

Citizens #5832539
Organic Trade Association
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Operator: Excuse me everyone, at this time Ms. Katherine DiMatteo has now joined. All lines will be muted during the broadcast. After the presentation we will begin the question and answer segment. If you would like to ask your question at that time you may simply press star one on your telephone keypad and your questions will be answered in the order received. If you are in the queue and no longer wish to ask your question you may simply press star nine. Should any participant need assistance please disconnect and redial your conference number. Ms. DiMatteo you may begin.

Katherine DiMatteo: Thank you very much. Well welcome everyone to our telephone press conference today. It's September 23. My name is Katherine DiMatteo. I'm the Executive Director of the Organic Trade Association. The Organic Trade Association was organized in 1985 and I've been the Executive Director since 1990. And we've been working to organize our community of stakeholders involved in organic agriculture and products to have consistent standards, to have high quality food for consumers, protection for farmers and deliver to the customer a product that they can feel confident and buy eagerly as well. One of the main questions that has come up over the many years that I've been here at the Trade Association has always been the price. Why does organic cost more? Why should it cost more because you're using less materials when you are growing organic, you've eliminated many of the chemical and synthetic inputs, it should cost less, it's not affordable, it's a niche only for the very wealthy. And that's a question that we would like to explore a little bit today with our two guests.

And our guests are Sandra Steingraber. Sandra is an ecologist, author and cancer survivor. Sandra has a PHD and is an internationally recognized expert on the environmental links to cancer and reproductive health. She received her Doctorate in biology from the University of Michigan and Masters Degree in English from Illinois State University. She has taught biology at Columbia College in Chicago, held visiting fellowships at the University of Illinois, Radcliff, Harvard and Northeastern University and served on President Clinton's National Action Plan on Breast Cancer. Her highly acclaimed book, *Living Downstream, an Ecologists Look at Cancer and the Environment* presents cancer as a human rights issue. Her new work, *Having Faith, an Ecologists Journey to Motherhood* explores the intimate ecology of motherhood, both a memoir of her pregnancy and an investigation of fetal toxicology. *Having Faith* reveals the alarming extent to which environmental hazards now threaten each crucial stage of infant development. She is recognized for her ability to serve as a two-way translator between scientists and activists. In 1999 as part of international treaty negotiations she briefed the United Nations delegates in Geneva, Switzerland on dioxin contamination of breast milk.

Our second guest this afternoon is Robert F. Kennedy, Jr. Robert F. Kennedy, Jr. is credited with leading the fight to protect New York City's water supply but his reputation as a resolute defender of the environment stems from a litany of successful legal actions. The list includes winning numerous settlements for Riverkeeper, prosecuting governments and companies for polluting the Hudson River and Long Island Sound, arguing cases to expand citizen access to the shoreline and suing treatment plants to force compliance with the Clean Water Act. He served as chief prosecuting attorney for Riverkeeper, senior attorney for the Natural Resources Defense Council and President of the Water Keeper Alliance. At Pace University School of Law he is a critical professor and supervising attorney at the Environmental Litigation Clinic in White Plains, New York. Earlier in his career Mr. Kennedy served as Assistant District Attorney, in New York City. Thank you both for being with us today.

September is celebrated by the Trade Association and our members and the community as Organic Harvest Month and during this month there are many features that are shown in stores outlining the benefits of organic, purchasing organic and the variety of organic products that there are. And we've seen over the years that our consumer base has changed. There are more and more people interested in organic agriculture and the products that it brings. We've seen that the demographic of our customer has changed over the course of time, but still that cost at retail is one of the factors for all of us that help or dissuade us from making a particular purchase. And I would like to ask the panelists each to comment right now on their thoughts about cost. Cost of food and cost at retail and whether they're true reflections of the cost of agriculture. Sandra?

Sandra Steingraber: Hi. I'd be happy to. First of all I want to dispel a couple of myths about organic farming. The first is the idea that organic farms are not as productive as conventional farms. And in fact there's been some good biological investigation of organic farms now, especially in Europe that show that by and large yields on organic farms are on par with those on conventional farms and they use less resources to get those high yields. A second myth is the idea that organic farms must be overrun by insect pests and that turns out to not be true either. And there are some good studies that have been done in California showing that organic farms actually have no higher levels of insect loads in the fields than conventional farms. But there is a difference and that is that conventional farms actually have higher numbers of pest insects whereas the insects on organic farms are more diverse and they actually have a lower number of pest insects and higher number of enemy insects that eat the pests. So clearly what's happening is to enjoy those high yields in organic farms the natural predator insects are substituting for chemicals in taking, in keeping down pest insects. And I think we need to understand those two truths about organic farming to understand the mystery of why organic foods cost more. Given that farmers have comparable yields and they use less resources it doesn't seem

logical that it should cost more. And I actually spent the better part of last summer in the agricultural library here at Cornell University trying to answer that question. And I guess I should say that, to add to my biography, that the last four years I've been a visiting scholar at Cornell here in Ithaca, New York. Currently this fall I started a new position at Ithaca College in Cornell, which is my current affiliation as a visiting scholar.

