

### V(A). Planned Program (Summary)

#### Program # 3

#### 1. Name of the Planned Program

Childhood Obesity

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%		29%	
702	Requirements and Function of Nutrients and Other Food Components	0%		43%	
703	Nutrition Education and Behavior	57%		14%	
724	Healthy Lifestyle	43%		14%	
	<b>Total</b>	100%		100%	

### V(C). Planned Program (Inputs)

#### 1. Actual amount of FTE/SYs expended this Program

Year: 2012	Extension		Research	
	1862	1890	1862	1890
Plan	14.2	0.0	13.0	0.0
Actual Paid Professional	0.4	0.0	0.3	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
36610	0	200290	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
36610	0	200290	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
395596	0	942272	0

### V(D). Planned Program (Activity)

## **1. Brief description of the Activity**

Population data from the most recent survey of Connecticut indicate a population of approximately 3.5 million with 22.9% of that population under the age of 18. Data from the Center for Disease Control show that 14.5% of adolescents were overweight and 10.4% were obese. Additionally, data for children age 2-5 show that 14.9% were overweight and 15.8% were obese. UCONN research and extension programs are directly addressing this issue by focusing on healthy lifestyles, nutrition education, and fitness and nutrition clubs for young people. Fourteen research and extension faculty and staff are involved in programs that address nutrition and wellness - with a strong emphasis on improved nutrition and wellness for young people. We are highlighting three of these extension programs in the state defined outcomes section of this report. In addition, Hatch and Hatch Multistate formula funds provided resources to 13 research projects that address nutrition and wellness. Two research projects are summarized below.

A UCONN research investigator participated multi-state project, W1005, "An integrated approach to prevention of obesity in high risk families," to implement a childhood obesity prevention project, All 4 Kids, for low-income preschool age children and their families. Over 100 children were reached during the program within the state of Connecticut and at least 100 parents or caregivers participated in 3 family events which involved tasting novel foods, participating in new dances with their children and receiving nutrition education materials about how to eat smart, be active and accept others no matter what their size. As a result of the implementation of the All 4 Kids program, preschool children significantly improved their ability to identify healthy snacks and indicated that they would prefer the healthy snack over a less desirable snack.

Hatch research project, "Variation in oral sensation and dietary risk of cardiovascular disease and obesity," generated new knowledge and actions for improving health through optimal diets related to variation in chemosensory function and food preference. Through research connecting oral sensation with chronic disease risk through food preference, a food liking survey was designed and tested. The food liking survey is a rapid, feasible, and valid screening tool for fruit and vegetable consumption in children and a screening tool for assessing dietary behaviors that increase the risk of obesity and/or cardiovascular risk in children and adults. The food liking survey was tested through collaborations with community-based preschools, Connecticut Children's Medical Center, psychologists at the University of Birmingham in the UK, and researchers at Yale University.

## **2. Brief description of the target audience**

Low income youth and families, State agency personnel, policy makers, teachers, food service staff, camp personnel, health care personnel, researchers, policy makers, advocacy groups. food industry personnel, marketing professionals and students in health and nutrition fields.

## **3. How was eXtension used?**

eXtension was not used in this program

## **V(E). Planned Program (Outputs)**

### **1. Standard output measures**

2012	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
<b>Actual</b>	7016	152602	15219	91655

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

**Patent Applications Submitted**

Year: 2012

Actual: 0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

2012	Extension	Research	Total
<b>Actual</b>	5	30	35

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Face to face general group education sessions (workshops, etc)

Year	Actual
2012	100

**Output #2**

**Output Measure**

- New or updated web page(s)

Year	Actual
2012	33

**Output #3**

**Output Measure**

- Individual consultations (in person, e-mail, etc.)

<b>Year</b>	<b>Actual</b>
2012	5137

**Output #4**

**Output Measure**

- Training Conferences or sessions hosted or conducted  
Not reporting on this Output for this Annual Report

**Output #5**

**Output Measure**

- Fact sheets, bulletins and newsletters written or edited.

<b>Year</b>	<b>Actual</b>
2012	67

**Output #6**

**Output Measure**

- Undergraduate and Graduate Students Supervised

<b>Year</b>	<b>Actual</b>
2012	43

**V(G). State Defined Outcomes**

**V. State Defined Outcomes Table of Content**

O. No.	OUTCOME NAME
1	Increased understanding (%) of the principles of good nutrition for families and children.
2	Increased use (%)of fruits and vegetables.
3	Decreased consumption (%) of high sugar foods.
4	Decreased consumption (%) of high fat foods.
5	Increased understanding of basic metabolic processes related to obesity, weight and health. (new research findings)
6	Increased number of children receiving nutrition education.
7	Number of people reducing levels of obesity

## **Outcome #1**

### **1. Outcome Measures**

Increased understanding (%) of the principles of good nutrition for families and children.

### **2. Associated Institution Types**

- 1862 Extension
- 1862 Research

### **3a. Outcome Type:**

Change in Knowledge Outcome Measure

### **3b. Quantitative Outcome**

<b>Year</b>	<b>Actual</b>
2012	90

### **3c. Qualitative Outcome or Impact Statement**

#### **Issue (Who cares and Why)**

Children from low-income households are at greater risk for developing obesity given their high calorie, poor quality diets and limited opportunities for physical activity. Poor diet quality and lack of physical activity over a lifetime also places adults at a much greater risk for multitude of chronic diseases such as cancer, hypertension, cardiovascular disease and diabetes.

