



JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON FOOD ADDITIVES

Fifty-Fifth Session

DISCUSSION PAPER ON THE FUTURE WORKS FOR CODEX COMMITTEE ON FOOD ADDITIVES

(Prepared by China, the Host Secretariats of CCFA)

Background

It was noted that the work management and future direction of Codex Committee on Food Additives (CCFA) had been previously considered at CCFA49 (2017) and CCFA50 (2018)^{1,2}. The *General standard for food additives* (GSFA, CXS 192-1995), was identified as the core of CCFA's work, alongside the GSFA were other pillars of CCFA, including Alignment of food additive provisions in commodity standards and GSFA, International Numbering System (INS), and the Priority list of substances proposed for evaluation by JECFA. It was also acknowledged that once the work on the GSFA is completed, CCFA could take on additional tasks, depending on the interests of Codex Members and Observers.

In other active Codex committees, there are established mechanisms for collecting proposals for new work through Circular Letters (CLs) and prioritizing future work activities. In the case of CCFA, such mechanisms are limited only to: food additives provisions in the GSFA; and the *Class names and international numbering system for food additives* (CXG 36-1989). It is considered beneficial for CCFA to adopt a similar approach, as CCFA receives new work proposals beyond the current GSFA and CXG 36-1989. This mechanism would help ensure that CCFA remains responsive to evolving public health needs and fair trade practices, while aligning with Codex's strategic goals and staying resilient and relevant in the face of global challenges.

In addition, the global food systems and technologies are evolving at a rapid pace. Innovations such as cell-based meats, alternative proteins, and precision fermentation present both new opportunities and potential risks that existing food additive standards may not fully address. Planning for future work will ensure that CCFA's standards remain scientifically sound and capable of protecting consumer health in this changing landscape.

Aligned with the Codex Strategic Plan 2026-2031³, future work will help CCFA stay ahead of emerging food technologies. This proactive approach will allow CCFA to develop science-based standards that protect public health while promoting fair food trade. As food technologies advance, CCFA can establish guidelines for novel ingredients and additives, ensuring they meet rigorous safety requirements and can be traded globally without barriers. Moreover, strategic planning will help streamline the work management process, enabling CCFA to respond quickly to new developments.

¹ CX/FA 17/49/14

² CX/FA 18/50/13 Rev.1

³ REP24/CAC, Appendix IX

Analysis and Discussion

The future work of the CCFA will likely continue to build on its past discussions while addressing new challenges related to food safety, regulation, and evolving food technologies. Considering these three key perspectives, the following important topics may be of interest to CCFA in the coming years:

1. Topics highlighted at the previous CCFA sessions

One area that has been previously discussed and will likely remain an important issue is the regulation of **secondary food additives** and **processing aids**. The management of processing aids is an important area because these substances are used during food production but do not remain in the final product or have no technological function in it. Despite their limited presence, they can still have potential health impacts and must be properly regulated. CCFA has previously worked on guidelines for managing such substances, and the database on processing aids has been maintained as a reference for information beyond the scope of CCFA. However, as new processing methods emerge, CCFA may need to update the *Guidelines on Substances used as Processing Aids* (CXG 75-2010) in order to align with evolving technologies and production practices and consider the need to establish a specific Codex-authorized list of substances that can be used as processing aids.

Similarly, **secondary food additives**, which are typically used in food production but not in the final product, remain a complex issue. These additives might include substances used for cleaning, preservation, or processing of raw materials that leave residues. A clearer, more comprehensive approach to their regulation will be needed to ensure that they are managed appropriately across different food sectors. CCFA may focus on refining definitions, usage limits, and safety assessments for these substances to maintain consistency and safety in food production.

2. Issues identified in using the General Standard for Food Additives (GSFA, CXS 192-1995)

The GSFA is a crucial Codex tool for regulating food additives globally. However, several issues have been identified in its use, which CCFA may aim to address in the future. One of the primary concerns is the **complex structure of the GSFA tables**. The current layout can be difficult to navigate, particularly due to the extensive footnotes and the vast number of additives and food categories included. This complexity may result in confusion or misinterpretation, especially among regulatory bodies that must implement the standards.

