

The Thermy Campaign: Increasing Food Thermometer Use Among Refugees and New Americans

NDSU
Extension Service
North Dakota State University

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Rationale

- Foodborne illness continues to make headlines. An estimated 76 million Americans are sickened, 325,000 are hospitalized and 5,000 die each year due to contaminated food.

Casserole's undercooked ground beef blamed for E. coli outbreak at school

Minneapolis (AP)

Ground beef used in an undercooked casserole was blamed for making 18 schoolchildren sick in an E. coli outbreak last month, and meat from the same batch may have been served in school lunches elsewhere in the state.

Minnesota Department of Health officials said Tuesday it appears the outbreak was caused by a casserole of ground beef, pasta and tomato sauce served at the Risen Christ Catholic School in Minneapolis.

Infection by the E. coli O157:H7 strain was confirmed in six students, said Kirk Smith, a department epidemiologist. Testing on 12 other students who had E. coli symptoms — severe or bloody diarrhea and abdominal cramps — was not complete, he said.

E. coli is one of the leading causes of food-borne illnesses in the United States, according to the

Centers for Disease Control and Prevention. The bacteria live in the intestines of healthy cattle. Meat can be contaminated during the slaughtering process, and E. coli can be mixed into the beef when it is ground.

Although testing of the suspected beef hasn't been finished, Smith and other state health officials were confident that it was the culprit.

"There's no question in my mind that it was the beef," Smith said.

Smith and federal officials said that the beef, which was purchased through the U.S. Department of Agriculture's school lunch program, came from several plants and was processed in December. One of them is in Minneapolis; federal officials declined to name it.

The plants supply other schools

in Minnesota and elsewhere, said Carol Blake, a spokeswoman for the U.S. Food and Safety Inspection Service, so it's possible that meat containing E. coli may have been shipped to other Minnesota schools.

Smith said there are no indications of outbreaks at other schools.

Although parents should be alert for symptoms of E. coli, Smith said they shouldn't be alarmed. Cooking ground beef until it is well done with no pinkness kills any E. coli.

Blake said investigators were working with the plants. If they find widespread problems at the plants, they may decide to take stronger action to reduce the risk of other students getting infected.

"It's possible that we may issue a recall of the meat, but we're not at that stage yet," she said.

3 more E. coli cases reported in N.D.

Bacteria outbreak in Bismarck linked to tainted ground beef

Associated Press

BISMARCK, N.D. — A strain of E. coli bacteria that sickened at least 10 people has been traced to hamburger products, state health officials said Tuesday.

Fred Heer, the health department's director of disease control, said seven other cases are awaiting the results of lab tests. Investigators who traced the background of those taken ill found a common link in the ground beef products eaten at a Bismarck restaurant, May 8.

"The thing that we haven't determined is how it got there," said Mel Fischer, Bismarck's city health inspector.

Seven of the 10 confirmed cases, ages 1 to 74, required hospitalization. Heer said those hospitalized ranged in age from 29 to 76 but their conditions were not life-threatening and all have been released from the hospital. He said there were no cases of hemolytic uremic syndrome, a condition in which red blood cells are destroyed and the kidneys fail.

Health officials declined to release the name of the restaurant where the victims ate. Heer said it has been inspected several times since the outbreak was reported.

"Thousands of people have eaten at this place since the outbreak, and there's been nothing occurring since," he said. "Unfortunately, something occurred (last time) with a contaminated product."

Fischer said the symptoms of poisoning from the strain known as E. coli O157:H7 bacteria include diarrhea, vomiting and sometimes kidney failure. There is no treatment or cure for advanced stages of the illness.

The city inspector said federal agriculture authorities will try to trace the restaurant's meat suppliers. The city also is interviewing workers at the restaurant, he said.

"They're following the procedure that are required," he said. "They have been very cooperative."

Heer said the health department got the first report of a case May 13, and then began a "food history" of the victims. He said the incubation period averages between four and six days.

"We put down all the places they ate, including homes, from May 4th through May 11th," he said.

"Then we line this all up, and we kind of look across and say a good number of people ate at this restaurant at this one day, at this one time."

An E. coli O157:H7 outbreak last year in the Pacific Northwest killed four people and made 500 severely ill. It was traced to tainted hamburger meat at a fast food restaurant.

North Dakota's biggest outbreak was in 1990. Heer said, when 27 people were reported ill after eating roast beef at a threshold above.

Bride sues restaurant over E coli

Bismarck, N.D. (AP)

A Dickinson woman who was sickened on her wedding day by E. coli is suing the restaurant that catered her wedding reception.

Debra Kurts and her husband, Robert, filed suit against the Wood House in South Central District Court last week.

State health officials say 14 people were sickened by E. coli in the May 1994 outbreak. All the victims were traced to Wood House meals.

The restaurant had catered the Kurts' riverboat wedding reception, and Debra Kurts was hospitalized after she became ill.

The couple is seeking reimbursement of \$2,800 in medical bills and \$300 for the catering bill.

They are also seeking an unspecified amount for her pain and suffering, and his "loss of normal society and consortium of his wife."

Sunday, February 18, 1996

Introduction

According to the Food Safety and Inspection Service and the Food and Drug Administration, only 6 percent of home cooks use a food thermometer for hamburgers and 10 percent use one for chicken breasts



Research at Kansas State University shows the brown color of cooked ground beef does not ensure safety or an endpoint temperature of 160 F.



Where: Fargo-Moorhead

- 150,000 people populate these two cities
- Increasing number of refugees moving to Fargo-Moorhead
- Fargo-Moorhead is one of the largest refugee resettlement communities per capita in the country
- In 2003, over 11,000 refugees lived in Fargo-Moorhead
- The five largest groups resettling to North Dakota are:
 - Bosnian
 - Sudanese
 - Somali
 - Albanian
 - Kurdish



Target Audience

New Americans living in Cass County, ND from:

- Bosnia
- The Sudan
- Somalia
- Vietnam



Goal

To improve food handling practices among refugee families in North Dakota.






