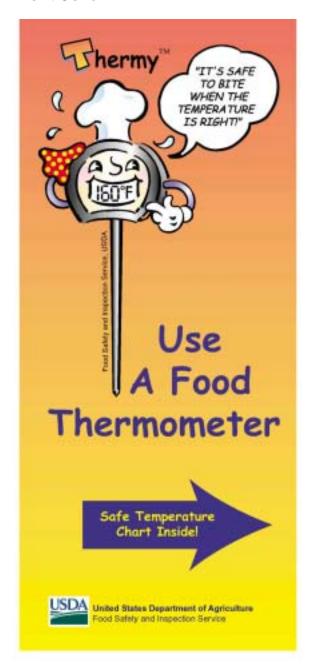
# Thermometer Usage Messages and Delivery Mechanisms for Parents of Young Children

Final Report 3/01/02

## Appendix A: Participants' Comments on Thermy™ Brochure

#### Front Cover



#### **Brochure Title**

- Make the title more attention getting by emphasizing the family, safety, and cooking at home.
- Convey the benefits of thermometer usage.
- Word the title as a rhetorical question.
- Suggested titles include:
  - "Keep Your Family Safe"
  - "It's Safe to Bite When the Temperature is Right!"
  - "Is Your Food Cooked at a Safe Temperature?"
  - "Why Use a Food Thermometer?"

#### **Brochure Cover**

- Use graphics and/or text to emphasize safety, urgency, families, and cooking at home.
- Portray a picture of a house or a mother and her children.
- Keep the USDA logo. It adds credibility to the brochure.
- State the benefits of thermometer usage.
- Enlarge the words "Safe Temperature Chart Inside."
- Move the title to the top of the brochure so it is more visible.
- Make the cover appear more serious.
- Quote foodborne illness morbidity statistics.
- Add bulleted facts or testimonials.

# Thermometer Usage Messages and Delivery Mechanisms for Parents of Young Children

Final Report 3/01/02

## Page 1

# WHY USE A FOOD THERMOMETER? "I want to keep my family safe." "I used to overcook my food. Now my food is juicier – not dry as a bone."

People all over the country are taking Thermy's advice. They're using a food thermometer to check the temperature of everyday foods — like hamburgers, pork chops, and chicken breasts.

Most people think they know when food is "done" just by "eyeballing it." They look at it and trust their experience.

Experience is good, but it sometimes can be misleading. For instance, cooking by color is definitely misleading. Meat color — pink or brown — can tool you!

How do you know when your hamburger is cooked? Because it's brown inside?

Think about this ... 1 out of every 4 hamburgers turns brown in the middle BEFORE it has reached a safe internal temperature, according to recent USDA research.

> Use a food thermometer. Keep your family safe. Be a better cook.

#### **Brochure Text**

- Drop the two testimonials at the top of the panel because they don't seem authentic.
   However, keep and emphasize the quality message in a different format.
- Drop the statement, "People all over the country are taking Thermy™'s advice." It seems unbelievable because most consumers are not aware of Thermy™.
- Change the word "eyeballing" to something less casual.
- Since the average consumer may not know what the term "safe internal temperature" means, change to "...food has reached a high enough temperature to destroy foodborne bacteria," the wording found on page 3 of the brochure.
- Emphasize the information on the ARS research on hamburgers by using the hamburger comparison photograph from the research sheet (see Appendix C) instead of the hamburger picture shown.
- Change the Thermy<sup>™</sup> temperature reading in the chicken breast to 170° F, the correct temperature.
- Increase the size of the statements shown at the bottom of the panel, "Use a food thermometer. Keep your family safe. Be a better cook," and change the phrase "Be a better cook" to "Be a safe cook."

# Thermometer Usage Messages and Delivery Mechanisms for Parents of Young Children

Final Report 3/01/02

#### Page 2



Some thermometers are meant to stay in the food while it's cooking; others are not. Some are ideal for checking thin foods, like the digital. Others, like the large-dial thermometer many people use, are really meant for large roasts and whole chickens and turkeys.

## Choose and use the one that is right for you!



#### **Brochure Text**

- Provide the information on types of thermometers in bullet format or as a table that provides proper temperatures and pictures of the thermometers recommended for various cuts of meat and poultry.
- Delete the phrase "Choose and use the one that is right for you!" because the text does not provide enough information for readers to choose which thermometer is appropriate for their needs.
- Avoid the impression that the brochure intends to sell thermometers by condensing this section and moving the pictures of thermometers under the Temperature Rules table on page 4 of the brochure.

# Thermometer Usage Messages and Delivery Mechanisms for Parents of Young Children

Final Report 3/01/02

#### Page 3

#### WHY IS IT IMPORTANT?

These are the facts!

