

Title Good agricultural practices to reduce contamination of produce for fresh-cut processing
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Citation Book of Abstracts, 2004 IFT (Institute of Food Technologists) Annual Meeting and Food Expo, 13-16 July 2004, Las Vegas, Nevada, USA. 321 pages.
Keywords fresh cut produce; GAP; food safety

Abstract

Produce food safety from farm to table is everyone's responsibility, including growers, shippers, processors and consumers. Preventing contamination of fresh fruits and vegetables with human pathogens, dangerous levels of chemical residues, or physical contaminants is the most effective means by which one can assure that "fresh" foods such as produce are wholesome and safe for human consumption. Epidemiological data indicates that the greatest risk to human health from consumption of uncooked produce is from pathogenic microorganisms. To minimize food safety risks, growers and shippers have implemented practices as outlined in the "Guide to Minimize Microbial Food Safety Hazards for Fresh Fruits and Vegetables" published by the Center for Food Safety and Applied Nutrition, U.S. FDA. 1998. This publication outlines what are commonly referred to as Good Agricultural practices (GAPs) which, when followed, can significantly reduce the risk of microbial hazards in produce. However, there are significant gaps in understanding of the microbial ecology of human pathogens on the farm and in the packing house environment. In particular, quantifiably defining water quality for irrigation as well as procedures and monitoring steps that assure the safe use of soil amendments warrant further investigation. Until science-based assessments of procedural risk are compiled, all recommendations are based merely on opinion and conjecture. This is particularly problematic for growers, as they must currently make decisions regarding deployment of their limited food safety resources without science-based understanding of all the risk factors or validation of intervention strategies. What risk factors are known and what information is needed to develop more effective on-farm GAP programs will be discussed. Specifically, the most effective strategies to monitor and control agricultural water quality, chemical inputs and personnel training will be addressed. The current status of effective preventative and intervention strategies and research in these areas also will be discussed.