

V(A). Planned Program (Summary)

Program # 9

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%	0%	0%	10%
702	Requirements and Function of Nutrients and Other Food Components	0%	0%	0%	10%
703	Nutrition Education and Behavior	50%	50%	0%	40%
723	Hazards to Human Health and Safety	5%	10%	0%	10%
724	Healthy Lifestyle	45%	40%	0%	30%
	Total	100%	100%	0%	100%

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2012	Extension		Research	
	1862	1890	1862	1890
Plan	12.0	3.0	0.3	2.0
Actual Paid Professional	23.0	3.5	0.0	1.5
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
435225	194568	0	291297
1862 Matching	1890 Matching	1862 Matching	1890 Matching
435225	97284	0	145648
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Clemson University Cooperative Extension as well as 1890 Research and Extension focused on nutrition and wellness programs for youth directed towards the prevention of childhood obesity, increasing physical activity and the development of food preparation skills that fit current nutritional needs and lifestyles. Good nutrition is important not only because it promotes a feeling of well-being, but it also has an important role in disease prevention. Activities included summer and day camps, programs through schools and childcare centers, churches and community centers were held.

Agents and specialists developed nutrition curriculum, kits, videos, and media programs to reach children. Specialists are conducting menu analysis at facilities that serve children. Partnerships were formed between the Center for Healthy Living, the Youth Learning Institute, the Department of Food Science and Human Nutrition to position Clemson University to be a national leader in addressing the obesity epidemic .

Associations will be explored between family domain factors and child physical activity and eating behaviors. Measures of family domain factors associated with child physical activity and eating behaviors will be developed and refined. This program will delineate the strength and direction of the relationships between family domain factors with the greatest potential for change through community based interventions. A pilot test will be conducted of an intervention targeted towards family factors that mediate child physical activity and eating behaviors.

Educational workshops will be conducted with youth and families of general and limited resources to improve their health and well-being. Health assessments on participants and their families will be conducted. Daily recreational activities will be incorporated into the summer and after-school programs.

An 1890 Researcher conducted a study on implementing physical activity and nutrition through the use of technology to combat overweight and obesity in elementary school-aged children. The research provided a Physical Activity And Nutrition (PAAN) Camp that continuously researched the effects of technology on physical activity and nutrition in the reduction of weight of children who were overweight or obese. The research targeted up to 75 children in grades 3-5 who are severely overweight or who were obese as identified by BMI index charts. The Departments of Family and Consumer Sciences and Health and Physical Education at South Carolina State University partnered to research how the negative views of technology used by youth can ultimately be transformed into positive instruments to combat childhood obesity. The project utilized the Diet Analysis Plus technological computer program to develop individual nutritional plans and used the Wii Gaming System, along with the Trikke body driven vehicles, to develop an activity program for each participant. Health and physical education teachers of the tri-county area of Orangeburg, Bamberg, and Calhoun counties were interviewed for fitness test results of children attending school in the districts of the targeted counties to obtain data on activities and nutrition as a basis for creating individual plans for participants.

Another 1890 Researcher concluded the study of an integrated approach to prevention of obesity in high risk families. An expert field review of key behavioral measures purported to contribute to excessive weight gain in children 4-10 yrs of age was conducted. Data collection instruments were designed, peer reviewed and pre-tested. A data analysis training session was conducted and designed. Education practices were identified in SNAP-Ed towards obesity prevention, outcomes, success stories, healthy eating and physical activity. Papers, presentations and articles were developed from the research. A research bulletin was written for documentation and dissemination.

2. Brief description of the target audience

The target audience includes agencies that serve all income levels, including limited resource families and youth. Children ages 3 - 12 years old.

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
Actual	7799	0	19531	0

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
Actual	4	2	6

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- National Media Placements
Not reporting on this Output for this Annual Report

Output #2

Output Measure

- Number of people completing educational workshops

Year	Actual
2012	24428

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Number of people gaining knowledge as a result of participating in educational workshops

Outcome #1

1. Outcome Measures

Number of people gaining knowledge as a result of participating in educational workshops

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	17049

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

In South Carolina, about 60 percent of the population is obese or overweight and over 20 percent of the children are obese. Overweight, obesity and the associated risk factors of unhealthy eating and inadequate amounts of physical activity increase the risk for developing other chronic conditions and diseases, such as diabetes, cardiovascular disease, certain cancers, arthritis, sleep apnea, and depression. Obesity related medical costs amount to about \$1 billion in South Carolina.

What has been done

Over 2,989 educational programs were conducted reaching approximately 24,428 children. Agents reached youth and adults in schools, summer camps, community centers, and health fairs. Some of the topics taught by agents covered included basic nutrition, the importance of daily physical activity, how to make healthy food choices and food safety in preparation and storage. Agents taught Veg-Olympics, Team Nutrition, What's Cookin, and Health Summit at Cafe Cultura. Lessons in nutrition and physical activity were taught to the children whose mothers are participating in the nutrition education program in Spanish Celebrating Health. Topics covered with the older children were: Portion distortion, mindless eating, dairy products, the importance of eating breakfast, and making healthful snacks. Nutrition programs include working in community-based participatory research to improve educational materials for Hispanic population in the Upstate region of South Carolina Celebrando la Salud.

Results

Evaluation data shows the following: 69% of the youth reported eating a variety of foods; 95% increased their knowledge of human nutrition; 87% increased their ability to select low-cost, nutritious foods; and 84% improved practices in food preparation and safety.

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

- Competing Public priorities
- Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation

V(I). Planned Program (Evaluation Studies)

Evaluation Results

Evaluation data shows the following: 69% of the youth reported eating a variety of foods; 95% increased their knowledge of human nutrition; 87% increased their ability to select low-cost, nutritious foods; and 84% improved practices in food preparation and safety.

The overweight and obesity project has sponsored an awards program for participants and families to encourage and motivate participants to continue trying to reach their goals as an incentive. All students were to show effort in participating in all activities and increasing steps. The steps count has increased to 8,000 steps. Several abstracts/proposals to present the research at state and national conferences have been submitted.

A final bulletin on the integrated approach to prevention of obesity in high risk families has been submitted for publication and distribution.

Key Items of Evaluation