So last summer I was trying to answer this question at the ag library, and I have a personal stake in the answer because I'm not only a biologist but I'm a mother of two small children and I've made the decision myself as a consumer to buy all organic food for my family. We're on a single income. It's my husband who is the stay at home parent and we spend probably considerably more than the average family of four for our groceries. I budget \$140 per week. And my financial counselor says that I could get that down to about \$100 a week if I would just agree to shop at the regular supermarket and use coupons and buy conventional food like everybody else. So it's about 40% more I suppose to buy organic food. So the experiment that I did to help me answer this question was to make two pizzas from scratch and pizza is, I consider it kind of the classic North American meal. Pizza's identified by 70% of school children as their favorite food and it's certainly the favorite food of my two kids. So that's why I chose pizza. And so I assembled from scratch a pizza made from conventional ingredients and one made from organic ingredients and in fact my organic pizza cost me 40% more to make than the conventional one. So then I traced back each of the ingredients that I used to the growers as best as I could. So I looked at where the wheat come from, the cheese, the garlic, the olive oils and the tomatoes to see how they were grown to see if I could figure out the reason for the higher cost.

And what I was able to determine was that there were basically three reasons. One is that the organic farms that were growing my organic ingredients were smaller and they had a greater diversity of crops that they grew. So the tomato farmer and the garlic farmer were growing lots of other kinds of crops and rotating them, which is one of the great ways they keep pest problems in check. But that means they also have a smaller overall harvest of any one of those crops so that supermarkets have to source with more suppliers and that keeps prices high.

Another reason I discovered is that organic food provides higher profit margins for the farmer and that was certainly the case in the cheese that I was using on these pizzas. As of June 2003 conventional dairy farmers here in upstate New York were receiving 11 dollars for 100 pounds of conventionally produced milk whereas the organic dairy farmers were enjoying much higher prices, they receive 20 dollars for the same 100 pounds of milk. And that turned out to be a really good think because here in upstate New York the reason that a lot of farmers are switching over to organic in the dairy industry is because they're going out of business with these historically low milk prices.

And organic is actually keeping dairy farming alive here in upstate New York. I heard time after time that farmers just weren't making a living, they couldn't even afford to go out of business said one, doing it conventionally so they're now doing it organically.

But the main reason I discovered, and this is reason number three here is that organic food really does cost more to produce. And that's because organic farming relies more on labor and less on chemicals and in this country labor costs more than pesticides. So organic food actually represents the true cost of growing the food whereas the pesticides that we use on conventionally grown food are not as cheap as they appear because the full price of the chemically grown food doesn't all become part of the retail price that we pay at the supermarket. There are lots of externalized costs from using these pesticides that are actually passed along to the public in other ways.

Katherine DiMatteo: Sandra, I'm going to interrupt you right here and we're going to come back to that part.

Sandra Steingraber: That was my last sentence.

Katherine DiMatteo: Okay. We're going to come back to the part about environmental externalities after we hear from Mr. Kennedy. Are you there?

Robert F. Kennedy, Jr.: Can you hear me?

Katherine DiMatteo: Yep.

Robert F. Kennedy, Jr.: Okay.

Katherine DiMatteo: Just barely. There you go.

Robert F. Kennedy, Jr.: Organics at this point are more expensive as Sandra pointed out that has something to do with the scale of production and the cost of labor. I bought, buy organic for my home, my wife buys it, we view it as almost a charitable contribution supporting our community and supporting the kind of infrastructure that we believe is sustainable. That will give our community the same opportunities for good health, for enrichment and for dignity over the long term. And it's the same reason people donate to hospitals or to cultural institutions, because there's something that they want to preserve. And so I think most people are willing to pay more for organic food, for good healthy food and it's not always well advertised by the one area, you know, milk, organic milk in the USA, I deal with the grocery industry and it flies off the shelf because people see it, there's a clear choice between non-organic and the organic and people choose to buy organic. I would also, just to add to what Sandra said about the externality, you know, I'll give you an example how organic, how organic food, the price of organic food is really reflected in the price you pay at the market

whereas the price of conventional food, pesticide grown food is paid by all of us but not in the market place, but much higher cost. Atrazine for example gives us cheap corn, which we can buy at the market place but the people who live in the Midwest now are paying much higher prices for their utility bills because they have to have these very elaborate carbon filtration systems for their drinking water supplies that filter out the atrazine. That price is not reflected, that cost, that impact is not reflected in the price of corn when it gets to the market place and that's really the problem is that the pesticide industry of manufacturers and the fertilizer industry have been able to garner huge subsidies for themselves and to shift their costs to the public so that they don't show up in their product.

I'll give you another example. In the factory meat industry, factory farms, a pig produces ten times the amount of waste as a human being. So a hog farm or a hog factory with 50 thousand animals produces the same amount of waste as a city of half a million people. Well the owner of that or the contract farmer is dumping that waste onto his soil. He's not growing crops with the waste, he's dumping it and he's disposing it and under the Clean Water Act and many other Federal Statutes if you want to dump that amount of waste you have to build a sewage plant. And if they had to build a sewage plant it would add about \$1.25 a pound to the price of every pound of pork at kill weight. And so, and pork right now is at the slaughterhouse about 35 cents a pound. So they would go out of business. They cannot produce a pound of pork or a slab of bacon more efficiently or more economically than a traditional farmer can unless they break the law. But they've been able to use their political clout to escape the discipline of the free market and force the public to pay their cost of production. And that's why conventional agriculture can offer us cheaper food than organics, and you know, artificial fertilizers.

Katherine DiMatteo: Okay. Well thank you very much and Sandra I'd like to get back to you to build on what you were beginning to say about your thoughts on the externalities and what those costs are related to public health.

