



JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON FOOD HYGIENE

Forty-seventh Session

Boston, Massachusetts, United States of America, 9 - 13 November 2015

DISCUSSION PAPER ON THE REVISION OF THE *GENERAL PRINCIPLES OF FOOD HYGIENE* (CAC/RCP 1-1969) AND ITS HACCP ANNEX

Prepared by the Electronic Working Group led by France and Thailand

Background

1. In November 2014, CCFH46 agreed to establish an eWG led by France and Thailand, working in English only, with the following Terms of Reference:

- Review the General Principles of Food Hygiene (GPFH) and identify any need for updating (e.g. clarification on the use of potable water vs. clean water);
- Review its Annex on HACCP and recommend updates, as necessary;
- In doing so, consideration should be given to the appropriateness and possibility of combining the GPFH and its HACCP Annex into one document;
- In addition, to look at current food hygiene tests (e.g. the validation, micro-criteria, MRM documents) and their relationship to the above, and recommend appropriate references to relevant adopted texts; and
- Prepare a proposal for consideration by CCFH 47.

2. An invitation was sent to all Codex members and a questionnaire was distributed to all of the eWG participants on 18 January 2015. The list of participants is attached as Appendix I. Comments from 30 Codex member states, 1 Codex member intergovernmental organization and 8 Codex observer organizations were gathered.

3. The questionnaire had three parts: (I) Structure of the document(s), (II) GPFH/HACCP concepts and (III) Other aspects, including terminology questions, HACCP principles, specific difficulties of understanding or implementing the current texts, and the need for more guidance on some aspects such as the determination of critical control points, the establishment of critical limits, etc. In this synthesis, we follow the three parts of the document with the aim to summarize what seemed to be the main messages received from the participants.

A- Synthesis

Part I – Structure of the document(s)

4. The eWG firstly assessed the structure of GPFH and its relationship with its HACCP Annex in order to determine the most appropriate approach to encompass concepts that are referred to within both documents. They concluded that the document should remain in two parts, keeping the distinction between the GPFH and the HACCP System. The GHPs, that cover safety and suitability, should clearly be the foundation to the HACCP system, which is focused on food safety, and the GPFH should cover the situations where GHPs alone are sufficient to manage food safety. Some participants insisted that the GPFH should remain as simple as possible in order to be useful for anyone.

5. Another question dealt with the current title of the document, which has been said to not cover every aspects addressed. Regarding the suggested title “Management of Food Safety Systems”, there was an equal number of pros and cons. Some participants were reluctant, assuming that the meaning of “management” concerns the policy that a business establishes to achieve objectives and processes, including organization’s structure, role and responsibilities, planning and operation. Therefore, it does not seem to be appropriate for a Codex standard, which is not aimed at instructing Food Business Operators (FBOs) on how to manage their quality and safety systems. Conversely, the respondents that favored the suggested title argued that the structure of the future documents should be aligned with the one of the standard ISO 22000 devoted to “Food safety management systems”. Besides, some respondents suggested alternative titles, often suggesting that they should mention both “hygiene” and “food safety”. They proposed for instance: “Principles and guidelines for the management of hygiene and food safety”; “Guidelines for the management of food hygiene and food safety control systems”.

Part II – GPFH/HACCP concepts

6. Since the establishment of the original GPFH documents, FBO’s and official authorities all around the world have developed their own systems to preserve food hygiene. Science has also progressed and new hazards have emerged, resulting on diverse interpretations of some concepts used in the frame of GPFH and its HACCP Annex. This section attempts to assess which concepts, if any, need updating to encompass new hazard or to build a common and universal ground of understanding.

7. The eWG examined which concepts could be considered as “horizontal”, useful for both GPFH and its HACCP Annex. Four respondents answered that all the items are horizontal. The other respondents agreed to the list providing that some items are excluded: Recall procedures/product tracing, training (each rejected by three respondents); validation, monitoring, documentation (each rejected by one respondent). Furthermore, some additional concepts were discussed. Even if about half of the participants did not feel that those should belong to GPFH, the other half agreed that the following concepts would be useful (the most cited listed first): supplier management > feedback loop > auditing, storage procedures and processes > outsourced work > continuous improvement. Assuming that those concepts are already present in the texts and used by FBOs, only amendments would be needed. Finally, few additional concepts were suggested by the eWG, such as: Validation/verification procedures; allergens; management commitment; use of rework and residual products; food fraud prevention; food defense; control measures; situations of emergency, terrorism or war; communication; traceability; relationship of GPFH/HACCP to risk analysis and risk management metrics; involvement of consumer organizations; consumers’ role in storage; handling and preparation; food safety culture; matrix for combining probability of occurrence and effect of hazard. Improvement or updating, when recommendations do not fit with the current practices of FBOs, is requested for hand washing; problems with produces consumed raw; control of time/temperature and cooling; design of facilities; food chain approach; documents and records; transportation; incoming material requirements. Six respondents were of the view that the horizontal items should be applied differently in the GPFH document and in the HACCP one, as a more rigorous application would be requested in the HACCP system.

8. Regarding the definition of CCP, there is almost unanimity that the current definition of CCP should remain unchanged. Yet, many respondents noted that higher level of control for key hygiene programs is needed where true CCPs cannot be designed. This would prevent the inappropriate proliferation of CCPs where the CCP definition is misunderstood or misapplied. Many names were suggested to designate these non-CCP hazard control measures, such as: enhanced hygiene practices, operational prerequisite programs/OPRPs, critical GHPs, CCP2, hazard specific hygiene practices, points of attention, control points.

