NCC Packaging Consumer Comprehension of NRTE Stuffed Breasts

Objectives:

• Consumer Safety
• Comprehension of “raw” product state
• Proper handling and cooking

Background:

• December 2008 present recommended standard to USDA
• May 2009 present next round continuous improvements
Research of Consumer Comprehension of NRTE Stuffed Breasts Product State and Proper Handling/Cooking

On-line Omnibus 1,000 interviews

• 50% of sample viewed “generic old copy” March 2008 packaging

• 50% of sample viewed “generic new” proposed standard
Appendix: Product Tested – Old Copy

Nutrition Facts

- Serving Size: 1 Piece (142g/oz)
- Servings Per Container: 2
- Calories: 520
- Fat: 19g (30%)
- Sodium: 850mg (35%)
- Total Carbohydrate: 11g (4%)
- Dietary Fiber: 2g (8%)
- Sugars: 1g
- Protein: 28g
- Vitamin A: 4% RDA
- Vitamin C: 0%
- Calcium: 1% RDA
- Iron: 0% RDA

Cooking Instructions:

Conventional Oven
1. Preheat oven to 400°F.
2. Remove frozen breast(s) from pouch and place on baking sheet.
3. Bake in preheated oven for a minimum of 30 minutes. (This product is raw. Cook to a minimum internal temperature of 165°F measured by a meat thermometer.)
4. CAUTION: Filling will be hot and may splatter; let stand approximately 2 minutes to cool before serving.
5. Due to variations in ovens, cooking times may vary.

Do not microwave.

SAFE HANDLING INSTRUCTIONS

- This product must not be partially cooked or frozen. Store raw product in a refrigerator or freezer for proper storage.
- Fully cooked product must be held at a temperature of 140°F or higher.
- Do not refreeze after thawing.
- Use within 3 days of opening package.
- Do not eat University of Colorado Denver. Keep frozen.
Appendix: Product Tested – New Copy

Rolling Valley

Raw Stuffed Chicken Breasts
WITH RIB MEAT

Cordon Bleu
Filled with Blended Cheeses & Cooked Ham

2-6 OZ. PORTIONS
KEEP FROZEN • NET WT. 12 OZ. (340g)

RAW: FOR SAFETY, COOK TO A MINIMUM INTERNAL TEMPERATURE OF 165°F MEASURED BY A MEAT THERMOMETER

Nutrition Facts
Serving Size: 1 Piece (40g/6oz)
Serving Per Container: 2

Amount Per Serving
Calories: 280
Calories from Fat: 110

Total Fat: 12g
Saturated Fat: 3.5g
Trans Fat: 0g

Cholesterol: 65mg
Sodium: 800mg

Total Carbohydrate: 11g
Dietary Fiber: 0g

Sugars: 1g

Protein: 24g

Vitamin A: 4% • Vitamin C: 2%
Calcium: 10% • Iron: 8%

Percent Daily Values based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your caloric needs.

Cooking Instructions:
1. Preheat oven to 400°F.
2. Remove frozen raw breasts(s) from pouch and place on baking sheet.
3. Bake in preheated oven for a minimum of 30 min.

For Food Safety, cook to a minimum internal temperature of 165°F measured by a meat thermometer.

Meat Thermometer instructions: Insert meat thermometer 2 inches into the stuffing in the center of the entrée. See Diagram.

CAUTION: Filling will be hot and may splatter; let stand approximately 2 minutes to cool before serving.

Due to variations in oven, cooking times may vary.

Raw Chicken
Do Not Microwave

SAFETY HANDLING INSTRUCTIONS
The product and surface of raw meat and poultry may contain bacteria that can cause illness if not properly handled and cooked. For your protection, yellow food handling gloves are recommended to wear while handling raw meat and poultry. Wash hands and food preparation equipment after handling. Thoroughly wash all utensils, cutting boards, and countertops. Discard all unused raw chicken.

Proof of Purchase

1234567890
Package research Executive Summary

The new package communicates the raw product state significantly better
• Recall of the word “raw” nearly doubles (42% w/ old pack to 82% w/ new pack)
• Understanding of the raw product state increases from 55% to 76% overall
  • Among females who indicate they are the primary meal preparer, it goes from 54% to 82%

The oven symbol does a good job in reinforcing the raw state of the product and how it should be cooked

In both the new and old versions the vast majority of consumers plan to cook the product in the oven (75% for old copy vs. 79% for new copy)

• Open end playback of packaging likes are consistent with the other findings – more mention raw and must be cooked in oven/not microwavable with the new package

Recall of a meat thermometer increases significantly overall (from 53% to 70%)
• The open ends suggest meat thermometer communicates that the product must reach a certain temperature/be cooked well or thoroughly – but not necessarily that the product is raw
Product State – Did you notice the word “Raw?”

- Multiple placements of the word “raw” nearly double the percentage of consumers who notice the word.
- The percentage is higher among females compared to males.