Objectives

- Increase knowledge of food safety through educational sessions
- Increase food safety skills by providing hands-on training
- Increase use of food thermometers by providing the equipment along with training



Methods

- Lesson plans, handouts and evaluation surveys were provided to Nutrition Education Assistants in the Family Nutrition Program in Cass County.
 - Nutrition Education Assistants reached audiences through small hands-on classes
 - Two classes were given to each group
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- After the first class students were given a post-survey
 - All received a food thermometer, magnet, “wash your hands” mirror cling and food safety handout




- A follow-up lesson was provided at least one month later where they discussed safe storage temperatures
- After the follow-up survey they received a refrigerator/freezer thermometer



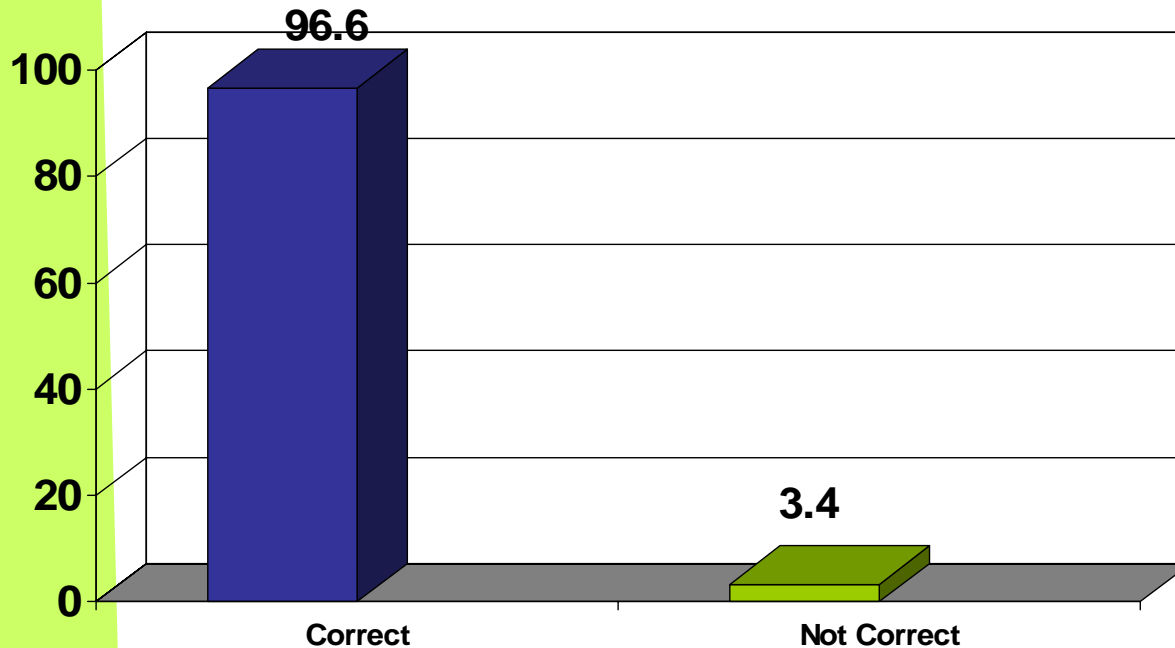


Collaborative Arrangements

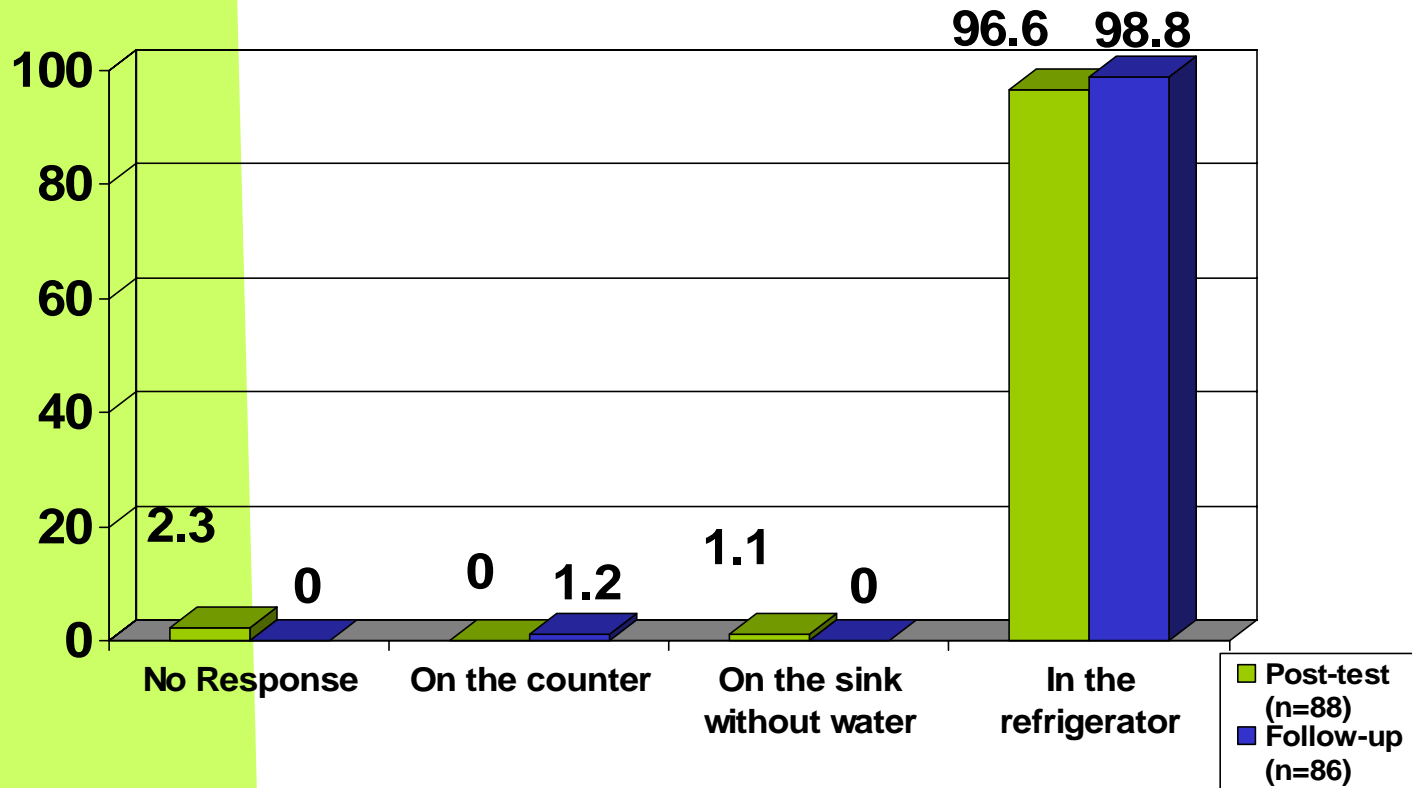
- ND Job Service
 - Provides vocational training for limited resource audiences
 - Center for New Americans
 - Charism Center
 - Serves a 52-square block, in a multi-cultural, low-income neighborhood
 - Represents ethnic groups including: Bosnian, Mexican, Somalian, Puerto Rican, Kurdish and Sudanese
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Results - Post-testing