9. Pursuing this prospective, the eWG examined the need to amend the current process of HACCP, focusing more particularly on the appropriateness of the seven principles. More than sixty percent opposed to add new principle(s), as the original ones are universally established. However, there is an exception originated from the confusion between validation and verification. Several participants asked for a clear separation of the two concepts, with addition of a reference to CAC/GL 69-2008 on *Validation of Food Safety Control Measures*. In their view, validation should be elaborated explicitly where it plays a vital role, e.g. in principle 3 and principle 6, so a new principle is not necessarily needed.

10. Finally, the eWG focused on principle 1. There seems to be an agreement on the three-parts division of Principle 1. Respondents agreed that subtask 1, establishing a list of potential or “assumed” hazards, has to be done at the start of principle 1. A large majority of respondents agreed that subtask 2, establishing the shorter list of significant hazards relevant to control measures, should take place once the GHPs are in place. However, some comments suggested that such a timing of conducting the subtasks of principle 1 should be flexible, taking into account that the division in sequential subtasks is not always practically possible.

Part III – Other aspects

• **Terminology and definition**

11. In its effort to review GPFH and its HACCP Annex, participants were asked to indicate any concepts that are misleading, because they lack definition or are ambiguous within the current wording. Indeed, some terms are actually used in GPFH but are not precisely defined. When they result in various interpretations among FBOs, some disagreements can occur, leading to potential trade conflict or risk for health.

12. As regards the expressions “prerequisite programs” (PRP) and GHP, it was noted that GHP are prerequisite, but are only one type of PRP. According to the majority of respondents, both GHP and PRP concepts are useful, and definitions are needed.

13. A few specific terminological ambiguities were also examined by the eWG.

14. The notion of “potable water”, as opposite to “clean water”, was part of the discussion that led CCFH to settle the eWG on the need to revise GPFH and its HACCP Annex. According to a majority of respondents, use of water should be developed. Most of them asked for definitions and guidelines regarding potable and clean water. One respondent was concerned that water that is neither potable nor clean, such as reclaimed water (e.g. extracted from milk) may find application in certain industries. A number of respondents think that the term “potable” is not well understood. Reference was made to the *WHO Guidelines for Drinking Water Quality*.

15. Another expression appeared to be understood very variably, namely “conditions of food” causing a potential risk to health. Examples of hazardous “conditions of food” were given (e.g. shape, size and texture leading to choking). In turn, it was noted that “condition of food” is not a hazard, but something leading to the presence of hazard(s) or to an increase of microbiological hazard(s), that is or should be addressed in various parts of the documents e.g. in control of operations. A 60 to 40 majority of respondents therefore preferred removing “condition of” from the definition, as it can induce confusion, and that explanations might be given where needed. If this option is preferred, CCGP should be consulted to consider changing the definition of hazard in the Procedural Manual for harmonization with GPFH terminology. Another option discussed was to keep the wording “conditions of food” but to work on providing explicit clarification.

16. Finally, taking into account that the two words “critical” and “essential” are sometimes used as synonymous¹, a high majority of respondents argued that the two terms have different meanings and should be kept. Several contributions suggested that the word “critical” should only refer to “critical control points”.

• **Articulation between GPFH and other food hygiene documents**

17. More than two thirds of the participants suggested developing some guidance about microbiological criteria. CAC/GL 21 – 1997 on *Application of Microbiological Criteria Related to Foods* was quoted as possible reference. Overall, respondents expressed the view that GPFH is intended to be a general document; therefore it should remain as simple as possible in order to be useful for everyone. Nevertheless, they stood for an update of all existing Codex or FAO/WHO documents that should be referred to within GPFH: for instance, the question of “potable” vs. “clean” water led repliers to mention the *WHO Guidelines for Drinking Water Quality*. Even if not cited as a reference document, Standard ISO 22000 was referred to on several occasions, underlining the fact that alignment in definitions and processes between GPFH/HACCP Annex and ISO 22000 could facilitate implementation by FBOs and official authorities. Dealing with the case of small businesses, references to professional specific guides were also cited for possible inclusion in the GPFH, with consultation of FAO (that have already developed a document: <http://www.fao.org/3/a-a0799e.pdf>). Other general approaches, such as the United Kingdom Food Standards Agency “Food Safety Better Business” seem to constitute a consistent reference.

• **Potential improvements**

18. Some sections of the questionnaire addressed possible ways to improve or update the current GPFH and its HACCP Annex.

¹ Critical Control Point (CCP) A step at which control can be applied and is essential to prevent or eliminate a food safety hazard or reduce it to an acceptable level.

19. Almost all respondents strongly agreed that some clarification about the distinction between validation, verification and monitoring should be included in the current text. Yet, very few comments suggested that a new principle could be elaborated in order to better distinguish verification vs. validation. Instead, participants encouraged providing guidance on establishing critical limits with the view to clarify the concept of “validation”. They were of the view that the concept of critical limit was often misused, contributing to the inappropriate proliferation of CCPs. Therefore, they considered that FBOs could benefit from science-based and applicable tools in establishing their own critical limits. The main option for moving forward seemed to rely on scientific literature references or examples that could be included in an annex. Only very few participants, who were of the opinion that the main issue was not the current text but its implementation by FBO's, and that the establishment of critical limits varied widely depending on the product, the process, and other parameters, were reluctant to pursue that work.

