



Hawaii posts high rate of food bacteria

A Salt Creek Grille restaurant in California was recently fined \$3.2 million because the raw ahi it served caused permanent nerve damage to a young woman. But was it the ahi or something else?

Most cases of food-borne illness result in a day or two of misery, followed by relief and return to life as usual. Rare cases can result in serious and permanent health problems.

In the California case, an avid runner in her early 20s experienced diarrhea, fever and chills a day after eating the raw ahi at the restaurant. Over the next 10 days, the condition progressed to permanent nerve damage.

Question: What type of microorganism could cause permanent nerve damage?

Answer: The test results indicated that she was infected by a type of bacteria called *Campylobacter*.

Q: How did the raw fish become contaminated with the bacteria?

A: This bacteria is not normally found on or in raw tuna. Investigation of the restaurant's routine practices indicated that the ahi was most likely cross-contaminated from raw chicken, which frequently carries the organism.

The Orange County Health Department identified four restaurant practices that could cause cross-contamination.

1) Rags used to wipe down various surfaces were not sanitized between wiping.

2) Tongs used to handle raw chicken also were used with other foods.

3) Raw vegetables were stored in the refrigerator below raw meat. This introduces the potential for meat dripping onto raw vegetables.

4) The waiter used a wet, unsanitized rag from the bar to wipe down the woman's table.

Cross-contamination also can occur when a knife or cutting board is not cleaned after it is used on foods such as meat or

chicken. Any raw food subsequently prepared with these utensils then becomes contaminated.

Q: What foods are most commonly contaminated with *Campylobacter*?

A: The Centers for Disease Control reports that raw or undercooked poultry is a common source. Raw milk, contaminated water and the feces of infected animals are other potential sources.

Q: Do *Campylobacter* infections commonly occur in Hawaii?

A: With about 800 cases per year, Hawaii has the highest rate of reported *Campylobacter* infections in the nation. Cross-contamination of foods with *Campylobacter* and other bacteria can happen at home, too. With the holiday season ahead, it's time to make sure that all the cook's helpers know how to avoid cross-contamination.

Joannie Dobbs, PhD, CNS and Alan Titchenal, PhD, CNS
are nutritionists in the Department of Human Nutrition, Food and Animal Sciences,
College of Tropical Agriculture and Human Resources, UH-Manoa.
Dr. Dobbs also works with the University Health Service.
