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A NEW ERA OF SMARTER FOOD SAFETY

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AGENDA

Simultaneous Breakout Sessions Block #1
Eisenhower Room: Food Safety Culture

Facilitators:
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P R O C E E D I N G S

SIMULTANEOUS BREAKOUT SESSIONS BLOCK #1

FOOD SAFETY CULTURE

MR. WALDROP: Hello, everyone. Thank you very much for joining us today and making your way all the way down the corridor. I hope you didn't get lost coming down here. Don't know why they put us down here. I think you really, really had to feel like you wanted to participate in this one, so I appreciate your enthusiasm and your willingness to walk down the hall.

My name is Chris Waldrop. I'm a senior public health educator with the Center for Food Safety and Applied Nutrition at FDA. I'm going to be one of our co-moderators here at this session. I'll ask my other folks from FDA to introduce themselves.

MS. MCNAMARA: Kristin McNamara, Office of Regulatory Affairs, and the Office of the Assistant Commissioner.

MS. FORFA: And I'm Tracey Forfa. I'm the deputy director at FDA's Center for Veterinary Medicine.

MR. WALDROP: And also, we have with us Johanna Dubay here. She is our strategic planning analyst with the Office of Food and Veterinary Medicine. She is going to be taking notes so we can capture all the ideas that you all are -- come up with at this session.

So you're in the Food Safety Culture session, and really appreciate you being here again. We're looking to get your input today, so we really want to hear from you, hear your thoughts, hear your ideas and suggestions. A part of -- if you all have looked through your packets, and it was referenced here today, we have sort of some food for thought, last page of the Food Safety Culture. None of that is sort of policy decisions or endorsements by the FDA, but it is the result of some brainstorming we did as a way to kind of get things started, elicit your responses, your reactions, and just sort of a way to kind of get some of the ideas flowing.

So feel free to comment on these, feel free

to bring your own ideas into this session and as part of the participation. So we're also -- in addition to the questions that we'll be talking about, we also just want to get your input on some of the challenges you face, the changes you might need from FDA, how we can all better really collaborate on this idea of improving and enhancing food safety culture.

So we have limited time today. We don't have time to introduce everybody, but just to give us a sense of who's in the room, by a show of hands, if you could raise your hand if you are a member of food producers or food manufacturers. Okay, thanks.

What about other parts of the supply chain? Retail or distribution or other parts? Okay.

What about consumer representatives or individual consumers that have come and -- to participate today? Okay.

Researchers, academia? Great. Other government agencies? Okay.

And media? Anyone from the media here? Okay, and any other group I didn't call? Okay, great.

Well, when you do come up to the mic, please do introduce yourself and your affiliation. That will give us a sense of who you are and lets everybody know who you are.

Today, we're looking for any ideas and opinions you have. We're not looking for group consensus. We don't have to agree on everything. So we just want to hear from you and your ideas. Please be respectful from others. Please keep your comments brief. We do have a short period of time, and we're trying to get through a number of different questions, so in order to make sure everybody has an opportunity, please keep your comments as brief as possible.

Apologies if we do need to kind of cut off conversation and move to the next question. We just want to make sure we're able to get comments on all of those, and we are going to move kind of quickly on this.

We'll have somebody taking notes. We will also have -- Tracy's going to be up here taking sort of key themes, just trying to track some of the key

themes that are being introduced. At the end, we'll wrap up and kind of go through those very quickly. And then, of course, any comments you have beyond what you're able to make today, or even the ones you are able to make today, please do contribute to the Federal Register document. Put your comments in there so that we can take all of those comments and bring them back into the agency and -- for their consideration.

So, again, we're here for the Food Safety Culture discussion. Frank talked about food safety being behavior. This is the hard stuff, as he said, so I'm glad you are here to talk about it. So what we're looking to do and what we want to hear from you is, you know, ways that we can leverage proven organizational culture and behavioral science principles and techniques to enhance organizational and employee compliance with food safety practices and behaviors.

So we'll start kind of walking through the questions. I'll pose the first question, and we'll open it up to the group to get your comments.

So first of all, first question we have is, what are the most significant actions FDA could undertake to foster and support the develop of food safety cultures globally? And so Tracy's going to capture some of the key themes on the board. Kristin is here; she's going to walk around. Just raise your hand if you want to provide some feedback, and then she'll come and bring the mic to you.

So I'll open that up with that first question about how we can undertake and foster develop and support of food safety cultures globally.

MS. MCNAMARA: If you guys look at the blueprint, as Chris referenced, which is -- we're on the back page. The Food Safety Culture section is the back page of that. That's some of the ideas that our internal FDA experts had, and then in the -- also, the left-hand pocket of your folder are the questions he's referencing, and the Food Safety Culture is on the back page of that second hand out. So really easy. Left-hand pocket; back page of both documents. And

that -- so if you can't read our chicken scratch, that's what we're talking about.

So some of the ideas the FDA had come up with --

UNIDENTIFIED SPEAKER: We have an idea.

MS. MCNAMARA: Oh, great. Thank you. I was going to say, we're going to get this party started somehow or other.

MR. WALDROP: Otherwise, we're going to stall for time, so.

MS. MCNAMARA: And we're going to ask you to say your name and your affiliation, thanks.

MS. PHILPOTT: Amy Philpott with Watson Green, a PR firm in Washington, DC. One idea is to help organizations, meaning companies, primarily, explain food safety to someone other than the food safety manager throughout the entire organization. I think food safety managers generally have a hard time doing that themselves, getting the internal message or the message to internal audiences, so somehow helping them do that.

MS. MCNAMARA: Thank you. Coming around here.

