

V(A). Planned Program (Summary)

Program # 1

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
702	Requirements and Function of Nutrients and Other Food Components	20%	0%	35%	0%
703	Nutrition Education and Behavior	40%	70%	35%	0%
724	Healthy Lifestyle	40%	30%	30%	0%
	Total	100%	100%	100%	0%

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2012	Extension		Research	
	1862	1890	1862	1890
Plan	6.1	1.0	5.9	0.0
Actual Paid Professional	3.8	0.5	4.3	0.0
Actual Volunteer	244.0	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
78574	138667	78631	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
111173	120200	176828	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
329943	0	974053	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Conduct educational classes, workshops, short courses, meetings, seminars, and trainings for children, parents, teachers, school food service workers, and health and other professional groups; develop curriculum, newsletters, and other educational resources; establish and implement train-the-trainer models to promote educational opportunities; facilitate local and statewide coalitions and/or task forces; conduct assessments and community surveys; partner with community agencies and institutions to facilitate programs and community development; contribute to the creation/revision of social systems and public policies; conduct research studies and disseminate program and research results to both the professional community and lay public through journal articles, papers, reports, and public media; develop and implement marketing strategies using various outlets to promote program participation, with special attention to underserved and disadvantaged audiences; disseminate research-based information to lay audiences and address emerging needs using a variety of media and innovative technology resources; cooperate with media and other community agencies to seek effective means of targeting new and non-traditional audiences; and respond to consumer inquiries.

2. Brief description of the target audience

Childhood Obesity, Nutrition and Fitness: young children (ages 2 - 5 years); school-age children; adolescents; parents, foster parents, and grandparents; caregivers (in-home and for-profit day care providers); teachers and other school faculty for young children, youth, and adolescents; school nutrition directors and staff; school wellness committees; school nurses and other health care providers; and Extension educators.

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	21600	4332	18236	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	5	5	10
---------------	---	---	----

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Childhood Nutrition and Fitness - Number of pre-school age youth participating in Extension nutrition education, physical activity, or other obesity-prevention programs at childcare centers or schools.

Year	Actual
2012	201

Output #2

Output Measure

- Childhood Nutrition and Fitness - Number of elementary, middle, and high school-age youth participating in Extension nutrition education, physical activity, or other obesity-prevention programs in school, after-school, or recreational settings.

Year	Actual
2012	28424

Output #3

Output Measure

- Childhood Nutrition and Fitness - Number of Head Start and preschool teachers, day care providers, elementary and secondary school teachers, school nurses, school nutrition directors, and school health and wellness committee members participating in Extension training for implementing nutrition education, physical activity, and other obesity-prevention programs reaching children and their parents.

Year	Actual
2012	30

Output #4

Output Measure

- Childhood Nutrition and Fitness - Number of individuals, including children, exposed to Extension-based social marketing campaigns

Year	Actual
2012	22400000

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Childhood Nutrition and Fitness - Number of pre-school age youth who try more new foods, consume more fruits and vegetables, eat a wider variety of foods, or increase their physical activity after participation in an Extension nutrition education, physical activity, or other obesity-prevention program at a Head Start or child care center or school.
2	Childhood Nutrition and Fitness - Number of select elementary, middle, or high school age youth who gain knowledge and awareness of nutrition, physical activity, or positive body image or improve at least one health-related behavior after participation in an Extension nutrition education, physical activity, or other obesity-prevention program in a school, after-school, or recreational setting.
3	Childhood Nutrition and Fitness: Number of Head Start and preschool teachers, day care providers, elementary and secondary school teachers, school nurses, school nutrition directors, and school health and wellness committee members participating in Extension training who implement a nutrition education, physical activity, or other obesity-prevention activity in their preschool, elementary or secondary school, or after-school or recreational setting.
4	Childhood Nutrition and Fitness - Number of children who made dietary and physical activity changes based on Extension-based social marketing campaign

Outcome #1

1. Outcome Measures

Childhood Nutrition and Fitness - Number of pre-school age youth who try more new foods, consume more fruits and vegetables, eat a wider variety of foods, or increase their physical activity after participation in an Extension nutrition education, physical activity, or other obesity-prevention program at a Head Start or child care center or school.

