

# CODEx ALIMENTARIUS COMMISSION



Food and Agriculture  
Organization of the  
United Nations



World Health  
Organization

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Agenda Item 10

CX/CF 23/16/10-Add.1

March 2023

**ORIGINAL LANGUAGE ONLY**

## JOINT FAO/WHO FOOD STANDARDS PROGRAMME

### CODEx COMMITTEE ON CONTAMINANTS IN FOODS

16<sup>th</sup> Session

18-21 April 2023 (physical plenary meeting)

26 April 2023 (virtual report adoption)

### PREVENTION OR REDUCTION OF CIGUATERA POISONING

Comments in reply to CL 2023/21-CF

*submitted by*

*Argentina, Canada, Chile, Cuba, Iraq, Japan, Kenya, New Zealand, Peru, Philippines, Singapore,*

*United States of America (USA) and*

*International Commission for Uniform Methods of Sugar Analysis (ICUMSA)*

#### Background

1. This document compiles comments received through the Codex Online Commenting System (OCS) in response to CL 2023/21-CF<sup>1</sup> issued in February 2023. Under the OCS, comments are compiled in the following order: general comments are listed first, followed by comments on specific sections.

#### Explanatory notes on the Annex

2. The comments submitted through the OCS are hereby annexed and presented in tabulated format.

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<sup>1</sup> <https://www.fao.org/fao-who-codexalimentarius/resources/circular-letters/en/>  
<https://www.fao.org/fao-who-codexalimentarius/committees/committee/related-circular-letters/en/?committee=CCCF>

**Annex****GENERAL COMMENTS**

<b>COMMENT</b>	<b>MEMBER/ OBSERVER</b>
Argentina considera que existe una gran incertidumbre sobre el tema y no es posible realizar un Código de Prácticas. Consideramos que en este caso sería más propicio un documento con recomendaciones o una herramienta para toma de decisiones en función del riesgo, teniendo en cuenta las lagunas de conocimiento existentes.	<b>Argentina</b>
Canada has no objection to the proposed new work and no objection to the outline for a COP. Canada supports proposing new work on developing a code of practice for ciguatera poisoning.	<b>Canada</b>
Chile agradece la oportunidad de presentar observaciones sobre las recomendaciones para la prevención o la reducción de intoxicación ciguatera. Al respecto, y considerando los argumentos entregados en el documento CX/CF 23/16/10, Chile quisiera comentar lo siguiente: - Chile considera que, las recomendaciones expuestas en la propuesta de CDP referidas a incluir programas de vigilancia y seguimiento se hacen imposibles de implementar si no se aborda de manera previa el problema analítico que existe respecto de la determinación de estas toxinas a nivel de laboratorio, por lo anterior, Chile considera que sería apropiado presentar esta problemática a CCMAS .	<b>Chile</b>
Cuba agradece la oportunidad de responder a la carta circular CL 2023/21-CF sobre el documento de debate sobre la prevención y la reducción de la intoxicación ciguatera, lo consideramos muy bueno y de gran contenido técnico, por lo que en principio se apoya el documento.	<b>Cuba</b>
Agree.	<b>Iraq</b>
<p><u>General Comments</u></p> <p>Japan thanks United States for preparing the discussion paper on the prevention or reduction of ciguatera poisoning.</p> <p>Japan is of the view that preventing and reducing ciguatera poisoning is important for many countries. To prevent ciguatera poisoning, there are already international educational documents on Ciguatera developed by intergovernmental agencies such as FAO and/or UNESCO as described in paras 11-12 in CX/CF 23/16/10 e.g., Course: Monitoring and preventing ciguatera poisoning (fao.org); CIGUATERA - Harmful Algal Bloom Programme (ioc-unesco.org). We believe that Codex's work should avoid duplicating those existing guidance on risk management measures. Japan suggests clarifying differences in role and purpose between those existing documents and a Codex document to consider whether a new work is needed.</p> <p><u>Specific Comments</u></p> <p>Codex members and observers are invited to submit general and specific comments on the recommendations as described in paragraph 37 of CX/CF 23/16/10 namely:</p> <p><i>(i) Consider if new work should be proposed on a code of practice or if the EWG should revise the discussion paper for consideration by CCCF17 (i.e. whether the discussion paper provides sufficient data/information that supports the development of a CoP)</i></p> <p>Japan supports that the EWG should revise the discussion paper for consideration by CCCF17 in order to further consider the possibility of developing a COP or guidelines containing feasible practices recommended for implementation international level because the current discussion paper does not present any specific data or examples to demonstrate the effectiveness of the proposed topics.</p>	<b>Japan</b>