MS. CANALES: Thank you very much. Hello, my name is Ana Cristina Canales. I work in the Global Food Safety Partnership of the World Bank. And I've been in line with the previous comment. I think one thing that we really need to do is to push food safety up in the food systems or nutrition agenda because there seems to be not enough awareness of the relevance of food safety within the food agenda and the importance of food safety to achieve actual food security and better nutrition.

MS. MCNAMARA: Excellent, thank you. So two ideas so far about internal in the organization, how to move this conversation throughout an organization, explaining food safety, and then in the broader food safety agenda in the world. So other comments? Yes.

MR. NAVA: Thank you. I am Joaquin Nava from Mexico from Delcen Food Safety Consulting company. We work in sixteen countries in Latin America. And I am seeing the question, and I am thinking, what can FDA

do to start the conversations with the government in other countries? So they need to understand what is food safety culture. They need to understand how to have a right approach for having the -- our own conversations in our countries, to think in the local regulations, trying to improve the food safety cultures issues. So thanks.

MS. MCNAMARA: Thank you. Yes?

MS. HANSEN: I'm Kuki Hansen, Association of Public Health Laboratories. Maybe an obvious statement, but food safety, I guess, has the same problem as many other public health problems in that you only get advertising when something goes wrong. So making sure that we talk about food safety when things are going right and, you know, all the advances that have been made so far. I guess people don't realize how important food safety is because generally your food is safe. So, you know, making sure we talk about food safety, about all the things that are going right and all the things that we are doing to make it go right.

MS. MCNAMARA: Thank you very much. Yes?

MR. BOJAK: John Bojak, Ingredion, Incorporated. I think the FDA can assist the community to extend or ramp up the foreign outreach programs for food suppliers importing products to the US, predominantly around areas of FSMA awareness, including preventive controls, intentional adulteration. I think a lot of those foreign companies and businesses that are looking to import foods to the US are really naive as to the requirements that are required of them.

MS. MCNAMARA: Thank you. Thank you very much. Another hand over here. I'm going to give Tracey just a moment because it's -- we're getting great ideas, and we want to give her a chance to make sure we catch up.

So Chris, if you want to grab maybe a fresh -- we can rip that one off and grab a fresh page. So going to keep this going because a lot of good ideas; we want to get them out here. I had a hand over here, and I'll come right back to you. Yes?

MS. HUSSEIN: Morning. Sima Hussein with Ecolab's food retail division. As it relates to the actual role of regulators and inspectors in retail establishments, in food establishments, I think the greater emphasis needs to be -- you know, while we focus a lot on compliance, and compliance is important, sustained compliance only comes from commitment. So how do you change the way the actual inspection process is occurring to better support sustained commitment to food safety and understanding the impact of what an employee does and how it impacts food safety?

MS. MCNAMARA: So both -- sustained commitment is one key theme here, and I think we're hearing not just -- we're hearing the employee connection to the larger FSMA goals and building that as an organizational culture throughout a company, if that helps. And maybe I'll do it -- try to do a better job, Tracey, of turning to the person who said the thing -- we'll summarize it so we're continuing to get the key themes out.

Okay, there was a hand over here, and then I'm going to head back this way.

MS. KOCHENDERFER: Karil Kochenderfer with LINKAGES, a consultancy. I would do two things. One is I would not recreate the world, leverage existing tools, and just simplify and eliminate the redundancies. For example, there is a global standard for food traceability that's in use. Governments abroad use it for regulatory compliance. Why not leverage it, because it's in the marketplace and it's working. That's not to say it can't be enhanced, but build on it; don't recreate and create more redundancy and confusion.

Two, to the extent that the deputy commissioner talks about a food safety culture and five elements of food safety culture, all the new technologies, all the new management tools in the world are worthless if you don't have good data. As part of food safety culture, put in data quality programs that require complete and accurate data that is managed and, frankly, is accountable in employee

reviews and reportable to the C-Suite, which is where food safety culture ultimately ends -- should end up, to the point of my colleague at the far side of the room. Thank you.

MS. MCNAMARA: So two things there of -- you know, with leveraging what already exists, and you mentioned specifically food traceability standards and not having to create from whole cloth something that --

MS. KOCHENDERFER: Leverage existing standards. Just eliminate redundancy. And then the second is incorporate smarter data quality management programs as smarter food safety -- in a culture of food safety.

MS. MCNAMARA: Within it. So holding a higher standard of data authenticity and -- yeah.

MS. KOCHENDERFER: Completeness and accuracy.

MS. MCNAMARA: Okay, I think we got it. I'm going to stay here and then head back on that side.

MS. SWIECH: Thank you. Hi, Lynn Swiech from The Hershey Company. So companies like ours have been working on food safety culture for a long time. We actually worked with Frank when he was at Walmart, and he's quite an expert in the area.

I think FDA can help by defining what food safety culture is because I don't think a lot of folks really understand food safety system versus food safety culture, how they work together, how a culture is really about behaviors. And if we're not all working off of that same basic definition here and abroad, especially smaller companies that might not have the resources or infrastructure to get the kind of education that we've gotten on it, if we're not all working off of that same basic understanding, I think it's going to be very difficult to move forward.

MS. MCNAMARA: Thanks, Lynn. So I think, agreed, that that common definition is key. I mean, we heard this morning -- I mean, Frank equated, as Chris said, food safety with behavior, getting people just to do it. And then Mary Wagner said how many of our food choices -- chefs walk around in small farmer's markets, and do we know that we're all using

the same definition of food safety practices and adhering to those? That's a good question. Okay, coming back to this side, yes.

MR. WALDROP: So Kristin, I think one more question on -- or one more answer on this question, and then we'll move to the next question.