#### **What has been done**

The Nutrition, Fitness and Healthy Lifestyles Extension program reached 80 youth through nutrition and fitness programs conducted in afterschool programs in Hartford and New Britain; 200 families attended educational workshops on feeding infants and young children; and low-income senior citizen in Hartford and New Britain received training on food budgeting, healthy eating and food safety.

#### **Results**

Youth participating in the nutrition and fitness programs increased their fitness levels by 50% from baseline testing. Ninety percent of participating youth reported increased knowledge regarding nutritional food choices. Seniors attending nutrition and food safety workshops increased knowledge and awareness of food budgeting and good food safety practices. Ninety percent of the parents that attended the child nutrition workshops adopted better feeding strategies.

### **4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
702	Requirements and Function of Nutrients and Other Food Components
703	Nutrition Education and Behavior

## **Outcome #2**

### **1. Outcome Measures**

Increased use (%) of fruits and vegetables.

Not Reporting on this Outcome Measure

## **Outcome #3**

### **1. Outcome Measures**

Decreased consumption (%) of high sugar foods.

Not Reporting on this Outcome Measure

## **Outcome #4**

### **1. Outcome Measures**

Decreased consumption (%) of high fat foods.

Not Reporting on this Outcome Measure

## **Outcome #5**

### **1. Outcome Measures**

Increased understanding of basic metabolic processes related to obesity, weight and health. (new research findings)

Not Reporting on this Outcome Measure

## **Outcome #6**

### **1. Outcome Measures**

Increased number of children receiving nutrition education.

### **2. Associated Institution Types**

- 1862 Extension
- 1862 Research

### 3a. Outcome Type:

Change in Knowledge Outcome Measure

### 3b. Quantitative Outcome

Year	Actual
2012	500

### 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

Only 2% of children in the U.S. eat enough fruits and vegetables, and the percentage of overweight and obese children has tripled over the past 30 years. This crisis discriminates against some children more than others; 50% of children of color are expected to develop diabetes during their lifetimes. Schools should provide a healthy food environment, where children will learn what healthy food is, how it grows, where it comes from, and will have access to it every day.

#### What has been done

A national service program called FoodCorps was launched in 2010, and Connecticut was invited to participate in fall 2011. College graduates invest a year of service creating healthy food environments for children in schools through three pillars of service: nutrition education, school gardens, and farm-to-cafeteria programs.

#### Results

The University of Connecticut's Cooperative Extension FoodCorps CT is under development. One FoodCorps service member will provide at least 80 educational activities (classroom lessons, cafeteria taste tests, garden meetings, etc.), and serve approximately 500 children.

### 4. Associated Knowledge Areas

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

### Outcome #7

#### 1. Outcome Measures

Number of people reducing levels of obesity

#### 2. Associated Institution Types

- 1862 Extension
- 1862 Research

### 3a. Outcome Type:

Change in Condition Outcome Measure

### 3b. Quantitative Outcome

Year	Actual
2012	2078

### 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

Obesity is increasing in youth and in high risk populations. According to the reports published on the "Let's Move" government website, "Over the past three decades, childhood obesity rates in America have tripled. Today, almost one in every three children in our nation is overweight or obese." Healthy Lifestyles programming, as part of a multi-faceted effort to help address the childhood obesity epidemic, and outreach in behavioral and environment factors will be essential in reducing the risk of disease.

#### What has been done

Connecticut Fitness and Nutrition Clubs in Motion, is a 4-H Afterschool program designed to reduce obesity rates in children ages 9 to 14, through sustainable interventions surrounding food and fitness. 4-H Teen Mentors are trained to deliver the program, in partnership with University of Connecticut (UCONN) 4-H Program Staff, UCONN Department of Kinesiology Staff and Graduate Students, UCONN Master Gardener volunteers, as well as parents and community partners.

#### Results

In addition to afterschool programs focusing on student and family fitness, nutrition, community gardening, and life skills, 14 Family Nights were conducted which included exergame technology demonstrations and healthy lifestyle information. Non-traditional exercise was introduced by community instructors, including yoga, karate and Latin dance, and Zumba. Four hundred and forty-four (440) one time contacts were conducted in New Haven via special community health fair events. A website was designed and launched, and Facebook and Twitter accounts were established. Sustaining-There are 24 sustained clubs including 2 Wii Dance Clubs and 2 Walking (Mileage)

### 4. Associated Knowledge Areas

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

## **V(H). Planned Program (External Factors)**

### **External factors which affected outcomes**

- Economy
- Public Policy changes
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

### **Brief Explanation**

## **V(I). Planned Program (Evaluation Studies)**

### **Evaluation Results**

Through a variety of evaluation tools including pre-testing, time series and post-testing Extension Educators surveyed participants utilizing both written and internet based methods. Participants reported changed in attitude and increased knowledge following completion of programs.

### **Key Items of Evaluation**

Team leaders reviewed the programs for educational value to ensure the programs remained significant and relevant to their intended goals.

The Food Corp CT program is using the Fruit & Vegetable Neophobia scale to measure change in attitudes toward fruits and vegetables. The program will also apply an intensive monitoring and evaluation program, including site visits, interviews, as well as use of the AmeriCorps' "AmeriLearns" log and monitoring tools.

The Connecticut Sustainable Community project conducted 103 data sets evaluation for participating youth assessing changes in strength, flexibility and endurance. In addition, questionnaires were used to collect data to determine nutrition and fitness awareness, knowledge and attitudes. Questionnaire results reported 2,078 youth and family reduced levels of obesity and 2,114 people increased their knowledge of basic dietary processes.