The last couple of years have been incredible ones to be involved in the food business. At no time in memory have the American people had a better opportunity to understand the complexity, the interdependence and the vulnerability of the system upon which all depend for nutrition. The timing of this meeting could hardly have been better.

Biotechnology is a controversial topic, difficult to discuss without provoking heated and divisive debate. My responsibility is to raise some of the issues central to that debate, hopeful that the opportunities encountered in later sessions of this meeting will provide the time to begin to form bonds of common interest that will see at least a few of us moving beyond the poles from which these discussions began. Judging from past meetings on this subject, I confess to being less than optimistic.

This presentation will discuss the issues of food safety and biotechnology from the perspective of the many voices of ordinary citizens. As a consumer, I am a member of that faceless mass known as the general public; an "A" student of citizen movements. I am concerned, among other things, with the issues of food safety and biotechnology. I believe it is important for all to know what this particular voice believes about the way our daily bread is produced, processed, and distributed.

This presentation includes thoughts about the context within which citizens find themselves today and how that context impacts on their attitudes about the food system, the technology that powers it, the public policies and regulatory structures upon which it is constructed.
Also, the prospective introduction of biotechnology into personal and communal lives and how it affects the picture will be discussed along with some ways of thinking about these matters.

A strong and healthy society requires a food system which:

— produces affordable, safe and nutritious products in adequate supply;
— provides economic return to producers which is fair and adequate to their needs and which encourages their stewardship of natural resources;
— encourages the sustainable development of healthy rural and urban communities, and
— contributes to the equitable distribution of goods, services and opportunities associated with the system.

Over the last ten years, it has become clear that the current food system is not structured to meet the above goals. Rather, it functions primarily to maximize profits with little regard to the social or economic stresses created for citizens who exist at the extreme ends of the system, namely: The primary producers, encouraged by public policies, by technological development, and by market forces to maximize production without regard for other people or for the environment; and the consumers who are encouraged to remain ignorant, to buy cheapness and convenience with little thought for the health effects of those decisions upon themselves; or to the impacts of their buying habits on the social and economic well-being of the people who produce the food; or on the sustainability of the natural resource base required to bring it to their tables.

This system, therefore, does not operate in the long-term interests of the citizens of this nation. However, there are powerful forces at work which derive short-term benefit from this arrangement, and which will undoubtedly resist reform.

The Minnesota Food Association (MFA), along with scores of other citizen groups is pursuing an agenda which will bring about changes in the food system both here in the United States and elsewhere around the globe. If society is to make the changes necessary to bring about a food system which will serve the interests of ordinary citizens, it must: become very smart about the food system; identify which parts of it serve well and which do not; and develop an understanding of the role technology plays...
in the system—which particular technologies contribute to the achievement of identified goals, and which do not. Finally, it must recognize that the current system over-values high technology development at the expense of economic justice and ecological well-being, and structures its involvement accordingly in order to bring about change.

It is necessary also to examine the social context in which these issues are to be considered. Most Americans operate with a given set of values, which guide everyday life and provides responses to things encountered in the environment. Most important among these values is the sense of security; security in knowing that basic needs of both individuals and families can be met, security in the predictability of life on a day-to-day basis. This sense of security is reinforced by trusting that the “people in charge”—elected officials, public servants, scientists and academicians are people who can be counted on as: responsive to societal needs of safety and security; fair and competent in the execution of their given duties; and long on vision and courageous in their concern for the future. Citizens value the sense of control felt when their role as citizens is fully empowered and respected.

Consequently, citizens in a healthy society must be prepared to accept and exercise power—prepared by experience, adequate and accurate information, and by access to the processes through which the rules of governance are made and enforced. This empowerment requires sufficient time and opportunity to engage in debate and dialog with others in the community. People need to feel that there is time to expand their knowledge fully before having to commit themselves on issues which are significant to the sense of security, trust, and control in their communities.

Food, in particular, has special meaning in the context of these values. The food supply is one of the most basic aspects of personal and family security and community trust. Threats to the reliability of supply, breakdowns in distribution, threats of contamination or toxicity will bring about public responses—rational or otherwise, which are intended to re-establish control and predictability in the system.

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Today, most people are completely dependent upon others whom they do not know, processes they do not understand, and institutions they do not trust or control, for virtually every aspect of nutrition. Greatly affects attitudes toward the food system in general, and sets up a volatile political and social environment.

The sheer scale of the system has created a situation which only recently began to find its way into our thinking. The food system is truly global in scope, the cast of characters changes rapidly, and brings in groups such as Labatt's Beer from Canada as a major player in the East Coast's dairy business, and Texas oil men moving into mammoth-scale pig farming in Colorado. One recent merger of two major food corporations involved 100,000 employees and will position the new company to command 10 percent of the American food market—an estimated 22 billion dollars in annual sales!