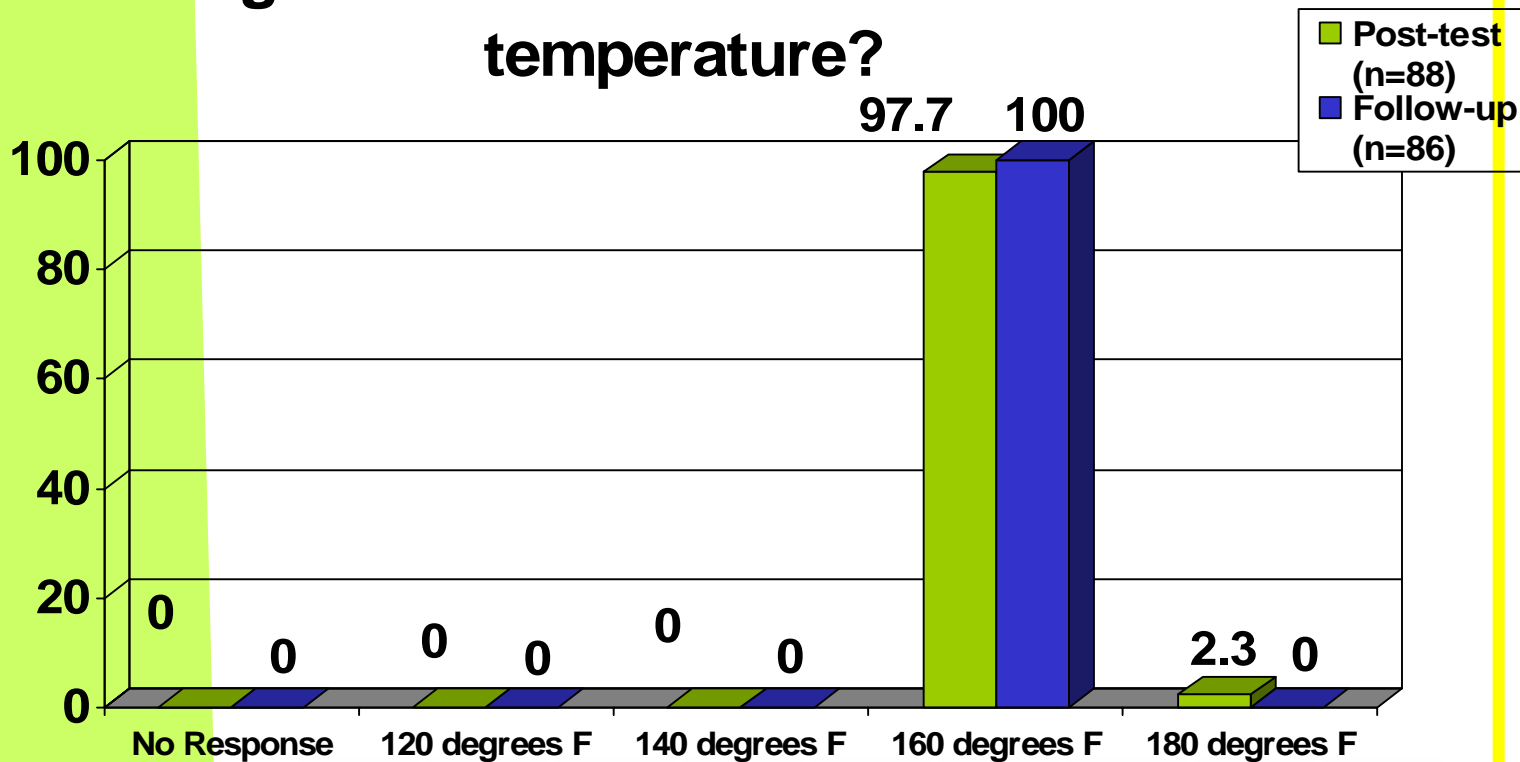
The four steps to food safety are: clean, separate, cook, chill.