<table>
<thead>
<tr>
<th></th>
<th>TOTAL OLD A (499)</th>
<th>TOTAL NEW B (501)</th>
<th>TOTAL OLD C (257)</th>
<th>TOTAL NEW D (263)</th>
<th>TOTAL OLD E (243)</th>
<th>TOTAL NEW F (237)</th>
<th>TOTAL OLD G (237)</th>
<th>TOTAL NEW H (247)</th>
<th>TOTAL OLD I (157)</th>
<th>TOTAL NEW J (167)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>42</td>
<td>82 A</td>
<td>40</td>
<td>85 C</td>
<td>44</td>
<td>78 E</td>
<td>40</td>
<td>85 G</td>
<td>45</td>
<td>87 I</td>
</tr>
<tr>
<td>No</td>
<td>58 B</td>
<td>18</td>
<td>60 D</td>
<td>15</td>
<td>56 F</td>
<td>22</td>
<td>60 H</td>
<td>15</td>
<td>55 J</td>
<td>13</td>
</tr>
</tbody>
</table>

Q10: “When you first saw the package, did you notice the word “Raw” to describe the product?”

**CAPITAL LETTER** indicates 95% confidence level vs. other column.

**Lower case** indicates 90% confidence level vs. other column.
Product State – What is the product state?

- New packaging copy has significant impact on the percentage of all consumers who believe the chicken is raw, especially among females and females involved in the category.

<table>
<thead>
<tr>
<th></th>
<th>TOTAL</th>
<th>TOTAL FEMALES</th>
<th>TOTAL MALES</th>
<th>TOTAL FEMALES + INVOLVED</th>
<th>TOTAL FEMALES + INVOLVED + BUY CHICKEN BREASTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OLD A</td>
<td>NEW B</td>
<td>OLD C</td>
<td>NEW D</td>
<td>OLD E</td>
</tr>
<tr>
<td>The chicken is already fully cooked</td>
<td>33</td>
<td>16</td>
<td>31 1</td>
<td>12</td>
<td>35 F</td>
</tr>
<tr>
<td></td>
<td>OLD D</td>
<td>NEW E</td>
<td>OLD F</td>
<td>NEW G</td>
<td>OLD H</td>
</tr>
<tr>
<td>The chicken is raw</td>
<td>55</td>
<td>76</td>
<td>54 8</td>
<td>82 C</td>
<td>56 70</td>
</tr>
<tr>
<td></td>
<td>OLD G</td>
<td>NEW H</td>
<td>OLD I</td>
<td>NEW J</td>
<td>55 83</td>
</tr>
<tr>
<td>I am not sure if the chicken is raw or fully cooked</td>
<td>12</td>
<td>8</td>
<td>15 6</td>
<td>9 10</td>
<td>15 6</td>
</tr>
</tbody>
</table>

Q4: “Based on what you noticed from the packaging, please select one statement below that describes the chicken in this product.”

**CAPITAL LETTER indicates 95% confidence level vs. other column**

**Lower case indicates 90% confidence level vs. other column**
Product State – Did anything call your attention to raw state and what appliance should be used?

• The oven symbol does a good job in reinforcing the raw state of the product and how it should be cooked, increasing recognition by over 30 points

Q11: “When you first saw the front of the package, did you see anything calling your attention to the raw state of the product and what appliance should be used to cook the product?”

<table>
<thead>
<tr>
<th></th>
<th>TOTAL</th>
<th>TOTAL FEMALES</th>
<th>TOTAL MALES</th>
<th>TOTAL FEMALES + INVOLVED</th>
<th>TOTAL FEMALES + BUY CHICKEN BREASTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OLD A (499)</td>
<td>NEW B (501)</td>
<td>OLD C (257)</td>
<td>NEW D (263)</td>
<td>OLD E (243)</td>
</tr>
<tr>
<td>Yes</td>
<td>44</td>
<td>76 A</td>
<td>46</td>
<td>80 C</td>
<td>42</td>
</tr>
<tr>
<td>No</td>
<td>56 B</td>
<td>24</td>
<td>55 D</td>
<td>21</td>
<td>58 F</td>
</tr>
</tbody>
</table>

CAPITAL LETTER indicates 95% confidence level vs. other column
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Cooking Method – Proper preparation method

• The vast majority of consumers will bake the product in the oven

Q5: “Which statement best describes the proper preparation method(s) for this product? (Please select one)

<table>
<thead>
<tr>
<th></th>
<th>TOTAL</th>
<th>TOTAL FEMALES</th>
<th>TOTAL MALES</th>
<th>TOTAL FEMALES + INVOLVED</th>
<th>TOTAL FEMALES + BUY CHICKEN BREASTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OLD A (499)</td>
<td>NEW B (501)</td>
<td>OLD C (257)</td>
<td>NEW D (263)</td>
<td>OLD E (243) NEW F (237)</td>
</tr>
<tr>
<td>Cook in oven</td>
<td>75</td>
<td>79</td>
<td>79</td>
<td>83</td>
<td>72</td>
</tr>
<tr>
<td>Heat in microwave</td>
<td>10</td>
<td>7</td>
<td>8 d</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>Cook in oven or heat in microwave</td>
<td>15</td>
<td>14</td>
<td>14</td>
<td>13</td>
<td>16</td>
</tr>
</tbody>
</table>

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Meat Thermometer – Notice mention of a meat thermometer?

