GUIDANCE ON GOOD AGRICULTURAL AND MANUFACTURING PRACTICES FOR FRUITS AND VEGETABLES

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PUBLIC HEARING

HELD ON FRIDAY, DECEMBER 5, 1997 AT

THE CLAYTON HUTCHESON AGRICULTURAL CENTER

559 NORTH MILITARY TRAIL

WEST PALM BEACH, FLORIDA

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PANEL MEMBERS:

Lynn Isaacs, Regional Public Affairs Specialist, FDA

Mike Chappell, Acting District Director, Fla. Dist., FDA

John Vanderveen, Ph.D., Acting Deputy Center Director, CFSAN, FDA

Martha Roberts, Ph.D., Deputy Commissioner for Food and Safety, Florida State Department of Agriculture and Consumer Services

Clayton Hutcheson, Director, Palm Beach County Cooperative Extension Service

Douglas L. Archer, Ph.D., Chair and Professor, Food Science and Human Nutrition, University of Florida

Richard Barnes, Food Safety Initiative Staff, FDA

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(The following Public Hearing commenced at 9:10 a.m.)

MS. ISAACS: Good morning. Thank you for joining us this morning, and we also thank our head table of participants for weathering the weather yesterday and joining us.

You all should have a copy of the agenda in your packets, the new and improved agenda as of this morning, and I'm going to go through here and briefly introduce our participants here.

Down at the far end is Dr. John Vanderveen. John is the Acting Deputy Center Director with FDA Center for Food Safety and Applied Nutrition.

Next to John is my boss, Mike Chappell, the Acting District Director of the FDA Florida District Office.

And next to Mike is Dr. Martha Roberts. Martha is the Deputy Commissioner for Food Safety with the Florida Department of Agriculture and Consumer Services.

And then we have former FDA'er, Dr. Douglas Archer, who is a Chair and Professor, Food Safety with the University of Florida, Food Science and Human Nutrition.

Did I get that sort of right, Dr. Archer?

DR. ARCHER: Certainly.

MS. ISAACS: All right. Just checking.

John, who was going to introduce Terry, but I guess I'm introducing Terry. Terry Troxell.

What is your title, Terry, with CFSAN?

MR. TROXELL: Director of Programs and Enforcement Policy Commission and of Dairy, Food and Beverages.

MS. ISAACS: And one of the drafters of the document.

Okay. And we have my other boss, Richard Barnes, is the Director of FDA's Division of Federal State Relations in Rockville, Maryland.

And we have Clayton Hutcheson. Clayton is the Director of Palm Beach County Cooperative Extension Service, whom I'm sure a lot of you know, and we certainly appreciate his hospitality today and he's going to be giving some welcoming remarks.

Okay. Let's give a little background information about this initiative. On October 2nd of this year, President Clinton announced a plan entitled Initiative to Ensure the Safety of Imported and Domestic Fruits and Vegetables.

As part of this initiative, the President directed the Secretary of Health and Human Services, in conjunction with the Secretary of Agriculture, and in close cooperation with the agricultural community, to issue guidance on good agricultural practices, affectionately referred to as GAPS?

Do you call them GAPS, too?

MR. TROXELL: GAPS.

MS. ISAACS: GAPS. And good manufacturing practices, GMPs for fruits and vegetables.

FDA and USDA have developed draft working papers that addressed microbial food safety hazards and good management practices associated with water quality, sanitation, hygiene, transportation, manure and municipal sludge common to the growing and harvesting of most fruits and vegetables that are sold to consumers in an unprocessed or minimally processed form.

These preliminary drafts are intended to be further developed and refined to assist growers and handlers in examining their operations for potential microbial hazards, and in identifying management practice options that may be adopted to minimize the risks of microbial contamination

for fresh produce.

So the purpose of this meeting is to solicit your input on this draft guide. This meeting is part of a series of town hall meetings that are being held across the country. A public meeting was held in Washington, D. C. on November 17th and approximately 150 people attended. Comments from that public meeting are included in the draft of the guide that will be presented today.

I believe there is going to be another meeting Monday to address international concerns; that's also in the Washington, D. C. area.

Grassroots town hall meetings have also been held this week in Grand Rapids, Michigan on Monday, they had about a hundred folks there, and Geneva, New York on Wednesday attracted about 75 attendees.

So today we hope to get your comments, your reactions to this draft guide and, later on, if you get home and think of additional points, you can go ahead and submit a written comment to the FDA.

Your information packet includes an announcement for this meeting, and that announcement tells you where to send additional

comments, and it's very important that you include the docket number with that comment. So we encourage you to do so after we go away today.

This meeting is being transcribed so that the scientists preparing the guidance document can carefully review your comments and make revisions to the document as appropriate.

As far as housekeeping, some of you may have found the rest rooms already right outside the entrance. There will be coffee, we hope. It has been ordered. There are several restaurants close by, and Clayton has provided a map to the ones closest to us. We really want to just break for one hour for lunch and be back here to get the input from you all.

We hope that you all picked up an information packet about FDA and USDA at the registration desk. And we intend that today's meeting will be informal; you will have ample opportunity for comment.

As you see from the agenda that we're scheduled to adjourn at 4:00 o'clock, but I'm sure if there's a lot of interest, that everybody will stay till the last person is heard. Am I right?

Okay. In addition, if some of you don't really want to make your comments orally, we have a little written two-part form, comments, questions, and Frank Goodwin has those available for you; just fill it out and raise your hand and Frank will collect it and we'll get it to the right panelist up here and address your concern, and I'll read your comment or question.

Okay? Are there any questions thus far?

All right. Well, let's start off with Mike Chappell.

MR. CHAPPELL: Good morning.

I think if we're going to hear from these people, we're going to have to have a little more enthusiasm.

MS. ISAACS: Try it again.

MR. CHAPPELL: Good morning. A little better. You might want to tone them down toward the end of the day.

Well, I'm here on behalf of the Food and Drug Administration to welcome you to this town meeting, as well as representing John Turner, who is the regional director for the Southeast Region of the Food and Drug Administration.

I'd like to emphasize a few points, very few

points about the President's Initiative and our purpose here today. First of all, it is a collaborative effort. It includes the United States Department of Agriculture and state and local Departments of Agriculture, and, importantly, for today's meeting, it includes you.

As Lynn mentioned, this is one of a series of meetings -- I think this is the third of six, I guess we held them last week, and there will be some next week also -- throughout the country to hear your concerns. The meeting that Lynn mentioned on Monday in Washington, December the 8th, will deal with international concerns.

The use of the town meeting is -- or the grassroots meeting is fairly new to FDA. We, really, over the last few years as part of, I guess, a re-invention of government, we began to use these instruments more in getting people's input earlier on in the process of developing guidelines and regulations.

And it's certainly appropriate to do that, because if you look at the history of this country, that is a forum that has been used throughout history to understand what the people

really need, the people really want, and the people's concerns.

So this is a forum; this is your forum, this is your opportunity to speak with us, to share with us your concerns and certainly understand what we're going to be giving you today and presenting to you. Certainly, we ask that you be frank, you be open with us, and we'll certainly do the same with you.

I think it's very appropriate that we're having one of these meetings in the Southeast, particularly here in Florida. The Southern United States and Southeastern United States produces a significant portion of the fresh fruits and vegetables consumed in the United States.

And it's also in this area where we have a wide variety of representatives of the producers. We have everything from the small family farm to the major agribusinesses. And this is, again, your opportunity to talk about these issues, to understand these issues and let us know how you feel about them.

I'd like to mention a little bit about -- I mentioned the Southeast Region. The Southeast

Region of the United States is composed of eight states, the Commonwealth of Puerto Rico and the U.S. Virgin Islands. There is a district -- district throughout the Southeast, they are located in Atlanta, Orlando, San Juan, Nashville, and New Orleans. There are about 500 of us. We have two laboratories located, one in Atlanta and one in San Juan. There's about 125 people associated with those laboratories. The rest of us in those district offices and the 28 other support offices for those districts comprise the 500 people in the Southeast.

The laboratories analyze thousands of products in the course of a year, generating hundreds of different analyses to ensure that the products that we regulate are safe, effective, and wholesome.

The rest of us throughout the inter-lands and in these other offices that I mentioned, are basically the field investigational force; we do the inspections, we conduct investigations in support of the Food, Drug and Cosmetic Act and other associated acts.

But FDA overall is involved in the production, import, transport, storage, and

monitoring of products that account for about $750 billion a year in our economy. So we have a major job and, of course, food safety is one of FDA's major concerns.

It is our responsibility to make sure that the food on American's tables is both safe and wholesome. And part of that process is to try to prevent problems before they occur. And as part of that, one of the things we do is try to assess risks associated with these products, and that is one of the bases for our public health commission.

Based on our public health responsibilities, the President has charged FDA to take the lead in developing a guidance document to assist farmers in minimizing microbial hazards. I must emphasize that we are developing guidance and not regulations.

Those of us within FDA understand the difference and we understand the possible nuances. And I know for people who are not that familiar with it, it may get muddled and one may appear to be the other.

And I think as we go through the day -- and I ask you to pay particular attention to this --

we're going to talk about the differences between guidance and regulations and how that really will affect what this whole process is about.

The President's Initiative does not require new regulations on microbial safety of foods. You'll hear that repeatedly throughout the course of the day and it's important for you to understand that.

Richard Barnes, who is now part of the food safety initiative -- I guess in his former life he's a director of the Division of Federal State Relations, and many of you may already know him, but he'll talk a lot more about this -- the regulation, per say, and the differences in the guidance.

The task at hand is twofold for us: First, we're going to review some of the major features of President Clinton's initiative on fresh produce, and Richard will give you some of the background on that and the forces that led to it.

Secondly, and most importantly, we need to have your input on the draft guidance on good agricultural practices, which Lynn has already referred to as GAPS.

The drafts in your information packet, it's

fairly fresh, I think we got it just a few days ago, and it represents our first stab at this. It does represent input from the both the sciences at USDA and FDA, and they represent only preliminary thinking on our part.

Obviously, you have to have something to start with, something to get the discussion going, and that's what this is.

The produce subcommittee of the National Advisory Committee on Microbial Criteria and Foods, which is an advisory body to FDA, has reviewed this draft, and it's my understanding their comments have been incorporated.

So now it's your turn. We expect you to go over this with us, give us your comments, ask questions. It's really important that we understand each other. If you don't understand something we're saying, you need to be clear on that. And, likewise, we need to be clear on your thoughts and feelings.

All of these town hall meetings, all of these grassroots meetings, the comments will be carefully analyzed, they will be reviewed prior to issuance of the final draft document, which will be issued in the Federal Register early in

1998.

Even after it's been issued, there will certainly be a comment period, and you'll have another opportunity to comment on that draft at that point. It also will be -- it is now posted, as I'm sure the -- when the final draft goes out, will be posted on FDA's web site or Internet site.

If you picked up one of these blue folders outside, you already have the FDA Internet address. It's on -- it's certainly on this particular insert. If you haven't picked that up, please do so. We've become so accustomed now to using the Internet to provide information that, in the field, this is the first place we go to find out what's the most current thinking in the various centers within FDA.

So I encourage you to use that to certainly see what's happening, what's going on, not only in this initiative, but in other areas of FDA.

Well, we got a little bit of a late start, but I certainly want to make sure I don't step on anybody's toes, talk about things that's going to be addressed further, so I'm going to stop now.

But I do want to encourage you to be open,

to be frank with us. We're here to listen, and I'm sure that if -- there's going to be plenty of time for questions and just so we can hear your concerns and comments.

So with that, Lynn, I'll turn it back over to you.

MS. ISAACS: Thank you, Mike. And the FDA home page is www.fda.gov. And you will find a wealth of information on it.

Okay. Dr. Vanderveen, you're next.

MR. VANDERVEEN: Thank you, Lynn.

I'm John Vanderveen, as Lynn has told you, and I would like to extend my welcome to all the welcomes that you'll get this morning on behalf of the Center for Food Safety and Applied Nutrition and all of our partners in this food safety initiative.

And there are six partners; there's several sections of USDA that are actively involved with this. The Center for Disease Control, the Environmental Protection Agency is playing a significant role, and we are all very pleased that you have taken the effort to come here today. We recognize that you have busy schedules, we recognize also that some of you

have come long distances, and we're very pleased that you're willing to make that effort.

I'd like to introduce one other person. I think Camille Brewer is back there in the back of the room. Camille is one of our compliance officers, and she's been the project manager for a number of these efforts, produce initiative efforts, and she has been largely responsible for organizing much of what you're going to see today.

I would like to mention the fact right off that we have the safest food supply in the world. There is -- we continue to say that, we're very proud of that. USDA regulating meat and poultry and FDA regulating a good portion of the other food supply. We are very, very pleased all the time with the response that the farmers, the processors, and retailers do in making our food supply as safe as it is.

Nevertheless, there are problems from time to time and we have to expect that, I guess, but we always try to make things better.

As you heard, the President, two months ago, initiated this produce initiative and we are very anxious to fulfill the goals that he's outlined

in this. But our main purpose is to gain from you your advice, your counsel, your constructive criticism and gain from the benefit of your knowledge. I'm the first to admit that we can't be in your shoes at all times and know all the nuances that are important in trying to do what we're trying to do in this area.

I want to acknowledge, also, that there has been significant input to where we are at the present time from the industry. The trade associations, the educational arms of those trade associations have played a significant role in recent years in trying to guide us in what needs to be done relative to such a guide as we're trying to put forth today.

I've met with a number of trade associations over the last two or three years; they have sent me their materials and asked for my input to it, and we're very pleased that they're working so hard in this area, and we hope that this relationship can continue in a very positive manner.

There's more about this initiative on produce that I want to emphasize and just take a moment to do it. As you've already heard, this

is a guidance document that we're trying to prepare and we think it's very important for various reasons.

It's about partnerships between government agencies, farmers, transportation processors, retailers, and even the consumer, and it's about a new paradigm where the government will place more emphasis on helping to prevent food safety problems by establishing good agricultural practices and good manufacturing practices and less on traditional end item inspection and testing.

We just don't have the resources; it's just not a good way to operate, and as a consequence, we want to enter into a much more -- we hope that with Seafood HACCP you will see the results of this partnership starting in January, and we will soon have an in-juice HACCP proposal in the Federal Register.

And we hope that you will understand that this is a program where we're trying to work with the industry and try to prevent problems and not rely on the traditional compliance approach to gaining food safety.

We want to establish also a dialogue, and we

want you to be able to feel free to come in to see us from time to time if you have problems. We've always had our doors open to talk with people and we want to emphasize that as well.

I think that there's one other aspect I would like to talk about today, and that is the fact that, in developing this guide, is for -- as you'll hear today -- for our domestic industry, but the guide is very important in dealing with our trading partners as well.

As you know, there are various trade agreements required, that we have standards that are equal between those for domestic and those for imports of all our products. And we must start out by defining what our standards are, and then only in that way can we say to foreign governments, this is our standard and we expect you to meet that standard.

So I emphasize that, although we're working on a guide for domestic production of foods, we're anxious to use that guide eventually as our standard as what we expect from other imports to this country.

In closing, I'd like to say just two things: I appreciate very much Mr. Hutcheson's efforts to

have us here in this very nice facility. I'm with the 4-H -- I guess I was going to say student -- but 4-H member for about 12 years 45 years ago, and I must say, things weren't quite this good. We usually met in the middle of a dairy farm barn floor or someplace like that, not nearly as nice as this, and we certainly appreciate your kind invitation here, and we hope all of you will participate very fully today.

Thank you very much.

DR. ROBERTS: I bring you greetings from State Government, Commissioner Bob Crawford, Commissioner of Agriculture for the State of Florida welcomes you, and we're delighted to be a participant in this meeting and to gain perspective from everyone involved.

We commend FDA and commend USDA for trying to address this issue and for allowing participation by state government, by industry, by consumers, and all stakeholders.

Quite frankly, it's unbelievable that we have a major political initiative that is very scientific issue of food safety, and I think, quite frankly, it puts us into a different arena and casts some different perspectives that we're

all having to deal with as we go forward on this very major initiative.

So as state government, we're prepared to work very closely with our federal partners, FDA and USDA, to ensure that we have a very science-based common sense guidance to the industry. We're very pleased that FDA has been charged to develop this in cooperation in partnership with USDA and to set standards for imported and domestic product.

Food safety is a major priority of the Florida Department of Agriculture and Consumer Services. It is the department's priority, it is the public's priority, industry's priority, universities and health professionals alike.

Within the department, we focus on the potential microbial risk, attempting to prevent it through good sanitation and hygiene and to provide the safest food supply to our citizens in our inspection and laboratory testing programs of the State.

We're emphasizing examination for food-borne pathogens, everything from Salmonella to E. coli to Listeria, and would like analytical procedures for other things, such as cyclospora that we have

to deal with as food-borne risk in the State of Florida.

The State of Florida is responsible for the inspection and laboratory surveillance of over 28,000 retail food stores, warehouses, and processing establishments in the State of Florida. We have almost 300 individuals associated with this program, and we're delighted that one of these public meetings is held in the State of Florida. We think it's a very appropriate location.

For many years, this very county in which we're seated was the fourth and fifth largest agricultural county in the United States producing over $1 billion in cash receipts in a whole host of fruits and vegetables. But yet, due to the impact of many government regulations, state, federal, local, as well as increasing competition from imports, within the last census, we have seen this county dwindle from fourth or fifth down to 11th.

We feel that this is an apt place to have this hearing because of the diversities of agriculture in this county. And it is also very appropriate because this was one of the very

first counties in the nation over three years ago where we started experiencing so many cases of food-borne illness from a unbefore recognized parasite, cyclospora. I'm very glad that Dr. Jean Malecki will be later talking a little bit about that, as far as the numbers of cases experienced here in this county from imported strawberries.

And this county is also the site of some very proactive citizen groups. We have some senior citizen groups in the area that are extremely active with the department, are trying to do more in the whole area of helping the department to enforce our country of origin labeling laws so that the general public will know the source of fruits and vegetables that they are eating.

So we are a state in which we have a tremendous partnership. Our philosophy in the State of Florida has always been cooperative. We've had innovative partnerships with federal government, with state government, with local government, with our industry groups, with consumer groups, with our universities, and with Extension Service, and we feel that that's the

very best way to attack problems.

We're a state where every one of these groups has, as their major focus, food safety consumer issues and water and environment, and they're all priorities for state government federal consumer groups, industry and universities alike.

So this partnership is excellent and we focus on partnerships as the necessary step in this guidance. But we'd also like to look at the goal of health. And within my welcome, I'd like to make a few comments relative to that, because that is the ultimate goal of any GAPS or GMPs relative to this industry, is to increase the public health in this country.

And I am personally concerned that, as we have any further drop in domestic production of fruits and vegetables with any increased importation from third world nations, that we make certain that we apply the current regulations on sanitation and production to the importation from other nations.

It is very difficult for us to absorb reports of all sewage and irrigation waters on nations from which we're having product imported.

If we reduce domestic production, have we increased public health safety in this country, and I do not think that we will have.

One of the major parts that we strongly support in the document is the area concerning water concerns and water impact on food safety. We are a state that has very major complex regulations involving water safety, water quality, and the source of water.

Water in the State of Florida is regulated very strictly by our five water management districts as far as the Florida Department of Environmental Protection. The actual water allowed to be used by agriculture is given to them on a water use permit that allocates to agricultural uses specific quantities of water annually and the specific source of that water. So they could not, and it would be very difficult to immediately change any source.

But the water use in agriculture is about 60 percent farm ground waters with about 80 percent of many of our industries already having shifted to low volume drip irrigation. Water we use is emphasized as a goal of the state as far as use of reclaimed water, but edible

crops that will not be peeled, skinned, cooked, or semi-processed before consumption are not permitted to be using treated effluent.

We support any reasonable proposal that will increase food safety in this nation. The number of deaths and illnesses is unacceptable, but we want to support something that will be based on sound science, on advisory groups' recommendations. We're very pleased that those have been entered into the proposed draft.

We would hope that our federal counterparts will support the additional research GAPS that have been identified and that will base all these good agricultural practice recommendations on common sense and reality and risk to the public.

And we earnestly ask that what we have currently in place as far as sanitary requirements in the United States be initially enforced on both domestic and imported product.

We need also to ensure that we're listening to our voices, and that's why I want to commend FDA and USDA for doing just that.

Today I'll be listening as a regulator. I'll be listening with a regulator hat who's top priority is food safety and who wants to ensure

the highest degree of safety to the foods that we're purchasing, the foods we're producing, the foods we're consuming.

We've got about 14.7 million citizens in this state and over 40 million annual visitors. That's a lot of meals being served and it's a lot of food safety requirements.

I'll be listening as a professional microbiologist who's very concerned with the threat of the condition of some of the imported products that we're seeing from nations not having adequate sanitation.

If I'm told not to eat salads or fruits and vegetables in a nation I'm visiting, even in the very best of restaurants, why would I want to buy them and purchase them once they're imported into the United States. That's a personal philosophy.

As a microbiologist, I also know that dirt and fields are not sterile and they can't be. I strongly support, though, the requirement that you can't expose the food to untreated human or animal waste.

I'm listening as a member of an agricultural agency that knows the efforts of our agricultural industry to try to address food safety concerns

and prevent contamination. And I'm also going to be listening to you as a mother and a grandmother because I want the safest and cheapest food supply. I want it to continue; I want the older and the younger members of my family not to be submitted to any undue risk, but I also want them to eat more fruits and vegetables because it's the best way, and one that our National Academy of Sciences has recognized as the best way to prevent cancer and chronic human disease.

So I commend FDA for their activity and I commend them on having the National Advisory Committee on Microbiology for Criteria for Foods to address this issue. We would ask you to thoughtfully consider the committee's recommendation and to pursue those with all care and deliberation.

We want you to continue, as you're doing here, to actively seek the input of all parties and we're delighted at that. And we thank you for letting the input of those who know how fruits and vegetables are grown in real life to provide information to you.

We want to all work together to seek the highest level of safety for the U.S. food supply

and to aggressively apply current standards. We want you to actively support country of origin labeling, too, so that consumers can know where the produce that they're eating has come from.

We look forward to hearing from the industry, we look forward to continuing to work with FDA because we're a state in which partnerships are effective and we want to see the President's Initiative soundly and reasonably applied.

Thank you.

MR. HUTCHESON: I wanted to take just a moment to welcome you on behalf of Dr. Chris Waddill, dean and director of the Cooperative Extension Service here in Florida, she couldn't be here today. But the Extension Service here in Florida has a commitment to carrying out the educational role that has been given to us over the years.

As I look at what's going on here today and what may come out of it in the future, we have dealt with and provided educational services for training of pesticide applicators leading to their certification when that came along, that's happening, of course, throughout the United

States, and Extension Services came through on that. The worker protection standards, when that came along, the Extension Service geared up to make sure that educational programs were there to be delivered to the agricultural people.

So Dr. Waddill has renewed her commitment to make sure that the Extension Service here in Florida is able to deliver and to provide those educational services that are going to make a difference for the industry here in Florida.

Whatever comes out of this meeting today and ultimately out of this process, the Extension Service will probably be -- have a responsibility for doing some part of the educational role that will be certainly associated with this.

Since my role is to remain unbiased and not make any inflammatory comments, I'm going to kind of stop there and welcome you to the facility.

I might say, there are some members of the press here today. We have some tables over along the wall; if that's more convenient for you, feel free to use those.

But, again, on behalf of Dr. Waddill and the Extension Service here in Florida, welcome, and we stand ready to support the industry and to

make life as easy as possible at the end of this entire process.

Thank you.

DR. ARCHER: I'm Doug Archer. I'm from the University of Florida which is the land grant school here in the State. And I don't speak for the University of Florida; if you know much about academics, nobody can represent academics, they all have their own opinions.

In any event, I'm allowed to make inflammatory remarks, unlike Clayton, so I'll make a couple.

