

**V(A). Planned Program (Summary)**

**Program # 1**

**1. Name of the Planned Program**

Childhood Obesity, Nutrition and Healthy Lifestyles

**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	5%			
703	Nutrition Education and Behavior	60%			
724	Healthy Lifestyle	30%			
802	Human Development and Family Well-Being	5%			
	<b>Total</b>	100%			

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

1. Actual amount of professional FTE/SYs expended this Program

Year: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	3.0	0.0	0.0	0.0
Actual	2.0	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
22394	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
83357	0	0	0

**V(D). Planned Program (Activity)**

1. Brief description of the Activity

- Conduct train the trainer workshops
- Conduct workshops
- Facilitate meetings
- Develop local and state partnerships
- Provide training

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

- Low income adults and children under the age of 19
- Low income youth, ages 5-12
- Adults that are FSP eligible
- Youth from FSP eligible households
- Teachers in the Montana School System
- Middle to older aged women, especially those living in rural areas

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
<b>Plan</b>	11000	3800	3100	6000
<b>Actual</b>	9772	2463	2702	1253

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

**Patent Applications Submitted**

Year: 2010  
 Plan: 0  
 Actual: 0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

2010	Extension	Research	Total
<b>Plan</b>	1	0	
<b>Actual</b>	1	0	1

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

**Output Target**

**Output #1**

**Output Measure**

- EFNEP/FSNP: The NEP curriculum will be used to teach three series of 8-12 sessions to adults who are enrolled. The NEP youth curriculum will be used to teach 6-7 lessons to youth in workshops (after school, in school, summer camps, park programs). Develop and maintain local and state partnerships and collaborations.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2010	6500	5490

**Output #2**

**Output Measure**

- Steps to a New You: Provide 2 train the trainer sessions for 10 County Extension Agents who in turn, can implement county Steps to a New You program. Provide 20 sets of training materials to County Extension Agents who will be presenting programs.  
Not reporting on this Output for this Annual Report

**Output #3**

**Output Measure**

- Food Safety: Provide 3 train the trainer sessions for County Extension Agents so they can conduct 25 food safety education for audiences such as county sanitarians, school food service personnel, volunteers, food banks and so forth. Provide training and updates to County Extension Agents so they can implement County based programs. Provide training for home food preservers.  
Not reporting on this Output for this Annual Report

**Output #4**

**Output Measure**

- Strong Women: To certify 10 county agents so they are qualified to conduct strength training classes. These 10 agents will provide 1-14 week strength training sessions in their local county.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2010	75	350

**Output #5**

**Output Measure**

- Healthy Lifestyles: To reach adult and youth audiences in rural communities with health fairs and school/community based programs that will provide medical screenings and classes on stress management, nutrition, obesity, fitness, osteoporosis, cardiovascular disease, diabetes, prostate cancer, etc. Number of people having medical screenings at health fair type activities and attending related classes as a result. Number of people following up with a physician or professional as a result of the tests conducted at the health fair activity.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2010	2600	4050

**Output #6**

**Output Measure**

- 4-Health Rural parents of 4-H 8-12 year olds will gain knowledge about healthy diets, physical activity and improved body image while enhancing their understanding, skills and potential roles as positive change agents for their pre-teen children. Rural 4-H families will have greater levels of knowledge related to nutrition, body image and physical activity. Parents will assist their pre-teens in making healthier choices and practicing healthier behaviors after participating in 4-Health programs. Rural families will have decreased rates of childhood obesity.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2010	{No Data Entered}	88

