Every holiday season brings celebrations involving lots of food, lots of food preparation, and with it, stressed-out chefs. Hawaii’s many extended families often have extended celebrations, meaning extended cooking and the use of short-cuts in the kitchen to keep the food coming. It can all be a recipe for potential health problems when food safety is ignored.

Very often what we think is a short-term virus, a 24-hour flu, or even an attack of holiday stress caused by excitement is none of those things—it is food poisoning. It comes from what food scientists call **microbiological contamination**, mainly caused by “bad” bacteria. Anyone can be affected by food poisoning, but the very young, the elderly, and those whose immune systems are weakened are especially vulnerable. Improper food handling and preparation is responsible for most food poisoning. Knowing and practicing proper food-handling methods can prevent bad after-effects of good holiday eating.

Salmonellosis, one of the most commonly occurring foodborne illnesses, is caused by the bacterium *Salmonella*. Poultry and eggs are foods commonly associated with *Salmonella*. Other foods, such as beef and salads, also have been sources of salmonellosis, mainly through cross-contamination. Cross-contamination occurs when harmful microorganisms are transferred by means of contaminated equipment, utensils, or human hands, from a food such as raw meat or its juice to another food that will not be cooked. For example, a cook cuts up raw chicken on a cutting board that is then reused to cut fresh fruits and vegetables, without first washing the board in hot, soapy water. Harmful bacteria from the raw chicken are transferred to the cutting board, then to the fruits and vegetables that are eaten without any further cooking. Fortunately, most of these harmful bacteria can be destroyed by proper cooking and food handling.

Follow the food-handling directions below for safe food and healthy holiday celebrations.

- **Always follow strict personal hygiene** practices, including thorough hand-washing before and after handling food.
- **Always cook by temperature!** Foods vary in the temperature at which they are thoroughly cooked. Some examples of “critical internal temperatures” are 165°F for poultry, 155°F for beef patties (no pink color), 145°F for pork, and 140°F for roast beef. A food thermometer might be the best purchase you could make toward keeping your family’s food safe.
- **Thoroughly wash** raw fruits and vegetables; also, wash the knives and peelers that you use on raw foods before using them again.
- **Pay cautious attention** to holiday dishes—especially at buffets. Cold dishes that need watching include macaroni salad, meat salads, cream pies, and eggnog. Hot dishes that you should be careful with include poultry stuffing, egg rolls, rice (steamed or fried), and roasted meats. Keep cold dishes below 41°F. Hot foods should have a food temperature above 140°F.
- **Transport foods cold** and reheat to above 165°F immediately before serving. Precooked foods should be eaten within two hours of cooking.
- **Refrigerate leftovers immediately** in small, shallow containers. Do not leave foods on the buffet table for more than two hours.
- **Clean the utensils** that you will need for both raw and cooked foods in hot, soapy water. Harmful bacteria from raw foods is transferred to the cutting board, then to the fruits and vegetables that are eaten without any further cooking. Fortunately, most of these harmful bacteria can be destroyed by proper cooking and food handling.
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