

Never Let Down Your Guard



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Given the events of the last few months, manufacturers of cereal-based products must be thinking, “*Whew, I’m glad I am doing what I am doing and am not in the produce business.*” The spinach outbreak that sickened over 200 people and a more recent outbreak traced to Taco Bell that has sickened in excess of 60 people to date were both caused by *E. coli* 0157:H7. Originally, the source in the Taco Bell situation was thought to be green onions (scallions), but this may not be the case.

The spinach outbreak was caused by fresh prepackaged spinach, but it affected spinach of all kinds. Sales of frozen

and even canned spinach dropped as a result of the outbreak, even though these products are blanched at temperatures of more than 190°F or canned at temperatures of >240°F, respectively. The pathogen that caused the outbreak would be destroyed by these temperatures; also, most people would heat frozen or canned spinach before using it, so it would have been safe. Of course, the average American’s knowledge of food safety and how it is achieved is minimal at best.

It is a given that cereal-based products are generally safe, but “generally safe” doesn’t mean “absolutely safe.” There was a salmonella outbreak in potato chips several years back. You think, potato chips? They are fried at 350–380°F, so how could they be implicated? They can if the seasoning that is used is contaminated with a pathogen. The most prominent outbreak linked to cereals was the *Salmonella* Agona outbreak caused by toasted oat cereal in 1998. The following statement is from *Morbidity and Mortality Weekly Review* (1) from that same year.

During April–May 1998, a total of 11 states reported an increase in cases of *Salmonella* serotype Agona infections; as of June 8, a total of 209 cases have been reported and at least 47 persons have been hospitalized, representing an eightfold increase over the median number of cases reported in those states during 1993–1997. The states reporting increases were Illinois (49 cases), Indiana (30), Ohio (29), New York (24), Missouri (22), Pennsylvania (20), Michigan (15), Iowa (eight), Wisconsin (six), Kansas (four), and West Virginia (two).

Breakfast cereals as a vehicle for a multistate outbreak? It just goes to show that anything can happen, that Murphy’s Law is inescapable. Remember? Anything that can go wrong will go wrong.

Development and implementation of hazard analysis, critical control point (HACCP) plans, which most processors of grain-based products in the United States have now adopted, should prevent such occurrences. Processors of cereal products have adopted the program not because it was mandated by the government but because it was basic good business. Today, if a company wishes to sell its products or ingredients, the business environment mandates HACCP. Without a HACCP program, you will be shut out of many accounts.

Of course, just because you have a HACCP plan doesn’t necessarily mean it is a good HACCP plan. One of the weakest links in most such plans is the hazard-analysis step. All too often, companies fail to do the necessary digging to determine what hazards may exist within the products, ingredients, and unit operations. Most people use a “hazard analysis worksheet” of some sort, but what they do not do is dig deeply to see whether any hazards have been associated with the *system*. In other words, the company has not done an in-depth hazard analysis. This “due diligence” is what can help ensure that something does not get through your defenses. It will also help you by limiting potential liability if there is a food-safety-related problem.

HACCP is the best available system that we have at the moment. It is not, however, 100% guaranteed. Of course, this is why it is essential that operators realize that a HACCP plan is a living and evolutionary document. Reassessing the plan and the processing system is part of the process and cannot be ignored. The bottom line is to stay diligent, don’t accept the status quo, and keep working to do things better. Remember, the company that accepts the status quo is not moving forward but running in place. In a fast-paced and ever-changing world, running in place simply will not make it.

Reference

1. Centers for Disease Control. Multistate outbreak of *Salmonella* serotype Agona infections linked to toasted oats cereal—United States, April–May, 1998. *Morb. Mort. Week. Rev.* 47:22, 462–464, 1998.

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