We're here today to talk about this document, this draft guide. And when I was with FDA, the last ten years I was with the agency, I spent in Washington, D.C., and there used to be a rule of thumb in Washington that when you put something out, it had to pass the hee-haw test, and if you think about that, it becomes self-explanatory.

And I have to admit, when I was reading this, I did get a few hees and haws out of it. A couple of them I'll just mention that I think the agencies might want to reconsider are some

$15,000 to cover my swimming pool and I still have frogs, snakes and other things that crawl in and out of it, so I don't think that's a practical solution.

Another thing that I think they might want to reconsider is the control of migratory birds. I'm not aware that migratory birds have to land in order to defecate and, frankly, I'd rather have them on the ground where they probably aren't going to saddle up to the green bean bush to do their business, rather than indiscriminate bombing overhead. So I don't think it's possible to enforce no-fly zones over the entire southern half of the State of Florida.

Now that might sound funny, but I don't think it's funny for a variety of reasons. I don't think it's funny if, in any way, these efforts, through publicity or whatever, decrease the consumption of fresh fruits and vegetables from whatever source.

Remember -- and Dr. Roberts brought it up, but it's very important that we keep in mind -- the consumption of fresh fruits and vegetables is the single most important preventive public health measure in the United States. It saves

more lives than food-borne disease takes ten times over each year. And that is a fact, it's a medically proven fact; it's not speculation.

Now, why is this effort happening at all? Well, I think Dr. Roberts also alluded to that. There is a good dollop of politics involved as well as some reality. There have been some outbreaks associated with fresh fruits and vegetables.

But where I take exception with some of the information in the guide are the examples that have been chosen. I mean, there are some real outbreaks that can be cited. But why confuse processed foods with fresh produce? Why bring up frozen coconut milk? I'm not aware that that's fresh produce. Why give false examples of outbreaks?

And I just pulled one because it happened here in Florida, and it's in the guidance document and it cites the outbreak in 1995 involving fresh-squeezed orange juice at a theme park here in Florida. And the add-on to that is that, although the cause of the contamination was not identified, at least one of the groups supplying oranges to the implicated processor

irrigated with surface water that may have been contaminated.

Well, if that's not speculation on speculation, I don't know what is. Because the cause of that outbreak, I think, was pretty well established, and it had nothing to do with irrigation water. So why have things like this in a document that's going to have any credence on the outside.

I think what you'll hear today from a lot of people is, this thing is going too fast. Now, there's a reason for that. FDA is in the executive branch of government, and the Chief Executive of the United States told him to do it in 90 days. And when he speaks, you do it in 90 days.

I did the same thing, I had to do the same thing when I was there. I never have experienced anything quite like this in the 20 years I was with the agency, but nevertheless, that's why it's on a fast track.

I wish the process would slow down and I wish that more time and more care could be given to putting things down on paper; because once they're down on paper, sometimes they're very

hard to erase.

Well, I've said some negative things, but what are the positives? I think there are some good things here and good things that need to be considered. I think anything that decreases illness in the United States is a positive thing, and if this effort can do that, more power to it; let's get down to work and find the things that will have the most bang for the buck and do those things.

But where should the effort be? I mean, there's a lot in here on all kinds of things in the growing field, and is that really where we ought to be focusing our efforts. And I say no. At least in my opinion, no.

What I don't see in here -- I see some illusions to it coming in the future, but I really believe that the biggest bang for the buck would be anything that could empower the consumer and the end product user of fresh produce. Educate them, give them the knowledge they need to treat the food safely, not to contaminate the food and subsequently cause people to become ill, which many of these outbreaks have really involved, taking Neem juice, putting it on

lettuce, feeding it to people and wondering why they become ill.

I think the other big bang for the buck would be for the agencies that regulate either disinfecting compounds or sanitizing compounds to be able to put those, and assure producers that those compounds could be put on a fast-track for approval. Without that, we have chlorine and we have precious little else that's been really approved and blessed by the federal government in the way of food additives.

I think those are two things that the agencies could do and where they could devote a lot of these resources to really, really make an impact.

Thank you.

MS. ISAACS: Thank you, Dr. Archer.

And we do do a lot in the area of consumer education already. We have a network of consumer affairs officers, now called public affair specialists, about 40 of us total nationwide, and we do work very closely with Extension.

In fact, one of the programs that the Florida District office started with Brevard County Extension Service several years ago was

recently recognized with -- they received the Vice President Gore's Hammer Award for Excellence in Consumer Education. So I just had to add that.

Our main focus this year is food safety for seniors and it's an elder education project, and most of the volunteers involved with this are family community educators affiliated with Extension. And this particular program has also been extended to several other counties in Florida. And in your package, you will also see a variety of some FDA consumer education materials.

Okay. Are there any questions at this point?

You can see how we're going to proceed; Mr. Barnes is going to present an overview of the President's Initiative and get into the GAPS, take a short break, hopefully, the coffee will have arrived, and then he will continue with his preview and any questions that you have that need to be clarified, break for lunch, a short presentation by USDA, additional questions, and open it up to industry group presentations, a number of which have been -- to start us off,

have been arranged by United Fruit & Vegetable Association, Stacey Zawel.

Did I get that right, Stacey?

DR. ZAWEL: Pretty good, yeah.

MS. ISAACS: Okay. We thank you all for your participation.

Then we will open it up to comments from any other stakeholders.

Now, we have seven folks lined up from the Fruit & Vegetable Association members who are going to kick off the industry presentations. And anyone else who knows now that they're going to want to comment, can sign up over there at the desk. We have an industry sign-up sheet, and also all stakeholders' sign-up sheet just so that we'll flow a little quicker.

Okay? Any questions? Stacey?

DR. ZAWEL: Should I go to the mike?

MS. ISAACS: Whatever.

DR. ZAWEL: Martha, I had a question. Stacey Zawel with United Fresh Fruit & Vegetable Association.

Martha, you had stated in your introduction something about imported strawberry outbreak.

DR. ROBERTS: I meant imported raspberry

outbreak.

DR. ZAWEL: Okay. Thank you. I just wanted to clarify.

MS. ISAACS: Okay. Anybody else?

DR. ROBERTS: Thank you for the correction.

MS. ISAACS: Okay. Mr. Barnes? Come on down.

MR. BARNES: Good morning. My name, again, is Richard Barnes, and I am one of the team leaders for the Food Safety Initiative Team working at FDA.

I've been with FDA a couple of years as the Director of Federal State Relations. I came to FDA from the State of Oklahoma, where I was Director of Consumer Protection before going up and deciding to work with the Food and Drug Administration.

A couple things I'd like before I get into the presentation to talk about how we got to this point, the President's Initiative, and then actually talk about the good agricultural practices.

First of all, several people have said, you know, this is a -- why pick on the fruits and vegetables. And we really are not. This is part

of a total initiative, and I don't know if you've seen this report to the President May of 1997. Food safety from Farm to Table, a National Food Safety Initiative.

And I'm involved, complete with all of the food safety initiative involving all of this, as well as the produce and import food safety initiative part that is leading to the guide to minimize microbial problems, hazards in fruits and vegetables.

The process, the President's entire program is exactly that; it's from farm to table. It takes the whole system and puts it together into a package. And so it talks about what -- this part of it that we're talking about this morning and what happens on the farm and the producers, packers and so on that lead up to the retail distribution chain, through the retail chain, and all the way to the consumers.

Several weeks ago, the secretaries of USDA and Health and Human Services announced the campaign called Fight BAC, B-A-C, which is a consumer campaign with four things they're concerned about in educating the consumer on handling foods.

The 1997 FDA Food Code has been produced and is out for distribution, and part of the food safety initiatives is to encourage jurisdictions, agencies to adopt the Food Code, which contains the best science available for the retail industry. Upgrading and looking at more good manufacturing practices; the use of HACCP, Hazard Analysis and Critical Control Points throughout the processing and manufacturing industry for food products, and also in now looking at retail, and where that fits and how that all goes together.

So this Food Safety Initiative is a composite of everything from farm to table. It puts us all together, all of us, as food safety people protecting each other to ensure the safety of our food supply throughout the entire thing. So that's one part that I want to bring up.

Secondly, I'm going to walk over here and turn the overhead on, and I'll keep trying to talk, hopefully, you can hear me, the group isn't real large, so that you can hear me.

People have asked about the schedule. This is the tentative schedule that, as Dr. Archer said, we are held to by the President of the

United States in trying to meet the guides that he wants for the Food Safety Initiative and the Produce Food Safety Initiative.

In November, on the 12th or 17th, there was a public meeting that was held in Washington, it was also held with the Produce Subcommittee of the National Advisory Committee for the Microbiological Criteria for Foods. I have to stop and think when I say that.

As a result of that, the working draft of the guide was produced and put out, which all of you have. And I would like to ask you, how many of you have seen a copy of the guide prior to today? How many of you have had a chance to really look at it? Okay. Good.

In my presentation a little bit later -- I'm not going to go through word for word of the guide -- we want you to be able to take time to look at it; those of you who haven't had a chance, those of you who have to digest it, to look at it, and to provide comments not only here at the meeting, but also the written comments that you're able to do through the end of December. In January, we're going to compile and evaluate all of these things that are being done.

Again, as we told you this morning or at the beginning, there's a transcript being provided. Those transcripts are going to be gone through by the scientists at the agency. We're also looking at bringing in our other people to assist us during this entire process of the whole food safety initiative; state people, industry people that are going to assist in this whole process.

Then, from that, we're going to publish a notice in the Federal Register sometime in March, where there will be another comment period. At the end of the comment period, there may be another meeting, depending on what's necessary, what comes out of all the comments. And then, sometime in July or later, the availability of the final guide will be produced.

Now, is this hard and fast, somebody said. And as of yesterday, my meeting very early yesterday morning, no, it is not. We are held to what the President tells us, but some of it may be shifted back a little bit, and that is based on the comments that we're getting from people from the first two grassroots meetings. So some of this time line may be moved back somewhat as we go through the process.

Okay. Any questions on that I'll take? That's just a very brief overview of the schedule.

Now I'm going to have to turn -- we're going to use some slides, so I'll turn the lights down a little bit when I get ready to do that, and if I don't get lost in my notes, we'll be all set in being able to read my notes from up here.

We encourage you to ask questions. One of the reasons I came to the Food and Drug Administration -- Dr. Vanderveen talked about the change in paradigms -- and one of the reasons that I applied and was very excited about going to work for Food and Drug was the fact that I was going to be a part of the change of the paradigms at the agency.

I'm here and I like to be here and I'm glad to present here because it involves my view and my change of paradigm, my guess for this, and that is that it involves everybody. It involves the state, it involves the growers, it involves the producers, it involves the consumers to have input into things, which is a change from the way things have been done in the past.

And so that's why I'm part of the team, is

to encourage and to make sure that I remind everybody during the whole process that we want the input from as many people as possible to make sure that this is a consensus document; that this guidance -- and I'm going to stress that word over and over again -- that this guidance has the input of everybody who wants to have something to say into it before it's finalized.

Okay. If you could turn the slide projector on for me please, Camille? See how we have to adjust the lights.

Can you see that? Good.

Initiative to ensure the safety of imported and domestic fruits and vegetables. In October of 1997, the President announced a directive to improve the safety of fruits and vegetables for both domestic and those imported from foreign countries. In his message, he wanted to develop guidance to the industry that would not have the force of regulation, that would not be a regulation, but would provide guidance to the industry, taking the input of everybody who was interested to help improve the safety of fresh fruits and vegetables to minimize the risk from unsafe produce.

Again, several people already have talked about the outbreaks that have occurred over the past years, and there have been several of those that have occurred from both domestic and from imported produce, but the goal is that we want to have the safest produce available to our consumers.

And we do have that, and the President said so in his message, that we do have a very safe produce supply, but that we wanted to increase it. And we want to increase it because both he, the National Cancer Institute, the Food and Drug Administration, the USDA, all support the idea that more fruits and vegetables, fresh fruits and vegetables are important to the health of our nation and our citizens and our consumers.

We all know that the idea of having fresh fruits and vegetables in our diet is important to our national health and that we want to keep it that way, we want to keep it safe and we want to make it safer as we go through this entire process of the farm to table food safety initiative, improving the safety of foods all the way along the line.

The elements of the initiative include a

legislative element, that one's already been done. On November 23rd, a bill was introduced into Congress to give the Food and Drug Administration the authority to work on imported foods very similar to what USDA, FSIS has for meat and poultry products. It would allow us to -- and I have some of the dates -- it was supported by -- introduced in the House of Representatives on November 13th, it's HR-3052, it's called The Safety of Imported Food Act of 1997.

And essentially what it says is it changes 21-CFR, or the -- I'm sorry, not 21-CFR, but the Food, Drug and Cosmetic Act, to add some language that would allow the Food and Drug Administration to look at foods that come into the country based upon -- and I'll say that have not been imported in the United States, that have not been prepared, packed, and held under a system of conditions or subject to measures that meet the requirement of the Act, or otherwise achieve a level of protection required as determined by the secretary.

Well, there are several steps that the agency must go through before that's done, and

there are several things that are different from what the USDA has. There would be no pre-approval, for example, what FSIS has is going into foreign meat plants. We have to show as an agency how we would enforce such a rule, how we would implement it. We'd have to show that no one would be denied entries of products into the country or that there would be licensing or pre-approval, for example, like low-acid canned foods. So all of that has to take place as a result of this legislative proposal before any of it happens.

The administration portion of it is the guidance to industry, which we're going to talk about shortly, the good agricultural practices, and eventually good manufacturing practices, as well, to deal with that segment of the industry from the farm up through other places where it is controlled already under the CFRs.

And I hope that all of you understand when I say CFRs, what I'm referring to it's the Code of federal regulations; it's the documents that guide the Federal Agencies and have the rules and regulations written into them. 21 Series is the Food and Drug Administration, for example, the 40

series is the Environmental Protection Agency, and so on.

You're going to hear me talk a lot this morning about good manufacturing practices that are already in place for producers and manufacturers. The good manufacturing practice is Section 110 of the 21 CFR series.

And then there's also a budget request, and that would be for '99, for FY99. There is no money budgeted for this initiative in FY98. So some of the things that would be done under it in both domestically and imported for it would be in FY99.

And the biggest requirement why we're here today is that we had a requirement to report to the President within 90 days of the October thing on where we were and how we were going, how this process was coming together, how the project was working, good agricultural practices, good manufacturing practices, what the schedule would be for all of those things to get it done.

And as Dr. Archer said, the man that we work for made the request that we do that in 90 days, and we're trying to adhere to it as much as we can.

Under the administrative section, the FDA, in conglomeration with the USDA, is to issue, within one year, the guidance for good agricultural practices and guidance for good manufacturing practices.

As a part of that, beside those guidance documents, also, then, we're going to work together to coordinate assistance and educational activities to both domestic and the foreign industry, the farming and producing industries, and both of them will be done as a part of that. Already, there has been cooperation between -- Cooperative Extension Service talks about doing some of this, as well as hooking on to what's being done, as I talked about earlier, on the other Food Safety Initiative as well.

There it is again; guidance, not regulation. Several people -- and we have said that you're going to hear that too much, and perhaps I need to just reinforce it again. That is the goal of this document. We want it to be a guidance document, an assessment, a self-assessment, to use another word, for the growing community to look at their practices, to help improve their practices, to help increase the food safety or

the safety of food, fruits, and vegetables in the in the food safety chain.

It's to help the farms, the growers, and the producers identify the appropriate practices where you can minimize microbial hazards. And the cartoon underneath that is Fight BAC; that's the one I talked about that's being geared towards consumers in the country. There was a -- the secretary's released last month, you're going to see more of him in many things.

And there's four areas, again, in that to go along like the four areas of the good agricultural practices; clean hands, avoid cross-contamination, proper temperatures, and cooking.

Good Agricultural Practices, the Guide to Minimizing Microbial Food Safety Risks for Fruits and Vegetables is the document that we're going to look at a little bit later. That's what they want -- or the President wanted us to produce, to do. It is a broad scope document. It is going to be very broad.

Many of the things you've already heard this morning, Dr. Roberts talking about the water in Florida, for example, there will be sections of the guidance document that are not going to

apply.

In other discussions we've had, for example, the amount of manure that's used in vegetables and fruit production in the State of Florida, for example, is very minimal, except for chicken litter, perhaps, in some areas. So it's going to be different areas of the country that are going to have different parts of that document be important to them, depending upon local laws and regulations, depending upon current practices.

And that's why we're here. Again, we're here to let you tell us what things will work for you, what won't, and if things are left out of the document that we have not considered, that those things get -- become a part of it as well.

We've already talked about the public meeting that happened in November and these meetings. The international meeting will occur next Monday in Washington, D. C., and there also is a second explanation of the good agricultural practices meeting that's going to occur, I believe, in Miami sometime next week.

Now this -- I left this slide in because it was used at the other grassroots meetings. However, I can tell you that the specific GAPS,

good agricultural practices, good manufacturing practices for four fruits and vegetables is being reconsidered. And as a result of the comments of the grassroots meeting, although we never had any criteria had been decided of what would be used for these fresh fruits or vegetables, none had been selected; it was intended that it will all come through a public notice, a Federal Register notice and public meetings.

At this point in time, as a result of the first two grassroots meetings and input from the industry, this is being reconsidered on whether or not there will be some specific -- this year or anytime in the near future -- whether there will be specific good agricultural practices or good manufacturing practices for four fresh fruits and vegetables during FY98.

So I've left this slide up because it was part of the other grassroots meetings, but also tell that you this whole process for the specific GAPS and GMPs is being reconsidered.

Outreach and educational activities are a big part of this process. Assistance to the U.S. farmer by the FDA and USDA on implementing the good agricultural practices, the new FDA

Extension Service, educational programs, assistance with people that you are used to working with and being part of your farming community to assist you in doing an assessment of your growing practices.

There's also going to be, in FY98, technical assistance to foreign countries. To initiate the development of training modules and to coordinate the development of non-FDA training network, which might involve industry groups, which might involve associations, which might involve private entities, to provide technical assistance to foreign countries using the same document to help them to be sure that their -- the level of safety of their produce is the same as ours.

That's a very quick overview of how we got to here, of how the President put forth this portion of the Food Safety Initiative.

Are there any questions I can answer about this part of it anyway? Anything I've left out?

Yes?

MR. BROWL: Which of the four fruit and vegetables --

MR. BARNES: Could you go to the microphone, please? And also, state your name for us.

MR. BROWL: My name is Joseph Browl (phonetic) I'm executive vice president of the Florida Gift Fruit Shipper's Association.

Which of the four fruit or vegetable groups you have considered or are still considering, GAPS and GMPs in 1998?

MR. BARNES: None have been considered that I'm aware of. The original proposal was that there would be eight sometime selected, that there would be specific good agricultural practices or good manufacturing practices selected for. None have been selected or even looked at.

What was proposed was that through the industry, through other means, eventually some would be looked at. But as I said, that are now being reconsidered and there are no -- at this point in time anyway, there's a possibility that that will not be done in the near future.

But that will happen with consultation with everybody. Again, this is an open process.

Yes? Please go to the microphone, state your name, please? I'm sorry, there's somebody in the back, Stacey.

MR. ROBBINS: John Robbins, consulting

engineer in food sciences.

Is that a function of the criteria that's involved, or is that a function of public comment that there's nothing been added to that list?

MR. BARNES: The criteria were never developed. There was never a criteria that we had developed to that point in time.

What we had announced was that we would look at some specific good agricultural practices for some specific commodities. The criteria were never developed to that point in time.

But as a result of the comments from the first two grassroots meetings and from the industry as a result of some other presentations, that is being reconsidered on whether or not there will be specific GAPS or GMPs for products.

MR. ROBBINS: Thank you.

MR. BARNES: Stacey?

DR. ZAWEL: Stacey Zawel with United Fresh Fruit & Vegetable Association.

Richard, I missed something that you said and wanted to get clarification on a Miami meeting? What is that and what's it about?

MR. BARNES: Camille, help.

John, do you have that?

MR. VANDERVEEN: There will be -- I believe there was another Miami meeting planned under a different auspices and we are going to make a presentation there.

I believe our director of the constituent services is going to make that presentation. There are a group of people from various countries coming to be at that meeting anyway, and it was an opportunity to inform them about our program and our -- and our legislative initiative, and that's an opportunity.

Do you have anything more to say on that, Terry?

MR. BARNES: The meeting and, again, to follow what John said, is a presentation; it's not a grassroots meetings. It's a presentation.

MR. VANDERVEEN: That's right. It's just a presentation.

MR. BARNES: Right. I'm sorry if I left you with the impression that it's a grassroots meeting. It is not.

MS. BREWER: It's a committee of Latin American Action --

MR. BARNES: That's right. Latin American Action Council.

MR. VANDERVEEN: This meeting was planned a long time ago. It was put together by the Foreign Aid Service. We were invited to participate. It was designed to help with providing information to countries about our requirements in meeting the regulations that we have for foods being sold in this country.

There were some other meetings planned in other countries. I believe they're still going to occur. The original focus had more to do with pesticides and things of that sort.

MR. BARNES: Yes, ma'am?

DR. MALECKI: Hi, my name is Dr. Jean Malecki, I'm a health officer here in Palm Beach County.

And my question has to do with the document itself, and I understand that it's one deeply routed in values.

My concern, and probably this will be discussed later -- if it wasn't going to be, I hope it will be -- with all the guidance and technical assistance that can be provided, my concern is more of importation, what happens from a regulatory standpoint if there is still evidence of contamination?

MR. BARNES: Terry?

MR. TROXELL: Your question is, if we find contamination on a product that's offered for entry?

DR. MALECKI: If we still have continuing human illness related --

MR. TROXELL: We would be able to take action against those products under the Food, Drug and Cosmetic Act.

DR. MALECKI: Well, in the past, we have not. So I was wondering if there's going to be a dialogue in the future in terms of relationships contractually and so forth.

Right now, it's obvious to me that it's been a consumer choice more than anything else. And, again, my concern is, is that if we provide all this guidance and technical assistance, again, my concern is importation; what does ultimately occur from epidemiological evidence, from public health relationships with the folks as FDA would have a health commission to either embargo or stop sale.

MR. TROXELL: At this point, we would need, under the FD&C Act, to make the link of a poisonous or deleterious substance such as a

microbiological problem in the product, or that the products were produced under unsanitary conditions to prevent their importation.

DR. MALECKI: Thank you.

MR. BARNES: At one of the other grassroots meetings -- and to show you that things are being done all over the country and many of them have been looked at in the process -- there is one that -- one of the Cooperative Extension Services had a brochure, Prevention of Food-Borne Illness Begins on the Farm. And Dr. Archer, wherever you went to -- one of the things -- I like words anyway, and one of the first sections in here is clean soil.

Any other questions on the first part of this? We are waiting for coffee to be set up.

Would you like to take a short break now, even though the coffee isn't ready, or would you like me to go on and we'll take a break when that gets done? We'll be flexible.

Go on? All right. We'll do that.

MS. ISAACS: Hold on, Richard.

MR. BARNES: We'll go about, maybe 15 minutes, 20 minutes?

MS. ISAACS: Okay. If you come back 15

minutes --

MR. BARNES: No, I thought they said go on.

MS. ISAACS: Oh, okay. All right.

MR. BARNES: So about 15 or 20 minutes and then we'll take a break.

MS. ISAACS: Never mind.

MR. BARNES: Again, the scientists who work on this document are in the room. When you ask questions, if you ask me, for example, the time and temperature requirements for composting untreated manure in a 30 degrees centigrade environment that's very damp, you'll see this glazed look come across my face, and I'll start pointing to someone.

And, also, I'm not going to go into specifics of this whole document. We want you to take some time to look at it, to develop opinions on what it is. I'm going to highlight only during this presentation what is in the guide to minimize microbial food safety hazards for fresh fruits and vegetables.