MS. MCNAMARA: Great, thank you.

MR. BRUNER: Hi, good morning. It's Leon Bruner, Michigan State University. I just want to build, actually, on your comment because I think it's really important. I've had a lot of experience building safety cultures in organizations, and if this is your working definition of employee compliance with -- what is it, food safety practices, I would quibble with this definition. Because I think that, in my experience, if you want to have a safety culture within an organization, it's not about compliance, it's about weaving safety into the way people work. So it's not a compliance thing. It's totally a behavior thing. And it comes from management commitment at the top, and it comes from building the capacity and the knowledge of how to solve safety problems into the organization. So it's a support from the top with expertise from the bottom and then this constant messaging that comes through that helps an organization operate every day thinking about safety. It's just -- it's not compliance. It's about the way you work.

And then you have to build in metrics, as well. It's very important to have measures that provide the guidance that help people know how to behave in order to deliver this safety output that you're looking for. So it's not compliance. It's behavior. And I think it's really important that you have a definition so we know what it is we're talking about. And, again, I would argue that that's not the right definition.

MR. WALDROP: Okay, great.

MS. MCNAMARA: Thank you very much. I think that's a valuable place to land, making safety behavior. I'll grab that from you. There we go. Sticky paper.

So our second question was the one that you can see on this page. How can FDA encourage and support companies in the development of food safety cultures throughout the supply chain? So this is less focused internally on FDA, right, and more focused on supporting companies develop food safety cultures, behaviors, education, metrics, data, standards, what have you, throughout the supply chain. So give that a moment to percolate, and then who would like to be our first taker? Yes.

MR. DETWILER: Thank you. I'm Dr. Darin Detwiler at Northeastern University. Many companies can't control all of the players and actors within the entire food supply chain. So perhaps the best way to look at this is to learn a lesson from sportsmanship within the world of athletics. It's not just the athletes on a team who are focusing on sportsmanship. You have sportsmanship being taught in elementary school and in high school and in all points in between.

If we focus on the idea of food safety culture is a human, a consumer element, then it's not a shock to the people who work in the supply chain that, oh, now this is something we need to actually learn about.

Someone who gets a job in the supply chain within the food industry should not be learning for the first time about washing their hands. As ridiculous as that may sound, that is what we're talking about. We're talking about some subcategory of humans who need to learn about food safety culture on the job, whereas if we support the entire category of what we as consumers, that applies to everyone, knows about this, and understands in terms of food safety culture, then that's going to give that much of an advantage to every single company who's dealing with a very diverse and challenging supply chain.

MS. MCNAMARA: Thank you. Starting at the very bottom. Basic human behavior as a consumer and anyone who eats food, right?

MS. TANNER: Well, culture of a company is -- first of, I'm Marie Tanner with DFA, Dairy Farmers of

America. A culture of a company is really defined by the worst behavior that a CEO will accept, and I think a lot of times in a lot of companies, you'll have people at the bottom doing the best things that they can do, but if it's not coming from the top, I think FDA can help us by really reaching out to CEOs in some of these cases and trying to drive home that it's all about behaviors. Because I think a lot of times, you have tension in organizations between food safety and quality and perhaps operations or sales, and where they are looking at getting widgets out the doors as opposed to doing it the right way. So I think that's how you could help those of us in the food safety and quality industry.

MS. MCNAMARA: Thank you. Fascinating. So you have the very bottom elevator -- bottom level, all the way up to our previous idea of how do you get everyone to think about it. Thank you.

MR. BROCK: Yeah, Adam Brock, Dairy Farmers of Wisconsin. So the check-off program.

MR. WALDROP: Oh, dairy jump there. Alright, good.

MR. BROCK: Yeah. No, I would like to emphasize what both said. Wisconsin, for example, has about 8,000 dairy farms. So you've got to get to those partnerships with FFA groups, with local regulatory agencies, and get that integrated into the curriculum. By the time they get to the door, I think the first speaker said it, you can have poor quality product coming in from somewhere up your supply chain because they didn't follow basic practices, and we know, by that point, we're in a reactionary stance. So that proactive education further up the supply chain on what food safety culture is should flow all the way through. So partnerships, I guess.

MS. MCNAMARA: Thank you. Proactive education and partnerships; absolutely. I saw a hand over here. I thought on the right side of the room -- no? Yes.

MS. KOCHENDERFER: I'm going to draw on some of the comments, particularly the lady for Hershey.

UNIDENTIFIED SPEAKER: Can you restate your

name, though.

MS. KOCHENDERFER: Karil Kochenderfer with LINKAGES. I'm going to draw on comments that have been made. When we talk about food safety culture, it's a rather nebulous conference -- concept. Everybody in this room has a different interpretation. And yet, when you hear the deputy commissioner speak about it, it's very clear what he's talking about. It's C-Suite engagement. It's employee empowerment. It's training investment -- training and investment. And it's, you know -- it's five very distinct items. It's not ten; it's not two.

As we begin to kind of talk about a concept, we need to be very clear on the definition, as Mr. Bruner has said, and very clear about the expectations so, frankly, we all meet the targets.

MS. MCNAMARA: Thank you very much. Okay.

So let me just reference one fact that Pradeep mentioned, the gentleman from McKinsey. Five hundred million small farm holders grow 80 percent of the food. Do they have the same -- this is our global supply chain these days, do they have the same definition, to the point that you just made, that we do? It's one thing in a large company, but in those individual small growers, how do we get the same knowledge out there? Yes, Darin; can you restate your name?

MR. DETWILER: Yes, Darin Detwiler from Northeastern University. I was going to state that there's the flip side of that in terms of, when you or a parent or -- who is suffering -- or, I'm sorry. If you're a parent whose child is suffering, when you're a person who yourself is suffering, you don't care about what the C-Suite knows and doesn't know, in fact, you don't even know if you're talking FDA or USDA at that point.