20. According to the eWG, the current GPFH and its HACCP Annex focuses more particularly on microbiological hazards. However, it is not clear whether further guidance is needed to put more emphasis on chemical and physical contaminants. It seems that chemical hazards are of bigger concern for many participants, who estimated physical contaminants as being currently well addressed. Approximately half of the respondents expressed the need for more guidance on chemicals causing an attested risk for public health. Many of them mentioned the problem raised by allergens, which can be considered as chemical agents. If that guidance is to be developed, there seems to be a preference to do this as an annex (the current HACCP Annex or another one) rather than within the GPFH itself. In their comments, those respondents who encouraged additional guidance asked for a list of examples that should follow the distinction between chemical, physical and biological hazards. Several participants pointed out emerging hazard such as allergens or mycotoxins. One of them suggested that a distinction could take into account the possibility of controlling the hazards through GHPs or through the HACCP plan. Some of those respondents suggested that a FAO/WHO document should be elaborated to develop that guidance. Conversely, those who indicated that the current guidance is appropriate argued that GPFH was meant to be a general document, thus not trying to establish the list of potential hazards.

21. Overall, the current text is perceived as being applicable throughout the whole food chain. Therefore, the eWG was not in favor of providing additional guidance dedicated to one or another segments, even if it recognized that the original text was manufacturing-oriented. Some participants also noted that some issues may occur because certain operators, recently incorporated in the food chain, such as transporters, packers, etc. ignored that they had to implement GPFH and sometimes HACCP. To deal with that difficulty, they suggested that FAO/WHO documents be developed or referenced in GPFH. About one third of respondents estimated that additional guidance should be developed in the frame of GPFH and its HACCP Annex. They all underlined that some segments, especially final delivery to the consumer, are not well addressed by the current document. However, the question of primary production gave rise to a range of opinions: half of participants estimated that HACCP did not encompass this step, especially when it produces ready-to-eat food, whereas the other half was of the view that HACCP encompasses the whole food chain. They suggested that a more flexible approach to CCPs, if adopted, could allow to better taking into account primary production.

22. The eWG also examined the appropriateness of the current text for implementation by all types of enterprises. Almost all respondents recognized that applying HACCP could represent quite a challenge for some FBOs. Even if medium and small size enterprises are particularly at stake, several participants underlined that every size category of businesses can tackle issues, for instance when they are involved in novel food production. Small businesses included retailers, caterers, butchers and other artisanal workers. Most of the time, these operators are not familiar with the language and concepts (for instance, the distinction of verification vs. validation) developed in GPFH and HACCP. They also do not have the financial and human resources to develop an appropriate HACCP approach and sometimes refer to external consultant. One of the main failures is therefore identification of a very high number of CCPs while other aspects, as continued follow-up, are neglected. Some participants insisted on the fact that even GPFH can be very difficult to implement for some enterprises.

23. About two out of three respondents were in favor of a revision, which was said to possibly involve GPFH, HACCP Annex, or both sections. For instance, more examples or references to professional specific guides could be included in the GPFH part, with consultation of the FAO (that has already developed a document: <http://www.fao.org/3/a-a0799e.pdf>). Other general approaches, such as the United Kingdom Food Standards Agency “Food Safety Better Business” seem to have a positive impact on small businesses. Participants also proposed more flexibility to be provided in order to improve understanding and implementation of Codex texts by small businesses: for instance, an annex presenting “should have” versus “must have” elements was cited as a useful tool. One comment expressed the view that very small enterprises could be exempted of the implementation of HACCP. Conversely, the other participants, argued that the main issue was not the current GPFH and its HACCP Annex texts but on field implementation. Therefore, they were of the view that no clarification was needed.

24. Finally, the eWG explored the possible tools that could be provided to make GPFH and its HACCP Annex more user-friendly. Thereby, a majority of the respondents were of the view that a decision tree is a useful tool in the frame of GPFH and its HACCP Annex, recognizing that the current tree is useful and well known by FBOs and officials. However, they did not agree on the need to elaborate new tree(s) or alternative tools in order to address any kind of hazards. Few comments recommended developing separate trees relative to biological or physical hazard. Among them, one respondent suggested to develop separate trees in order to compare them with the original one, expecting that the differences would be small enough to be addressed by footnotes. An appreciated lead to move forward relied on the examining and referencing of additional trees that seem to be used on field, such as the Ghent University tree developed by Prof. Jacxsens, the ILSI Europe 1992 decision tree for raw materials, the trees presented by Dr. Bonne in BTSF Africa framework, or several OPRP decision trees (Campden BRI, Mortimore and Wallace).

25. The other participants, considering that additional work on decision tree(s) could be too prescriptive, split in two parts: about a half were reluctant to modify the current tree, even if some comments proposed to provide more guidance to make the current tree easier to apply. Another half suggested that alternative tools could be developed. Most of them proposed to elaborate a risk matrix or to make reference to guidance provided in ISO 22000 for instance.

26. Finally, one respondent mentioned auto-controls (i.e. own checks) as a new concept to be included within the frame of GPFH.

27. Additionally, one participant reported that in the French version of the standard, “chemical” has been translated into “biochimique” (biochemical) in the definition of “hazards” and that this term should be replaced by “chimique”.