The rapid evolution of this system has brought with it a parallel and complex arrangement of government regulatory agencies and rules designed to protect the vulnerable consumer from dangerous additives, contamination by foreign materials and disease organisms, and adulteration by unscrupulous entrepreneurs. This is supposed to defend against the enormous scale and impersonal nature of the food system. Today, there is a widespread perception that the defense system is inadequate, is performing badly and, in fact, seems often to be in conflict with the public's interests by working too closely with those interests being regulated. This is certainly the perception in biotechnology's case.

Over the past few years, the people of this country have been bombarded with reports of:

- inadequate inspections of imported meats and fresh vegetables and other questions about the intent and/or competency of government food safety regulators;
- growth hormones in our meat;
- drug residues in our milk;
- Salmonella in chickens;
- Alar in apples;
- cyanide in grapes;
- resistant strains of human pathogens due to sub-therapeutic doses of drugs in animal production;
- genetically-engineered cross-eyed, arthritic hogs;
- releases of genetically-engineered organisms into the environment;
- patenting of animals.
just to name a few. These reports have created a climate of public fear, confusion and suspicion and have served to bring the reality of our dependence and vulnerability home with great clarity.

What does all of this have to do with the issues of biotechnology and food safety? Social science research indicates that the faster the pace of change, and the more complex the proposed change, the greater the resistance to that change by those who perceive it to be a threat to their security. On a scale of one to ten, biotechnology scores near 10 on all counts. People are concerned:

— that food which is grown or processed using biotechnology will not be safe to eat;
— that the system of regulating biotechnology research and testing is inadequate to assure the safety of these new techniques;
— that the application of these new processes will permanently alter and/or damage ecological systems;
— that the motives which drive the rapid commercialization of biotechnology research discoveries will compromise Land-Grant universities, seducing them through the promise of fame and fortune to short-cut their responsibilities for providing citizens with accurate, unbiased information;
— that the high technology, capital intensive aspects of biotechnology will further exacerbate the inequities of the current food system speeding the centralization and control of production resources, reducing real choices for ordinary citizens—all in the name of progress;
— that the prospect of enormous profits will lure people and resources away from other areas of needed and useful research and into short-term, less community-oriented areas of inquiry. For example, research to improve the nutritional quality of food will be sacrificed to that which will make food items more colorful, more flavorful, or more uniform in size, or have a longer shelf-life.
— Finally, people are most concerned about the rapid and unrestrained introduction of this powerful, radically-different technology into today’s society—a society in which the hierarchy of science is energized by an almost religious conviction that any problems caused by its short-sighted curiosity and assumptions of dominance can be corrected through more of the same. In other words, society may not be “grown-up” enough to handle the introduction of biotechnology.

What has the response been of the regulatory and scientific community to these concerns? There is little positive to report:
Concerned citizens are called uninformed, emotional and unscientific zealots by high government officials charged with the responsibility for regulating the industry on behalf of the public. In one specific instance, an official used the term “intellectual pygmies” to describe those people who would question any aspect of biotechnology;

— Citizen efforts to create locally adapted and accountable regulatory mechanisms are threatened by Federal legislation which would preempt their right to set tougher standards than those established at the national level;

— Land grant researchers whose work is being supported by grants from biotechnology companies are appearing in legislative hearings and public events touting biotechnology benefits without balancing considerations of possible problems;

— Legitimate questions about possible unintended outcomes are glibly put aside with assurances that this technology is no different than what has been in use for years in agriculture.

Responses such as these are familiar to citizens who have been involved in the early anti-nuclear power issue. However, biotechnology is being introduced into a society radically different from the one in which nuclear power was introduced. Citizens have more information and less trust in their institutions, and more experience in organizing and in confronting power. Citizens' interests are smarter and better organized. Environmentalists, church groups, animal welfare advocates, hunger organizations and even small groups of scientists and economists are forming networks and coalitions that transcend single issues and national borders.

The so-called “consumer movement” is much more than that. Citizen power is being exercised on many fronts, and there are indications that it is having an impact. The recent action of the Minnesota and Wisconsin legislatures to establish a BGH/BST moratorium is a good example of this impact.

The message is a simple one. We are a society of many voices:

— some rational and reasonable, willing to sit around the table with you and debate the many points of view involved with an issue in a civil fashion;

— some who are motivated by fear and uncertainty, activated by newspaper headlines, confused and randomly powerful as they try to adapt their purchasing behavior to the latest report on diet and cancer;
— and some who see biotechnology providing a public platform from which to speak out and organize the fundamental reform of our food and agriculture system.

The issues being discussed here are far more complex than just a matter of figuring out how to communicate a particular message to consumers.

In a democratic society, the sound of many voices, raised in civil discourse, is a sign of a healthy society, where the search for the right path is a communal process, not simply the exercise of power of one group over another in a win-lose struggle. We all occupy the same planet, deriving basic needs and a sense of community from the same base. No voice in the process should be demeaned, ignored or stilled.