**Conference for Food Protection**

**2012 Issue Form**

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| **Council Recommendation:** | Accepted as  Submitted |  | Accepted as Amended |  | No Action |  |
| **Delegate Action:** | Accepted |  | Rejected |  |  |  |

*All information above the line is for conference use only.*

**Title:**

Final cooking temperature requirement for non-continuous cooking

**Issue you would like the Conference to consider:**

Amend 2009 FDA Food Food Code Section 3-401.14, (D) which currently requires a final temperature of 165°F before service to allow an exception for the use of the cooking temperature of 145°F for 15 seconds for intact whole-muscle beef.

**Public Health Significance:**

The 2009 FDA Food Code requires a final cook for non-continuously cooked raw animal foods of 165 °F based on the USDA/FSIS Performance Standards for Partially Cooked and Char-Marked Meat Patties and Partially Cooked Poultry Breakfast Strips found in 9 CFR 318.2331 and 9 CFR 381.150. Since the initial partial heat treatment may not eliminate the vegetative organisms of concern or spores, the second and final heating process is necessary to eliminate the hazards associated with these products before service. However, the cooking temperatures in FDA Food Code Section 3-401.11 likewise based on USDA/FSIS data are adequate and vary based on scientifically based anticipated load and thermal destruction needed for different types of raw animal products and organisms of concern.

The current requirement for non-continuous cooking limits the time for the initial partial cook and the cooling time/temperatures such that, if done as per the current Code requirements, it will limit the growth of both possible vegetative and spore-forming organisms of concern. Non-continuous cooking is typically done for small mass products such as grill marking of steaks and burgers and poultry, or diced raw animal products for Asian style cooking with brief initial heating and rapid cooling.

Assuming these steps (initial heating and cooling) follow the current Code requirements, the expected load would not have increased significantly relative to a completely raw animal food or a fully cooked animal food that has been properly cooled and can be eaten without reheating as long as it is not going to be held hot. In the case of non-continuous cooked animal foods, these products are going to receive a second heat treatment before service; the final cooking temperatures in Section 3-401.11 will eliminate possible pathogens present, which the initial partial cook did not control.

The cooking requirements used to control both the vegetative and spore forming pathogens such as C. perfringens, B. cereus, and C. botulinum in 3-502.12 (D) (2) (b) for cook-chill or sous vide products likewise uses the same time/temperature parameters in 3-401.11, not 165°F.

According to the 2009 Food Code Annex 3 Section 3-401.14, the cumulative growth of C. perfringens, B. cereus, and C. botulinum must be taken into account during both the initial heating and cooling steps. The hazard may be compounded with an extended initial "come up" time and /or a prolonged stage. Hence the degree of hazard may be dependent upon the ultimate effect of the initial heating and cooling, as well as the final cooking step.

The hazard of vegetative cell growth and spores of C. perfringens, B. cereus, and C. botulinum can be controlled if the initial cook was within 1 hour and the fast cooling process to less than 70 °F is achieved in less than 2 hours.

Section 3-401.11 (C) also allows for the service of raw or undercooked whole-muscle intact beef steak if the surface temperature reaches 145°F for 15 seconds based on National Advisory Council on Microbiological Criteria for Foods (NACMCF) and USDA recommendations due to the low probability of pathogenic organisms being present in or migrating from the surface to the interior. This would likewise apply to non-continuously cooked whole-muscle, intact beef steaks. As long as the outside is seared to at least 145°F for 15 seconds during the final heat treatment before service, any pathogens will be controlled as long as Section 3-401.14 (A), (B), and (C) has been met.

**Recommended Solution: The Conference recommends...:**

that a letter be sent to the FDA requesting the 2009 Food Code (as modified by the Supplement issued in 2011), Section 3-401.14, (D), be amended as follows (new language shown with underline):

3-401.14 (D) Prior to sale or service, cooked using a process that heats all parts of the food to a temperature of at least 165°F for 15 seconds: except to allow for the use of the cooking temperature of 145°F for 15 seconds found in 3-401.11 for raw intact whole-muscle beef.

**Submitter Information:**

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