



## The Lesson in Costco Chicken Salad

By Fred M. Reiff, PE

The recent multistate outbreak of foodborne illness linked to Costco rotisserie chicken salad is another reminder that safe food practices are as essential to fresh produce as they are to raw meats and poultry. The Costco outbreak was traced, not to contaminated chicken or tainted mayonnaise, but to *E. coli*-contaminated *fresh celery* in a diced vegetable mix that Costco purchased from [Taylor Farms](#) Pacific in Tracy, California. The US Food & Drug Administration (FDA) notes the company has voluntarily recalled a [list of products](#) that could potentially contain *E. coli*-contaminated vegetables. In response to the outbreak, Costco has removed all rotisserie chicken salad from its stores and stopped further production.

According to [the US Centers for Disease Control and Prevention \(CDC\)](#), 19 people in seven states<sup>1</sup> have been sickened by the outbreak of *E. coli* O157:H7. Five people were hospitalized and two developed hemolytic uremic syndrome, a type of kidney failure. This outbreak is caused by a strain of *E. coli* more potentially harmful than that which caused the recent Chipotle outbreak (*E. coli* O26). The source of the Chipotle outbreak is still under investigation.

### *Proper Washing and Sanitizing is a Must*

Fresh produce used for commercially prepared salads must be properly washed and sanitized especially when organic fertilizers such as chicken or cow manure are utilized. FDA recommendations (see [Guidance for Industry: Guide to Minimize Microbial Food Safety Hazards of Fresh-cut Fruits and Vegetables](#)) address maintaining the quality of processing water, which is “used extensively in almost all aspects of processing fresh-cut fruits and vegetables, including during cooling, rinsing, or conveying food”. When antimicrobial chemicals, such as chlorine-based disinfectants, are used to help minimize processing water contamination and potential cross-contamination, the water chemistry should be optimized for antimicrobial effectiveness. This can be done, according to FDA, by adjusting the water’s pH, the amount of organic matter in the water and the water temperature.



*A recent foodborne illness outbreak from contaminated Costco chicken salad has been traced to *E. coli* O157:H7, which produces a Shiga toxin.*

*Image from [CDC website](#)*

<sup>1</sup> Montana, Washington, California, Colorado, Utah, Missouri and Virginia

The [Taylor Farms website](#) highlights food safety and the company's efforts to prevent foodborne outbreaks. Yet, recently something went awry. The current *E. coli* outbreak reinforces the need for agricultural producers to be ever-vigilant in their battle against microscopic foodborne pathogens. That includes a complete investigation of what went wrong at Taylor Farms, and adjusting current practices to prevent a recurrence.

### *A Word to Consumers*

As we reminded readers in our [Thanksgiving post](#), between 1998 and 2008, vegetables accounted for the single greatest percentage of US foodborne illnesses, although meat and poultry were responsible for the greatest percentage of deaths. Fresh produce can be a healthful addition to our diets, but everyone, from the farmer to the consumer, must be savvy when it comes to handling and preparing our fruits and veggies.

The following tips are based on the CDC "[Test Your Produce Safety Savvy](#)":

- Wash your hands for 20 seconds (the time it takes to sing the "Happy Birthday" song twice) with warm water and soap before and after preparing fresh produce.
- At the grocery store, be sure your fruits and vegetables are separated from raw meat, poultry or seafood in your cart and bagged separately at the checkout.
- Choose produce that is not bruised or damaged, especially if you are not planning to cook it. Store precut fruits and vegetables in the refrigerator or surrounded by ice in a cooler (for picnics, for example).
- Even though the package indicates that produce is pre-washed, add an extra layer of caution and wash it before eating.
- Keep fruits and vegetables separated from raw meat, poultry and seafood in the fridge. If fresh produce that will not be cooked contacts raw meat, poultry or seafood, throw out the fresh produce.
- Remove visible dirt and wash fruits and vegetables, even the ones you peel, under running water just before eating, cutting or cooking.
- Do not use the same cutting board for fresh produce that you use for raw meat, poultry or seafood. To sanitize cutting boards and other food-contact surfaces, first clean with detergent and water and then sanitize with a solution of 1 tablespoon of regular chlorine bleach in one gallon of water (or 2 teaspoons of concentrated bleach in one gallon of water). Let air-dry.
- Do not eat recalled produce. If you are unsure of the safety of your produce, ask the place of purchase or your supplier for information.
- When in doubt about the safety of produce, if you cannot get more information, do not eat, sell or serve it to anyone, and throw it out.

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