COMMENT	MEMBER/ OBSERVER
<p>Based on Japan's decades of experience on Ciguatera poisoning, we think that it will be difficult to develop internationally harmonized management measures for the prevention of ciguatera poisoning, as effective measures will vary by region and species of fish causing the poisoning.</p> <p>We are of the opinion that the priority at this time is to consider feasible control measures on a region-by-region or country-by-country basis, rather than on a Codex level, based on existing intergovernmental agencies documents for the prevention of ciguatera poisoning.</p> <p><i>(ii) Review the proposal for new work in Appendix I (i.e. in case the discussion paper provides a sound basis for the development of a CoP, provide comments and/or revisions to the project document to further improve the proposal)</i></p> <p>Japan is not strongly opposed to a new work but is not in favor of it at this time, because it is not certain that any of the topics proposed for inclusion in the COP have measures that have been proven to be feasible and effective at the international level.</p> <p>There are many knowledge gaps and challenges as described in the paragraph 30 in Appendix I, and the feasibility of possible topics for inclusion in a Code of Practice at the global level is questionable.</p> <p>The draft project document in Appendix II states that a code of practice or guidelines will be developed. If a new work is proposed, Japan would ask the Codex Secretariat to explain what the difference is between a code of practice and a guideline, and which is appropriate in this case, before starting the new work. If CCCF agrees to the new work, we will propose some modifications to the project document. See Track Changes to Appendix II for more information.</p> <p><i>(iii) Review the outline for the proposed COP in Appendix II (i.e. provide general comments on the format/structure and specific comments on risk management considerations that should be improved or include in the outline to guide further work on the CoP)</i></p> <p>If a new work is agreed, we suggest that new sections be added to the outline in Appendix III on the relationship to existing relevant documents of intergovernmental organizations and on the objectives, scope, definitions and target users of the Codex document.</p> <p>Japan believes that description on importance of traceability and labeling should be included in the "Recommended practices" according to the FAO/WHO expert meeting report.</p> <p><i>(iv) Establish an EWG to prepare a proposed COP for the prevention and reduction of ciguatera poisoning based on the outline provided in Appendix II for consideration by CCCF17 (i.e. whether there is support to establish an EWG to proceed with this work)</i></p> <p>Japan supports establishing an EWG to revise the discussion paper for consideration by CCCF17 in order to further consider the possibility of developing a COP or guidelines, as mentioned in the comments to the bullet (i).</p> <p><i>(v) Other comments as appropriate (i.e. any other comments not considered in points i-iv)</i></p> <p>Japan believes that CCCF should seek advice/information from CCFFP when developing a COP or guidelines.</p>	
<p>Kenya supports the new work proposed on the development of a CoP in the Prevention or reduction of ciguatera poisoning in appendix I. Kenya also supports the proposed outline of the CoP in Appendix II and the Establishment of an EWG to handle this work.</p>	Kenya
<p><i>New Zealand supports proposing new work to develop a code of practice to prevent or reduce ciguatera poisoning and have no comments or no objections to the proposed new work in Appendix I and the outline for the proposed COP in Appendix II.</i></p>	New Zealand