B- Recommendations

1. The Committee should consider starting new work on the revision of the General Principles of Food Hygiene and its Annex: Hazard Analysis and Critical Control Point (HACCP) System and Guidelines for its Application (CAC/RCP 1-1969) , with an introduction and two distinct parts (General Principles of Food Hygiene and an annex on HACCP) and seven HACCP principles (Project Document attached as Annex) and, if agreed, establishing a Working Group to that effect;
2. To recommend the WG to keep in mind that the revised text should be useful to all types of stakeholders. Therefore, it should be as simple as possible and provide more flexibility to small and medium enterprises, or to businesses developing innovative food processes, in order to achieve wider application while maintaining consumer safety;
3. To consider:
 - a. Whether the document is aimed at dealing with managerial aspects, thereby instructing Food Business Operators (FBOs) on how to manage their quality and safety system, and if the title should be modified accordingly. If so, it could be necessary to determine how FBOs should address concepts such as supplier management, the role of auditing, contract manufacturing, storage procedures and processes, change management, continuous improvement, Good Agricultural Practices;
 - b. Whether the GPFH include primary production, and address the safety aspects (i) of foods that go directly to the consumer as ready-to-eat (e.g. berries, produce that will not be cooked/peeled/hulled before eating), and (ii) of final delivery to the consumer (e.g. retailers);
 - c. As a number of items are common to both parts of the document (such as but not limited to product and process description, validation, monitoring, verification), deciding whether these items are to be presented first in the introduction and then developed in both GPFH and HACCP while emphasizing that their application could be more rigorous in the HACCP context than in the GPFH one;
 - d. Whether revising the definition section in the introduction. Especially, clear definitions for the following terms could be added: “good hygiene practice”, “prerequisite programs”, “potable water”, and “clean water”. Additionally, in relation to HACCP, clarifying the use of “essential” and “critical” in relation to HACCP since many do not consider these to be equivalent but the terms appear to be so according to the CCP definition;
 - e. Whether elaborating a sequential systematic approach to be implemented for hazard identification and analysis in order to allow for (i) establishing a preliminary list of potential hazards independently of consideration of GHP implementation, and (ii) determining a shorter list of significant hazards to be addressed in the HACCP plan that takes into account the GHP measures implemented;

- f. As regards hazard control measures, taking into account that the definition of the CCP will remain unchanged, examining the need for a class of control measures essential to control hazards for which management as CCPs presents challenges;
- g. Whether removing the expression “condition of” in the definition of the term Hazard or including an explanation in the definition, providing another term while addressing where appropriate choking hazards and foods associated with illness but in which the hazardous substance cannot be identified;
- h. Including references to:
 - “*Principles and Guidelines for the Establishment and Application of Microbiological Criteria Related to Foods* (CAC/GL 21-1997)” to provide more guidance on Micro-biological Criteria;
 - “*Guidelines for the Validation of Food Safety Control Measures* (CAC/GL 69-2008)” to provide more guidance on validation;
 - “WHO Guidelines for Drinking Water Quality“ on the use of water, and the “*Code of practice for fish and fishery products*” (CAC/RCP 52-2003) on the use of clean vs. potable water”;
- i. Addressing the distinction between validation and verification, for instance by amending the contents of Step 8 (Principles 3) and Step 11 (Principle 6) in order to clarify validation related to those steps;
- j. Elaborating further guidance on:
 - The control of chemical contaminants, including allergens and mycotoxins;
 - How to use the current decision tree; and, if appropriate, adding decision trees related to chemical or physical hazards;
 - The establishment of science based critical limits for CCPs and their proper use.

PROJECT DOCUMENT

Revision of the *General Principles of Food Hygiene (CAC/RCP 1-1969)* and its HACCP Annex

1. Purpose and Scope of the Standard

The *General Principles of Food Hygiene (CAC/RCP 1-1969)* and its Annex: Hazard Analysis and Critical Control Point (HACCP) System and Guidelines for its Application provide food business operators worldwide with the basis for producing food that is safe and suitable for consumption. Since its inception in the early 1970s, HACCP has become the universal system for the control of food safety, on which most regulatory food control systems and international food safety standards (e.g. ISO 22000) are based. HACCP, or a similar approach of identifying hazards and establishing controls to prevent them, has also been used in guidance on the safety of feed and drinking water.

2. Relevance and Timeliness

The General Principles of Food Hygiene (GPFH) is the basis for all codes of hygienic practice developed by CCFH. This standard is widely used and referenced internationally. There are several initiatives ongoing to update, in particular, the concept of HACCP. However, because *Codex Alimentarius* standards are the basis for international acceptance, it is important for the Committee to ensure that the General Principles of Food Hygiene and the Annex on HACCP provide the best available guidance based on current scientific information.

At its 46th session, CCFH agreed to explore further if GPFH and its HACCP annex needed to be revised. An eWG, co-chaired by Thailand and France, established a questionnaire in order to identify specific items that could benefit from improvement through the *Codex alimentarius* standardization process.

3. Main aspects to be covered

As GPFH and its HACCP annex are currently recognized for providing a common ground for the control of food safety worldwide, the whole document deserves a regular update. The discussion conducted by the eWG on the need to revise GPFH and its HACCP annex underlined that such a revision should address several issues regarding the articulation of the two parts of the document, or within the content of each part. Those potential improvements should be aimed at making the standard easier to understand and to enforce for all members of the food chain or at clarifying some aspects that seem ambiguous. Areas that may be considered in a revised GPFH and HACCP annex include:

- Clarify the scope of GPFH and its HACCP annex, especially in order to determine whether the document should encompass aspects of quality management;
- How to better address concepts that are common to both parts of the document, considering that they might not be as rigorously applied regarding GPFH or HACCP enforcement;
- Complete the definition section with the following terms: “good hygiene practice”, “prerequisite programs”, “potable water”, and “clean water”. Additionally, in relation to HACCP, the use of “essential” and “critical” should be clarified.
- Establish a sequential systematic approach to determine a list of relevant risk to complete the hazard identification step of HACCP;
- Examine the need for a class of control measures essential to control hazards for which management as CCPs presents challenges;
- Consider whether the removal of the expression “condition of food” could lead to improve the common understanding of the definition of “hazard”;
- Inclusion of relevant references to other FAO/WHO guidance, where appropriate;
- Distinguish validation from verification within Principle 6;
- Establish further guidance on chemical contaminants, including allergens and mycotoxins, on potential improvement of the decision tree and on the establishment of science based critical limits for CCPs and their proper use.