When you look at that in terms of how much pressure is put on the sense of the last mile and the consumer expectations with consumer education level is, that is -- people are thinking about this at the worst time in their lives. And there needs to be an element in terms of -- corporations need to have that

bit beyond data and graphs and charts and numbers and probability and statistics and hear some of these stories and meet some of these people.

I actually go to events for auditors and inspectors where I'll speak to them and I'll give some of these stories, and there will be people who say I've been doing this for 15, 20, 25 years, and I've never talked to anyone who's actually ever been sick or in the hospital or has lost a child to foodborne illness. This opens my eyes and makes me think differently about my job. Great to hear; sad that I'm hearing this from people who are telling me they've been doing it for 15, 20, 25 years until they've actually encountered some of this.

So it is back to that idea of the human nature of this and understanding that it's not about incentives and smart goals and -- by itself, and compliance, it is about understanding what happens, truly happens, when we don't have that.

MS. MCNAMARA: Thank you. And Darin actually had made that point in his earlier comment. When your feet hit the ground first thing in the morning and you are part of this supply chain, what do you think of? What do you know your role is? So similar idea; understanding the human experience.

Other final thoughts? Yes, the back of the room.

MR. SCHWAB: Yes, I work in the IT industry, and the corporations are somewhat flat, I think, by the standards of, say, some other industries like probably agriculture and that where it's maybe, you know, very top-down structure. This is more of a question than answer, but just what other particular corporate structures that are, say, more conducive to food safety? We're hearing a lot about, you know, putting pressure on the C-Suite, and they may have to have maybe even personal liability in these kinds of issues, but even then, they're still enforcing and pushing compliance and regulations down on the workers. But, you know, what -- are they invested in food safety?

So, I mean, is there a particular corporate

structure that's more conducive to food safety culture?

MS. MCNAMARA: Did you say your name?

MR. SCHWAB: I'm sorry. My name is Kevin Schwab, and I'm with a company called REI Systems.

MS. MCNAMARA: Thanks. Other thoughts on this?

MR. WALDROP: So maybe move to the next --

MS. MCNAMARA: Before -- yeah, before we move on to the next question, we're about halfway through our questions, and then we have some brain teasers at the end. We won't let you go without some brain teasers.

Anyone else who really wants to opine on, again, supporting food safety culture throughout the supply chain? Okay. We will move on. Thank you.

Okay, so, again, looking at the back page of this short piece. Third question is, what are the obstacles to creating food safety cultures throughout the supply chain? So specifically the obstacles to creating food safety cultures. Similar, a little bit, to what we just spoke about. Different slant. Yes?

MR. FARRELL: My name is Tim Farrell. I work for the USDA Specialty Crops Inspection Division. The biggest obstacle that I've seen from my limited career with USDA so far is that the knowledge isn't as understood from the bottom up to whereas I've met a lot of food safety managers who know a lot about food safety, but the people on the floor doing the work do not know as much as the food safety managers do. These are people who are working very difficult jobs trying to make a living, and there's no incentive for them to be safe with food because the corporations that pay them don't have that structure built in.

We've seen some very ironclad food safety programs, and if the knowledge isn't on the ground floor, or isn't in the home, or isn't taught in school, then there's no way to know, you know, what is actually happening throughout that supply chain.

MS. MCNAMARA: Thank you. So every employee, not just the food safety manager, needs to understand their role in this. Yes?

MS. MCENTIRE: Jennifer McEntire with United Fresh Produce Association. In thinking about this question from a global perspective, you know, here in the US we do expect that our food is safe, but that may not be the case everywhere in the world. When people, when countries, when societies, have limited access to clean water, it becomes much more difficult to make the case, I think, of what a food safety culture means if they're not accustomed themselves to having that default expectation that their food is safe.

MS. MCNAMARA: Fascinating, fascinating. So a different part of the world where there is not the norm that you're eating safe food and how to make that more the norm. Yes?

MS. MATZEN: Chelsea Matzen, National Farmers Union. I think another thing that we have run across when working with farmers, in particular, is that there's a lot of assumption that they know what food safety is, and there is still a lot of education about what are those basics and how long do you wash your hands. And I think a lot of people assume that they know food safety without actually getting formal education on food safety.

MS. MCNAMARA: Thank you. So, again, the theme we're hearing, the definition of what food safety culture is, what food safety practice is. Definitions at every level of the organization, every employee group, every role, that you understand what your particular responsibility is to contribute, what your behavior does to make this happen. Right? Other obstacles. This is great, guys. Keep it going. Yes?

MR. DETWILER: Darin Detwiler, Northeastern University. Maslow's hierarchy of needs tells us that, at the most basic level includes food, water -- we're assuming safe for humans -- in terms of the things they want to attain or need to attain to get to the next level. Carroll Archie's list, however, is completely different. The most basic elements is economic requirements, then legal, then philanthropic and ethical.

So there's this clash between what is the

driving measures for success for some companies, restaurants, retail, et cetera. You're looking at time. You're looking at volume. You're not looking at food safety. In many cases, food safety and food safety culture clashes with economic requirements or economic measures that are used in industry.

So there needs to be a way of better merging food safety culture with the economic drive within industry. And I'm talking, of course, the difference between short-term and long-term gains. You can look at the long-term gains; yes, we don't want to -- gains. Yes, we don't want to have that because we can look at Chipotle, but most decisions are made in terms of the short term, the next quarterly report that goes out to stakeholders and stockowners, excuse me.

