

V(A). Planned Program (Summary)

Program # 17

1. Name of the Planned Program

Childhood Obesity - Human Nutrition and Health

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
703	Nutrition Education and Behavior	70%		0%	
724	Healthy Lifestyle	30%		0%	
	Total	100%		0%	

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2011	Extension		Research	
	1862	1890	1862	1890
Actual Paid Professional	29.0	0.0	0.0	0.0
Actual Volunteer	12.2	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
475000	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
475000	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
2400000	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Development of new curricula

- Adaptation & supplementation of existing curricula
- Outreach to families, schools, child care providers, direct assistance, demonstrations, and educational opportunities relating to food, healthy eating, exercise, diet, etc.
- Development of surveys, evaluation tool
- Searching out and applying for appropriate grants
- Delivery through classes, One-on-One, News Releases/TV/Radio, Participation in Events, Displays
- Provide training and other staff development opportunities to county educators
- Create public awareness of programs and resources through promotional and educational materials to be distributed to teachers, agency professionals, and other community members.

Accomplished through programs such as:

- Healthy Oklahoma Youth
- Farm to You
- Food and Fun for Everyone
- Fresh Start - Nutrition and You
- Community Nutrition Education Program

2. Brief description of the target audience

Youth, children; parents; teachers; adult volunteers; middle to low income families; race and ethnicity will also be recognized as an identifier of audiences; caretakers, agencies & service providers, schools, policy makers.

3. How was eXtension used?

Worked closely with appropriate eXtension CoPs

V(E). Planned Program (Outputs)

1. Standard output measures

2011	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	123059	11300000	66300	5600000

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

Patent Applications Submitted

Year: 2011
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2011	Extension	Research	Total
Actual	3	0	3

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Revised On-Line Curricula

Year	Actual
2011	2

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Number of youth improving food, nutrition, and/or physical activity behaviors through Healthy Oklahoma Youth Program
2	Food Insecurity and Hunger in Oklahoma - Community Nutrition Education Programs - Number of youth receiving nutrition information

Outcome #1

1. Outcome Measures

Number of youth improving food, nutrition, and/or physical activity behaviors through Healthy Oklahoma Youth Program

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	16599

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Over the past decade, the percentage of those overweight has steadily increased in Oklahoma. As many as one in five Oklahoma children are at-risk of overweight or overweight; and two-thirds of adults are overweight or obese. Among children and adolescents, overweight increases the risk of type 2 diabetes, high blood pressure, and cardiovascular disease. The health of Oklahoma youth can be improved by increasing knowledge, skills, attitudes and behaviors related to food and physical activity. Overweight, obesity and associated health problems have a significant economic impact. The estimated annual cost of overweight and obesity in the United States is \$117 billion. Just a 10% sustained weight loss has been estimated to reduce an overweight person's lifetime medical costs by \$2,200 to \$5,300.

What has been done

Nutrition Education for Youth

The OCES Healthy Oklahoma Impact Team (HOIT) educates Oklahoma youth on healthy food, nutrition and physical activity behaviors with the aim of reducing overweight and risk for related chronic disease. Efforts are conducted primarily in elementary classroom settings across the state using a six lesson series. Topics include increasing consumption of breakfast, using nutrition facts labels to make healthy snack choices, making healthy choices when eating out, making healthy beverage choices, increasing intake of dairy foods, fruits and vegetables, and increasing time participating in physical activity. Lessons are aligned with the Oklahoma Priority Academic Student Skills (PASS).

Steps to a Healthy Oklahoma.

To increase physical activity levels of Oklahoma youth the OCES HOIT has developed thirteen supplemental teacher lessons combining nutrition education and physical activity. Lessons are aligned with PASS.

Farm to You Exhibit

OCES programs targeting youth populations joined efforts with State agencies and agricultural commodity organizations to offer an interactive educational exhibit linking agriculture as the source of nutrient dense foods and role of these foods to health. The collaborating programs and agencies include OCES HOIT, OCES Community Nutrition Education Program (CNEP), OCES 4-H, OCES Ag in the Classroom, Oklahoma State Department of Health WIC Service, and Southwest Dairy Farmers. Exhibit messages are consistent with and enhance the HOIP and CNEP youth program messages, are research based and consistent with United States Department of Agriculture (USDA) Dietary Guidelines for Americans 2005 and MyPyramid.

Results

Since September 2008, the Farm to You exhibit was experienced by approximately 56,944 youth and 2,230 community volunteers in 56 counties. The average number of students reached per site visit over the 3 year period was 312 students and 12 community volunteers. In a case/control evaluation, the exhibit was found to enhance behavior change in students who were exposed to both classroom nutrition education lessons and the exhibit compared to those exposed solely to the classroom lessons. The project received national attention by being featured in *Weighing the Options: How Can We Encourage Healthy Weights among America's Youth*, a publication of the National Issues Forum Network, West Virginia Center for Civic Life. In 2010, it received the Dr. Rodney Huey Memorial Champion of Oklahoma Health Award.