COMMENT	MEMBER/ OBSERVER
<p>El Perú desea agradecer a la Secretaría de la Comisión del Codex Alimentarius, Programa Conjunto FAO/OMS sobre Normas Alimentarias, respecto a la solicitud de observaciones sobre las recomendaciones para la prevención o la reducción de intoxicación ciguatera.</p> <p>Considerando que las ciguateras son un tipo de toxinas producidas por algas marinas dinoflageladas, nos gustaría que el GTE debería revisar el documento de debate para someterlo a la consideración del CCCF en su 17.ª reunión, con la finalidad de debatir si se ofrecen datos e información suficientes para sustentar la elaboración de un código de prácticas.</p>	Peru
<p>The Philippines' response is as follows:</p> <p>(i) Consider if new work should be proposed on a code of practice (COP) or if the EWG should revise the discussion paper for consideration by CCCF17.</p> <p>The Philippines agrees to proceed with the new work on the proposed COP for the prevention or reduction of ciguatera poisoning.</p> <p><u>Reason:</u> The Philippines is rich in marine resources that includes corals, reef fishes, and algae, making it more vulnerable to ciguatera poisoning. Considering a new work on the proposed COP will help the Philippines and other countries to ensure the safety and suitability of fish products for consumption.</p> <p>In case there is an agreement to proceed with new work on the COP, please consider the points below:</p> <p>(i) Review the proposal for new work in Appendix II.</p> <p>The Philippines supports the proposal for a new work (project document) without any further comment.</p> <p>(ii) Review the outline for the proposed COP in Appendix III.</p> <p>The Philippines concurs with proposed outline on the Code of Practice for the prevention or Reduction of Ciguatera Poisoning taking into account the propose minor revisions as follows:</p> <p>Recommended Practices Philippine Position/Comments</p> <p>2. Government-sponsored surveillance programs</p> <ul style="list-style-type: none"> <li>• Consider establishing or strengthening surveillance programs to monitor toxins in algae, sentinel fish species, and fish for consumption</li> <li>• Consider establishing or strengthening surveillance programs to monitor the algal cell density and toxins in fish for consumption as well as in economically important species. Monitoring of toxins in algae and other sentinel species could be optional to reduce the use of resources particularly in developing countries.</li> </ul> <p><u>Reason:</u></p> <p>1. It is important to monitor the concentration of ciguatoxin in fish as food to avoid poisoning.</p> <p>3. Analytical Methods</p> <ul style="list-style-type: none"> <li>• Because analytical technologies will continue to evolve, it is not appropriate to recommend any specific methods in the COP. Stakeholders are encouraged to contact their government officials for assistance or consult with international agencies such as IAEA on method development and sharing of technology. Because analytical technologies will continue to evolve, it is not appropriate to recommend any specific methods in the COP. Stakeholders are encouraged to contact their government officials for assistance or consult with international agencies such as IAEA and other scientific bodies on method development and sharing of technology. These include inter-laboratory testing method validations and development of reference standards.</li> </ul>	Philippines

COMMENT	MEMBER/ OBSERVER
<p><u>Reason:</u></p> <ol style="list-style-type: none"> <li>1. This is to ensure that the adopted or developed analytical method is suitable for its intended purpose.               <ol style="list-style-type: none"> <li>4. Harvesters and producers</li> </ol> </li> </ol> <ul style="list-style-type: none"> <li>• It is recommended that primary seafood processors who purchase fish directly from the fishermen obtain information about harvest locations to determine the potential for ciguateric fish based on knowledge of the regions where ciguatera occurs. Primarily seafood processors should avoid purchasing fish species associated with causing CP from established or emerging areas linked with CP.</li> <li>• It is recommended that primary seafood processors who purchase fish directly from the fishermen obtain information about harvest locations to determine the potential for ciguateric fish based on knowledge of the regions where ciguatera occurs. Primarily seafood processors should ensure that fish species associated with CP from established or emerging areas linked with CP should be tested first before purchase to reduce exposure to hazard.</li> </ul> <p><u>Reason:</u></p> <ol style="list-style-type: none"> <li>1. Ciguatoxin occurrence is observed to be site-specific and fish weight is not a good predictor of fish toxicity. (Montejo et al., 2020).               <ul style="list-style-type: none"> <li>• Government officials could determine or identify the fish species and toxin maximum level (ML) that could cause a health risk locally or regionally, by conducting their own research or by using information developed in similar regions, and relay this information to harvesters or producers.</li> <li>• Government officials could determine or identify the fish species and toxin maximum level (ML) that could cause a health risk locally or regionally, by carrying out risk assessment studies or by using information developed in similar regions and translate such information to country's regulation.</li> </ul> </li> </ol> <p>6. Consumer advice</p> <ul style="list-style-type: none"> <li>• Be alert for advisories in regions where fish that may contain CTX are harvested either commercially or recreationally. Advisories could contain information about fish species to or fish sizes to avoid, symptoms of CP, and directions on how to preserve meal remnants for testing. Government in collaboration with international organization/s to develop a system of reporting and advisories for sharing of information. Advisories could contain information about fish species (e.g. scientific name, fish size, etc.), symptoms of CP, and directions on how to preserve meal remnants for testing in fish samples that may contain CTX that are harvested either commercially or recreationally.</li> </ul> <p><u>Reason:</u></p> <ol style="list-style-type: none"> <li>1. Fish weight is not a good predictor of fish toxicity. This only means that bigger fish does not always test positive for CTX (Montejo et al., 2020). In addition, larger fish are not always more toxic than smaller fish (Gaboriau, et al., 2014)</li> </ol> <p>(iii) Establish an EWG to prepare a proposed COP for the prevention and reduction of ciguatera poisoning based on the outline provided in Appendix II for consideration by CCCF17.</p> <p>The Philippines supports the establishment of EWG to work on the proposed COP.</p> <p><u>Reference:</u></p> <ol style="list-style-type: none"> <li>1. Montejo UM, Tanyag BE, Perelonia KBS, Cambia FD, Oshiro N. 2020. Ciguatera in the Philippines: Examining Reef Fish Vectors and Its Causative Benthic Dinoflagellates in Visayan and Sibuyan Seas. The Phil J Fish. 27(1):19-29. <a href="https://doi.org/10.31398/tpjf/27.1.2019A0015">https://doi.org/10.31398/tpjf/27.1.2019A0015</a>.</li> </ol>	
<p>Singapore supports the proposed scope of the COP. Developing the COP is a pragmatic approach to controlling the incidences of ciguatera poisoning while the challenges of detecting ciguatoxins are being overcome.</p>	<p><b>Singapore</b></p>