4. Assessment against the Criteria for the establishment of work priorities

4.1 The text needs to be revised in order to meet the General criterion: Consumer protection from the point of view of health, food safety, ensuring fair practices in the food trade and taking into account the identified needs of developing countries.

The proposed work is directed at revising the most central standard in food hygiene, in order to make it more logical and user-friendly and to better address emerging and new hazards. Furthermore, such a revision could lead to help implementation by small and/or less-developed food businesses in both developed and developing countries and to better encompass the whole food production sector.

4.2 Diversification of national legislations and apparent resultant or potential impediments to international trade

Food safety legislation widely refers to the Codex HACCP principles, as do many international standards giving food businesses access to more lucrative markets, but as the application of the HACCP principles can differ among countries it can cause impediments to international trade. A document that fosters a more consistent approach can reduce impediments to international trade. Furthermore, an harmonized glossary could improve common understanding through the whole food chain and between every kinds or agro-food businesses.

4.3 Scope of work and establishment of priorities between the various sections of the work

The proposed work would consist on the revision of the different sections of the standard CAC/RCP 1-1969, e.g. its General Introduction, the GPFH part and the HACCP annex. Indeed, it appears that the whole structure of the document needs to be rearranged, particularly because of concepts that seem to be common for the two sections. Several improvements have also been proposed for each part of the standard by participants of the eWG on the need to revise GPFH and its HACCP annex.

The proposed schedule is as follows:

- a) Revision of the General Introduction to clarify concepts and terms that are useful in the frame of both GPFH and HACCP, and to avoid repetitions, and revision of the HACCP annex, as this section is the most critical for food businesses and needs urgent modification to encompass emerging issues;
- b) Revision of the GPFH, taking into account the improvements of HACCP; and
- c) Final verification of the soundness and consistency of the whole revised standard.

4.4 Work already undertaken by other international organizations in this field

In the ISO, work has recently started on a revision of its HACCP standard, ISO 22000. ISO 22004 is now the most updated available standard in this field.

4.5 Amenability of the subject of the proposal to standardization

– This revision concerns the most central food hygiene standard of Codex.

4.6 Consideration of the global magnitude of the problem or issue

– This standard is applied worldwide to practically all commercial food processes. If a revision can make it more effective and user-friendly, results will include improved food safety, more efficient food control, and increased food trade. It can provide a sound common ground for every food hygiene sectorial standards and codes of hygienic practices.

5. Relevance to the Codex strategic objectives

The proposed work directly relates to the following Codex Strategic Goals from the 2014-2019 Strategic Plan.

Strategic goal 1: Establish international food standards that address current and emerging food issues

The revision of these texts is consistent with all three Objectives of this strategic goal. At the 45th and 46th Sessions of the Codex Committee on Food Hygiene, the revision of the GPFH and HACCP texts was indicated as a top priority in the Committee's forward work plan. Therefore, an eWG was settled to explore further that possibility, with massive involvement of Codex members and observer organizations. A number of those stakeholders have been actively involved in identifying issues of concern that could be addressed in a revision. The revised standard will provide important information for all countries and agro-food businesses of all kinds in order to achieve a higher level of food safety.

Strategic goal 2: Ensure the application of risk analysis principles in the development of Codex standards

Risk analysis as it applies to food safety across the food chain is an internationally accepted discipline and forms an integral part of any well-designed food safety control system. Through an active involvement of scientific and technical experts from many Codex members and observers we aim for a revised standard addressing all recent developments in the field of food safety risk management. eWG members participation already identified gaps in addressing hazards from allergens or mycotoxins, for instance.

Strategic goal 3: Facilitate the effective participation of all Codex Members

The revision of these universal texts should generate great interest and broad participation from all members. Through the revision process, it should be kept in mind that one of the main challenges is to produce a user-friendly document that could be enforced as widely as possible. Specific attention should be granted to small enterprises and to developing countries.

Strategic goal 4: Implement effective and efficient work management systems and practices

More expeditious and efficient work by Codex is necessary to provide members and international organizations with the standards, guidelines and recommendations that they need. During the revision, all working documents and electronic discussions will be distributed in a timely and transparent manner, using web-based technologies available freely to all.

This strategic goal is one of the core objective of the revision of this standard, as it will provide a solid ground for all Codex works related to food hygiene.

6. Information on the relation between the proposal and other existing Codex documents

The revised text will build on the General Principles of Food Hygiene (CAC/RCP 1-1969) and its Annex: Hazard Analysis and Critical Control Point (HACCP) System and Guidelines for its Application. Due to the centrality of the texts to food hygiene, it is foreseen that a technical alignment of texts may subsequently be needed in related Codex standards.

The following documents have already been identified to be added as references within the revised document: "Principles and Guidelines for the Establishment and Application of Microbiological Criteria Related to Foods (CAC/GL 21-1997)", "Guidelines for the Validation of Food Safety Control Measures (CAC/GL 69-2008)", "WHO Guidelines for Drinking Water Quality" and the "Code of practice for fish and fishery products" (CAC/RCP 52-2003);

7. Identification of any requirement for and availability of expert scientific advice

We think that FAO/WHO could facilitate this effort by reviewing their guidelines related to HACCP or specific guidance (for instance, addressing water quality) and determining if there is information useful to address the concerns raised in the accompanying Discussion paper. The information will then be used to better define the Scope of the documents under revision, and to what extent new guidance is needed. Also, a number of Codex observer organizations seem to be willing to provide the expertise they have in improving the content of the document or to make it easier to use for businesses.

