All Americans have a right to a safe, sustainable and nutritious food supply. The growing number of farmers’ markets, food cooperatives, community supported farms and the continued rise in demand for locally-grown and organically-produced foods reflects the changing attitude of consumers about food. There are health benefits of sustainable food systems. Offering healthy, local food can ensure that families are eating the nutrient-rich foods they need while simultaneously supporting Florida’s agricultural economy. Recently, the UF/IFAS Extension Family Nutrition Program (FNP) has included a Farm to School, Farm to Community Program. The goal of this program is to support capacity building among school food authorities, communities, and farmers to promote Farm to School in Title 1 Schools and to provide fresh fruits and vegetables to low-income communities. With FNP’s relationship with many school districts and community partners, it is the perfect program to help Florida’s most needy communities with access to fresh fruits and vegetables. Farm to School Programs have been effective in changing behaviors. A review by Joshi et al. (2008) indicated that students who participated in Farm to School Programs consistently ate more fruits and vegetables at school and at home. They also had improved knowledge and attitudes about nutrition and agriculture. In addition, there was a 9% increase in participation in the School Lunch Program at schools that had a Farm to School Program. A diet rich in fruits and vegetables maximizes good health. Increased fruit and vegetable consumption lowers the risk of developing obesity, diabetes, and heart disease and could prevent at least 20% of all cancers, thereby reducing health care costs. Linking fresh, local foods to nutrition assistance programs may decrease food insecurity and hunger and improve the health of low-income families.

Programming that addresses nutrition is needed for a variety of reasons in Florida. Almost 14% of the population in Florida lives below the poverty level and as poverty levels rise, the nutritional and health risks to people of all ages increase. In addition the most recent food insecurity data show that 16.2% of Florida’s households are food insecure or don’t always have access to nutritious, safe food for a healthy, active life. Hungry children often have learning and behavioral problems and expectant mothers with inadequate nutrition are more likely to have low birth weight babies. Furthermore, Florida adults with the lowest incomes and the least education have the highest prevalence of obesity. This disparity, along with the persistent increase in obesity rates over the last three decades, is cause for concern as obesity is linked to increased risk for a number of chronic diseases, including heart disease, hypertension, diabetes, and some cancers. In Florida, participation in the Supplemental Nutrition Assistance Program (SNAP) has increased by 15.9% since 2011 for a total of 3,560,060 monthly recipients as of March 2016. Most of these recipients exhaust these benefits five to ten days before the end of the month. Extension receives federal dollars from USDA to provide nutrition education to SNAP participants and SNAP-eligible families in 43 Florida counties (UF/IFAS Extension Family Nutrition Program) to help them improve the quality of their diets and adopt an active lifestyle for chronic disease prevention and healthy weight management. The Social Ecological Framework, as referenced in the Dietary Guidelines for Americans, 2015, is used to understand how individuals make decisions about food and physical activity and is the foundation for the approaches used in the Family Nutrition Program. The goal of FNP programming is to influence multiple levels of the Social Ecological Framework in multiple settings of targeted...
communities. This is achieved using evidence-based nutrition education and cooking classes. As a result, FNP is working to change the environment to make the healthy choice the easy choice in communities. Additionally, six Florida counties receive funding to provide nutrition education to limited resource families through the Expanded Food and Nutrition Education Program (EFNEP). EFNEP’s series-based education assists limited-resource families in acquiring knowledge, skills, attitudes and changed-behavior necessary for nutritionally sound diets. All educational materials are based on the Dietary Guidelines for Americans and USDA's food guidance system - MyPlate.

