V(A). Planned Program (Summary)

Program # 18

1. Name of the Planned Program

Childhood Obesity

☐ Reporting on this Program

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
<th>%1862 Extension</th>
<th>%1890 Extension</th>
<th>%1862 Research</th>
<th>%1890 Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>703</td>
<td>Nutrition Education and Behavior</td>
<td>50%</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>724</td>
<td>Healthy Lifestyle</td>
<td>50%</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>0%</td>
</tr>
</tbody>
</table>

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

<table>
<thead>
<tr>
<th>Year: 2013</th>
<th>Extension</th>
<th>Research</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1862</td>
<td>1890</td>
</tr>
<tr>
<td>Plan</td>
<td>3.0</td>
<td>7.0</td>
</tr>
<tr>
<td>Actual Paid Professional</td>
<td>1.8</td>
<td>7.0</td>
</tr>
<tr>
<td>Actual Volunteer</td>
<td>0.0</td>
<td>35.0</td>
</tr>
</tbody>
</table>

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

<table>
<thead>
<tr>
<th>Extension</th>
<th>Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smith-Lever 3b &amp; 3c</td>
<td>1890 Extension</td>
</tr>
<tr>
<td>24647</td>
<td>421812</td>
</tr>
<tr>
<td>1862 Matching</td>
<td>1890 Matching</td>
</tr>
<tr>
<td>24647</td>
<td>238773</td>
</tr>
<tr>
<td>1862 All Other</td>
<td>1890 All Other</td>
</tr>
<tr>
<td>202240</td>
<td>0</td>
</tr>
</tbody>
</table>

V(D). Planned Program (Activity)

1. Brief description of the Activity
AgriLife Extension
Balancing Food & Play
The curriculum contains three elements: lesson plans, take-home reading assignments, and student journals.

* Twenty lesson plans address physical activity, MyPyramid, making healthy choices, and goal setting.

* The lessons incorporate higher-level thinking and learning skills (i.e., opportunities to design games, commercials, menus).

* Eight take-home reading assignments and parent letters encourage family engagement by providing the opportunity for shared family discussions.

* The reading assignments follow a fictional family as they learn about nutrition and physical activity, set goals, and learn to make healthy choices.

* Each student receives a 41-page journal. The journal allows opportunities for reflective learning and goal setting.

* The program evaluation includes child surveys regarding knowledge and behavior.

WAT Youth Component
A local coalition will recruit participants and provide leadership to implement Walk Across Texas! Teams of eight or classes of children at schools will be recruited to walk for eight weeks. Teams and classes are challenged to walk regularly for eight weeks, reporting their mileage on http://walkacrosstexas.tamu.edu, to achieve the goal of walking the approximate 830 miles across Texas on a map that allows comparisons of teams and class progress.

Communities Putting Prevention to Work
Each of the eight elementary schools formed community coalitions which worked with Extension agents and project personnel to design and implement changes to increase physical activity options and access to fresh fruits and vegetables.

AgriLife Research
Research is conducted in collaboration with State and Federal Women, Infant and Children Program leaders to provide data and programs to improve dietary habits of children and their parents or care givers. Research also involves native American populations and the school lunch program.

Cooperative Extension Program
Cooperative Extension Program provides a series of educational programs designed to equip parents with better meal preparation skills and persons coping with and at risk for chronic illnesses. Education programs are provided through one-on-one consultation, on-site food demonstrations, teach a series of nutrition classes to special interest groups a series of educational programs and classes, educational displays at various sites, social media FaceBook, fact sheets, and newsletters.

2. Brief description of the target audience

AgriLife Extension
Balancing Food & Play
Third grade students in Texas Schools
WAT Youth Component
Youth in Texas Schools

Communities Putting Prevention to Work
Elementary schools in underserved communities.

AgriLife Research
Parents and others who care for children, school lunch program administrators, and native Americans.

Cooperative Extension Program
The Cooperative Extension Program is mandated through federal legislation to serve limited resource audiences in Texas. Our primary focus is to target audience which includes limited resource Texas citizens including minority families and individuals, senior adults, single parents, college students, individuals who have experienced job loss and teen parents. Another targeted group include hospitals and assisted living facilities.