Sandra Steingraber: Well let me just give you some little specific examples from my pizza experiment. Let's talk about fresh market tomatoes for instance. My kids love to have fresh tomatoes chopped up on top of their pizza and most fresh market tomatoes are grown in the state of Florida. And when you grow them conventionally very often the growers use a pesticide called methyl bromide which sterilizes the soil, essentially takes everything out of it, not only the pathogens but also the earthworms and anything that's alive in the soil. And methyl bromide is slated by both the Clean Air Act as well as the Montreal Protocol on substances that deplete the ozone layer as a really terrible ozone depleter. It's one of the most powerful ozone depleters we know. So it's slated for phase out, both by the Clean Air Act and by this international agreement called the Montreal Protocol to protect our ozone layer. And yet the conventional growers in Florida organized under the Florida Fruit and Vegetable Association are lobbying both our US Government and the United Nations who's in charge of

this, the ozone secretariat for an exemption so they can go on using this ozone depleting chemical because they can't grow tomatoes conventionally without it without suffering terrible economic loss, meaning that they would pass the cost of those tomatoes on to the consumer. And I as a mother am shocked to know that. That I would be buying conventional tomatoes and supporting farmers who want to use ozone depleting chemicals because I spend a lot of time as a mom trying to keep my kids out of direct sunlight between nine and, you know ten in the morning and two p.m. And we know that skin cancer is a problem. We know that sunburns to children when they're young create later risk for melanomas and all the mothers I know worry about this. So I want my tomato buying habits to protect the ozone layer.

Katherine DiMatteo: Well thank you for those comments Sandra and Robert Kennedy, do you want to expand in this line of thinking about the environmental impact?

Robert F. Kennedy, Jr.: I mean they, you know, environmental impacts are even greater than the public health impacts and the externalities are so enormous and so catastrophic in conventional farming these days that they're unsustainable and it would, it simply would not be able to compete with organic farming if they had to pay, if we lived in a true free market economy. Jim Hightower used to say you know the free market is a great thing, we should try it some time. If we did try it you would see organic farms prevailing in the market place. I'll give you a couple of examples of things we've lost. Our groundwater. All over the country now groundwater is contaminated with pesticides. We're wiping out beneficial insects. Farmers, there's such an inadequate bee population in this country now that farmers, crop farmers are now renting bee hives to fertilize their crops. Our birds are being damaged and many of them are at critical levels. Many of our songbirds and our fish eating birds cause that's where the pesticides end up. We use more pounds of pesticides every year to grow the same amount of crops and that's because it's like an addiction. The amount of pesticide and the toxicity of the pesticides have to increase every year to keep up with the ingenious evolutionary aspects of insect behavior. As the insects evolve to deal with the pesticides we have to put more and more toxins, greater amount of poundage, greater amount of toxicity onto our food.

I'll give you a couple of examples from the factory farm world. We see now the areas around factory farms there's a series of studies that show typically in the counties where factory farms locate property values drop about 30%. Well that price in a true free market system would be reflected, those losses, the impacts on those property values would be reflected in the price of Smithfield's or Cargill's product or Tyson's Foods product when it makes it to the market place. People become sick. There's a billion antibiotic resistant bacteria that leave each one of these farms, each farmer grows every single day according to a recent study by the United States Department of Agriculture. Those antibiotic resistant bacteria damage other herds and they also

cause public health problems. It is well documented that people who live downwind of a corporate hog farm suffer from a grim inventory of illnesses, including depression, respiratory illnesses, eye infections, ear infections, throat infections, gastrointestinal infections. That fish kills are, that fish populations have disappeared from many of the rivers in North Carolina as a result of this industry. In 1993 one spill from one hog farm killed a billion fish in the Noose River. A billion. And we loose about 100 million every year now from the Noose because of nutrients from the hog industry. That puts fisherman out of work. 27 thousand 500 independent hog farmers have lost their jobs in the last 15 years in North Carolina. And those people, we're seeing rural communities empty, the Agways aren't there because they don't buy the corn in the states. The banks are gone. We're seeing a collapse of our rural infrastructure because of what so-called conventional farming is now doing to agricultural production. And we're seeing a consolidation where a few large companies are now controlling all of our agriculture. And that is something that ultimately will impose huge costs on our national security and food security.

Katherine DiMatteo: Well thank you for those thoughts and it does remind me of many of the public health, other public health impacts that we're beginning to hear about in scientific studies. And, including things like reducing exposure to dioxins at an early age as being something that's very critical because dioxins accumulate in the body over time. And that, you know, we're also seeing in other studies the environmental health perspectives recently had a report that linked birth malformation increases in four US wheat producing states because of the types of herbicides that are widely used there. And that the Salk Institute researchers have found a link between exposures to organophosphates and neurological disorders including Attention Deficit Hyperactivity Disorder.

Sandra would you like to make some comments about the public health impact as, you know, both as a scientist and as a parent?

Sandra Steingraber: Sure. Well let's just look at pregnancy from start to finish for a minute. We know from a study in Missouri that there are links between pesticide exposures and low sperm count in men. And what's interesting about this study is not only (inaudible) used but also that most of these men were not farmers. They were likely exposed through contaminated drinking water in their community. So this is a public health effect on sperm quality that's not, that the general population is now experiencing in some of our agricultural rich areas. So infertility may be one public health problem related to pesticides. We also know from a study of Canadian farm families that exposure to certain weed killers raises the risk for miscarriage. And I've certainly had two miscarriages myself. I wouldn't know how to quantify the price; the externality created by pregnancy loss is certainly an emotional term that's quite something. We know that women are, women who have been exposed in the womb as fetuses themselves to the now banned pesticide DDT that when those girls exposed in utero grow up to be women they have more difficulty becoming

pregnant. We also know that in California, Minnesota or Iowa if you live near a pesticide sprayed field and then you get pregnant it raises your risk of certain kinds of birth defects. And we know from studies in Washington State that certain kinds of organophosphate insecticides that are used in agricultural fields turn up in the house dust of nearby homes and in the urine of young children who inhabit them.