An important part of healthy eating is keeping foods safe. It is estimated that foodborne illness affects about 1 in 6 Americans (or 48 million people), leading to 128,000 hospitalizations and 3,000 deaths every year. Food illnesses are attributed to commercial food service and foods prepared in private homes. Fresh produce is crucial to a healthy diet, but in the last three decades, the numbers of foodborne illness outbreaks associated with fresh produce has increased. Because of the recent economic downturn, home food preservation has returned as a popular activity across Florida. Many home food processors are using practices that put them at high risk for foodborne illness and economic losses due to food spoilage. In addition, many of our visitors to emergency food programs may be more susceptible to serious consequences from foodborne illness than the general population. To ensure that emergency food programs are operating at the highest level of food safety, training on important safety needs to be offered to staff and volunteers.

The target audience for programming in the nutrition and food systems priority work group includes children and adolescents (including 4-Hers), families with children, and adults of all ages including those with special needs. Food safety programs will focus on three major primary target audiences including professional food service managers or operators, professional food workers or food handlers, general consumers, and volunteers. Additional target audiences include personnel in state agencies such as FDACS, DBPR, DOE, and FDOH.

There are many challenges that face Extension throughout Florida. Budget cuts are a constant threat, which makes the need for quality programming and meaningful outcome data and impacts that much more important. Continuing to obtain external funding and participating in collaborative projects will enable Extension to address many, though not all, of the problems identified. As a result, the nutritional needs of many Floridians may be met through the efforts of this Priority Work Group.

**Program Objectives**

**Program: Nutrition Programs (includes Family Nutrition Program and Expanded Food and Nutrition Program)**

- **Objective 1:** At least 80% of program participants will increase their food, nutrition, physical activity, food handling, and resource management knowledge.
- **Objective 2:** At least 30% of youth participants will increase the number of days per week they are eating more than one kind of fruit or vegetable
- **Objective 3:** At least 30% of adult participants will increase the number of days per week they are eating more than one kind of fruit or vegetable
- **Objective 4:** At least 60% of participants will improve food preparation skills
- **Objective 5:** At least 30% of youth and adult participants will increase the number of days per week they are being physically active
- **Objective 6:** Over half of adult participants will utilize at least one food resource management strategy (e.g. compare prices and/or identify foods on sale) while food shopping.
- **Objective 7:** In partnership with Florida Extension Initiative Group 1:2, support at least 100 new, and enhance existing school and community gardens and alternative distribution networks that cater to food insecure households through production recommendations, networking, and fundraising.
- Objective 8: 50% of schools, worksites, child care centers, community and faith based organizations, food pantries, etc. partnering with Extension will enhance the environment and create or improve wellness policies to promote healthful eating and physical activity.
- Objective 9: At least 20% of adult participants will report improved access and/or awareness of healthful foods (did not run out of food in the past 30 days, consumed an increased amount of healthful foods, or who were food secure in the past 12 months)

Program: Food Safety
- Objective 10. At least 80% of the program participants will report an increase in knowledge of food safety and handling
- Objective 11. At least 50% of participants will adopt safe food handling practices when purchasing, storing, preserving foods at home, and preparing meals that will help to protect their family’s health.
- Objective 12. At least 50% of food service professionals (managers and operators) will:
  - Increase their food safety knowledge and competencies
  - Pass a national certification exam
- Objective 13. At least 50% of professional food handlers and volunteers in food banks, pantries and feeding sites will:
  - Demonstrate food safety knowledge and understanding of food safety concepts.
  - Adopt good personal hygiene practice.
  - Improve safe handling of foods and thereby reducing foodborne illness risk.
- Objective 14. At least 50% of consumers and volunteers (of all ages and 4-Hers) will:
  - Increase their basic knowledge of safe food handling practices and food preparation as prescribed by The Dietary Guidelines for Americans 2015, leading to behavioral changes to reduce foodborne illness risk.
  - Increase their knowledge and practice of safe food preservation and home canning preparation.

These increases in knowledge, changes in behavior or intents to change behavior will lead to sustained individual and family health and economic stability for Florida’s families.