3. How was eXtension used?

eXtension was not used in this program

V(E). Planned Program (Outputs)

1. Standard output measures

<table>
<thead>
<tr>
<th></th>
<th>2013 Direct Contacts Adults</th>
<th>2013 Indirect Contacts Adults</th>
<th>2013 Direct Contacts Youth</th>
<th>2013 Indirect Contacts Youth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual</td>
<td>123</td>
<td>2529</td>
<td>9265</td>
<td>0</td>
</tr>
</tbody>
</table>

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

Patent Applications Submitted

Year: 2013
Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

<table>
<thead>
<tr>
<th>2013</th>
<th>Extension</th>
<th>Research</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual</td>
<td>5</td>
<td>0</td>
<td>5</td>
</tr>
</tbody>
</table>

V(F). State Defined Outputs
Output Target

Output #1

Output Measure
● # youth participating in WAT Program.
   Not reporting on this Output for this Annual Report

Output #2

Output Measure
● # youth participating in Balancing Food and Play Program.
   Not reporting on this Output for this Annual Report

Output #3

Output Measure
● # of classes/workshops addressing nutrition and health.
   Not reporting on this Output for this Annual Report

Output #4

Output Measure
● # of group educational methods conducted.

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>201</td>
</tr>
</tbody>
</table>

Output #5

Output Measure
● # of research-related projects.

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>1</td>
</tr>
</tbody>
</table>
## V(G). State Defined Outcomes

### V. State Defined Outcomes Table of Content

<table>
<thead>
<tr>
<th>O. No.</th>
<th>OUTCOME NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Percentage increase the number of children getting at least 60 minutes of physical activity.</td>
</tr>
<tr>
<td>2</td>
<td>Percentage decrease the number of children reporting decreased sweetened beverage intake.</td>
</tr>
<tr>
<td>3</td>
<td>Percentage decrease the number of children reporting 2 hours or less of screen time.</td>
</tr>
<tr>
<td>4</td>
<td># of participants who understand and use My Plate in meal buying and preparation, become aware of diet related diseases, understand the connection between diet and exercise, increase consumption of fruits and vegetables.</td>
</tr>
<tr>
<td>5</td>
<td># of participants modify recipes to decrease amount of calorie and adopt healthy eating habits.</td>
</tr>
</tbody>
</table>
Outcome #1

1. Outcome Measures

Percentage increase the number of children getting at least 60 minutes of physical activity.

2. Associated Institution Types

   ● 1862 Extension

3a. Outcome Type:

   Change in Action Outcome Measure

3b. Quantitative Outcome

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>43</td>
</tr>
</tbody>
</table>

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Many health professionals and educators are alarmed by the increase in the rate of child obesity. Nationally, 18 percent of children ages 6 to 11 years are obese (95th percentile for body mass index [BMI] by age/sex). Texas ranks seventh in the nation and has a child obesity rate of 20.4 percent. Programs are needed that increase awareness of food and physical activity recommendations and change behaviors associated with obesity.

What has been done
A multi-disciplinary team developed an integrated, interactive third-grade enrichment curriculum on nutrition and physical activity. The curriculum is based on the Texas Essential Knowledge and Skills (TEKS) and is titled Balancing Food & Play.

The Balancing Food & Play curriculum was designed to improve knowledge and behaviors related to the following four educational constructs:
* snacking on fruits and vegetables,
* drinking milk with meals and water with snacks,
* encouraging 60 minutes of physical activity each day, and
* limiting screen time to two hours or less per day.

The curriculum contains four elements: 20 lesson plans, 8 take-home reading assignments, 4 parent letters, and a 41 page journal for each student. The 2nd edition of the Balancing Food & Play curriculum was released in the summer of 2011 to incorporate the new Food Guidance System called MyPlate. The MyPlate icon serves as a reminder for healthy eating and illustrates the five food groups.

During 2013, Texas A&M AgriLife Extension Service agents in 16 counties recruited local third grade classroom teachers to participate in this program. They received permission to implement
this school-enrichment program, and 819 students completed the curriculum. To date, 1,405 teacher manuals and 1,300 student journal masters have been downloaded from the website (http://balance.tamu.edu).

**Results**
At the completion of Balancing Food & Play, students were more likely to correctly identify food and physical activity recommendations.

Self-reported student behaviors related to physical activity, soda consumption, and screen time all of which are associated with obesity improved during the time that Balancing Food & Play was taught. The percentage of students who reported getting at least 60 minutes of physical activity increased from 53 percent to 76 percent.

4. **Associated Knowledge Areas**

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>724</td>
<td>Healthy Lifestyle</td>
</tr>
</tbody>
</table>

**Outcome #2**

1. **Outcome Measures**

   Percentage decrease the number of children reporting decreased sweetened beverage intake.