- Millions of people get sick from dangerous bacteria in food every year.
- Public health data in 2000 show that there are more than 5 times the number of dangerous bacteria in our food than we were aware of in 1942.
- Many people don't link their illness to foodborne bacteria. They think they have a case of the flu.
- You can become sick anytime from 20 minutes to 6 weeks after eating food with some types of harmful bacteria.
- For some people who are at high risk — young children, pregnant women, people over 65, and people with chronic illnesses — getting sick from foodborne bacteria can cause serious health problems.

# WHEN THE TEMPERATURE IS RIGHT!

Using a food thermometer is the only sure way of knowing if your food has reached a high enough temperature to destroy foodborne bacteria.

Is it "done" yet? Where is your food thermometer?

#### **Brochure Text**

- Move this section to page 2 to give it more prominence.
- Keep the bulleted format and use throughout the brochure.
- Change "millions" to "X out of 100 people" (first bullet).
- Compare public health data to more recent research or change the statement "in 1942" to "60 years ago." Include information about why safe food handling is more important now than in 1942 but state it differently. The phrase, "5 times the number of bacteria" is confusing (second bullet).
- Change the pronoun "you" to "people" to make it consistent with the other bullets (fourth bullet).
- Add more facts about the names of specific foodborne bacteria and the illnesses that they cause.
- Make the picture of the quiche more recognizable.

# Thermometer Usage Messages and Delivery Mechanisms for Parents of Young Children

Final Report 3/01/02

#### Page 4

## TEMPERATURE RULES!

| Food   | °F                                    |
|--|---------------------------------------|
| Ground Meat & Meat Mixtures<br>Beef, Pork, Veal, Lamb<br>Turkey, Chicken   | 160<br>165                            |
| Fresh Beef, Veal, Lamb<br>Medium Rare<br>Medium<br>Well Done   | 145<br>160<br>170                     |
| Poultry Chicken & Turkey, whole Poultry breasts, roast Poultry thighs, wings Duck & Goose Stuffing (cooked alone or in bird) | 180<br>170<br>180<br>180<br>165       |
| Fresh Pork<br>Medium<br>Well Done  | 160<br>170                            |
| Ham<br>Fresh (raw)<br>Pre-cooked (to reheat)   | 160<br>140                            |
|  | ok until yolk<br>nite are firm<br>160 |
| Leftovers & Casseroles   | 165                                   |



## www.fsis.usda.gov/thermy

For more information, call USDA's Meat and Poultry Hotline at 1-800-535-4555

(TTY: 1-800-256-7072)

#### Temperature Rules Table

- Keep the table and give it prominence in the brochure.
- Make the table detachable so consumers can easily post it in their kitchens.
- Suggestions for improvement:
  - Clarify what "Meat Mixture" means.
  - Provide one safe temperature for the Fresh Beef, Veal, Lamb category or state that all 3 levels of doneness are safe.
  - Define what each food category includes (e.g., the Fresh Pork category includes pork chops).
  - State whether the cooking method (e.g. baking, frying) and the weight of the meat affect how long it takes for meat to reach the proper temperature.
  - Delete the reference to eggs because people who like eggs sunny side up will not cook the yolks hard.
  - Add seafood and soups/stews to the table.
  - Include only the most commonly used foods to make the table shorter.

# Thermometer Usage Messages and Delivery Mechanisms for Parents of Young Children

Final Report 3/01/02

#### Back Panel

#### THERMYTM FIGHTS BAC!

Proper cooking is one of the four key steps for fighting BAC — bacteria that can be found in food. Be a BAC-fighter.

Fight BAC<sup>M</sup> is a food safety education campaign of the Partnership for Food Safety Education. For more information, check the web site: www.fightbac.org

- Enlarge the Fight BAC!<sup>™</sup> logo to make the four messages easy to read.
- Consider moving the Fight BAC!<sup>™</sup> logo to a more prominent position in the brochure.



Food Safety and Inspection Service Food Safety Education Staff

April 2000

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## Thermometer Usage Messages and Delivery Mechanisms for Parents of Young Children

Final Report 3/01/02

# Appendix B: Participants' Comments on Thermy™ Public Service Announcement

Woman: Hey, hon, dinner's almost ready.

Thermy: Hey, let me out of here! Hey, what about using me? Thermy! You need a food

thermometer to be safe.

Boy: Yeah, what about Thermy?

Woman: Oh, honey, I know by the color when it's done.

Thermy: Colors can be wrong. People could get sick. Hamburgers that look done sometimes

aren't cooked enough.

Boy: We learned it at school.