**V(G). State Defined Outcomes**

**V. State Defined Outcomes Table of Content**

O. No.	OUTCOME NAME
1	EFNEP/FSNP: Number of adults gaining awareness and knowledge regarding the importance of: Healthy eating (more fruits and vegetables, more whole grains Increasing physical activity Food Safety practices Food resource management practices Food planning and preparation Number of youth increasing knowledge regarding the importance of: Eating a variety of foods Healthy eating Increasing physical activity Food safety principles (hand washing) Number of adults: Improving the family diets by choosing/preparing healthier choices(more fruits and vegetables, hole grains) Improving food safety practices storing and thawing foods properly) Improving food resource management practices (meal planning shopping with list) Improving nutrition practices (reading food labels) Healthy eating (more fruits and vegetables, more whole grains Increasing physical activity Food Safety practices Food resource management practices Food planning and preparation Number of youth increasing knowledge regarding the importance of: Eating a variety of foods Healthy eating Increasing physical activity Food safety principles (hand washing) Participants will: Decrease their risk of developing diet-related chronic disease, obesity, osteoporosis, cardiovascular disease and diabetes. Decrease the risk for illness and death associated with foodborne illness. Increase their confidence in the ability to manage food resources, as well as other resources.
2	STEPS TO A NEW YOU: Participants will learn about facts, attitudes, behavior change techniques and specific behaviors related to physical activity, nutrition, body image that will allow them to live healthier lifestyles and prevent or reduce obesity. Number of children: Eating a variety of foods Improving practices in food preparation and food safety Select low cost nutritious foods
3	FOOD SAFETY: The participants will learn about safe food handling, specifically facts and skills related to the basics of safe food handling: Controlling time and temperature when handling food Ensuring proper personal hygiene Preventing cross-contamination Proper cleaning and sanitizing The participants will improve safe food handling, specifically the behaviors supporting the basics of safe food handling: Controlling time and temperature when handling food Ensuring proper personal hygiene Preventing cross-contamination Proper cleaning and sanitizing. Participants will adopt healthy attitudes related to a healthy lifestyle approach to prevention or reduction of obesity. Participants will improve their eating behaviors related to a healthy lifestyle approach to obesity. Participants will increase their level of physical activity related to a healthy lifestyle approach to preventing or reducing obesity. There will be a decline in the economic and health consequences of foodborne illnesses.
4	HEALTHY LIFESTYLES: Number of people having medical screenings at health fair type activities. Number of people following up with physician or health professional. Number of people making better nutrition and food choices and engaging in regular physical activity.
5	STRONG WOMEN: Number of people improving physical measurements (maintaining or lowering BMI) and reducing resting heart rate. Amount of increase in weight resistance over the course of the program as measured by specific exercises (bicep curl) and amount of weight lifted 2# increasing to 5#).
6	4-HEALTH provides parents with relevant information, effective parenting skills and strategies, and a strong social network that encourages and helps them to solve everyday problems relating to the health and well-being of their pre-teen children.

## **Outcome #1**

### **1. Outcome Measures**

EFNEP/FSNP: Number of adults gaining awareness and knowledge regarding the importance of: Healthy eating (more fruits and vegetables, more whole grains Increasing physical activity Food Safety practices Food resource management practices Food planning and preparation Number of youth increasing knowledge regarding the importance of: Eating a variety of foods Healthy eating Increasing physical activity Food safety principles (hand washing) Number of adults: Improving the family diets by choosing/preparing healthier choices(more fruits and vegetables, hole grains) Improving food safety practices storing and thawing foods properly) Improving food resource management practices (meal planning shopping with list) Improving nutrition practices (reading food labels) Healthy eating (more fruits and vegetables, more whole grains Increasing physical activity Food Safety practices Food resource management practices Food planning and preparation Number of youth increasing knowledge regarding the importance of: Eating a variety of foods Healthy eating Increasing physical activity Food safety principles (hand washing) Participants will: Decrease their risk of developing diet-related chronic disease, obesity, osteoporosis, cardiovascular disease and diabetes. Decrease the risk for illness and death associated with foodborne illness. Increase their confidence in the ability to manage food resources, as well as other resources.

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

- 1862 Extension

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

Change in Condition Outcome Measure

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

<b>Year</b>	<b>Quantitative Target</b>	<b>Actual</b>
2010	6000	5490

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

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

Limited resource families in Montana struggle to purchase and prepare food for their families in a nutritious manner with the money, food stamps or other resources they have available. Almost 20% of all Montana children live in poverty and food security is a problem for many children and their families. Working low income families often lack the time, knowledge and skill to prepare and serve family meals which are tasty, low-cost and healthful. Research on diet quality and cost indicates as incomes drop and food budget shrink, the trend is to shift away from selecting healthier, nutrient-dense foods and instead opt for energy-dense, refined grains, added sugars and fats.