MS. MCNAMARA: Thank you, I think that's a very good point. Think back to what Mary Wagner showed us in one of her first slides this morning. Time to market, or speed to market was the phrase she used and how that has been the driver so much, and then you begin to interplay the other economic factors. And that is not the primary motivator. Absolutely.

And, you know, I also found it very fascinating we heard a lot from both Dirk and Mary about trust and the Gen Z example. But beyond Generation Z, anybody's willingness to jump ship and switch brands if they perceive that there is a food safety issue. So how do you build trust? What are the obstacles to that if your focus is largely economic? What else needs to be considered? So obstacles, other obstacles.

MS. KOCHENDERFER: Karil Kochenderfer for LINKAGES. It's a one percent market.

MS. MCNAMARA: Expand on that just a bit.

MS. KOCHENDERFER: Few companies are making more than a one percent profit, whether you call it a producer, a processor, or a retailer. So in asking to take on a broader initiative, whether it's one for food safety culture or leveraging new technologies, any kind of investment comes up against a ceiling of a one percent market in short term quarterly returns.

MS. NCNAMARA: So -- yes?

MR. BROCK: Adam Brock, Dairy Farmers of Wisconsin. I would say I agree at the one percent. Some farmers are making nothing; very low cost. Two is apathy, truthfully. I think we all get complacent with -- we built our system. We are good. We've had no recalls. We hire new employees. The employees think everything's fine. And then what happens if?

There's also a huge retirement in the food industry. We see it in Wisconsin. I'm sure other states do, too. And there's a gap. There's probably a ten-year gap where we don't have enough people. So just that apathy and that overwhelming amount of people. It's ripe for a system to break down, but I think we just always need to have that continuous improvement mindset, so.

MS. NCNAMARA: And just to have Adam expand on that, so the apathy -- and you're tying it to the fact that you're seeing a lot of the knowledge base turn over, that this next generation coming up internally has not developed and acquired those same behaviors, understandings? Say it in your own words.

MR. BROCK: Well, I'll give you a good example. We see it often in dairy. And, again, I'm drawing on this experience. You have a lot of old -- we'll say older, close to retirement cheesemakers that understand their whole process. Now, we've got a bunch of people that push buttons. It's a huge problem. And I think one thing is just remind them how important this is, which I think builds on what everybody says here is a culture. But that continuous improvement; it never stops.

You know, look at best practice models from, what was it, the culture of quality in the -- years ago. And look how that's rolled out over the years and the manufacturing, Toyota, and others. So can you take that model and spread it and look at those best practices.

But yeah, getting people to understand what it is, which goes back to our whole first question: what is it? Define it. And now educate people.

MS. MCNAMARA: Thank you. Especially in this

economy where it's more mechanized and not everybody understands the full picture, every step of the process. Yes, coming to you.

MS. SWIECH: Hi, Lynn Swiech, The Hershey Company. One thing I'll add as an obstacle to creating a food safety culture, a good -- great food safety culture, is it takes time and commitment. It does not happen overnight. You're talking about committing years and years to developing this.

MS. MCNAMARA: Yeah, good point. Education and having people ingrain this in their heads and change their behavior does take a very long time. Absolutely. Other thoughts on this? Other obstacles? Yes.

MR. WALDROP: We're giving Kristin her workout today back and forth across the room, so.

MS. PHILPOTT: Amy Philpott with Watson Green. Another obstacle to creating these food cultures, I think, is the perception that there can be little payoff, that especially small to medium companies see other companies spend hundreds of thousands of dollars and put in the apparent or seeming time and commitment and still have problems. So it can seem like there's very little payoff for the amount of time and energy and money and input that goes into it, that just because you put in the effort, there's no guarantees. No such thing as zero risk.

MS. MCNAMARA: Sounds like parenting. Right? I'm making a joke, parenting, but you spend years teaching these behaviors hoping that they do become ingrained and the payoff is often evident years later. Thank you.

MR. FARRELL: Tim Farrell, SCI, USDA. Another part of this is understanding food safety at home in my mind because you're going to have folks who are going to start their career at a supermarket, and they should have basic understandings of food safety practices.

The other thing is that education for the public is a big part of this, as well. When the romaine E. coli issue happened this past year, we saw the romaine price drop overnight, and it, as stated

previously, never recovered. But the romaine was found to be contaminated only in the Yuma, Arizona region, but the entire country completely changed its buying pattern to not buy romaine at all, even though a lot of it was coming in from California, which was believed to be free of E. coli. So we as a culture need to understand that, you know, growing regions do play into effect when there is an outbreak or an issue such as E. coli or anything else.

MS. MCNAMARA: So understanding and getting the word out in a way that is translatable and people do get the message. Other thoughts?

MR. WALDROP: Yeah, one more answer on this, and then we can move to the next question.

MS. MCNAMARA: Maybe we'll take -- can we take two?

MR. WALDROP: Two more, yeah, sure.

MS. MCNAMARA: Yeah.

MS. TANNER: I'd also like to put some pressure, this is Marie Tanner from Dairy Farmers of America, on GFSI. I know that they have BRC that does have a module on food safety culture, but we need to ingrain that because I think it's the biggest single threat is our food safety culture to food safety in general. And I think right now what makes it hard for a lot of us in manufacturing is we're getting these GFSI audits and getting great scores. So it's hard to define -- to tell them that I have an issue when you have these great scores. You're getting 100. You're getting 99. You're getting great audits.

So it's hard to make a compelling court -- case to really invest in a plant when that's going on so we can really leverage GFSI and also the FDA when they come in to try to assess culture.

MS. MCNAMARA: So it's, again, getting to the idea of metrics, too. The metrics that you rely on have to be something that means -- that you can translate into something meaningful.

