

# Consumer Preferences for Labeling of Not-Ready-to-Eat Meat, Poultry, and Egg Products

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## 1. Introduction

In response to the requirement to reassess their Hazard Analysis and Critical Control Point (HACCP) plans for ready-to-eat (RTE) meat and poultry products with respect to *Listeria monocytogenes* (Lm) control, some manufacturers have changed their products' processing categories. Consequently, labeling features that convey whether a product is not-ready-to-eat (NRTE) or RTE have become unclear. Consumers may be unaware that foods previously classified as RTE are now considered NRTE. We conducted two separate focus group studies (14 focus groups in five locations) to assess consumers' perceptions and understanding of labeling terms and features that convey that products are NRTE and thus require cooking for safety before consumption. We also elicited consumers' preferences for mandatory labeling features for NRTE products, including standardized labeling features to convey that products require cooking for safety and mandatory preparation instructions.

## 2. Purpose

- Study 1 collected information on consumers'
  - use of labeling terms and features to distinguish between RTE and NRTE products,
  - use of product attributes other than labeling to distinguish between RTE and NRTE products,
  - reactions to novel labeling features for NRTE products, and
  - attitudes toward requiring standardized labeling of NRTE products to convey that cooking for safety is required.
- Study 2 collected information on consumers'
  - use of Safe Handling Instructions (SHI) labeling,
  - use of preparation (cooking and heating) instructions on product packaging,
  - attitudes toward uniform guidelines for preparation instructions,
  - attitudes toward mandatory preparation instructions,
  - preferences for novel labeling features on NRTE products, and
  - other topics not relevant to NRTE labeling and not presented in this poster.

## 3. Study Design

- Study 1: 8 focus groups—two groups each in Raleigh, NC; Phoenix, AZ; Philadelphia, PA; and Cincinnati, OH.

- Study 2: 6 focus groups—two groups each in Raleigh, NC; Philadelphia, PA; and St. Louis, MO.

- In each location, conducted one focus group with individuals who had a high school education or less and one focus group with individuals who are college graduates.
- Segmented the focus groups by three age groups: young adults (ages 18 to 30), an intermediate age group (ages 35 to 55), and seniors (60+).

- In Study 1 participants were presented with 12 different meat and poultry products and asked to indicate on a worksheet if they think each product requires "cooking for safety" (i.e., consumers might contract foodborne illness if the product is not properly or thoroughly cooked before eating) or does not require cooking for safety (i.e., consumers can safely eat the product without cooking because the product is already fully cooked when purchased). After completing the worksheet, participants discussed how they determined whether the products require cooking for safety.

### Key Demographics of Focus Group Participants, n = 111

Gender	Percentage
Male	46%
Female	54%
Race/Ethnicity	Percentage
Caucasian	66%
African-American	25%
Asian/Pacific Islander	2%
Other race/multiracial	5%
No response	2%
Hispanic or Spanish origin	Percentage
	13%

Study Design					
Study 1			Study 2		
Education					
Age	High School*	College	Age	High School*	College
18-30	Philadelphia, PA Phoenix, AZ	Cincinnati, OH	18-30	Raleigh, NC	Philadelphia, PA
35-55	Raleigh, NC	Philadelphia, PA Phoenix, AZ	35-55	Philadelphia, PA	St. Louis, MO
60+	Cincinnati, OH	Raleigh, NC	60+	St. Louis, MO	Raleigh, NC

\*High school education or less

## 4. Key Findings

### A. Use of Labeling Terms and Features to Distinguish Between RTE and NRTE Products

#### Product Worksheet

- Determined if products require cooking for safety (RTE vs. NRTE) by
  - reading preparation instructions and
  - looking for labeling terms that indicate whether cooking is required.
- Expressed confusion and frustration about inconsistencies in labeling of meat and poultry products with regard to whether cooking for safety is required.
- Surprised that some products do not provide preparation instructions.
- Confused when one brand's product indicates that cooking is required and a similar product with a different brand name does not.
- Speculated that manufacturers who provide cooking instructions "care more" about consumers or provide preparation instructions to protect themselves from potential lawsuits.
- Expressed need for standardized product labeling with regard to whether cooking for safety is required.

