Barnes County School Children are Banking on Strong Bones

2015-2016

The Situation
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.”

Extension Response
Susan Milender Toppen taught Banking on Strong Bones to Barnes County fourth-graders to help address the “calcium crisis” among youth. The program utilizes a NDSU-developed, pilot-tested curriculum. Based on MyPlate recommendations, the multi-week effort includes classroom nutrition lessons with participation incentives, educational materials in the libraries, supplementary activities and taste testing. Families receive newsletters designed to improve knowledge of nutrition and physical activity.

Impacts
In school year 2015-2016, 104 Barnes County children and their families participated in the five-week classroom-based nutrition education program and completed surveys. Post-surveys showed the following as a result of the program:

- 62 percent reported in the post-survey that they drank three or more glasses of milk the previous day, compared with 35 percent in the pre-survey.
- About 80 percent reported in the post-survey that they drink milk every day, compared with 75 percent in the pre-survey.
- 26 percent indicated in the post-survey they would choose soda pop instead of milk if given the choice, compared with 32 percent in the pre-survey.

In a survey with parents, 40 percent of parents reported positive changes in their child’s eating habits as a result of this program.

Feedback
Teachers said:
- “After the class, I noticed that my students are making an effort to drink more milk, yogurt, and cheese.”
- “The students are excited to have the agent come to the class each week and visit about eating healthy.”
- “I want to have this program as part of our health curriculum each and every year. I see the value by students being aware of calcium and its health benefits. Kids drink too many unhealthy drinks today.”
- “I will definitely recommend this program to other teachers.”

Public Value Statement
Improving health behaviors can increase quality of life and save millions of dollars in collective health-care costs for North Dakotans throughout their lifetime.

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