CCFA may work on simplifying the structure of the GSFA to make it more user-friendly and accessible. This could involve reducing redundant footnotes, clarifying the definitions and functions of additives, and possibly developing a more streamlined, digitally accessible version of the document. This would ensure that the GSFA is easier for member countries to adopt and apply, facilitating more consistent global food safety standards.

Accurately identifying the food category to which a commodity belongs is essential. While there is often a direct one-to-one relationship between the commodity standard and the GSFA, discrepancies sometimes arise between the commodity standard and existing GSFA food categories. In addition, as food products evolve, it is necessary for the GSFA to reflect new developments, such as the rise of plant-based or fermented foods, which may not fit neatly into current categories. To address these discrepancies, exclusion notes (XS notes) may be considered to use, in order to ensure that food additive provisions are appropriately scoped. Additionally, **revisions and/or amendments to food categories** may be beneficial to ensure they remain relevant and encompass emerging food products, potentially requiring the introduction of new categories or condition notes.

3. New challenges related to food additives, including New Food Sources and Production Systems (NFPS)

As the food industry evolves, new challenges related to food additives will emerge, particularly due to **new food sources** and **production systems**. For instance, **cell-based foods** and **precision fermentation technologies** are introducing new food additives derived from these alternative production methods. These new food sources and production systems may require entirely new regulatory approaches to food additives. CCFA will need to establish safety guidelines and maximum limits for additives used in these novel products. This is particularly important as these new food products may have unique chemical compositions and safety profiles that differ from traditional food additives.

Moreover, the use of **biotechnology** in food production is rapidly increasing, and CCFA may need to address the regulation of new additives produced through genetic modification, microbial fermentation, or other biotechnological methods. These additives may not have a long history of use and may raise concerns among consumers and regulatory bodies. Thus, CCFA could focus on developing new frameworks for the evaluation of such additives, ensuring that they are safe for consumption while facilitating innovation in food production.

Additionally, **nanotechnology** is becoming more prevalent in food production, particularly in the development of food additives with enhanced functional properties, such as improved solubility, stability, or bioavailability. While nanomaterials offer potential benefits, they also present unique challenges in terms of detection, characterization, and regulation. CCFA may need to consider developing specific guidelines for nanotechnology-derived food additives, ensuring that their use is safe, transparent, and appropriately monitored within international food safety frameworks.

As new technologies emerge, the specifications for food additives developed by JECFA and reviewed by CCFA may need to be revised to reflect the changes in production methods. Variations in purity profiles, potential unintended residues, and the presence of novel by-products could necessitate revisions to existing specifications to maintain consistency in quality and safety assessments.

Furthermore, **sustainability** is becoming a central issue in food production. Additives used in novel food production systems, such as cell-based meats or plant-based products, may have different environmental impacts compared to traditional additives. CCFA may explore the sustainability of new food additives, assessing their lifecycle and environmental footprint. This will help ensure that food safety standards align with global sustainability goals, as food producers and consumers increasingly prioritize environmentally friendly practices.

4. Challenges in applying new food additives to the International Numbering System (INS)

In the current circular letter, the *Principles for changes/additions to Section 3 of Class Names and International Numbering System* (CXG 36-1989)⁴, it is indicated that “requests for the inclusion of new additives may be made by Codex Members that authorize the additive for use in that country and for which an INS number is needed”. The need for national approval as a prerequisite to request assignment of an INS number has been questioned in CCFA54⁵. CCFA agreed to keep the current process while referred the issue to the INS Electronic Working Group for further discussion.