And so I'm going to talk about the document in general. At the end, we'll do a short question and answer period, then we will either go to lunch, depending upon how we do on time.

Probably we'll go to lunch a little bit early and then come back and then do the other presentations.

The reason for the document in the beginning of it talks about the reasons for this guide; the recent outbreaks have raised concerns about the safety of foods, including fresh fruits and vegetables that are not processed to eliminate pathogens.

And that's part of the problem. The problem is that we do not have a way to eliminate pathogens from some fresh fruits and vegetables. You know the names of the microorganisms, cyclospora, E. coli 0157:H7, Salmonella, cryptosporidium. There are many organisms that have been involved in outbreaks in recent years involving fresh fruits and vegetables that are difficult to remove. I mean, we don't have fried lettuce sandwiches; we don't cook lettuce to 155 degrees for 15 seconds like we do a hamburger. And so we have to be involved in the entire process from farm to table in ensuring that we do not -- we reduce or eliminate pathogens wherever possible in that process.

They're not subject to many of the steps

that normally occur in food processing that would eliminate or reduce microbial load that most processed foods receive, or they aren't cooked. Therefore, we have to find other ways to reduce the microbial contamination, especially for raw produce products.

And, again, at the same time, we have to do that and what we're telling people eat more of them; it's important to your health.

Potential vehicles for pathogenic contamination, and which this document is divided in, are into four areas; water, manure/municipal sewage slush, water field facility sanitation hygiene, and under transportation there is one other area which is called the trace-back; where we're now calling it positive lot identification instead of trace- backs.

Again, as you've heard everybody say, it is intended as guidance only; it's intended as self-assessment. It's not a check list; it will not contain everything that you need to know. We will not have every bit of information that's there. But it's to get you to think, to look at, and evaluate your growing practices, your on-site processing facilities, to look at what could be

done to minimize the food safety risks.

It encourages you to take a proactive role in the food safety chain. It will be the first step in the food safety chain. It has the best advice of FDA and USDA in consultation with all of you. The reason for the grassroots meetings with scientists, Cooperative Extension, the universities -- and other universities, with anybody who is willing to provide input into that process.

The document focuses on common elements in growing, production, and distribution, and where they will reduce the risk of microbial contamination.

However, it does not contain all of the scientific knowledge that we have or that we are aware of, or that we know about to get everything to answer all the questions. There are many gaps in the science, treating manure, for example. There has been a lot of research and work done with municipal sewage sludges, but not as much done with manure.

And so there's a lot of gaps in the science. And part of this initiative is to improve the science, to develop research, to help provide you

with better information for your farming practices.

Where there's uncertainty, the guidance will be qualified using terms like "minimize" or "avoid" or "where feasible". And those are words that are used in guidance. Again, somebody said the difference between guidance and regulations; regulations usually don't use those words, they usually use "shall" or "may" or "do".

In this case we're saying, you want to look at, minimize, or avoid where feasible. And that's important because there are some times that you cannot do that, you cannot avoid certain things. You cannot avoid the birds flying over. I don't know how to do that. If you invent something, please let me know, I'll invest in it.

It is intended to provide practical advice appropriately qualified. And appropriately qualified means as a result of this process, of going through the whole process of ensuring that everybody has input.

In some areas, the guidance may properly be more specific such as when practices are related to federal, state, or local laws. As Martha Roberts talked about earlier, in Florida the

water usage is fairly tightly controlled. Alternate water sources may not be available to you, so you're stuck or restricted in what you can do based upon federal, state, or local laws.

In many cases, a packing house may come under the Code of Federal Regulations and the good manufacturing practices, Section 110, because they are considered a food processing establishment, where some are not. And that has a lot to do with where they're located, the type of process they're in, and so on and so forth. And it depends, in the Code of Federal Regulations on how they fit into that process.

Many times packing houses in the field, open sheds where packing is done, it's gone directly from there to the retail segment and through the distribution chain and through the retail segment, are not covered under that good manufacturing practices.

Common vectors for pathogens of all fresh produce, such as water and manure. There are certain things that are common to growing no matter what. And there are vectors that we know are there. Water -- and I'm going to talk about it in a few minutes -- is a very, common vector

for many, many pathogenic organisms.

On the other hand, there's also a big difference in the size of the farms, the regionality of farming practices, types of farms, climate, soil differences, fertilizer sources, employee availability, et cetera, et cetera, et cetera.

The document will try and take into account in being general and broad-scoped to account for all of those things. But, again, there are some sections that you may find in this area that do not apply, where in other areas they do.

One of the things that I was thinking about this morning, in the section that talks about making sure that you restrict livestock from the fields. And at this time of year in Oklahoma and Texas and that part of the country, they are grazing their cattle on the wheat fields, eating the green tops off of them. And that's a common practice. That's a common practice in that part of the country, although it's not a fresh fruit and produce, that's a common practice of letting the cattle into the fields for the winter wheat.

Then there are cultural practices that vary widely between different types of produce and

different varieties of specific types of produce. A strawberry is not a strawberry is not a strawberry, or a rose is a rose is a rose. How you grow a strawberry here in Florida may be different from the way it's grown in another part of the country.

Martha Roberts said this morning that, for example, many of you have already gone to drip irrigation. Well, that's not true in other parts of the country where they're unable to do that for many different reasons. And so there's different ways of doing things, even within the same product, based upon different sections of the country.

We want to be able to tailor it as much as possible, but allow enough flexibility in the document to ensure that the differences that occur across this country can be taken into account.

And the last question there -- I stepped ahead too much -- is the question of why we're here. How can we best provide practical concrete advice to growers that will move us toward safer produce without being unnecessarily costly to the growers and the industry?

Now, that's what the guidance document is intended to be. And how can we do that? How can we best provide that guidance that will assist you in ensuring the quality of the products. Okay?

Water. Now, before we get to the actual section, there's a couple other sections in the document you need to be aware of.

Definitions. It talks about several definitions. There may be some need to add some more in there, or you can be a judge of that kind of thing that might need to be defined a little bit better for certain people or certain entities in that document.

The first section is on water. And I think -- how are we doing on the coffee? Can you --

MS. BREWER: Ten more minutes.

MR. BARNES: Ten more minutes. Okay. Keep talking.

Source and quality of water are extremely important. One, because water is an inherent source of contamination itself. Because it picks up -- when I went to college, I learned that water is called the universal solvent; you give

it enough time, it will dissolve anything, and it will carry it with it as it goes through the process.

And so it can pick up and become a source of contamination itself. And you can't say because it comes out of the water tap that it's safe water.

If you remember the cryptosporidium outbreak in Michigan, that's it. You've always thought, well, if you turn the tap on, the water comes out, it must be safe. Well, it isn't always that way. We have to be constantly vigilant about the water supplies that we're using to ensure that they maintain and they stay safe. It's a very good vehicle for spreading pathogens in the field, during harvest, or in the packing house.

And the water you start out with may not be contaminated, but it can become contaminated through the process; either in the process of washing, moving fruits or vegetables through a flume, using water as a transportation vehicle, cleaning the food, so on and so forth.

These are some of the organisms that can be carried through water and have been associated with outbreaks that are associated with different

types of fruits and vegetables and water products, as well.

Because of water's potential as a source of pathogenic microorganisms, growers should carefully analyze their practices involving water.

Use a lot of ground water. I just put a new well pump in my well, and I wound up having to chlorinate the daylights out of it to clean the well back up again, to get the E. Coli out of my well as a result of putting a new pump and fooling around with it, touching it, and doing everything else. That water was safe before, and now it's safe again. But in between times, I had to test it and to treat it, to make sure that it stayed safe.

So you have to be able to look at your practices and what you've done, what's going on, what's happening around you involving the water products and the water that you're using. You want to try to seek to limit the possibility for water-borne contamination. And that gets more and more difficult as it goes through the process.

Recognize the potential for water source to

contain pathogens. If you're using a surface water source, is there runoff from someplace else, are you downstream from a sewage plant, has there been a lot of rain that has allowed runoff from a livestock operation upstream from you. Is there a dairy operation upstream from you where there is a creek or a tributary that runs through the field where the cows are pastured.

So you've got to look at what happens to the water, and then also that it has sufficient quality for its intended use. Using a surface water to do the initial dirt wash off a product that is going to then be further washed down the road in the packing shed with a cleaner water supply, that's the kind of process that you want to look at. So what is its intended use. You need to tailor it to the needs of the operation.

Now, in the document, for example, it talks about -- I can't say it -- counter-current flow. In other words, you want to start where the product is supposed to be the cleanest with your cleanest water, and if you're going to reuse that water, like Dr. Roberts talked about this morning, is that the water goes back towards the beginning process so that you don't -- that you

use your cleanest water at the point where you want the product to be the cleanest, and if you're reusing that water, that it then goes -- it's reused back at a different portion, not at the final rinse stage, for example, is one of the ways you can do it.

And, again, the guidance does not preempt any applicable federal, state, or local regulations or laws or practices. You've got to combine all of that together. Dr. Roberts said this morning, there are plenty of regulations, and that's true, there are. And sometimes the regulations do what we want them to do, and sometimes they don't.

One of the things I do other than this kind of stuff, is I do a lot with teams and with change. And one of the -- I believe Steven Cubby (phonetic) said, you give a man a fish, you feed him for a day; you teach a man to fish, you feed him for a lifetimes.

Sometimes in the regulation business, we're doing the former, and what we really need to do is the latter. And sometimes this type of document, guidance, that has the input of everybody, does the latter.

Growers should consider -- don't fail me now. So, again, do an assessment; identify and review the source of water used on your farm. If it's in Florida, then you're controlled by the Department of Environmental Quality using ground water, you still need to look at what has happened to that ground water, what have you done to it.

As the degree of water to produce contact increases, so does the need for good quality water. Again, the higher up the chain that you get closer and closer to the consumer, the higher the quality of water needs to be. And the review can include determining whether the source of water is from a well, open canal, so on and so forth. In that process, you're going to look at the water and what's happening to it as it gets closer to that end product.

Now, this one; controls may include delaying water use till the water quality improves. That's not very practical. We realize that. But what we want you to do is to be aware of that, be aware of what's happening to your water so that you can change, if necessary, do something different.

Now, that may not be practical, as Dr. Roberts said this morning. You're pretty well controlled in the State of Florida in how your water usage is done, but you need to look at that process. If something does go wrong, what are your alternatives, what kind of things can you change in your particular operation.

Irrigation water. Again, many factors influence the choice of an irrigation system. Water availability and state, for example, is what I just talked about earlier.

Cultural requirements for different types of crops. An orchid needs a different water supply than a strawberry or raspberries do. So in the way that it's supplied to. Depending upon the crop, you need to look at considering the water delivery system that minimizes the direct water to produce contact for certain produce, or that that contact is far enough away from the harvesting of the product that the likelihood of pathogenic contamination is decreased.

Water used for crop protection sprays also needs to be considered. Although you may say, well, it doesn't make any difference, I'm just mixing a pesticide with this, it's been found

that many pesticides mixed with the water do not necessarily kill microorganisms that are in that water; they're not designed to do that, so they may survive. So the contamination could be still there. And so the water that's used to mix crop protection sprays also needs to be considered in the process.

Let me catch up to my notes.

Mixing crop protection sprays. Growers need to be sure that the water is of adequate quality for this purpose.

Good agricultural practices to protect the integrity of the water source. For example, if you're using your ground water to mix a herbicide or a pesticide, you want to be sure that, not only is that good quality for the stuff -- the pesticide or herbicide spray that you're going to use to spray on the crops, but you also want to be sure that your pesticide doesn't contaminate your water source. There are many, many instances around the world where someone has been mixing pesticides or herbicides and accidentally wound up putting it back into their water source into the well or even into the municipal water supply.

Once you get to the point where you're using -- you're starting to wash produce, you really need to take a better look at the water supply to make sure it's safe and sanitary, and that it is in a packing environment that you're using, as you go through the process, you're using cleaner water.

Even with sanitizers, the water might eliminate the pathogens on the surface of the produce, but it may not. And in some cases, the pathogens are internalized, the wash water is not going to do it.

When I flew in yesterday, after we came under the clouds, I looked down, I could see a lot of swimming pools. And I know a lot of you know about swimming pools; this is very similar to it; a good analogy. You put two kids in the swimming pool and the chlorine level stays pretty high; you put 40 kids in the swimming pool, what happens to your chlorine level. It disappears.

The same thing is occurring when you're washing fruits and vegetables; as you continue, and you've lowered microbial load and it increases in the water, even with chlorine in it, it uses it up, and if you're not careful, if

you're not monitoring it, if you're not replacing it, like an automatic system in a swimming pool will do, the ability to kill pathogens or to reduce them in the water goes away and becomes virtually nothing.

There's one of the things in there that already was commented on, on tomatoes, one of the guidances in there was talking about washing tomatoes with water that's ten degrees warmer than the tomato to stop internalization of the thing. So the growers -- many of you said, but you don't understand, we're trying to cool the produce and get the field heat out of it at the same time.

And this is one of those things where we come to you and say, here's a scientist saying, this is a good way to keep the pathogens out of the thing using scientific principle, and here's a grower saying, but I've got to do something else. Somewhere we've got to find a way that those two come together, and that's part of, again, why we're here.

If pathogens are not removed or inactivated, they can spread so a significant portion of the produce becomes contaminated. And that's, you

know, the old adage, the one bad apple, the barrel of apples; same thing.

If you had one load coming out of the field that was very highly contaminated for some reason, and you start mixing it together in a wash tank and washing it together, now all of them could become contaminated if you're not careful of what's happened with that water.

Chlorine, as Dr. Archer said, is one of the most commonly used ones. There are some others being used that are used in other environments, like processing or food service environment, but they have not been used for this type of operation.

And again, once you get into using these kind of things, you want to be sure that you understand their usage, how they should be used, and how to monitor their use during the time that you're using it as a disinfectant.

Cooling operations. Water and ice used in cooling should be considered a potential source of contamination. Several food-borne illness outbreaks have occurred as a result of ice; ice made from an improper source or ice becoming contaminated. It is just like a water.

One of the things that I deal a lot in the retail environment, earlier this week, I said I was working on the retail portion of the Food Safety Initiative; we talked about many of the same kind of things that we'll talk about later in hygiene. You know, when people who take your glass in a retail environment and stick it through the ice, what have they done? Have they contaminated the ice? Very possibly yes.

Okay. So you've got to look at that because of outbreaks of the organisms shown here.

Growers need to be made aware of the water source used to make ice needs to -- used for cooling operations has to be in good sanitary condition. But, again, it's becoming in contact with the produce and, therefore, should not carry pathogens to the produce, but you should do it. Okay?

MS. BREWER: Richard? We're ready. We can take a break now.

MR. BARNES: Okay. That's a good break. We'll just break right here for 15 minutes. We'll be back at 11:00 o'clock.

(Thereupon, a short recess was taken.)

MR. BARNES: We'll try and get through this

section of it here in about 20 minutes, do a short question and answer, and then break for lunch a little bit early, take an hour for lunch and get back and then finish up this afternoon.

I'm going to try and speak a little bit slower so that I don't wear out our transcriptionist before lunch.

And a couple things from earlier that people brought up. One is that, when I was talking about water and wash water and talking about the supply of the water, municipal supplies, potable water supply, I did not mean to imply that, as a grower, if you're using municipal water, you should go test it; that should be done for you by the entity, the municipality, the authority providing the water to you, and they should have the records.

So I didn't mean for -- when I was talking about potable water, that you should be testing water all over the place. Just be aware of your source of water and where it comes from.

We talked about water and ice and cooling and, finally -- and this is the very end of it -- is that, again, it's just that we want you to be aware of the fact that water is a vehicle for

spreading localized contamination; that water can carry pathogenic organisms with it, and that it can be spread from one group of products to another, or spread through a group of products; that when you're using water in washing operations, that you're aware of the potential contamination of that water as it's being used, and that you monitor its use throughout the process.

Manure and sewage sludges. As I said earlier this morning, health officials and scientists agree that animal manure and human fecal matter are a significant source of human pathogens, and that untreated use of these -- use of untreated products such as these on a product that is not going to be further -- where the pathogens are not going to be further reduced is a significant risk.

The use of manure or municipal sewage sludge in the production of produce must be closely managed to limit potential for pathogen contamination of produce.

Now, we know that -- and I'll talk about it in a minute -- that there are not a lot of use of municipal sewage sludge so much in the farming

community, but that it has been used. And where I come from and was working in Oklahoma, every spring, one of the places we went to get the best tomato plants was at the city municipal sewage sludge plant, because they were grown in the drying beds and they had beautiful tomato plants that got about that high that you could take home and plant and grow nice tomatoes.

So it is being used, and there is more research has been done on municipal sewage sludge than on a lot of manure products. So there is some evidence of its use. They know that this is a good soil conditioner and that properly treated sewage sludge that has pathogens reduced and does not have heavy metals in it -- which is one of the other things that they definitely look at -- municipal sewage sludges is a good soil conditioner and fertilizer.

You've got to be alert to the presence of human or animal fecal matter that may be introduced into the produce growing and handling environment. The use of manures, whether it's chicken or other type of animal manure, is used in the environments. And, again, it talks about in the document, site packing, for example, and

so on. You've got to be aware of that process.

Properly treated manure or municipal sewage sludge is a safe and effective fertilizer. But untreated or improperly treated manure could contain pathogens that eventually would get into the produce and contaminate the produce.

And, for example, with some produce, leafy produces like lettuces or whatever, if it was contaminated, it may be very difficult, then, to wash that product or to eliminate the pathogenic organism from it before it goes on through the food safety chain.

Although municipal sewage sludge is not widely used on fields growing fresh produce, there is a lot of information about its use and where it has been used, and it does, again, serve as a source -- untreated sludge serves as a source of contamination for produce.

Again, the sources of fecal contamination, untreated or improperly treated manure, nearby composting or treatment operations, nearby livestock or poultry operations, municipal wastewater storage or disposal areas, you know, if you have a produce field very close to a municipal sewage plant and something happens

because of a rain or whatever and they have to bypass, even though that's their -- with all the requirements they have, if that happens, if they bypass and it gets into your field, you need to be aware, if that happened, the possibility of contamination of produce.

And then, finally, the last one, high concentrations of wildlife in growing areas. We were talking during the break about some of the things Dr. Archer talked about, covering ponds. And, again, those -- that's not a thing, but covering tanks might be a better analogy.

We would not ask -- and I was telling them in Maryland, the deer we have, I don't care how you build a fence, if the deer want in, they're going to eventually get there to your garden. So that's not -- again, it's looking at what's around you; what types of contamination can occur.

And Dr. Roberts was talking about, saying, you know, putting in a produce growing area downhill from a cattle operation is not -- would not be considered really good practice and should -- and would be the kind of thing we're looking at.

Growers need to develop and follow good agricultural practices for handling manure to reduce the potential of introducing microbial hazards of produce. And this talks about different practices; processes such as composting to reduce the levels of pathogens, minimizing direct or indirect manure-to-product contact, and assessing adjacent or nearby land to determine the risk that it may pose as a result of water runoff, wind blowing, and so on and so forth.

Some of the treatments to reduce pathogens in manure; passive, nature and time. There is a competition that occurs with the soil microorganisms that have a tendency to overwhelm the pathogenic organisms when it's tilled in and it is allowed to sit for a period of time. Active types of things, like pasteurization, anaerobic digestion, aerobic digestion, et cetera.

Composting divides it again, which most of you are probably aware of, what it is and how it helps to make the manure safer, reduce the pathogenic or the organism level in the manure so that it can be used as a safe amendment.

And some of the science is there, some of it

is not. The NCRS has some data on composting, they have some booklets on composting we can use, talks about some of these things that have been done with EPA and municipal sewage sludge, two or three days at 131 degrees, I think it is, I can't remember what the exact temperature was. It talks about they know that that will reduce the thing, but some of it for manure is not known.

And, again, how you compost manure here in Florida is going to be a lot different in December than how you compost manure in North Dakota, so there's a big difference in how that works.

We don't have the data to tell you all the time and temperature recommendations. In one of the statements in there, it talks about -- maybe one of my next slides -- of putting it on the soil so many days ahead of time then leaving it, and these are minimum amounts of time. And there's one of them, it talks about 120 days. And there's not really the science to support that yet, but it's a recommendation.

Again, it will vary, depending upon whether you're using treat or untreated manure. And, again, here's a -- the growers may reduce the

risk of contamination from manure by maximizing the time between application and harvest.

The minimums range from 40 to 60 days, but some recommendations are 120 days or longer. And that's a recommendation; that's not always -- and that's part of the research process that's going to go on under this initiative, is to look at those kind of things to determine and to give you better data on what kinds of things you need to do, what kind of operations need to take place, moving the product from outside in, et cetera, et cetera, et cetera.

Natural fertilizer, such as composted manure have to be produced in a manner to reduce the likelihood of introducing microbial hazards. And there's many questions about that. If it's been produced in a composting facility, it gets to you and you store it outside for a while, is it possible for microbes to get to grow or to be reintroduced into the composted or treated manure for fertilizer.

So how it's handled and what happens to it after it's been treated may have an impact, and there's some of that information that is not available.

Cross-contamination which could occur as a result of your composting operation from stuff being wind-blown or runoff from it going downhill into your field where you're growing the produce. Depends on, again, looking at the process, how and where it's being done, is there any likelihood of contamination occurring in that process.

And, again, there's some -- not a clear indication that composting or other treatments totally eliminate the pathogens. In many cases, you're not talking about a sterile product. It's been reduced to a low enough level, but it's not a sterilized product. If you were going to buy sterilized manure, that's one thing, but if you just composted it, it may reduce the pathogens.

But, again, in some of the organisms that have been seen, the levels that were required to cause food-borne illness may be very, very low. So even though we reduce them to a very low level, it may not be enough to eliminate the possibility of contamination of the final product.

So you want to consider even treated manure under the same aspect that you might untreated

manure, being sure there's a long enough period of time, even after you applied treated manure to the product before harvesting is similarly to what you would do for untreated manure.

Again, here it talks about cross-contamination runoff, leaching from wind spread from your composting operation or your manure handling operation.

We're going to go on now and talk a little bit about sanitation and hygiene and microbial hazards associated with workers and people who are working in the field.

The worker health and hygiene do play a critical role in the controls to minimize microbial contamination of fresh produce. The fecal oral route is the majority of the way that many of these pathogenic organisms affect people.

That is how it occurs; that's where the organism is shed, from the human body, a person who is ill, and can wind up on the hands or something else, and wind up back in the mouth of another person.

And so the fecal oral route is the primary microbial concern with most of the organisms we're talking about.

Good hygienic practices by workers are essential in the control of microbial hazards. And, again, as I had talked to you earlier or showed you earlier the other document from farm to table, that's part of the essential thing all the way through to the consumers.

All of the educational campaigns, all of the documents that you see from the entire Food Safety Initiative reemphasize this, that good hygienic practices from the farm all the way through the housewife or house-husband at home preparing the meal are necessary in order to avoid the contamination of the food products.

People who are ill, who are working in any part of the food safety chain, whether it's in the field, picking produce, packing it, distributing it, processing it, serving it, retail to the consumer, anywhere along that line, it's possible that it can become contaminated and wind up causing illness.

What we would like -- and in the document it talks about -- is to control those hazards in the growing environment. Employees tell -- or report to the person who's in charge about their health as they go -- as they're working, to talk about

diseases that they understand and have some education or are talked to about the diseases that are transmissible through food that they may carry, that they could contaminate the food product with. That the people in charge should be aware of the health of their employees, wherever possible. And that individuals with diarrheal disease shouldn't be handling directly fresh produce.

Now, we realize that you could certainly not say to the farm worker, or the person working in the shed, if you're sick, we can't let you work. Their livelihood is just the same thing we deal with in the restaurant; they are paid for the time that they're there. But what we have done in the other environments is look at what other kinds of tasks can that person perform without actually having their hand on the food product itself. Could they drive a truck, could they clean and maintain equipment that day, could they work at -- I should say work in the manure pile, that's not -- are there other things that they can do other than actually putting their hand on the produce during times that they're ill that might minimize their contact with it.