- Women are significantly more likely to notice the mention of a meat thermometer on the new package than males

| Q13: “Did you notice anywhere on the packaging the mention of a meat thermometer?” |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Yes  | 53  | 70 A (499) | 41  | 76 C (257)  | 55  | 62  | 52  | 77 G (237)  | 53  | 81 I (157) |
| No   | 47 B | 31  | 49 D | 24  | 45  | 38  | 49 H | 23  | 48 J | 19  |

**CAPITAL LETTER** indicates 95% confidence level vs. other column

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Thermometer – Open End Responses

• A meat thermometer suggests consumers must cook the product well and/or to a certain temperature for safety reasons

• It is not necessarily telegraphic that a meat thermometer means raw

• Note: We believe more respondents say they a meat thermometer means “raw” for the old copy because fewer consumers noticed a mention of the meat thermometer for that concept (see previous page) or thought it was raw originally

<table>
<thead>
<tr>
<th></th>
<th>TOTAL</th>
<th>TOTAL FEMALES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OLD A (499)</td>
<td>NEW B (501)</td>
</tr>
<tr>
<td>Preparation (NET)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cook right/well/thoroughly</td>
<td>18</td>
<td>13</td>
</tr>
<tr>
<td>Cook to certain/proper temperature</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>Cook to certain temperature for safe consumption</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>165 degrees/cook to 165 degrees</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Cook properly/thoroughly for safe consumption</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Product Attributes (NET)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Raw food/meat</td>
<td>15 A</td>
<td>8</td>
</tr>
<tr>
<td>Need/Usage (NET)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Used to check temperature</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Check for doneness/safety</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Don’t like/use it</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Convenience (NET)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

Q14: “What does the mention of a meat thermometer mean to you about the product and its preparation? Please be as specific as possible.”

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Recommended Raw Packaging Guidelines

Consensus guidelines of top 4 Stuffed Breast manufacturers

Need USDA FSIS input on guidelines & how to standarize
1. “Raw” in the name of product to follow USDA regulations

2. NEW “RAW CHICKEN” Icon:
   - The icon MUST be prominent, conspicuous and legible

3. Serving Suggestion notice:
   - Copy must convey product after cooking/baking

4. Safety statement at bottom of package:
   - RAW/RAW PRODUCT - all caps, minimum type height 1/4”
   - FOR FOOD SAFETY... all caps or uppercase and lowercase, minimum letter height of the capital letter must be 1/2 the height of RAW

RAW PRODUCT - FOR FOOD SAFETY, COOK TO A MINIMUM INTERNAL TEMPERATURE OF 165°F MEASURED BY A MEAT THERMOMETER

KEEP FROZEN • NET WT. 12 OZ. (340g)

2-6 OZ. PORTIONS

05-18-09
BACK PANEL:

1. RAW-DO NOT MICROWAVE
   - all caps
   - must be in RED or if a one color package then it can be in BLACK.
   - minimum type height 3/16"

2. NEW Foodborne Illness statement adjacent to “RAW-DO NOT MICROWAVE”
   - minimum type height 1/16"

3. “For Food Safety, cook to a minimum internal temperature of 165°F measured by a meat thermometer” must appear adjacent to cooking instructions

4. Cooking and Meat Thermometer Probing Instructions
   - three illustrations must appear in this area

   1. Do Not Microwave illustration

   2. An oven illustration

   3. Probing Illustration with thermometer probing product. Text version of probing instructions must be included and immediately follow cooking instructions.
INNER POUCH:

1. **RAW-DO NOT MICROWAVE**
   - all caps
   - must be in RED or if a one color package then it can be in BLACK.
   - minimum type height 3/16" 

2. **NEW Foodborne Illness statement adjacent to “RAW-DO NOT MICROWAVE”**
   - minimum type height 1/16" 

3. “For Food Safety, cook to a minimum internal temperature of 165°F measured by a meat thermometer” must appear adjacent to cooking instructions

4. **Cooking and Meat Thermometer Probing**
   - three illustrations must appear in this area
     1. Do Not Microwave Illustration
     2. An oven illustration
     3. Probing Illustration with thermometer probing product. Text version of probing instructions must be included and immediately follow cooking instructions.

---

**For Food Safety, cook to a minimum internal temperature of 165°F measured by a meat thermometer.**

**Meat Thermometer Instructions:**
Insert meat thermometer 2 inches into the stuffing in the center of the entree. See Diagram.