8. Identification of any need for technical input to the standard from external bodies so that this can be planned for

Technical input is expected from the International Commission of Microbiological Specifications for Foods (ICMSF), the International Organization for Standardization (ISO), and other international standard-setting organizations. Such input is important as these organizations would be among the organizations that would be applying the information in a revised text on the general principles for food safety control systems.

9. The proposed time-line for completion of the new work, including the start date, the proposed date for adoption at Step 5, and the proposed date for adoption by the Commission

Proposed time line: The work conducted by the eWG since the 46th session of CCFH allowed to identify the main items that need improvement and to provide alternative ways forward. A five-year timeline is proposed for the completion of the revision of the General Principles of Food Hygiene (CAC/RCP 1-1969) and its HACCP Annex. A proposed revised document would be ready for discussion at Step 3 by the CCFH in 2016, with a proposed date for adoption at Step 5 in 2018 and adoption at Step 8 in 2019.

**LIST OF PARTICIPANTS
LISTE DES PARTICIPANTS
LISTA DE PARTICIPANTES**

**Co-Chairpersons
Co-présidents
Co-presidentes**

Olivier Cerf
olivier.cerf@gmail.com

Pisan Pongsapitch
Deputy Secretary General
National Bureau of Agricultural Community and Food
Standards (ACFS)
Ministry of Agriculture and Cooperatives, Thailand
pisan@acfs.go.th

**Secretariat
Secrétariat
Secretaria**

Louise Dangy
National School of Veterinary Services
louise.dangy@ensv.vetagro-sup.fr

ARGENTINA/ARGENTINE

Codex focal Point of Argentina
codex@minagri.gob.ar

Maria Ester Carullo
Coordinación de Vigilancia y Alertas de Residuos
y Contaminantes
mcarullo@senasa.gov.ar

Josefina Cabrera
Laboratorio de Microbiología, Departamento de
Control y Desarrollo, Instituto Nacional de
Alimentos

ARMENIA/ARMÉNIE

Vahe Danielyan
Head of Food production Control Department
State service for food safety, Ministry of
Agriculture
vahe.danielyan@mail.ru

AUSTRALIA/AUSTRALIE

Amanda Hill
Section Manager, Food standards Australia New
Zealand
amanda.hill@foodstandards.gov.au
codex.contact@agriculture.gov.au

BELGIUM/BELGIQUE/BELGICA

Katrien Beullens
Engineer Expert
katrien.beullens@favv.be

Liesbeth Jacxsens
Expert

Liesbeth.Jacxsens@UGent.be

Isabel de Boosere
Expert
isabel.deboosere@health.belgium.be

BENIN/BÉNIN

Dagbegnon Tossougbo
Head of laboratory of microbiology
alexisdag@yahoo.fr
maepdana@ymail.com

BOTSWANA

Malebogo Pinkie Ralefala
Senior Research Scientist, National Food
Technology Research Centre
malebogo@naftec.org

BRAZIL/BRÉSIL/BRASIL

Ligia Schreiner
Specialist on Regulation and Health Surveillance
ligia.schreiner@anvisa.gov.br

Carolina VIEIRA
Specialist on Regulation and Health Surveillance
carolina.vieira@anvisa.gov.br

Priscilla Rangel
Official Veterinary
priscilla.rangel@agricultura.gov.br

CANADA**Hélène Couture**

Chief, Evaluation division, Bureau of Microbial hazards

helene.couture@hc-sc.gc.ca

Jeff Farber

jeff.farber@hc-sc.gc.ca

CAMEROON/CAMEROUN/CAMERÚN**Jean Martin Etoundi**

Ingénieur général des techniques industrielles (Spécialiste de la nutrition et des technologies alimentaires)

etoundijme@yahoo.fr

CHILE/CHILI**Álvaro Flores Andrade**

National coordinator for CCFH, Ministry of Health

aflores@minsal.cl

CHINA/CHINE**Guo Yunchang**

Secretariat of National Food Safety Standard Committee, Division I, Department of Food Safety Standard

China National Center for Food Safety Risk Assessment

gych@cfsa.net.cn

Liu Huancheng

Secretariat of National Food Safety Standard Committee, Division I, Department of Food Safety Standard

China National Center for Food Safety Risk Assessment

liuhuanchen@cfsa.net.cn

EGYPT/ÉGYPTTE/EGIPTO**Zienab Mosad Abdel Razik**

Food Standards Specialist (EOS)

mokhtarmohamed50@ymail.com

EUROPEAN UNION/UNION EUROPÉENNE/UNIÓN EUROPEA**Risto Holma**

European Commission, DG SANCO

risto.holma@ec.europa.eu

Kris de Smet

European Commission, DG SANCO

kris.de-smet@ec.europa.eu

codex@ec.europa.eu

Sylvie Coulon

European Commission, DG SANCO

sylvie.coulon@ec.europa.eu

FINLAND/FINLANDE/ FINLANDIA**Marjatta Rahkio**

Veterinary Counsellor, Ministry of Agriculture and Forestry

marjatta.rahkio@mmm.fi

FRANCE/FRANCIA**Stéphanie Flauto**

Head of the Food Safety Division

Ministry of Agriculture, Food Processing Industry and Forestry - Food Directorate

stephanie.flauto@agriculture.gouv.fr

Thomas Longley

Expert in charge of "Hygiene Package" in the Food Chain Monitoring Office

Ministry of Agriculture, Food Processing Industry and Forestry - Food Directorate

thomas.longley@agriculture.gouv.fr

Corinne Danan

Deputy Head of the Food Chain Monitoring Office

Ministry of Agriculture, Food Processing Industry and Forestry - Food Directorate

corinne.danan@agriculture.gouv.fr

Laurent Montaut

Head of the Food Chain Monitoring Office

Ministry of Agriculture, Food Processing Industry and Forestry - Food Directorate

laurent.montaut@agriculture.gouv.fr

Caroline Nicolo

Rédactrice chargée de l'hygiène et de la microbiologie des aliments

Ministry of Economy and Finances

caroline.nicolo@dgccrf.finances.gouv.fr

Anselme Agbessi

Rédacteur chargé de l'hygiène et de la microbiologie des aliments
Ministry of Economy and Finances
anselme.abgessi@dgccrf.finances.gouv.fr

