

**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	10%			
703	Nutrition Education and Behavior	30%			
724	Healthy Lifestyle	30%			
801	Individual and Family Resource Management	10%			
802	Human Development and Family Well-Being	10%			
806	Youth Development	10%			
	<b>Total</b>	100%			

**V(C). Planned Program (Inputs)**

1. Actual amount of FTE/SYs expended this Program

Year: 2012	Extension		Research	
	1862	1890	1862	1890
Plan	16.0	0.0	0.0	0.0
Actual Paid Professional	17.0	0.0	0.0	0.0
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
460000	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
790020	0	0	0
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

In 2012, the childhood obesity planned program at West Virginia University Extension worked towards increasing the capacity of youth, adults, and families to make informed, science-based decisions which prevent chronic disease and maintain healthy weight status through physical activity and intake of nutrient-dense foods.

There were **3,667** reported activities for 2012 in the Childhood Obesity and Healthy Lifestyle planned program this year. These activities can be grouped in the following categories:

Nutrition, Food Selection, and Preparation - There were **2,260** educational activities, **10,075** adult direct contacts and **81,861** youth direct contacts reported in 2012 that address issues related to nutrition and healthy eating. The largest program in this category is the Family Nutrition Program for both low-income adults and youths. The program teaches food and nutrition by using the USDA's MyPyramid. Other activities in this category include nutrition classes, food preparation classes, and classes on food selection/shopping resources and techniques.

Healthy Lifestyles Skills and Practice- There were **1,311** educational activities, **9,343** adult direct contacts, and **20,452** youth direct contacts reported in 2012 that address healthy living issues. The largest programs in this category include the Health Motivator Program, the Wild Wonderful Wellness Health Challenge, Choose to Change, Health Rocks, ATV Safety, Germ Bug, and the WV Early Childhood Obesity Prevention Program (a collaborative program with two school systems and WVU's Davis College, School of Medicine, and Regional Research Institute).

Chronic Diseases and Associated Risk Factors - There were **96** educational activities, **16,094** adult direct contacts, and **14,239** youth direct contacts reported in 2012 that address health risks and chronic disease prevention. Two initiatives, Dining with Diabetes, a cooking school for persons with diabetes and their caregivers and the Diabetes Symposium, a national professional conference enhance the capacity of Extension educators and healthcare partners to impart diabetes education. Other initiatives address heart disease prevention such as Women's Heart Health and the CARDIAC program: Coronary Artery Risk Detection in Appalachian Communities. It is in

the CARDIAC program where we have reached 14,239 youths. Additional programs target the special needs of older adults such as the prevention of bone loss and falls.

**2. Brief description of the target audience**

The primary target audiences include: 1) low-resource West Virginia adults and youth; 2) adult West Virginians who have diabetes and their caregivers; 3) older adults, and 4) health care professionals 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
<b>Actual</b>	35512	92239	124747	71024

**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
<b>Actual</b>	5	2	7

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of educational activities

<b>Year</b>	<b>Actual</b>
2012	3667

**Output #2**

**Output Measure**

- Number of educational materials created or updated

<b>Year</b>	<b>Actual</b>
2012	27

**Output #3**

**Output Measure**

- Number of educational materials distributed

<b>Year</b>	<b>Actual</b>
2012	35090

**Output #4**

**Output Measure**

- Number of professional presentations

<b>Year</b>	<b>Actual</b>
2012	12

**Output #5**

**Output Measure**

- Number of outside organizations collaborating within this program area  
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	Number of participants who increase their knowledge
2	Number of participants who improve or increase skills
3	Number of participants who change a behavior or use a new skill
4	Number of participants who train others
5	Number of groups or organizations that change their procedures and/or policies
6	Number of new groups or organizations that are established or enhanced
7	Number of participants who advance to higher knowledge and skill level in healthy lifestyle professional areas
8	Number of state organizations who ask Extension professionals to implement programs in schools/communities

## **Outcome #1**

### **1. Outcome Measures**

Number of participants who increase their knowledge

### **2. Associated Institution Types**

- 1862 Extension

### **3a. Outcome Type:**

Change in Knowledge Outcome Measure

### **3b. Quantitative Outcome**

<b>Year</b>	<b>Actual</b>
2012	323

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

#### **Issue (Who cares and Why)**

Childhood obesity has reached epidemic proportions in the U.S. and West Virginia far exceeds national norms (Singh et al). The Coronary Artery Risk Detection in Appalachian Communities (CARDIAC) Study (2011-2012 surveillance data) reported that 34% kindergarteners, 39% of second graders, and 48% of fifth graders in West Virginia are overweight or obese.

