

V(A). Planned Program (Summary)

Program # 4

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	5%	5%	0%	
703	Nutrition Education and Behavior	95%	95%	0%	
	Total	100%	100%	0%	

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2014	Extension		Research	
	1862	1890	1862	1890
Plan	77.0	9.0	0.0	0.0
Actual Paid	63.0	13.0	0.0	0.0
Actual Volunteer	18.0	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
1249064	406564	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
5330147	546564	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
5986105	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

UT and TSU Extension used the Power U curriculum in Tennessee schools and afterschool programs. Extension personnel and volunteers used the curriculum to teach diet quality to young adolescents. The program was delivered through 10 interactive lessons. Extension obesity prevention programs emphasized the following:

- how to use MyPyramid.gov and following Dietary Guidelines.
- how to use the Healthy Plate Method.
- decreasing consumption of high-fat foods like fried foods, bologna, hot dogs, etc.
- increasing consumption of fruits, vegetables and whole-grains.

2. Brief description of the target audience

Tennesseans targeted included consumers and youth. Because of the prevalence of obesity in the state, all consumers were potentially members of the target audience. However, the Tennessee Nutrition and Consumer Education Program (TNCEP) and the TSU Food Nutrition Education Program targeted eligible food stamp recipients. The Expanded Food Nutrition Education Program (EFNEP) programs targeted the state's limited resource population.

3. How was eXtension used?

This Childhood Obesity planned program was enhanced through the service of:

- 12 Tennessee Extension personnel on the "Families, Food, and Fitness" CoP.
- two Tennessee Extension personnel on the "A,B,Cs of Omega 3's" CoP.
- The "Families, Food, and Fitness" CoP continues to make extensive use of social media in Tennessee to promote educational programs and resources related to improving dietary quality and increasing physical activity.

V(E). Planned Program (Outputs)

1. Standard output measures

2014	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	215454	12809763	234279	0

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
Actual	1	0	1

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of exhibits displayed to promote program awareness and participation.

Year	Actual
2014	2731

Output #2

Output Measure

- Number of research-based publications distributed as part of this program.

Year	Actual
2014	293815

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Tennessee Shapes Up: Number of participants who decreased consumption of high-fat foods such as chips, fast food, fried foods, sausage, bacon, bologna, hot dogs, etc.
2	Tennessee Shapes Up: Number of participants who decreased consumption of high-sugar foods and sweetened beverages, such as soft drinks, Kool Aide type beverages, sweetened tea, etc.
3	Tennessee Shapes Up: Number of participants who increased consumption of fruits.
4	Tennessee Shapes Up: Number of participants who increased consumption of vegetables.
5	Tennessee Shapes Up: Number of participants increased consumption of whole grains.
6	Healthy Steps: Healthy Food and Physical Activity for Tennessee Preschoolers
7	Culinary Arts for Everyday Cooks
8	Power U: Helping Youth Make Healthy Choices and Increase Physical Activity

Outcome #1

1. Outcome Measures

Tennessee Shapes Up: Number of participants who decreased consumption of high-fat foods such as chips, fast food, fried foods, sausage, bacon, bologna, hot dogs, etc.

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2014	3788

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior

Outcome #2

1. Outcome Measures

Tennessee Shapes Up: Number of participants who decreased consumption of high-sugar foods and sweetened beverages, such as soft drinks, Kool Aide type beverages, sweetened tea, etc.

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2014	3788

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior

Outcome #3

1. Outcome Measures

Tennessee Shapes Up: Number of participants who increased consumption of fruits.

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2014	3788

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior

Outcome #4

1. Outcome Measures

Tennessee Shapes Up: Number of participants who increased consumption of vegetables.

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2014	3788

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior

Outcome #5

1. Outcome Measures

Tennessee Shapes Up: Number of participants increased consumption of whole grains.

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2014	3788

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior

Outcome #6

1. Outcome Measures

Healthy Steps: Healthy Food and Physical Activity for Tennessee Preschoolers

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2014	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Tennessee was one of three states that showed increases in the numbers of obese low-income preschool children in 2008-2011. Overweight or obese preschoolers are five times as likely to become overweight or obese adults, compared with their normal weight peers. Obesity is associated with high cholesterol, high blood sugar, asthma, and mental health problems. The medical costs for people who are obese are higher than those of normal weight, particularly if these conditions occur at younger ages.