**Educational Methods**

One-time educational presentations and an in-depth series using lecture, multi-media, games, and food demonstrations will be used. State programs focused on children and adolescents include the following:
- The Great Garden Detective
- Dig In!
- Grow It, Try It, Like It
- Youth Understanding MyPlate
- OrganWise Guys
- Healthy Habits for Life
- Cooking Matters for Kids and Teens
- Kids in the Kitchen
- University of Missouri Show Me Nutrition
- Youth Understanding MyPlate – Exploration Edition
- MyPlate Super Tracker High School Lessons
- Florida Ag in the Classroom Gardening for Grades
- Florida Ag in the Classroom Gardening for Nutrition

Programs for adults include the following:
- Eat Smart, Be Active
- Eat Healthy, be Active
- Faithful Families
- MyPlate for My Family
- Cooking Matters series
- Homestyles
- Elder Nutrition and Food Safety Program (for FNP older adults)

Examples of Food Safety Programs for Professionals:
- FDA – Model Food Code
- ServSafe® curriculum
- Worker Health and Hygiene (UF)
- State and Federal Food Laws and Regulations
- SafeStaff® (Safe Employees)

Examples of Food safety programs for consumers and volunteers:
- Basic food safety for different populations
- Home food preservation/home canning [USDA]
- Cottage Food Rules, Florida Food Safety Regulations

Produce safety and safe produce handling for consumers
Articles in newspapers or newsletters. Broadcasts on radio and television.
Displays at community partner sites and special events, such as health fairs.
Electronic Media- Fact sheets on locally grown produce in Florida
Information outreach to raise awareness of each of the health issues targeted above. These will include print and broadcast media, Family Album Radio scripts, and articles for the Solutions for Your Life and county Web sites.
Work with community partners to promote awareness of and enrollment in existing assistance programs which are currently underused with targeted outreach to increase use of SNAP benefits, WIC, the National School Breakfast and Lunch Program and the Senior Nutrition Program to increase healthy eating.

Partner with Florida Extension Initiative Group 1:2 Food Systems/Small Farms and Alternative Enterprises/Food Safety:
- To offer face to face in-depth training and web-based updates on food safety
- Contribute to the development of an electronic hub for all internal and public food safety information that aggregates consumer food safety information (Solutions for Your Life website), small farm food safety information (Small Farms and Alternative Enterprises website) and farm/processor food safety information (Food Science and Human Nutrition/UF-IFAS Food Safety Extension’s website).

Partner with the Florida Extension Initiative Group 5:1 Health and Wellness to ensure that people at-risk for negative health outcomes from chronic conditions have opportunities to learn about increasing consumption of healthy, fresh, affordable foods through chronic disease self-management programs.

RESULTS
1. Changes in knowledge about basic nutrition and the importance of physical activity, basic food safety, food resource management, and food security as measured by pre/posttests.

2. Intent to change behaviors related to choosing healthy foods, increasing physical activity, practicing basic food safety, managing resources, and enhancing food security as measured by pre/posttests.

3. Changes in behavior related to choosing healthy foods, increasing physical activity, managing resources, practicing basic food safety, and enhancing food security as measured by 24 hour food recalls and behavior checklists.

4. Dollars saved on healthcare and dollars saved on food costs.

5. Skills demonstrated during class activities (observation).

6. Increased numbers of schools with a HUSSC certification or Healthy District Award.

7. More schools implementing school gardens and procuring local foods.

8. Changes in food safety knowledge (pre/post-test).


10. Using recommended home food preservation and safety practices or intent to change behaviors.

11. Evaluation plans are: ServSafe® certification numbers; numbers of canning classes and the evaluation.

**NEEDS**

Face to Face Trainings:
OPS translator (Spanish, Haitian Creole)
Evaluation support including funding for research to measure impact
Curriculum support
Web-based program delivery support
IT support for demographic data collection required by state and federal agencies
Face-to-face training on:
- Farmers market training
- Other emerging programs and issues
Training in developing educational materials using state-of-the-art electronic media
OPS graphics artist
Support for program marketing (strategies, print materials, PSAs, etc.)