

FOOD PROTECTION CONNECTION

NAVIGATING FOOD SAFETY THROUGH THE SEASONS

BY JESSY SADLER, SNS

REGARDLESS OF THE TIME OF YEAR, consistent emphasis on food safety serves as a fundamental pillar in minimizing the risk of contamination, bacterial growth, and the spread of foodborne pathogens. Each season brings forth a unique set of challenges: From handling fresh produce and berries in the spring, mitigating temperature-related risks during BBQs in hot summers, navigating storage challenges for fall harvest, or managing holiday feasts in the winter, every season requires a tailored approach. Recognizing and tackling these challenges are crucial elements to maintain food safety.

The following tips serve as a reminder that—just like the weather—food safety demands continuous adjustments to ensure a delicious experience rather than stomach-churning illnesses.

SPRING CLEANING

Time for fresh beginnings, sunshine, and removing any grime and clutter.

The warmer weather brings a bounty of fresh produce and berries along with eager opportunities for outdoor dining.

Wash all fresh produce thoroughly. While farmers' markets offer a variety of fresh, local and often organic products, it's essential for both vendors and consumers to prioritize food safety practices. Best practices include bringing reusable bags for carrying purchases, designating separate coolers for any raw and perishable items to avoid cross-contamination, and promptly refrigerating products to maintain freshness and

safety. Wash all fruits and veggies thoroughly under cold running tap water, especially leafy greens and berries. Even a lurking speck of dirt can harbor tiny microbes. A brush can help dislodge stubborn grit on firm surfaces, such as on apples or potatoes (U.S. Department of Agriculture, Food Safety and Inspection Service, n.d.).

Practice egg-cellent handling. Springtime often features eggs on our menus. Remember to keep them refrigerated and cook them thoroughly. According to the Food Code (2023b), scrambled eggs prepared for immediate consumption should be cooked to 145°F (63°C), while egg quiche-type fillings should reach an internal temperature of 158°F (70°C) for 15 seconds to ensure safe consumption.

Deep clean. Spring cleaning in your foodservice operation should include more than just food contact surfaces and appliances. Beef up your usual cleaning schedule and focus on hard-to-reach areas and proactive maintenance to keep your appliances and small wares sparkling and in tip-top working order.

SIZZLING SUMMER

Fire up the grill, fill the coolers, and prepare for epic summer cookouts!

Heat it up, cool it down. Summer screams grilling season, but don't let summer's sizzling fun spoil with foodborne illness. Did you know that a raw piece of meat can harbor numerous bacteria such as salmonella, E. coli, and listeria? Proper cooking and temperature checks are crucial.



Poultry needs to reach 165°F (74°C), while steaks can be safely consumed at 145°F (63°C). The Food Code (2023a) reminds us to not let cooked food linger in the temperature "Danger Zone," a temperature range of 41°F to 135°F (5°C to 57°C). Transfer leftovers to shallow containers and refrigerate them instantly. Remember, two hours outside the fridge is the limit.

Ice is your friend. Coolers are your summer allies. Pack them generously with ice or freeze packs, and remember that regular replacement of ice in the heat is crucial. Think beyond beverages. Use coolers for all types of salads such as green salads, potato salads, macaroni salads, dips, and cut fruit, especially when lounging under the sun.

Marinate safely. Keep marinated meats in the fridge unless cooking them immediately. Discard marinade that has touched raw meat or poultry immediately; do not reuse.



FOOD SAFETY DEMANDS CONTINUOUS ADJUSTMENTS

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FALL HARVEST

Time for apple and pumpkin pies, hearty soups, and golden skies.

This season brings steaming stews and bakes, as the temperature drops and vibrant golden colors paint our landscapes.

Preserve nature's harvests. The last of summer harvests tempt us to extend its embrace through canning, pickling, and fermenting. However, these endeavors require precision, trusted processes, and adherence to established techniques and guidelines. Research published by the National Library of Medicine showed that 91 percent of botulism outbreaks linked to home-prepared foods were attributed to improper canning techniques between 1950 through 2006 (Juliao et al., 2012). Shortcuts which result in improper



REFERENCES

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techniques, as warned by the National Center for Home Food Preservation, can lead to Clostridium botulinum, also known as botulism, a potentially fatal form of foodborne illness.

Stir up a flavorful soup season. As the temperature drops and the air gets crisp, hearty stews and simmering soups offer a warm counterpoint to that fall chill. Slow cooking may add depth of flavor, but it doesn't guarantee a foodsafe performance. All ingredients, particularly meat and poultry, must reach the appropriate internal temperature before being consumed to prevent an outbreak from bacteria like Salmonella and E. coli. The recommended internal temperature for ground meat, including beef, pork, lamb, and turkey, is 160°F (71.1°C). Whole poultry, such as chicken and turkey, needs to reach 165°F (74°C), and hearty beef roasts/chunks require an internal temperature of 145°F (63°C) for three minutes (U.S. Food and Drug Administration, 2023b).

