

V(A). Planned Program (Summary)

Program # 3

1. Name of the Planned Program

Nutrition and Wellness

Reporting on this Program

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
701	Nutrient Composition of Food	0%		25%	
702	Requirements and Function of Nutrients and Other Food Components	20%		25%	
703	Nutrition Education and Behavior	50%		25%	
724	Healthy Lifestyle	30%		25%	
	Total	100%		100%	

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2014	Extension		Research	
	1862	1890	1862	1890
Plan	0.7	0.0	0.3	0.0
Actual Paid	0.4	0.0	0.5	0.0
Actual Volunteer	0.0	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
43772	0	228496	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
43772	0	228496	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
780620	0	1430455	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

The Nutrition and Wellness Planned Program conducted research and extension programs that focused on increasing knowledge about good eating and exercise habits to promote improved health and wellness.

Activities in this planned program included:

- Home visits, and individual and family consultations
- Demonstrations on healthy shopping and cooking
- Summer youth activities
- Workshops
- Webinars, websites, and other publications
- Basic and applied research studies

2. Brief description of the target audience

Limited resource families and youth; agency personnel, teachers, food service staff, camp personnel, Health personnel, researchers, policy makers, advocacy groups

3. How was eXtension used?

eXtension was not used in this program

V(E). Planned Program (Outputs)

1. Standard output measures

2014	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	2714	12109	1738	1827

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year: 2014

Actual: 0

Patents listed

None

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2014	Extension	Research	Total
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Actual	0	56	56
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V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Conferences and Workshops, short courses, reports

Year	Actual
2014	234

Output #2

Output Measure

- New or updated web page(s)

Year	Actual
2014	1

Output #3

Output Measure

- Training of undergraduate, graduate and post doctoral students

Year	Actual
2014	353

Output #4

Output Measure

- Webinars conducted

Year	Actual
2014	0

Output #5

Output Measure

- YouTube videos produced

Year	Actual
2014	2

Output #6

Output Measure

- Apps developed

Year	Actual
2014	0

Output #7

Output Measure

- Clinical, extension or other expert services

Year	Actual
2014	56

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Increase program participants knowledge about healthy lifestyle changes to promote improved health and reduce obesity.
2	Enhance and improve nutrition education interventions to prevent childhood obesity of children beginning from conception to preschool age in low-income families.
3	Increase the health and well-being of program participants

Outcome #1

1. Outcome Measures

Increase program participants knowledge about healthy lifestyle changes to promote improved health and reduce obesity.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2014	13793

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Even in our relatively high income state, 12% of households experience food insecurity, 1/3 of children are overweight or obese (more than half are Hispanic and Black), an estimated one out of 5 residents eat no vegetables daily, 1/3 of our census tracts live more than a half mile from a healthier food retailer, and only 10% of our cropland is used to harvest fruit and vegetables. The typical elementary student receives just 3.4 hours of nutrition education each year. Efforts to strengthen education on healthy eating have a multifaceted approach in various Extension programs including FoodCorps, CT Youth Food Justice VISTA, 4-H, EFNEP, and partnerships with Nutritional Sciences and others.

What has been done

FoodCorps is a national service-learning program that places service members in high need school districts to build school gardens, teach nutrition, and bring local food products into the cafeteria. Our 15 service members collaborate frequently with Extension programs and their networks to address food system change across the state and regionally. FoodCorps service sites are in food insecure towns and cities across the state. Food service environments are improved via school gardens, nutrition education and farm to school. FoodCorps works in collaboration with our other Extension sustainable food programs: the Connecticut 10% Campaign, CT Food Justice Youth Corps VISTA project, and the 4-H program.

FoodCorps service members have built 26 gardens with our partners. 424 adult volunteers in FoodCorps have new leadership skills working with youth to improve food environments. 7,255 educational activities were conducted throughout the state. 324 pounds of produce were donated from the FoodCorps gardens to soup kitchens and other local organizations.

Results

Our service members work alongside teachers to increase the quantity of nutrition education children receive, while dramatically improving its quality through an emphasis on hands-on learning. FoodCorps addresses childhood obesity, increases knowledge about healthy lifestyle changes, and strengthens youth, families and communities. FoodCorps service members reported that 13,793 students have improved knowledge of healthy, nutritious eating through the programs and activities that were conducted.

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior
724	Healthy Lifestyle

Outcome #2

1. Outcome Measures

Enhance and improve nutrition education interventions to prevent childhood obesity of children beginning from conception to preschool age in low-income families.

2. Associated Institution Types

- 1862 Research

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2014	1

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Obesity is the number one nutritional problem in America. Prevention in early life is one of the most powerful strategies for combating the current obesity epidemic. It is evident that current childhood obesity prevention interventions are ineffective during time periods from preconception through early childhood (ages 2-5 years old). Parents, including fathers, have a strong influence over a child's eating and physical activity habits. Key behaviors have been identified to prevent childhood obesity, yet, effective nutrition education interventions for families within the community are lacking. Furthermore, a disproportionate risk for childhood obesity exists among lower income and/or minority families.