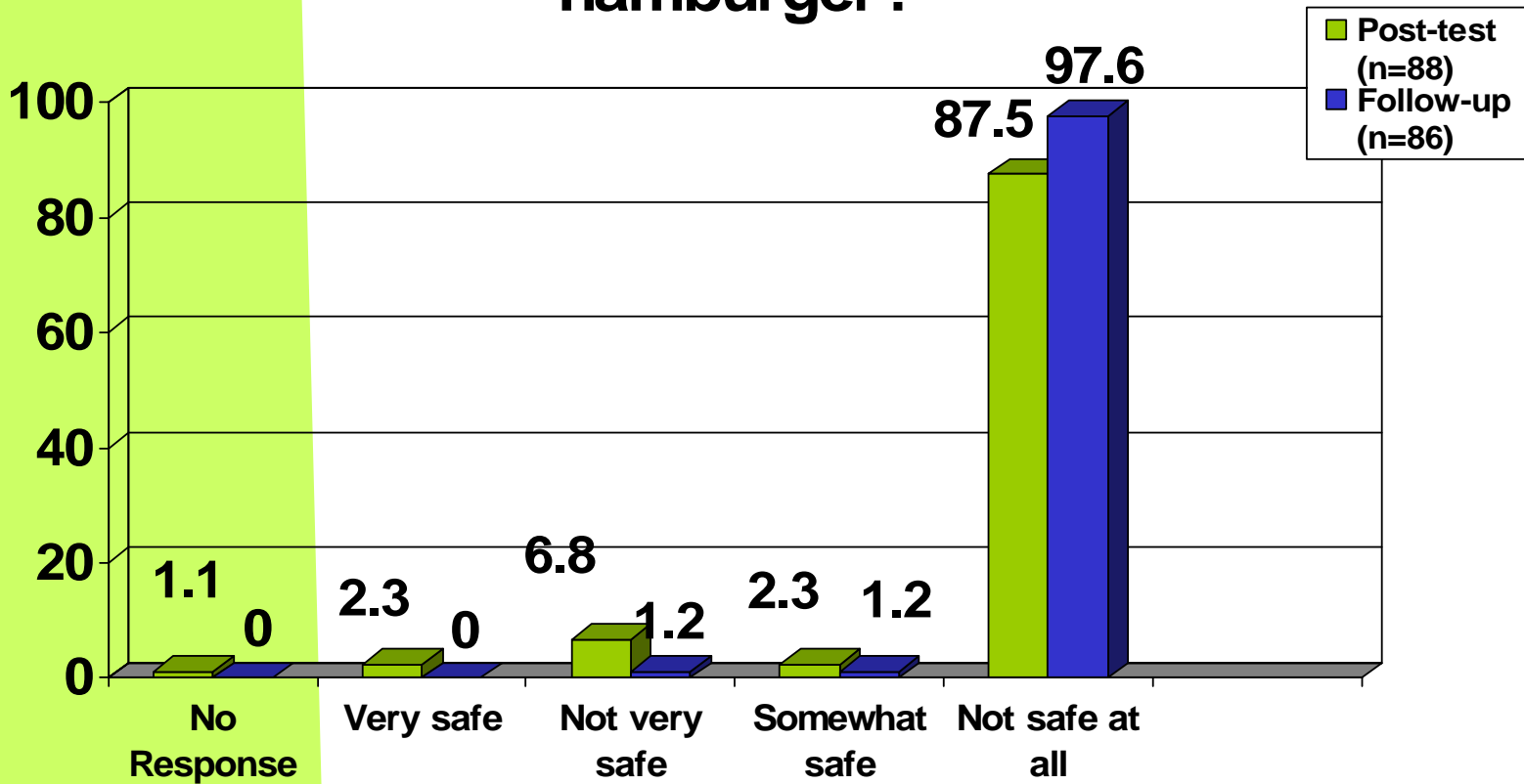
Where should meat be thawed?



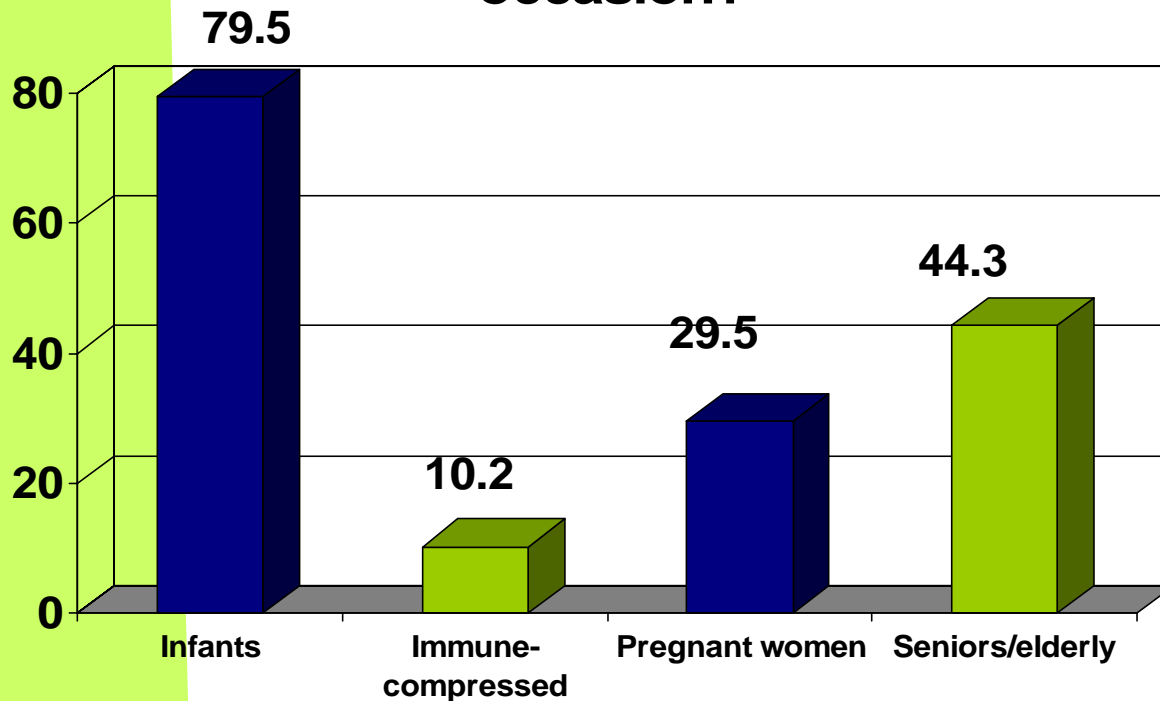
Hamburger should be cooked to what internal temperature?



