



Health, Nutrition and Food Safety Education

Situation:

The number of New Hampshire households receiving food stamps rose by one-third, from 25,208 in September, 2006 to 33,624 in October, 2008. These 33,624 households include about 68,000 individuals, 29,000 of whom are children.

Food prices also rose dramatically over the same period. In the last three years, meat, poultry and fish prices rose more than 11 percent, eggs 34 percent, dairy products 18 percent, fruits and vegetables more than 18 percent, and cereals and bakery nearly 18 percent. USDA estimates prices for these nutritious foods will jump another 2-4 percent in 2009. Yet the average food-stamp allotment remained steady at about \$3 per person per day throughout the three-year period.

Recent surveys reveal 61 percent of New Hampshire citizens are overweight or obese. More than 71 percent don't eat the recommended amounts of fruits and vegetables and nearly half don't meet the recommendations for physical activity. Research shows diet is associated with the leading causes of death, many of which are preventable, including heart disease, diabetes, obesity and several types of cancer. Despite the importance of diet, however, Americans fail to achieve Dietary Guideline recommendations that lower their disease risk.

The National Restaurant Association estimates a food-borne illness outbreak can cost an establishment thousands of dollars. Serving safe food is vital to an establishment's success, and given Hillsborough County's reliance on tourism, a well-designed food safety program can help protect an establishment's employees, customers and reputation. Food workers need up-to-date and practical information on food safety and sanitation to prevent foodborne illness.

UNH Cooperative Extension's Public Value:

Research shows the effectiveness of nutrition education programs for increasing the nutritional well-being of the families served. Nutrition education programs delivered to limited-income residents help them make better food choice decisions, improve their health and save them money, reducing the probability they will need public assistance.

UNH Cooperative Extension's Response:

UNH Cooperative Extension's Nutrition Connections, Family and Consumer Resources and 4-H Youth Development staff implement nutrition and health programming in New Hampshire. Activities target physical activity, nutrition, community involvement and obesity awareness and prevention. The Nutrition Connections mandate is to work with limited income adults, youth and families. Programming is evaluated with a pre/post survey and an analysis of foods eaten prior to and after a series of lessons.

Heidi Bennett and Awilda Muniz, program staff with Nutrition Connections in Hillsborough County, work with individuals and families in their homes, groups at local agencies, and school-aged children at income-eligible schools. Referrals of adults for the Nutrition Connections program come from several organizations that partner with UNH Cooperative Extension including Head Start, The Way Home, Families in Transition, Our Place, Upper Compassionate Ministries of Nashua, Nashua Soup Kitchen, WorkPlace Success Programs in Nashua and Manchester, and Operation Frontline (of the New Hampshire Food Bank).

Schools and youth organizations also partner with UNH Cooperative Extension to offer youth nutrition education programs with a focus on healthy food choices and physical fitness. Programs were offered through the Manchester and Nashua Public Schools, Boys and Girls Club of Greater Nashua, the Nashua Police Athletic League, Head Starts in Manchester and Nashua, Families in Transition, Nashua 21st Century Programs, Hillsboro-Deering Middle School and Nashua YMCA.

Local food service workers receive their food safety education through the *ServSafe*® national certification program and the Safety Awareness in the Food Environment (SAFE) workshop. One *ServSafe*® program was offered to restaurant workers in Hillsborough County in the past year, completed by 18 participants. The SAFE program (a two-hour, free program) targets front line food service workers who frequently don't have access to the national certification program

due to cost and time requirements. More than 650 county participants attended these programs in 2008 taught by Alice Mullen, Extension Educator, Family and Consumer Resources. Other food safety programs included food safety at farmers' markets and food preservation workshops.

How We Made a Difference:

Nutrition Connections, through the national Expanded Food and Nutrition Education Program (EFNEP) and Food Stamp Nutrition Education (FSNE), saves states and families money. Multiple cost benefit analyses in several states highlight the program's value and document that for every dollar invested in EFNEP, benefits can reach as high as \$10.64 from reduced health care costs. Another study showed that for every \$1 to implement the program, \$2.48 is saved on food expenditures, reducing the need for emergency food assistance.

In Hillsborough County, 929 youth and 143 adults with 434 family members participated in Nutrition Connections programming from 2007-2008. New Hampshire data from pre/post surveys show the following percentage changed their behavior after they completed Nutrition Connections classes:

- 85 percent showed improvement in one or more nutrition practices such as planning meals, comparing prices, not running out of food at the end of the month and shopping with a grocery list.
- 88 percent showed improvement in at least one of the following: making healthy food choices, preparing foods without adding salt, reading nutrition labels and making sure their children ate breakfast.
- 60 percent showed improvement in food safety such as thawing and/or storing foods properly. Food safety is critical in avoiding foodborne illness. Foodborne illness can result in days lost from work or school and increased health care costs.
- 62 percent increased their fruit and vegetable consumption. There are many positive health indicators associated with increasing fruit and vegetable consumption, such as reduced incident of heart disease.
- 48 percent increased their physical activity. Evidence shows increasing physical activity results in better physical and emotional health, meaning fewer illnesses.
- 60 percent more often compared prices when shopping. This shows they are making smarter financial decisions and enhancing their skills with their cash/food stamps. This can result in less reliance on local resources.
- 31 percent less often ran out of food before the end of the month. Having food available means households have less demand for city welfare and food pantries.
- 30 percent reported their children ate breakfast more often. Data shows children do better in school if they eat breakfast.

Teacher feedback is extremely exciting and positive. A few student changes observed by teachers included students enjoyed tasting new foods and trying things at home they learned from the lessons. Teachers have also received great positive feedback from parents.

Overall, people who participate in Nutrition Connections in Hillsborough County make improved health/nutrition choices for themselves and their families. The implications to making smart nutrition choices are financial, emotional and physical. Nutrition Connections helps people learn how to become more self-reliant and more independent. We provide the educational tools to people so they have the awareness and knowledge to make healthier choices.

Twelve food service workers and managers from Hillsborough County passed the National Restaurant Association Education Foundation's *ServSafe*® food manager certification exam. *ServSafe*® certification is valid for five years and is recognized throughout the food industry wherever food manager certification is required. Ninety-five percent of participants in the SAFE program scored 80 percent or higher on their end-of-workshop quiz, indicating they had a greater understanding of food safety practices such as hand washing procedures, correct temperature to keep food safe, and sanitizing equipment procedures.

***The University of New Hampshire Cooperative Extension is an equal opportunity educator and employer.
University of New Hampshire, U.S. Department of Agriculture and N.H. counties cooperating.***