#### **What has been done**

WVU, in collaboration with other WV organizations was awarded a five-year obesity prevention grant from the USDA. Kick-off events were hosted to share preliminary results from the Nutrition Environment Measures Survey (NEMS) and themes identified from parents and teachers. Teachers and aides were trained in strategies to motivate children and families to make healthy food and physical activity choices. Home visitors with families to collected parent and child biometrics. Family Fun Nights were hosted with the theme "Choosy Families Eat Together."

#### **Results**

--100 stakeholders who attended the Monongalia Kick-off gained knowledge of the preliminary results from the Nutrition Environment Measures Survey (NEMS).

--62 Teachers, Aides, and Family Service Workers gained knowledge and skill in performing strategies to motivate children and families to make healthy food choices and increase physical activity.

--99 families contributed information about their children's biometrics during home visits in Monongalia County and Kanawha County which will be used to develop targeted obesity prevention programs for families and youth in WV.

--62 families that attended a Family Fun Night gained knowledge of the benefits of eating together as a family.

#### 4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior
724	Healthy Lifestyle
801	Individual and Family Resource Management

#### Outcome #2

##### 1. Outcome Measures

Number of participants who improve or increase skills

##### 2. Associated Institution Types

- 1862 Extension

##### 3a. Outcome Type:

Change in Knowledge Outcome Measure

##### 3b. Quantitative Outcome

Year	Actual
2012	263

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

###### **Issue (Who cares and Why)**

In WV, family finances are stretched and heads of households need to learn to cook nutritious food on limited budgets. In addition, recipes and food traditions passed on from generation to generation in WV often use high-calorie food containing fats, sugar, and carbohydrates. Fresh vegetables, meats, fish, and poultry are often out of reach for many families.

###### **What has been done**

WVU-ES conducts a number of cooking classes designed to equip participants with skills necessary to prepare nutritious meals on limited budgets. Examples of these activities include: Build a better plate, Kid-Friendly Cooking Easy and Healthy, Making a Healthy Meal, Making Homemade Salsa, Kids in the Kitchen, Winter Cooking School, Supper in a Sack, and the like. Each of these activities, in general, have been designed with local communities in mind. Our Dining with Diabetes program is an example of a larger, statewide program that attempts to teach participants how to cook for family members with diabetes.

###### **Results**

263 youths and adults improved their skills in preparing healthy foods for their families.

#### 4. Associated Knowledge Areas

<b>KA Code</b>	<b>Knowledge Area</b>
703	Nutrition Education and Behavior
801	Individual and Family Resource Management

**Outcome #3**

**1. Outcome Measures**

Number of participants who change a behavior or use a new skill

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

<b>Year</b>	<b>Actual</b>
2012	1043

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

**Issue (Who cares and Why)**

In West Virginia, adults and youths need to learn skills to assist them in living healthy lifestyles. These skills lead to changes in behavior related to selecting and preparing healthy foods, shopping for the healthiest choices and best prices, choosing physical activities, and improving food safety behaviors.

**What has been done**

The Family Nutrition Program in West Virginia enrolls 1,374 adults and 18,712 youth in its programs which include classroom, afterschool, and camping activities for youth and training workshops for adults at community centers, public school, churches, elderly service centers, adult education and job training centers, health fairs, and the like. Other WVU-ES programs that promote a change in nutrition and physical activity behaviors include: Dining with Diabetes, Maintain, Don't Gain, and Wild, Wonderful Wellness.

**Results**

37% of youths who attend these programs say that they now always eat a variety of foods that contribute to a balanced diet.

54% of the adults say that they plan meals ahead, up from 52% last year.

47% compare prices before buying foods, up from 44% last year.

50% shop with a grocer list, up from 45% last year.

50% think about healthy food choices, up from 48% last year

64% use "nutrition facts" on food labels to make food choices, up from 59% last year

24% eat meals with their family, up from 21% last year.

#### 4. Associated Knowledge Areas

<b>KA Code</b>	<b>Knowledge Area</b>
702	Requirements and Function of Nutrients and Other Food Components
703	Nutrition Education and Behavior
801	Individual and Family Resource Management

#### Outcome #4

##### 1. Outcome Measures

Number of participants who train others

##### 2. Associated Institution Types

- 1862 Extension

##### 3a. Outcome Type:

Change in Action Outcome Measure

##### 3b. Quantitative Outcome

<b>Year</b>	<b>Actual</b>
2012	9193

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

###### **Issue (Who cares and Why)**

WVU ES is committed to addressing the substance abuse needs of youth and adults. West Virginia's smoking-attributable mortality rate ranks 50th among the states and about 28% of youth aged 12 to 20 years drink alcohol and 19% reported binge drinking. It is reported that 37% of 8th graders and 72% of 12th graders had tried alcohol, and 15% of 8th graders and 44% of 12th graders drank during the past month.