2. **Associated Institution Types**

   - 1862 Extension

3a. **Outcome Type:**

   Change in Action Outcome Measure

3b. **Quantitative Outcome**

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>31</td>
</tr>
</tbody>
</table>

3c. **Qualitative Outcome or Impact Statement**

   **Issue (Who cares and Why)**
   Many health professionals and educators are alarmed by the increase in the rate of child obesity. Nationally, 18 percent of children ages 6 to 11 years are obese (95th percentile for body mass index [BMI] by age/sex). Texas ranks seventh in the nation and has a child obesity rate of 20.4 percent. Programs are needed that increase awareness of food and physical activity recommendations and change behaviors associated with obesity.

   **What has been done**
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The curriculum contains four elements: 20 lesson plans, 8 take-home reading assignments, 4 parent letters, and a 41 page journal for each student. The 2nd edition of the Balancing Food & Play curriculum was released in the summer of 2011 to incorporate the new Food Guidance System called MyPlate. The MyPlate icon serves as a reminder for healthy eating and illustrates the five food groups.

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Results
At the completion of Balancing Food & Play, students were more likely to correctly identify food and physical activity recommendations.

Self-reported student behaviors related to physical activity, soda consumption, and screen time all of which are associated with obesity improved during the time that Balancing Food & Play was taught. The percentage of students who reported drinking soda almost never or never increased from 32 percent to 42 percent.

4. Associated Knowledge Areas

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>724</td>
<td>Healthy Lifestyle</td>
</tr>
</tbody>
</table>

Outcome #3

1. Outcome Measures
   
   Percentage decrease the number of children reporting 2 hours or less of screen time.

2. Associated Institution Types
   
   ● 1862 Extension

3a. Outcome Type:

   Change in Action Outcome Measure
3b. Quantitative Outcome

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>21</td>
</tr>
</tbody>
</table>

3c. Qualitative Outcome or Impact Statement

**Issue (Who cares and Why)**
Many health professionals and educators are alarmed by the increase in the rate of child obesity. Nationally, 18 percent of children ages 6 to 11 years are obese (95th percentile for body mass index [BMI] by age/sex). Texas ranks seventh in the nation and has a child obesity rate of 20.4 percent. Programs are needed that increase awareness of food and physical activity recommendations and change behaviors associated with obesity.

**What has been done**
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* limiting screen time to two hours or less per day.

The curriculum contains four elements: 20 lesson plans, 8 take-home reading assignments, 4 parent letters, and a 41 page journal for each student. The 2nd edition of the Balancing Food & Play curriculum was released in the summer of 2011 to incorporate the new Food Guidance System called MyPlate. The MyPlate icon serves as a reminder for healthy eating and illustrates the five food groups.

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**Results**
At the completion of Balancing Food & Play, students were more likely to correctly identify food and physical activity recommendations.

Self-reported student behaviors related to physical activity, soda consumption, and screen time all of which are associated with obesity improved during the time that Balancing Food & Play was taught. The percentage of students who reported limiting screen time to 2 hours or less increased from 76 percent to 92 percent.

4. Associated Knowledge Areas

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
</tr>
</thead>
</table>

Report Date    05/13/2014
724 Healthy Lifestyle

Outcome #4

1. Outcome Measures

   # of participants who understand and use My Plate in meal buying and preparation, become aware of diet related diseases, understand the connection between diet and exercise, increase consumption of fruits and vegetables.

2. Associated Institution Types

   ● 1890 Extension

3a. Outcome Type:

   Change in Action Outcome Measure

3b. Quantitative Outcome

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>423</td>
</tr>
</tbody>
</table>

3c. Qualitative Outcome or Impact Statement

   Issue (Who cares and Why)
   Efforts targeting nutrition health and wellness engaged in activities focusing on chronic disease prevention targeting obesity and obesity related diseases. Education programs focused on helping limited resource participants adopt a healthy lifestyle and reduce risk for chronic illness and disease, i.e., diabetes, high blood pressure, high blood cholesterol, and cardiovascular disease. Excess weight can be a factor in these health issues. A large number of Texas citizens, whether living in rural or urban areas, socially disadvantaged or middle income are experiencing problems with diet-related illnesses. The prevalence of obesity in more than 60% of the adult population has tripled in children and adolescents. Among children and adolescents, 15% are overweight and more than 70% have diseases that are associated with obesity. In Texas, obesity related diseases are found in higher rates among African Americans and Hispanics.

