

**REPORT OF THE UNITED STATES DELEGATE
ON THE 53rd SESSION OF THE
CODEX COMMITTEE ON FOOD HYGIENE**

November 27 – December 2, 2022

San Diego, CA

Report Adoption (virtual): December 8, 2022

The 53rd Session of the Codex Committee on Food Hygiene (CCFH53), chaired by Dr. Emilio Esteban, Food Safety and Inspection Service (FSIS), U.S. Department of Agriculture (USDA), had 158 participants from 51 Member countries, one Member Organization (the European Union (EU)), and 11 Observer Organizations. The United States was represented by the Delegate, Ms. Jenny Scott, Center for Food Safety and Applied Nutrition (CFSAN), U.S. Food and Drug Administration (FDA); Co-Alternate Delegates, Dr. Bill Shaw, FSIS-USDA, and Dr. Eric Stevens, CFSAN-FDA; 4 government advisors; and 1 non-government advisor.

The session opened with comments (presented via video messaging) from Mr. Steve Wearne, the Chairperson of the Codex Alimentarius Commission (CAC). Mr. Wearne noted that this was the first physical committee meeting in nearly three years because of the COVID-19 pandemic and that a return to physical sessions provided an unrivaled opportunity to develop and coordinate work. He recognized the appetite to advance guidelines to prevent Shiga Toxin-Producing *Escherichia coli* (STEC) and the use and reuse of water, commenting on how water is a dwindling resource worldwide. Water for food production should be used in such a way to ensure food safety while limiting waste. He also thought that new work on *Vibrio* species, viruses, and traditional markets would advance Codex priorities of advancing safe food for people around the world.

Dr. Linda J. Harris, Professor of Cooperative Extension in Microbial Food Safety, Food Science and Technology, University of California, Davis, delivered the keynote address. Located in a state that is a key producer of fresh produce and where water has become a scarce resource, she highlighted some of the key challenges faced from water availability linked to risk factors affecting the survival of foodborne pathogens in the fresh produce production environment in California. She addressed issues of STEC in the United States, the cycle of surveillance, epidemiological investigations, the role of basic and applied research related to prevention and control measures for foodborne pathogens, and the constant need to evolve the approach to incorporate innovation and address new foods, pathogens, or food/pathogen associations.

The United States' objectives for the meeting were realized, as five key documents were advanced to the 46th Session of the Codex Alimentarius Commission (CAC46) for final adoption at Step 5/8; the documents are in line with the U.S. commitment to science-based decision making.

HIGHLIGHTS

The 53rd Session of CCFH:

- Agreed to forward the draft *Guidelines for the Control of Shiga Toxin-Producing Escherichia coli (STEC) in Raw Beef, Fresh Leafy Vegetables, Raw Milk and Raw Milk Cheeses, and Sprouts* (General Section and Annexes on Raw Beef and Raw Milk and Raw Milk Cheeses) to CAC46 for final adoption at Step 5/8. Work on annexes for fresh leafy vegetables and sprouts is continuing.
- Agreed to forward the draft *Guidelines for the Safe Use and Re-Use of Water in Food Production* (General Section and Annex on Fresh Produce) to CAC46 for final adoption at Step 5/8. Work on annexes for fishery products and dairy products is continuing.
- Agreed to forward proposals to CAC46 for new work on: (1) revision of the *Guidelines on the Application of General Principles of Food Hygiene to the Control of Pathogenic Vibrio Species in Seafood* (CXG 73-2010) (to be drafted by an EWG led by Japan and Chile) and (2) *Guidelines for Food Hygiene Control Measures in Traditional Markets for Food* (to be drafted by an EWG led by Kenya, with co-leads Nigeria and Bolivia).
- Agreed to request scientific advice from JEMRA on information to inform the revision of the *Guidelines on the Application of the General Principles of Food Hygiene to the Control of Viruses in Food* (CXG 79-2012).
- Agreed to the development of a discussion paper by France, Canada, and the United States on revision of the *Guidelines on the Application of General Principles of Food Hygiene to the Control of Listeria monocytogenes in Foods* (CXG 61-2007).
- Agreed to the development of a discussion paper and project document by the United States, Honduras, Brazil, and the EU on the revision of the *Guidelines for the Control of Campylobacter and Salmonella in Chicken Meat* (CXG 78-2011).