So those are the kinds of public health problems we worry about in pregnancy and reproduction in farming areas. And at the consumer level we're just beginning to take a look at this now and there's one good study that came out of Seattle recently showing that children whose parents fed them exclusively organically grown food have significantly lower residues of certain kinds of pesticides in their urine than children fed on conventional diets. This is the first study of its kind. We don't know what the health effects are but I certainly as a mother would prefer that my kids had less pesticides in their urine than more.

Katherine DiMatteo: Mr. Kennedy do you want to add anything to this discussion that we're having about these externalities, both economic, environmental and public health?

Robert F. Kennedy, Jr.: Well on a public health issue you know the majority of pesticides are neurotoxins and they attack, they function by attacking the nervous system of the insects. Well the nervous system of insects is constructed of the same materials and the nervous system of human beings. And they kill human beings if you gave them the same doses we'd have the same dose response. They kill by overwhelming the insect with very large doses, but in small doses they can also effect nervous systems and there's people, there's 150 thousand farm workers, mainly Hispanic who become sick in this country every year because of the acute effects of pesticide exposure. And God knows what's happening to their families because those kinds of measurements are not, there's nobody going around doing those kind of surveys. There are, but these people are hospitalized with typical neurotoxic symptoms; twitching, trouble breathing. And some of them die as well. Eating, or pesticide exposure at low doses from eating fruits or other foods that are contaminated with pesticide has been connected to autism, to Alzheimer's disease, to attention deficit disorders, to learning disabilities and in a recent study also to the occurrence of asthma. The increased probability that a child will get asthma if it's mother is exposed to pesticides during the fetal period. There's also all of these illnesses are now seeing an uptake across our society and we can't make a direct causative link to pesticides but there's a high probability that pesticides are linked to these. And they are also linked to cancer and you know EPA plays this game where it says yes that many of them are probable carcinogens but you know we're probably not giving them out in large enough doses to cause a lot of cancers. Well there's no known safe exposure level to a carcinogen. And you know we ought to be, instead of caring so much you know we've got an administration now that's

saying that they're going to leave no child, there's no child left behind but you know the current EPA and FDA seem much more concerned about the health of the pesticide industry and the chemical manufacturers than they do about our children.

Katherine DiMatteo: Do you want to make a comment about the recent, the lawsuit that's been just filed against the EPA?

Robert F. Kennedy, Jr.: Well NRDC (Natural Resources Defense Council) has just filed yet another law suit against EPA for failing to comply with the rule that says, that requires a tenfold infant and child protection safety factor the National Academy of Sciences has recommended. When pesticides, when the safety levels of pesticides were originally determined by EPA they used adults, full sized adults eating adult foods. But when the National Academy of Sciences looked at this they said wait a second, children eat a lot more fruit per pound of body weight than an adult. An adult eats one apple every three days, children eat, with apple juice and apples, you know several apples a day. So the pesticides, their exposures are actually larger but because of their neurological system is not completely formed it's also much more vulnerable. Probably ten times more vulnerable than an adult human to disruption by neurotoxins. So Congress unanimously passed a law that was signed by President Clinton that required a ten-fold protection of children. But EPA is not complying with that law and the NRDC charges that EPA's in violation of that. And also charged them with failing to protect highly vulnerable and highly exposed people including farm worker's children and other children living on or near farms who are more heavily exposed to pesticides than average children. And also for relying on confidential proprietary industry developed computer model to determine pesticide risks.

Katherine DiMatteo: Well it certainly leaves one to pause and think what in the world can we do without being self serving at all to talk about organic agriculture because in our standards and in our philosophy and in our approach to developing methods and materials for organic agriculture we are, we have looked at all these things. And we have come up with a standard that's strictly controlled the type of production levels the playing field in terms of competition for the farmers. But we still are making small but good progress in terms of converting agricultural acreage. We're still less than 2% of farmland in the United States. Oh, I'm sorry, less than 1% of farmland in the United States and just about 2% of the food supply although there is definitely interest by the public in making changes. Sandra what would you say that the parents or schools might be able to do about providing better food or at least food that may reduce the exposure of the children at, in either the school system or in their homes to pesticides?

Sandra Steingraber: Well I think there are all kinds of great initiatives now that are springing up and one of them is the realization that investing in local agriculture is also a good way to invest in organic agriculture and lower the cost.

Because obviously if we're, if we can grow things, you know lettuce organically here in upstate New York and we're not transporting it using fossil fuels from California that lowers the cost right away. So what I'm seeing here in this rural farming area where I live in is for example there's a coalition of human service agencies here that's just announced a program to make organic vegetables accessible to low income residents with children. So for 30 dollars a month participants receive a weekly bag of fresh produce and in exchange they volunteer their time to work on nearby organic farms that actually grow the food. So that they're helping with the chores and they're also learning the art of growing food organically with the hope that they'd be able to then go home to their own houses and start organic gardens.

