Information on Validation of Labeled Cooking Instructions for Products Containing Raw or Partially Cooked Poultry

This information is intended to provide industry with guidance in developing validation for labeled cooking instructions for raw and partially cooked, breaded, boneless poultry products as set forth in FSIS Notice 75-06. This information supplements labeling guidance currently on the FSIS website entitled “Food Safety and Inspection Service (FSIS) Labeling Policy Guidance for Uncooked, and Raw, Breaded, Boneless Poultry Products”.

Products containing raw or partially cooked poultry components have been implicated in a number of consumer illnesses in recent years. Evidence suggests that the failure to adequately cook the product in the home before consumption is the primary cause of those illnesses because consumers apparently believe that these products are pre-cooked, not raw. Therefore, it is important that manufacturers of processed products that contain raw or partially cooked poultry take steps to ensure the adequacy of any cooking instructions that they include on the labeling of such products. (NOTE: Not-Ready-to-Eat (NRTE) products that contain fully cooked meat or poultry components along with other ingredients that require cooking by consumers are not the subject of this guidance.)

Properly validated cooking instructions are those that have been shown to achieve a safe minimum internal temperature of 165 °F, which the Agency has determined will deliver at least a 7-log reduction of Salmonella. Since the Agency has made this determination, challenge studies are not necessary as long as a safe minimum internal temperature of 165 °F is achieved in all parts of the product. However, establishments may provide challenge study data as a component of validation.

Cooking instructions for products containing raw or partially cooked poultry must be practical. Prudent manufacturers of such products should document that labeled cooking instructions are simple and easily followed by targeted consumers. At a minimum, firms should closely monitor calls to their toll free numbers and other consumer complaints for signs that cooking instructions are not easily followed or, when followed, do not adequately cook the product. Firms may elect to conduct and to document trials with consumers to monitor how well they are able to follow labeled cooking instructions.

Because of known inconsistencies in microwave heating, raw and partially cooked poultry-containing products whose labels bear microwave cooking instructions, or whose label do not specifically discourage use of microwaves for cooking, will receive the closest scrutiny of their adequacy by FSIS.
Characterization of the process employed by the establishment to validate the labeled cooking instructions should be included as part of the labeling record. This record should also include the company’s basis for believing that the cooking instructions can be easily followed by consumers. For firms that operate a toll free consumer hotline, the absence of feedback from consumers expressing concern about the cooking instructions is one basis. Direct interaction with consumers is even better.

**Considerations for validating cooking instructions**

When cooking instructions are provided on product labeling, the destruction of pathogens of concern in raw or partially cooked poultry components should be validated for each labeled cooking method.

As noted above, inconsistencies in microwave cooking make it more challenging to develop adequate cooking instructions applicable to microwave ovens than for most other methods of cooking. The following are some variables that should be considered by establishments during the development and validation of microwave cooking instructions. (NOTE: Not all factors will be relevant in all cases.)

**Microwave oven variables**

- Wattage of the microwave oven
  
  Note: The actual effective wattage of the microwave can be influenced by
  
  - Age of the microwave
  - Immediate prior usage of the oven
  - Line voltage to the microwave oven

- Position of the product within the microwave oven
- Rotation of the product during microwave cooking

**Product variables** (samples used for validation should be representative of the variability normally seen during production)

- Uniformity of product
- Size and shape of product
- Presence of chunks or pieces and number of such chunks or pieces

**Testing variables** that should be documented in addition to relevant variables noted above

- State of the product at the start of microwave cooking, e.g., frozen versus refrigerated, or room temperature
- Number and location of temperature measurement sites during testing
- Multiple containers of product (where instructions are provided for cooking multiple units)
- Product is covered during cooking
- Standing time after cooking

Establishments should directly consider these factors in developing of their labeled cooking instructions or documenting why these factors are not relevant to individual products or groups of products.