#### Use of Labeling Terms

- Think the following terms indicate product requires cooking for safety (NRTE):
  - "Cook thoroughly"
  - "Cook until internal temperature of..."
- Think the following terms indicate product does not require cooking for safety (RTE):
  - "Fully cooked"
  - "Ready to eat"
  - "Heat and serve"
  - "Ready to serve"

#### Use of Safe Handling Instructions (SHI) Labeling

- Are familiar with SHI labeling and associate the label with raw meat and poultry products.
- Many believe that presence of SHI labeling indicates product requires cooking for safety. Some believe absence of SHI labeling indicates product is RTE.
- Generally do not look for SHI labeling to determine if product requires cooking for safety although some said it is helpful, especially for new cooks.

#### Use of Other Labeling Features

- Do not rely on descriptive terms like "baked," "breaded," "browned," "fried," and "roasted" in the product name or description to determine if RTE or NRTE.
- Do not rely on handling statements like "keep refrigerated" or "keep frozen" to determine if RTE or NRTE.
- Do distinguish between different types of instructions on product packaging:
  - think "heating instructions" indicate a product is RTE
  - think "cooking instructions" and "baking instructions" indicate a product is NRTE
  - divided as to whether "preparation instructions" indicate a product is RTE or NRTE

**Safe Handling Instructions**

*This product was prepared from inspected and passed meat and/or poultry. Some food products may contain bacteria that could cause illness if the product is mishandled or cooked improperly. For your protection, follow these safe handling instructions.*

- Keep refrigerated or frozen. Thaw in refrigerator or microwave.
- Keep raw meat and poultry separate from other foods. Wash working surfaces (including cutting boards), utensils, and hands after touching raw meat or poultry.
- Cook thoroughly.
- Keep hot foods hot. Refrigerate leftovers immediately or discard.

## 4. Key Findings (cont'd)

### B. Use of Product Attributes Other than Labeling to Distinguish Between RTE and NRTE Products

- Consider the following product attributes to determine if RTE or NRTE:
  - appearance of meat or poultry through product packaging
  - type of product packaging (e.g., think canned products are RTE)
  - location of product in grocery store
- Do not consider the following product attributes to determine if RTE or NRTE:
  - color of package
  - picture of product or serving suggestion shown on packaging
  - whether product is a combination of RTE and NRTE foods (e.g., a fully cooked meat product combined with vegetables that are not cooked)
  - advertisements

### C. Use of Preparation Instructions

- About half look for preparation instructions (see example label) when shopping for meat, poultry, and egg products.
- Use preparation instructions to determine cooking method (microwave or oven), time, and temperature. Generally do not refer back to instructions after first time preparing product but rely on previous experience with the product.
- Consider usefulness of preparation instructions to vary by product type.

**COOKING GUIDELINES**

For food safety and quality, follow these cooking instructions. This product must be cooked thoroughly before eating. Promptly refrigerate any unused portion.

- BEFORE COOKING**, lift corner of lid to vent.
- MICROWAVE** on high for 3½ minutes.
- OPEN LID**, stir rice and sauce separately, then continue to cook on HIGH for an additional 1 to 1½ minutes.
- LET STAND** in microwave for 1 to 2 minutes.
- REMOVE LID**, serve sauce over the rice.

Microwave oven wattage varies. Cooking times shown may require adjustment.

Product Type	Usefulness of Preparation Instructions for NRTE Products		
	Most Useful	Somewhat Useful	Least Useful
Frozen entrees and dinners	●		
Refrigerated entrees and dinners	●		
Processed products			●
Canned products			●
Dehydrated products	●		
Raw meat and poultry		●	
Egg products	●		

- Believe preparation instructions are product specific. Follow product-specific instructions and do not rely on previous experience with similar products.
- Believe manufacturers verify preparation instructions and provide instructions for food quality, food safety, and liability purposes.