Woman: All right.

Thermy: Remember, it's safe to bite when the temperature is right!

- Use a different scenario but keep the ARS hamburger research message about color being an inaccurate indicator of doneness. (Although participants thought teaching food safety in schools was a good idea, some participants found it unbelievable that the child was instructing the mother to use a food thermometer. They would prefer to see the mother "teaching" the child. Others disagreed and said that the child saying, "We learned it at school," makes it valid.)
- Suggested scenarios:
  - A father cooking hamburgers on a grill.
  - A child eager to eat a hamburger and the mother insists on checking the doneness with a thermometer.
  - The hamburger photographs with information about the ARS hamburger research and "shocking"

- statements about which hamburger is safe to eat.
- Thermy<sup>™</sup> fighting BAC<sup>™</sup>
- Consider creating a series of PSAs that would showcase different foods and seasonal cooking in addition to hamburgers.

# Thermometer Usage Messages and Delivery Mechanisms for Parents of Young Children

Final Report 3/01/02

## Appendix C: Participants' Comments on Additional Thermy™ Materials

## Research Sheet: Thermometers Are Key to Safety



- Participants generally liked the research sheet and found it very informative.
   They especially liked the photograph comparing the two hamburgers.
- Participants were surprised to learn that the brown hamburger was not safe to eat. They suggested adding the hamburger photograph to the Thermy™ brochure.
- Some participants considered the research sheet too technical and wordy.
   One participant commented on the overuse of acronyms, which he found confusing.
- A few participants suggested adding information on how using a food thermometer can enhance food quality.
- A few participants said the research sheet focuses too much on hamburgers and would like to see information about other meat and poultry products included.
- A few participants liked that web site addresses were provided if the reader wanted more information.
- A few participants wanted to know why ground beef turns brown without being fully cooked.

## Thermometer Usage Messages and Delivery Mechanisms for **Parents of Young Children**

3/01/02 Final Report

#### Newspaper Article: Cooking Ease



#### Thermy™ Says: For Food Safety **Use A Food Thermometer**

(NAPS)-No matter how you slice it, holiday meats will be done more safely and turn out better if cooks use a food thermometer while preparing them.

Using a food thermometer, according to the USDA's Food Safety and Inspection Service (FSIS), is the only way to tell your food has reached a high enough temperature to destroy harmful bacteria and is safe to eat.

Unfortunately, not all cooks use thermometers. Consequently, thousands of Americans are at risk of falling victim to foodborne

"Illness every year.

The FSIS has created "Thermy","
a messenger to help educate
cooks on food safety. "We are using Thermy" to encourage con-sumers to use food thermometers throughout the year, but it is especially important at holiday time," says Susan Conley, direc-tor of Food Safety Education at

Thermy's" message is "It's Safe to Bite When the Temperature is Right!" That means if food has reached a high enough temperature to kill bacteria, it is safe to eat. "In addition," says Conley, "food tends to be tastier and juicier when it is not overcooked.

If a golden brown turkey will be at the centerpiece of a holiday table, a food thermometer should be used to be certain that the whole turkey reaches an internal temperature of at least 180 °F. The thermometer should be placed in the thickest part of the thigh, between the leg and the breast. If cooking only the turkey breast, it should reach 170 °F in the thickest part of the breast.

For safety and quality, it's best not to stuff turkey but to bake the



Thermy's™ message: "It's Safe to Bite When the Temperature is Right."

stuffing in a casserole until it reaches 165 °F. However, if the turkey is stuffed, a food thermometer must be used to determine the temperature of the stuffing. Even if the thigh has reached 180 °F, cooking must continue until the center of the stuffing has reached 165 °F.

Beef, veal, and lamb roasts can be cooked medium rare  $(145\ ^{\circ}F)$ , medium  $(160\ ^{\circ}F)$  or well done  $(170\ ^{\circ}F)$ . If fully cooked hams are reheated, a food thermometer should be used to be sure the thickest part has reached 140 °F.

Fresh game meats should reach 160°F throughout to kill foodborne bacteria and parasites. Cornish hens, ducks, geese

capons, and other chicken should be cooked to the same temperature as turkey: 180 °F in the thigh of whole birds, 170 °F if roasting only breast meat.
For food safety information

about meat, poultry, or eggs, call the toll free USDA Meat and Poultry Hotline at 1-800-535-4555 or TTY 1-800-256-7072. The Hotline is staffed by food safety specialists weekdays from 10 am until 4 pm Eastern Time, year round.
Additionally, cooks can visit

www.fsis.usda.gov/thermy.