All the employees who are involved in the harvesting, packing, and distribution of fresh produce should be trained in good hygienic practices. I can tell you from my long experience in hand washing, without getting up on my soap box, that a great percentage of the people in this country do not wash their hand after they go to the bathroom. And that's not out only in the fields; that's every day, every place you go. If you don't believe me, next time you go out to the theater, you go somewhere out to dinner or whatever and you go to a public restroom, take a minute and look and see; look and see how many people come in and go out, and the only thing they stop at the sinks and the mirror for is to check their hair.

Consider establishing a training program.

A good training program would cover -- a part of it would cover hygienic practices. Also, it might be part of a total program where you look at all the other things that are necessary for you as an operator or producer in the field.

A system to monitor. How can you be sure that the people that are working in your packing shed, after they have gone to the little green

building out back, have washed their hands before they come back in and sort produce or chop it or put it in plastic bags. They need to be taught proper hand washing techniques.

Wherever possible, you'd like them to use warm water and soap. But any water and soap -- any potable water and soap is going to remove contamination from their hands, especially after something that talks about things in the thing, after smoking and eating, after going to the rest room, which is very, very important, after being out -- let's say that they did work in the morning, working shoveling or working at the composting pile with manure, moving the outer layer into the center. Then in the afternoon they're coming and helping with the harvest. You want to be sure that they have not caused any cross-contamination, that they've washed their hands.

On-site latrines and elimination of wastes outside of these facilities with some kind of a good toilet facility needs to be ensured. There has to be a way for people to eliminate waste from their body in a safe and sanitary manner that is not going to cause pollution or

contamination of the environment or the produce.

Toilet facilities, the proximity and accessibility for harvest crews is important. If you're harvesting a section of land and you've got one port-a-potty that's at the opposite corner of it, is it accessible to the employees or are they not going to make it all the way over there on their way.

So you need to look at where they're located, that you have enough facilities for the number of people that are working, and that workers have the opportunity to use the facilities when needed.

Assure that the location of facilities is not near a water source that's used in irrigation or that there's any way that contamination from that should it overflow or gets blown over, it leaks, whatever is going to contaminate water source, the produce itself, equipment that might be used out in the field, so that there's no way that runoff or anything else is going to contaminate the product.

Again, hand washing stations, it's very important, especially after using the rest room, anybody with diarrheal disease should be suspect

and should be looked at as a possibility of carrying or shedding the pathogenic organisms, and that's a call that you're going to have to look at and do, but the idea of having toilet paper, the ability to wash and dry their hands is going to make a lot of difference.

Service the portable toilets away from the field, if possible. If not, to be sure that the truck that services it can get into the field and close to it without contaminating anything. If a spillage should occur from the truck, that it doesn't wind up all over your produce, et cetera. Make sure the drainage is correct. If something does go wrong, that it's disposed of away from the produce or the packing shed or whatever other facility you're using.

A little bit different. This is the harvesting precaution itself for the product. Wherever possible, get as much dirt, mud, et cetera, off the produce while in the field. What you're talking about here -- or what we're talking about is eliminating as much contamination as possible before it gets into the packing shed, before it gets into the transportation system, before it gets into the

packing boxes, et cetera.

Somebody said -- we talked about muddy cartons or pallets, using them to stand in in the field while they are harvesting, standing on the pallets or standing in the cartons that the produce is going to be packed in while they're filling one, and then stepping out of it, and then using that one, then, to fill the produce. Those kind of things need to be looked at during the harvesting operation to be sure that there isn't cross-contamination or contamination of the vehicles that transport the produce.

If it's packaged in the field, make sure to look at the contamination process -- or that it isn't contaminated and being carried through the system. Inspectors, anybody else who is handling the produce, sorting it, grading it, whatever they're doing with that product, that they also have good hygienic practices; that they're washing their hands or using some other method of ensuring that they don't contaminate the produce themselves.

Equipment maintenance. Now we're talking about field equipment. Maintaining equipment sanitation. Now that word sanitation does not

mean sanitizing. And that just means the ability to remove gross dirt, et cetera, from the harvesting or the equipment that's used in the production process or the harvesting process.

That may be everything from harvesters to tools, et cetera, et cetera, that need to be cleaned on an occasional or regular basis to ensure that they don't add to or contribute to the contamination of the final product.

You certainly are well aware you're not going to use a manure spreader to hall lettuce back to the packing shed, but the other pieces of equipment need to be looked at as well for gross contamination. If that farm wagon that's towed behind the tractor happened to go through the field that you just applied untreated manure to, and you're not going to produce, there's a possibility that it's going to carry some of that back into your produce field.

Again, you're going to look at the whole facility so that anything in the process from harvest through processing that makes contact with the produce is cleaned and is not going to add or contribute to the contamination of that product.

Poor sanitation in the packing house can increase the risk of contamination of the produce and the water supplies that are used in that environment that are used with the product.

Again, closed packing houses in many cases that are permanent facilities may be covered under the Code of Federal Regulations, Part 110, Good Manufacturing Produces, and the water and a lot of the cleanliness and the equipment types and so on that are used in that facility are going to be different from the ones that are used in an open packing shed out in the field.

Equipment that is used in the packing process or in the processing facility, knives, saw blades, et cetera, et cetera, need to be inspected and cleaned on a regular basis. Again, it goes back to the same thing we've been talking about all along, anything where there's a possibility of adding to or putting contamination into the product needs to be looked at and cared for in the proper manner.

Pest control. Here, we're talking about primarily in a closed facility; a closed packing house, not an open packing shed. You want to be sure that animals are excluded, that maybe it's

a

source of contamination. So there are many things that can be done even around open packing sheds that eliminate or reduce the risk of insect or rodents, birds, et cetera from being in that environment. Not giving them harborage, places to hide, to nest, those kind of things.

So those things you just need to look at to try to keep the processing facility, the packing house and the grounds around them in good condition so that they don't become a vector for contamination.

And then there's transportation. Now that we've got it out of the field, it's been in your packing house, it's put in the packages, the crates, the pallets, whatever the method of transportation is, now it gets -- starts it through the food safety chain moving up towards final consumption. And this is a part that you also need to be aware of.

The people who transport your food products, what kind of vehicles are they using. You're certainly not going to be putting your crates of lettuce into a cattle hauler for him to take back because he hauled cattle down here and now he's going back to somewhere up north, he's going to

hall your lettuce back.

You want to be sure that the vehicle that is being used to transport your product that you spent so much time and effort on to ensure it's free from contamination doesn't add to the contamination at that point in time.

Cross-contamination with other foods and non-food surfaces can occur during transport. There's a DOT law that was passed many years ago, most of you are aware of, called -- regarding the back-hauling of hazardous waste products, the back-hauling of food products after hazard waste and those type of things were hauled in vehicles, to ensure that that doesn't occur.

But that doesn't cover other kinds of things that might be in vehicles. So you need to be aware of what might happen during the transport of your product to ensure there's segregation from other types of food that might contaminate your produce and to ensure that the carrier has met some kind of sanitation requirements; the truck has been washed out, been swept out, that the -- there's no leftovers from the previous cargo that's carried in that that could lead to or cause a problem with your product.

And, again, this is a communication problem. Make sure that all along that way, that you're aware of what's happening to your product while still under your control.

And traceback -- and, again, we're calling this, really, positive lot identification instead of traceback. Traceback is the process that we go through when we look back to find -- an epidemiologist goes back, a health professional goes back to try to find out the cause of the food-borne outbreak.

Positive lot identification is the ability to identify those lots. And this becomes very difficult. It is very difficult to do this and, we realize that, and that's why it's here, because we need your suggestions. We realize that after it leaves your facility, your packing house and it goes to a distributor, it may be commingled or that, in some instances where it's going directly from your field to someone who is packaging the product who bought the product from you, they commingle it with products from many other farms.

And so positive lot identification is a problem, but we need your input into how we could

better do that. How could we better identify the products coming from anywhere so that they could be followed back so we know where they came from so we could determine how the contamination is occurring and stop it.

Again, traceback won't prevent a hazard, but it can limit the potential scope of an outbreak, limit the populations at risk, lead to specific sources or fields, lessen the economic burden on the operators and on the growers, limit the economic burden on specific products.

In talking to the gentleman earlier about the impact that -- somebody saying this caused an outbreak or that caused an outbreak, it happened in the whole industry; we've seen that over and over again. We know that that happens.

We've seen it with hamburger chains who did not have contaminated hamburgers, or even have meat product in their thing, but because they had a hamburger, they felt the impact of it. So we see that all the way through the industry.

Again, positive lot identification minimizes the unnecessary expenditure of public health resources, reduces consumer anxiety, and that the operators have procedures to trace it back from

the farm to receiver and so on.

If there's any things that -- ideas that you have to help us with that process, to talk about how we can better identify the lots, that's information we're interested in.

And this just talks a little about traceback and the type of things that are needed in order to follow a product back to its roots.

And that's a very brief, very general overview of the guide. Let me put the lights on. Wake up.

With that, it's about 11:30; why don't we have a few minutes of questions about the presentation, if you've got any questions that we can answer quickly, and then we will break for lunch.

So does anybody have any questions this morning or are we just ready for lunch?

DR. ARCHER: Doug Archer, University of Florida. I just had a quick question because I came across it when I was reading the guidelines.

What is the perceived risk for open lesions? I mean, I know aesthetically it's not fun to think about eating blood, but what's the risk? What's the microbial risk?

MR. TROXELL: The ongoing infection and spreading that in -- the infectious materials into the produce.

DR. ARCHER: I mean, usually we think of staphylococcus, you know, as the risk from an open lesion.

I'm not aware of a single outbreak of staph food poisoning from fruit and vegetables, and I think there's a good reason for that physiologically.

But what other kind of infectious -- I'm not aware of any food-borne infectious material that gets passed along from a lesion. That was my question.

MR. TROXELL: Okay.

DR. ARCHER: And I guess the other one I was curious about, there's a lot of detail on hand washing procedures for people that are working in the growing field.

What about people in the grocery store?

MR. BARNES: There -- and I talked this morning about the total continuum of this farm to table.

DR. ARCHER: No, I mean a consumer. Probably they fondle produce a whole lot more

than the people --

MR. BARNES: The -- again, the Fight BAC campaign, one of the things it talks about is specifically that, is geared towards the consumer.

The food code, that covers a whole segment of the retail industry, goes into great detail on hand washing and the necessity for that and the GMPs and the processing and the manufacturing environment, which is probably better controlled there than in many places, it goes with that there.

This is the final piece. Again, this is the farm to table continuum, and your comment about the -- other than Staph aureus from an open lesion, again, that may not be a significant factor in the field, but it is part of the continuum. If we continue to talk with the same message all the way from farm to table, the message gets through.

Anything else?

DR. ZAWEL: Stacey Zawel from the United Fresh Fruit & Vegetable Association.

Terry, I had a question for you regarding a specific statement in the document, and I know

this has been mentioned over and over in the sense of the impracticality of this specific recommendation which is in 1.1 under irrigation where it says to cover open reservoirs.

I never asked the question and so now I'm going to ask you the question. In the context of developing some of these ideas or things that a grower could institute to impact public health, what is it that was envisioned here?

MR. TROXELL: Covering open reservoirs was an earlier draft. Is it in this -- I mean, I thought we pulled it out.

MR. BARNES: Yes, it still is.

MR. TROXELL: It is? Well, it shouldn't be there.

DR. ZAWEL: Okay.

MR. TROXELL: And it was supposed to be changed to being a -- protecting your -- basically, your water shed. And that's the kind of thing you can have some impact on. But --

DR. ZAWEL: Okay.

MR. TROXELL: -- covering reservoirs doesn't work.

DR. ZAWEL: Thank you.

The other statement that I wanted to make or

follow with a question is that, the United Fresh Fruit & Vegetable Association represents growers all across the United States as well as in other countries and, in fact, many of our growers domestically also grow in other countries.

And so given that, it's important for us to take a position that we need to encourage the appropriate food safety measures no matter where we're growing, and I think that the industry domestically has certainly shown a tremendous amount of leadership in that area, and now the federal government is also doing the same thing.

But along that line -- obviously, it's going to be very important how that gets implemented so it doesn't impact a domestic grower.

And along that line, though, the WTO is undertaking this, and CODEX has, in fact, directed, at the last food and hygiene committee meeting, directed Canada, or a Canada volunteer to draft guidance in this area for cold produce, and France had also volunteered to draft guidance for fresh-cut, and I'm wondering how this is all going to fit together, or if it does.

MR. BARNES: To answer that, yes. And in my notes, which I kind of couldn't see all of them

that are written down, but I had -- in the beginning of it, I want to talk that this was designed to be consistent with WTO and with GATT and with other things as well.

And so that -- that -- I didn't say that, but that fits into what you're saying, is that we don't want this to be inconsistent with any of those things, nor do we want to develop something that -- reinvent the wheel, I guess is the best way to put it.

So those things, we hope, will be incorporated as we go through the process.

DR. ZAWEL: So you --

MR. VANDERVEEN: Well, let me just make the comment that in order to deal with CODEX, we have to have a position. And to get out in front of it is a lot better than trying to react to what someone else is writing. And a quick reaction is also good.

So if we can get our heads together and come up with what we think is a good guidance, and there's general agreement with it, we can respond to whatever drafts that come around.

And let me just say, also, we're trying desperately that when a CODEX document does get

out, we want public comment on that, as well. But I think we ought to have our discussions amongst ourselves long before CODEX gets to the point of having a final draft.

MR. TROXELL: Let me add, also, that, as you recall in the public meeting on the 17th, Stacey, I acknowledged and commended the industry for the work that they've already accomplished in this area and, you know, the work that's been done has been well articulated and efforts to implement it have been well done, and I think it's going to help us come up with a good document that -- you know, we can put out as a -- as something for both domestic and imports to work with. I think it's going to help us come out with something a lot quicker and it will be a better document, so --

DR. ZAWEL: And one sec.

I guess my concern is that -- or not necessarily concern, but my hope would be -- and I know Canada has talked to the FDA -- is that this document be perhaps a model wherever, that we, the U.S., takes a role and works closely with Canada in the development, and I think you're already doing that. But rather than having two

separate initiatives for U.S. growers, that could be part of developing equivalent standards for the U.S. -- for the world.

MR. TROXELL: And the process we have outlined is inviting everybody to participate. We're going out of our way to solicit input from every major producing region in the U.S. and trying to solicit input internationally, that's why we're holding an international meeting and hoping we will be able to come up with something that will be a template for the CODEX, will be able to show some leadership here, and I don't think with the way things are -- the status of the situation, that we really can wait for two, three, four years for CODEX to come to agreement on something.

MR. BARNES: Yes?

MR. STUART: My name is Mike Stuart, I'm with Florida Fruit & Vegetable Association, and this is a question for any one of you up on the panel.

We've been hearing a lot that -- through this process about the importance of making sure that this guidance document is consistent with the WTO, and I guess that's fine.

But I guess my concern is, what efforts are we taking to ensure that the guidance is consistent with existing state, federal, and local laws and regulations?

We've got, obviously, a very complex set of rules and regulations that apply to this industry, not just here in Florida, but throughout the United States, and to the degree that there may be provisions in it -- we've already talked about some of the irrigation issues, but I think there are some of the issues regarding worker reporting and that type of thing that may perhaps apply in the face of either local or state regulations or even federal laws and regulations that would apply to that specific area.

What are you doing from an inner-agency process to ensure that we're being consistent and not providing guidance to an industry that might be encouraging them to get into some gray areas of other laws that they're already required to comply with?

MR. TROXELL: We -- this is a very -- obviously, a very complex agricultural system, and the requirements across the country vary

tremendously.

This document probably does not say it strong enough, or say it at all yet, as a matter of fact, but the recommendations here, the advice, the -- to minimize this, when feasible, et cetera, that's in here, has to be like that because of the great variety of the situations across the country.

But we need to make it very clear in here that this does not substitute or replace any state or local requirements, and we will do that. This is not to undermine in any way --

MR. STUART: I guess the reason for the question, I don't want to see producers in the United States, anywhere in the United States, Florida in particular, finding themselves in a situation where they're having to deal with their buyers in the marketplace because they want them to comply with the particular items found in this guidance, and then having that particular provision, whatever it happened to be, put them in some gray area against state or federal law or regulation on that specific area. I think that's extremely important that you don't put producers in that predicament.

MR. TROXELL: And we agree, and if there's items in this document that cause such problems, we need to know about those items.

MR. BARNES: And there are several sections in there involved, that Terry said, that already talked about applicable -- I think a couple of my slides showed that where the applicable guidance may come from federal, state, or local laws that -- first, and these may supplement it a little. But that those existing laws are what need to be followed.

This is a guidance document, again. And maybe we need to put that in each chapter, but I know it's in there in several places.

DR. ROBERTS: May I be permitted to ask a question, too?

MR. BARNES: Certainly.

DR. ROBERTS: Along that very same line, I know there's been a lot of discussion, even in the room today, as to how best can FDA state within the document that these should not become de facto regulations at this very moment, you know, with buyers insisting that people meet a certain specific suggestion within your proposal.

MR. TROXELL: Well that, of course, is

always a risk that guidance or advisories will become, effectively, requirements through contracts by your grocery stores or your food service establishments and so on.

The only thing we can really do there is emphasize that this is guidance; it's not regulatory, it's not binding. And the other thing I think that helps that situation is, in the document we talk about minimize, avoid to the extent feasible, you know, if practical, and so on, and it's very difficult to take those terms, which are -- to take those terms and convert them into something that becomes a requirement.

I mean, because if you say avoid to the extent feasible, well, okay, that's a matter of degree, and people can avoid to the extent feasible to different degrees.

MR. VANDERVEEN: I think, Martha, you do bring out a good point, and I think we'll go back and, maybe you want to put on the front of this document as draft. It's clearly a draft at this point in time; it is a working draft, and we probably have been a little hasty in not labeling it as such.

MR. BARNES: It is labeled at the bottom in

little letters.

MR. VANDERVEEN: Oh, yeah. It says working draft down in the bottom. You might want to put that in great, big letters at the top, especially if you're --

MR. TROXELL: We would clearly like to hear your ideas and how we can cast this to help avoid the problem of this becoming a requirement through contracts.

MR. VANDERVEEN: Well, the question of when it's a final document, if someone wants to use it in that manner and they have good reason to do it, then that's reasonable. But we do have that -- we recognize that that is an issue.

MR. BARNES: We've got -- how about two more questions and then we'll break for lunch. And we'll start in the back, you were up there first, please.

MR. MATTHEW: Good morning. My name's Charlie Matthew, I'm with Florida Fruit & Vegetable Association.

In the guidance you've dedicated an entire section to crop protection sprays. And my question is, what information and data do you have that would show this much significance to

crop protection sprays?

MR. TROXELL: I don't think -- well, there's no intention by the amount of words to indicate the weight of the problem. I think we just need to use as much -- put as much information in there as necessary to assure that the correct practices are taken.

I don't know that this is a very serious problem, but it's something that we have to recognize and make recommendations to deal with.

MR. MATTHEW: And I agree with you, that there possibly could be perhaps the potential.

But my question is, you know, you've dedicated an entire section to the importance of this, and I don't understand -- and what are the instances where you can document that applying pesticides had resulted in problems, you know, microbial problems?

MR. TROXELL: Okay.

MR. MATTHEW: And following along with that -- and I don't handle this -- but you're using language like "should" and "verify", that I don't know, perhaps we should be using -- should be using verification and other things that other places that are perhaps more important than

something where we really don't, to my knowledge, have a documented occurrence of a problem.

DR. ROBERTS: Terry, if I might on that --

MR. BARNES: Thank you.

DR. ROBERTS: -- earlier point, you know, again, we have a whole section in there, and to my reading and recollection, the only instance you ever show where that might be a problem is in your investigation of the Guatemalan raspberry situation, and some of the documents that you put out there about a situation in a foreign country, you were then -- the description of what you found said that that was a potential problem in a foreign country on the Guatemalan raspberries and cyclospora.

But I've never seen a documented mention for a domestic situation. There may be some that I don't know about.

MR. TROXELL: But this document is for domestic and foreign produce production.

DR. ROBERTS: Okay.

MR. BARNES: One more question, and then we'll go to lunch.

DR. BEASLEY: Terry, I'm going to put you on the spot, I guess, because basically -- my name's

Larry Beasley and I'm with A. Duda & Sons. We grow about 40,000 acres of vegetables and a little bit of citrus and I'm quite concerned about your guidance document.

We're talking about perception of a perceived problem, and we're talking about liability.

Mike Chappell, John Vanderveen, Martha, you brought up the subject of guidance, Richard Barnes, you brought up the subject of guidance.

I'd like to point out to you, there's a buyer here from Kroger, and he's drafting his letter now to his buyers with the tick marks on it based on your guidance document, telling us what we will or won't do, and what they will consider that we have to have in place in order for them to purchase from us.

This is not guidance. Guidance is only one step in the evolution of a regulation, and I don't care what you write in fine print or bold print on your document; this is a regulation. No question. Point made.

MS. ISAACS: Okay. Enjoy your lunch and please be back one hour from the time you currently have on your watch.

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(Thereupon, a lunch recess was taken.)

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(Thereupon, the Public Hearing resumed at 1:05 p.m.)

MS. ISAACS: This afternoon we're going to begin with the role of the USDA and our presenter is Dr. Ricardo Gomez.

Ricardo is the principal horticulturist with Cooperative State Research Education and Extension Service, USDA.

Is that Washington, I take it?

DR. GOMEZ: Yes.

MS. ISAACS: Washington, D. C.

Okay. So he's going to discuss the role of USDA.

DR. GOMEZ: Thank you. Before I start on the role of USDA, which is somewhat complex, I wanted to thank Clayton. I think his offering this facility to us has been fantastic.

Clayton and I, by the way, went to school -- talking about a communications -- went to school at the University of Florida in the late '60s, '68, nine and so on. Both in the same department of fruit crops, and we didn't know each other.

But I had talked to Clayton about six, seven years ago, Clayton? So we sort of know each other a little bit. But thanks. The facility's great.

The role of USDA. We are an extremely complex department; we have several roles. We have regulatory roles, outreach, and education roles. And in this initiative, I think we can take advantage of all those three roles that the department offers.

As you all know -- or if you don't, I'll tell you -- there are some regulatory agencies within the department. The Food Safety Inspection Service is that which is responsible for meat and poultry inspections in the U.S. and foreign lands.

The Animal and Plant Health Inspection Service is also one that has point of entry responsibilities to keep agriculture safe, American agriculture safe from foreign pests. These two agencies can really be a lot of help in having also outreach capabilities in those foreign areas, as well as within the U.S.

The foreign agricultural service, through its international cooperation and development

activities and the scientific exchange programs also has a major role that it can play in here.

But getting closer to the initiative itself is the national agricultural statistical service which has working relationships with the departments of agriculture in all -- in all of the 50 states working with the State Agricultural Statistical Services.

And they're the ones that survey -- do surveys on our farms -- statistical and valid surveys, by the way -- to get information on crops, pesticides and so on. And I think we've been talking to them in this initiative about trying to include, as part of their surveys, some questions that may be applicable to this initiative so that we get some valid feedback from them. So that's one agency that we are dealing with as a part of this initiative.

There's two or three other agencies, the Agricultural Research Service, which is the intramural research agency of the department. And this agency serves the -- both the regulatory agencies as part of the research programs and other agricultural research of probably more basic type than the other agency which I belong,

which is the Cooperative State Research Education and Extension Service. That one is really the federal department.

And here's the first time I'm using the word partner; it's a federal partner of the Agricultural Extension Service and the Agricultural Experiment Station System.