GHANA**John Odame-Darkwah**

john.darkwah@fdaghana.gov.gh
jodame22@gmail.com

Regina Vowotor

yateppor@yahoo.com

Nana Pokuaa Asare-Twerefour

Codex Contact Point Manager
Ghana Standards Authority
codex@gsa.gov.gh
codexghana@gmail.com

GREECE/GRÈCE/GRECIA**Eleni Stavrakaki**

Hellenic Ministry of Finance, General Secretariat for Public Revenue, DG of the General Chemical State Laboratory (G.C.S.L.)
e.stavrakaki@gcsl.gr
elstavrakaki@yahoo.gr
codex@efet.gr

INDIA/INDE**Sunil Bakshi**

Deputy General Manager (QA)
sbakshi@nddb.coop

Seema Shukla

Assistant Director
tech9@eicindia.gov.in

C.M. Srilatha

Scientist
srilatha.cm@nic.in

Vani Bhambri arora

Deputy Director
vani.nabcb@qcin.org

Vinod Kotwal

National Codex Contact Point
codex-india@nic.in

IRELAND/IRLANDE/IRLANDA**Wayne Anderson**

Director of Food Science and Standards
Food Safety Authority of Ireland
wanderson@fsai.ie
abrady@fsai.gov.ie

Kilian Unger

Superintending Veterinary Inspector
kilian.unger@agriculture.gov.ie

ITALY/ITALIE/ITALIA**Dario de Medici**

Head of Microbiological Foodborne Hazard Unit
Department of Veterinary Public Health and Food Safety, Istituto Superiore di Sanità, Viale
dario.demedici@iss.it

Monica Gianfranceschi

First researcher
Istituto Superiore di Sanità, Viale Regina Elena
monica.gianfranceschi@iss.it

JAPAN/JAPON/JAPON**Hiroshi Umeda**

Assistant director, Inspection and Safety Division,
Department of Food Safety
Ministry of Health, Labour and Welfare
codexj@mhlw.go.jp

Hajime Toyofuku

Professor, Veterinary Public Health and Epidemiology
Yamaguchi University
toyofuku@yamaguchi-u.ac.jp

Tomoko Matsuta-Goshima

Assistant Director, Food Safety and Consumer Policy Division
Food Safety and Consumer Affairs Bureau,
Ministry of Agriculture, Forestry and Fisheries,
tomoko_goshima@nm.maff.go.jp
codex_maff@nm.maff.go.jp

KYRGYZ REPUBLIC/RÉPUBLIQUE KIRGHIZE/KIRGUISTÁN**Dinara Aytmurzaeva**

Head of Quality Management Department, Codex Contact Point
aytmurzaeva@mail.ru
KOREA (REPUBLIC OF)/CORÉE (RÉPUBLIQUE DE)/COREA (REPÚBLICA DE)

Eun Sil Lee

Codex Researcher
Food Standard Division, Ministry of Food and Drug Safety (MFDS)
eslee0915@korea.kr
codexkorea@korea.kr

So Hee Kim

Codex Researcher
Food Standard Division, Ministry of Food and Drug Safety (MFDS)
ligel84@korea.kr

MAURITIUS/MAURICE/MAURICIO**Badroonesha aumjaud**

Lecturer, Faculty of Agriculture, University of Mauritius

eaumjaud@uom.ac.mu

MOROCCO/MAROC/MARRUECOS**Azzi Abdelghni**

abdelghniazzi@gmail.com

NEW ZEALAND/NOUVELLE ZELANDE/NEUEVA ZELANDIA**Judi Lee**

Principal Adviser Risk management, Ministry for primary Industries

judi.lee@mpi.govt.nz

NORWAY/NORVÈGE/NORUEGA**Kjersti Nilsen Barkbu**

Senior Adviser

Norwegian Food Safety Authority

kjnba@mattilsynet.no

Vigdís S. Veum Moellersen

Senior Adviser

Norwegian Food Safety Authority

visvm@mattilsynet.no

PERU/PÉROU**José Miguel García Rojas**

Coordinador Titular del CT sobre Higiene de Alimentos del Codex Perú, Ministry of Health

DIGESA – Ministerio de Salud

jgarcía@digesa.minsa.gob.pe

Libia Liza Quesquén

Coordinador alternativo del CT sobre Higiene de Alimentos del Codex Perú, Ministry of Health