- Participants were divided as to whether they liked the newspaper article.
  - Participants who liked the article liked that it was short and easy to read. A few participants liked that information on cooking temperatures was provided in a text format (rather than a table) and that the article contained more detail than the Temperature Rules table. A few participants said they would cut out and save the article if they saw it in their local newspaper.
  - Participants who did not like the article said it was too long and contains too much information to be easily retained. Some participants said they would be unlikely to read the article if they saw it in their local newspaper.
- A few participants did not like the title, "Thermy Says: For Food Safety Use a Food Thermometer." If readers are unfamiliar with Thermy<sup>™</sup> the title would be meaningless.
- A few participants suggested including the article in raw meat/poultry packaging or distributing it at schools.
- **Participants** suggested following changes to improve the article:
  - Use bullet points to present information.
  - Add the Temperature Rules table.
  - Make the Thermy™ graphic larger or move it to another location in the article.
  - Use a more attention-getting title and/or use "USDA" in the title.
  - Include a recipe with the article to encourage readership.
  - Outline the article to encourage readers to cut it out and save it.
  - Include information on myths and facts (e.g. you cannot determine doneness by the color of juices).

# Thermometer Usage Messages and Delivery Mechanisms for Parents of Young Children

Final Report 3/01/02

## Kids' Sheet: Thermy™ Rules

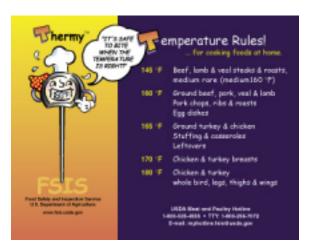


- Participants thought the sheet would appeal to children because it is colorful and eye-catching. However, most participants did not give the sheet to their children when they received it at home. Participants suggested distributing the sheet to children at schools.
- One participant suggested changing the title to "Hey Kids...tell your parents." She said that even though children cannot cook, they can pass the message on to their parents.
- One participant said about the Thermy<sup>™</sup> Rules, "I thought these were good adult rules."

# Thermometer Usage Messages and Delivery Mechanisms for Parents of Young Children

Final Report 3/01/02

## Thermy™ Magnet



- Participants really liked the magnet and most had placed it on their refrigerators or oven hoods.
- Many participants said they had referred to the magnet when cooking. They found it a useful reference and said it was a good reminder to use a thermometer.
- Several participants preferred the more detailed Temperature Rules table and suggested displaying it on the magnet.
- Participants suggested distributing the magnets at events where thermometer usage is promoted.

# Thermometer Usage Messages and Delivery Mechanisms for Parents of Young Children

Final Report 3/01/02

#### Thermy™ Beanbag Doll



- Participants had mixed opinions on the Thermy<sup>™</sup> beanbag doll.
  - Some participants liked the doll, described it as "cute," and thought it would appeal to children.
  - Those participants who did not like the doll found it unattractive and did not think it would be a fun toy.

- Some participants did not think the thermometer message should be targeted heavily to children so thought a doll was unnecessary.
- Participants suggested the following improvements to the doll:
  - Make the face more brightly colored (it is too pale).
  - Make the face heat sensitive so it turns red when warm.
  - Give Thermy<sup>TM</sup> more of a superhero look.
  - Make the head a different color ("he looks like a bun").
  - Give the doll arms and fix the fingers.
- Participants offered the following suggestions for promoting the doll and the Thermy<sup>™</sup> character:
  - Advertise the doll during cartoons.
  - Display the doll in meat departments.
  - Display an inflatable doll (like the Pillsbury Dough Boy<sup>™</sup>).
  - Display a cardboard, stand-up version of the doll.
  - Offer the doll free with the purchase of a thermometer.
  - Sell the doll where grills and stoves are sold.
  - Create a video game with Thermy™.
  - Create a Thermy<sup>™</sup> oven mitt.
  - Do not create a Thermy™ puppet.

## Thermometer Usage Messages and Delivery Mechanisms for Parents of Young Children

Final Report 3/01/02

## Thermy™ Thermometer Packaging



- Most participants liked the Thermy<sup>™</sup> thermometer packaging used by Acurite<sup>®</sup> (for its digital instant-read thermometer) and said it would appeal to consumers. They liked that a temperature table was included on the packaging.
- Several participants were not very enthusiastic about the Thermy<sup>™</sup> packaging. They said they would not pay more for a thermometer in such packaging but if it were priced the same as other thermometers would probably choose it over other brands.
- Participants suggested including instructions about proper use and cleaning of the thermometer on the packaging.
- One participant said consumers might trust a thermometer in the Thermy<sup>™</sup> packaging more than thermometers not in Thermy<sup>™</sup> packaging; she considered the Thermy<sup>™</sup> packaging to be an endorsement.