MS. HANSEN: Kuki Hansen, Association of Public Health Laboratories. However, I'm probably speaking more from my background as a veterinarian working with producers. Someone mentioned, or it's

been mentioned a few times, trust of the consumers in the companies, but I also think the companies need trust in the FDA. And, again, that's something that's going to take a long time. I mean, if FDA comes along and says, here we go, we have a great new initiative on food safety culture, the first thing people are going to do is, like, groan, and be, like, how much does that cost? Like, the one percent issue again.

So it's not going to be a case of, here's FDA, here's something for you. It's got to be, as the lady from back home back in the UK said this morning, what is your problem, and how can we help you? That's really, I think, where it's going to have to come from because that's what's going to give people trust that you really are there to help them.

MS. MCNAMARA: Thank you. So like Julie said, make it a business problem people can connect to. Okay, thank you.

So we're going to go to our fourth question. You guys are getting out a lot of great ideas, and we really do appreciate it. So we're talking about as the -- are there changes FDA can and should take in how it approaches food safety to place further emphasis on prevention, specifically?

So we talked a couple of changes FDA can and should take and how the blueprint, which we heard this morning is going to be coming out in early 2020, is great, but we want it to contain ideas that are workable, right? We just said that. So what changes FDA can and should take to place further emphasis on prevention. So let that percolate for a minute. Yes.

MS. SWIECH: Lynn Swiech, The Hershey Company. I think that FDA went a long way to helping here with the Food Safety Modernization Act in terms of preventive controls, in terms of taking it back to produce and all the way through the supply chain. I think that's huge. But, again, that's still about compliance to a regulation versus the folks in those roles really understanding how they impact food safety.

So I think additional education, so that people can really understand on the farm, you know,

how the actions that they're taking or the behaviors that they have impact food safety, not just that they're compliant to regulation, if that makes sense.

MS. MCNAMARA: Changing that book learning, that compliance regulation, into actual behavior; understanding the behavior that you should just demonstrate. Other thoughts? I know this has been fairly FDA-centric because we told you that's what we brainstormed on. Then we want to get your ideas.

MS. MCENTIRE: Jennifer McEntire with United Fresh Produce Association. So in terms of the steps that FDA can take and how it emphasizes prevention, recognizing that nothing is risk-free, but I think as our tools, our detection tools, both in detecting contaminants in products and detecting illness and outbreaks increase, there should be a decreased likelihood that bad players can fly under the radar.

So as long as that is true, then I think there could be an opportunity in FDA rewarding those who have been successful, who produce products that are free of contamination, who are not making people sick. Something like a safe driver program to reward those who are the good players.

MR. WALDROP: Jennifer, what does that look like? Do you have any thoughts on what a reward or a safe driver program might look like?

MS. MCENTIRE: Well, people don't really like being inspected, so that's one. I think that's a pretty obvious one. But on the other side, I think people do also like the acknowledgment that they're doing a good thing. So it's not just ignoring somebody, leave me alone, I'm doing a good thing. I think finding a mechanism to give people recognition that, you know, here's a company, and here's the good that they have done, and holding someone up as a poster child for good behavior, rather than just holding people up as a poster child for bad behavior, could be equally as effective.

MS. MCNAMARA: Excellent, and we actually heard that before. Saying, you know, telling the story of what's been done right. Right? Telling the story of the players who've done a good job so far.

MR. BRUNER: Leon Bruner, Michigan State. OSHA, for example, has the OSHA Star Program, and what that does is that gives awards to facilities where they have effective worker safety programs. And plants who achieve that award covet that award because it says a lot about the facility, but it's also reflective of the -- one of the many things is the integration of worker safety culture into their facility. So something like that might be worth looking at.

And you might also look, again, just at other areas. So in the worker safety area, for example, worker safety culture has been a big deal, and it's been studied for many years. So I would look outside the food industry into other areas of safety and look for opportunities to learn and cross-fertilize as well, would be useful.

MS. MCNAMARA: Thank you. So there are a lot of industries that, obviously, do focus on worker safety and their role. I mean, you think about auto plants and the like. Do you have any specifically in mind that you think are particularly analogous?

MR. BRUNER: Well, I think worker safety, in general, and it can be across the industry. There are general principles for worker safety that are employed, many of which are behavior-based. So, for example, in the facilities we worked in, when we had worker injuries, 60 percent of our injuries were behavior-based. And the way to address those behaviors is through culture.

So, you know, just to give you an example, really specific, maybe kind of a dumb example. But we used to train people, if you see somebody on the top of a ladder and that's unsafe, you don't walk by, you say, hey, get off that ladder. Come down. You're going to hurt yourself. So that's a manifestation of culture that is woven into the way people work. And it's not about compliance, it's about, we're going to be safe, we're going to work safe. I'm going to do the right thing, and I'm going to look out for my colleague, as well.

So, again, there are a broad range of

approaches that have been used in other areas to help integrate behaviors so that it becomes -- I used these words earlier -- woven into the fabric of the way an organization does its business.

It also addresses this resource issue that you mentioned a minute ago. When you weave safety into the way you work, then you can make choices. It's not "or"; it's about "and". It's not, I'll build a new -- I'll install a new machine and not do safety. It becomes, I will build a new machine, and I will make sure that I have safety integrated into my system.

MS. MCNAMARA: Literally, a safety net of behaviors.

MR. DETWILER: Darin Detwiler, Northeastern University. I think, too, that building off of what was just said, you go to some jurisdictions, you have to have someone from the company that is ServSafe or food handler certified. You go to other jurisdictions, it's one -- you have to have one person on the premises. You go to another jurisdiction, it's everyone who works there. Consumers assume that it's the same everywhere. Consumers also make assumptions about people who work outside of retail and restaurant, that there's some level of certification for people who work elsewhere in the supply chain.

