

V(A). Planned Program (Summary)

Program # 11

1. Name of the Planned Program

Childhood Obesity

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	70%		0%	
724	Healthy Lifestyle	10%		0%	
806	Youth Development	20%		0%	
	Total	100%		0%	

V(C). Planned Program (Inputs)

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

Year: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	8.0	0.0	0.0	0.0
Actual	8.0	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
256000	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
384000	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

- Identify emerging issues
- Translate scientific data

- Develop lessons and curricula
- Develop public campaigns
- Promote changes in public policy
- Train Extension Agents
- Develop evaluation methodology
- Analyze and report impacts

2. Brief description of the target audience

- Youth in schools, afterschool programs, and 4-H
- Adults in homes, worksites, and communities
- People with chronic disease

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Plan	7000	400000	7000	25000
Actual	8100	570000	14000	35000

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
Plan	3	1	
Actual	9	1	10

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	Based on follow-up surveys of adult participants in walking programs, 50 percent will report increased number of steps or minutes of walking
2	Based on follow-up surveys of adult participants in nutrition education programs, 25 percent will report a change in behavior to be more consistent with current nutrition recommendations based on MyPyramid
3	Based on follow-up surveys of parents of children participating in nutrition education programs, 25 percent of parents will report a family behavior change to be consistent with current recommendations
4	Based on post-surveys of children involved in multi-session nutrition/fitness classes, 25 percent of participants will report a change in nutrition or fitness behavior to be consistent with current MyPyramid recommendations
5	Based on program evaluations, 25 percent of adult participants will demonstrate an increased knowledge and an intent to change nutrition behavior, which may help prevent diabetes or improve disease management.
6	Number of children in elementary classrooms and afterschool programs targeted with nutrition education programming, with multi-lesson curricula integrating MyPyramid-based nutrition and fitness concepts for grades 3-5, statewide.
7	Number of older adults (over 45) targeted with the "Eating for Your Eyes" project containing nutrition and health information about the role of nutrition and eye health.

Outcome #1

1. Outcome Measures

Based on follow-up surveys of adult participants in walking programs, 50 percent will report increased number of steps or minutes of walking

Not Reporting on this Outcome Measure

Outcome #2

1. Outcome Measures

Based on follow-up surveys of adult participants in nutrition education programs, 25 percent will report a change in behavior to be more consistent with current nutrition recommendations based on MyPyramid

Not Reporting on this Outcome Measure

Outcome #3

1. Outcome Measures

Based on follow-up surveys of parents of children participating in nutrition education programs, 25 percent of parents will report a family behavior change to be consistent with current recommendations

Not Reporting on this Outcome Measure

Outcome #4

1. Outcome Measures

Based on post-surveys of children involved in multi-session nutrition/fitness classes, 25 percent of participants will report a change in nutrition or fitness behavior to be consistent with current MyPyramid recommendations

Not Reporting on this Outcome Measure

Outcome #5

1. Outcome Measures

Based on program evaluations, 25 percent of adult participants will demonstrate an increased knowledge and an intent to change nutrition behavior, which may help prevent diabetes or improve disease management.

Not Reporting on this Outcome Measure

Outcome #6

1. Outcome Measures

Number of children in elementary classrooms and afterschool programs targeted with nutrition education programming, with multi-lesson curricula integrating MyPyramid-based nutrition and fitness concepts for grades 3-5, statewide.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	{No Data Entered}	3100

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Childhood obesity remains an issue of concern in the U.S., with some researchers considering children to be overfed but undernourished. Diseases formerly associated with adults, including heart disease, are becoming more common among children.

What has been done

The overall goal of the "Eat Smart. Play Hard. Together." program is to increase knowledge and change behavior among children and their parents through the use of two curricula in elementary schools and a recognition program used in 4-H clubs. "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 calcium-rich foods and weight-bearing activities. "On the Move to Better Health" is a five-week school-based curriculum for fifth graders, which aims to increase fruits, vegetables and calcium-rich foods in the diets of children, as well as increase physical activity. 4-H clubs completed an evaluation process to determine if their club met the "healthy club" criteria.