2. Associated Institution Types

- 1862 Extension
- 1890 Extension
- 1862 Research

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	193

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

An estimated 13.9% of preschool-aged children in the United States are overweight. Good nutrition and physical activity is important to the growth, development, and emotional well-being of young children and to prevent childhood obesity.

What has been done

VCE conducted a variety of programs for pre-school aged youth, including the Food Friends and Mighty Moves program and I am Moving, I am Learning. Food Friends and Mighty Moves, a 12-week multi-faceted awareness and education program, promotes healthful habits, literacy, and skill building among preschool-aged children by encouraging children to try new foods and new physical activities.

Results

Teachers reported the following improvements: children trying more foods; children eating eating more fruits and vegetables; children eating a wider variety of foods, children acquiring important fine and gross motor skills, children being exposed to nature, and children moving more. Overall, the VCE programs were found to inspire changes to young children's dietary and physical activity knowledge, attitudes, and behaviors.

4. Associated Knowledge Areas

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

Outcome #2

1. Outcome Measures

Childhood Nutrition and Fitness - Number of select elementary, middle, or high school age youth who gain knowledge and awareness of nutrition, physical activity, or positive body image or improve at least one health- related behavior after participation in an Extension nutrition education, physical activity, or other obesity-prevention program in a school, after-school, or recreational setting.

2. Associated Institution Types

- 1862 Extension
- 1890 Extension
- 1862 Research

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	20744

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Recent data indicate 17% of children and adolescents are obese. Obese children are more likely to have high blood pressure, high cholesterol, and type 2 diabetes, and a tendency to be overweight and obese as adults. Childhood obesity also has social, psychological, and economic consequences. Large children report lower self-esteem, sadness, marginalization, and lower quality of life than healthy weight children and cost approximately \$72 more per year in health-related costs.

What has been done

VCE-Family and Consumer Sciences programs reached 29,313 Virginia youth and families through educational programs focused on food, nutrition, and health. Extension Educators partnered with local and state agencies, including schools and restaurants, to provide numerous education programs across the commonwealth annually, including: Chefs Clubs in Middle School Cafeterias, which offered hands-on cooking activities to students; Cooking Matters, a family-based cooking and nutrition program; Healthy Weights for Healthy Kids, a program aimed at youth between 7 and 14 years old to prevent childhood obesity; Campers Build Healthy Futures by Building Healthy Pizzas, a day camp which included farm visits and cooking demonstrations;

and the Fit Kids Menu Initiative aimed at promoting healthy choices and menu labeling targeted towards children.

Results

The Chefs Clubs encouraged student chefs to try new foods and create healthy, seasonal foods, aligned with MyPlate. An evaluation of Cooking Matters found that every participant reporting learning one new thing as a result of the class and enjoyed family-based cooking. There was a 14% increase in the number of individuals who reported using the food label too. Finally, Healthy Weights for Healthy Kids has consistently found that children: increase fruits and vegetables eaten (by 85%); limit sweet snacks (82%); read food labels (83%); and consume more milk (94%). The Fit Kids Menu Initiative was tested with one restaurant. Menu labeling with the nutrition bargain price were found to significantly alter purchases among families with children.

4. Associated Knowledge Areas

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

Outcome #3

1. Outcome Measures

Childhood Nutrition and Fitness: Number of Head Start and preschool teachers, day care providers, elementary and secondary school teachers, school nurses, school nutrition directors, and school health and wellness committee members participating in Extension training who implement a nutrition education, physical activity, or other obesity-prevention activity in their preschool, elementary or secondary school, or after-school or recreational setting.

2. Associated Institution Types

- 1862 Extension
- 1890 Extension
- 1862 Research

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	30

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Recent data show that 17% of children 6 to 19 years old, and 35.7% of adults are obese. Obese children are more likely to become obese as adults, at a rate as high as 50%, and have higher

risk for numerous emotional and health consequences, including stigmatization, lower perceived quality of life, type 2 diabetes, osteo-arthritis, and sleep apnea. Childhood obesity also has a huge economic impact on Virginia and the nation. It is estimated to cost \$14.1 billion in outpatient costs and \$237.6 million in inpatient costs every year.