DIGESA – Ministerio de Salud

lliza@digesa.minsa.gob.pe

Carlos Leyva Fernández

Especialista Subdirección Inocuidad Agroalimentaria

SENASA

cleuva@senasa.gob.pe

PHILIPPINES/FILIPINAS**Ma Celia Raquepo**

OIC - Division Chief III

ma.celiamr@yahoo.com

Almueda C. David

Food-Drug Regulation Officer IV; Chairperson, Sub-Committee on Food Hygiene (SCFH)

acdavid@fda.gov.ph

POLAND/POLOGNE/POLONIA**Joanna Maryniak-Szpilarska**

Codex Contact Point for Poland

Agricultural and Food Quality Inspection

jmaryniak@ijhars.gov.pl

PORTUGAL**Pedro Margarido**

National Codex Contact Point

Portugal, Direção Geral de Alimentação e Veterinária

pmargarido@dgav.pt

codex@dgav.pt

RUSSIA/RUSSIE/RUSIA**Svetlana Sheveleva**

Head of the Laboratory (Institute of Nutrition)

sheveleva@ion.ru

SWITZERLAND/SUISSE/SUIZA**Christina Gut Sjoeborg**

Scientific Advisor

Federal Department of Home Affairs FDHA,

Federal Food Safety and Veterinary Office FSVO,

International Affairs

christina.gut@blv.admin.ch

THAILAND/THAÏLANDE/TAIANDIA**Virachnee Lohachoompol**

Standards Officer, National Bureau of agricultural commodity and food standards

Ministry of Agriculture and Cooperatives

virachnee@acfs.go.th

UNITED KINGDOM/ROYAUME UNI/REINO UNIDO**Carles Orri**

Food safety and Hygiene Policy Manager

Food Standards Agency

carles.orri@foodstandards.gsi.gov.uk

UNITED STATES OF AMERICA/ÉTATS UNIS D'AMÉRIQUE/ESTADOS UNIDOS DE AMÉRICA**Jenny Scott**

Senior Advisor

Office of Food Safety, FDA CFSAN

jenny.scott@fda.hhs.gov

Kerry L. Dearfield

Chief Scientist

USDA/FSIS/OPHS

kerry.dearfield@fsis.usda.gov

Andrew C. Yeung

FDA/CFSAN

andrew.yeung@fda.hhs.gov

URUGUAY**Adriana da Silva**

Food Control Laboratory, Montevideo City
Government
adrianad@movinet.com.uy

Norman Bennett

Head of the Coordination and Planification Unit on
Food Safety. Ministry of Livestock, Agriculture and
Fisheries
nbennett@mgap.gub.uy

Q. F. Ines Martinez

Senior researcher in Food Safety- Technological
Laboratory of Uruguay
imartin@latu.org.uy

YEMEN/YÉMEN**Rakeeb Dahnan**

Ministry of Public Works
codex@ysmo.org
codex.yemen@gmail.com

**INTERNATIONAL GOVERNMENTAL
ORGANIZATIONS/ORGANISATIONS
GOUVERNEMENTALES
INTERNATIONALES/ ORGANIZACIONES
GUBERNAMENTALES INTERNACIONALES**

**FOOD AND AGRICULTURE ORGANIZATION
OF
THE UNITED NATIONS**

Cornelia Boesch

Food Safety and Quality Unit
cornelia.boesch@fao.org

WORLD HEALTH ORGANIZATION**Mina Kojima**

Technical Officer, Department of Food Safety and
Zoonoses
kojimam@who.int

**INTERNATIONAL NON GOVERNMENTAL
ORGANIZATIONS/ORGANISATIONS
INTERNATIONALES NON
GOUVERNEMENTALES/ ORGANIZACIONES
INTERNACIONALES NO GUBERNAMENTALES**

FOODDRINKEUROPE**Patrick Fox**

Manager Food Policy, Science and R&D
p.fox@fooddrinkeurope.eu

INSTITUTE OF FOOD TECHNOLOGISTS**Francis F. Busta**

Codex Subject Expert to the Codex Committee on
Food Hygiene, representing the Institute of Food
Technologists
fbusta@umn.edu

**INTERNATIONAL ALLIANCE OF DIETARY /
FOOD SUPPLEMENT ASSOCIATIONS**

Yifan Jiang

Advisor, Regulatory affairs
yifanjiang@iadsa.org

**INTERNATIONAL ASSOCIATION OF
CONSUMER FOOD ORGANIZATIONS**
SFI@cspinet.org

**INTERNATIONAL COMMISSION ON
MICROBIOLOGICAL SPECIFICATIONS FOR
FOODS (ICMSF)**

Director Regulatory Affairs
Unilever, Research & Development
leon.gorris@unilever.com

Katherine M.J. Swanson

President KMJ Swanson Food Safety Inc.
kmjswanson@hotmail.com

Lucia Anelich

Director Anelich Consulting
la@anelichconsulting.co.za

**INTERNATIONAL COUNCIL OF BEVERAGES
ASSOCIATIONS**

Paivi Julkunen

Chair, ICBA Committee for Codex
pjulkunen@coca-cola.com

**INTERNATIONAL DAIRY FEDERATION /
FEDERATION INTERNATIONALE DE LAITERIE
(FIL/IDF)**

Claus Heggum

Chief consultant, Danish Agriculture and Food
Council
Danish Agriculture and Food Council
chg@lf.dk

Aurélie Dubois-Lozier

IDF Standards Officer
FIL-IDF
adubois@fil-idf.org

**INTERNATIONAL FEDERATION FOR ANIMAL
HEALTH (IFAH)**

Olivier Espeisse

espeisse_olivier@elanco.com

ifah@ifahsec.org

INTERNATIONAL POULTRY COUNCIL (IPC)

Food Safety and Quality Assurance Manager,
Tegel Foods

roy.biggs@tegel.co.nz

Richard Griffiths

rgriffiths@britishpoultry.org.uk

SSAFE

Joe Shebuski

Senior Director, Global Food Safety at Cargill,
Technical expert representing SSAFE

Joe_Shebuski@cargill.com

Yves Rey

Corporate Quality General Manager at Groupe
Danone, Board Member of SSAFE and Strategic
Leader

yves.rey@danone.com