So our agency and ARS are those that do the research. And we will be, as we identify some knowledge gaps -- and these are not good agricultural practice; holes in our knowledge -- that we will be putting into motion some research.

And as was stated before, I think Richard said that we're not -- we do not have monies in the FY98 budget for this, but there are some funds that have been requested for the fiscal year '99 and beyond. So there may be some monies available to do some research on specific aspects of this initiative later on.

One other agency, as well as ours that has routes or branches down to the local level is the Natural Resources and Conservation Service. The Extension System and NRCS, as well as the partners in the Soil and Water Conservation

District, really touch the producer, him or herself. And those are the agencies that will really be involved in the outreach and educational programs through this initiative for the Department of Agriculture.

I think that partnership that we have with NRCS, with ARS, with our local Extension System, is really the foundation that this initiative needs to look at to go forward and be functional.

As has been stated before by many of you, the initiative needs to be based on good science, but we don't have all the science. We need to identify those gaps, those knowledge holes, and start working on them very quickly.

I know ARS has already made some changes in funding directions and they are working, or starting to gear up to work on some of the composting questions that have arisen within this short period of time that we have been working on.

So there are possibilities, not only of additional funding, but also of redirection. Redirection is good and it works in a straight line agency. And that's another point that I want to stress to you, is that both the

Experiment Station System and the Extension System are partners with my agency, but we're not a straight line agency. God forbid me if I tell Clayton, as a federal guy, to do something because I fear what he's going to tell me back; I really fear it.

So we have a good relationship, but we are partners. As a matter of fact, the federal branch is a minor partner in the Extension System. We only fund about 30 percent of the whole extension deal, whereas the state and local levels fund the rest. So we are a minor partner, but we can be -- we can be very successful, especially if there's some additional money.

So let me give you an example or two of some of the other -- some of the things that we have done as partners.

We have a program that is called the Pharmacist Program, which was borne by the federal agencies, NRCS and CSREES, working with the land grant institutions to develop a management tool for producers mainly to do with the environmental consequences of agricultural practices, but looking at it from an economic point of view.

And I think I need to stress the point, economic point of view. If an initiative is going to work, it needs to be based on sound economics; nobody should really take a bath trying to follow any of these guidance documents.

We need to develop the guidance documents with common sense, based on science, and based on economic reality.

The Pharmacist Program has been very successful, and Michigan State University and several other institutions are already working to incorporate into that pharmacist -- which is a computer driven program, but nonetheless, it's a good program -- they're starting to put in some of these food safety and quality aspects into that.

But it still leaves the ultimate decision in the hands of the producer. It does not take away the management aptitudes.

Another program in which NRCS and Extension have been working very closely in is the water quality. And we have, in each and every state, just about, some water -- water shed management projects that have shown us some of the real practices that will deter runoff, that will deter

pesticide contamination of waters and so on. And I think these two models -- and there are many others, by the way -- but these two models are based on science, they are based on common sense, and they are not pushing the economic picture out of the way.

They are based on economics; on good economics, so there's some profit still available to the producer.

It is also a voluntary type program at this point in time, even though some of the farm management plans that NRCS has responsibilities for require certain management tools or practices incorporated. But it's still a -- they're still voluntary, if you participate in a USDA farm program, then you have to have a management plan.

The voluntary aspect, the good science and so on, are what make these type of programs work. We do not take the producer and make him a slave. We let him or her manage that production facility.

We also have, in the CSREES, in my agency, other programs that really need, and could be very useful to this initiative, and we're bringing all these things in. Even though today

it may not appear the USDA has a vital role in this initiative, we do. Believe it.

And as the guidance documents continue to develop, we will have more. You need to remember that FDA is not a non-agricultural based agency, whereas the USDA is an agricultural based agency. So we need to be complementary.

But other programs in which my agency can help with are the Expanded Food and Nutrition Program, which also addresses the consumer issues associated with this initiative. And there are some. It's not only the responsibility of the producer to manage the output of fresh fruits and vegetables to be -- to increase the microbial contamination; it's throughout the food chain up to the consumer.

That's the responsibility of us as people, as consumers, also. We have that. We are also involved, and the department is greatly involved, in the food stamp program. These are all vehicles that we can use to help not only educate the producer, but all of us that do consume.

And before I end my points, I do want to remind you -- and I think it has been said before -- that there's probably -- there is more

risk to your health of not consuming fresh fruits and produce and vegetables than there is of consuming some that are contaminated.

So keep on eating your veggies and your fruits, fresh veggies and fruits, do that. It's healthy. Very healthy.

Thank you.

MS. ISAACS: Are there any questions for Dr. Gomez?

MS. TRUNK: I'm Maria Trunk (phonetic) from the Tropical Fruit Island, a grower, shipper, packer in Homestead. We are also importers of tropical fruits and vegetables from the Carribean and Central and South America.

I have two questions. Just drawing on my experience in working with plant quarantine issues, I've seen that a pattern of APHIS and ARS working very closely together to quantify pest risks from produce from other countries and then developing treatments or practices which adequately address those risks.

Is this the kind of research that you would envision, this kind of risk assessment would be done in this -- in this case?

DR. GOMEZ: I really don't know at this

point. I think there must be a risk assessment type avenue in there, yeah.

DR. TROXELL: Let me just comment that -- and, obviously, this initiative is focusing totally on microbes, not other aspects.

Microbiological quantitative risk assessment is pretty much in its infancy. There are very few quantitative risk assessments actually ongoing, and one that I'm aware of is for -- for eggs from farm to table that the USDA is doing.

This is a developing field, and it will be applied as it develops. There are qualitative risk assessments that are done all the time and that have been done for years in food programs.

So we do not -- do not really have the complete tools to be able to do quantitative risk assessments at this time for microbiology problems.

MS. ISAACS: Can you all hear in the back? Perhaps you weren't close enough.

MS. TRUNK: Okay. I'll ask my second question, then.

I guess I'm just a little bit unclear on how this all fits together, but we saw at the beginning of the presentation a time table that

called for a final guide to be issued in the summer of '98, and yet we're hearing that maybe research funds won't be available until fiscal '99. How does this all fit together?

DR. TROXELL: This does not anticipate complete answers on all the science. That's why the document will be using a lot of relative terms; it's better to compost longer than shorter and, you know, not specific times and so on.

We need a lot of research to be able to pinpoint all the answers. Once those answers are pinpointed, then there could be much more, you know, very, very concrete advice.

But at this point, the information isn't available, and as it becomes available, guidance will be revised and practices -- recommended practices will be changed.

DR. GOMEZ: I want to tell you a little story to Brooks here.

I was involved in the ethylene dibromide problem when mangoes from Santo Domingo or Haiti were starting to be brought in, and there was a tremendous panic.

But through working with ARS, with the Experiment Station System also, and with APHIS

hand in hand as partners, that problem was resolved.

So there are opportunities for this in the future and I hope they will be resolved, as well, working as partners. Not one agency can do it all by itself, but working together, we can solve some of these problems.

MS. ISAACS: Anyone else?

DR. BEASLEY: In two of the documents you passed out this morning --

MS. ISAACS: Could we have your name, please?

DR. BEASLEY: I'm sorry. Larry Beasely with A. Duda & Sons again. And I'll try not to be as emotional as I was earlier in the day. I get frustrated from time to time.

It says in here that 9,000 deaths are directly linked to food-borne pathogens and that's in two different places in that handout. Not the one that you prepared, but handouts we were given outside here.

How many of those 9,000 deaths are due to pathogens found on fresh fruit and vegetables? Anybody?

DR. TROXELL: I don't think we have an

answer to that.

DR. BEASLEY: Then we don't know what the risk is, do we?

DR. TROXELL: Well, the percentage of the outbreaks associated -- and cases of illness associated with produce has gone up. It had been fairly minimal. It's now up to, I believe, five-eighths to eight percent of the total outbreaks and illnesses.

The known cases are generally considered the tip of the iceberg because the monitoring systems do not allow you to really understand the full magnitude. And there have been estimates that, based on what's -- what your known illnesses are, the actual illnesses are 50 to a hundred times larger.

DR. BEASLEY: Well, you state in here, six and a half to 33 million illnesses. And I'm only directing this to deaths.

And what I'm asking -- my question is: How many of those deaths are related to fresh fruit and vegetable; not eggs, not meat, not something cross-contaminated by meat; something that you directly trace back to fresh fruit and vegetables?

MR. BARNES: I --

DR. BEASLEY: Not the processed vegetables, but --

MR. BARNES: And I don't know that -- I don't have any of that data here. I don't know if that data's available, because normally it's traced back to an organism. And I'm just looking at the list of Salmonella, E. Coli 0157, Listeria monocytogenes, which all have been found in fresh fruits and vegetables, which can be very serious, even life threatening to high risk possible populations, regardless of the vehicle.

And those numbers are -- where the deaths come from are the numbers people have died from specific organisms, not necessarily from a specific outbreak that -- I mean, I don't have that data here. It may be somewhere.

The Center for Disease Control and Prevention may have -- maybe it will link it directly from the organism back to the product and be able to tell you that, but I don't have that data.

DR. BEASLEY: Could someone from this august group get some information like that back to us to so that we know what the risk is?

MR. VANDERVEEN: What we can give you is the work of the subcommittee -- produce subcommittee of the advisory committee on microbiological quality of food in which they have listed from the literature those cases associated with produce outbreaks, and we will -- we will provide you that.

DR. BEASLEY: Thank you, sir.

MS. ISAACS: Okay. Moving right along. We are into the industry group presentations ahead of time. Thank you everyone.

And at this time, I would really like to thank Dr. Stacey Zawel, she's the Director of Scientific and Regulatory Affairs with United Fruit & Vegetable Association based out of Alexandria. And she and Michael Stuart with the Florida Fruit and Vegetable Association in Orlando, were able to arrange some member speakers to start off the industry segment.

So we really -- and the tremendous job they did in publicizing this event in a very short turn-around and getting the draft out to their members. We appreciate it so much.

So Stacey, did you want to say a few words?

DR. ZAWEL: Thanks, Lynn. I just want to

say very few words, actually.

What United has done in this process is tried to take advantage of these meetings and capitalize on them, Michigan, New York as well as the rest of them all along the road, to put together a number of industry experts to convey and to represent numerous commodities, why certain practices are followed, to demonstrate the diversity and complexity of the industry, as well as conveying what's practical and reasonable for the industry to do, and demonstrate that, in fact, the industry takes the issue of food safety extremely seriously.

In Florida, we have, in all cases, rely very, very heavily on the local associations, regional associations to identify the appropriate people and, therefore, I want to thank Mike Stuart, the President of the Florida Fruit & Vegetable Association, and the rest of the association in the effort that they have put forward to identify the appropriate people in Florida.

With that, Mike.

MS. ISAACS: Mike, would you mind coming -- I think it works out a lot better if you're not

shy and don't mind coming up to the front podium. It makes it a lot easier as far as transcription, and easier for all of us to see you and hear you.

MR. STUART: Thank you, Lynn. And I too want to thank Dr. Zawel for all of her efforts in coordinating the industry's examination and responsive participation in this whole effort.

This is, as I think we've all discussed here today, with the complexity of this industry, it's very difficult to bring an industry together from various sections of the country and throughout North America, for that matter, what they've been involved with here, try and play a good, strong, constructive role in this process.

Again, my name is Mike Stuart. I'm the president of Florida Fruit & Vegetable Association, and we're an organization represents vegetable, citrus, tropical fruit and producers of other agricultural products in the state.

As has been mentioned here -- I know Dr. Roberts mentioned it this morning and others have as well -- we have a very diverse and complex industry here in the state. The fruit and vegetable sector represents about 50 percent of the entire industry. It's about $3 billion

worth of farm gate value on an annual basis. We lead the nation, I believe, in some 14 different fruit and vegetable crops including citrus, tomatoes, green peppers and others.

I think, again -- and I hate to reiterate something that's been mentioned by people earlier, but eating a diet rich in fruits and vegetables is extremely important to the health of all Americans.

And along those lines, for several years, FFVA along with a partnership of literally hundreds of different organizations and companies around the country, has been actively involved in promoting that message of eating five servings of fruits and vegetables a day in partnership with federal agencies like the National Cancer Institute.

I am happy to say that we are making, I think, some excellent progress in that goal. When we started out in 1989, 1990, consumption was at about three to three and a half servings per day. We're looking for some data to come out, hopefully, earlier next year that will show us somewhere between four and four and a half servings of fruits and vegetables a day for the

American population.

So we are making some progress. And I think it's important, as we move through this process, to ensure that we're doing something that will encourage people to eat more fruits and vegetables and not frighten them away from eating those very important products.

We do believe that our industry, and in our membership in particular, produces a very safe and wholesome product throughout Florida. We comply with literally a myriad of state, federal, and local regulations, many of which have to do with providing a sanitary and healthful product to consumers. But along those lines, we do obviously support science-based efforts to further enhance the wholesomeness of fruits and vegetables consumed here in Florida throughout the United States.

As an industry, we recognize that the incidence of food-borne illness attributed to fresh produce has increased over the past ten years. Unfortunately, other than the epidemiological studies that have been conducted with each reported illness that we've had during that time, there's really been insufficient

research conducted to determine the source and cause of many of these outbreaks.

We have, however, particularly over the last few years, I think, approached this whole issue in a very proactive manner. Last year, we began a process within our own organization to assist our members in the identification and mitigation of potential sources of microbial contamination of fruits and vegetables.

Our growers' check list for microbial safety on such produce was developed and designed under the simple premise that consumers deserve the ability to purchase produce that has been produced, distributed, and marketed in a manner which minimizes the risk of food-borne illness.

Another key premise of the document, however, was the fact that crops such as fresh fruits and vegetables which are produced in a natural environment cannot be expected to be completely free of microbial agents.

Here just recently, the National Advisory Committee on microbial criteria for foods, which was just mentioned here just a minute ago, reinforced that reality in a white paper that was produced here, I believe, the week before last,

which stated, and I quote: "The focus of activities must be realistically directed towards risk reduction and not elimination."

I need to also point out several other industry initiatives have also been undertaken in the whole area of microbial safety. FFVA worked closely with Dr. Zawel and the United Fresh Fruit & Vegetable Association as well as 18 other fruit and vegetable -- primarily producer organizations from around the United States and throughout North America, for that matter, in the development of industry-wide guidance to minimize microbiological food safety risks for produce, which also focuses on risk identification and mitigation at the grower, shipper, handler level.

Additional efforts have also taken place on the West Coast with Western Growers Association in cooperation with the International Fresh & Cut Produce Association. I know the Florida Department of Citrus and several other organizations around the country have also taken a proactive effort in addressing these issues and providing industry guidance back to the industry.

I think it's important, though, to point out that in each of these cases, these efforts have

taken several months, if not years, to develop among people who are intimately knowledgeable and versed in the application and production of different cultural practices within the industry.

We also have worked closely with the Fresh Produce Subcommittee of the National Advisory Committee to identify these risks as well. We, along with United Fresh Fruit & Vegetable, hosted the Fresh Produce Subcommittee down here in Florida a year ago -- actually, it will be two years this coming January, to go out literally and spend some time in the fields and the groves and the packing houses so they could get a firsthand view of what's going on here in Florida so that they have a good, sound basis for making the recommendations.

Unfortunately, we still have many unanswered questions regarding the introduction and transmission of food-borne pathogens and fresh produce and that was an assessment that was drawn by the subcommittee, and we strongly agree with that assessment.

We appreciate that the agents' draft guidance to minimize microbial food safety hazards for fresh fruits and vegetables has been

developed as guidance as opposed to regulation; we think that is obviously very positive for the industry. But as has also been mentioned here, and I need to reiterate that, you need to recognize that, although the federal government has taken great pains, I believe, to try and ensure all of us that this is, in fact, guidance, I think its application in the marketplace needs to be closely examined. And although you do consider it guidance, I think, as we move down the road here, the buying end of our industry may dictate otherwise.

The draft document has also been put together in the two months since the announcement of the President's Initiative, and we are very concerned, quite frankly, with the speed in which this train is moving down the track.

Again, the produce industry is highly complex and diverse and what may be applicable to one commodity may not be applicable to another, or what may be applicable to one producing area certainly may not be applicable to another. That is accurate, I think, here in Florida as well as throughout the country.

It is essential that the complex and diverse

nature of our industry be taken into account. And this -- we've heard, I think, this time and time again today, and I think you'll hear it more as other industry people get up to speak. We seriously doubt that this agency can really accurately put together this kind of document in the type of short time period that you've described here today.

Any guidance also must have a strong scientific basis. It's clearly been identified by the Fresh Produce Subcommittee that more research needs to be conducted on how, when, and where this contamination occurs. It needs to be addressed, though, not just at the production level, but throughout the distribution chain all the way to the table.

Contamination can occur anywhere in the chain, and it's been well documented in recent years, particularly by public health officials, that much of the contamination occurs at food preparation sites, whether in food preparation at restaurants or particularly in the home.

While it's been shown to be incidents of food-borne illnesses associated with fresh produce have increased in recent years, it's

important, however, to put the relatively few incidents involving fruits and vegetables into context with the one billion servings of fruits and vegetables that are consumed by Americans every single day. It should also be pointed out that not only has consumption of produce increased during that time, but more importantly, the amount of fruits and vegetables imported in the United States has risen dramatically during that time as well.

According to federal statistics, the amount of imported fruits and vegetables consumed in the United States has basically doubled in the past ten years. Meanwhile, it's also been reported that FDA testing of imports has declined.

Although the initial thrust of the President's Initiative seems to be focused on imported foods, the domestic industry now seems to be the focus of this initiative and this guidance effort. It's important the focus of this effort be directed on those countries where the sources of these food-borne illnesses are commonly found or endemic.

We also believe that a key element in the President's Initiative should be to provide

consumers with information on the country of origin of the produce they buy at the supermarket. If you visit any Florida store, grocery store, you would find country of origin labeling in each of the bins where those products are located. Florida and Maine, to date, are the only states in this country that require country of origin labeling. Consumers have told us time and time again in research studies that they want that information. We agree that they should have it.

We encourage and we urge the FDA and the USDA to move forward cautiously and slowly with this initiative, taking into account the implications not only on the production of fruits and vegetables, but what implication it might have on the marketplace itself. Any guidance should be based solely on documented risk and science-based solutions. There is no need to move at the current rapid pace.

Those involved in the development of the document need to fully understand current industry practices, as well as the myriad of state laws and regulations that impact this industry. This means more structured industry

input as well as getting all of you out into the field, out into the groves and packing houses to see firsthand how our industry operates.

Again, we appreciate the opportunity to appear before you today. We thank you very much for providing all of us the opportunity to participate in this particular session. We do urge you to get the industry more involved on a daily basis with this effort.

We have a number of industry people here that will speak either representing a different grower organization or individual representatives themselves over the next hour or so. So we look forward to hearing their input.

And, again, I thank you very much from all of us.

MS. ISAACS: Thank you, Mike.

I might add, Mike, that a couple of us dietitians here today -- Judy, do you want to raise your hand -- serve as very active members of the Florida-based partnerships and we do have most of our meetings at your office, of course.

Okay. Next, we'll have Mr. Bobby McKown. Did I get your name right?

MR. McKOWN: That's correct.

MS. ISAACS: He's with Florida Citrus Mutual out of Lakeland, Florida.

MR. McKOWN: Good afternoon, and welcome to each of you and thank you for the agencies and the representatives here today coming down to allow the opportunity for the various interests in Florida to give their viewpoint relative to the issue at hand.

My name is Bobby F. McKown, I'm executive vice president and CEO of Florida Citrus Mutual. Florida Citrus Mutual is a voluntary cooperative association whose active membership consists of 11,676 citrus growers operating within the State of Florida.

The comments we're offering you today, we offer those, we believe that they are factual and we bring some points to you that we think you should give serious consideration as you do the further deliberation relative to the proposal at hand.

Florida Citrus Mutual generally supports existing federal and state initiatives geared toward increasing assurances of fruits and vegetables whether produced domestically or imported are safe. Florida Citrus Mutual has a

long history of working very closely with the Food and Drug Administration, the U.S. Department of Agriculture, IFAS, the Florida Department of Agriculture, the Florida Department of Environmental Protection, the United States Department of Environmental Protection, all to make sure that we have the world's safest and most abundant supply of affordable foods and particular with citrus and processed citrus products.

Citrus Mutual endorses the comments of Florida Citrus Packers, which you will hear today, the Florida Department of Citrus, the Florida Department of Agricultural Consumer Services, and the Florida Institute of Food and Agricultural Sciences.

Fresh Florida citrus is highly regarded throughout the world as a safe and reliable source of nutrition and plays a vital role in the health and the well-being of many of the less privileged countries and nations throughout this world.

Florida citrus growers are rightfully proud of their heritage, of global food and safety records. And that is a strong testimony for

their diligent efforts to continue in that tradition. Never in the history of the Florida citrus industry -- and I repeat again -- never in the history of the Florida citrus industry, has there been a case of food-borne illness as a result of the consumption of fresh Florida citrus.

And as an aside, we spend -- the growers are assessed in excess of $12 million a year in order to provide continuous inspection at the receiving points, at the processing plants, at the packing houses, and all the way through the finished product that is shipped then to the consumers of these United States and throughout the world. $12 million of continuous USDA inspection. And I say to you that we have that total safety net in place and we support that proposition.

Nevertheless, Florida Citrus Mutual strongly supports continuous inspection for all fresh and processed citrus, domestic, as well as imported. Frankly, that's not the case relative to imported products coming into this country whether it be processed or fresh.

Florida Citrus Mutual further believes that

vigilance is the key to maintaining the best reputation for safety among our global trading partners and stands ready to cooperate with state and federal efforts to ensure global food safety for all nations.

And we strongly urge that any guidance recommendations be based solely upon the most sound science. And if you do not have the science, that you don't rush to judgment to make that decision prior to having that science when there's no proven problem and the best available information about the growing, the harvesting, the handling, the processing, and packaging of any fruits and vegetables foreign or domestic.

In this regard, while many of the recommendations provided in the current guidance document are well-recognized industry practices, certain others are rather inappropriate for the following reasons:

Number one, as stated earlier, the naturally protective peeling on fresh citrus, coupled with current well-recognized industry practices aimed at sanitary growing, handling, and packaging have established the highest degree of food safety and set the standards in the world marketplace.

Two, in the production stages of citrus, there is very little likelihood of contamination from irrigation water because the industry standards of low volume under-tree microjet systems direct their spray away from the fruit and toward the surface of the root zone. These systems routinely require ozonation or chlorination to prevent clogging.

Furthermore, irrigation is only done on an as-needed basis, carefully monitored by state and local agencies, and growers are required to identify their sources of irrigation water and carefully monitor both quantity and quality of withdrawals as well as discharges. Any existing very small overhead irrigation is rapidly being phased out of our industry, in fact, it is almost non-existent today.

Any irrigation utilizing reclaimed water is carefully monitored for quality control by suppliers and must meet stringent state and federal guidelines. Further periodic testing of water sources for microbial contamination in the field is unwarranted, time consuming, and expensive.

Florida citrus growers in certain areas of

the state rely heavily on surface water from reservoirs, rivers, and stormwater retention basins for their irrigation needs, and these sources have been carefully monitored by the state water management districts, under the careful and watchful eye of the Department of Environmental Protection to ensure the continued safe use of these sources. These state agencies have carefully undertaken massive efforts to significantly enhance water quality in every single one of these systems.

The guidance documents suggest consideration be given to total protection for open water bodies. But this is impractical and unwarranted, in our opinion. Florida has established a classification system for surface and subsurface water bodies and a vast, oftentimes redundant, network of regulations serving to protect and enhance water quality.

This has served as a model for many other states throughout these United States. And, in fact, Florida was the lead state that moved in the development of water standards at which we operate today.

