ND Children are Banking on Strong Bones
2005-2016

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
Banking on Strong Bones addresses the “calcium crisis” among youth and reaches fourth-graders with an NDSU-developed, pilot-tested curriculum delivered in elementary classrooms across North Dakota by Extension agents. Based on MyPlate recommendations, the multiweek 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
From 2005 to 2016, 12,657 children and their families participated in the five-week classroom-based nutrition education program and completed surveys. Post-surveys with 1,202 children in 19 counties in 2015-16 showed the following as a result of the program:

- 56 percent reported in the post-survey that they drank three or more glasses of milk the previous day, compared with 40 percent in the pre-survey.
- About 75 percent reported in the post-survey that they drink milk every day, compared with 70 percent in the pre-survey.
- 25 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, 43 percent of parents reported positive changes in their child’s eating habits as a result of this program.

Feedback
Students said:
- “I liked going home and challenging myself to drink and eat more dairy products.”
- “I liked learning that calcium is super good for your bones.”

Parents said:
- “She is excited about eating healthy. She is paying more attention to the foods she eats and how they help her body and mind function. She has been bringing the stuff she learns from Banking on Strong Bones home to share.”
- “He is more aware of what he’s eating and whether it is healthy. He is also more aware of what the health benefits are and how they help his body grow.”

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.

Primary Contact
Julie Garden-Robinson, Food and Nutrition Specialist
701-231-7187
julie.garden-robinson@ndsu.edu