



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

Fields of FEAR

by Luther McKinney

➤ Fear, confusion and frustration have eroded the public's confidence in the wholesomeness of our nation's food supply and how it is produced. However, it is not too late for segments of the agricultural sector to join together to restore confidence. To do so agriculture must do three things: develop their position on environmental policy, develop their position on food safety policy and articulate both to strengthen the confidence of public policymakers and consumers.

Today's consumer environment can be summed up in three words: fear, confusion and frustration.

The reasons for the fear are understandable. In recent years U.S. consumers have been told repeatedly that the foods they eat are unsafe. They have been told that there is cancer-causing aflatoxin in the grains they eat, Alar on their apples, salmonella in their chicken, listeria in their cheese, parasites and mercury in their fish, hormones in their meat, and undetected pesticide residues on imported fruits and vegetables.

But consumers also are confused, because at the same time the media and some consumer groups are telling them how unsafe their food is, the government and the food industry are saying just the opposite. In fact, current government dietary guidelines recommend that consumers eat more chicken and fish, more grains, and more fruits and vegetables—the very same foods that have been characterized as harmful in headlines across the country.

The result, quite simply, is that consumers don't know who or what to believe. That in turn has led to a loss of confidence in our food supply and growing frustration with those who produce that food.

Food producers and processors also are frustrated. Increasingly, farmers are being told that they are poisoning America. They are charged with harming the environment by eroding the soil, contaminating the groundwater, and destroying wetlands and woodlands. Farmers also stand accused of making our food unsafe—of poisoning grains, fruits and vegetables with pesticides, fungicides, and insecticides; of contaminating meat with hormones and antibiotics and of producing meats high in fat and cholesterol. Food manufacturers are also under heavy criticism for making foods that are unnecessarily high in sodium, saturated fat, cholesterol and calories, and for failing to label them as such.

Luther McKinney is Senior Vice President, Quaker Oats Company.



Primacy of Perception

The truth is that these accusations are largely inaccurate and unfair. However, truth is almost irrelevant because when it comes to our food supply, perception has overtaken fact. The perception that our food is unsafe has begun to drive the food policymaking machinery in Washington, DC, and could mean increased government regulation for all the wrong reasons—besides creating a disaster for U.S. agriculture and agribusiness and providing little benefit to consumers.

A recent Food Marketing Institute (FMI) survey of over one thousand consumers illustrates how widespread this misperception is. Even though current scientific evidence does not support the conclusion that pesticide residues are a health hazard, FMI found that 95 percent of the consumers surveyed believe pesticide residues are a serious health threat. Where are consumers getting this misinformation?

Much of it comes from the media, where sincere efforts to inform often go awry because journalists do not always have the facts necessary to write a balanced story. The recent Alar story that appeared on the CBS News program "60 Minutes" is a case in point. Consumers stopped buying apples in droves after the story aired—even though it was based solely on the flawed research study of a single group. The result was an estimated loss this year of more than \$100 million to the U.S. apple industry.

Unfortunately, that kind of reaction is not likely to be an isolated event. The spotlight is likely to next focus on fungicides, as the Environmental Protection Agency begins the long re-registration process required under the Federal Insecticide, Rodenticide Act (FIFRA). Scrutiny of these fungicides could result in even more controversy than has been the case with pesticides. Stories on environmental contamination, which drew considerable media coverage this past year, also are likely to resurface in the near future—due in part to the likelihood that much of the 1990 farm bill debate will focus on whether to tighten restrictions on the use of farm chemicals and restrict other farming practices.

Misdirected Policy

Moreover, this scrutiny can only intensify with continued scientific advances. The measurements that once could be made only in parts per million now can be made in parts per billion and even—in some instances—parts per trillion. If used properly, increased detection can enable us to make sound judgments about the risks of a particular substance or practice; if used improperly, further confusion and misdirected government regulations could result.

One example of this misdirected policy response is the Waxman pesticide residue bill. This proposal by Rep. Henry Waxman (D-Calif.) illustrates the difficulty of fashioning a policy response to an issue surrounded by fear and confusion.

Among other things, the Waxman bill would eliminate the current system of balancing the benefits of pesticides against the risks they pose to society. It also would impose impossibly short pesticide re-registration deadlines. Finally, it would establish a novel method of calculating aggregate negligible risks based on total food uses of a pesticide and on total risks from all pesticides used on a specific crop. The effect would be fewer pesticides available to producers, decreased production, and higher farm and consumer prices.

Application of a risk/benefit analysis to Mr. Waxman's proposal shows that the bill poses significant risks to the continued viability of U.S. agriculture but

offers virtually no benefits to consumers. It would not result in a safer food supply. Pesticide residues generally do not pose a threat to public health according to the Food and Drug Administration. A 1988 FDA report asserts that virtually all tested foods sold in the United States have been found to have little or no detectable pesticide residues. Admittedly, in some cases residues have been found to exceed federal tolerance levels. However, the safety margins built into these federal tolerances are more than sufficient to ensure that consumers are not exposed to health risks.

