

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
703	Nutrition Education and Behavior	70%	70%	70%	70%
724	Healthy Lifestyle	30%	30%	30%	30%
	Total	100%	100%	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	8.0	1.5	5.0	1.5
Actual Paid Professional	8.0	1.5	0.0	0.1
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
329599	131374	0	21171
1862 Matching	1890 Matching	1862 Matching	1890 Matching
329599	131374	0	28086
1862 All Other	1890 All Other	1862 All Other	1890 All Other
329599	131374	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

- Develop/implement training for cafeteria/food service workers using Walk the Line curriculum.
- Workshops and professional development for Growing Healthy Habits, Farm-2-School, and Walk the Line.
- Create effective materials and programs that meet standards of health literacy.
- Investigate taste preference and trying new fruits and vegetable measures for statewide evaluation.
- Educational programs for cafeteria and food service workers and school administrators.
- Educational programs targeting pre-schoolers and their parents through train-the-trainer approach for child care and pre-school teachers.
- Up For the Challenge curriculum implemented for school-age youth in 3 sites targeted to geographically dispersed military families/youth.
- Contribute articles and expertise to eXtension.org Community of Practice for Food, Fun, and Fitness
- Develop Social Marketing and Social networking strategies to engage target audiences in Healthy Living dialogue
- Conduct applied research to inform educational program interventions.

2. Brief description of the target audience

- School-age youth
- Parents of school-age youth
- Teachers
- Cafeteria/Food service workers
- School administration
- Providers of before and aftercare
- Limited Income Mothers and Children
- Food Stamp recipients
- Geographically dispersed military families

3. How was eXtension used?

Members and contributors to FFF Community of Practice, which is used as resource for clientele.

V(E). Planned Program (Outputs)

1. Standard output measures

2012	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	47554	0	47460	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	0	5

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- 1. Growing Healthy Habits: # workshops; # train-the-trainer sessions; # school gardens developed; # community gardens developed; # new partnerships to implement GHH.

Year	Actual
2012	1242

Output #2

Output Measure

- 2. Walk The Line: # sessions conducted; # school cafeteria workers trained; # cafeterias participating

Year	Actual
2012	820

Output #3

Output Measure

- 3. Farm 2-School: # Sessions conducted; # schools participating; # farmers participating; # New partnerships developed.

Year	Actual
2012	167

Output #4

Output Measure

- 4. Eating Smart/Being Active: # youth served; # sessions; # supporting resources developed.

Year	Actual
2012	820

Output #5

Output Measure

- 5. Up For the Challenge: # sessions conducted; # youth reached; # teachers/afterschool providers trained; # schools implementing

Year	Actual
2012	228

Output #6

Output Measure

- 6. Strong Women, Healthy Hearts: # women completing program; # sessions conducted; # partnerships developed to implement program
Not reporting on this Output for this Annual Report

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	1. Fruit & Vegetable Consumption: # youth planning to increase consumption of fruits and vegetables.
2	2. Healthy Eating & Physical Activity: # of individuals and families who gain awareness, knowledge, or skills regarding healthy eating and physical activity
3	3. Policy Change: # schools, businesses and organizations with increased awareness of needed systems changes that will positively impact intake of healthier foods.
4	4. Systems Changes: # schools, businesses or organizations making systems changes to promote healthy lifestyles
5	5. Physical Activity: # youth and adults including physical activity in daily routine at least three times weekly

Outcome #1

1. Outcome Measures

1. Fruit & Vegetable Consumption: # youth planning to increase consumption of fruits and vegetables.

2. Associated Institution Types

- 1862 Extension
- 1890 Extension
- 1862 Research
- 1890 Research

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

According to the Maryland Behavioral Risk Factor Surveillance Survey, 36% of Maryland residents are overweight or obese and 45% participate in no vigorous physical activity. Overweight children are more likely to remain overweight as adults and are at increased risk for coronary heart disease, high blood pressure, Type II diabetes, gallbladder disease, and some cancers. This epidemic, which causes about 300,000 premature deaths each year nationally, also accounts for approximately 9 percent of national health care expenditures.

What has been done

A garden-based program, Growing Healthy Habits introduces children to fruit and vegetables through multiple tasting experiences as they grow, harvest, and prepare foods. The Expanded Food and Nutrition Education Program (EFNEP) provides education to youths from 6-12 years old at schools as an enrichment of the curriculum, in after-school care programs, through 4-H EFNEP clubs, day camps, community centers, neighborhood groups, and gardening and cooking workshops.

Results

Growing Healthy Habits programming reached 500 youth, resulting in students tasting and consuming significantly more fruits and vegetables. The 1890 EFNEP program has targeted preschool children ages 3-5. Teachers were trained on indoor gardens and food demonstrations, and cafeteria staff were trained on fruit and vegetable preparation. Parents and caregivers learned on healthy food choices, the importance of exercise, food resource management, and indoor gardening. This family-centered programming helped increase awareness of good

nutritional habits in young children as well as their parents.