Whereas the guidance documents suggest

consideration be given in the decisions being made with regard to adjacent land use compatibility, the recommendation has merit where feasible. Florida's rapid population growth has taxed existing conditions that safe potable water and pressure has come to bear on growers in some areas to accept the lowest quality of water available for irrigation purposes.

Florida Citrus Mutual has played a key role in the development of rules and regulations to protect the integrity of the excellent reputation of the industry by requiring careful monitoring of treatment and delivery processes of reclaimed water whenever state agencies has encouraged or required its use.

In addition, we played a key role in the development of state and federal guidelines for sludge application for citrus and in the application of groves throughout the State of Florida where used.

Although the practice is very limited, we believe that key safety measures have been adopted to control application quantity and quality. We further believe that efforts within the citrus industry to regulate worker activities

in the grove aimed at safeguarding against pathogenic contamination of citrus would be unwarranted and misdirected. Worker activities in the grove are not entirely controllable and workers are sensitive to their privacy rights. And I can assure you that that is a very key element that is a management decision in working with employees today; you, too, must be very cognitive of their privacy rights.

Education is the best method to address the possibility of any contamination of packed and processed fruits and vegetables. Efforts in this respect are strongly supported by the state trade associations, IFAS, universities, the Department of Citrus, Florida Department of Agriculture, USDA and others.

In conclusion, I would say to the panel and those in the audience today, Florida Citrus Mutual firmly believes a threat of contamination of microbial hazard should be addressed for continued rigorous inspection efforts of all fresh and processed citrus at packing and processing plants and at port of entry.

As a practical matter, so much has been done up to this point to ensure food safety and

production agriculture that the most likely causes of contamination would be in open air marketplaces, improperly protected displays at retail locations, and failure on the part of consumers to exercise best judgment in the handling, storage, and preparation of the produce.

All the best efforts of the growers must be complemented by the best efforts of wholesalers, retailers, consumers, and Florida Citrus Mutual applauds the effort of federal and state agencies to ensure that growers' efforts are not in vain.

Because, frankly, we are doing those things today to make sure that the product we delivered wholesale into the distribution channel trade within this country and other countries, that we meet the very high standards. Because the basic premise of advertising and promoting Florida citrus of which the growers assess themselves approximately $80 billion a year to promote our product, is the one hundred percent purity of our product.

And I can assure you that we have a greater desire to find and know the problem long before an agency of the government's going to tell us,

because that's the number one item that we protect, and that's the purity of our product and the wholesomeness it represents in the marketplace.

So in closing, Florida Citrus Mutual supports continuous inspection of all fresh and processed citrus, foreign and domestic, as well as all efforts aimed at the most likely sources of contamination as identified by sound scientific evidence, and the most sufficient means of controlling, including increased consumer awareness and education is our belief that that's what the major goal must be of any actions undertaken.

So I thank you for allowing me the opportunity to express these comments on behalf of Florida Citrus Mutual and its almost 12,000 members, and we continue look forward to continue to work with you.

Thank you.

MS. ISAACS: Thank you, Mr. McKown.

Now we're going to hear from Dr. Chip Hinton. He's with the Florida Strawberry Growers Association in Plant City, Florida. And we always try to do food demos in cooperation with

Extension Service at the Strawberry Festival. Wonder why.

DR. HINTON: When we put this program together, I'm sure it was more than coincidental that in order to demonstrate the diversity of our commodities, that we had citrus, which is our largest fruit, followed by strawberries, which has half the acres that they have members.

I appreciate this opportunity to address the issue of microbial safety of our produce. I also want to assure you that every agriculturist in this room supports your objective and is open to your suggestions on how we can do an even better job of assuring food safety for our consuming public.

You must believe that our comments relative to process are not meant to be obstructionist, but are aimed at reaching our mutual objective as painlessly as possible.

Let me tell you a little about Florida Strawberries. As mentioned, we are located in the Plant City, Dover area. We have the interesting dichotomy of being a small family operation; our median size farm is 19 acres, our average size farm is 34 acres. Total plastic

culture, one hundred percent drip irrigation.

At the same time, we're a $120 million industry and we employ over 9,000 workers, field level. There's some advantages in having virtually 20 percent of the production of strawberries in a nation within a 20-mile radius. One of them is that we are not only a small family, but we're a large community. And we work together and we can, in fact, get the entire community together under one roof in our educational process.

I want you to know that the Florida strawberry industry has tried to be ahead of the curve on food safety. Every year, we hold a two-day educational session; we've done this now for 15 years, to address topics like field sanitation, in fact, that was the topic of our discussion this past summer, and that over 80 percent of our growers attended that particular session.

Food safety is a regular item on our grower newsletters, both through our Florida Strawberry Growers Association and through our sister organization, FFVA, and our entire membership is enrolled in FFVA. We cooperated with voluntary

industry-wide efforts to develop GMPs for field level protection of produce, as Mike mentioned.

And we have an outstanding relationship and a mutual respect for both the Institute of Food and Agricultural Sciences, which co-sponsors our two-day session, and the Florida Department of Agricultural Services. We view them both as willing cooperators and outstanding resources to solve problems.

Within our system and our design, we recognize that with 9,000 workers, that's probably the most limiting practice that we have. Our production occurs within 20 miles of our -- of a pre-cooler; harvests are immediately cooled and they are, in fact, kept refrigerated, 34 degrees, as long as they are within our control.

Our workers -- and I've been on virtually every farm that we have -- have a situation field sanitation that is regulated at the state level both in number of facilities and distance to facilities with potable water, hand-washing facilities and so forth. We have incorporated, through our WPS program, an addition of field sanitary systems this past year, and so we are really doing everything we can short of holding

people's hands to assure the necessity of good field sanitation.

I think one of the things that you may not have been totally aware of until today was that agriculture is already pretty well regulated. The perception is there's very little regulation of agriculture at the field level.

An extension agent in Hillsboro County once took a project of identifying agencies regulating agriculture and he provided a brief synopsis of the rules and permits required for each agency. The guide quickly grew to 1,080 pages.

We developed a case study with use in farming for the future to determine the impact of regulations on agriculture, and we sent out a questionnaire to those regulatory agencies that would have impact upon an agricultural facility. We contacted 46 regulatory agencies. Forty-six agencies. Many with multiple permits, several duplication services with other agencies, and most not realizing how each related to the other agencies.

Some of your guidance bullets address sources of irrigation water. In West Central Florida, virtually all of our production is

within a water use caution area. Both quantity and source are regulated and metered. Switching and moving permits is closely monitored and extremely difficult. As I mentioned, we're virtually a hundred percent drip irrigation. So most of our production water is used -- is ground water.

One of the things I'd like for you to understand in your development of your regulations is, when you develop BMPs, so many of them interrelate and overlay. I'm going to give you a little anecdote, a true anecdote, that has occurred to us over the past several years.

As I mentioned, we're a hundred percent drip irrigation. There were a number of reasons why we made that conversion. First of all, we determined that we could save roughly 40 percent of our water, and we were under some pressure to reduce water usage in our production of strawberries.

One of the things we quickly discovered was that we would also be able to fertigate through the system which, in fact, reduced our fertilizer use by roughly 45 percent by putting the fertilizer right at the root zone. That made not

only the water quantity, but the water quality people happy.

When you're putting water at the root zone, you don't get the plant wet, which reduced our incidence of disease. As we mentioned, water is the carrier. That reduced our pesticide use by 15 to 20 percent.

Now, when we had an increased harvest as a result of that -- we increased our harvest by 25 percent as a result of that, and our marketable fruit, which made everything much more productive.

So here we are, we've reduced water use by roughly 40 percent, fertility requirements 35 to 40 percent, protected our water quality, reduced disease, increased marketable fruit by 20 percent, and reducing our pesticide use by 15 to 20 percent.

Then in 1994, the month of February, we didn't get a drop of rain. And Canada, which has an MRL of 20 percent of that of the U.S. on Captan, started rejecting our strawberries. The problem was that with our dry plants and without overhead irrigation, we didn't have anything to rinse off the Captan in the process.

Now we solved the immediate problem by cranking up our overhead irrigation, which removed about eight or nine percent of the residues, and we followed up with grower education programs and we haven't had a problem since.

I mention that because that's the one incidence that we've had with FDA, and our one black eye of involvement in 1994. And I'm bearing my soul just so that you understand that, number one, that when you have a best management practice, it's a moving target, and while we consider it to be moving in one direction, it moves both ways.

When we use overhead irrigation to accomplish what I consider a trade issue more than a food safety issue, we will have to have more water than what we would need under drip irrigation. This will affect our fertility, it will affect disease and everything else. So when you make a regulation, when you make a recommendation, you need to understand that there may be unanticipated results.

As an addendum to that anecdote, I would like to say that Martha put on another hat and

she told us that in order to maintain her credibility -- and we encourage her to do so -- that we would be under a lot of scrutiny the following year. Every one of our growers was inspected the following year. We had zero violations.

I think that that probably is a testimony to the fact that we try to do what is best for our community. BMPs are not isolated; they're convoluted, interrelated, and complex. They may be influenced by other BMPs and missions, and sometimes diverse direction occurs when they are compromised by other competing missions.

You need to know all the players, the other missions, and to minimize any anticipated negative results, you need to think ahead. It's desirable to identify impacts before they become recommendations which may become regulations.

You say that you're talking about recommendations and guidance, and I believe you. I think in my 25 years of similar jobs such as I'm working right now, I have found one thing to be true, and that is that once your recommendations are made, it's really out of your hands. You don't have control if they become

regulations by de facto or by outside influence.

So if you cannot resolve the problem after it leaves your hands, your emphasis must be before it leaves your hands. And you can accomplish a whole lot, first of all, by making sure that what you have is based on science, based on practical information and, for God's sake, not on giving us something to shoot for.

I wish I had a nickel for every time a regulator said, this will not be binding, but we want to give you something five years down the road to shoot for. Because no one can tell your business better than you, and no one can tell whether that target is a realistic target.

You need to be aware of the tremendous diversity in production practices among the numerous commodities you are addressing. It may be reasonable for my industry to trace back produce beyond the shipper, beyond the grower, to the individual worker in the field. And we can do that; we can actually tell you what worker picked a flat of berries. I say that because a lot of our people are doing it because we want to maintain our own quality control.

But, secondly, you need to understand that

most of our berries are broken up somewhere before they get to the consumer, and we have no control over that. The train of information is lost at that period.

There was some discussion here relative to collateral damage. The incidents that we have had recently relative to strawberries, incidents of cyclospora and E. Coli both occurred when we were not in production. That's probably the only safe way to say that you can be assured that things could not be traced back to you; we were not producing at that time.

And I can't speak for my friends in California, but I know them well, and I have been assured from some very reasonable sources that they were not the source of that problem as well.

We lost some money as a result of that situation, even though we weren't in production, because people thought of strawberries in a different way than they had prior to that information. I know for a fact that California lost over $40 million on the second incident alone, and they were not at fault.

We have the same ultimate objective and that is public health. Please move slowly and

carefully and minimize the negative impacts on growers.

A diet that is a cornucopia of fruits and vegetables is in the best interest of the consumer. It's important that one of your unanticipated impacts not be the reduction of our domestic supply of fruits and vegetables.

A reduction of supply of produce will influence the cost to the consumer, a reduction in domestic supply of produce will influence public health.

Thank you.

MS. ISAACS: Thank you, Dr. Hinton. Next we'll hear from Dr. Mohammed Ismail. I hope I'm not fracturing your name. Was I close?

DR. ISMAIL: Very good.

MS. ISAACS: What's the proper -- tell me what your pronunciation is.

DR. ISMAIL: It's pronounced in many different ways.

MS. ISAACS: All right. I'll say Ismail then. Okay?

DR. ISMAIL: Ismail.

MS. ISAACS: Ismail. Dr. Ismail is with the Florida Department of Citrus out of Lake Alfred,

Florida.

DR. ISMAIL: Thank you, Madam Chairman, distinguished members of the head table, ladies and gentlemen in the audience.

It is true, my name is Mohamed Ismail. I work for the Florida Department of Citrus and serve as the Scientific Research Director for fresh fruit.

Our staff is located at the Citrus Research & Education Center at the University of Florida, Lake Alfred. The Scientific Research Department was established in 1941 and, believe it or not, by an act of the Florida legislature, and we were moved to Lake Alfred about 50 years ago.

I have a Ph.D. in horticulture and I specialize in post-harvest citrus technology, including packing house operations and quarantine treatments.

The department staff includes engineers, a plant pathologist, plant physiologists, chemists, and food scientists and microbiologists. The Florida Citrus Commission and the Florida Department of Citrus, as a unit, is a government agency established in 1935 by an act of the Florida legislature as a result of an industry

request.

The act called the Florida Citrus Code states -- and it is ironic in a way that how the words are put together -- that the commission, department was set up to protect and enhance the quality and reputation of Florida citrus fruit and processed citrus products in both domestic and foreign markets.

It also acts to protect the health and welfare and stabilize and protect the citrus industry of the state which, in turn, helps promote the general welfare and social and political economy of the state.

The Florida Citrus Commission, Department of Citrus is financed by an excise tax placed on each box of citrus moved through commercial channels. The Florida Citrus Code stipulates the maximum tax and how funds generated are allocated. The portion of that tax is deposited in the state's general revenue fund to offset administrative costs.

We do support local, state, and federal efforts to enhance food safety and improve the quality of our food supply. We also believe in the importance of a healthy diet, rich in fresh

fruits and vegetables as part of a healthy lifestyle, and citrus does figure prominently in the diet as a good source of many vitamins and minerals.

The edible portion of the fruit, of the citrus fruit, is naturally protected by the peel against microbial contaminants, and it is also further protected by a natural abundance of citric acid and other organic acids creating a low pH environment, ranging between 3.2 in grapefruit, to 4.0 in oranges, which can deter a large number of disease causing organisms.

Nevertheless, we support the implementation of sanitary measures and guidelines which would strengthen and enhance the safety of fresh citrus and fresh citrus juice.

As a state agency, the Florida Department of Citrus has placed a great deal of emphasis on education through publication of fact sheets, passive manuals and workshops. We have just released two fact sheets on the microorganisms on food and beverage and on reducing the risk of microbial contamination of fresh citrus fruit.

We also collaborated on preparation of a model of Hazard Analysis Critical Control Point

for the fresh squeezed juice industry. And in 1996 and 1997, we organized workshops on microbiologic safety of fresh-squeezed citrus juices.

So we definitely place a great deal on the education side informing our constituents of the best science and the best research results and on the importance of education.

We also have a very active research program as we are the scientific research department of the Florida Department of Citrus. We conduct research on fresh fruit, on fresh-cut, and fresh-squeezed citrus juice. Our research activities include challenge studies on peeled, fresh-cut oranges using Salmonella, E. Coli, staphylococcus, and Listeria.

We are also studying microbial contamination of fresh citrus fruit and are developing physical and chemical methods for surface disinfection. Our research staff will continue to survey the microflora of citrus fruit in the grove, the packing house, and in fresh-squeezed juice plants. We plan to also conduct challenge studies and develop effective preventative measures and food surface disinfection methods at

various points of production and packing and distribution.

It is very important to recognize the potential for contamination of fresh fruit and vegetables that can occur in retail and wholesale outlets, and, indeed, in the hands of the consumer. These are areas of utmost importance which needs to be studied in order to develop sound and objective protective sanitary measures and practices. And these are areas that I do not see in the guidance document; what happens at retail, wholesale, and in the hands of the consumer.

Florida produces approximately 250 million boxes, which is approximately 10.2 million metric tons, of oranges, and about 55 million boxes of grapefruit, which is approximately 2.2 million metric tons. While only six percent of our oranges are shipped fresh, most of the tangerines, tangelos, and grapefruit are shipped fresh. When recommending guidelines, we must not lose sight of the intended use of a given crop. An orange crop harvested for processing, which includes a potential kill step, can be handled in a manner different from oranges or other citrus

fruit picked for the fresh fruit market.

The Florida fresh citrus packing industry benefits not only from the natural protection of a divinely designed fruit, a citrus fruit, but also from certain common practices in our groves and citrus packing house operations.

Among these -- and I might be a little bit repetitious here -- the extensive use of under-tree irrigation, the microjet systems which minimizes exposure of fruit to irrigation water, fruit trenching at the packing house with chlorinated and ozonated water with automated control of pH and chlorine concentrations, the use of automated systems to clean and sanitize harvesting bins, also the increased use of plastic bins that minimize fruit damage and aid with bin cleanliness. The use of sanitizers such as chlorine and quaternary ammonium, compounds to clean degreening and storage room and packing line equipment. The increased use of high pressure washers to improve fruit cleanliness and the use of automated grading and packing systems to minimize human contact. And, finally, the increased use of refrigerated storage and refrigerated transport.

Finally, I would like to mention that each commodity is unique in the way it is grown, handled, shipped, and ultimately consumed. To recommend implementation of one set of regulations to all fruits and vegetables, in our opinion, is inappropriate.

Thank you.

MS. ISAACS: Thank you, Dr. Ismail. And now we will hear from Dr. Larry Beasely, who I think we've already heard from earlier today, but maybe a little more extensively.

Dr. Beasley is with A. Duda & Sons, Incorporated back in the Central Florida area from Oviedo, Florida.

DR. BEASLEY: Central Florida, South Florida, Texas, Arizona, and California. And I get to visit all of those. I haven't been home in two weeks, and I will get home next week, along about Wednesday.

There's one thing I'd like to thank all of you for, and that means you in the group here, as well as the medical association and the universities. During my lifetime, my life expectancy has increased by several years, and I found out this morning that it's due in part to

the consumption of fresh fruit and vegetables. I plan on continuing to eat them.

In addition to that, I'd like to also point out to you -- and I think the point's already been made, but I'd like to reiterate -- that first and foremost, as a producer of fresh fruit and vegetables, we have a responsibility to the consumer, and if we were to shirk that responsibility, we would quickly be out of business. Food safety is first and foremost in our interest as businessmen.

I think we have already implemented various and sundry things. We developed a guidance document for the industry on our own and put our own efforts into doing that. We have implemented those. We have very, very diverse conditions under which we produce the fresh fruit and vegetables here in the United States.

We have been talking about the possibility of drip irrigation, microjet irrigation, Chip talked about furrough or drip irrigation, citrus could be on seepage irrigation.

In the vegetable community out here west of town, we literally manipulate the water table just by raising it to a level each crop needs.

The water doesn't go over the top of the crop; we put it in the root zone where it needs to be.

Now, how do we do that? We do that by raising our water table out of surface water canals. And someone suggested that we perhaps cover that surface water canal? I know I'm being facetious, but probably the pond that we're watering out of encompasses thousands and thousands of square miles of surface water. It's impossible to do.

I don't want to stand up here and pick apart your efforts, but I do want to encourage you that this is, as Chip pointed out, the most opportune moment that you're going to have to impact these guidance documents that will continue to affect us long after your names are forgotten.

So please move forward slowly and consider very carefully the very diverse industry that you're impacting because we are regulated, whether it's by the government or whether it's by the buyer that I mentioned earlier this morning.

And I'll go through a few of these. On the irrigation water; this is one that causes me most concern. Evaluation of the runoff. Our water is runoff, all of it. We gather that water and

reuse it, and have to by permit. Tail water runoff is recirculated, it is open to the environment, which you might also consider is inhabited by endangered species, and they tend to like the farm; they don't like cities. And we can't regulate where they're going to use the bathroom, whether they're aquatic or whether they're birds or whether they're mammals running around on the ground. I can share your concern; I hope you can share my frustration.

Spray water. We may be seven miles from the closest utility line, so there's not a pump there. We're pumping water right out of the canals, and that is a common operation.

The reclaimed water that has been mentioned. The reclaimed water -- and I'm going to go ahead and talk about sludge, municipal sludge at the same time -- is very, very closely managed by other federal and state and local regulations, and if they aren't meeting their standards, our use of it is just improper, and it is used in certain small limited areas, but it is used. So I don't want to downplay the idea that municipal sludge is used, or downplay that reclaimed water is used because it is, and will continue to be.

But it's under very close guidelines already.

Processing water. I found it very unique that you use potable water there -- use that term. That sounds good and looks good on paper, but there may not be a source of potable water of sufficient quantity to do all the things that we do. And I'm talking about everything from cleaning equipment to cleaning the packing house, washing the produce, as you intended it to mean, to irrigation, not to mention the makeup of water that we use for spraying.

Wash water, the addition of sanitizers. We already are doing that, but I'd like to perhaps -- it may be unnecessary, but to -- since I didn't see some of you on the field trip a year ago, two years ago this coming January, I'd like to educate you a little bit with regard to water and sanitation, because I think you're thinking about a packing house, and I'm thinking about the packing house may be the field. The entire field. How do I sanitize 40,000 acres? That's just ours; not to mention my neighbor's.

We use chlorine in the water that we wash the bugs off of the celery or the leaves as we cut it and pack it in the field. That's one

method of packing those commodities. They may be harvested in bulk and brought to a packing house and treated as you are probably thinking, at a packing house. But I wouldn't say that the majority of the acreage in the United States comes to the packing house unpacked.

So chlorination or addition of sanitizers is something that is done in a limited way. It may not get washed at all. How would you overcome the dilemma that I'm certain -- and I haven't seen a farm in about three weeks, at least not one that we have; I did try to take some vacation -- but we have we had three and a half inches of rain on the west coast yesterday and you talk to me about clean boxes and equipment? I'm certain it was fairly dirty, and I am certain that if we didn't get in a crop out of the field, it would be lost.

We cannot assure pristine, clean operating conditions because we operate under God's environment, subject to everything that gets dumped on us. And it could be muddy. We clean the produce, we clean the equipment, and we provide clean boxes.

Soil types can impact this tremendously. If

you have sand, you can get it off relatively easy; if you have muck, you can get most of it off, but the residue looks worse when it's left on there because of the cold. And if you have clay, God forbid, it sort of collects water. So the more water you put on it, the muddier and messier it gets. So I just want to caution you about some of this.

The temperature differential. If we increase the temperature, we will have more diseases on that produce by the time it gets to the consumer than we will if we chill it very quickly. That is not practical. It may be in the lab, but it is not in the real world.

Worker training. We have OSHA standards, we have worker protection standards, we provide hand washing facilities to them, we have -- we have the bathrooms in the field, we have training programs for hygiene, the smoking, the heating, the air, all of this, depending on where you work and what you do, we have training programs out there that are available. And I'm not talking about A. Duda & Sons, they're available to all the growers that want to use it and want to go and train their people. And I think the -- most

of us are implementing those ideas already.

Maintenance and sanitation I just touched on a while ago. I don't know how you keep everything pristine clean in a field condition.

Animal control. I would love to be able to get some of them out of there. Deer eats the crop. And a lot of others cause serious problems that I can't do. But I am regulated by other government agencies that says leave them alone.

And I want to point out also that I am disappointed that we have a guide to minimize microbial food safety hazards for fresh fruit and vegetables, it's open-ended. Where did it begin and end? It began out there when we prepared the land and it ended when we put it on the truck. That's all I have control over.

But as I read the newspaper and as I listen to people who can talk about things that I don't know enough -- don't understand; I'm not an epidemiologist, I find a lot of it is traced back by scientists and experts in the field through epidemiology to cross-contamination, and I find that it happens somewhere other than the farm.

I understand your concern; I understand you have to address the issues, but I don't see where

we've talked about trucking, I don't see where we've talked about warehousing, I don't see where we've talked about that grocery store chain or the consumer coming by, as someone said and I found amusing, fondling my produce. God only knows whether they sneezed or went to the bathroom before they did it.

Positive lot identification is something that's impossible. It's a cost. I hate to put it that way, but I would ask the buyer again, what are you going to pay me to put it on there? We operate maybe three to five percent return on our investment. Most of you wouldn't invest your money in the stock market if that was all you were getting, or any kind of municipal funds or anything else. You pull it out of CDs because you can't get any better than we farmers get, and I do the same thing.