What has been done

A Hatch research project is in progress to 1) inventory and analyze the current nutrition education obesity prevention resources available to low-income families from time points of

preconception to preschool; 2) assess low-income families' barriers to implementing recommended obesity prevention behaviors and determine corresponding nutrition education needs; 3) develop and pilot test new nutrition education resources for childhood obesity prevention and; 4) evaluate the impact of new nutrition education resources on obesity related health and nutrition parameters for low-income families in a community-based, longitudinal study from preconception through early childhood.

This past year, several types of data were collected and presented at national conferences including additional formative/cross sectional data of interviews with low-income fathers of preschool age children to determine relationships of diet quality, body mass index and physical activity. In addition, qualitative interviews were conducted with low-income mothers to determine barriers to consuming fruit, vegetables and whole grain foods. Also, data analysis was conducted and presented as it relates to parenting and feeding styles and child obesity.

Results

Results of research efforts this past year have provided evidence of the following: 1) children as young as 3 years old can distinguish between healthy and unhealthy snacks and therefore can be taught to make healthier food choices, 2) fathers' weight status, diet quality and vigorous physical activity level as well as feeding practices are associated with preschool age children's weight status, diet quality, vigorous physical activity and eating behaviors thereby indicating that fathers, in addition to mothers, should be targeted in obesity prevention outreach and, 3) mothers continue to identify barriers including knowledge and skills to implementing Dietary Guidance messages particularly related to vegetable and whole grain intake thereby indicating the need to reevaluate current consumer nutrition education messages and outreach efforts.

These research findings will help enhance and lead to innovative behavioral-based nutrition education interventions to prevent childhood obesity which may translate to reduced prevalence of adult obesity and associated chronic disease.

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior
724	Healthy Lifestyle

Outcome #3

1. Outcome Measures

Increase the health and well-being of program participants

2. Associated Institution Types

- 1862 Extension
- 1862 Research

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2014	649

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

More children across the United States are suffering from overweight and obesity. Thirty percent of American children are overweight, 15% are obese, and millions more are at risk. Children from low-income households are at greatest risk for developing obesity given the high calorie, but poor quality diets and limited opportunities for physical activity. In Connecticut 10% of students are obese, 14% do not participate in moderate or vigorous physical activity in a week, and 30% of high school students watch TV for 3 or more hours on an average school day. Poor diet quality and lack of physical activity over a lifetime place adults at greater risk for a multitude of chronic diseases such as cancer, hypertension, cardiovascular disease, and diabetes. Minority and low-income adults are disproportionately at risk for developing chronic diseases due to these lifestyle factors as well as limited access to preventive care.

What has been done

Preventive nutrition and wellness programs conducted by Extension faculty and staff in Connecticut are reaching targeted groups of limited resource families and youth to raise awareness and promote positive behavior changes in diet quality, physical activity and access to preventive care services. Programs are conducted as single workshops or series of lessons to assist these groups in basic nutrition, physical activity and health. Programs are reaching adults and youth in urban, suburban and rural communities throughout the State; bilingual programs are also conducted for Spanish speaking groups. UConn websites for EFNEP, CT FANS IM, and Sustainable Living also provide nutrition and physical activity information on-line to the general public. Extension nutrition educators are also contacted by the public on a regular basis regarding nutrition, food safety, and food preservation topics.

Results

At-risk youth targeted through CT Fitness and Nutrition Clubs in Motion (CT FANS IM) and urban 4-H programs have shown increased awareness and knowledge of nutrition and physical activity. Youth have documented positive behaviors such as improved snacking choices and increased physical activity during the week. Youth involved with gardening projects showed increased knowledge of nutrition and increased vegetable consumption. Youth participating in Tools for Healthy Living project are able to identify home risks to health such as smoking, mold, and food bacteria. Specifically, Connecticut Fitness and Nutrition Clubs In Motion (CT FANS IM), is a 4-H Afterschool program designed to reduce obesity rates in children ages 9 to 14, through

sustainable interventions surrounding food and fitness, reached 649 students this reporting period. The program is a collaboration between the UConn Extension, and the Department of Kinesiology. CT FANs IM, was modeled after the original 4-H FANs Fitness and Nutrition Clubs, a USDA Children, Youth and Families at Risk (CYFAR) Program.

4. Associated Knowledge Areas

KA Code	Knowledge Area
701	Nutrient Composition of Food
702	Requirements and Function of Nutrients and Other Food Components
703	Nutrition Education and Behavior
724	Healthy Lifestyle

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)
- Other (Lack of access to a supermarket)

Brief Explanation

V(I). Planned Program (Evaluation Studies)

Evaluation Results

We use a nationally recognized survey instrument (the Fruit & Vegetable Neophobia Scale) to measure change of attitude among students working with FoodCorps CT Service Members. Changes in schools: Through the FoodCorps Landscape Assessment, we measure changes happening across each of our participating schools that help make them healthier places to learn, work, and play. Since schools are where kids spend the majority of their day, it's critical that the surrounding environment supports them in making healthy decisions and developing healthy habits. In the last year, 66% of our schools made better use of their gardens. Another 60% made improvements to their cafeteria environments to promote healthy eating.

Key Items of Evaluation