
codex alimentarius commission



FOOD AND AGRICULTURE
ORGANIZATION
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Agenda Item 9 (a)

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JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON FOOD HYGIENE

Thirty-eighth Session

ELABORATION OF RISK BASED STANDARDS FOR MICROBIOLOGICAL HAZARDS: ENHANCING THE PROCESS¹

(Proposal from the Delegation of New Zealand)

Introduction

1. The Commission's strategic framework for 2003-2007 attaches high priority to promoting science and risk analysis as the basis for Codex standards and other texts and considerable progress has been made in this area. The recent adoption by the 27th session of the CAC of the Working Principles for Risk Analysis for Application within the Framework of the Codex Alimentarius represented an important milestone and provides the necessary guidance for moving forward on the elaboration of risk based standards.
2. International risk based standards clearly have a critical role in facilitating a farm to table approach for foods produced and consumed in different countries. FAO and WHO are now investing in development of "global" microbiological risk assessments for specific pathogens / food commodities so as to service development of risk-based standards by the Codex Committee on Food Hygiene (CCFH). This work is resource-intensive and heavily dependent on risk assessments already carried out by national governments. Further, translation of this risk assessment work into microbiological standards for food in international trade remains problematic. Data gaps impede completion of farm-to-table risk assessments and risk estimates may be non-representative due to unavailability of data from developing countries. To date, progress has been slow in CCFH and Codex has not set any microbiological standards based on the work of JEMRA.
3. While waiting for international guidance, national Competent Authorities are increasingly setting standards for microbiological pathogens according to qualitative judgements on food-borne risks e.g. for *Escherichia coli* H7:O157 and *Salmonella*. In the absence of benchmark Codex standards, debate over the scientific justification of such standards can cause tension between trading partners and disrupt trade.

¹ Previously considered as CAC/28 LIM 14.

Developments in the Codex Committee on Food Hygiene

4. Recent sessions of CCFH have provided a valuable forum for discussing development of risk based standards on priority microbiological pathogen/food commodity combinations, for example:

- Discussion paper on guidelines for microbiological risk management options for *Campylobacter* in broiler chickens
- Discussion paper guidelines for the application of the general principles of food hygiene to the risk-based control of enterohaemorrhagic *E. coli* in ground beef and fermented sausages;
- Discussion paper guidelines for the application of the general principles of food hygiene to the risk-based control of *Salmonella* in broiler chickens;
- Other “risk-based” draft discussion papers e.g. *Vibrio* spp. in seafood and viruses in seafood.

5. Despite these discussions, progress in developing specific microbiological standards is slow.

On the other hand, overarching Codes of Hygienic Practice that are based on risk analysis principles have recently been elaborated for several food commodities. The recent availability of these Codes provides an opportunity for further application of a risk-based approach to standard-setting by providing a context for specific microbiological standards e.g. performance objectives or performance criteria at specific steps in the food chain.

6. The timely elaboration of priority risk-based microbiological standards by CCFH would be enhanced by:

- A Code of Practice for the commodity that incorporated a risk-based approach and provided a generic platform for development of specific risk-based standards
- A “champion” country that would lead and develop the draft standard inter-session, including appropriate communication between risk assessors and risk managers
- Access to good, globally-representative science
- Reference to a generic risk management template and standard development process (CCFH).

An innovative approach

Food standard context

7. Codes of Practice relating to specific commodities provide a generic food safety context and increasingly include risk analysis principles. Specific risk-based microbiological standards could be developed and appended to umbrella COPs on a continuing basis.

Champion country

8. Because of the highly technical and resource-intensive nature of risk-based microbiological standards, each work topic needs a champion country that is prepared to steward development of the standard between Committee sessions. In particular, productive and on-going dialogue between risk assessors and risk managers is an essential iterative function for timely development of risk-based standards. Science and data inputs would be sourced from JEMRA and individual countries, with the champion country facilitating the process and using their own technical resources as necessary.

Timeliness

9. It is envisaged that the champion country would receive clear instruction on the scope of the work and the form of the output from CCFH (Step 2) and develop a draft standard for circulation and government comment within a single intersession period. This would provide the possibility for endorsement of a priority microbiological standard at Step 8 at the next session of CCFH, or that following.

Structured Process

10. The form of the standards would depend on the outputs desired by CCFH. Structured processes should be developed that would guide two broad types of standards:

- Elaboration of performance objectives or performance criteria
- Determination of the proportional impact of different interventions throughout the food chain in mitigating risks to consumers.

11. The current initiative in CCFH to develop templates for risk-based standards for several hazard / food commodity combinations would inform this area of work. The primary role of the champion country would be to ensure an appropriate risk assessment was available and provide an architecture for application of value judgments by CCFH in choosing risk management options and finalising the standard.

Transparency

12. The champion country would fully document all data inputs, assumptions and scientific value judgements included in the risk assessment, and draft the final standard as decided by CCFH.

Recommendation

13. It is recommended that the CAC debate this approach as a positive means of enhancing the timely development of risk-based microbiological standards within the framework of CCFH.