A summary of the meeting of the 53rd Session of CCFH is given below. All working documents (including conference room documents (CRDs), remarks, presentations and the final report of CCFH53) may be found on the Codex Website at: <https://www.fao.org/fao-who-codexalimentarius/meetings/detail/en/?meeting=CCFH&session=53>.

NEXT SESSION OF CCFH

The 54th Session of CCFH is tentatively scheduled for March 11-15, 2024 at a location yet to be determined.

MEETING SUMMARY

Proposed Draft <i>Guidelines for the Control of Shiga Toxin-Producing Escherichia coli (STEC) in Raw Beef, Fresh Leafy Vegetables, Raw Milk and Raw Milk Cheeses, and Sprouts</i>
To Be Presented for Adoption at Next CAC? Yes
Have the United States' Objectives Been Met? Yes
Is it anticipated that this item will or should be raised at the CAC because it is contentious?
No
United States Objective

The United States objective was to finalize the General Section of the document and Annexes on Raw Beef and Raw Milk and Raw Milk Cheeses at CCFH53 and forward these to CAC46 for final adoption at Step 5/8.

Discussion in Relation to United States' Objectives

The plenary session used CRD13 containing modifications made by the PWG prior to CCFH53 as the basis for discussion. The PWG had resolved a number of key issues and made numerous editorial changes for clarification, but time did not allow for discussion of all the annexes, leaving a lot for discussion in plenary. (An extra hour of interpretation was required to complete the work.)

The General Section clearly states a key point supported by the United States: "The virulence genes carried by STEC isolates should be considered when deciding how STEC will be managed in food commodities, including the actions to be taken when STEC is detected in the food."

The General Section includes the definitions for the commodities covered. Although the work group Co-chairs believed that the intent of the guidelines with respect to raw milk had been decided at CCFH51 (2019), where the Committee had previously agreed on terminology, India again raised the issue of limiting the scope for "raw milk" to milk intended for drinking in the discussion on the General section. Some delegations preferred to specify "raw drinking milk" throughout the text, but consensus was achieved to simply add in the General Section the phrase "raw milk intended for drinking" in the Objectives (consistent with text in the Raw Milk and Raw Milk Cheeses Annex) and a footnote to "raw milk" in the Scope to indicate that the "guidelines present specific guidance for control of STEC related to raw milk intended for drinking and for production of raw milk cheese."

There was also extensive discussion about the definition of Shiga Toxin-Producing *E. coli* (STEC) and whether it was appropriate to include a footnote that production of the Shiga toxin alone generally was not sufficient to cause severe illness. The Co-chairs of the working group had intended to use the footnote to clarify that, since the guidance is addressing risk-based actions, it was appropriate to note upfront that some STEC strains are riskier than others. However, several delegations opposed the footnote on the basis that it could confuse the reader because, in their view, the document provided control mechanisms for all STEC. The JEMRA representative indicated that STEC with the *stx2d* gene alone (with no adherence genes) had caused severe illness. Based on this, the footnote was deleted.

There was extensive discussion about whether competent authorities "should" or "may" assess the documented process control systems of a food business operator (FBO). Japan and some other delegations indicated that this would place an unreasonable burden on competent authorities, whereas others (including the United States) indicated that assessing food hygiene systems is a fundamental responsibility of competent authorities, and it was agreed to keep "should" in this section.

The role of testing by FBOs was discussed; a proposal to replace “where appropriate” (with respect to when STEC testing should be conducted) with “in particular for those processes for which correlation may be less evident (e.g., water, milk and dairy)” was not agreed to after the United States pointed out that there was no correlation between indicator organisms and STEC and the representative from JEMRA confirmed that there were times when periodic testing was appropriate.

