

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

**Program # 5**

**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
201	Plant Genome, Genetics, and Genetic Mechanisms	10%		10%	
502	New and Improved Food Products	10%		10%	
607	Consumer Economics	10%		10%	
610	Domestic Policy Analysis	5%		5%	
701	Nutrient Composition of Food	5%		5%	
702	Requirements and Function of Nutrients and Other Food Components	10%		10%	
703	Nutrition Education and Behavior	20%		20%	
806	Youth Development	30%		30%	
	<b>Total</b>	100%		100%	

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

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

Year: 2014	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	1.2	0.0	11.0	0.0
<b>Actual Paid</b>	0.8	0.0	6.8	0.0
<b>Actual Volunteer</b>	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
701081	0	270328	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
2358054	0	1268299	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
274117	0	1191143	0

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

**1. Brief description of the Activity**

- Conduct research
- Conduct educational workshops, seminars, short courses, conferences
- Partner with other agencies interested in childhood obesity
- Work with the media
- Develop curricula, publications, web sites, distance education materials
  
- Publish research and Extension articles

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

- Parents
- Youth
- Children
- Consumers
- Day Care Providers
- Healthcare Providers
- State and county health departments
- Professional organizations

**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
<b>Actual</b>	2095	9680	6762	2088

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

**Patent Applications Submitted**

Year: 2014  
 Actual: 0

**Patents listed**

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

**Number of Peer Reviewed Publications**

2014	Extension	Research	Total
<b>Actual</b>	2	89	9

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

**Output Target**

**Output #1**

**Output Measure**

- Number of Extension publications written, new or revised

Year	Actual
2014	3

**Output #2**

**Output Measure**

- Number of research publications

Year	Actual
2014	89

**Output #3**

**Output Measure**

- Number of research projects

Not reporting on this Output for this Annual Report

**Output #4**

**Output Measure**

- Number of consultations

<b>Year</b>	<b>Actual</b>
2014	184

**Output #5**

**Output Measure**

- Number of educational workshops or seminars conducted

<b>Year</b>	<b>Actual</b>
2014	281

**Output #6**

**Output Measure**

- Number of volunteers

<b>Year</b>	<b>Actual</b>
2014	400

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

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

O. No.	OUTCOME NAME
1	Number of persons who adopt one or more practices to improve food choices
2	Number of participants who have increased their knowledge of how to raise healthy eaters
3	Number of persons who increased their knowledge of selection and preparation of foods with reduced fat and/or calories
4	Number of persons who increased knowledge of USDA serving sizes
5	Number of participants consuming appropriate serving sizes
6	Number of participants demonstrating ability to choose or prepare foods with reduced fat and/or calories
7	Number of youth who increased knowledge of the importance of physical activity
8	Number of participants who adopt increased physical activity levels
9	Number of participants who increased their knowledge of the connection between food choices and risk of chronic disease
10	Number of participants who increased their knowledge of the relationship between nutrition and health
11	Number of participants who adopt one or more practices to improve food choices and activity levels
12	NIFA National Outcomes and Indicators, Childhood Obesity (Outcome 1, Indicator 1.c) - Number of children and youth who reported eating more of healthy foods.

## **Outcome #1**

### **1. Outcome Measures**

Number of persons who adopt one or more practices to improve food choices

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

- 1862 Extension
- 1862 Research

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

Change in Action Outcome Measure

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

<b>Year</b>	<b>Actual</b>
2014	1606

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

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

In Indiana, 57.3 percent of children between the ages of 10-17 are obese, 68.4 percent of men and 56.8 percent of women are overweight or obese. These significant statistics create a critical need for improved nutrition and increased physical activity for youth.

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

Camp RAVE Garden project, through partnership with Chances and Services for Youth, United Way and the City Parks Department, was a 9-week series of demonstrations and workshops for youth held at the Booker T. Washington community garden. Instruction was of gardening skills and plant science, nutrition, healthy living, food safety, and physical fitness. Over half of the youth had never worked in a garden prior to Camp RAVE.