4. Associated Knowledge Areas

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

Outcome #2

1. Outcome Measures

2. Healthy Eating & Physical Activity: # of individuals and families who gain awareness, knowledge, or skills regarding healthy eating and physical activity

2. Associated Institution Types

- 1862 Extension
- 1890 Extension
- 1862 Research
- 1890 Research

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The Maryland Behavioral Risk Factor Surveillance Survey indicates that 36% of MD residents are overweight or obese and 45% participate in no vigorous physical activity. Overweight children are more likely to remain overweight as adults and are at increased risk for coronary heart disease, high blood pressure, Type II diabetes, gallbladder disease, and some cancers. This epidemic, which causes about 300,000 premature deaths each year nationally, also accounts for approximately 9 percent of national health care expenditures.

What has been done

A garden-based program, Growing Healthy Habits introduces children to fruit and vegetables through multiple tasting experiences as they grow, harvest, and prepare foods. FSNE implemented a texting pilot project called Text2BHealthy in 4 counties and Baltimore City.

Text2BHealthy is designed to reach parents of school-age children at FSNE schools in an effort to provide a greater chance of family and at home behavior changes.

Results

FSNE was offered in 18 counties and Baltimore City and reached 44,127 participants for a total of 248,529 direct contacts. Program results show increased tasting of new fruits and vegetables by students, increased preference for fruits and vegetables, and positive changes in teacher and classroom nutrition-related behaviors.

4. Associated Knowledge Areas

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

Outcome #3

1. Outcome Measures

3. Policy Change: # schools, businesses and organizations with increased awareness of needed systems changes that will positively impact intake of healthier foods.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Overweight and obesity have reached epidemic proportions nationwide and have become two of the most critical issues of our time. Over the years, environmental changes have resulted in trends toward inactivity and poor diets. It has been stated that children establish eating habits early in life and these are often the results of interactions with parents and caregivers.

What has been done

ReFresh is a partnership between Maryland State Department of Education (MSDE) and the University of Maryland Extension (UME) to utilize partnerships between food service staff, instructional staff, and UME educators within the school setting to work to increase students preference and selection of fruits and vegetables. FSNE provided classroom-based nutrition education in low income schools and in the development of the ReRefresh curriculum for 4th and 5th grade students.

Results

Students in intervention schools offering the ReFresh program were found to consume more fruits and vegetables after the program than students in control schools. Students in intervention schools showed a higher likelihood of eating fresh fruits and vegetables at lunch and reported eating larger amounts of fruits and vegetables consumed than children in control schools.

4. Associated Knowledge Areas

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

Outcome #4

1. Outcome Measures

4. Systems Changes: # schools, businesses or organizations making systems changes to promote healthy lifestyles

Not Reporting on this Outcome Measure

Outcome #5

1. Outcome Measures

5. Physical Activity: # youth and adults including physical activity in daily routine at least three times weekly

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Physical activity plays a vital role in the prevention of obesity and its complications. According to the Behavioral Risk Factor Surveillance System, more than half of Marylanders do not engage in physical activity at levels consistent with the 2008 Physical Activity Guidelines for Americans. Up to 23% of adults in the state did not participate in any physical activities or exercise during the past month. The Youth Risk Behavior Survey of 2007 found that 69% of Maryland high school students did not meet the recommended levels of physical activity.

What has been done

Up for the Challenge program was released in 2006 and distributed to over 120 Army installations worldwide. Since then, it has been used by Army Child and Youth Services (CYS) staff in military after-school programs for youth from ages 5-18. It has also been used nationally by Extension systems in several states including New Hampshire, Florida, Virginia, New Mexico and Pennsylvania, among others.

Results

Almost 250 individuals were reached in train-the-trainer sessions for educators in multiple states. UME educator, in response to a request from the 4-H Military Partnership, conducted a national training in to 60 extension and military professionals. In 2011, the Army developed a new fitness initiative known as Be Fit Be Strong and identified Up for the Challenge as one of the curricula they would like to use in their healthy lifestyle youth programming worldwide.

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.)

Brief Explanation

There are more people in need of nutrition education than ever before, especially children, and the situation becomes even more critical. The number of families receiving food stamps is at an all-time high in Maryland. Obesity rates for youth as well as adults are at an all-time high. In these difficult times, having food to eat becomes more important to parents and caregivers than worrying about healthy food to eat. However, UME's programs are addressing these challenges and the organization is building more capacity to address the issue.

The diversity of Maryland's population continues to grow and expand. UME needs more bi-lingual educators on staff to serve our Hispanic audience. In addition, there are indigenous people from many countries in great need of nutrition education, yet we do not have the capacity to fill that need.

More research efforts are underway. However, additional funding would help to employ more graduate students to continue and expand research efforts.

V(I). Planned Program (Evaluation Studies)

Evaluation Results

Findings from ReFresh Program Evaluation: 935 students from 34 schools completed pre and post student surveys. Students from schools with nutrition education and cafeteria nudges selected more fruit and vegetable items in cafeteria lunchrooms. Students in intervention schools were found to consume more fruits and vegetables after the program than students in control schools. Students in intervention schools showed a higher likelihood of eating fresh fruits and vegetables at lunch and reported eating larger amounts of fruits and vegetables consumed than children in control schools. The number of fruits and vegetables offered in the cafeteria was higher for intervention schools. The percentage of students reporting they could choose fruits and vegetables in the school cafeteria and could prepare fruits and vegetables at home, was higher for intervention schools than for control schools. Positive outcomes were highest for schools including both nutrition education and cafeteria nudges. Control schools experienced a consistent decline in both fruit and vegetable offerings and student selection throughout the school year.

Key Items of Evaluation