In the Raw Beef Annex, there were numerous editorial changes for clarification. The process flow diagram was modified to include a step for post-mortem inspection and a paragraph on control measures was added for this step.

The section on vaccination was revised to state that some vaccines have been shown to reduce fecal shedding of STEC serotype O157:H7, but the section also noted that their efficacy is dependent on the type of vaccine and the number of doses administered, with most vaccines needing more than a one-dose course of treatment in order to be effective.

A bullet related to minimizing STEC contamination and/or the spread of STEC contamination in ground/minced beef indicating that measures could include specifying that “all beef which will be used for grinding or already minced beef be pretested and found negative for specific strains of STEC, e.g., *E. coli* serotype O157:H7” generated significant discussion. The United States strongly supported inclusion of this bullet, but some delegations proposed deletion due to the limitations of testing and because it could be interpreted as supporting routine monitoring. CCFH53 eventually agreed to a revised paragraph that provided flexibility by indicating some of the specific conditions in which testing might be appropriate. During report adoption Argentina was able to get the insertion of “where appropriate” into the sentence, despite the United States and New Zealand pointing out it was redundant, since that flexibility was already contained in the revised paragraph.

For the Raw Milk and Raw Milk Cheeses Annex, there was extensive discussion on a footnote for thermization, which was included since the term was not well-known; concerns were expressed that its efficacy in terms of pathogen reduction might be misunderstood. This term was included in U.S. comments to indicate that consuming raw drinking milk or raw milk cheeses without any control measures was associated with a higher risk of illness than drinking pasteurized milk or eating cheeses made from milk subject to heating such as thermization or pasteurization. CCFH53 agreed to a modified footnote using the definition of thermization from the *Code of Hygienic Practice for Milk and Milk Products* (CXC 57-2004).

The annexes on Fresh Leafy Vegetables (for which the United States was the lead co-chair) and on Sprouts (for which the United States provided the technical expert) were not discussed. As the United States expected, these annexes were referred to an EWG for additional work, since the relevant JEMRA reports had not yet been published. Although the United States had hoped that the Annex on Fresh Leafy Vegetables might be sent to CAC46 for adoption at Step 5 (interim adoption, with an opportunity for comment and further consideration by the committee), this was not possible given the lack of time for discussion.

Outcome/ Conclusion

The Committee agreed to forward the General Section and the Annexes on Raw Beef and Raw Milk and Raw Milk Cheeses of the *Guidelines for the Control of Shiga Toxin-Producing Escherichia coli (STEC) in Raw Beef, Fresh Leafy Vegetables, Raw Milk and Raw Milk Cheeses, and Sprouts* to CAC46 for final adoption at Step 5/8.

Other Comments

The Annexes for Fresh Leafy Vegetables and for Sprouts were returned to an EWG led by Chile, New Zealand, Kenya, and the United States for redrafting based on CRD13, comments received through the Online Commenting System (OCS) and comments in other CRDs received at CCFH53. A PWG meeting in advance of CCFH54 to help finalize these annexes at that session is expected.

Proposed Draft *Guidelines for the Safe Use and Re-Use of Water in Food Production*

To Be Presented for Adoption at Next CAC? Yes

Have the United States' Objectives Been Met? Yes

Is it anticipated that this item will or should be raised at the CAC because it is contentious?

No

United States Objective

The United States objective was to finalize the General Section of the document, as well as the Annex on Fresh Produce, at CCFH53 and forward these to CAC46 for final adoption at Step 5/8.

Discussion in Relation to United States' Objectives

The plenary session used CRD20 containing modifications made by the PWG prior to CCFH53 as the basis for discussion. In the General Section, there was deliberation on the definitions of fit-for-purpose water, clean water, and fresh produce (particularly on the inclusion of "fungi;" ultimately "mushrooms" were included in the definition). A paragraph on what was excluded from the scope (e.g., water for direct human and animal consumption, water for household use, physical hazards, and chemical hazards other than those that may impact microbial safety) was discussed extensively and eventually deleted.

