

A Sustainable Agriculture Perspective on Food Safety

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What makes food safe? Or, for that matter, nutritious, or enjoyable? Such questions acknowledge the many inherent risks that compromise the availability, diversity, quality, wholesomeness, cleanliness, and affordability of food, making it less safe, secure, or sustainable.

We enter this conversation as partners in the rapidly growing constituency of local and regional food systems across the United States. We are farmers and food-related business of many shapes and sizes, committed to providing the safest food possible without increasing the potential for adverse unintended consequences. We see 'food safety' in the context of many other risks to our shared food systems.

As citizens and as stakeholders, our commitment to food safety is informed by our **concerns** about:

- The long-term loss of topsoil, species diversity, natural resources, opportunity for farms and rural communities, and choices for consumers
- The public health consequences of industrial chemical and pharmaceutical use on and off farms
- The long-term effects of implementing inadequately tested and controlled technology
- The concentration of wealth, power, and control of production in the hands of fewer and fewer players in the food system
- Private ownership and patenting of seeds and other production technologies
- A widening gap in the connection between many citizens and the sources of their food
- Instances in which farmers are disregarded or demonized, in particular by other farmers
- The measurable but unpredictable impacts of the industrial model applied to agriculture

We believe that many answers to these concerns and to general food safety risks can be found in holistic approaches and 'bigger picture' solutions. We believe that everything is connected, and that as a consequence our global food system affects family farmers, communities and diverse species of plants and animals all across the planet. We claim our place at the table in every current and future discussion of these and other emerging issues involving our food system, its health and impacts.

We assert that our observations and sensibilities are economically, culturally and socially relevant, and accept responsibility to support a process of dialogue in which all viewpoints are respected and considered, including especially 'minority' viewpoints. We expect discussion to reflect a commitment to what's best for everyone, not to who is strongest, richest, or most powerful.

In this light, **we support**:

- A concerted and cooperative effort from all players, with renewed emphasis on consumer involvement and shared responsibility
- Significant training, outreach and support for implementation of proven best practices including understanding of on farm risks and control methods
- Responsive local, state and federal governments at levels appropriate to the level of risk
- A strong scientific lens that embraces holistic, integrated and contextual approaches, as opposed to a narrow view that only relies on reductionist thinking or worshipful assumptions about science and the industrial food model in general

We commit to proactively working with farmers and all players in local and regional food systems to reduce the risk not only of pathogenic outbreaks, but of other risks to the environment and our health, while upholding the quality, freshness and transparency that consumers deserve. We offer the following guiding principles for achieving safe and healthy food systems.

Sixteen Food Safety Tenets for Sustainable and Healthy Food Systems

Food safety is just the tip of the iceberg of true good agricultural practices. Before us are critical questions about how to feed a growing population with healthy, safe, fresh and affordable food on dwindling resources while improving quality of life, the environment, opportunities for farmers, and choice for consumers. Will sustainability be a market advantage or a precompetitive expectation of all foods and farming systems? What minimum standards of sustainability and safety will be acceptable in order for a product to enter the marketplace? How will these standards be assured? What are the relative roles of government and of private, voluntary initiatives? These conversations are ongoing and will continue for many years. The following principles with regard to food safety reflect the thinking of local/regional food system participants from across the United States:

1. **Food safety is noncompetitive and transparent.** Everyone who lifts a fork has a right to safe and healthy food, just as they have a right to choose foods based on the qualities most important to them. ‘Food safety’ should not be a competitive marketing food-trait, lest the most vulnerable people end up with access to only the least safe food, or simply fewer choices. Every person has a right to expect the safest possible food, and a right to absolute transparency about its production processes, no matter what they can afford to pay for it. Completely open, public information about what makes a food ‘safe’ is not negotiable.
2. **Effective food safety strategies must be global in reach and effectiveness.** ‘Think globally, Act locally’ means that we are all connected, and the consequences of any strategy or intervention must be considered in the context of a global network of relationships. Threats to food safety in any given locale can originate globally. Likewise, the livelihoods of farmers all over the world can be threatened as a result of ill-considered action in any particular locale, region, or nation.
3. **Assessment and reduction of risk is at the core of assuring food safety, at every level.** All participants in agriculture must be effective assessors and managers of risk. This is made possible through training, education and empowerment of all farmers and farm workers to understand the risks that can enter the process at critical points existing in their operations.
4. **Total elimination of risk may be an idealized goal, but is unachievable -- food safety requires constant vigilance and continual improvement.** Statements about “zero tolerance” make good public relations copy but are a distraction from the real work of minimizing risk. The changing and interactive nature of microbial pathogens, farm chemicals and other residues of industrial production, coupled with changing human immune tolerances, make grandstanding over ‘zero tolerance’ and ‘eliminating risk’ unrealistic and misinformed.* Eradication of pathogens is a scientifically impossible goal, the pursuit of which often sacrifices localized, mid-scale processing capacity. Effective minimization of risk is a more appropriate expectation as compared to the false hope promised by zero-tolerance strategies.
5. **No raw food product is inherently risky in and of itself.** Risk is an equation with many variables, including the method and manner of production, handling, processing, distribution, delivery and preparation. There is no ‘dirty dozen’ with respect to food. The life cycle of a food product, how it is treated throughout all of the stages from production to consumption, is the prime driver of the level of risk that product may carry forward to the end consumer.
6. **Concentration in and of itself carries tremendous risk.** Food processing and preparation is often done in concentrated facilities, sometimes several days, weeks or months prior to a “use-

by date.” Food is then shipped all around the nation and the planet. The risks inherently associated with this far-reaching chain of activities have not been adequately explored, contributing to the tendency to pass responsibility back to farms and farmers. The consequences of concentration and global distribution need to be fully explored and integrated into risk assessment and enforceable food safety best practices.