Results

From 2005-10, the "Banking on Strong Bones" five-lesson program has reached more than 5,900 children and their families. Students improved their knowledge scores and reported positive attitude and behavior changes toward consumption of dairy products. About 1600 fourth graders participated in the 2009-10 school year. On the pre-survey, 49% reported drinking three or more glasses of milk the previous day, compared to 63% on the post-survey. On the pre-survey, 16% reported drinking soda pop every day, compared to 11% on the post-survey. About 88% reported planned to drink more milk. According to the post-surveys of 1,300 fifth graders in the five-week "On the Move to Better Health" program, about 56% reported increasing the amount of fruits and vegetables they consumed, 56% reported drinking more milk, 60% reported drinking less soda

pop, 61% drank more water, 55% chose healthier snacks, and 63% increased the amount of daily physical activity. In 4-H youth programming, 15 4-H clubs from eight counties were recognized for completing at least six of the eight criteria required for recognition as "healthy clubs".

4. Associated Knowledge Areas

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

Outcome #7

1. Outcome Measures

Number of older adults (over 45) targeted with the "Eating for Your Eyes" project containing nutrition and health information about the role of nutrition and eye health.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	{No Data Entered}	1190

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

In the United States, approximately 16 million people over the age of 45 report some vision loss. The most debilitating eye diseases include age-related macular degeneration (AMD), glaucoma, cataracts, diabetic retinopathy, retinal detachment and refractive errors. More than 2 million Americans have severe AMD, and another 7 million may have it and not know it. Prevention is important because AMD is the leading cause of irreversible vision loss and greatly reduces the quality of life. Researchers have reported that nutrition, fitness and other lifestyle factors play a role in eye health.

What has been done

"Eating for Your Eyes" is a multimedia teaching kit designed for delivery by trained professionals to adults on the prevention of age-related macular degeneration. The program content was developed using the research of dietitians and gerontologists with peer review by ophthalmologists and optometrists. Participants used vision simulators to experience various eye conditions. The program is a joint project with the North Dakota Optometric Association. The program has been offered in 36 North Dakota counties and eight other states. Of the 35 trainers

completing a program training evaluation, 94% indicated their satisfaction with the program was "above average" or "excellent".

Results

The "Eating for Your Eyes" program is making a difference in the nutrition and eye health of North Dakotans who have received this training. Based on 1,188 participant surveys, 95% reported learning something new, 88% planned to share the information received with family and friends, 54% planned to share vision simulator cards with others, 35% indicated they planned to get a dilated eye exam, 57% planned to wear ultraviolet sunglasses or a hat, 54% planned to get more physical activity, 63% planned to prepare more meals that included green, leafy vegetables, 73% planned to eat colorful fruits and vegetables more often, 61% planned to eat eggs more often, 32% planned to switch from fat-free salad dressing to one with olive or canola oil, and 35% planned to try a new food such as kiwi, orange bell peppers or Swiss chard. According to follow-up contacts with 138 participants from 24 counties, 85% indicated they are currently eating colorful fruits and vegetables more often, 48% had a dilated eye exam, 83% had shared the information with family and friends, and 57% were eating leafy greens more often.

4. Associated Knowledge Areas

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

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Public Policy changes

Brief Explanation

There has been an increased emphasis on managing issues related to obesity and health for youth and ND populations.

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

1. Evaluation Studies Planned

- Comparisons between program participants (individuals, group, organizations) and non-participants

Evaluation Results

A retrospective study of the Fresh Fruit and Vegetable Program (FFVP) was completed. The goal of the study was to evaluate the effectiveness of a Fresh Fruit and Vegetable Program in two income-eligible schools on participants' fruit and vegetable behavior at school and at home. The evaluation addressed two questions: (1) Did the Fresh Fruit and Vegetable Program affect students' availability of fruits or vegetables in the home,

willingness to try or request fruits or vegetables from a parent, or fruit or vegetable consumption throughout the day? (2) Were any of these factors influenced by student age, ethnicity, family income, or gender? During the 2009 to 2010 school year, the intervention school distributed a daily fruit or vegetable snack to all students (kindergarten through grade 5) during the school day. Data were collected in the spring of 2010 from students in grades 3, 4 and 5 and their parents from two schools, one intervention (n=264) and one control (n=326), using a post-only survey. According to the results of the study, the FFVP did not affect students' fruit and vegetable behavior away from school; however, student characteristics such as gender and family income did play a role. A journal article has been submitted for publication. The results of this study will be used to guide nutrition education/obesity-prevention programming in schools.

Key Items of Evaluation