Food Safety Fact Sheet

Thawing Foods

Introduction

Thawing frozen food correctly is important for keeping food safe to eat. The FDA *Food Code* states that the temperature of food should not exceed 41 °F during the thawing process. Cooks must plan ahead so that they can use an appropriate method for thawing.

Here Are the Facts

Freezing food keeps most bacteria from multiplying, but it does not kill them. If food is allowed to enter the temperature danger zone of 41 °F–135 °F, bacteria will grow rapidly. There are four acceptable methods for thawing food: in a refrigerator, under cold running water, in a microwave, or as part of the cooking process.

Application

Use good production planning to determine the quantity of food needed and when food should be thawed in advance. Indicate preparation such as thawing that needs to be done on the daily production record.

Use one of the four safe methods when thawing frozen foods.

1. Thaw frozen food in the refrigerator at a temperature at or below 41 °F.
    - ◊ Place packages of frozen food in a pan so that juices cannot drip on other foods.
    - ◊ Change the drip pan when liquid is visible in the pan.
    - ◊ Allow adequate time for thawing. A small quantity of food may thaw in one day, while a large product such as a turkey may take several days.
2. Thaw frozen food completely submerged under clean, drinkable running water.
    - ◊ The water temperature should be 70 °F or below.
    - ◊ The water should be at sufficient velocity as to agitate and float off loose particles in an overflow.
    - ◊ Ready-to-eat foods should never be allowed to rise above 41 °F.
    - ◊ Foods that will be cooked should never be allowed to rise above 41 °F for more than 4 hours, including thawing and cooking time or thawing and chilling time.
3. Thaw frozen food in a microwave oven only if it will be cooked immediately.
4. Thaw frozen food as part of the cooking process. This method typically is used for products such as frozen patties, nuggets, pizza, lasagna, chili, soup, and vegetables.

Monitor thawing process for frozen foods.

- Check temperature of food during the thawing process using a temperature measuring device.
    - ◊ For thawing as part of the cooking process, temperatures should be checked as they would be for cooking. Food should be heated to the internal cooking temperature within 2 hours.
    - ◊ For refrigerator thawing, check the temperature at the end of the thawing process. If the refrigeration unit is working properly, the food will never exceed 41 °F.

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  - ◊ For microwave thawing, food should be cooked immediately and temperature checked at the end of the cooking process, which should not exceed 2 hours.
  - ◊ For thawing in running water, check the temperature of the food every 30 minutes.
- Check food temperatures with a clean, sanitized, and calibrated thermometer.
- Check the water temperature with a clean, sanitized, and calibrated thermometer if cold running water is used for thawing.
- Record the temperature and the time the temperature is checked.

Take corrective action if appropriate thawing temperature of the food is not met.

- If water temperature is warmer than 70 °F from the tap, use another thawing method.
- Record corrective actions taken.

Remember, follow state or local health department requirements.

References

U.S. Department of Agriculture, Food and Nutrition Service, & Institute of Child Nutrition. (2015). *Food safety in schools*. University, MS. Author.

U.S. Department of Health and Human Services Public Health Services, Food and Drug Administration. (2013). *FDA food code*. Retrieved from http://www.fda.gov/food/guidanceregulation/retailfoodprotection/foodcode/ucm374275.htm

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