7. **Food safety begins at the farm, on every farm.** All farms, farmers, and farm staff, from the owners to the most transient farm helpers, have a role in producing safe food. Respect for farmers and concerns of farm workers is a critical foundation of any food system, and is essential to building and maintaining customer confidence in our products.
8. **We are all responsible.** Along the paths from the farms to individual kitchens, food can change hands, change ownership and form many times. At every turn, risks are introduced that far exceed those resulting from most on-farm activities. Public health requires awareness and effort from each of us, even in our own kitchens. Ultimate vigilance at the farm will not demonstrably reduce risk further along the supply chain. Efforts to unnecessarily push concerns back to the farm often hurt farmers and do little to assure food safety.
9. **We cannot test our way to acceptable food safety.** Testing along the chain of food production and distribution yields data necessary for the understanding and abatement of systemic risks. Data is needed from many critical points along the food chain to support scientific inquiry, continuous improvement and better practices. However, over-emphasis on testing disproportionately burdens smaller producers and processors while yielding only marginal results. In an equitable food system, testing is not a “cost of doing business,” but a public health requirement, and should be funded and administered in a way that does not unduly increase the negative impact on smaller operations.
10. **Effective policies and practices are rooted in science and proven systems of production.** An open, ongoing and transparent scientific effort to understand risks and alternative interventions is needed. The reality of an ever-shifting landscape of microbial pathogens, in which new risks emerge regularly, requires open-minded scientific inquiry and sharing of research on best practices. Scientific concepts such as vegetative buffering, the effects of biological diversity, and the potential for diverse, beneficial microbial populations to act against pathogenic microbes, deserve equal consideration alongside traditional, reductionist, “search and destroy” approaches.** In pursuing evidence-based solutions, we cannot afford to leave any stone unturned or ignore the stones turned over by any solid scientific effort.
11. **Food safety includes chemical and physical hazards, in addition to food-borne pathogens.** While the major focus of food safety is often the reduction of health risks associated with microbial, food-borne pathogens, solutions must also address physical hazards posed by chemicals, antibiotics, and other processing and packaging residues. Though such hazards may have slower, longer-term effects than microbes, they often pose more expansive threats and cannot be ignored in a comprehensive food safety strategy.
12. **HACCP as used in food processing facilities is not appropriate on farms.** Although risk is managed and reduced at critical control points, true HACCP is most valuable when applied to controlled environments such as manufacturing plants. Farms are biological systems and have few uniform ‘control points’ where HACCP can be relevant or effective. However, HACCP can provide a valuable framework for systematic thinking in the development of any on-farm food safety plan, and in risk management training programs.

13. **Federal efforts to enforce minimum standards of food safety must be integrated and respectful of state and local government stakeholders.** Establishment and enforcement of baseline standards, especially in areas of greatest known risk, is an important responsibility of government. Federal, state and local agencies need to work together in a consistent fashion to tailor enforcement that is appropriate and effective in light of local and regional realities, reinforcing a multi-stakeholder process of continuous improvement.
14. **Government intervention alone cannot achieve absolute protection of public health.** Unless we are to cede to our government unlimited resources along with abdication of our civil liberties and freedom of choice, government entities cannot guarantee safe food by themselves. Support of a democratic, small-business-friendly food system will require many other effective layers of ongoing activity and cooperation in addition to government intervention. The role of government regulation should be limited to those loci of risk that are most universally understood and far-reaching in impact.
15. **Overextended regulation and intervention will harm all players in the food system.** Adding disproportionate expenses to farms and food producers that already depend on slim margins will reduce opportunity and create barriers to entry for producers of all scales. Overextended regulations will undermine private and voluntary systems of training and continuous improvement, and will undermine any sense of “shared responsibility” among all food-system players, ultimately harming the public the regulations purport to protect.
16. **A healthy societal attitude toward risk is essential to understanding and achieving a safe, secure, and sustainable food supply.** It is in the very nature of risk that it can never be eliminated altogether and often increases in unintended places when reduced in others. The many routine risks in daily life far exceed those associated with ingestion of any food or encounter with our modern food system. This does not excuse any actor from responsibility to do the best possible job in bringing safe food to the public. However, it serves as a reminder that the cost-benefit ratio can easily turn against public well-being and must be closely observed. Sustainability is a progressive attitude affecting not only the production, processing, and marketing of food, but also its consumption and enjoyment. Such an attitude would suggest that the reality of “safe, clean food” exists largely in the increasingly educated preferences – and pocketbooks – of the beholders.

*For example, a highly placed official with the USDA Food Safety Inspection Service, when informed that the implementation of HACCP requirements was creating a hostile environment for small and mid-scale processors in his region, responded by saying that “until we eradicate E-coli pathogens, things are just going to be difficult for small producers.”

** Serious consideration must be given to those studies showing how liquid manure from CAFOs (confined animal feeding operations) has higher amounts of *E. coli* 0157: H7 than solid manure from farmyards, and the concentration of CAFO pathogens can more easily contaminate the water and landscape.