Cooked Bacon

It is a common practice in foodservice to precook bacon to be used throughout the day on hamburgers, sandwiches, salads, etc. There is confusion among food safety inspectors as to whether it is safe to hold precooked bacon at room temperature. So, is cooked bacon considered a "time/temperature control for safety (TCS) food" as defined by the Tri-Service Food Code, NAVMED P-5010, chapter 1, Glossary, Section II, Terms or the FDA model Food Code?

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Discussion

Raw bacon has a water activity of 0.92. FDA defines food having a water activity above 0.85 as a TCS food. Raw bacon must be held at or below 41°F. However, according to USDA's Microbiology Division, the water activity of crisp bacon is approximately 0.72 to 0.75. Commercially pre-cooked bacon has a water activity of 0.85.

Conclusion

The FDA in 1984 (FDA CSFAN, 1984) concluded that pre-cooked and other fully cooked bacon, with a water activity at or below 0.85, does not support the rapid and progressive growth of infectious or toxigenic microorganisms and therefore, is not considered a TCS food per the current FDA definition. Also, a study by the company Hormel (Brown, 2005) also concluded that even for severely undercooked bacon, the water activity was much less than optimal (0.89) and, if used within 17 hours after cooking, the equivalent time-temperature at 70°F to 41°F and 7 days (Snyder, 1998), there would be no significant risk.

Knowledge Checks

- Raw bacon is a TCS food that must be maintained at temperatures of 41°F (5°C) or less.
- Precooked, crisp bacon can be held at room temperature.
- Cover precooked bacon to protect from contamination.

References

Brown, D. 2005 (June). Hormel. Personal communication with author.
FDA CFSAN. 1984. Definitions – Potentially Hazard Food – Cooked Bacon.
Retail Food Protection Program Information Manual #1-102(q). Washington, D.C.
Snyder, O.P. 1998. Updated guidelines for use of time and temperature specifications for holding and storing food in retail food operations. Dairy Food Environ. Sanit. 18(9):574-579.

For more information, resources and tools on food safety and Public Health Reasons:

- Visit NMCPHC PPS EH Food Sanitation and Safety
- Food Safety Research: https://www.fda.gov/food/science-research-food
- Contact your local Military Treatment Facility's Preventive Medicine Office.