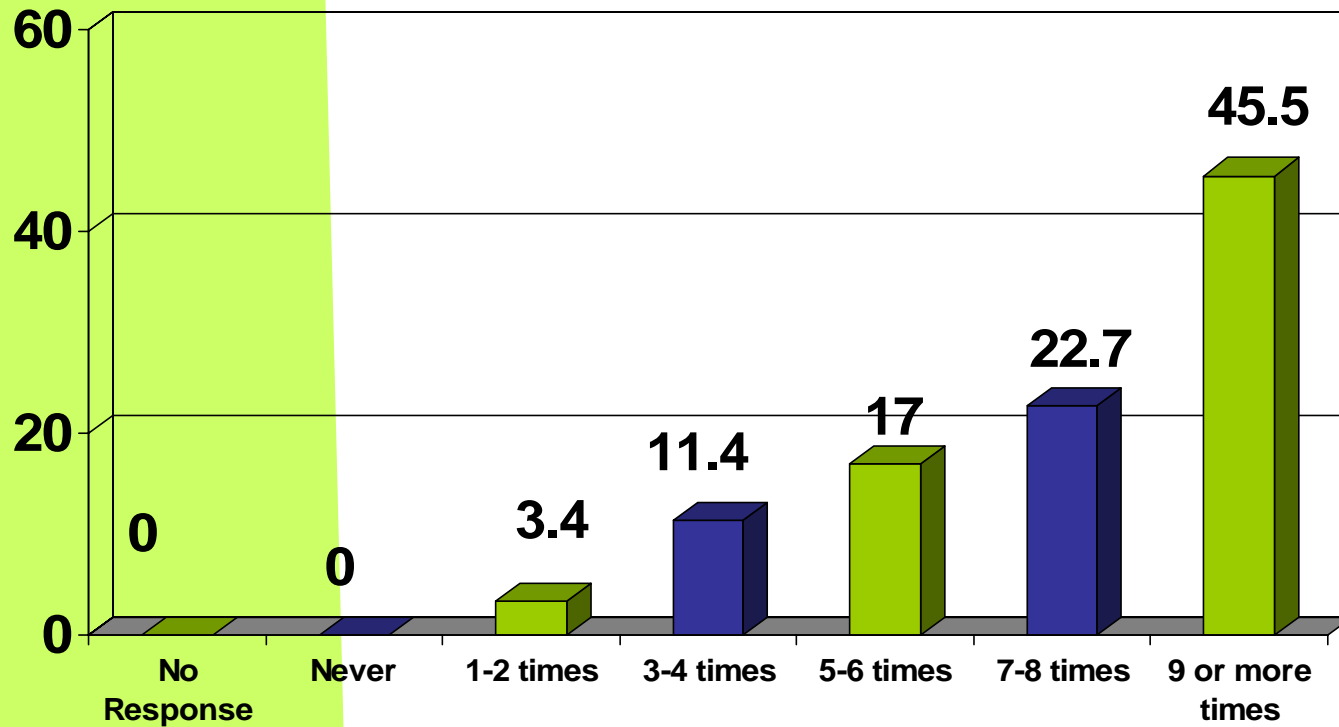
How safe would you say it is to eat raw hamburger?



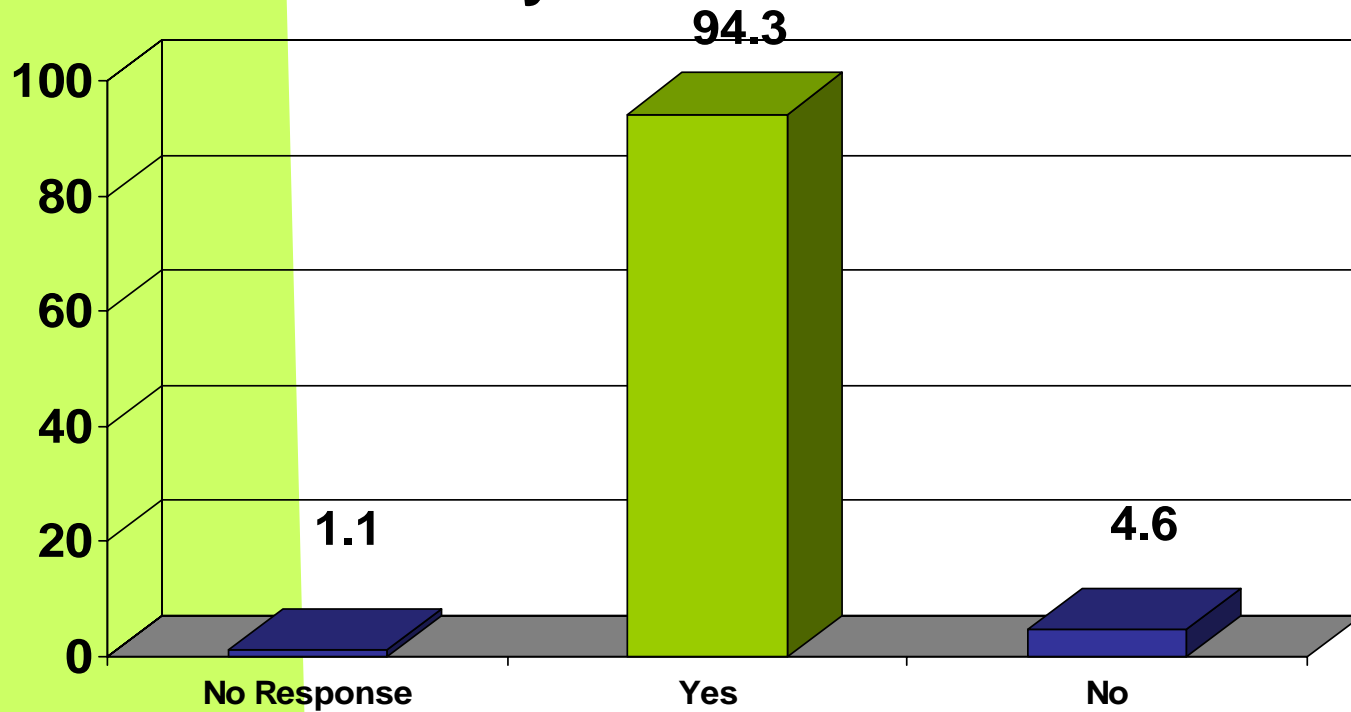
Including yourself, for which of the following groups do you prepare food, at least on occasion?