What has been done

Extension Educators partnered with childcare centers, schools, and other local and state agencies and non-profit groups to train volunteers to teach numerous education programs for youth on nutrition and physical activity to address childhood obesity and to expand the reach of extension programs.

Results

Several trainings were conducted by Extension Educators on childhood obesity programs, including Food Friends and Mighty Moves, and Healthy Weights for Healthy Kids, to enable partners to offer nutrition and physical activity programs at their childcare centers, camps, and other locations.

4. Associated Knowledge Areas

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

Outcome #4

1. Outcome Measures

Childhood Nutrition and Fitness - Number of children who made dietary and physical activity changes based on Extension-based social marketing campaign

2. Associated Institution Types

- 1862 Extension
- 1890 Extension
- 1862 Research

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	7973

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Recent data indicate 17% of children and adolescents are obese. Obese children are more likely to have high blood pressure, high cholesterol, and type 2 diabetes, and a tendency to be overweight and obese as adults. Childhood obesity also has social, psychological, and economic consequences. Large children report lower self-esteem, sadness, marginalization, and lower quality of life than healthy weight children and cost approximately \$72 more per year in health-related costs.

What has been done

A social marketing campaign promoting the "Eat Smart, Move More!" message related to food choices and physical activity was conducted in Virginia by the Family Nutrition Program. Children frequently have athletes who are their role models. The campaign consisted of billboards throughout Virginia where there is a high incidence of poverty, posters on buses traveling through high poverty areas, and posters distributed throughout Virginia in schools where there is a high level of poverty, and a web presence.

Results

Over 22,400,000 people viewed the social marketing campaign through billboards, posters, and bus signage throughout the state of Virginia.

A sample of youth were surveyed. The sample included 10,491 youth. The youth overwhelmingly demonstrated very positive attitudes and intent to change dietary behavior. Further, 76% of youth were likely to follow the suggestions for eating smart and moving more and 85% of youth believed that they could be an athlete by eating smart and moving more.

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
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)
- Other (Loss of county agents)

Brief Explanation

The economy (i.e. employment opportunities, etc.), as well as gas prices (which can, in turn, increase food prices) can directly influence food purchases and food security of

families and

caregivers of children and furthermore weight status.

Changes within the built food environment can also influence food access and availability and thereby dietary intake.

Public policy changes, particularly those directed at children, can also effect dietary and physical activity status. For example, the Healthy-Hungry Free Kids Act has resulted in substantial changes to foods offered

at schools participating in the USDA school breakfast and lunch programs, along with funding for farm-

to-school programs. While these changes did not influence impacts or outcomes from 2012, they demonstrate the potential for external policy factors influencing children's behaviors and stakeholders' interest in programs offered by Extension.

Several populations, particularly Hispanic and African American individuals, have higher rates of

obesity. With population shifts within Virginia, it is possible to see changes in childhood obesity prevalence rates.

V(I). Planned Program (Evaluation Studies)

Evaluation Results

All major programs relating to children and youth are evaluated to determine program effectiveness, although outcomes may not be available from all locations statewide.

This past year, a study was completed with youth EFNEP to test the cost-effectiveness of the program, utilizing Healthy Weights for Healthy Kids. The results found that over 90% of youth participating in the program improved behaviors in at least one area. The data are still being analyzed and interpreted and will be reported in 2013. Correspondingly, a study was conducted and published in the Journal of Nutrition Education Behavior that estimated the average cost effectiveness of EFNEP Outcomes. Virginia was found to offer cost-effectiveness programs in relation to other states.

A study was completed this past year as part of the Extension-based Fit Kids Menu Initiative, to offer healthier options and nutrition labeling on children's menus at restaurants. The results found that menu labeling that contained information on the 'nutrition bargain price' was considered to be most effective and significant in changes purchases among families with children. The results were published in the journal, Appetite.

Key Items of Evaluation