



Health, Nutrition and Food Safety Education

Situation:

Improving the well-being of New Hampshire residents through healthy eating and active living helps individuals and families fight disease, disability, disparities in health status, and even death. Diet quality and physical activity play vital roles in overall health. In fact, 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. Cardiovascular disease and cancer together account for almost two-thirds of all deaths in the United States. Despite the importance of diet, however, Americans fail to achieve Dietary Guideline recommendations that lower their disease risk.

The National Restaurant Association estimates a foodborne illness outbreak can cost an establishment thousands of dollars. Serving safe food is vital to an establishment's success, and given Carroll 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:

Given rising rates of obesity in the Granite State, UNH Cooperative Extension remains committed to looking at ways to optimize the health of the state's residents by reducing risk factors through education focused on encouraging physical exercise and diet/healthy lifestyle choices. In addition, low income individuals have higher rates of overweight and obesity. Individual, group and community coalitions are all effective ways to get important messages and education to the public.

Research shows the effectiveness of nutrition education programs by increasing the nutritional well-being of the families served. A national survey in 2007 showed 92 percent of those "graduating" from these programs improved their dietary intake. 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 Program, 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 Program's 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.

Joanne Knowlton, Educational Program Coordinator, Nutrition Connections in Carroll County, works with individuals and families in their homes, groups at social-service agencies, family day care providers, and school-aged children at income-eligible schools. Forty-seven Carroll County families or individuals enrolled in Nutrition Connections programs, participating either in a series of home study lessons, group lessons or home visits. Referral for the Nutrition Connections program comes from several organizations that partner with UNH Cooperative Extension including the Alternative Life Centers in Conway and Wolfeboro, Northern Human Services and North Country Independent Living.

Local food service workers receive their food safety education through both the *ServSafe*® national certification program and the SAFE (Safety Awareness in the Food Environment) workshop. Six *ServSafe*® programs were offered to restaurant workers in Carroll County in the past year, completed by 67 participants. The Safety Awareness in the Food Environment (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. One hundred sixty participants from Carroll County attended 10 of these programs in 2008 taught by Ann

Hamilton, Extension Educator in Family and Consumer Resources. In addition, 13 food pantry workers from the Wakefield food pantry attended safe food training.

How We Made a Difference:

Nutrition Connections, through the national Expanded Food and Nutrition Education Program (EFNEP), 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 Carroll County, 243 youth and 59 adults with 111 family members participated in Nutrition Connections programming from 2007-2008. This includes one-time classes as well as people enrolled in a series.

New Hampshire data from pre/post surveys for adults taking a series of lessons show the following percentage of adults changed their behavior after they completed Nutrition Connections classes in 2007-2008:

- 85 percent of the adults showed improvement in one or more nutrition practices. These include 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 from Carroll County schools 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, showing they were more aware of nutrition and they now drink more milk, and eat healthier snacks.

Overall, people who participate in Nutrition Connections programming in Carroll County are making 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.

Sixty-seven food service workers and managers took the National Restaurant Association Education Foundation's *ServSafe*® food manager certification exam with 79 percent receiving food safety certification. *ServSafe*® certification is valid for five years and is recognized throughout the food industry wherever food manager certification is required. Ninety-two percent of participants in the SAFE program scored 75 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.

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