So an element of consistency would help in terms of that idea of reducing variations of approaches based on ZIP code because the consumer -- again, the consumer thinks it's one FDA, one USDA, one supply system. Why would it be different here than in some other jurisdiction, especially if there's a company's name associated with it? So if you have variation, then you don't have a consistent approach at all.

MS. MCNAMARA: Coming to you, yeah.

MS. KOCHENDERFER: Karil Kochenderfer with LINKAGES. I think it comes down to clear expectations, or what I tried to refer to earlier was standards. Eliminate the redundancy in the marketplace. There are so many standards out there about what is food safety, food safety traceability,

food safety management, private and public certifications. I mean, there's so many expectations.

As we go towards a clear expectation that consumers have of the food supply, what is it? And that's where I say create one level of expectations so we can all shoot for that target and where we fall short or exceed it, it's very -- becomes clear.

MS. MCNAMARA: It's a lot about consistencies and reducing variabilities across geographic locations and standards being, really, both transparent, understandable by the consumer, and, you know, across the board.

We started a little bit earlier this morning also talking about, and I think Darin kicked it off, the role of the consumer and their role in understanding what they -- what their responsibility is in this. And I'm just curious, as I come over here, if anyone has a thought about the role of the consumer in prevention.

MS. PHILPOTT: Amy Philpott, Watson Green. While we would all -- in this room, we would all love this to not be about compliance, out in the field for many companies, it will be about compliance. So incorporating some sort of food culture or food safety culture metric in inspections and audits. And, you know, I don't know whether it's a simple questioning in -- during an inspection, you question one of the people on the line. What do you understand to be your role in food safety? Maybe it's as simple as that, maybe it's something else, but it goes back to, essentially, verifying the education and training that was mentioned earlier.

MS. MCNAMARA: So asking an employee their role in food safety culture and what behaviors they demonstrate. Just that random employee, what behaviors they demonstrate that show that they're playing a part in food safety culture.

MR. FARRELL: Tim Farrell, USDA SCI Division. To touch on that point, it's an interesting point because we do offer interviews in our auditing, but again, an audit is a snapshot in time, and even if we don't get the right answer, it's not as much of a

penalty on that company. It doesn't automatically cause them to fail that audit, depending on, you know, the purview of that audit. So harsher repercussions from the folks actually doing the work, I think, would go a long way.

MS. MCNAMARA: So we've had both the idea of asking something, having something that stands for food safety culture, as part of what you're being held accountable for, but then when you are being held accountable for it, if you don't demonstrate it, having a consequence, if you will.

Okay, Darin, yes.

MR. DETWILER: Darin Detwiler, Northeastern University. Every single time I hear consumer brought up over the last 25 years, I almost think of it like a macro and a micro level. The majority of victims who are hospitalized and who die every year are about two years of age or younger. You can't place consumer expectations or the role of consumer as a critical element in all those decisions. Children that go to elementary school and get sick from foodborne illness, it's not their -- you know, a third grader, it's not their decision-making that needs to be changed. It's not their behavior that needs to be changed.

We need to look at how we define the consumer because, again, if we look at the role of the vulnerable populations, you can't necessarily equate that to the role of the consumer. And I know that I'm sounding like I'm conflicting or contradicting here, but you can't assume that all we've got to do is teach the consumers and then the industry doesn't have to do something or that everything will be fine when we change the level of understanding of the consumer. But that does not work when you look at the vast majority of those who are most impacted and harmed and killed.

MS. MCNAMARA: So, yeah, ground level; having the vulnerable population as who you're working for when you think about who the consumer is. Other thoughts on this?

MR. WALDROP: We have about seven minutes left, so I would say if there's anything else beyond

this question that you all want to share about food safety culture or things that you don't think you've been able -- or we haven't had an opportunity to talk about, I think --

MS. MCNAMARA: So just to tease your brain, we did ask a couple of questions. So, you know, what other challenges do you face that we in our FDA brain, in our brainstorming, did not come up with? What other challenges have, to food safety culture, have you been grappling with? What other changes do you need to make? What other collaborations do you need to accomplish or achieve to have food safety be realizable, that were not in the descriptions that you saw? Like, if you looked at those handouts this morning, you thought, oh, great, this is a good start, but it's really limited. They haven't even thought about X, Y, Z. What are those? Yes.

MS. RANNEY: Hi, my name is Julia Ranney. I work for the Center for Food Safety. I guess to me, I was interpreting food safety culture a little differently and sort of thinking about food safety more broadly, not just related to foodborne illness because I think a lot of the time, when we think about consumers and what consumers know, there's a lot -- there's a general lack of knowledge when it comes to sort of underlying causes of foodborne illness, things like antibiotic resistance. I could go on. There's a long list.

But another thing that I think is really important for consumers to know and be educated on are things like genetically modified organisms and how certain things are approved by the FDA, such as -- you know, soy leghemoglobin with the Impossible Burger was improved under GRAS, and I don't think a lot of consumers are aware of even the concept of Generally Recognized as Safe. I think there's a lot of -- just sort of a general lack of transparency when it comes to certain things that are in our food or how they're approved by the FDA overall.

MS. MCNAMARA: Thank you. So the whole question of the definition of -- the broader definition of food safety culture to incorporate those

-- the things that we don't think your average consumer thinks about, right? And we mentioned antimicrobial resistance. We mentioned GMO. We mentioned some of the ways that foods are being both labeled, GRAS, and produced. We talked about cell-based meats this morning, and, like, the three difficult categories of "meats," and do people really understand what those are and what they're buying? So a little bit more sophisticated, deeper definition.