## 4. Key Findings (cont'd)

### D. Reactions to Novel Labeling Features for NRTE Products

#### Standardized Phrases

- Like use of a standardized phrase on NRTE products to indicate that cooking for safety is required.
- Preferred phrases (as selected from a list of potential phrases) are
  - "requires cooking" and
  - "cook thoroughly."

#### Warning Statements

- Do not like use of warning statements (similar to statements used on unpasteurized juice) on NRTE products. Believe warning statements are unnecessary, ineffective, and deter purchases.

#### Logos or Icons

- Like use of logo or icon in conjunction with a standardized phrase on NRTE products to indicate that cooking for safety is required.
- Believe logos would be especially effective with children, individuals with limited education, and people who do not speak English as their native language.
- Preferred logos (as selected from a list of potential logos) are shown at right.



- Are divided as to the necessity of using standardized logos on both RTE and NRTE products. Some believe it is necessary so consumers can look at products and know immediately if RTE or NRTE. Others believe because RTE products are fully cooked, it is unnecessary to display logos because no safety concerns exist.

#### Color Coding

- Think use of standardized color-coded packaging (similar to color-coded caps that indicate percentage of fat in milk) to differentiate between RTE and NRTE products would be too complicated.
- Like use of a standardized phrase within a color-coded box for RTE and NRTE product packaging.



#### Preferences for Format of Standardized Labeling

- Display in a standardized location on all packages (e.g., front of product packaging)
- Use larger font size
- Use bold, bright, contrasting colors

## 4. Key Findings (cont'd)

### E. Attitudes toward Government Regulations for Standardized Labeling of NRTE Products

**Standardized NRTE Phrases and/or Logos:** Regulations would require all NRTE products to display a standardized phrase or logo indicating that cooking for safety is required.

- Many support standardized NRTE phrases or logos:
  - Standardization would ensure consistency in labeling of NRTE products and make it clear that cooking for safety is required.
  - Labeling regulations are necessary because manufacturers are unlikely to voluntarily adopt standardized labeling.
- Some believe standardized NRTE phrases or logos are unnecessary:
  - Manufacturers already provide sufficient information on product labels.
  - Labeling regulations would increase product cost which would be passed on to consumers.
  - Labeling regulations are warranted only if there is a significant problem with consumers contracting foodborne illness as a result of products being labeled improperly.

**Uniform Guidelines for Preparation Instructions:** Regulations would specify that certain information on product preparation (e.g., cooking time and temperature) be provided in a specific format on the labeling for all NRTE products.

- Some support uniform guidelines because they would
  - make it easier for consumers to find information on product preparation and help consumers to properly prepare products.
- Others consider such guidelines unnecessary because manufacturers
  - already provide sufficient information and
  - should decide what information to provide on their products and in what format.

**Mandatory Preparation Instructions:** Regulations would require preparation instructions on the labeling for all NRTE products.

- Many support mandatory preparation instructions on NRTE products to help consumers safely prepare products. Preparation instructions are
  - necessary for food safety reasons and
  - important for novice cooks.
- Some oppose mandatory preparation instructions because
  - it is the manufacturer's, not the government's, responsibility to provide preparation instructions and
  - manufacturers already provide sufficient information.

## 5. Discussion

FSIS is planning to provide recommendations to the meat and poultry industry on the approach to labeling of NRTE products and RTE products to better distinguish them to consumers. While the focus group findings infer that there is currently a considerable degree of confusion about labeling terminology and a desire by consumers for more consistent labeling, FSIS does not believe that these findings alone are a sufficient basis for regulatory action at this time. FSIS would need to conduct analyses to evaluate the costs and benefits of a regulation or policy requiring standardized labeling of NRTE meat and poultry products to convey that cooking for safety is required. While FSIS evaluates the economic benefits and costs of mandating NRTE labeling features, it is recommending that the meat and poultry industry consider the implications of the consumer research findings and apply them accordingly to their labeling approaches for NRTE and RTE products.

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