###### **What has been done**

WVU ES has implemented programs designed to train adults and youth to implement programs designed to improve skills in avoiding use of illegal and/or addictive substances such as the Health Rocks program for 4-H youths, workshops on intervention procedures related to substance abuse, and workshops on fetal alcohol spectrum disorders and current trends in substance abuse.

###### **Results**

- 1223 adults and teens were trained and worked with youth involved in the Health Rocks program.
- 321 adults in communities were trained to recognize youths at risk for substance abuse and provide educational interventions.

-- As a result, in the Health Rocks program, over 88% of youth participants were confident that they would be able to say "no" if other people, such as their friends or peers, offer them drugs. In addition, over 85% of youth participants were confident that they would be able to deal with stress by using stress management skills, such as talking about it with someone they trust.

#### 4. Associated Knowledge Areas

KA Code	Knowledge Area
724	Healthy Lifestyle
806	Youth Development

#### Outcome #5

##### 1. Outcome Measures

Number of groups or organizations that change their procedures and/or policies

##### 2. Associated Institution Types

- 1862 Extension

##### 3a. Outcome Type:

Change in Action Outcome Measure

##### 3b. Quantitative Outcome

Year	Actual
2012	1

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

###### **Issue (Who cares and Why)**

West Virginia's oral health status is ranked among the poorest in the nation on several measures: more than a third of adults (38.4%) had not had their teeth cleaned by a dentist and 60.3% of adults had at least one and 30.9% had six or more teeth missing. Among those 65 years and older, 37.8% were missing all teeth, the highest in the nation. Oral health is essential to general health and well-being, therefore it seemed to be a natural fit with the Family Nutrition Program.

###### **What has been done**

Curricula was developed for the Family Nutrition Program and a training was conducted with 23 Nutrition Outreach Instructors (NOIs). NOIs provide instruction to adults and youths through our Family Nutrition Program. Following the training, NOIs began using FNP Dental Tips for Parents with their scheduled classes. Over 300 participant surveys have been collected thus far. This curriculum will become a part of the Family Nutrition Program in WV.

###### **Results**

The FNP dental health curricula was added to the program as a result of an evaluative study done by WVU-ES. The changes were made because of these positive results:

13% of the NOIs said that they increased their skill on how to make recommendations for children's dental health to their FNP clients.

57% of FNP participants talk to their family more often about caring for their teeth.

63% of FNP participants more often choose foods that are healthy for their teeth.

53% of FNP participants decreased the amount of sugar-sweetened beverages they drink.

51% of FNP participants floss their teeth more often.

55% of FNP participants brush their teeth more often.

#### 4. Associated Knowledge Areas

KA Code	Knowledge Area
724	Healthy Lifestyle
802	Human Development and Family Well-Being

#### Outcome #6

##### 1. Outcome Measures

Number of new groups or organizations that are established or enhanced

##### 2. Associated Institution Types

- 1862 Extension

##### 3a. Outcome Type:

Change in Condition Outcome Measure

##### 3b. Quantitative Outcome

Year	Actual
2012	1

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

###### **Issue (Who cares and Why)**

Children are involved in about one-third of all ATV-related deaths and hospital emergency room injuries. Most of these deaths and injuries occur when a child is driving or riding on an adult ATV. Children under 16 on adult ATVs are twice as likely to be injured as those riding youth ATVs. There have been 63 deaths recorded in WV since 1982 for children under 16 who are riding ATVs. In total, there were 546 deaths from ATV accidents in WV for the same time period.

###### **What has been done**

WVU-ES has developed partnerships with WV Dept. of Motor Vehicles, Governor's Office of Highway Safety, St. Mary's Hospital, Mingo and Cabell County Commissions, and school systems

to conduct ATV safety programs for youth. To date, 759 youth have been involved in at least two hours of ATV Safety instruction. 74 youth have completed the ASI online course. Two-hundred and ninety (290) youth have reported playing the TreadSlyvania online game. Three (3) PSA entries were completed for the ATV National PSA Contest: Mingo, Logan and McDowell counties.

**Results**

A 4-H ATV Safety Mobile Unit is now equipped with necessary equipment to be utilized in conducting ASI Rider Course programs throughout the state. Extension secured funding for first aid kits, canopy, chairs, totes, cones, goggles, gloves and helmets for the mobile unit.

Additional funding was secured for an additional mobile unit and four ATVs.

