

Third-Party Audits – New Demands for Assurances of Food Safety

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Consumers continue to challenge the food industry by demanding a year-round supply of safe and wholesome products at an affordable price. The vast majority of food providers have kept their end of the bargain. The food supply in the United States has never been more abundant and American consumers enjoy the safest food in the world. However, as a result of several highly publicized outbreaks of foodborne illness, consumers no longer take for granted the safety of the foods they eat. Major retailers, restaurant chains, and other buyers of fresh produce are increasingly demanding that growers and packers submit to third-party food safety audits of their operations.

Food borne Illness in the United States

The Centers for Disease Control (CDC) estimates that, in the United States, there are 76 million illnesses, 325,000 hospitalizations, and 5,000 deaths per year due to consumption of food contaminated with pathogenic microorganisms. Particularly susceptible to foodborne illness are the very young, the elderly, and other individuals with impaired immune systems. The number of reported outbreaks will no doubt increase as methods for detection of human pathogens improve, better diagnostic and tracking tools are developed, and the proportion of susceptible individuals in the general population increases as is projected.

The CDC has stated that the number of outbreaks associated with consumption of fruits and vegetables has doubled between the periods 1973-1987 and 1988-1992. This increase can be traced to the proliferation of a wide variety of fresh, minimally processed, and unpasteurized juice products on the market. Of particular significance have been outbreaks attributed to contamination of tomatoes and cantaloupes with *Salmonella*, imported raspberries with *Cyclospora* parasites, Mexican strawberries with Hepatitis A virus, and alfalfa sprouts with *Salmonella* and *E. coli* O157:H7 bacteria. Within the last decade, there have also been several highly publicized outbreaks

involving unpasteurized juices contaminated with E. coli O157:H7, Salmonella, and Cryptosporidium. In 1996 unpasteurized apple juice produced by Odwalla Inc. became contaminated with E. coli O157:H7 and resulted in sixty-six cases of illness and the death of one child.

Government and Industry Response

The case has been made that, for much of the 20th century, the food industry has not been as tightly regulated as many other industries in the United States. A steady succession of safety regulations designed to protect consumers have been imposed on the automobile, aviation, construction, and manufacturing industries. Food processors as well have been regulated by the federal and state governments since the beginning of the 20th century with many stringent requirements in place on the use of food additives, colorants, packaging materials, and labeling procedures. However, government interest in regulating growing and packing practices has only recently occurred.

On October 2, 1997, the President of the United States announced a plan entitled "Initiative to Ensure the Safety of Imported and Domestic Fruits and Vegetables" with the goal of providing further assurance that fruits and vegetables consumed by Americans meet the highest health and safety standards. As part of this initiative, the Food and Drug Administration partnered with the U.S. Department of Agriculture to issue guidance on good agricultural practices (GAPs) and good manufacturing practices (GMPs) for fruits and vegetables. The resulting document, published in 1998, was entitled "Guidance for Industry -- Guide to Minimize Microbial Food Safety Hazards for Fresh Fruits and Vegetables." This guidance document addresses microbial food safety hazards and good agricultural and management practices common to the growing, harvesting, washing, sorting, packing, and transporting of most fruits and vegetables sold to consumers in an unprocessed or minimally processed form. Because the control measures in the guide are general in nature, the authors encouraged growers, packers, and distributors to use the recommendations to tailor food safety practices appropriate to their particular commodity and operations.

Recent legislation proposed in the United States Congress has addressed the safety of fresh produce. The U.S. Senate has proposed food safety legislation for the fruit and vegetable industry in the form of the "Fruit and Vegetable Safety Act" proposed by Senator Thomas Harkin (D-Iowa). This bill would establish a program to assure the safety of raw and minimally processed

produce by mandating conformance to good agricultural and manufacturing practices. If the bill becomes law, growers and packers would, in effect, have to comply with more stringent sanitation regulations and inspection procedures similar to that which food processors already face.

Governments and commodity groups throughout the world have now developed their own versions of food safety standards. Fresh produce safety truly became a global issue in 1997 when the World Health Organization (WHO) published “Codex Alimentarius – Food Hygiene Basic Texts”. The purpose of the document was to recommend international standards for safe production and processing practices of foods and to thereby facilitate international trade of fresh produce. The document was noteworthy in that it recommended that all segments of the food system, from “farm to table”, work together to assure safe products for consumers.