What has been done

Agents use curricula and resources called ?Healthy Steps? developed by University of Tennessee Extension to deliver nutrition and physical activity education to preschoolers. In 2014, agents conducted 176 group meetings with teachers and students and made over 3,000 contacts. An additional 5,500 direct contacts were made by teachers with students using a train-the-trainer model. Approximately 25,000 more teacher and student contacts were made indirectly through exhibits, publications and other methods.

Results

Agents surveyed teachers about behaviors they observed in the classroom following implementation of Healthy Steps with the following results: 1) 39 of 39 teachers reported preschool children in their classes were more actively engaged in physical activity, 2) 39 of 39 teachers reported preschool children in their classes were more willing to taste fruit, 3) 38 of 39 teachers reported preschool children in their classes were more willing to taste vegetables, 4) 34 of 37 teachers reported preschool children in their classes were more willing to taste whole-grain foods, and 5) 34 of 39 teachers reported using physical activities from Healthy Steps at least three times per week.

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior

Outcome #7

1. Outcome Measures

Culinary Arts for Everyday Cooks

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2014	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Lack of basic cooking skills contributes to the obesity epidemic because it limits the ability of the family to have healthy meals prepared at home.

What has been done

Culinary Arts for the Everyday Cook was implemented in 34 counties in 2014. There were 4554 direct contacts that included 123 group meeting and cooking schools. In addition there were 391,322 indirect contacts made through exhibits, newspaper articles, publication, radio and TV programs. There were 344 volunteer hours were reported that reached an additional 28,416 contacts.

Results

- *121 participants reported choosing fast-food or take-out less often.
- *529 participants reported learning culinary skills.
- *146 participants reported using healthy food preparation techniques.

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior

Outcome #8

1. Outcome Measures

Power U: Helping Youth Make Healthy Choices and Increase Physical Activity

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2014	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The number for Tennessee youth who are overweight or obese is higher than the national average but this is due to actual measures. Nationally, obesity and overweight data are extrapolated from samples. Tennessee has available actual measure of schoolchildren through the Coordinated School Health Program. More than 40 percent of Tennessee Children are overweight or obese.

What has been done

Extension implements programs that target youth across the age ranges. Power U is implemented in 368 schools. It is an interactive curriculum developmentally appropriate for 4th and 5th graders that engage the student in the learning activities. It has been reviewed and complies with the Common Core Standards adopted by the Tennessee Department of Education. Through tasting parties, students are exposed to a variety of new fruits and vegetables. The foods are presented in ways that are pleasing to 4th and 5th graders.

Results

Impact data was collected using a behavior checklist survey and through teacher and parent comments:

- *52% (n= 1212) reported decreased intake of high-fat foods
- *56% (n=1212) reported decrease intake of high-fat foods
- *72% (n= 1212) reported increase intake of fruit
- *58% (n= 1212) reported increase intake of vegetables
- *64% (n= 1212) reported increase intake of dairy foods
- *71% (n= 1212) reported increase in physical activity

Increasing intake of dairy foods and decreasing intake of high-sugar foods increases their likelihood of the food's adoption and is important for healthy prevention of obesity. Increasing physical activity and decreasing intake of sugar helps maintain caloric balance essential for healthy weight.

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Programmatic Challenges

Brief Explanation

V(I). Planned Program (Evaluation Studies)

Evaluation Results

Extension implements programs that target youth across the age ranges. Power U is implemented in 368 schools. It is an interactive curriculum developmentally appropriate for 4th and 5th graders that engage the student in the learning activities. It has been reviewed and complies with the Common Core Standards adopted by the Tennessee Department of Education. Through tasting parties, students are exposed to a variety of new fruits and vegetables. The foods are presented in ways that are pleasing to 4th and 5th graders. Impact data was collected using a behavior checklist survey and through teacher and parent comments:

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Increasing intake of dairy foods and decreasing intake of high-sugar foods increases their likelihood of the food's adoption and is important for healthy prevention of obesity. Increasing physical activity and decreasing intake of sugar helps maintain caloric balance essential for healthy weight. These program results demonstrate the strength of the UT-TSU Extension partnership in the state of Tennessee.

Key Items of Evaluation

Extension implements programs that target youth across the age ranges. Power U is implemented in 368 schools. It is an interactive curriculum developmentally appropriate for 4th and 5th graders that engage the student in the learning activities. It has been reviewed and complies with the Common Core Standards adopted by the Tennessee Department of Education. Through tasting parties, students are exposed to a variety of new fruits and vegetables. The foods are presented in ways that are pleasing to 4th and 5th graders. Impact data was collected using a behavior checklist survey and through teacher and parent comments:

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