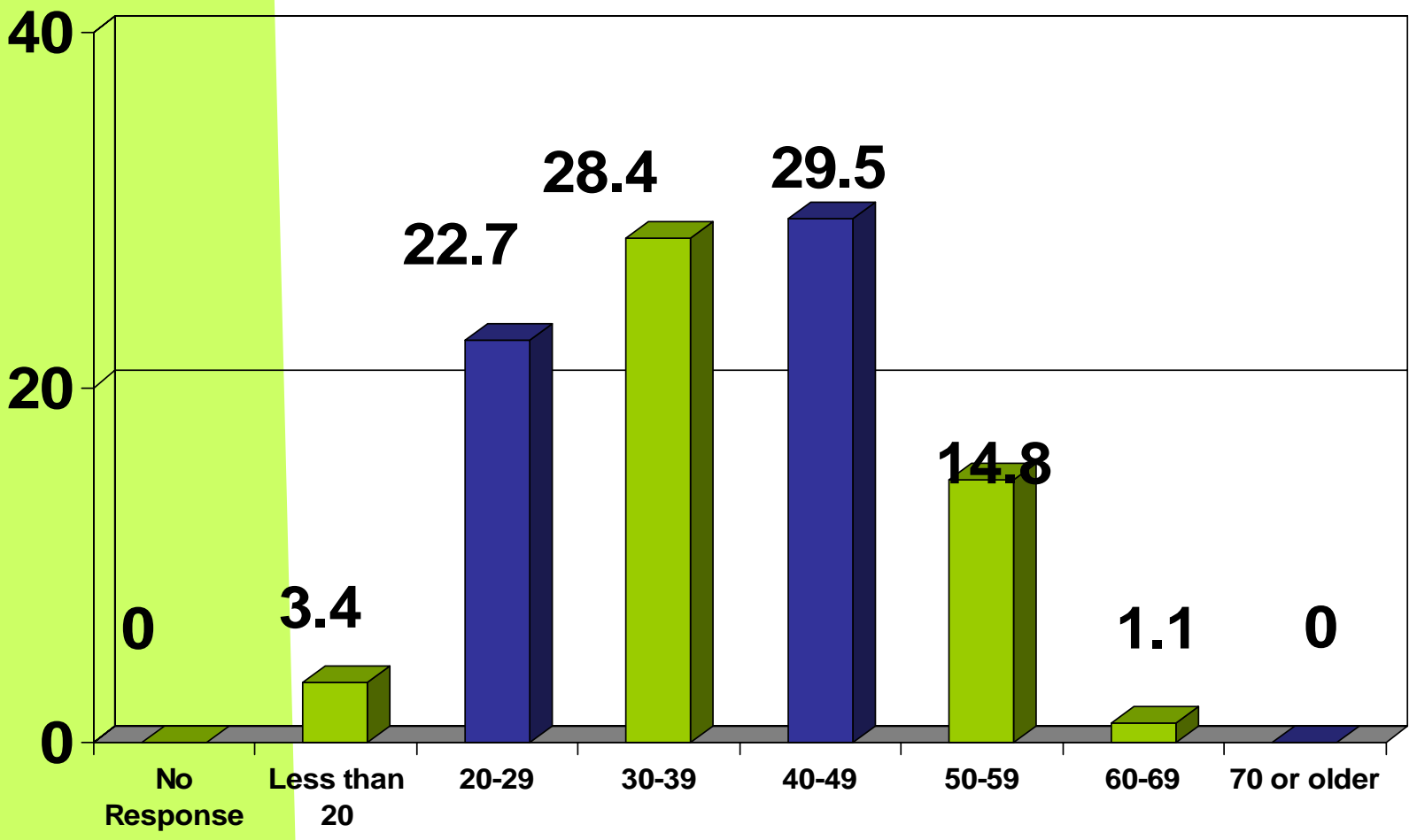
How often do you prepare meals at home for yourself or others per week?



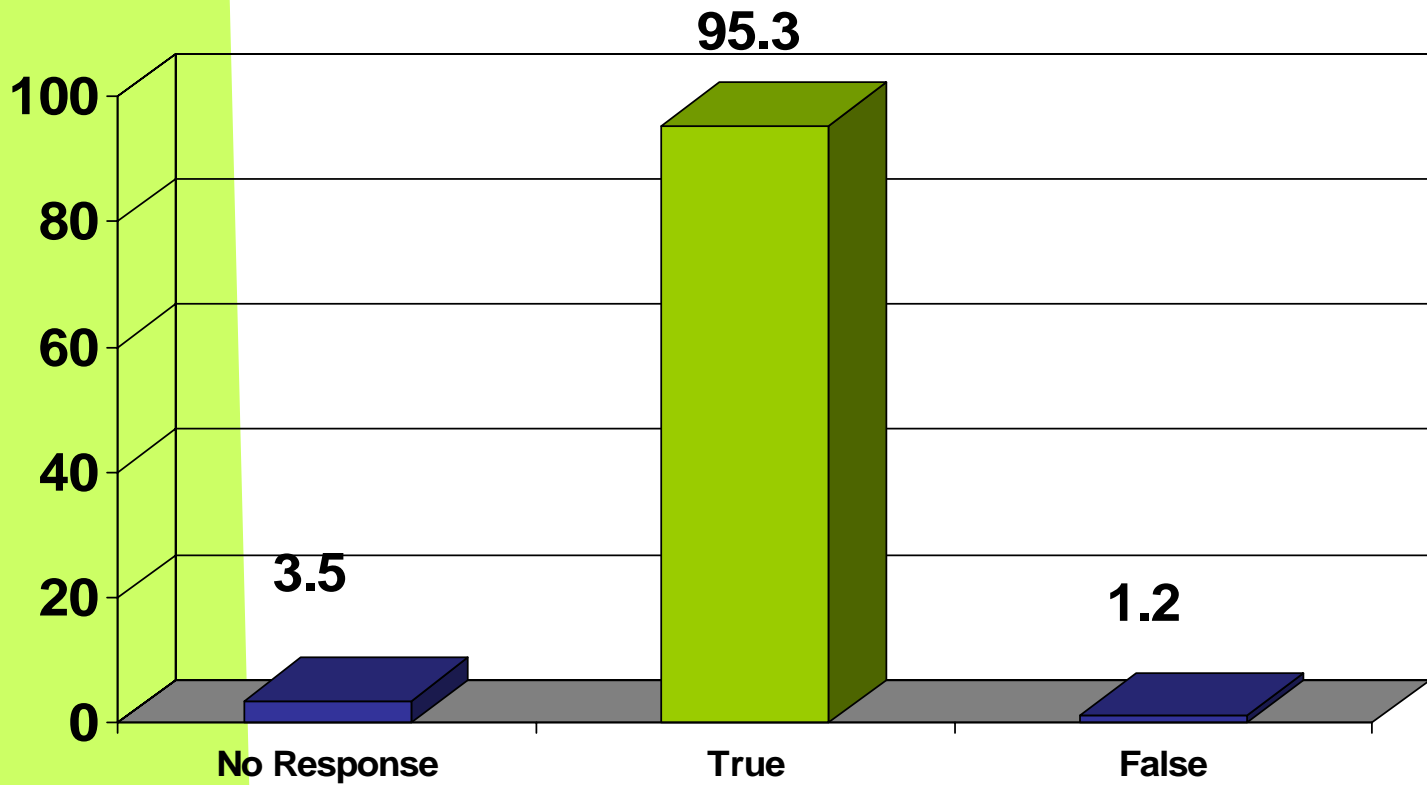
Do you plan to use this thermometer when you cook?