While the Waxman proposal offers minimal benefits, its cost to agriculture and the U.S. consumer would be enormous. It would lead to almost immediate removal of a wide spectrum of essential crop protection products.

In a way, this bill is a perverse tribute to American agriculture. It reflects an increasingly widespread view that American agriculture can and should successfully supply people all over the world with abundant, varied, wholesome and reasonably priced food—but without using the very tools that made that success possible in the first place.

The Challenge to Agriculture

Today's consumers expect a lot from their food. Consumers are becoming more aware of the link between diet and health—and with that awareness they are demanding food that is not only convenient, nutritious, wholesome and safe, but also that food actually improve their health. As the baby boom generation gets older, demand is growing for foods that will help prevent chronic disease and help the aging population look and feel better. Moreover, consumers expect foods to be palatable and to look good; small, discolored but otherwise edible produce is not acceptable for most consumers. And consumers expect most foods to be available year-round and at affordable prices.

Finally, consumers expect to be fully protected from all hazards, real or imagined. Because they have been told repeatedly that pesticide residues are harmful, they expect those residues to be removed completely from their food supply. At the same time, however, they will not tolerate any decline in the appearance or quality of their food supply—especially fruits and vegetables—that those chemicals have helped to ensure.

Left: Grain arriving at Quaker Oats Cedar Rapids' plant.
Below and following pages: Grain being tested for aflatoxin.



Agriculture's Response

The question for American agriculture—input suppliers, producers, processors and distributors alike—is whether it can meet this challenge. In my view, the answer is both no and yes.

Agriculture cannot meet the specific demands of proposals such as the Waxman bill. That proposal insists on the almost immediate removal of many chemicals that are vital to producing and processing the high-quality food that consumers demand. Agriculture cannot simultaneously comply with Waxman's proposal and maintain the high standards to which its customers—the world's consumers—have become accustomed. The same is true of any other proposal that attempts to deal with perceptions rather than the facts regarding the safety of our food supply.

But agriculture unquestionably can meet the general challenge posed by increasingly sophisticated American consumers. In fact, it must do so if it is to survive.

Like any other enterprise, American agriculture depends on its customers to stay in business. If the consumer doesn't like what is produced, those who insist on producing these products rejected by consumers will go out of business. And others—those who produce what consumers demand in the marketplace—will prosper.

American agriculture must continue to farm profitably and productively, and provide American and world consumers with an abundant, reasonably priced food supply. It also will have to produce foods that meet the consumer's definitions of what is safe and what is healthy. And these same consumers will insist that all this be accomplished in ways that minimize adverse impacts on the environment.

Three Tasks

With that kind of challenge facing American agriculture, it is vital that the nation's farmers and food processors play a significant role in helping people understand what is possible to expect in terms of the safety of the food supply and the environment. To do this, agriculture must do three things: develop its environmental policy; develop its food safety policy and clearly articulate both to policymakers in Washington and to consumers nationwide.

Environmental Policy

Unfortunately, agriculture has let the ball drop with regard to environmental policy—a fact which Rep. George Brown, D-Calif., deplored at a January 1989 National Food Processors conference. Mr. Brown, who chairs the House Agriculture subcommittee responsible for agricultural research, pesticides and other related issues, expressed amazement that agriculture—the economic sector most vulnerable to environmental forces, both natural and political—does not have an environmental agenda already in place. He lamented the fact that agriculture has allowed environmental groups to dominate the agenda on the groundwater issue, which is of deep and immediate concern to the nation's food producers. And he scolded USDA and production agriculture for sitting quietly by while the EPA, the Council on Environmental Quality and various environmental groups hold seminars and conferences and issue reports that shape public perception of these issues.

Congressman Brown believes agriculture needs to take a leading role in the growing debate on how to protect the environment, but that, until now, farmers

have not even advocated the assumption of individual responsibility. For example, farmers are not advocating mandatory chemical application record keeping and well testing. Without this information, regulators are forced to assume maximum application (100 percent of a farmer's acreage every year)—an unrealistically high estimate that could end up costing farmers money, and driving up food prices.

This doesn't have to be. Congressman Brown says—and I agree—that agriculture can gain public support if it develops a credible environmental policy and sells it effectively. But the policy has to be a real one, a policy of creativity and substance. If agriculture fails to take the lead, or if it develops a narrow, short-term agenda that only defends the status quo, agriculture will be discredited and be at the mercy of political events outside its control.

Food Safety Policy

Agriculture—again, all segments of the sector alike—also needs to develop an effective food safety agenda that will help restore consumer confidence in the food supply. This agenda should have two components: educating the media and the public, and strengthening the government's ability to ensure a safe food supply.

Education. All of us want to do a better job of education—and in fact, agriculture *must* do a better job if it is to be a credible player in future debates on food safety. That means that agriculture must convince both the media and the consumer that specific questions of food safety should be integrated into the broader issue of societal risk. Consumers must understand that they do not live in a risk-free society and that some risk is necessary for all the benefits that today's technology brings. To help the public understand this point, agriculture has to do a better job of calculating and comparing risks and communicating the results of those analyses to both consumers and the media. Moreover, it must do a better job of explaining concepts such as negligible risk, relative risk, and risk assessment. Only then can the public integrate food safety concerns into the larger, more general issues related to societal risks.