So it's both that old proverb of giving a man a fish versus teaching him to fish. It's providing both the fish and the skills for fishing if you will. So these are the kinds of creative innovative things that I'm starting to see and as more and more schools look closely at their food and where it's coming from with all of the focus now on obesity and what kids are actually consuming in the foods I think it's natural now to start thinking also about who's growing the food, what price we're paying not only for the kids who are eating that food but also for the children of the farmers who are producing this food. Cause one of the things that we know is that farmers have higher rates of certain kinds of cancers than the general population and so do their children. So pediatric cancers among farmers are in excess and in some cases so are birth defects in farming communities. So all of us who are parents I think have an obligation to think about how are own food buying habits affect the public health of children in farming areas and certainly the schools have a stake in this as well.

Katherine DiMatteo: Robert Kennedy, would you comment on what we as citizens might do beyond the personal choices that we can make in our family life or in our schools or in our local community? Is there something more that we can do as citizens in terms of making some changes in the agricultural policy that exists here in the United States?

Robert F. Kennedy, Jr.: Yeah I mean first of all as consumers we can use our consumer power to buy organic and we do that in my house without much trouble. We buy Organic Valley milk and we buy Niman's Ranch, our meat comes from Niman's Ranch and we shop at Fresh Fields and Whole Foods, big supermarkets that are organic. And when we go to a regular supermarket we go to the organic section first and do as much of our shopping there as possible and then move on to the find something we couldn't find there. But the most important thing for citizens to do is to take some political action. Join an environmental group that's working on these issues and start to pressure EPA to take unsafe pesticides off the market. For example atrazine, which the EPA has been dragging its feet on for years and they're supposed to make a decision about it on Halloween and it should be off the market. But unfortunately EPA today is in the possession of the pesticide industry and is unlikely to take any of

these off the market. Methyl bromide which the Bush Administration is now trying to abandon the Montreal Protocol which banned ozone producing chemicals and it's an international protocol, we're a signatory to it and it has been extremely successful. The ozone layer is now reconstructing itself thanks to the Montreal Protocol. But methyl bromide as well as being the most potent ozone disrupter is still being manufactured and still in use and the Bush Administration is now trying to expand its uses.

We also need to pressure FDA to do its job in monitoring the food supplies. Right now the food supply isn't highly monitored at all for pesticides. The monitoring that is done is under funded, it's haphazard, it is, there's nothing systematic about it and it's really designed to not find a problem. And FDA should do its job and be monitoring and protecting the food supply. Again you know this administration has been an obstacle because the priorities of the chemical and pesticide industry have been given favor over public health priorities by this administration. But we really need to force the administration to pay the political price for not protecting public health.

Katherine DiMatteo: Well it also raises in my mind the often heard statement that the world couldn't go organic and if all our agriculture changed to organic methods we wouldn't be able to feed the world or that we'd be disrupting the economic system. I'd like to hear any thoughts you had about that as a final comment before we open up for questions both from, from our audience here. But Robert Kennedy if you'd like to go first.

Robert F. Kennedy, Jr.: Yeah. That is utter demonstrable nonsense. Our problem in this country is not, and in the world is not under-production of agricultural produce. Our big problem is over-production. We're producing too much. And you know we are, there are huge surpluses that have now distorted farm policy all over the world. There's butter mountains and egg mountains in Europe and England and everywhere that have to be destroyed or dumped. There are, you know we produce far more oranges, you name an agricultural product, they're highly subsidized and over-produced. And what's happened is we're eliminating human beings from the farm, we're turning our farms over to large corporations for pesticide, unsustainable pesticide and fertilizer intensive farming that is over producing these crops. And that really ultimately threatens our democracy because farming is not just about food production. It's about, this, what we're doing today is a final nail in the coffin of Thomas Jefferson's vision of this nation as a democracy routed in tens of thousands of independent free holds owned by small business men gentlemen farmers. And you know that's so important. Democracy is fragile and it's so important to have all of those, you know American democracy came off of our farms. That's where you know, that's where we're routed. And when we eliminate these farms and destroy rural communities and push human beings off the farm so that there's now, we're back in a feudal system like they had in Europe which could not have developed this kind of democracy. We're in a feudal system where the owners of

the land no longer work the land. Where the owners are you know, Dole and Cargill and Smithfields and that farmers are indentured servants on that land or they're paid hired help with no stake in the system of the land. They're producing lower quality food and too much of it. And what we ought to do is go back to a more labor intensive vision of farming where the true costs of producing agriculture are reflected in the price of the crop and that is evident all over the world. Anybody who says that pesticides are going to somehow threaten our ability to feed the planet is, knows nothing about farm policy and you know all you have to do is ask them the one question. Why do we have over-production and is over-production a good thing? It is not a good thing because it deprives us the ability to sustain what we produce food.

Katherine DiMatteo: Thanks very much. And Sandra your last thoughts.

Sandra Steingraber: Well I'll think with my biologist head on here. I took a close look at everything in the biological literature I could find this summer on production on organic versus conventional farms. And it's pretty, they are pretty unanimous that any good study that was actually done, that was done really you know with comparable, looking at things comparably and holding variables, trying to control the variables discovered that organic farms enjoy yields that are almost on par with conventional farms. So that this, the idea raised by those opposed to organic farming that we'll all go hungry if the world were turned over to organic farmers is not a scientific, is not a science-based conclusion. And it seems ironic to me since so often those in the environmental community are accused of scare mongering and frightening the public it seems to me that in this case those trying to scare monger are those who would claim that we would all go hungry if we embraced organic wholeheartedly. And I'm reminded of pesticide manufacturers and their friends' claim in the early '70's when we decided that the price that we were paying for the use of DDT was too high. At that point the same argument was put forward that you know agriculture would wither on the vine if we didn't have, the farmer didn't have DDT. And of course we successfully banned DDT and I think farms, that you know the broccoli is still in the supermarket but I don't even think it costs much more. So I do think that necessity is the mother of invention and once we take away what really are drugs that agriculture has become dependent on and put agriculture through a kind of rehabilitation program that we will find on the other end that we can have our cake and eat it too. We can have high yields and foods in the supermarket once organic catches on even more, and it is growing at 20% a year on a, at the cash register level, then the prices will come down just because of the economies of scale. So I feel very optimistic about this and I do think the science is on the side of those who say that organic is the future here.

