

IMPACT



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Consumers Helped to Safely Cook Ground Beef to Avoid *E. coli* O157:H7

The Situation

To protect themselves and their families, consumers need to be aware of the importance of thermometer use and receive information about how to select and use food thermometers when cooking ground beef patties and other small meat items.

Most consumers are aware that adequate cooking of ground beef is important to destroy pathogenic bacteria, such as *E. coli* O157:H7, which can cause serious illness. But, most consumers incorrectly believe that the cooked brown color of ground beef indicates the meat is safe to eat. It is now known that different lots of ground beef can turn brown at a variety of temperatures. During cooking, ground beef can turn brown before reaching the safe temperature of 160°F. Conversely, safely cooked ground beef can have a pink center—see photos below:



This **IS** a safely cooked hamburger, cooked to an internal temperature of 160°F, even though it's pink inside.



This is **NOT** a safely cooked hamburger. Even though it's brown inside, it is undercooked.

Using a food thermometer is the only way to ensure a safe and palatable ground beef patty. Yet, only 6% of consumers use a food thermometer when cooking hamburger patties.

Our Response

In a partnership with Washington State University, University of Idaho Extension has assessed the availability and accuracy of food thermometers in retail stores and conducted focus group research to determine factors for motivating consumers to use food thermometers. Using the theme *Now You're Cooking... Using a Food Thermometer*, this partnership developed full-color, consumer-oriented, educational pieces promoting thermometer use in a:

- Brochure about why and how to use a food thermometer with ground beef patties and other small meat items.
- Set of five recipe cards featuring thermometer use with small meat items.
- 15-minute video explaining the importance of thermometer use and demonstrating selection, use and calibration of food thermometers.
- Curriculum on thermometer education for high school Family and Consumer Sciences teachers.

Program Outcomes

Several assessments of the *Now You're Cooking... Using a Food Thermometer* materials have shown them to be effective in increasing consumer knowledge of the importance of using a thermometer and in motivating consumers to use thermometers when cooking ground beef patties and other small meat items.

- In a telephone survey, 68% of Idaho consumers thought it was very important to use a thermometer to determine doneness in hamburger, up from 37% before receiving the

brochure, recipe cards, and a thermometer. Use of a food thermometer when cooking hamburgers and other small meat items also increased. Only 3 of 100 surveyed consumers used a thermometer three or more times per week prior to receiving the materials; after receiving the materials this increased to 19 respondents.

- A mail survey of 295 Washington and Idaho residents who received the brochure, recipe cards, and video indicated significant movement along the continuum of behavior change toward adopting regular use of a food thermometer. Thermometer ownership increased from 55% to 73% after the intervention.
- Over 200 Washington and Idaho Family and Consumer Sciences high school teachers requested and received the *Now You're Cooking... Using a Food Thermometer* curriculum for use in their classrooms. An evaluation of 326 students participating in the curriculum indicated significantly increased knowledge about food thermometer use and increased confidence in ability to cook ground beef safely.

The brochures and recipe cards have been and are being distributed in Idaho at county fairs and via various University of Idaho Extension nutrition and food safety programs.

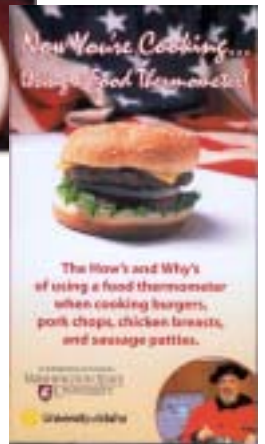
For More Information

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Brochure



Recipe cards



Video