

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	45%		45%	
724	Healthy Lifestyle	35%		35%	
806	Youth Development	20%		20%	
	Total	100%		100%	

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2014	Extension		Research	
	1862	1890	1862	1890
Plan	4.0	0.0	1.5	0.0
Actual Paid	2.7	0.0	0.5	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
15741	0	2717	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
15741	0	2717	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
164654	0	73255	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

School-based curricula, including "On the Move to Better Health", "Banking on Strong Bones", and "Go Wild for Fruits and Vegetables" will continue to be used with children. Community-based programs for adults and children will continue.

2. Brief description of the target audience

Children and adults will be the target groups for the programming. They will be reached with both direct and indirect methods.

3. How was eXtension used?

eXtension is used as a resource for development and implementation of the programs.

V(E). Planned Program (Outputs)

1. Standard output measures

2014	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	10515	535302	14720	32000

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	5	1	6

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- {No Data Entered}

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Number of children participating in the youth education curricula that improved their diet quality and/or their physical activity level.
2	Number of adults participating in educational curricula that improved their knowledge and practices related to nutrition and/or physical activity.

Outcome #1

1. Outcome Measures

Number of children participating in the youth education curricula that improved their diet quality and/or their physical activity level.

2. Associated Institution Types

- 1862 Extension
- 1862 Research

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2014	1070

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Calcium is the nutrient most likely lacking in the American diet. According to the U.S. Department of Agriculture, 70 percent of preteen girls and 60 percent of preteen boys do not meet daily calcium recommendations. According to nutrition experts, this calcium shortage places the current generation at greater risk for osteoporosis, a condition known as "pediatric disease with geriatric consequences."

What has been done

Children in elementary classrooms and after school programs have been targeted with nutrition education programming. "Banking on Strong Bones" is a five-week, school-based educational intervention for fourth graders. The purpose is to increase knowledge and change behavior regarding an overall healthful diet, calcium-rich foods and weight-bearing activities. Based on "MyPlate" recommendations, the multi-week effort includes classroom nutrition lessons with participation incentives, supplementary activities and taste testing activities. Families receive newsletters designed to improve knowledge of nutrition and physical activity

Results

From 2005-14, the "Banking on Strong Bones" program has reached more than 11,500 children and their families. Students improved their knowledge scores and reported positive attitude and behavior changes toward consumption of dairy products. During the past year, 1,070 fourth graders participated in "Banking on Strong Bones." On the pre-survey, 21 percent reported drinking three servings of milk (or dairy) the previous day, compared to 39 percent on the post-survey. On the pre-survey, 13 percent reported drinking soda pop every day, compared to 10 percent on the post-survey. About 91 percent planned to drink more milk.

4. Associated Knowledge Areas

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

Outcome #2

1. Outcome Measures

Number of adults participating in educational curricula that improved their knowledge and practices related to nutrition and/or physical activity.

2. Associated Institution Types

- 1862 Extension
- 1862 Research

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2014	3280

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

According to the 2011 Youth Risk Behavior Survey, 11 percent of North Dakota's high school students were obese. Less than 20 percent of North Dakota's children (especially low-income children) eat the recommended levels of fruits and vegetables. Motivating children to try fruits and vegetables and then regularly eat fruits and vegetables is a challenge. Behavior change is more likely to occur if children and their families are engaged in role modeling and tracking of their behavior.

What has been done

"On the Move to Better Health" is a five-week school-based curriculum for fifth graders and their families, which aims to increase fruits, vegetables and calcium-rich foods in the diets of children, as well as increase physical activity. The "On the Move" program was adapted for use in a 4-H camp setting, where children tracked their health behaviors during the 3-to 5-day camps and participated in educational programs and activities.

Results

About 40 percent of the 3,280 children/families participating in "On the Move to Better Health" set a weekly goal, 37 percent of participating parents indicated that their family's fruit consumption had increased, 30 percent reported their family's vegetable consumption had increased, and 14 percent reported their family's whole-grain consumption had increased. According to post-surveys with 4th and 5th graders, about 49 percent reported increasing the amount of fruits and vegetables they consumed, 55 percent reported drinking more milk, 61 percent reported drinking less soda pop, 61 percent drank more water, 56 percent chose healthier snacks, and 54 percent increased their amount of daily physical activity. Of the 332 children who participated in the 4-H Healthy Camp Challenge, 49 percent ate more fruit, 36 percent ate more vegetables, 43 percent drank more water, 59 percent got more exercise, 36 percent brushed their teeth more often, 44 percent wore more sunscreen and 89 percent planned to practice these healthy behaviors more often.

4. Associated Knowledge Areas

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

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Competing Public priorities
- Competing Programmatic Challenges

Brief Explanation

North Dakota has had changes in population due to the oil boom as well as immigration of new cultures. Reaching busy parents/caregivers directly continues to be a challenge, so we are exploring new technologies to reach audiences of all ages

V(I). Planned Program (Evaluation Studies)

Evaluation Results

About 40 percent of families participating in "On the Move to Better Health" set a weekly goal, 37 percent of participating parents indicated that their family's fruit consumption had increased, 30 percent reported their family's vegetable consumption had increased, and 14 percent reported their family's whole-grain consumption had increased. According to post-surveys with more than 2,800 4th and 5th graders in the five-week "On the Move to Better Health" program, about 49 percent reported increasing the amount of fruits and vegetables they consumed, 55 percent reported drinking more milk, 61 percent reported drinking less soda pop, 61 percent drank more water, 56 percent chose healthier snacks, and 54 percent increased their amount of daily physical activity. To continue to thrive and reach new audiences, nutrition educators need to be on the cutting edge of technology use to complement their traditional educational programming,

and reach younger audiences and those in rural, isolated areas.

Key Items of Evaluation