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

Through EFNEP, 2 counties received lessons on helping adult family members stretch food dollars to feed their families nutritious meals. Programs reach low income youth in Title 1 Schools and out-of-school programs for ages of 5-17 with lessons on healthier, low cost food choices and child obesity. SNAP-Ed is delivered in 22 counties and 7 reservations. Identification of people in need of nutrition education has improved due to cooperation with MT DPHHS entities like Temporary Assistance to Needy Families and Work Readiness Component programs. Local Offices of Public Assistance, commodity programs, public housing units and Food Banks are also contacted regularly.

### **Results**

Of the 634 families participating in EFNEP, 48.5% stated they increased their consumption of milk; new enrolled families (537) said they decreased the amount of money spent on junk food like chips, soda pop, fried frozen items; and participants said they decreased their saturated fat intake by 30%. In the SNAP-Ed programs 56% of adult participants surveyed at the end of the series of lessons showed improvement in healthy food choices, food resource management and food safety as compared to initial surveys; 71% of youth were selecting and adopting healthy food and lifestyle choices. Post surveys from 3rd graders who completed the series of lessons indicate 49% eat different kinds of fruits and vegetables daily, 49% eat at least one whole grain serving daily, 76% are physically active daily, and 82% eat breakfast daily.

## **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

## **Outcome #2**

### **1. Outcome Measures**

STEPS TO A NEW YOU: Participants will learn about facts, attitudes, behavior change techniques and specific behaviors related to physical activity, nutrition, body image that will allow them to live healthier lifestyles and prevent or reduce obesity. Number of children: Eating a variety of foods Improving practices in food preparation and food safety Select low cost nutritious foods

Not Reporting on this Outcome Measure

## **Outcome #3**

### **1. Outcome Measures**

FOOD SAFETY: The participants will learn about safe food handling, specifically facts and skills related to the basics of safe food handling: Controlling time and temperature when handling food Ensuring proper personal hygiene Preventing cross-contamination Proper cleaning and sanitizing The participants will improve safe food handling, specifically the behaviors supporting the basics of safe food handling: Controlling time and temperature when handling food Ensuring proper personal hygiene Preventing cross-contamination Proper cleaning and sanitizing. Participants will adopt healthy attitudes related to a healthy lifestyle approach to prevention or reduction of obesity. Participants will improve their eating behaviors related to a healthy lifestyle approach to obesity.

Participants will increase their level of physical activity related to a healthy lifestyle approach to preventing or reducing obesity. There will be a decline in the economic and health consequences of foodborne illnesses.

Not Reporting on this Outcome Measure

#### **Outcome #4**

##### **1. Outcome Measures**

HEALTHY LIFESTYLES: Number of people having medical screenings at health fair type activities. Number of people following up with physician or health professional. Number of people making better nutrition and food choices and engaging in regular physical activity.

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

- 1862 Extension

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

Change in Knowledge Outcome Measure

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

<b>Year</b>	<b>Quantitative Target</b>	<b>Actual</b>
2010	2600	4050

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

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

Chronic diseases are Montanas leading cause of death, illness and disability and 70% of health related costs. Heart disease tops the list with diabetes, stroke, osteoporosis, and hypertension significantly impacting the population. Research documents that healthy food choices and physical activity can prevent or delay the onset of many of these diseases. Educational strategies that work at the individual, community and policy levels can contribute to prevention as well. Programming in this area includes access to health services, chronic diseases, disability/secondary conditions, injury/violence prevention, nutrition/weight status, quality of life and well-being, physical activity/fitness.

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

In 9 counties and 1 reservation, teaching strategies for achieving and maintaining healthy lifestyles to Montana residents is important programming. A variety of opportunities for people to learn about nutrition, physical activity, medical issues, chronic disease and other issues related to healthy lifestyles included nutrition education classes for teachers, community health fairs, cooking classes, menu planning with schools and restaurants, physical activity classes, newsletters and newspaper articles, brown-bag lunch classes on nutrition/exercise, modifying recipes for health and wellness (diabetes, heart, gluten intolerance, etc.)