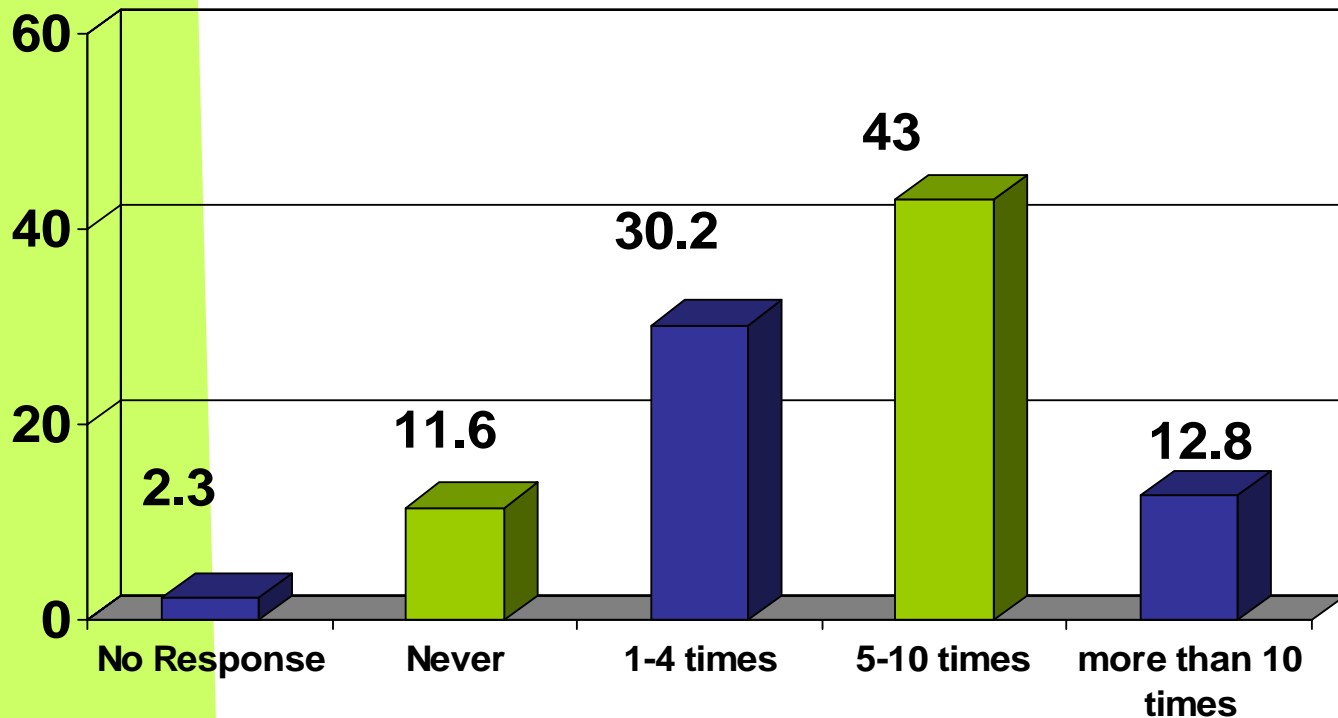
How old are you?



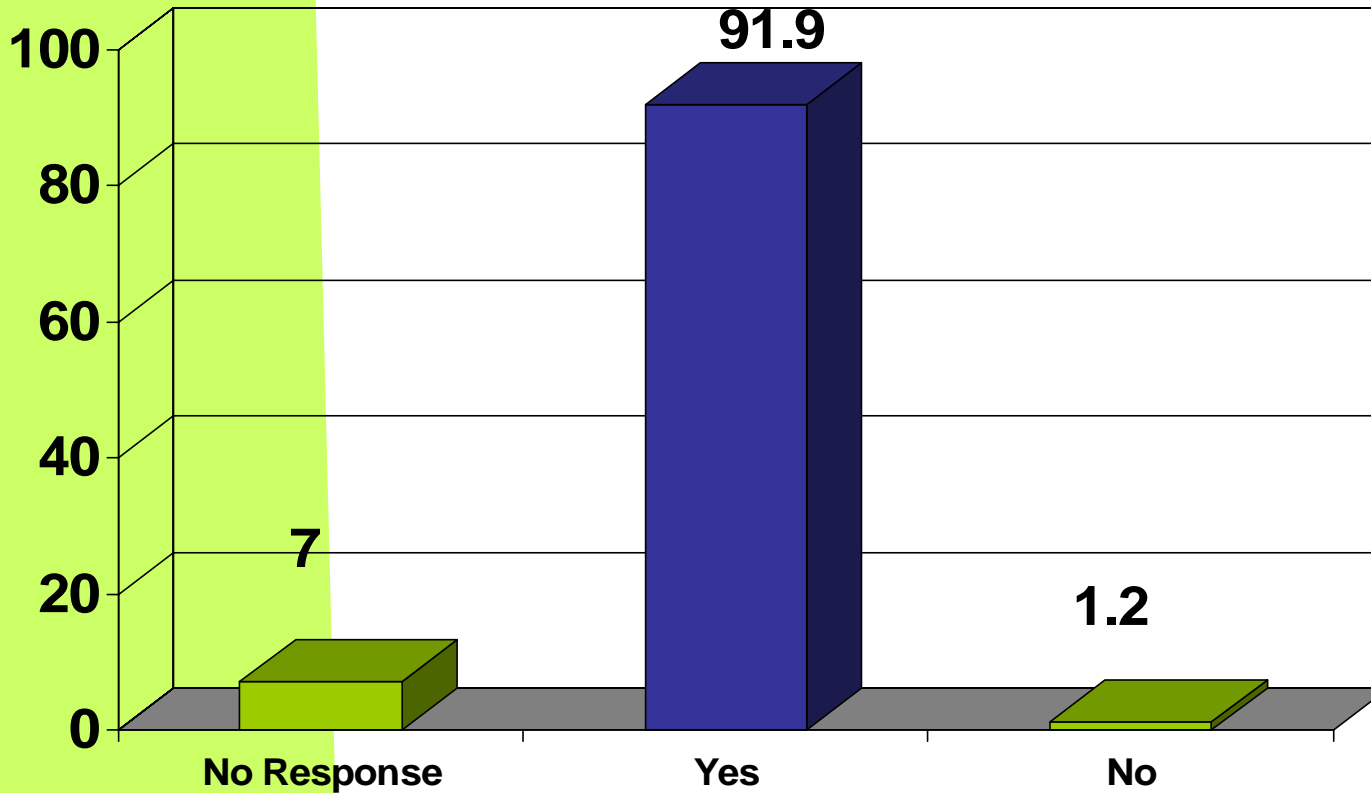
True or False: Using thermometers can help to prevent foodborne illnesses?



