators to determine the long term impact of attending the training.

In the spring of 2014, 80 past participants, each representing a different farm, were asked to complete a 20 question survey administered by Cornell Cooperative Extension personnel. Though a formal research paper will be written, this summary is intended to share some preliminary findings from both the training evaluations and the long-term survey with growers since there will be additional GAPs training opportunities this winter throughout New York and the information may be valuable to growers attempting to decide if attending a GAPs training would benefit them and their farms.

Evaluations completed by participants on the first day of the GAPs trainings indicated that 13% of participants had a written farm food safety plan. By the end of day two, 48% of participants report having 50-100% of their farm food safety plans written. At the end of day two, participants were asked if they would recommend the training to others. Of those who completed the evaluations, all except one say they would recommend the training to others, with the one individual reporting “maybe”.

Of those responding to the long-term survey 63% (50/80) report having a written farm food safety plan and 38% (30/80) have completed a third party audit. Growers responding to the long-term survey had farms that varied in size from 0.25 acres to 4000 acres in fruit and vegetable production with a median size of 70 acres. They also reported having operations that included animals (28%) and having the public on their farm (32%), showing that growers from diversified farms and farms that direct market to consumers participated in both the GAPs trainings and the survey. This data highlights the progress that growers make during and after attending the workshop as well as the diversity of growers who have attended the multi-day trainings.

Thirty five (43%) growers reported maintaining sales valued from $14,000 to $2,000,000, while 14 (16%) growers reported expanded sales valued at $15,000 to $300,000. The three top reasons growers report for implementing GAPs are their personal commitment to food safety (24%), maintaining market access (20%), and reducing liability (17%).

Based on the evaluations, both short and long-term, the multi-day GAPs training programs are helping growers increase their understanding of produce safety issues, develop a written farm food safety plan, and implement practices to reduce microbial risks.

www.gaps.cornell.edu.

Recent Example – from the CCE EFNEP Program – use of pre-post, qualitative individual behavior change data collection
Some of the food and nutrition programs implemented through Cornell Cooperative Extension are the result of larger grant/contract supported projects that require specific evaluation strategies. Programs like EFNEP, Eat Smart New York, and Choose Health Action Teens are evaluated with consistent measures and strategies across the state. This information now feeds into our State Defined Outcomes related to Nutrition and Childhood Obesity.

- Some of the Expanded Food and Nutrition Education Program (EFNEP) and Supplemental Nutrition Assistance Program - Education (SNAP-Ed) are nutrition education programs designed to enhance the quality of life for a low-income (<=185% of poverty) participants and their families. EFNEP is provided to participants who are parenting, pregnant, or influencing the nutritional well-being of children under the age of 19 years, and who meet the income guidelines. SNAP-Ed is provided to any person who meets the income guidelines.

- Participants complete an assessment form at entry into the program and at exit. The question sets used are based on the content of classes delivered. Enrollment in the program is usually limited to 4 - 12 lessons, but may occasionally be longer, depending upon the needs and desires of the individual participant. The assessment form collects demographic information, a maximum of 25 behavior checklist items and a 24-hour dietary recall. These collected data are entered into a web-based electronic database, specifically designed by the USDA to capture these evaluation data.

- The web-based system provides multiple levels of assessment on participant and program outputs. The web-based system provides individual assessment: providing output reports which summarize participant reported behaviors to use with program participants to facilitate awareness of current practices and improved practices, at the conclusion of the sessions. The web-based system provide aggregated reports of program participant data which summarizes output and outcome (reported behavior and diet changes) at the local county level. The web-based system then enables to aggregation of data at the state and federal levels, to facilitate program reporting and evaluation assessment at each of these levels.

- Participants reached through one-time education complete a form which captures demographic characteristics and an assessment of topic-specific intent to change behavior, e.g. intent to choose water and low-fat milk instead of sweetened beverages. Data will not be linked to participant's name or address. Data on enrolled participants are used to 1) assist staff in establishing goals and objectives with the participants for program delivery and 2) assess outcomes of the program. Aggregated data are shared with the Federal and State funding agencies at the end of each Federal Fiscal Year as required for Cornell University and Cornell Cooperative Extension to receive the Federal funding.

https://fnec.cornell.edu/Home.cfm