   What has been done
   In addition to an increase in knowledge and change in behavior, there is a goal to increase physical activity. Outreach activities with limited resource participants were conducted at community centers, senior activity centers, state, city, and county agencies, faith based institutions, and a hospital. A series of MyPlate messages are sent out daily from the Program Specialists to agents so that that can relay this message to their local clientele and partners. These messages include adding fruits and vegetables to their daily diet, reducing the intake of sodium, consuming less sugars and fats, and increasing the amount of vegetables and fruits on their plate and lessening the amount of consumed starches. The use of Face Book has allowed for various ideas in infusing water to reduce sweetened beverage consumption and increase fruit and vegetable intake by juicing.

   Results
Through proper diet and exercise one participant lost 27 pounds, 96% of the 115 participants stated that they now realize the importance of reading food labels to reduce the amount of sugar and sodium in their diet. Social media has been proven as one way of reaching our Texas citizens.413 participants have increased the percentage of fruits and vegetables on their lunch and dinner plates from none, 1/4 or 1/3 of a plate to 1/2 to 3/4 of their plate containing fruits and vegetables. Clientele look forward to recipes and information being placed on FaceBook. The infused water on FaceBook continuously received 120 likes and has be forwarded to other FaceBook friends. Participants are enjoying physical activity by engaging in Zumba. One participant stated that she went from having approximately 15 days a month of stress that lead to bad mental health to having 0 days of stress out of a month after completing Step Up and Scale Down and participating in the exercise program. Other out of state Extension specialist from University of Maryland, University of Missouri and Oregon State have reached out to CEP specialist for further information.

4. Associated Knowledge Areas

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>703</td>
<td>Nutrition Education and Behavior</td>
</tr>
</tbody>
</table>

Outcome #5

1. Outcome Measures

# of participants modify recipes to decrease amount of calorie and adopt healthy eating habits.

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>250</td>
</tr>
</tbody>
</table>

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

A large number of Texas citizens, living in rural or urban areas, are socially disadvantaged or low income, are experiencing problems with diet related illnesses such as hypertension and elevated cholesterol levels. In Texas, obesity related diseases including diabetes, hypertension, cancer and heart disease are found in higher rates among various members of racial-ethnic minorities (e.g., African American and Hispanic Americans). Nearly two out of three (64.5%) of U.S. adults are overweight or obese. Adult overweight and obese individuals are at increased risk for the healthcare issues previously mentioned.
What has been done
Research based educational information to limited resource families and individuals to help them understand the importance of nutrition and diet. It heightens awareness of the relationship between high calorie food consumption and lack of exercise to health status and also expands participant knowledge and empowers them to make better choices for overall wellbeing. A series of 12 lesson program lesson including Step Up to Healthy Plate, Step Up Breakfast and Menu Planning, Stepping up to Nutrition Labels, Scale Down with Moves to Lose, Step Up to Successful Socializing, Scale Down with a Colorful Plate, Scale Down by Knowing Your Numbers, and Step Up and Celebrate were taught.

Results
After completing the 12 lesson workshop, participants learned to set calorie goals, read labels, plan a menu, adopt healthy cooking skills, plan a colorful plate, eat a healthy breakfast, choose healthier snack options, incorporating fruits & vegetables, healthier baking options, incorporation of green shakes and fruit smoothies, hydration and staying motivated and active thru Zumba. Participants lost a combined total of 100 pounds which is a substantial amount of weight and desired to develop healthier eating habits and cooking skills to continue their weight loss success. All participants were recognized at the last session for their successful completion.250 participants have increased the percentage of fruits and vegetables on their lunch and dinner plates from none, 1/4 or 1/3 of a plate to 1/2 to 3/4 of their plate containing fruits and vegetables.

4. Associated Knowledge Areas

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>703</td>
<td>Nutrition Education and Behavior</td>
</tr>
</tbody>
</table>

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

No external factors affected this program.

V(I). Planned Program (Evaluation Studies)

Evaluation Results

At the completion of Balancing Food & Play, students were more likely to correctly identify food and physical activity recommendations.
Self-reported student behaviors related to physical activity, soda consumption, and screen time all of which are associated with obesity improved during the time that Balancing Food & Play was taught. The percentage of students who reported:

* getting at least 60 minutes of physical activity increased from 53 percent to 76 percent.
* drinking soda almost never or never increased from 32 percent to 42 percent.
* limiting screen time to 2 hours or less increased from 76 percent to 92 percent.

**Key Items of Evaluation**

No other information to present.