The HOIT reached a total of 16,599 youth through school classroom nutrition education efforts. Important improvements in food, nutrition and physical activity behaviors were observed among participating Oklahoman youth which can have a role in reducing overweight and risk of related chronic diseases. The statistically significant observed improvements include:

- 33% increase in eating whole grain breads and cereals.
- 27% increase in eating fruits and vegetables.
- 27% increase in drinking milk or eating cheese or yogurt
- 32% increase in eating low-fat meats
- 33% increase in eating foods from 2 or 3 MyPyramid food groups for breakfast.
- 29% increase in snacking only when hungry.
- 39% increase in using nutrition facts labels to make food and beverage choices.
- 34% increase in eating small amounts of high fat foods.
- 34% increase in eating small amounts of sugar-sweetened beverages.
- 23% increase in time spent in physical activity.

4. Associated Knowledge Areas

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

Outcome #2

1. Outcome Measures

Food Insecurity and Hunger in Oklahoma - Community Nutrition Education Programs - Number of youth receiving nutrition information

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	23332

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Of households experiencing hunger, less than 20% are classified as unemployed. More than one-third are disabled and/or retired, while the remaining 40% have at least one working member.

Oklahoma loses an estimated \$1.4 billion each year from hunger through illness, increased illness and decreased academic achievement alone.

Among seniors receiving food through Oklahoma's Food Bank System, 45% report having to choose between buying food or paying for medicine or medical care.

In 2010, 24.5% of children under the age of 18 lived in poverty and 1 in 5 children were at risk for being hungry.

In 2010, over 616,000 Oklahomans lived in poverty. The prevalence of low socio-economic status is associated with poor nutrition habits that contribute to chronic disease including heart disease, cancer, stroke, and obesity.

During 2011, Supplemental Nutrition Program Assistance (SNAP, previously known as the Food Stamp Program) participation increased 9.2% over the previous year and doubled the amount distributed 5 years ago.

What has been done

Through the Community Nutrition Education Programs (CNEP), OCES has leveraged state monies to provide over \$3.8 million (FY11) in federal nutrition education program funds. This funding supports 108 jobs in 49 Oklahoma counties. CNEP is a voluntary program for adults participating in federal food assistance programs as well as impoverished youth in qualifying

schools and communities. Program participants learn to feed their families in order to promote good health and to plan and budget their food dollars so their family will not go hungry at the end of the month.

Working through OCES county offices, teaching paraprofessionals known as Nutrition Education Assistants (NEAs) coach participants during weekly lessons to build skills that enable them to stretch their family food dollars, plan and prepare more nutritious meals and increase physical activity. The research-based lessons involve hands-on learning experiences and can take place in the participant's home or in small group settings.

CNEP educates Oklahoma youth on healthy food choices, safe food practices and physical activity with the purpose of reducing overweight and obesity and the associated risk of related chronic disease.

Results

In FY11 CNEP has had a positive impact on the health and wellness of 4,785 low-income Oklahoma families. Almost 96% of adult graduates demonstrate a positive change towards a healthy diet. In addition, 39% of graduates less often ran out of food by the end of the month and 36% report that their children ate breakfast more often.

CNEP staff provided a total of 5,598 hours of nutrition information on healthy eating practices, food preparation and food safety to 23,332 qualifying Oklahoma youth during the 2011 fiscal year.

The majority of enrolled youth (19,556) were taught through school enrichment programs; while 3,776 children received their nutrition education through short term community based programs.

After participating in CNEP, approximately 12% of surveyed youth participants more often consumed low-cost, healthy foods and 9% increased their frequency of hand washing.

In FY11, CNEP and OCES leveraged state monies to bring \$3.8 million in federal nutrition education program funds to the state. Based on a 2009 study, estimated potential health care savings associated with nutrition education programs similar to the CNEP were approximately \$26 million due to increased prevention of nutrition-related chronic diseases and conditions.

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
- Government Regulations
- Other (Access to schools)

Brief Explanation

V(I). Planned Program (Evaluation Studies)

Evaluation Results

The HOIT reached a total of 16,599 youth through school classroom nutrition education efforts. Important improvements in food, nutrition and physical activity behaviors were observed among participating Oklahoman youth which can have a role in reducing overweight and risk of related chronic diseases. The statistically significant observed improvements include:

- 33% increase in eating whole grain breads and cereals.
- 27% increase in eating fruits and vegetables.
- 27% increase in drinking milk or eating cheese or yogurt
- 32% increase in eating low-fat meats
- 33% increase in eating foods from 2 or 3 MyPyramid food groups for breakfast.
- 29% increase in snacking only when hungry.
- 39% increase in using nutrition facts labels to make food and beverage choices.
- 34% increase in eating small amounts of high fat foods.
- 34% increase in eating small amounts of sugar-sweetened beverages.
- 23% increase in time spent in physical activity.

Key Items of Evaluation