Thus, within a few short years, international and domestic standards for fresh produce safety have been handed down to the food industry. Although many of these documents currently provide only voluntary guidelines and have no regulatory authority, produce distributors, major retail grocery and restaurant chains, and other buyers of fresh fruits and vegetables are increasingly relying on them for sanitation specifications and as a basis for independent third-party auditing of suppliers.

From the point of view of retailers, food safety is just one more risk to be managed in an increasingly litigious society. Business has long recognized the need to manage risks. Driven largely by the need to protect ones assets as a result of litigation, businesses pay heed to the legal concept of due diligence; ie. one must have utilized all reasonable measures to prevent a hazard from occurring in order to avoid liability in the courts. The retailer recognizes that if a customer should become ill from one of their products, then their business is at risk. They, naturally, wish to pass that risk on to someone else so they require written assurance from the distributor that the product is safe and wholesome. The distributor, in turn, passes the risk down to the packer who then makes the same demands on the grower. It is common sense and good business practice.

In 1999, Safeway Inc., with over 1600 grocery stores throughout North America, initiated a program requiring third-party food safety audits of its suppliers of “high-risk” produce. Initially limited to leaf lettuce, the retailer has plans to expand the program to other high risk items and ultimately to all fruits and vegetables it purchases. Shortly thereafter, Albertson’s Inc., with over 2000 stores nationwide, asked its suppliers of all fresh produce items to verify safe production and packing practices. Specifically required were the development of safe production manuals and

regular self- and third-party audits based on the sanitation standards provided in the FDA's "Guide to Minimize Microbial Food Safety Hazards for Fresh Fruits and Vegetables". A&P, Supervalu, and Kroger, the nations largest retail food chain, as well as Burger King, Subway, Wendy's and other fast food chains have also favored third-party audits as a means of assuring conformance to good agricultural and manufacturing practices.

Third-Party Audits and the Mushroom Industry

A complaint often made about auditing programs is the tendency for each buyer to develop their own sanitation standards and audit procedures. A grower or packer who sells produce to more than one grocery or food service chain may, therefore, be burdened with a variety of redundant and, therefore, expensive auditing procedures, forms, and inspection fees. Work is in progress by the FDA and several trade groups, including the American Mushroom Institute, to pursue common auditing procedures that would be acceptable to all buyers of fresh produce. The first step in this process was accomplished last year when the Penn State University Department of Food Science and the Products Committee of the American Mushroom Institute collaborated on developing field and facility sanitation guidelines for mushroom growers and packers. The document entitled "Good Management Practices for Safe Growing, Harvesting, and Packing of Fresh Mushrooms" is intended to identify a broad range of potential microbial, chemical, and physical hazards that may occur during growing, packing, and distribution of mushroom products. Food safety control measures presented in the document were drawn from the FDA's "Guide to Minimize Microbial Food Safety Hazards for Fresh Fruits and Vegetables", the "Codex Alimentarius Food Hygiene – Basic Texts", and "Current Good Manufacturing Practice in Manufacturing, Packing, or Holding Human Food (CFR 21 Part 110)". The document was presented at two Mushroom Food Safety workshops held in Avondale, Pennsylvania and San Jose, California and were distributed to all AMI members for review and comment. Additional copies are available through the American Mushroom Institute. Penn State University and the American Mushroom Industry are continuing to work together in developing educational programs that will assist growers and packers in dealing with the new food safety requirements.

Commercially grown mushrooms have never been implicated in a foodborne disease outbreak and, as evidenced by the rapid rise in sales for the last several years, have earned a high level of consumer confidence. However, the mushroom industry as part of the entire food system is

not exempt from increased government and buyer demands for assurances of safe production and processing practices. By taking a pro-active approach, the industry can collectively develop effective, reasonable, and cost-effective procedures for assuring safe growing and packing practices that satisfies the legal requirement for “due diligence”.

In an effort to assist the food industry in developing safe processes and products, Penn State University will offer a workshop on October 9-11, 2000 entitled “The Penn State Sanitation Short Course – Prerequisites for Food Safety”. The 2 ½ day event, held at the University Park Campus in State College, Pennsylvania, will be directed at members of the food processing and handling industries, including packers and processors who need practical guidance on sanitation and pest control procedures. For more information about the program, contact Dr. Luke LaBorde, Department of Food Science, Penn State University, 814/863-2298 or via email at lfl5@psu.edu. For registration information, call the Conferences and Short Course office, 814/865-7050, or visit <http://conferences.cas.psu.edu/>.

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