But when you pass this on to me, I can't pass it on to him. It just eats into the profit. We were talking about being profitable here earlier like it is possible. It gets harder every year. I've been at it for 25 years and every year it gets harder than the previous year.

Chip used the term, and I liked his term,

perhaps if I had avoided it, I wouldn't have had my outburst this morning about guidance. De facto regulation. That is exactly what this will ultimately end up being.

And I'll finalize by saying, this is -- and I'll repeat it -- this is your only chance to have any impact on the GAPS that you're going to develop, and once it's out of your hands, by de facto regulation, I'll live with it for 11 more years.

MS. ISAACS: Thank you, Dr. Beasley.

I should have mentioned earlier, if you do have written testimony, to please leave at least one copy with us at the head table.

And now we'll hear from Mr. Dan Riche with Riverfront Groves, Vero Beach, Florida.

MR. RICHE: Thank you.

When I got the call from Richard Kinney, (phonetic) the executive vice president of Florida Citrus Packers, I got the call and he was being very complimentary and asking me about my children and taking a genuine interest in me, and I pulled a chapter out of Dale Carnegie's book, and I'm thinking, all right, Richard, what do you want, because I knew there was a reason for this.

He told me a little bit about what this was about today, and I'm a farmer, and I'm a packer, I'm a marketer, shipper; I'm not a PR guy, I'm not a very good public speaker, which you'll soon see. But I also know that Richard has a wife that I knew in college, and she has, as I think Mohammed said, divinely -- what was it, Mohammed -- divinely -- she has a divinely developed memory, among other things. But a divinely developed memory of my college days, and I knew Richard had the opportunity to blackmail me, so I had to agree.

Also, I'm surprised he asked me. Last time he asked me to do this, we went to a congressional delegation and spoke to the group about NAFTA, and I was sitting there with my time and I'm making good eye contact with everybody, all the important things of public speaking, and I was getting a little cocky. As I looked down the line, I noticed one of the congressmen was sound asleep, so that was a real blow to my ego and I swore I would never do this again, but here I am.

My name is Dan Riche, I am the President of Riverfront Groves. We are a grower, packer,

shipper, and marketer of fresh citrus. We employ about 200 people from the field right on through the packing house.

One of my many non-paying jobs right now also is I serve as president of the Indian River Citrus League, which is a trade association of 1,600 grower members stretching from Palm Beach to Cocoa Beach. We have approximately -- in the State of Florida, we have approximately a hundred packing houses that employ plus or minus 15,000 people.

As we said -- one of the benefits of going last is a lot has been said, also. Certainly, the goal of food safety is a worthy cause; there's no argument about that. Our company, we ship to both domestic and export markets; as a matter of fact, 65 to 70 percent of our product goes offshore into the international market, purely because that's where the higher FOB's can be derived and, right now, as you probably are aware, in the last four or five years, citrus has been in a very difficult state economically.

Under GATT -- and I've been involved with Richard and Bobby and some of the others regarding the opportunity to expand our

markets -- and under GATT, we're dealing with Australia or Mexico or China, trying to gain access, and all of the discussion of access pretty much the preclusion of our fruit, has always been science based.

This situation here, I believe, could cause our trading partners to react negatively if we eventually endorse and publish this type of a document. Even if it's guidance -- and I'm going to echo several of the former speakers -- even if it's guidance, it's publicity and it's perception that makes a difference.

The best example that I could think of in that regard was the Alar scare in Korea several years ago; the Alar and apple industry in Washington. Well, Alar is not labeled for citrus; it has no use at all for citrus. Yet the Korean press picked up and stated that Alar was applied to citrus and we lost our market over there and have yet to recover the same volumes.

Again, it's perception, it's publicity. These are the type of things that can come out of these type of guidance regulations -- I'll call them regulations because I believe that that's truly what they do become. The damage was done;

there's nothing we could do about it. We lost our market share, we lost a lot of money.

Another example of an experience that I personally had was the United Kingdom market on citrus. Sansbury is a very large importer in the UK. Sansbury came through Florida and said they wanted to import citrus direct; they no longer wanted to go through an intermediate handler. They came to several packing houses, they came with a set of documents that they were going to say -- that they indicated that were going to be imposed upon us with food safety.

They weren't unreasonable, totally; some were, and they realized that. And the fact of the matter is, though, they went back, they -- they indicated it was just guidance. They went back, and then following that guidance discussion came this very long legal document that they required us to sign stating that we would adhere to all those.

My question back to them was, well, you came and you said this was guidance and we were supposed to make every effort to adhere to this guidance. Well, it became regulation and it became very difficult to the point that Sanisbury

didn't get any fruit direct for a while because they had to abandon that because we couldn't adhere to those requirements.

The quote was made earlier that the agricultural industry is a very complex one, and it came from -- I'm not sure, I think maybe Terry. That is very true. There is no broad-brush approach that's applicable to our industry.

Fresh citrus, as Bobby and Mohammed said, is an extremely safe product. We have no documentation of any problem with our product with food safety. And as some of the other speakers said also, we are very apprehensive at the speed at which this is progressing.

I find it a little interesting about the timing of this also. The President's Initiative came out October 2nd. I find it interesting that the timing of that was just prior to the fast track vote, and the possibility that this could have been a preemptive strike against the fast track opposition, which certainly might use food safety as a battle cry.

Food safety is an absolute objective of our industry. Hudson Foods is an example of why we cannot take risks with our product. Hudson

Foods, to my knowledge, is no longer in business; if they are in business, they're not anywhere near what they were.

There is no compromise on food safety in my organization, and I know there is no food safety compromise in our industry.

I mentioned the apple industry and Alar, there is a lot of people went out of business; there was really no basis for that claim, as you know. The recourse that we, as growers, have or they, as growers, had, they filed in the State of Colorado, yeah, they probably won, but the damage was done. The horse was out of the barn at that point. The door was shut, the horse was out of the barn. The damage was done, the economic damage was done. So perception, again, in reality.

Someone also said, it's difficult -- it would be difficult to take this type of language and turn it into requirement. Well, I can tell you that is not true. It's not difficult for the buyer to take recommendations or guidance and turn them into requirements. And in our industry any more, the supply side of the equation is much more fractualized than the procurement, buying

side. And it doesn't take much intelligence to know who's got the strength and who doesn't.

So in our case, if this became a requirement of our buyer, we would have to meet these, and I readily believe that this will be something that they will be looking at.

Another, you know, words like -- on that subject -- words like minimize and avoid where feasible. They just get blocked out and they become requirements. I know the intention is good and have all due respect for everyone who drafted this, but I think this is the time and this is why you have this forum for this type of dialogue.

Perception, again. I'll take a minute to talk about perception and -- in another sense. Irradiation and cold treatment are two viable ways for us to move fruit to Japan, yet the customers won't take it. Irradiation for obvious reasons, and cold treatment for other reasons that are not founded. But it's the perception that the two of those do not work that we do not ship to Japan under those means of protocol. Again, it's a reverse, but it's perception.

I really think what it boils down to is what

you are intending to achieve and what you will achieve are not the same. As I mentioned earlier, also, we also have constant challenges to gain access to markets. Currently, we're dealing with China, Mexico, and Australia; this would definitely be some new information for them to latch on to to continue to put some non-tariff trade barriers in front of us.

On the public side, the public perception in our own country arguably could cause a concern; it could cause our population to move away from fruits and vegetables due to a fear, an unfounded fear. This could defeat all of our recent objectives to encourage a healthy diet, including more fruits and vegetables.

An example of that would be the Chilean grape scare several years ago, where we had one or two grapes that were tainted. And I would venture to say, just like the strawberry industry was affected dramatically by the recent outbreak from the Mexican strawberries, that the Chilean -- or the domestic grape business was severely impacted by that. And there's a lot of -- a lot of concern regarding that.

In closure, I do believe in my heart that in

your heart that you're doing the right thing, and I believe it's a noble cause. Our industry specifically is fighting for survival. The economics of our business the last few years have been extremely difficult. We don't need this type of curve ball thrown at us at this state in time.

I would respectfully request that you consider slowing down the process. I understand fully the time line you've been presented by the President, but I also understand that time lines have come and gone many, many times before this one, and I would request that you -- you request an extension, if necessary, and please involve the portion of the USDA with the FAS and how this will affect us on the export side of our market, because I can tell you, the citrus industry, fresh citrus industry, would not be surviving with the economic state we have if we didn't have that one glimmer of hope that we have, and that's the export.

There's too many questions at this time and too many possible challenges that could be thrown at our feet. Again, I know you believe in your cause of guidance and I respect that mission, but

I do believe, in closure, that the impact will go way beyond your intent.

Thank you again for your time.

MS. ISAACS: Thank you, Mr. Riche. And now we'll hear from Mr. Wes Roan with Six L's Packing Company, Incorporated, Immokalee, Florida.

MR. ROAN: Thank you very much for the opportunity to be here and welcome everybody to sunny Florida, at least it is today. It wasn't yesterday, but it is today.

Again, my name is Wes Roan. I'm the director for research and development in vegetable production for Six L's Packing Company. We're located in Immokalee, Florida. We're a fresh market vegetable producer, specializing in tomato and pepper production, packing and sales. We're a corporate family farming operation; we farm in Florida, Georgia, South Carolina, Virginia, and Pennsylvania.

Recent impact of microbiological contamination of imported agricultural product seems to created a sense of doubt in the minds of the current administration and some consumers as to the reliable health benefits of fresh fruits and vegetables in the American diet. The

benefits of five servings a day of fresh American grown fruits and vegetables will always far outweigh the risks of potential food-borne illness.

The quality and safety of our products plays a major role in our ability to be profitable in a competitive global marketplace. Microbiological food safety issues and best management practices to minimize risks of that nature have been and will continue to be a management strategy for the success of our company.

Some of the concepts we currently incorporate into our production and packing procedures for the mitigation of microbiological contamination include field -- production field sanitation facilities for harvesters and laborers, chlorination of field packing and dump tank equipment, selection of commercially produced fertilizer products, the use of drip fertigation technologies, and the use of plant disease specific crop protection chemicals.

A lot of these issues we've talked about, a lot of the speakers have reiterated them, and I'll probably say a lot of the same things. But one of the issues that we face in the field in

the production scenario is the availability of water and the limitations put on us for the amount of water we can use and, in some instances, the water quality.

We have lots of different water sources, sometimes many different sources on the same farm, depending on the location of the land, whether it's owned or rented; it might be surface water, it might be well water that's pumped from the ground and pumped into a pond which then is then pumped to the field because we don't have access through whatever limitations to pump directly from the well to the field, so we have to pump over the middle of the night to gain the volume of water we need and pump it into a pond, and then, in daylight hours, when the crop needs the water, pump it through the systems that we have, primarily drip irrigation in these instances.

Also, others have talked about animals and the control of circumstances that would lead to these types of contamination. Well, animal control is impossible. Everybody knows that there are rats and mice and raccoons and deer and pigs, and I don't care how large your fence is or

how electrically charged it is, it doesn't keep them out. You know, you can go out in the field and be looking at your crop and you'll find birds nesting in the crop; stake tomatoes are a prime location for bird nests.

We have a situation in Naples right now where we're dealing with a bear and its cub. And this bear has decided that it likes our watermelons and it likes the things that we have to offer in the field better than what's in the woods. Well, we called the Game Commission and they say, well, gee, we're sorry, it's just a bear and, you know, you're going to have to live with it.

And the old saying that we use when we're pretty sure of something is, does the bear do what it does in the woods, and I can tell you now that he also does it on the farm, too. And we can't control that any more.

And not only did this bear come on the farm, but he's right in the middle of a residential area, and it doesn't seem to matter; the bear has free reign and we don't have control of the animals any more.

Okay. Our packing houses, we have

facilities that employ sanitation management procedures, including constant testing and documentation of chlorine levels and dump tanks and flumes. The use of new packaging and palleting materials at all times, personal hygiene training and monitoring of packing house employees.

Other recently incorporated product management techniques, such as positive lot stamping for track-back identification does allow for a certain amount of track-back of our products, but we do face the problem that, once our product is purchased and sent on a truck, it may go to a direct consumer, it may go to a re-packager, and once it's out of our hands, it can be -- I guess the word was intermingled with many other sources of product. So it does allow for source of -- origin information, but it can only be effective while it remains in our packaging.

We talked about education. We talk about education to our workers, but we've also talked today about education of the consumer and education of the handlers off the farm. I believe that consumer education is probably the

biggest and most important area that we could improve upon.

I know from my own personal experience with eating in my own household, eating at friends' houses, the different things that people take for granted or let go as insignificant in the preparation and handling of food is, a lot of times, something that concerns me, and I try to always educate my friends and my wife when I have a chance.

The loss of control of our product in the transportation process is of critical concern to us. We are at the mercy of the end receiver perspective of what the quality of our products are. And a lot of times, temperature control in the transportation mode is the main reason for those problems.

We're forced to spend money in management and control of temperature logging units that go into the transportation vehicles to justify and verify that the temperatures were maintained as the transporter indicated that they were; it's not just his word against ours, we now go ahead and document through data loggers temperatures from one end to the other.

Sanitation is real important at the -- we've talked about it -- at the retail markets. The fondling issue is very funny and -- but it's so true. How many times do you, as a consumer, go in and you grab that cantaloupe and you want to feel it or maybe you pick it up and you sniff it, or you grab that tomato and you squeeze it. It's just so common.

And all of the risks and the potentials that come in with the consumer are hard to ignore, and probably where we should be focusing a lot about.

Six L's Packing Company will continue to implement management strategies that minimize the potential for microbiological contamination as it makes good sense. I hope that in an era of regulatory actions that impact the way we manage our labor, the chemicals that are available for our crop protection, the availability of a water supply, and the constant onslaught of environmental lawsuits that attack farmers as polluters of the community, our legislators will find wisdom and use their strength in coming to grips with the realities of microbiological contamination.

There are currently many laws that impact

issues that affect the potential for food-borne illness. Jumping into the rapid escalation of government guidance documents and/or regulatory action without due diligence and attention to sound scientific data will only exacerbate the financial burdens to American agricultural producers.

Thank you very much.

MS. ISAACS: Thank you, Mr. Roan. We are going to participate in a five-minute break. We have four official industry presenters yet to present.

Dr. Malecki, what time did you have to leave by?

DR. MALECKI: I have to leave by 3:30.

MS. ISAACS: 3:30? Okay. If it's okay with Camille, I think when we come back, can she give hers and then go back to the industry and then continue with the stakeholders?

Okay. Be back here by 3:00, we'll give you eight minutes, and there's some drinks left outside.

(Thereupon, a short recess was taken.)

MS. ISAACS: Okay. As I mentioned, Dr. Jean Malecki, she's an M.D. and has also has a

master's in public health. Dr. Malecki is the director of the Palm Beach County Health Department, and we're just briefly interrupting the industry presentations for now because she can only stay here for a little bit longer because of a conflict.

So come on up, Dr. Malecki. Thank you for joining us.

DR. MALECKI: I am going to show a couple slides. I don't know if you'll be able to see the overheads.

First of all, welcome back from lunch, and most of us had a lunch of chicken, rice, and beans, and still we're back here with our behavior habits talking about the health of fresh fruits and vegetables. I just say that because I am a proponent of fresh fruits and vegetables.

First of all, just a few comments before we turn the lights off. I am a public health official for this county. I have been involved in what I call enumerable outbreaks related to food products from contaminated spice with specific bacteria, and not necessarily because a spice had bacteria, and spice do, but because of improper cooking of the spice, all the way -- and

that was in a major hotel here in Palm Beach -- to an outbreak of Hepatitis A related to little kindergarten children taking jellybeans off the table of a kindergarten teacher and transmission that way. So I really do appreciate the comments that I've heard that from farm to mouth is extremely important.

Welcome to Palm Beach County, the diarrhea capital of the world. And that marks my career. Our Margarita y Amigas' Salmonella to cyclospora. In fact, just recently, the press decided that I should start a new sitcom for a new network coming into being on Paxson, and it's supposed to be entitled Diary of a Medicine Woman. And that's for real.

And we also, because of the situation, especially with cyclospora, have Boca Raton, one of the, you know, wealth capitals of the world next to Palm Beach, called Bocarrhea. So we really -- you know, we really consider this very serious. And I'd like to say that we have the cleanest colons in the United States.

With that, my comments today are going to outline what we went through in investigating cyclospora. Back in 1995, Palm Beach County

really was the major county that initiated investigation of this, what we call, emerging health threat. A disease caused by a parasite. The parasite actually is in the slide there, A, it's the largest one, and this is one which really was unknown to the United States back in 1995, unless you traveled abroad and you consumed water or produce abroad in countries where this is endemic. Otherwise, we didn't see it here.

But in 1995, we did because we were looking for it. We had a laboratory and hospital down in Boca who actually had a medical director who came from Peru, who did a lot of work in Peru, knew about cyclospora, saw travelers with this, and actually trained the laboratory technicians in identifying this. Otherwise, this would have gone undiagnosed.

At the same time, a smoking gun was occurring in New York. Certainly not as vast in the outbreak as in Palm Beach County, but one which really substantiated some of the findings that we found in 1995, and then further on into 1996.

I show the organism to you because our discussions today have dealt with the safety of

the fruits and vegetables and the importance -- and I want to stress this now and at the end of the few minutes I'm going to speak -- the importance of research in microbial standards. And when I'm saying that, I want to say microbial identification.

We were at a loss in this county, we were at a loss world-wide because this was an organism which was basically an unknown and an emerging health threat. Very little research had been done on it. And, in fact, to today, we do not have a sensitive and specific test to isolate it off produce.

We certainly are better at it looking at it in humans and looking at it in stool, but we still are at loss. Is that uncommon in public health? No, not at all. In fact, the investigation and promotion and intervention of almost all of the major health threats that we have seen known to man have been corrected without identifying the cause of it.

If you go back to the studies in England on cholera, typhoid, no one can isolate those organisms. In fact, our earliest intervention on HIV, the largest cause of AIDS, were done and

implemented prior to our isolating that virus.

So I say that to you as industry, as stakeholders and people who are charged with public health, that the science of epidemiology is extremely important, even if you can't isolate the organism, because I will guarantee you, the laboratory science falls behind, and it still does with this particular organism.

One other thing that you should know is that we, at public health, like to say, cook your meat, right? Wash your fruits and vegetables, because we all know there will be some form of contamination. A good scrubbing here and there does you a lot of good. This organism is a sticky organism, and how many of you really can thoroughly scrub those wonderful beautiful berries that are very pliable and very fragile.

So knowing the microbiology of the organism helps you, helps us in public health, and really to give a good public health message.

This -- I do need to go over there, but I'll describe this because it's important when you're investigating an emerging health threat, especially one which has been imported. And my comments are going to be totally isolated to

importation, and I want you to be aware of that.

As you could see here, we're comparing the 1995 outbreak to the 1996 outbreak. The 1995 actually is a diamond shape and they're purple, and the 1996 are orange colored and they are in a circular color.

When the outbreak occurred, it occurred in Bocarrhea, or Boca Raton. I say that because, when we were investigating this for public health, we did everything possible; we interviewed every patient and their family, we went to every restaurant -- and let me tell you, people in Boca like to eat out -- we investigated every grocery store, we went to every distribution center, and I personally watched the trucks come in. All right? From across state to the distribution sites. And we knew -- and we knew early on, it did not occur here in this county and the contamination did not occur in this state.

So by doing that and by looking at the water supplies, number one, the water supplies, we were able to begin to hypothesize. Eventually, it was not just an isolated event in wealthy Boca Raton, which was a clue to this whole thing, because

people without the money can't purchase those beautiful, beautiful berries that come into the State of Florida, at that particular time, they're very costly, and there is what's known as market share. And as you know, there's a distribution based on cost and based on beauty and based on taste to those areas of the country where people can buy them. So lo and behold, we began our outbreak.

Will you please give me the next slide?

Because of the lack of laboratory science, the unknowns, we identified in 1995, 41 laboratory confirmed cases. Is that all we had? Absolutely not.

And by the way, this is probably happening all over the country, but nobody was looking for it except for us.

And, as you can see, when we were looking through this, we did have two events; everybody dreams of an outbreak of a single event, and we eventually were looking at strawberries and at raspberries and began tracebacks with our partners, our distributors, and that's where the trace back began, which is now called lot identification.

I think this is a very important point, and I'm going to raise it right now, and I'll reiterate it again in my comments. But the industry, as a whole, federally, we have to come to grips with being able to truly traceback to the farms. That's where the identification of contamination must be. Remember, I'm talking about imports. Because the contamination here really did occur at the farm site, and if we can't trace back to those farms, there is that commingling in the packaging piece, and if we want to save an industry and we want to be able to have a single voice as to a culprit, then we must be able to do that. And if one piece of industry has to go blind, but let's not have the whole apple industry or the whole raspberry or strawberry go down the tubes.

May I have the next slide, please?

The conclusions of the 1995 with an epidemiological study with the CDC pointed to soil contamination and possibly raspberries.

In 1996, because of the awareness that occurred, we certainly notified all my compatriots throughout the United States, other people were ready to pick this up.

Most of you remember the Houston media event that took place. We had 108 laboratory confirmed cases. And, again, we looked at clusters, we looked at confirmed cases and, in this particular time, as also took place throughout the United States, pointed to Guatemalen raspberries.

What's important -- and this has to do with partnering, and this has to do with consumer awareness and both of those terms have been mentioned. When we have demographic evidence, as we had in 1995, it is certainly important to actually apply what we call the basic science of public health, which is epidemiology, knowing full well in these types of situations, you might not uncover the actual cause of the organism, but based on statistics, you can really point your finger, and you can really find a culprit and you can find provide interventions and implementations.

You get the statistical evidence in here; it was raspberries, and it was very specific to Guatemalan raspberries and, as we moved forward with this and we did our tracebacks, it was difficult to go back to the farm.

And as you know, CDC went over there, I

think FDA went over to Guatemala, and they did attempt to initiate changes over there at the farm site; hygiene, sanitation, there was water that was contaminated, they actually had risked -- had a risking level from one, two, three, four, in terms of the farms and when they could export and when they could not export fresh versus frozen raspberries versus no raspberries at all. It was either a complete HACCP or a modified HACCP approach. It didn't work. It didn't work.

We relied on an existing environmental evidence, which is weak right now, which is one I think everybody in this room has to support. If we can do tracebacks back to the farm without the commingling, I think the industry and, most importantly, the public will be better informed to make wise choices and important choices in their diet.

In terms of epidemiological evidence, we can no longer avoid or put our heads in the sand the strength of that evidence. It's three years later, and we're seeing this product come out.

I, too, because I'm a public health official and I specialize in prevention, I want everybody

to eat fruits and vegetables. But I also want them safe. So I want both and I want them now.

Next slide. Let's go to the next one.

MR. BARNES: That's it.

DR. MALECKI: That's the end of it? Okay.

Let me go ahead and summarize. Evidence. Again, evidence on sampling, evidence used epidemiologically and statistically. We still cannot isolate cyclospora from fresh produce, whether it's Peruvian lettuce, lettuce from Peru, raspberries, basil, whatever it might be. But there are indicator organisms, and I would like to see this panel address that.

We know when there's contamination. We don't have to have cyclospora on a piece of lettuce to know that. There are indicator organisms that you use in your industry, such as E. Coli. And I think if you start looking at sampling, whether it's a guidance issue or a regulatory issue, E. Coli is an indicator of contamination. And I suggest to you, that could be of use in terms of sampling produce that comes into this country.

Positive lot identification. This is a cooperative issue, and one which us, as a public,

in making our choices whether to choose raspberries from the State of Florida versus raspberries from Guatemala, versus specific farms, is extremely important for us.