Katherine DiMatteo: Thank you both very much and I'd like to open this up for questions of those who are listening in. We've heard a lot about the price of food, particularly putting organic in relation to non-organic production. The check out price of organic more closely reflecting its full production cost. The fact that

non-organic produced foods bear heavy externality costs and these include the contamination of water and fish and poisoned wildlife, ozone depletion, resistance to antibiotics, eroded soil, toxic algae blooms. There's other externalities of conventional agriculture in health care expenses and farm subsidies and water pollution clean up and water supply and soil restoration. So that in taking a good close look at it as we have for the last 45 minutes you know organic agriculture seems to be an answer to many problems and a very sustainable way to go. So your questions please.

Operator: At this time we will begin the question and answer segment of the conference. If you would like to ask your question you may do so by pressing star one on your telephone keypad. Your question will be answered in the order received. Our first question is from Sylvia Carter from Newsday.

Sylvia Carter: Hi. First of all congratulations to Mr. Kennedy on the piece in the *Times*. That was very good and I look forward to reading Sandra's book, new book at the soonest opportunity. One of the things that I find even though as Sandra just said organic is growing at a fast rate, at 20% in sales but it's still starting from a pretty small base. And one of the things that I think and maybe you guys would both have some ideas on how this can be accomplished it's a lot to ask people to understand all these issues. I think because they're so far removed from farms. I myself grew up on a farm in so I have a pretty good grasp of a lot of it but people are three and four stages removed from family farms at this point in their lives. And sometimes when we try to talk to them about some of these issues their eyes kind of glaze over. I mean they're concerned but there's too many different things going on, too many facts and I've sort of found that one of the best things is just to get them to taste stuff. For example with the Niman Ranch pork I just gave up trying to explain it to someone and ordered a couple of hundred dollars' worth of pork for his wife's birthday for us to cook and I just said this is pork from happy pigs. Well now they won't buy anything but pork from happy pigs because it tastes different. And I think the more people who can taste things and make that discerning kind of judgment for themselves, I mean your organic pizza tasted a lot better than the other pizza, didn't it. If more people could taste that that's all you have to do. They don't have to understand all the issues. How can that happen?

Katherine DiMatteo: Sandra, do you want to take it first?

Sandra Steingraber: Yeah I will. I did actually serve my pizza. I invited some friends over with small children and served those pizzas without reviewing which was which and people did enjoy the organic one a little bit better. I think for some people taste is going to be the big issue and I think for other people understanding the human rights element of this is a bigger issue. So I think that the way we talk about organic food with folks is just going to depend on what their, where their priorities are. And Foodies in the big city will probably be more interested in the taste issues. Certainly the folks where I live back home in,

outside of Peoria Illinois would just want, what they need to know is that by supporting organic agriculture they're not contributing to the ongoing contamination of their drinking water. And that's often an incentive for the people I talk with when I go back to rural Illinois.

Katherine DiMatteo: Mr. Kennedy, any comments? (Inaudible)

Robert F. Kennedy, Jr.: I mean I agree with the question about, and that you know observations that organic foods taste better and I'm particularly thinking of organic meat. I mean Americans have forgotten you're not supposed be able to cut chicken with a fork you know. It doesn't, the meat that is coming out of these industrialized operations is inferior meat. It is dry because they get company's like Smithfield's make more money by trimming the fat and by selling the meat they make more money on a meatless hog so they've bred hogs now that have no back fat. Hogs, you know millions of years of evolution caused them to grow back fat and it's actually very tasty, but the ones that they use for example Smithfield's uses don't have back fat, which means they can't really survive in the world and outside of these factories. But the meat is also tasteless. Most of the recipes nowadays call for adding water or adding liquid to the pork. You can't boil it on it's own because its so dry. And some of the companies are now adding color to the pork.

So it's, you know, the meat, and if you look at like, for example Wine Spectator magazine recently did taste tests, blind taste tests on a lot of different pork and Niman's Ranch came out high on it. Cabbage Hill Farms ironically in Mount Kisco, New York, which is a small organic farm, won the highest level unanimously by all the chefs in blind taste test who were tasting the pork. And the, you know that the worst tasting pork of course was the conventional pork that you're getting that is factory raised confinement pork. So you know we're getting, the quality of our lives, a few people are getting rich by making everybody else poor. They're raising standards of living for themselves, these pork barons and Monsanto's of the world by lowering quality of life for everybody else with not only contaminated ground water, destroyed fields, national security issues, less democracy but also the product that they're getting to us, although it's uniform, is really inferior to traditional farm raised meat.

Katherine DiMatteo: Well thank you and thank you for that question. I know that in organic industry itself and in many of the supportive organizations there is a lot of work being done with building awareness about organic agriculture not only the standards and the methods but about the information about the environmental impact, the public health impact and about the taste. And I think that as Sandra said there are many ways and different motivations for consumers and we need to just have more voices out there who are spreading the word, talking about organic in its many different ways with its many different benefits. I'll take another question now.

Operator: Your next question is from Linda Odum with Taste for Life.

