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

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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.
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
• 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
The four steps to food safety are: clean, separate, cook, chill.
Where should meat be thawed?

- No Response: 2.3%
- On the counter: 0%
- On the sink without water: 1.2%
- In the refrigerator: 96.6%
- Follow-up (n=86): 98.8%

Post-test (n=88)
Hamburger should be cooked to what internal temperature?

- No Response: 0%
- 120 degrees F: 0%
- 140 degrees F: 0%
- 160 degrees F: 97.7%
- 180 degrees F: 0%

Post-test (n=88) vs. Follow-up (n=86)
How safe would you say it is to eat raw hamburger?

- No Response: 1.1%
- Very safe: 2.3%
- Not very safe: 6.8%
- Somewhat safe: 2.3%
- Not safe at all: 97.6%

Post-test (n=88)
Follow-up (n=86)
Including yourself, for which of the following groups do you prepare food, at least on occasion?

- Infants: 79.5%
- Immune-compressed: 10.2%
- Pregnant women: 29.5%
- Seniors/elderly: 44.3%
How often do you prepare meals at home for yourself or others per week?

- No Response: 0
- Never: 0
- 1-2 times: 3.4%
- 3-4 times: 11.4%
- 5-6 times: 17%
- 7-8 times: 22.7%
- 9 or more times: 45.5%
Do you plan to use this thermometer when you cook?

- Yes: 94.3%
- No: 4.6%
- No Response: 1.1%
How old are you?

- No Response: 3.4%
- Less than 20: 22.7%
- 20-29: 28.4%
- 30-39: 29.5%
- 40-49: 14.8%
- 50-59: 1.1%
- 60-69: 0%
- 70 or older: 0%
True or False: Using thermometers can help to prevent foodborne illnesses?

- No Response: 3.5
- True: 95.3
- False: 1.2
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?

- No Response: 7
- Yes: 91.9
- No: 1.2
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
References

• 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/