Perishability of the produce. And when we're looking at where can we identify, where should we test, you've got to go back to the farm. When you're investigating a disease like cyclospora which has an incubation period that can range up to 22 days, and I'm relying on your memory to tell me what you ate even two weeks prior to that, how many of you can tell me what you ate two days ago? Then to go back to the shelf to get that same raspberry batch, it's not there any more.

So I agree with you, and I wholeheartedly support, that if we are going to look at continuing to import from areas where we know there's contamination and we want to provide technical assistance, then we have to go back to those farms and work with that contaminated water and work with those folks; not here in our local supermarket.

Educating the wise consumer. I think we've been in the forefront in the State of Florida,

and I commend the regulatory agencies, to ensure and implement, make sure that there's labeling in every one of our grocery stores so that people can choose; they can choose what they want to buy and where they are buying it from.

And most importantly, research and development. This is not just research and development in terms of microbial standards for produce; this is research and development on the medical side of the house as well. They can't be separated. They're intertwined.

So the partnership that we have has to remain there. There has to be a trust factor, and we have to be cooperative in our approach in the future.

So with that, I want to say thank you for allowing me to present this. I certainly applaud the efforts. It's been three years in coming. I know some of you think that there's a delay here. As far as I'm concerned, I would like to move forward, and certainly move forward collaboratively. And, again, these are comments made on importation.

Thank you.

MS. ISAACS: Thank you, Dr. Malecki.

Now we will go back to the industry. Some folks had signed up to give short presentation testimony. J. Luis Rodriguez. You're with the Florida Farmers & Suppliers Coalition?

MR. RODRIGUEZ: Yeah, I'm willing to yield my time to Mr. Smigle, because he wants to make a visual presentation of a short documentary that we have.

MS. ISAACS: Okay. Gary, did you want to come up here?

Okay. Gary Smigle, president of the Florida Tomato Exchange, and you're based out of where?

MR. SMIGLE: Lantana.

MS. ISAACS: Out of Lantana. Okay.

MR. SMIGLE: My name is Gary Smigle, I'm president of the Florida Tomato Exchange. I'm with Mecca Farms; we farm on the East Coast of Florida, primarily winter vegetables. We're a family farm and business. We've been in operation just at 100 years.

We're unalterably opposed to this initiative and to the guidelines, and I'll tell you why briefly.

When I first heard of the President's Initiative I said, great, he's finally come

around. It seems like every three months over the past two years myself, Mr. Rodriguez, I've seen Mike Stuart, many, many people from our industry have been up in Washington asking the government to push a country of origin labeling law.

We think there is a problem. The problem is not in the United States farmers; the problem is, as the doctor just told you, that we see it, is Guatemala, it's Mexico, it's the people that now produce 60 percent of the winter vegetables eaten in the United States.

These countries routinely use practices that wouldn't last a minute in this country, and then they have free-flow of all that produce into the United States where it's not labeled, where the consumer does not have a choice, and where we say people are getting sick.

We, too, deal with the 46 government inspectors, some days it seems like twice that many. We don't need another government regulation on us until we cure the primary problem.

Before the program closes out, they've agreed to show our documentary, it's 12 minutes

long. We sent a film crew to Mexico to document the sanitary practices there and we would invite you to look at that.

Thank you.

MS. ISAACS: Okay. Thank you, Gary. That video will be shown when we wrap up our session. If we go, you know, until 4:00 o'clock or after, for those of you who want to stick around.

Did Dr. Malecki leave? She wound up with one of my business cards, so I may not call everybody who signed up here, so speak up if you don't get called by the end of the day.

Okay. Next we will hear from Mary Dettmers with PBC Greenmarket Association.

And, Mary, where are you from?

MS. DETTMERS: I'm from Jupiter.

MS. ISAACS: Okay. From Jupiter, Florida.

MS. DETTMERS: I am a master gardener trained here at the Palm Beach County Extension Service, and also serving this year as the part-time director of the Palm Beach County Greenmarket Association.

And I wanted to draw to your attention to something that's happening here in Palm Beach County that I think is very relevant to the

discussion today. We're talking about from the farm to the table, the safety of the food.

Obviously, the quicker you get from the farm to the table, the safer the food is; the more direct the route. And here in Palm Beach County, the agricultural community and the government have joined together in a very proactive movement to provide local produce to the local population.

We have a group here called the Agricultural Enhancement Council. It's representatives from different parts of agriculture who are advisors to the Palm Beach County, Board of County Commissioners. They've been in existence just two years and, in that time, there's three projects that they've done that I think could be imitated country wide.

The first is, ask where it's grown. This is just one of the posters; there's also bumper stickers and other literature. But ask where it's grown. We are educating the local population to ask where the produce comes from.

Recently, the Palm Beach Post reported that 60 percent of the people nationwide don't care where their food comes from; it's not even a question, they never thought about it, it doesn't

matter. Well, it does matter if you're trying to get the food from the farm to the table in the quickest possible way so that there's less opportunity for any contamination.

Obviously, if you think about it, it matters. And so our agricultural community, which we must say is a wholesale agriculture here; we're the biggest agricultural county in the Eastern United States, and it's 99 percent wholesale, in other words, shipped north and out of state. Nevertheless, the farmers here recognize that it's time to start creating avenues for their produce to get to the local population.

So in addition to this educational program, they have provided support for the Palm Beach County Greenmarkets, which are open-air community markets that have just sprouted up, again, within these past two years.

The first one was started by Mayor Graham of West Palm Beach, a very strong mayor who believes that local produce is best for the health of the people, and that an open-air community market is one of the best ways for people to gather.

Well, our Agricultural Enhancement Council

supported that effort by creating an association of any greenmarkets that started. In two years now, we have seven community markets that are -- come right down the coast of Palm Beach County, all in an effort to make local produce available to the local population.

And then the third of the projects, just briefly then, is the growing tours. The Ag Enhancement Council has supported tours whereby they're taking tours by the bus load and local people to the farm so they can find out what is being grown here in Palm Beach County, what are the standards by which our food is being grown, and educating themselves about what the food supply is.

All three of these are aimed at shortening that distance between the farm and the table. And, you know, as a master gardener, we work with people all the time, telling them how to create habitat for all the different species; how to plant blue porter wheat so you get butterflies in your yard, you know. And, meanwhile, in Palm Beach County, we watch our food supply, the human food supply, being outsourced to Mexico and Central America and other countries.

Not to say anything bad about what's grown in other countries, but it's a principle of ecology that you keep the food as close to the species as possible, and that's what the people in Palm Beach County have been trying to do through this cooperative effort of the agricultural community and the government.

And just this week, the Department of Agriculture from the state, the State Department of Farmers' Markets, agreed to give us signs for each one of our seven markets that have the big "Fresh From Florida" logo on it, and the support of Bob Crawford and the Department of Agriculture for this effort.

Thank you.

MS. ISAACS: Thank you, Miss Dettmers.

Next we have A. Roswell Harrington with Florida Organic Growers.

A VOICE: He had to leave.

MS. ISAACS: He had to leave. Do you know if he left any written testimony?

A VOICE: No, I don't.

DR. TROXELL: We'd appreciate hearing his comments if he'd submit written comments or something.

MS. ISAACS: And, in fact, I should have mentioned this earlier. I was told around break time that the announcement that we formerly alluded to this morning that it was in your packet that told you how to submit your written comments, for some reason, was not in the packet, so Camille has had copies made, and please pick one of these up on your way out so you can submit additional written comments, and be sure to use that docket number on here.

DR. TROXELL: And let me say right now, the comment time frame in there, I believe, is December 19th. Please don't hesitate to send comments even if you can't get them in by December 19th.

There is going to be plenty of time through December and beginning of January to get comments considered in our next phase of this project, and we really would like to see written comments so we can think about what you all have to say.

MS. ISAACS: Okay. Thank you.

All right. Al Yamada? Is that right?

MR. YAMADA: Yes.

MS. ISAACS: Al is with Fresh Produce Association of the Americas.

And you are here representing James Cathey with Produce Kountry.

MR. YAMADA: Yes. Thank you.

My name is Al Yamada. I'm here because Jim Cathey, who is a grower, packer, and distributor and has operations in Tennessee, California, and Arizona, couldn't be here, and he wanted a short statement read for the record, so I agreed to do that. So allow me to make it as short as possible considering the hour.

I'm afraid that much of this current rush to create an all encompassing voluntary guidance for fruits and vegetables is ruined by an irrational desire to accomplish the unwarranted.

Facts do not support the need to focus on imports as a source of food-borne illnesses. Looking, however, at the way the President's announced initiative to ensure the safety of imported and domestic fruits and vegetables, one would also assume that if there were no imports, there would be no food-borne illnesses and no more outbreaks. Many would say that it's wrong, but I'm afraid, again, that just as many probably would be happy to let the public reach that wrong assumption.

As a businessman with domestic and international experience, I believe a proposed guidance will affect more American farmers than foreign farmers. The reason is that foreign growers are already used to rigid inspections and they're prepared to meet whatever standards established here. Since all imports come through check points or better known as ports of entry, they are already subject to these sort of inspections. Foreign farmers are more likely to be ready, therefore, to meet the challenges proposed by the proposed guidelines.

Meeting budgetary standards is simply one of the costs of doing business, but is the cost warranted in this extended cost effective. The answers are not very clear.

While foreign producers might take the position that they need to do whatever's necessary to carry on trade, domestic growers think the guidance is unnecessarily onerous.

I would like to discuss two points briefly; one is that of international trading standards, the other is domestic growers.

In Tennessee this past summer, some of the local growers, including growers in Virginia and

the Carolinas, were delivering tomatoes to me in used cartons, and I observed even tree fruit packed in used tomato boxes, and when I pointed out that reusing cartons is illegal, a Virginia agricultural official told me that no one had ever mentioned that to him before, and he also didn't want to discuss how they enforce that type of law there.

In contrast, if any American importer were to deliver to any port of entry produce in used boxes, that product would be turned back and the shipper would be in big trouble.

Simply put, imports automatically meet federal standards or they do not get into the market; they do not come into this country. The same is not true with all domestic produce, because they do not necessarily go through an FDA checkpoint.

The other point is about international trading standards. I said earlier that foreign shippers probably will do whatever is necessary to meet U.S. standards because they want to trade with Americans. Of course, Americans want for their fruits and vegetables to complement the domestic supply.

That does not mean that foreign shippers will tolerate any standards. At some point, they are going to object or they are going to insist on similar standards on U.S. agricultural products that go into their country, then we will all know how much trouble can be caused by these proposed guidelines.

That is why this most important proposed guidelines be done non-discriminatory towards foreign agricultural products, and that the guidelines be in conformity or in line with proposed international trade agreements.

The proposed guidelines must not become, not be perceived as non-tariff trade barriers. American agricultural exporters, including the Florida Citrus Growers, have experienced exotic regulations overseas. They realize that the regulatory game can be played in many ways by different countries.

Furthermore, American trade negotiators have constantly fought against discriminatory regulations overseas. FDA, therefore, should more firmly take into consideration the possibilities of international trade repercussions before finalizing the proposed

guidelines.

My final point is to question the need for this moniminiacle dash to the finish line. The whole effort is moving at a speed that is totally uncomprehensible and unsupported by science or data. Raising public awareness of safe food handling practices has always been (inaudible) but the public must understand that the farm is not where all the problems start, and the FDA should not focus it's safe initiative on only farming operations.

Thank you.

MS. ISAACS: Thank you, Mr. Yamada.

MR. YAMADA: Thank you.

MS. ISAACS: Do we have any additional industry presenters at this time?

(No response.)

MS. ISAACS: Okay. As we mentioned, if you have additional comments, be sure to send in your written comments after the meeting.

Okay. On the other stakeholders' side of it, we have Rebecca Schleifer? Schleifer?

MS. SCHLEIFER: Schleifer.

MS. ISAACS: Schleifer.

MS. SCHLEIFER: Yes.

MS. ISAACS: And Rebecca is an attorney and has a master's in public health, and she works with the Migrant Farmworker Justice Project out of Belle Glade, Florida.

MS. SCHLEIFER: Ms. Isaacs, my name is Rebecca Schleifer, I'm a staff attorney with the Migrant Farmworkers Justice Project in Belle Glade. I also have a master's degree in public health and I do a fair amount of public health education both with Florida advocates and also some with health care providers.

I just have three brief remarks, and one comment on something that was -- something that came up this morning.

I think we probably all agree that field sanitation facilities in the fields are important. I just wanted to comment that, first of all, the best information that we have on a national basis, which is the National Agricultural Worker Survey, or the NAWS Survey, reports that only one-third of farm workers have adequate drinking water, water for washing and/or toilets in the field.

My own experience working both here in Florida and Washington State, supports the fact

that, in many fields, farm workers don't have adequate access to toilet facilities, and even where there are toilet facilities, often they are not clean or they lack doors, or there are enough of them.

Also, the federal standards require that field sanitation facilities be present if there are 11 or more farm workers in the field. We're fortunate in this state that the state law also required that if there are five or more farm workers, that such facilities be present.

I just wanted to say it would be great if we could be like the four states that require these facilities if there are any farm workers present in the field, and those are other states which have a significant population of farm workers; North Carolina, Washington, Oregon, and California.

My third comment is just one other problem that we hear a lot about from farmers with whom we work is that even, again, when there are facilities present, they often aren't given time to use them. This is particularly a problem for -- or we hear this is often a problem for people that work in packing houses where people

work in a line and they all have to -- they can't just leave when they want to.

Oftentimes, people are given ten minutes and there's 30 people in the line and there's often not enough time to go. So this is something that people should pay attention to to make sure that people are using facilities and using them properly.

My only final comment is that I think that it's good that the guidance does talk about the importance of workers reporting their illnesses, and also of accommodating workers with illnesses or diarrhea or lesions. I just think that people should be realistic about this kind of expectation in a climate where workers are very fearful of reporting any kind of problem for fear of being fired or otherwise retaliated against.

MS. ISAACS: Thank you.

Okay. Who's business card did I lose? Who else wanted to present?

Yes, sir. We'll let you introduce yourself. I'm sorry about that. Dr. Malecki has your card.

MR. PAIGE: Here, you can have one.

MS. ISAACS: Well, then let me introduce you.

MR. PAIGE: Oh, okay.

MS. ISAACS: All right. This is Stephen Paige. He's the director of the Bureau of Environmental Health Services, and you're from Topeka, Kansas, Department of Health and Environment.

Thank you for joining us.

MR. PAIGE: Thank you. And why am I here? Well, I understand that the forecast low at home is 14 degrees; that's why I'm here. I may stay all month.

There's a couple issues I'd like to talk about. I apologize for not having prepared remarks as I just read the document this morning.

First of all, I think the issues related to water should be left alone. Water is regulated to death, and it just seems to me that another comment or two about regulation of water would just cause problems in our 50 states and 5,000 local agencies that deal with water issues from

If we do more than that, I'm afraid we'll run into conflicts.

For example, suggesting one water sample per year from an otherwise properly constructed and located well, is probably in contrary with some local standard someplace. And unless the FDA wants to drop their preemption of local codes and ordinances, I think that would run into a problem.

My next comment would be in regard to sprouts. I see no other place in the documents that we have to regulate or control sprouts in regard with causing food-borne illnesses.

Sprouts are not well organized. Sprouts would be, I would say, a fledgling industry, done from small -- small shops; one, two, three people shops, that have sprouteries down to sprouts that are grown by the restaurants in the hand sink or whatever.

The issue is that sprouts have a real potential for causing food-borne illness. I speak from experience. This year, we had an outbreak in the Kansas City area of Salmonellas associated with sprouts grown by one company in Kansas City, Kansas.

we can help industry provide them clean sprout seeds.

Thank you.

MS. ISAACS: Anyone else?

Yes. Go ahead, Stacey.

DR. ZAWEL: Stacey Zawel with United. I just wanted to make two brief comments for the record.

One of them, Dr. Malecki gave a very good presentation of the raspberry and cyclospora outbreak in this area. I thought that was very, very good.

And one of the things that I'd like to point out is the example that it sets that, in fact, FDA and CDC have been down in Guatemala for two seasons now, trying to help out the Guatemalans and address this issue, test different -- test the product for cyclospora, test for water sources and other, and they haven't been able to find it.

I think it provides a very good example for the fact that we don't have enough science to understand what our interventions are actually achieving, so we need to be careful.

The second thing is something that I, as an

industry representative of many different commodities, have to say over and over and over, and I really can't emphasize it enough, and I know sometimes I sound like a broken record, but when we talk about all these outbreaks, we have to really be very, very careful to talk about the vehicle that was associated with contamination and not speculate as to where that might have happened.

Especially in instances of today, I'm specifically stating this for the media that is in our presence. I think all of us need to be very conscious of the statements that we make, and so while we understand, and I certainly understand, nobody intends to wrongly implicate something. It does have a huge economic impact on, perhaps, an innocent industry, and so I just want to clarify that the strawberry and hepatitis outbreak was a frozen strawberry outbreak that was a vehicle contamination and, in fact, the strawberries were grown in Mexico, were processed in California in the frozen state, and that is what contaminated people. We just don't know where the contamination, in fact, occurred in that outbreak.

MS. ISAACS: Okay. Thank you, Stacey.

Anyone else?

DR. ISMAIL: This is Mohammed Ismail with the Florida Department of Citrus.

We do acknowledge the -- definitely, the sincerity of the Food and Drug Administration and the President's Initiative. And the guidance that have been developed so far are excellent and could serve as a guideline for each of the food and vegetable industries throughout the United States as a starting point to develop their own voluntary guidelines that would suit their own industries.

And in the meantime, some of the funding that is -- and the dollars that are being spent in this effort should be going into research, and each of the land grant colleges, universities, as well as USDA scientists, should be given adequate funding to really look into the scientific vehicles or scientific merits of various problems and develop the data that is needed to make this process truly science driven.

MS. ISAACS: Thank you, Dr. Ismail. Right?

DR. ISMAIL: Yes.

MS. ISAACS: I'm getting good at that.

Anybody else? Come on down.

MS. GOULD: My name is Lauren Gould. I'm from the Miami, Fort Lauderdale area. I'm a member if Florida Certified Organic Growers and Consumers. I'm also an extremely pesticide sensitive person due to working in a nursery over 25 years ago where I received my lifetime supply of drift.

My feeling from a consumer standpoint is, if safety is truly at the crux of this matter, why, besides the almighty dollar are certain pesticides still produced? Specifically DDT and Temik?

And we know for a fact that there are countries all over the world who still use DDT, and that consumers unknowingly, unwittingly or whatever, then eat products which have the DDT in them.

So what I really would hope would occur is for there to be a list of all the countries that use these really detrimental, highly toxic pesticides to be available to the general public so the public can make a truly informed choice. See this list, see which countries are on it, and then decide if they want to buy that product.

Further, I was really quite stunned to see, in a trade journal about a week or so ago from another country, that Temik -- which, for those who may be not familiar with it, it's a granular pesticide that, if a bird touches it, the bird actually cannot fly away because it will die; it's that potent. I forget what the LD-50 is on it; it's something extraordinary.

But also, I would hope that somehow we can look at some alternative safe ways to combat some problems that exist.

For instance, Medfly. That, not just the wholesale spraying of malathion, perhaps something like Neem, which has an LD-50 of zero because you can literally spray something with Neem, and then eat the fruit or the vegetable.

Neem is, for those of you who are aware of that, it's -- what Neem is to India what petrie oil is to Australia. It has widespread uses. There are Neem conferences held all over the world at various times of year.

Anyway, so that's an opportunity that I think we're missing. And, also, the adequate removal of the dropped fruit, which is perhaps a root cause of some of this.

And I think immediately of so many starving people. Why not contact somebody like Second Harvest, or some of these other gleaning groups, so that for the grove owners that think that it's not feasible financially for them to go out and pick the fruit either from the trees or from the ground, now maybe they have what will actually work as a tax benefit to them.

There is also, as far as nutrition goes, in terms of organics -- I'm not really here to talk about organics -- but there was a study done at Rutgers University, which I'll be happy to give for the record.

Also, I'm really concerned about adequate labeling. And that concern is based in when I, as a consumer, go somewhere to purchase some sort of pesticide and I see inert ingredients. And it says, inert ingredients, 97 percent. What are those inerts?

Because I've heard tell that there's some not too pleasant things in the inerts. So I really hope that the people who are pushing for inert -- well, thorough labeling can play a force in this as well.

Thank you very much.

MS. ISAACS: Okay. Thank you. Do you have written testimony to leave?

MS. GOULD: No, but I will be happy to provide it.

MS. ISAACS: Thank you very much.

Okay. Richard and Terry, you wanted to say a few words?

MR. BARNES: Anybody else that has any comments? Have we -- okay. Dr. Vanderveen?

My comments, I just would like to, finally, to thank all of you.

Your input is very important to us, your testimony here, and also written input, as Terry said and as Lynn said, we have until December and probably after that to get it to us.

We want to hear from you; we want you to stay involved. As I told several people earlier today, we want you to be a part of this process. That's the reason for these meetings, that's the reason that we are going down this road, that's the reason it's guidance. We want you to be a member of the food safety team, and although most of you already are, but we want to keep you involved and make sure that we have a chance to keep you involved in it.

So please do provide us with your input, do provide us with your comments. We need that.

Terry?

DR. TROXELL: Well, yes. I wanted to second everything Richard has said, that we very much appreciate that you came out and provided these comments, a lot of good comments, and we'll be taking all of them into consideration.

I did want to take one minute to talk about the rush. Yes, it has been, at least for me, kind of a rush to get ready for public meeting and these town hall meetings.

However, the first priority for us is getting it right, and you can be assured that we're not going to rush it out if it's not right.

So we're going to be taking all the time we need, have additional comment documents available all along the way as necessary until we can get this right.

Thank you.

MR. VANDERVEEN: I would just like to say we heard you, we'll pay attention to your comments. It will take us quite a while to digest them, and we'll be back, and hope that you will continue in this process, because it's absolutely critical,

we hear that it's critical, and we want you to be aware of them.

And we will -- at each step of the way, whatever happens, we will try to make you aware at a time when you can get back to us.

Thank you.

MS. ISAACS: And thank you for coming down to Florida.

And I would like to remind the folks who are still here, if you didn't sign in on the attendance sheet, please do so. There may be some follow-up mailings or something, or extra credit points or something, I don't know. I don't know. I'm just kidding, you know. So be sure so sign up so we've got a record of who participated.

And thank you so much for your active participation today. I didn't attend the other two meetings, but I'll bet you ours was the most interesting so far.

So thanks a lot. Send in your written comments, if you've got some, and many, many thanks to Clayton Hutcheson for his hospitality of him and his staff, and Audrey Norman (phonetic).

And for those of you -- I know we were going to wrap up at 4:00 o'clock -- for those of you who would like to stick around and see the 15-minute video -- is that right, Gary?

MR. SMIGLE: Twelve.

MS. ISAACS: (Continuing) Twelve-minute video that Gary brought.

What is it about, Gary?

MR. SMIGLE: It's about the growing practices used in Mexico versus the United States.

MS. ISAACS: Okay. So you're welcome to do so. We will put that on now.

And thank you again.

(Thereupon at 4:15 p.m., the public hearing was concluded.)

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C E R T I F I C A T E

THE STATE OF FLORIDA,)
COUNTY OF PALM BEACH.)

I, Toni M. Salopek, Registered Professional Reporter, State of Florida at large, do hereby certify that I was authorized to and did report the above public hearing at the time and place herein stated, and that it is a true and correct transcription of my stenotype notes taken during said public hearing.

I further certify that I am not attorney or counsel of any of the parties, nor am I a relative or employee of any attorney or counsel of party connected with the action, nor am I financially interested in the action.

The foregoing certification of this transcript does not apply to any reproduction of the same by any means unless under the direct control and/or direction of the certifying reporter.

IN WITNESS WHEREOF, I have hereunto set my hand this 12th day of December, 1997.

Toni M. Salopek, Notary Public
in and for the State of Florida
My Commission Expires 12/30/99
My Commission #CC 510695