Store fall harvest appropriately. With shorter days and cooler temperatures, proper storage becomes an essential baseline of autumnal food safety. According to Byczynski (2005), root vegetables like potatoes prefer a cool haven such as a well-ventilated basement or storeroom with a temperature range of 40°F (4°C) to 60°F (15°C), while crops like beets, turnips, and carrots are best stored at 32°F (0°C). Fruits like avocados and tomatoes need a burst of warmth. For refrigerated items like leafy greens, herbs, and berries, they are best wrapped in separate, lightly damp paper towels within the crisper drawer. Stone fruits like peaches and

plums prefer cooler temperatures but not as frigid and can be stored in a high crisper shelf or the main compartment.

WINTER WONDERLAND

Tis the season for cozy feasts and brrr-illiant bites.

Thaw with foresight. Thawing your holiday roasts demands foresight and planning. Safely defrost them using methods such as the refrigerator, cold running water (changing the water every 30 minutes), or the microwave's defrost setting. Avoid leaving frozen meats at room temperature to prevent rapid bacterial multiplication. Once thawed, keep the meat refrigerated and be sure to cook it within 2-4 days.

Navigate the "Danger Zone." Slow cookers are beloved kitchen appliances for their ability to transform tough cuts of meat into tender, flavorful masterpieces. While slow cookers and pot luck-type buffets are winter favorites, they can turn into "Danger Zones" if mishandled. Set slow cookers to high or low settings, and ensure cooked foods reach an internal temperature of at least 165°F (74°C). Remember, "warm" settings on slow cookers aren't enough. Buffet items should stay hot above 130°F (57°C) or cold, placed on ice, below 41°F (5°C) for no more than 2 hours (Centers for Disease Control and Prevention, 2023).

Serve safe and delicious holiday treats. Cookies, pies, and baked goods are the sweet notes of winter celebrations, but ensuring food safety during the holiday season is key—especially when baking delightful goodies. Thoroughly



WHILE SLOW
COOKERS AND POT
LUCK-TYPE BUFFETS

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wash hands before and after handling raw ingredients such as eggs. Be mindful of cross-contamination, especially when handling ingredients that may trigger allergies. Separate utensils, cutting boards, and countertops should be used to prevent allergen transfer. Additionally, clearly label dishes and ingredients to communicate potential allergens, and consider using color-coded kitchen tools to distinguish between different types of treats. Properly store and label all baked treats in airtight shallow containers to maintain freshness and prevent contamination (Centers for Disease Control and Prevention, 2018). Keep them covered and refrigerated, if needed, for up to 3 days (or freeze for an extended period).

YEAR-END WRAP-UP

From sunshine to snowflakes, remember, at minimum, the basic food safety steps:

Wash produce and hands. Give your fresh fruits and vegetables a thorough rinse under cold running tap water, especially leafy greens and berries. When it comes to handwashing, wash hands with warm water, a temperature of about 85°F (29.4°C) (U.S. Food and Drug Administration, 2023d).



both before and after handling food (U.S. Food and Drug Administration, 2023c).

Thaw and cook smartly. Ditch defrosting on the counter; frozen food should exclusively thaw in the refrigerator, under cold running water, or using the defrost setting on the microwave. Invest in a good digital thermometer and remember to not let cooked food linger in the temperature "Danger Zone," a range of 41°F to 135°F (5°C to 57°C).

Maintain refrigerator temperature.

Ensure your refrigerator stays at 40°F (4°C) or below, and avoid overcrowding shelves. Leftovers, the treasured aftermath of any feast, should be labeled, stored in airtight containers, and enjoyed within 4 days.

Embrace each season and its flavors knowing that you're protecting yourself, your loved ones, and your clients with every bite. Remember, food safety is a journey and not a final destination.



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CE QUESTIONS | FOOD PROTECTION CONNECTION



This Level I SANITATION AND SAFETY article assumes that the reader has introductory knowledge of the topic. The desired outcome is to ensure a basic understanding and explanation of the concepts of the subject matter and recalling of related facts.



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- 1. What temperature should scrambled eggs be cooked to for immediate consumption?
 - A. 145°F (63°C)
 - B. 160°F (71°C)
 - C. 175°F (80°C)
- 2. Ice is considered a summer ally because:
 - A. It cools beverages
 - B. It prevents bacterial growth
 - C. It replaces the need for refrigeration
- 3. What caution should you take when marinating meats during summer cookouts?
 - A. Reuse marinades to avoid waste
 - B. Keep marinated meats uncovered in the refrigerator
 - C. Discard marinades after each use
- 4. According to the National Center for Home Food Preservation (NCHFP), improper canning techniques can lead to:
 - A. E. coli outbreak

- B. Salmonella outbreak
- C. Clostridium botulinum outbreak
- 5. Why is thawing a holiday roast in the refrigerator recommended?
 - A. It speeds up the thawing process
 - B. It prevents rapid multiplication of bacteria
 - C. It enhances the flavor of the meat
- 6. What is the recommended internal temperature for ground meat, according to the 2022 Food Code?
 - A. 145°F (63°C)
 - B. 160°F (71.1°C)
 - C. 175°F (80°C)
- 7. What is the main concern with slow cookers?
 - A. They cook food unevenly
 - B. They are not energy efficient
 - C. They can cause the food temperature to be in the "Danger Zone" if mishandled
- 8. What is the best way for leftovers to be handled?
 - A. Discard them immediately
 - B. Reheat them thoroughly to 165°F (74°C) before consuming
 - C. Store them at room temperature for up to a week



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