It is considered that the current system, while effective in ensuring global recognition and consistency, creates challenges for countries whose competent authorities approve only those additives listed in the INS. These countries face a situation where their regulatory frameworks are restricted to the INS list, potentially limiting their ability to approve additives that may be safe but are not yet included. This reliance on the INS for approval

⁴ CL 2024/57-FA Annex 1

⁵ REP24/FA, paras 118-121

can slow down the adoption of new food additives, particularly in regions that may have more stringent regulatory requirements or are slower to update their own food safety standards.

While CCFA cannot change the flexibility of national regulatory systems, CCFA may facilitate the communication and collaboration among Members to share data on food additive safety, helping to expedite the approval process and ensure that food safety standards remain up-to-date without waiting for formal INS inclusion. This approach would help balance the need for global consistency with the flexibility needed to address national concerns and innovations in food production.

5. Other Considerations

Another major challenge would arise from the fragmentation of risk assessment and risk management practices, particularly if some countries or regions decide to revoke the approval of a food additive based on new scientific findings or because a certain food additive is no longer technically justified. Such actions could lead to inconsistencies in international food additive regulations and raise questions about the continued relevance of certain additives in the GSFA.

Meanwhile, this evolving landscape also presents an opportunity to propose the reassessment for the necessity of specific food additives with GSFA. As national or regional authorities conduct their own evaluations and update their regulations, CCFA can actively monitor these developments, analyze the scientific evidence, and assess their implications for CCFA standards, particularly the GSFA. When a food additive is revoked or prohibited to use in food products due to new risk assessments, Codex Members and Observers are encouraged to submit proposals for JECFA to conduct a re-evaluation. This process would ensure that CCFA decisions remain both scientifically sound and globally relevant. Furthermore, a more dynamic communication approach between Codex Members, Observers and FAO/WHO scientific bodies regarding new risk analysis findings at the national or regional level will help elevate relevant actions at the international level, thereby driving CCFA to refine its review processes and fostering a more forward-looking approach to updating food additive provisions in the GSFA. This, in turn, would strengthen the credibility and adaptability and scientific rigor of Codex standards, ensuring they keep pace with the latest scientific advancements and industry practices while maintaining global harmonization.

Conclusion

In summary, the future work of CCFA will likely build upon its established responsibilities, such as refining guidelines for secondary food additives and processing aids, while addressing complex issues in the GSFA's structure and food category classifications. Moreover, CCFA will need to adapt to emerging challenges brought about by new food sources and production systems. By addressing these evolving needs, CCFA can continue to ensure the safety of food additives while supporting global trade, consumer health, and sustainability in the food industry.

Recommendations

1. Review and consider topics for future work

CCFA is invited to consider whether it continues to have the interest and capacity to work on the issues mentioned above, including the regulation of secondary food additives, the management of processing aids, and the review of the GSFA, as well as addressing new challenges posed by emerging new food sources and production systems. In line with the aims and goals of Codex, and considering the Terms of Reference (TOR) of the CCFA, CCFA should evaluate whether some of these emerging issues can be included in the CCFA Forward Work Plan. This review will ensure that CCFA remains aligned with its mandate while addressing new global trends in food safety, innovation, and sustainability.

2. Review of the Terms of Reference (TOR) of CCFA

For issues that may not currently fall under the existing TOR of CCFA, CCFA should consider whether there is a need to amend or expand its TOR to encompass new responsibilities, particularly those related to emerging food technologies and the sustainability of food additives. If necessary, amendments to the TOR should be proposed to ensure that CCFA can continue to respond effectively to developments in the global food system and maintain its leadership role in food safety and trade.

3. Issuing a Circular Letter to Collect New Work Proposals and Preparation of Discussion Paper to be Considered in CCFA56

It is recommended that the Codex Secretariat issue a circular letter to all Codex Members and Observers to collect proposals for future work to be considered in the CCFA forward work plan. Based on the replies received, the Host Secretariat should prepare a discussion paper outlining the proposals for future work, proposed actions, and considerations for the next session of CCFA. This will enable informed decision-making and facilitate the development of a comprehensive and forward-looking work plans that addresses both current and emerging food additive challenges.