###### **Results**

Restaurants involved with the Tasty Fork program have moved from offering the heart healthy menu one month per year to year round. Because of the health fairs, early detection of heart disease, diabetes, high blood pressure, cancer etc for some participants has lead to medical treatment. A variety of health screenings were offered at minimal costs which made them affordable for participants. These screenings include such tests as blood profiles, blood pressure checks, glucose checks, a mobile mammography unit, bone density scans, flu shots, PSA screen. Because of Extension classes, physical activity and weight lifting has increased for both youth and adults, especially for seniors. The schools in two counties are offering healthy food/snack choices in their concessions.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
702	Requirements and Function of Nutrients and Other Food Components
703	Nutrition Education and Behavior
724	Healthy Lifestyle

**Outcome #5**

**1. Outcome Measures**

STRONG WOMEN: Number of people improving physical measurements (maintaining or lowering BMI) and reducing resting heart rate. Amount of increase in weight resistance over the course of the program as measured by specific exercises (bicep curl) and amount of weight lifted 2# increasing to 5#).

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2010	75	150

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

**Issue (Who cares and Why)**

Women start to show decline in muscle mass beginning at age 30. Current recommendations for adults to maintain a healthy level of muscle mass is to strength train at least two times per week, but only 17.5% of women meet this goal. The Strong Women™ program was developed by Tufts University as a strength training program to be conducted through County Extension Offices. In Montana, the program is especially targeted at women who live in rural communities.

**What has been done**

There were 12 strength training exercise programs conducted in 8 Montana counties. Ages of the participants ranged from 36 to 77 years. Nutritional information, along with individual consultation, opportunities were made available to participants. In some programs, CDs containing instructions were provided for people to continue the work at home.

### Results

Through the evaluation process which included 13 focus areas, class participants reported they know how to properly use weights, feel physically stronger, have better balance, feel happy about their bodies, can lift most anything, feel free from joint pain, have enough energy to do what they want to do, have a healthy level of physical activity, enjoy good health, are in a good mood, feel confident in what they do, are willing to try new things, and walk up and down stairs without pulling on the handrail. In one county, a physician assistant is referring patients to the program and in this rural county, it is the only program of its kind. On a scale of 1-10, all the programs were rated between 9 and 10.

## 4. Associated Knowledge Areas

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

## Outcome #6

### 1. Outcome Measures

4-HEALTH provides parents with relevant information, effective parenting skills and strategies, and a strong social network that encourages and helps them to solve everyday problems relating to the health and well-being of their pre-teen children.

### 2. Associated Institution Types

- 1862 Extension

### 3a. Outcome Type:

Change in Condition Outcome Measure

### 3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	{No Data Entered}	88

### 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

The increasing prevalence of childhood overweight and obesity is cause for alarm across the globe. Because they have poorer nutrition, more sedentary lifestyles and poorer body image, children today are worse off both physically and emotionally than children were just 25 years ago. The main goal of this program is to deliver an obesity prevention curriculum that will change the

behaviors of parents and children thereby significantly reducing the likelihood of children becoming overweight. Throughout the course, parents will improve their abilities to encourage nutritious eating and physical activity and provide healthier home environments for their children.

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

The program is conducted over an 8 month period with 1 additional month devoted to gathering evaluation data. This is the pilot year (2010) with 6 counties involved; 3 offering classes taught by the county agents and 3 with educational information being delivered by mailed packets. Information in the classes covers body image, parenting activity and food and nutrition. In May, data will be gathered from the 6 counties providing feedback on effectiveness of class content as well as delivery method.

#### **Results**

Evaluations indicate that parents in all experimental counties are reporting increased rates of confidence in their ability to make changes to family habits in order to increase health and well-being; increased agreement that by using new knowledge obtained in the session, they could make positive changes to their families eating habits; increased confidence in their ability to set and support family goals related to physical activity; that they could better identify the best way to communicate with their preteen and family regarding health related topics; increased rates of confidence in their ability to proactively address media messages with their preteens; that they are more comfortable applying their knowledge of body image issues to enhance the health of their preteen and family.

#### **4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
802	Human Development and Family Well-Being

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

##### **External factors which affected outcomes**

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

##### **Brief Explanation**

{No Data Entered}

#### **V(I). Planned Program (Evaluation Studies and Data Collection)**

##### **1. Evaluation Studies Planned**

- After Only (post program)
- Before-After (before and after program)
- During (during program)

**Evaluation Results**

**Key Items of Evaluation**