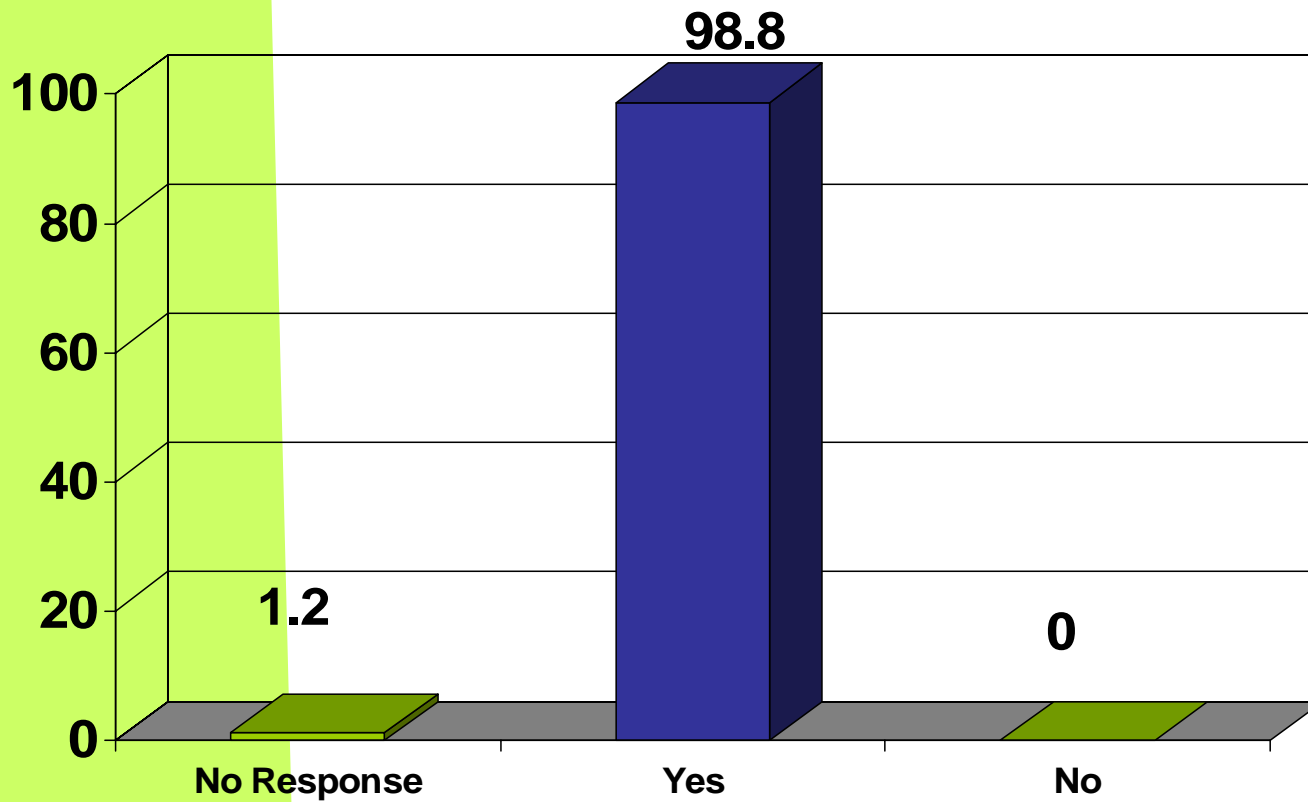
How many times in the past month have you used your meat thermometer?



When you use your meat thermometer, do you feel more confident that you are serving safe foods to your family?



Do you plan to put this thermometer in your refrigerator?



Conclusion


As a result of this educational campaign

- Participants gained knowledge
- Participants made behavior changes
- The pilot project led to a large-scale project





Acknowledgements

- Funding from the Food and Drug Administration – Minneapolis District
 - PowerPoint designed by Tera Sandvik, Project Coordinator
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References

- Research Findings related to Safe Cooking. Food Safety Education 1999; retrieved from <http://www.foodsafety.go/~fsgf99rsrch.html>
 - Centers for Disease Control and Prevention: <http://www.cdc.gov>
 - American Dietetic Association: <http://www.eatright.com>
 - Food and Drug Administration: <http://www.fda.gov>
 - Fight BAC – USDA website: <http://www.fightbac.gov>
 - Food Safety and Inspection Service: <http://www.fsis.usda.gov/>
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