#### **Results**

As a result of the program, campers had an increased desire for healthier food choices and overall improved lifestyle. Campers reported that they: 1) tried new fruits and vegetables while attending camp; 2) will look for more opportunities to garden; 3) will wash their hands more often before eating food, 4) will wash fresh fruits and vegetables before eating them, and 5) plan to eat more fruits and vegetables each day.

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

<b>KA Code</b>	<b>Knowledge Area</b>
703	Nutrition Education and Behavior
806	Youth Development

## **Outcome #2**

### **1. Outcome Measures**

Number of participants who have increased their knowledge of how to raise healthy eaters

### **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>
2014	223

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

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

Military families face unique challenges and have a growing need to access quality community-based child care. Indiana was one of 13 states chosen to participate in the Childcare and Youth Training and Technical Assistance Project (CYTTAP) conducted by the University of Nebraska-Lincoln Extension with Penn State Extension and in partnership with the US Department of Defense. This three-year grant-funded project was to provide training and technical assistance to early childhood professionals who care for young children of off-installation military families to increase quality child care.

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

Five target counties were identified in Indiana to participate in this national initiative based on the number of military families in those counties who need quality child care services. I Am Moving, I Am Learning (IMIL) is a hands-on, interactive workshop on increasing physical activity and promoting healthy nutrition choices for children birth to 5. IMIL seeks to increase daily moderate to vigorous physical activity, improve the quality of movement activities intentionally planned and facilitated by adults, and promote healthy food choices every day. Train-the-trainer sessions were given to Extension Educators so they could provide the face-to-face workshops for child care providers in their communities using the various curricula and resources provided by the grant.

#### **Results**

Based on post evaluations, the child care staff had improved knowledge regarding: 1) developmentally appropriate strategies to promote physical activity in children; 2) how motor development influences one's overall health; 3) how to use appropriate verbal cues and music to encourage various movement activities; 4) health benefits associated with and strategies to apply

moderate to vigorous physical activity practices; 5) how moderate to vigorous physical activity supports pre-school readiness; 6) impact of good nutrition on children's overall health and development and strategies to promote healthy food choices for children, 7) benefits of outdoor play and time in nature to children's motor skill development; and 8) how culture and unique experiences of children and families influence children's healthy development. In addition, those child care staff showed improvement in these practices: 1) using movement vocabulary to support children's development; 2) discussing strategies with parents to support moderate to vigorous physical activity with children at home; 3) building in movement activities with children that achieve 60 minutes of moderate to vigorous physical activity per day; 4) encouraging families to use developmentally appropriate activities with children at home; and 5) implementing strategies for improving nutritional choices among parents and children.

#### 4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior

#### Outcome #3

##### 1. Outcome Measures

Number of persons who increased their knowledge of selection and preparation of foods with reduced fat and/or calories

##### 2. Associated Institution Types

- 1862 Extension
- 1862 Research

##### 3a. Outcome Type:

Change in Knowledge Outcome Measure

##### 3b. Quantitative Outcome

Year	Actual
2014	1559

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

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

The impact and prevalence of overweight and obesity continues to be high. In Indiana 29% of adolescents and 65% of adults are overweight/obese. Poor nutrition and sedentary behaviors are contributing to this epidemic.

###### What has been done

Eat Healthy-Be Active was a program developed by the Centers for Disease Control and Prevention was implemented in counties across Indiana. The six-session curriculum focused on

nutrition and exercise with each session providing nutrition education, food demonstration, and exercise.