Other -- great idea. Other challenges? Other changes? Other things we haven't even thought about or talked about?

MS. CARLUCCI: Casey Carlucci from LGS Specialty Sales. We touched on this earlier with the economic drive in our industry, but I think there's a large gap and kind of a lack of accountability on the sales and operations for knowing about food safety. We're all expected to know about it. I mean, truckers have the transportation rule and everything, but I find in our business, at least, there's a lack of responsibility on sales to really know what food safety culture means and the red flags when dealing with other customers or procurement and issues like that.

MS. MCNAMARA: So I'm just going to stand here for a second. So we're talking the rest of the supply chain, the conditions under which things are delivered, the conditions under which someone takes possession in the supply chain, assuming or relying upon a step taken before that may or may not have been taken? Describe it a little bit more.

MS. CARLUCCI: Just in terms of -- I mean, there's times when you hear about an issue afterwards that the sales and operations might not even know that that's a red flag or if that's an issue in itself, where we're expected to all know it, but they're more focused on get it out quicker and not taking the time to confirm or to realize what an issue is.

MR. WALDROP: So the entire organization needing to understand food safety culture, not just the ones that are typically responsible for it?

MS. CARLUCCI: Exactly, yes.

MR. WALDROP: Yeah.

MS. MCNAMARA: And the internal sharing of information that needs to happen that doesn't always happen, especially to the sales force. Yes.

MR. BROCK: So just one last -- oh, yep, Adam Brock, Dairy Farmers of Wisconsin. Me, again. Just one more comment. I think this goes, again, back to an earlier comment, but making it digestible for those people in marketing, sales, operations. Not everybody learns the same way. Some of them would be -- would benefit from a basic food safety infographic. I can walk into an office and be like, here's FSMA. Here's this. Here's that. A complete glaze-over. Try talking to a salesperson sometime about, you know, microbial growth on whatever.

It's -- the FDA could kind of either partner or work with how do we -- or maybe a subgroup, how do we communicate to these groups? Here's a marketing group. Here's sales. Here's consumers. Because they each interpret it differently based on their understanding and their objectives and the whole what's-in-it-for-me deal. But just kind of that understanding. It goes back to, if we're going to have education and behavior and we're going to adjust it, you know, is this a graphical learner? Is this a written learner? Is this an oral learner? What -- how do we -- how do we market a food safety culture?

Everybody in this room gets it, but if I walked out on the street and said, hey, what's food safety culture to somebody walking by, they either, one, won't care, or they'll at least look at you strange and walk away. So just who's the audience. How do we have tools to talk to that audience?

MS. MCNAMARA: So actually -- I mean, I think as we begin to kind of think about and summarize the themes we've heard today, it has been kind of the definitions of food safety culture -- definitions of food safety behaviors, getting the right people to know what their behaviors need to be, but as Adam just said, understanding that not everybody comes at this with the same level of knowledge. Making it applicable so that when your feet hit the ground in

the morning and you have any role anywhere, and we all do because we all eat, what that responsibility is, what that behavior is that we have to participate in. Tim?

MR. FARRELL: Tim Farrell, SCI Division. Just the only other thing that I can think of is when I suspect I have a foodborne illness for myself as a consumer or I witness food safety behaviors that don't fall in line with that I understand for food safety, how do we report that to FDA so that changes can occur.

When the E. coli issue happened with the romaine, it was very much like they suspected or they thought, and I think the reporting only came out to be, you know, less than 20 people or 9 people had passed away from it. But how do consumers know when to go when they think they have these symptoms from this disease because they ate this product? Is there a website to go to to fill out, to suspect so that FDA can look further into it? Because as all-encompassing as FDA is, there's no possible way they can be everywhere at once. So having a centralized location to where you can report extreme behaviors, suspicious activities, would be important. Same to be, you know, a CSA campaign. Something like that.

MS. MCNAMARA: Thank you. As we heard this morning again, this Gen Z culture is in my mind; how they report stuff is on social media, so making it very available.

Any burning desires? What we're -- what our job to do, Chris and Tracey's and mine, is to kind of synthesize everything that we've heard from you in to a couple of key themes which Tracey will then report out this afternoon. And we don't want to miss anything, so if there's something that you think we captured but not quite, something that you didn't see up here that you really think is critical, we want to hear it because we can't report it if we don't hear it from you. So anything you thought was maybe misunderstood or that you just didn't think we got out? We're going to repeat this session this afternoon. Yes.

MR. WALDROP: And I think that's our last comment because we have to wrap up.

MS. HANSEN: Yeah, Kuki Hansen from the Association of Public Health Laboratories. I am not in any way for a one regulatory agency for food. But it might be useful to have some kind of coordinating mechanism between all the federal agencies for food safety. I mean, EPA is a food safety agency in some sense. NOAA is a food safety agency in some senses. And if there was a better way for them to work together. I mean, sure, there's things like NORMs that works on antimicrobial resistance in these, like, small areas where they work together, but if there was some greater kind of one health way that they could work together in food safety.

MR. WALDROP: Okay, well, thank you everybody very much for all this input. You all get gold stars today, so that was -- that was really impressive. We got a lot of information. It's going to be difficult for us to try to boil this down to some key themes, but it is all great information that the agency will then take back.

Please do, if you have additional comments or thoughts, put those into the federal docket that was opened up for this public meeting so we can make sure we get even more of your information.

The next step is lunch, so please, you earned it. You guys did a great job. Go eat. Have a good lunch. We'll meet back in the main ballroom at 12:30, so thank you again very much for your participation.

(Whereupon, the breakout session concluded.)