\$5,000 was secured from the WV Governor's Office of Highway Safety to set up an Instructors Prep course to get eight new instructors certified to conduct the ASI Rider Course.

This year the West Virginia University Extension 4-H ATV Safety program will once again be highlighted in the Annual Report of the Governor's Office of Highway Safety.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
724	Healthy Lifestyle
806	Youth Development

**Outcome #7**

**1. Outcome Measures**

Number of participants who advance to higher knowledge and skill level in healthy lifestyle professional areas

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

<b>Year</b>	<b>Actual</b>
2012	236

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

**Issue (Who cares and Why)**

Nutrition education is best delivered by locally trained individuals. These paraprofessionals become the main source of nutrition information for citizens in the state.

**What has been done**

Nutrition Outreach instructors are trained by Extension faculty to carry on nutrition programs at the county level. NOIs are trained in adult and elderly nutrition, curriculum overview, dietary guidelines, evaluating Internet research sources, grocery stores, reading food labels, stretching your food dollar, adult and youth pedagogy, and creating action plans. Extension faculty coach NOIs, observe them in their workplace, and interview and hire them in each county.

**Results**

236 NOIs were trained this year. They successfully delivered educational programs to thousands of West Virginians in most of the State's counties.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
702	Requirements and Function of Nutrients and Other Food Components
703	Nutrition Education and Behavior
724	Healthy Lifestyle
801	Individual and Family Resource Management

**Outcome #8**

**1. Outcome Measures**

Number of state organizations who ask Extension professionals to implement programs in schools/communities

Not Reporting on this Outcome Measure

**V(H). Planned Program (External Factors)**

**External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Competing Programmatic Challenges

**Brief Explanation**

Because of the economy, many more people in West Virginia are needing help finding nutritious foods to feed their families.

We had two major weather systems in 2012 that knocked out power in much of the state - the derecho last summer and superstorm Sandy in late fall. The derecho, particularly impacted programming because of wide-spread, prolonged power outages.

**V(I). Planned Program (Evaluation Studies)**

**Evaluation Results**

Exercise for 20 minutes or more

- 5-6 times a week                      Pre 24/12.5% -- Post 33/17.2%
- everyday                                      Pre 20/10.4 -- Post 24/12.5

Eat a variety of fruits and vegetables

- 5-6 times a week                      Pre 35/17.7 - Post 62/31.3
- everyday                                      Pre 70/35.4    Post 73/36.9

Eat more than you should have

- 5-6 times a week                      Pre 24/12.7 - Post 24/12.7
- everyday                                      Pre 40/21.1 -- Post 21/11.1

Take medicines as prescribed

- 5-6 times a week                      Pre 14/8.1 - Post 11/6.3
- everyday                                      Pre 149/85.6 -- Post 156/89.7

Check blood sugar levels

- 5-6 times a week                      Pre 13/6.8 - Post 14/7.4
- everyday                                      Pre 82/43.4 - Post 97/51.3

**FNP**

1. Hour Food Recall Results - percent with positive change in food group at exit. \* equals improvement from last year.

a. % of increase by Pyramid Category

1. Grains - 5%
2. Fruits - 150%\*
3. Vegetables - 31%
4. Dairy - 33%
5. Protein foods - 5%

b. % of increase in dietary intake

- i. Carbohydrates - 3%
- ii. Fat - -6%\*
- iii. Protein - 10%
- iv. Alcohols -- -40%
- v. Fiber - 33%

c. % of increase in food related practices

- i. Food Resource Management - 31%
- ii. Nutrition Practices - 27%\*
- iii. Food Safety - 27%

iv. All Three - 23%

**Choose to Change Project**

477 retail food outlets in Monongalia County and 593 in Kanawha County were completed. Audit scores indicated an overall high cost and low availability of healthy options, which may results in unhealthy choices by participants.

8 focus groups were conducted with 32 parents and 32 school staff. Stakeholder interviews were conducted with 31 community representatives. The project team learned that many people were unaware of the prevalence and impact of childhood overweight. A variety of barriers and concerns were expressed and subsequently used in the intervention approaches.

**Dental Tips for Parents**

Twenty three adult NOIs were trained on FNP Dental Tips for Parents. Survey questions ranged from "how and why dental cavities form" to "available dental health and community resources to help FNP families". Post evaluation results showed the following:

- 14% of NOIs increased their knowledge of how and why dental cavities form
- 33% of NOIs increased their knowledge of available dental health and community resources available to FNP families
- 7% increased their knowledge of how to brush and floss effectively
- 13% increased their knowledge on current recommendations for children's dental health

**Key Items of Evaluation**