**Results**

Adult participants learned a lot of great information about preparing healthier meals. They planned to: change their recipes to reduce salt and sugar, refer to the written material when planning healthy meals, and use the recipes that were provided. The best part of the program was getting to taste examples of healthy foods which made them more confident to try it at home. Participants planned to become more active and to improve their eating habits.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
701	Nutrient Composition of Food
702	Requirements and Function of Nutrients and Other Food Components
703	Nutrition Education and Behavior
806	Youth Development

**Outcome #4**

**1. Outcome Measures**

Number of persons who increased knowledge of USDA serving sizes

Not Reporting on this Outcome Measure

**Outcome #5**

**1. Outcome Measures**

Number of participants consuming appropriate serving sizes

Not Reporting on this Outcome Measure

**Outcome #6**

**1. Outcome Measures**

Number of participants demonstrating ability to choose or prepare foods with reduced fat and/or calories

Not Reporting on this Outcome Measure

**Outcome #7**

**1. Outcome Measures**

Number of youth who increased knowledge of the importance of physical activity

Not Reporting on this Outcome Measure

**Outcome #8**

**1. Outcome Measures**

Number of participants who adopt increased physical activity levels

Not Reporting on this Outcome Measure

**Outcome #9**

**1. Outcome Measures**

Number of participants who increased their knowledge of the connection between food choices and risk of chronic disease

Not Reporting on this Outcome Measure

**Outcome #10**

**1. Outcome Measures**

Number of participants who increased their knowledge of the relationship between nutrition and health

Not Reporting on this Outcome Measure

**Outcome #11**

**1. Outcome Measures**

Number of participants who adopt one or more practices to improve food choices and activity levels

Not Reporting on this Outcome Measure

## **Outcome #12**

### **1. Outcome Measures**

NIFA National Outcomes and Indicators, Childhood Obesity (Outcome 1, Indicator 1.c) - Number of children and youth who reported eating more of healthy foods.

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

- 1862 Extension
- 1862 Research

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

Change in Action Outcome Measure

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

<b>Year</b>	<b>Actual</b>
2014	1868

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

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

In 2014, Indiana, like the rest of the nation, had an increase in poverty and joblessness. According to US Bureau of Labor Statistics, 5.7% of Hoosiers were unemployed in September 2014, with individual counties as high as 6.7% unemployment. In 2012, STATS Indiana reported Indiana ranked 20th in the US with 15.5% of Hoosiers living in poverty. According to the Indiana Family and Social Service Administration (October 2013), 926,653 individuals in Indiana received food assistance (SNAP).

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

The Purdue Extension Nutrition Education Programs (NEP), in partnership with Purdue University Cooperative Extension Service, Indiana Family Social Service Administration, and the U.S. Department of Agriculture (FNS and NIFA), continued to provide education to low-income participants on food safety, diet quality, and economizing food dollars to help bring about nutrition-related lifestyle changes and reduce food security. In 2014, NEP provided this program in 91 Indiana counties. From the mission to empower limited-resource audiences are two that address prevention of obesity: making healthy food choices, and engaging in regular physical activity to enhance the quality of life. Of the clients reached through NEP in Indiana, over 37,908 were youth ages 5-17.

#### **Results**

Of the 6,000 children in grades 3-5 who completed the Nutritional Educational Survey before and after the nutrition education program: 1) 29.10% increased their intake of vegetables; 2) 24.80% increased their intake of fruits; 3) 31.13% increased their intake of healthy snacks; and 4) 26.02% increased their physical activity levels.

#### 4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior
806	Youth Development

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

##### External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

##### Brief Explanation

{No Data Entered}

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

##### Evaluation Results

Outcome 1 - Post survey of knowledge gained and intentions for actions  
Outcome 2 - Post survey of knowledge gained and practices impacted  
Outcome 3 - Post survey of knowledge gained and intentions for eating habits  
Outcome 12 - NIFA - Pre- and post-surveys of self-reported eating behaviors. Paired t-tests to compare the pre- and post-test answers with statistical significance level  $p < 0.05$ .

##### Key Items of Evaluation

Outcome 1 - Youth introduced to gardening and tasting a variety of fresh foods plan to eat more fruits and vegetables.  
Outcome 2 - Staff caring for children of military families were more prepared to increase daily physical activity and to make healthier food choices available for those children in the child care setting in an effort to prevent overweight and obesity.  
Outcome 3 - Participants planned to become more active and improve their eating habits.  
Outcome 12 - NIFA - Children in grades 3-5 increased their intake of vegetables, fruits, and healthy snacks, and increased their physical activity.