

THE HISTORY, POLITICS & PERILS OF THE CURRENT FOOD SAFETY CONTROVERSY

Executive Summary



CAFF Guide to Proposed Food Safety Regulations

January 2008

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Published by the Community Alliance with Family Farmers

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Acknowledgements

This is the edited version of a longer work on farm food safety. Originally conceived as an activist and lobbyist guide to proposed farm food safety regulation, it grew into a position paper for CAFF on an alternative approach to farm food safety, as well as a critique of current approaches.

The author would like to acknowledge CAFF's Judith Redmond and David Runsten for review and editing the text, Kira Pascoe for review and discussion of CAFF's experience with Central Coast growers and environmental issues, and Libby Earthman for layout of the document. Many thanks are also due to Tom Willey, Dale Coke, Joe Morris, Chuck Benbrook, and Paul Muller who made time to review and critique this document.

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After contaminated bagged spinach sickened several hundred people in 2006, protection of food from human pathogens became an even higher priority for farmers across the U.S. It had become clear that *E. coli* O157:H7 and other related pathogens were highly virulent and apparently present across many farm environments. Farmers, ranchers, consumers and public advocates are now engaged in a debate over the direction of new regulations and initiatives intended to address food safety. This document provides background to those interested in a deeper understanding of the food safety debate.

There are several problematic issues to be addressed. One of those is the need to reconcile food safety regulations with environmental stewardship. Common to most of the official food safety efforts is a call for vigilance in keeping wildlife, cattle and manure away from crops. While there is some evidence that wild pigs and other wildlife harbor human pathogens, there is little evidence on persistence in wildlife or that they are source reservoirs of O157:H7. The on-farm impact of the new rules has been removal of wildlife habitat, fencing of farm fields, and poisoning of rodents and other animals. Critical practices to protect water quality and increase biodiversity are being discouraged. Water quality specialists, farmers, and consumers are distraught at the resulting environmental disruptions.

Another issue to be considered is the presence of reservoirs of *E. coli* O157:H7 in large dairies, cattle feedlots, and in the general farm environment. The beef industry has its own problems with O157:H7 as a contaminant of meat and the number of outbreaks was particularly high in 2007, despite 14 years of costly regulation. Reducing the reservoirs and movement of the pathogen would benefit both the produce and the beef industries, but current regulatory initiatives provide no incentives for such partnerships and tend to use a narrow farm-by-farm approach.

Finally, the fixed costs associated with some of the new regulations will have a disproportionate impact on growers who specialize in a diversity of crops, or who have limited resources. Most of the regulations have been developed by produce buyers and technical experts who are only familiar with large-scale cropping production systems. Subjecting all producers to the regulations seemingly required for industrial production will limit market entry of smaller farmers who can least afford compliance. In turn, this will limit the choices of consumers by reducing the types of farms and farm practices that they can support.

Food poisoning can be associated with many different foods, but the new regulatory initiatives are directed at fresh vegetables in general, and greens like spinach and lettuce in particular. One of the most successful efforts, the California Leafy Greens Marketing Agreement, focuses on an ill-defined group of crops called “leafy greens,” many of which are used in the conveniently packaged “ready to eat” bags of salads, spinaches, lettuces and lettuce hearts that have become so ubiquitous on supermarket shelves.

The practice of bagging cut greens in this “ready to eat” or “ready to serve” form is relatively new, but the industry has been very successful and is growing rapidly. It caters

to the supermarket shelf as well as food service, and it has become known as the “fresh-cut” industry. In fresh-cut processing plants, safeguards are taken to prepare fruits and vegetables to be eaten directly out of the bag. The processors, handlers and growers associated with fresh-cut leafy greens are large-scale, located primarily in California, secondarily in Arizona.

Despite precautions to protect consumers from pathogens, there are a number of risks uniquely associated with the fresh-cut industry: cutting tender young plants, mixing them in large batches potentially from multiple sources, and shipping them in bags that require constant refrigeration to maintain freshness and safety. These issues are very different from any potential risks that might be associated with growing and marketing whole produce in a more traditional, non-processed manner.