Definitions were contentious at times. Several were deleted (e.g., first-use water, active management, passive management, risk assessment, HACCP system) because they were not needed, and, in response to a comment by the United States, a definition of "wastewater" was included. Some delegates recommended deleting the term "clean water" because "water fit for purpose" as currently defined covered clean water. However, the definition of clean water was retained because it is frequently used to contrast with potable water. The United States noted that both "potable water" (for which a definition was included) and "clean water" were subsets of "water fit for purpose." The United States had also objected in multiple rounds of comments to the definition and use of the term "water risk assessment" because the United States did not feel that the definition was consistent with the Codex definition of risk assessment. The revised document presented in CRD20 used the more appropriate term "water fit-for-purpose assessment."

In the Fresh Produce Annex, there was considerable discussion on the need for Figure 3, a decision tree on the frequency of water testing, for which the original source was a European Commission guidance document evaluated and used by JEMRA. Some delegations indicated that it was potentially confusing and could lead the reader to make different determinations based on using Figure 1 or Figure 3, and that Figure 1 and Table 1 provided similar information. Other delegations (including the United States) reiterated that Figure 3 was useful because it indicated what the sampling frequency should be based on the water risk, whereas Figure 1 and Table 1 do not specifically address testing frequency. It was on this basis that Figure 3 was retained.

Outcome/ Conclusion

The Committee agreed to forward the draft *Guidelines for the Safe Use and Re-Use of Water in Food Production* (General Section and Annex on Fresh Produce) to CAC46 for final adoption at Step 5/8.

Other Comments

The Annex on Fishery Products of the *Guidelines for the Safe Use and Re-Use of Water in Food Production* was returned for redrafting and further discussion by an EWG, which will also develop an annex on Dairy Products. The EWG will be chaired by the EU and co-chaired by Chile and the International Dairy Federation (IDF). The Chair noted that normally Codex does not have Observers as co-chairs, but after consultation with the Codex Secretariat and the Legal Offices, it was determined that there could be an exception given the scope of work (Annex on Dairy Products). A PWG meeting may be convened in advance of CCFH54.

New/Future Work

To Be Presented for Adoption at Next CAC? Yes

Have the United States' Objectives Been Met? Yes

Is it anticipated that this item will or should be raised at the CAC because it is contentious? Possibly

For the proposed new work on Guidelines for Food Hygiene Control Measures in Traditional Markets for Food (the revised title), some countries may question (1) the value of a Codex guideline on “traditional markets” given a lack of data on the impact to global trade and (2) the term “traditional market” versus other terms to describe the work.

United States Objectives

One United States objective was to take on new work (provided we could advance a significant portion of the documents on STEC and water for final adoption) to revise the *Guidelines on the Application of General Principles of Food Hygiene to the Control of Pathogenic Vibrio Species in Seafood* (CXG 73-2010). Because CCFH54 will not meet again until March 2024, the United States also had an objective to get countries working on developing discussion papers and project documents related to issues for which CCFH has requested scientific advice from JEMRA (e.g., information on *Salmonella* and *Campylobacter* in poultry and a new risk assessment on *Listeria monocytogenes*, both areas of keen interest for the United States).