Linda Odum: Yes, I wanted to go back to, I wanted to go right to the beginning and where we were talking about, Sandra mentioned something, a bit about the dairy farmers and about how a lot of them are surviving by going organic. How, what's the incentive for a farmer who's grandfather jumped right on the bandwagon of pesticides when they were introduced after the second World War, what's the incentive for them to make the choice to go organic instead of conventional? Not just in dairy farmers, but you know grain farmers, meat farmers. How can we convince them to do that?

Robert F. Kennedy, Jr.: Who was this to?

Katherine DiMatteo: Well either one of you can answer the question.

Linda Odum: Oh, either one, yeah. Either one.

Sandra Steingraber: I think I'll give it a try. This is Sandra. I interviewed a lot of farmers for this pizza essay that OTA commissioned me to write and I discovered as with talking to consumers about organic foods many different motivations even among farmers. And some of them were purely motivated by the economics of the situation. They were just almost forced into organic agriculture because they just weren't making it conventionally and they discovered that switching over to organic wasn't as hard as they thought it was. Whereas others, some of them the final straw that one dairy farmer told me was RBGH, the bovine growth hormone. He said he just didn't want to do that to his cows and realized that organic was a way not only to give his cows no hormones but to treat them more humanly in general.

So I think the whole animal rights and animal welfare argument is really important for some farmers who are in the husbandry aspect of farming who have livestock. And for some of the grain farmers I talked to, the wheat farmers that I was trying to trace the wheat flour in my pizzas back to the kind of farms that they might have grown on. Some of those guys told me that now that there's such a big drought in the west that they were beginning to realize when they looked at their neighbors' farms where the neighbor might have gone organic that because the soils were healthier that organic wheat was able to survive a drought better than the conventional wheat. And it just had to do with the healthier soil being able to hold rainwater better than the conventional soil. So the organic farmers were not suffering such terrible losses during the drought. So that was a big motivation for them. So I think again the answers are going to be really specific to the motivating factors, what's in the hearts and minds of the individual farmers. And we just need to have a lot of different reasons that are really specific to the kind of farming that people practice and the kind of culture they happen to be embedded in.

I first learned about organic agriculture from my own father who's a very conservative Republican and who read Rachel Carson's book when it came out in the early '60's and became an organic gardener because he was a, he taught business and economics and it just made economic sense to him that we should do organic food. So I can remember very clearly and I mentioned this in the beginning of my pizza essay, my earliest memory is my dad setting up a roadside stand of organic tomatoes and having his daughters, my sister and I sell organic tomatoes for 25 cents a pound. And I was astonished when our customers pulled up and bought tomatoes that they didn't know what organic was in the year 1970. And that was just something I had grown up with in my household. And for my father, this very conservative Republican, it was the economic logic of organics that was convincing to him.

Katherine DiMatteo: Thank you for that answer. Can I just check in with the facilitator of the call if there's, how many other questions are in the queue.

Operator: There's one additional question.

Katherine DiMatteo: Okay, let's go to that question then so that we can have it answered before the end of our time.

Operator: Very well the next question is from Lori Budgar from National Food Merchandiser.

Lori Budgar: Natural Foods Merchandiser. My question is that you know we all seem to have a lot of idealism about the future of organic foods and that's great. And you know we talked a little bit about you know the fact that we can consider buying organic as a charitable contribution and we talked about the economies of scale that will develop if more and more people begin to buy organics and more farmers convert to organics. But in the short term, how can we make, how can retailers make organics more accessible now to low and mid income people? There's a lot of people out there who can't look at buying organic as a charitable contribution. They need to put food on their family's table.

Robert F. Kennedy, Jr.: Well this is Bobby Kennedy again and it kind of goes back to the last question which is, you know, how do you encourage farmers to produce? You've got to create a market. I don't know any farmers and I know lots of farmers who have converted to for example confinement hogs and confinement chickens and they hate what they're doing. Nobody wants to live that way. Nobody wants to raise animals without husbandry. People live on those farms because they want to live there because of the quality of life and the tradition of it and that's gone. That part of farming has gone. It's become a, you know it's become a chemical operation for many of them and a factory operation and they don't want it. So they'd do, most of them would do anything to be able to go back to some kind of conventional farming. The question is how to you

create a demand for these products, which at this point at least in the transition and maybe even in the future are going to be more expensive on the shelf than pesticide grown agriculture. And you know the thing that we see, that I see, and this is anecdotal, I have a water business that, where I sell bottled water that gives all of its profits to the environment. And if you put my bottled water up against Poland Springs people, and it's the same price, people are going to buy it because something's going to go, come back to their communities. Even when it's more expensive and people, and there's advertising on the shelf, people buy it. With the milk, the milk is a really easy, it's a good example because you've got two products that look just like each other but Organic Valley Milk is slightly more expensive but without almost any advertising it flies off the shelf. And in many of the grocery stores that I deal with they cannot keep it in stock because there's so much of a demand for it and you know you don't see it advertised anywhere. Nobody's advertising it on TV or anything --organic milk-- but people want it when they're educated about it. And people, unless they understand it, and I think part of what our job is is to educate the consumer to create that demand. And you know that's the best I can tell you.