Specifically, we need to help consumers understand that a person who eats food with a minuscule amount—for example, parts per trillion—of a cancer-causing pesticide will not automatically get cancer. Consumers also need to realize that any risk posed by

*Agriculture must
do three things.*



the presence of that pesticide does not automatically outweigh its benefits. The fact that thousands of fatalities occur as the result of auto accidents has not resulted in a ban on cars; the same logic should hold true for agriculture. It is up to agriculture to convince the public the same holds true for food.

As part of the education process, food producers and processors have to do a better job letting the public know what they already are doing to ensure the safety of the nation's food supply. For example, many food manufacturers have established stringent testing procedures and requirements to ensure the highest quality possible. One example of this at Quaker is our elaborate and exacting aflatoxin testing procedure, combined with our stringent aflatoxin standard for corn, which is one of the strictest in the nation.

Most consumers do not know that industry is taking these additional safety steps. That's a lapse on our part, and it's up to us to do something about it. Consumers deserve to know all the facts.

Agriculture also needs to educate the public on what would happen if chemicals were not available. The public needs to realize that fungicides prevent deadly molds from contaminating stored commodities, that rodenticides prevent the spread of vermin-originated disease; and that preservatives prevent bacterial growth and food spoilage. Chemicals keep apples red and wormless, wheat free of insects, and tomatoes free of

blemishes. And when it comes to the all-important bottom line, Americans need to learn that chemicals are a major reason why consumers in this country spend less on their food than people in most other countries. Without these production tools, some experts believe more than 30 percent of the U.S. harvest would be lost—and with that loss would come considerably higher food prices.

Government Performance. The second essential element of an effective food safety policy—improving the government's performance—is a bit more challenging, but equally important.

By most accounts, the public's lack of confidence in the food supply can be laid right at the government's door. A conflicting and confusing division of authority between EPA, USDA, and the Food and Drug Administration (FDA), a lack of resources, incomplete scientific data, and bureaucratic inertia have kept the government from responding aggressively to the current alarm over food

safety. When the government does respond, it is

often too little, too late, or too confusing. We need to remove overlapping and conflicting authority between government agencies, and we need better coordination among these agencies. The government must be able to speak with one voice and to respond quickly to consumer concern without getting mired in jurisdictional disputes or turf battles.

It is also critical that FDA—the federal agency responsible for ensuring food safety—be given desperately needed resources to allow it to do its job. Currently, FDA is an agency characterized by dwindling funds and staff and escalating responsibilities. Not only is FDA responsible for monitoring most foods and all drugs, cosmetics and medical devices, it now devotes considerable resources to dealing with the AIDS epidemic and is taking on responsibility for regulating the biotechnology industry. Compare FDA's staff of fewer than 7,500 people to the Department of Agriculture's 8,000 inspectors—responsible only for meat, poultry, and egg production—and the problem becomes clear.

This overburdened and underfunded agency must be revitalized through an infusion of additional and substantial resources. Senator Hatch (R-Utah), joined by Senator Kennedy (D-Ma.) and others, has proposed to do exactly that in his bill, S. 845. Enactment of this legislation would be an important step toward improving FDA's performance and restoring public confidence in the government's ability to ensure the safety of food.

But perhaps most crucial in any effort to improve government performance is the need to eliminate laws and regulations that stand in the way of a logical and consistent food safety policy. For example, current regulations set forth a risk-benefit standard for residues on raw agricultural commodities but require a risk-only standard for processed foods; the latter, commonly referred to as the "Delaney clause," imposes zero tolerance for cancer-causing pesticides in processed foods. We need to revise this standard in light of new scientific knowledge, and in light of the fact that this standard is typically applied only to new pesticides—not to the older and perhaps more dangerous pesticides.

For both raw and processed foods we need a consistent negligible risk standard—a maximum level under which the presence of pesticides is acceptable—for old and cancer-causing pesticides.

More uniform regulations among federal and state governments and between domestic and imported foods would be important steps toward assuring consistent government food safety policy. Without such uniformity, effective food regulation will be impossible. Instead, food regulation will become bogged down in a tangled mess of 50 different state regulations, not to mention the regulations of the many countries that export food to the United States.

Finally, food inspection programs need to be updated to reflect scientific and technological advances and to ensure their ability to deal effectively with microbiological contamination. This contamination poses a far greater hazard to consumers than do chemical residues.

There can be an end to the fear, confusion and frustration that is besetting American agriculture and American consumers—if American agriculture takes the lead. We can begin by taking positive steps to restore consumer confidence in the nation's food supply, and we can build on that confidence by taking an active role in shaping the nation's food safety and environmental agendas. These are the great challenges faced by American agriculture in the next decade. **C**

More uniform regulations among federal and state governments and between domestic and imported foods are needed.