The multi-state outbreak of September 2006 was associated with bagged spinach. However, when investigators first became aware of the problem, even after narrowing it down to spinach, it took them several critical days before they pinpointed it to bags from a specific processing plant, manufactured on a specific day. Initial FDA warnings advised people not to eat any fresh spinach until further notice, shutting down nearly the entire spinach market in the U.S.

The approaches for protecting produce from pathogens that are under consideration (or in place) can be summarized as follows:

- The use of crop-by-crop Marketing Act programs that give a small number of handlers or growers the responsibility of enforcing a set of on-farm food safety standards. In this scenario, industry leaders exercise significant control.
- Regulations enforced by a centralized state or federal bureaucracy (for example, the Food and Drug Administration). In this scenario, significant authority is ultimately in the hands of elected politicians.

Federal and State Marketing Acts have generally been used to address marketing and trade issues. Their use in food safety is a new development. The California and Arizona Agreements (for example the California Leafy Greens Marketing Agreement) are potentially the first steps before a national law is adopted. This report outlines the following reasons why (mandatory) Marketing Act Orders and (voluntary) Agreements are not well suited for regulating on-farm produce safety:

1. Marketing Act programs give control to a small group of the largest processors or growers.
2. Marketing Act programs can give processors and handlers control over on-farm production practices, which can result in rules that are impractical and ineffective.
3. Marketing Act programs and other leafy greens food safety approaches have not distinguished between fresh-cut and whole produce.
4. The crop-by-crop nature of the Marketing Acts doesn't work well for farms growing more than one crop.
5. Marketing Act programs and other approaches currently in vogue put farmers in conflict with environmental stewardship.

6. Marketing Act Agreements require growers to follow regulations for which the enforcement agencies take no responsibility and accept no liability.
7. Marketing Act programs and other current approaches do not address important issues beyond the farmers' control.
8. Using Marketing Acts for food safety is beyond the original purview of the Marketing Acts and is probably illegal.
9. Over the long term, using the Marketing Acts for farm food safety will diminish consumer choice as well as farmers' freedom.
10. Using the Marketing Acts for farm food-safety can lead to massive regulation without substantially improving food safety.
11. Using Marketing Act programs for food safety exercises national or state control over an inherently local industry, primarily benefiting the largest agricultural entities.

This report concludes with eight recommendations that should be included in a better approach to farm food safety:

1. Reduce human pathogens throughout the pathogen cycle in the farm environment. On-the-farm and in-the-processing plant efforts will have limited success on their own. It is critical to add a food safety component that addresses the general environment and prevents contamination of farms and water.
2. Develop and enforce specific food safety regulations for all phases of the fresh-cut industry, including processing plants. Food safety for the farmers who do not choose to grow for fresh-cut is a separate issue, with its own requirements depending on risk, farm size, and history.
3. Encourage environmental stewardship as an integral part of food safety. Good Agricultural Practices on the farm have to mesh with Best Management Practices of the Endangered Species Act, Clean Water Act and Air Quality regulations.
4. Provide educational materials on food safety to limited-resource growers and provide all farmers with the tools they need to address food safety on their farms.
5. Identify and track serious human pathogens in watersheds. Several of the largest outbreaks in North America were caused by contaminated water, suggesting that water quality and public health agencies need to take a greater role in addressing the threat.
6. Support partnerships between ranchers and dairymen, researchers, watershed or water quality experts, and cooperative extension specialists to address food safety issues.
7. Conduct research into reducing the human disease impact of O157:H7.
8. Conduct research into food safety that is practical for farms, ranches and dairies. Practically oriented studies should be conducted into: understanding the cycling of the pathogen through soils and rangelands; understanding the relationships between human enteric pathogens contaminating food and the use of antibiotics in animal production; protecting the microbial safety of all farm inputs; and animal husbandry practices that reduce the incidence and shedding of O157:H7.