Katherine DiMatteo: Well thank you very much for the answer and for the question. And the only thing I would add to it is that we do have to keep working at building availability, building supply and reducing those middle costs in terms of transportation and handling and maybe even begin to work directly you know at retail talking about margins with the retailers and the contribution that they can make if they just decide to feature organic at a cost that may be a charitable contribution themselves. So there's a lot of suggestions that are available. I know not only on the Organic Trade Association website, OTA.com but we have a website for consumers or for the general public that can give a lot of answers to these questions and make suggestions as to where to find local sources of organic food that will also reduce the cost for the individual. And that website is theorganicreport.org and we have lists on there where people can find local sources or find, or help them to encourage their local farmers to go organic and perhaps even to start a community supported agricultural product, project, where they can contribute financially to the farm and get their goods direct from the farmer. So there's a number of ways and it will take time. We're a young industry but we've come a long way and I think that we can provide a solution not only in terms of greater environmental and public health benefits but we can make agricultural policy change and I'm totally sounding optimistic now but I think that we can begin to change the way people think about how they live in relationship to others, other people's economy like the farm economy.

Are there any other questions before we close down our press conference today?

Operator: There is one additional question.

Katherine DiMatteo: Okay.

Operator: And that question comes from Ms.Carter from Newsday.

Sylvia Carter: Hi. I just wanted to ask you to brainstorm a little bit one of the things that Katherine just said is you know that we can change, make agriculture policy change. And one change that I think is really important to bear in mind she's talked about being a young industry but in truth up until 50 years ago everybody farmed organically and so in one way I think that we're kind of giving too much credit to the chemical farmers and the hog farms and all the bad people by calling them conventional. They're not conventional farmers. Organic is the conventional and you know really the way to farm. So I don't know what we could call them instead but conventional makes it sound like, I don't know like it's kind of okay. So I mean is there any other way that we speak of them you know or can speak of them. And the other thing I wanted to say I don't know if any of you have read *Ace in the Hole*, the new Annie Proulx book about a company called Global Pork Rind but I'd be really interested to know what you thought if you did because it was such a, she's a great writer of course it was a great novel but it really makes a point. By the end of the book the hero Bob Dollar is on the side of right instead of recruiting for the hog farms.

Robert F. Kennedy, Jr.: Your point about calling them conventional farms is well taken and thanks for making it. We should, you know conventional farmers are traditional farmers and unfortunately the convention today because of national subsidies and because the power of the industry and because the consolidations and the integration they've been able to capture the market place and really eliminate the market place. There is no market nowadays for agriculture. The slaughterhouses, the stockyards have closed. The markets are gone. There's no free market economy left in agriculture anymore and that's allowed the big integrators to squeeze out that small farmer and so now they are the convention.

But I just came back from Europe or from Poland where virtually all the farmers in the country, there's more farmers, 2 million more farmers than the rest of Europe combined and it has, and they're all non-pesticide farmers. It's all organic agriculture. And you know, Smithfield's and Cargill's and Monsanto are fighting their way into that country before joining the European union promising to "modernize" Polish agriculture. And what they mean is to you know turn it into pesticide intensive and confinement, animal confinement agriculture and drive those 2 million farmers off the land into the cities and install themselves on that land instead. And unfortunately nowadays that's what the you know the traditional agriculture is gone from America and largely except for these you know pockets of organic farmers throughout the country it's pretty much gone. And what we're, our job is much harder because we've got to fight to reestablish it.

Sandra Steingraber: I guess I would just add to that perhaps one of the terms we might think about in finding a good substitute for conventional farming would be chemically intensive agriculture. Although I have to say that a lot of people make the comparison that organic agriculture is like conventional agriculture used to be before World War II and that's not really true either. When I take a look at the data it's really clear that yields on organic farms now are far higher for any commodity you can think of than yields on farms before we introduced pesticides. Organic farmers are making use of all kinds of really smart ways of doing pest control that weren't available to like my grandfather who farmed you know in the '20's and '30's in downstate Illinois. So organic farmers there are getting much higher yields of corn and beans and hay and oats and alfalfa than my grandfather was able to do without chemicals. So I think we do need to remind people this isn't back to the past. That organic agriculture now is high yield, it's smarter, it knows a lot more than farmers did in the '20's and '30's.

Katherine DiMatteo: Thank you both for those answers and thank you for the question because I think it's a wonderful question and I would agree with Sandra's last comment that it's not organic I hope isn't going back to the past. I think that it's taken all the wisdom, all the good ideas that have come up through all the ages in agriculture and combine them together because of the philosophy which holds organic together, which is that we're trying to emulate the natural systems and to protect you know our resources so that there is you know good soil for future farming. That there's good water, not only future farming but for drinking. That there is bio-diversity and that we're partnering with nature so that all of our natural systems are going to be, exist not only know for our use and, but for the future and for our children and their children as well. So I think that people have taken a look at the way agriculture has been done you know throughout time and organic has really combined the best features of all that agricultural knowledge and brought it forward in a standardized system so that people can now learn and share that with each other and have a market identity. And I think that we just have to continue along this path that we've started and make sure that not only the buyers of organic products but also those people who grow food and other (inaudible) products really have access and are encouraged by the interest, the support of organic agriculture and the growing marketplace.

Well I think that, if there's any other questions? No? That's great. Well thank you all for participating today. I think we've had a wonderful session. A lot of interesting ideas, interesting facts, things I think to hold us together and inspire us as we move forward. If you need any follow up questions, would like to follow up in any way on this press conference you can contact Holly Givens, g, i, v, e, n, s at the Organic Trade Association. That's 413-774-7511 and Holly's extension is extension 18. Thank you so much for being with us today and thank you both Sandra Steingraber and Robert F. Kennedy, Jr.

Sandra Steingraber: My pleasure.

Katherine DiMatteo: Bye now.