Discussion in Relation to United States' Objectives

Two discussion papers, one on the revision of the *Guidelines on the Application of General Principles of Food Hygiene to the Control of Pathogenic Vibrio Species in Seafood* (CXG 73-2010) (and the associated project document for new work) and the other on revision of the *Guidelines on the Application of the General Principles of Food Hygiene to the Control of Viruses in Food* (CXG 79-2012) were discussed in both a PWG meeting led by the United States immediately prior to CCFH53 and in plenary. For viruses in food, it was essential to prioritize needed scientific advice that to be requested from JEMRA. A new work proposal on Guidelines for Food Hygiene Control Measures in Traditional Food Markets was also discussed. It was noted that there are soon-to-be-released JEMRA reports for (1) control of *Salmonella* in poultry (with a *Campylobacter* report coming out in 2023) that will be used to prepare a project document to update the *Guidelines for the Control of Campylobacter and Salmonella in Chicken Meat* (CXG 78-2011) and (2) a risk assessment on *Listeria monocytogenes* to update the *Guidelines on the Application of General Principles of Food Hygiene in the Control of Listeria monocytogenes in Foods* (CXG 61-2007). Finally, given the adoption of the revised *General Principles of Food Hygiene* (CXC-1-1969) at CAC45, CAC46 noted that CCFH would need to align existing documents to the revised GPFH.

For the work on *Vibrio*, there was discussion on whether to expand the scope to include other *Vibrio* species, as well as to expand the scope to all seafood products. Morocco in particular raised the issues of focusing on fish. After a lengthy discussion and advice from the representative from JEMRA and the Codex Secretariat, it was decided that the general section of the *Vibrio* document already applied to all pathogenic *Vibrio* species and that data could perhaps be available from a series of JEMRA reports from 2010 to 2019. The JEMRA representative also advised that the scope already included all seafood, including fin fish.

The Committee agreed to forward project proposals to CAC46 for new work on: (1) revision of the *Guidelines on the Application of General Principles of Food Hygiene to the Control of Pathogenic Vibrio Species in Seafood* (CXG 73-2010) and (2) Guidelines for Food Hygiene Control Measures in Traditional Markets for Food. Japan and Chile will lead an EWG on the revision of the *Guidelines on the Application of General Principles of Food Hygiene to the Control of Pathogenic Vibrio Species in Seafood* (CXG 73-2010) in advance of CCFH54. Kenya, Bolivia, and Nigeria will draft Guidelines for Food Hygiene Control Measures in Traditional Markets for Food in advance of CCFH54.

For the work on viruses, after discussing the areas for which JEMRA advice is needed, and recognizing that the work would probably require two meetings, it was decided that the highest priorities for advice were (1) review of foodborne viruses of highest public health concern; (2) analytical methods for enteric viruses; and (3) potential utility of indicators for viral contamination. Scientific advice on prevention and efficacy of interventions and risk assessment models for wide use among member countries was considered important but not prioritized as high when considering the need for immediate JEMRA advice. FAO/WHO agreed to develop updated information on viruses in food. Based on this work, Canada and the Netherlands will prepare a project document on viruses in food for CCFH54.

France, the United States, and Canada volunteered to work on a discussion paper and project document for revision of the *Guidelines on the Application of General Principles of Food Hygiene to the Control of Listeria monocytogenes in Foods* (CXG 61-2007) for CCFH54.

The United States, Honduras, Brazil and the EU volunteered to work on a discussion paper and project document to update the *Guidelines for the Control of Campylobacter and Salmonella in Chicken Meat* (CXG 78-2011) for CCFH54.

Outcome/ Conclusion

Both the revision to the *Guidelines on the Application of General Principles of Food Hygiene to the Control of Pathogenic Vibrio Species in Seafood* (CXG 73-2010) and the development of Guidelines for Food Hygiene Control Measures in Traditional Markets for Food were sent for adoption as new work by CAC46. The United States objective of having countries develop discussion papers (and possibly project documents) to update the *Guidelines for the Control of Campylobacter and Salmonella in Chicken Meat* (CXG 78-2011) and the *Guidelines on the Application of General Principles of Food Hygiene in the Control of Listeria monocytogenes in Foods* (CXG 61-2007) was met.

Other Comments

The United Kingdom agreed to coordinate work on the alignment of CCFH texts with the revised *General Principles of Food Hygiene* (CXC 1-1969), with assistance from Morocco in reviewing texts.

The United States agreed to continue to chair the working group on New Work, while expressing a willingness for other members to take on this working group.