COMMENT	MEMBER/ OBSERVER
<ul style="list-style-type: none"><li>• The United States chaired the EWG that prepared the discussion paper on the development of a COP or guidelines to prevent or reduce ciguatera poisoning.</li><li>• The United States thanks all member countries that contributed to work in the EWG.</li><li>• The United States supports new work on a COP for the prevention and reduction of ciguatera poisoning.</li></ul>	USA
Some formatting errors in all three documents.	ICUMSA

**SPECIFIC COMMENTS****APPENDIX I: DISCUSSION PAPER ON THE PREVENTION AND REDUCTION OF CIGUATERA POISONING**

COMMENT	MEMBER/ OBSERVER
This may be Appendix I according to entry 37 (ii) of the background section.	Canada
<p data-bbox="91 395 1247 422"><del>There is no known related Codex document</del> <a href="#">Code of Practice for Fish and Fishery Products (CXC 52-2003)</a>.</p> <p data-bbox="91 438 1951 499">The FAO has already provided needed expert scientific advice in the form of the <i>2018 FAO/WHO Report of the Expert Meeting on Ciguatera Poisoning</i>. <a href="#">Additional scientific advice may be required as the work progresses</a>.</p>	Japan

**APPENDIX II: PROJECT DOCUMENT - PROPOSAL FOR A NEW WORK ON A CODE OF PRACTICE FOR THE PREVENTION OR REDUCTION OF CIGUATERA POISONING****APPENDIX III: OULINE OF THE PROPOSED CODE OF PRACTICE FOR THE PREVENTION OR REDUCTION OF CIAGUATERA POISONING**

COMMENT	MEMBER/ OBSERVER
<p data-bbox="91 730 936 758">This may be Appendix II according to entry 37 (iii) of the background section.</p> <p data-bbox="91 774 293 801"><u>Consumer advice</u></p> <p data-bbox="91 817 1899 877">Be alert for advisories in regions where fish that may contain CTX are harvested either commercially or recreationally. Advisories could contain information about fish species <del>to</del> or fish sizes to avoid, symptoms of CP, and directions on how to preserve meal remnants for testing.</p>	Canada
<p data-bbox="91 904 786 932"><u>Government-sponsored surveillance and monitoring programs</u></p> <p data-bbox="91 948 1559 975"><i>Consider establishing or strengthening surveillance programs to monitor toxins in algae, sentinel fish species, and fish for consumption.</i></p> <p data-bbox="91 991 1890 1051">Consider establishing or strengthening surveillance programs to monitor the algal cell density and toxins in fish for consumption as well as in economically important species. Monitoring of toxins in algae and other sentinel species could be optional to reduce the use of resources particularly in developing contries.</p> <p data-bbox="91 1067 192 1094"><u>Reason:</u></p> <p data-bbox="91 1110 1122 1137">1. It is important to monitor the concentration of ciguatoxin in fish as food to avoid poisoning.</p> <p data-bbox="91 1153 315 1181"><u>Analytical methods</u></p> <p data-bbox="91 1197 1912 1257"><i>Because analytical technologies will continue to evolve, it is not appropriate to recommend any specific methods in a COP. Stakeholders are encouraged to contact their government officials for assistance or consult with international agencies such as IAEA on method development and sharing of technology.</i></p> <p data-bbox="91 1273 1951 1334">Because analytical technologies will continue to evolve, it is not appropriate to recommend any specific methods in the COP. Stakeholders are encouraged to contact their government officials for assistance or consult with international agencies such as IAEA and other scientific bodies on method development and sharing of technology. These include inter-laboratory testing method validations and development of reference standards.</p>	Philippines

COMMENT	MEMBER/ OBSERVER
<p><u>Reason:</u></p> <p>1. This is to ensure that the adopted or developed analytical method is suitable for its intended purpose.</p> <p><u>Harvesters and producers</u></p> <p><i>It is recommended that primary seafood processors who purchase fish directly from fishermen obtain information about harvest locations to determine the potential for ciguatoxic fish based on knowledge of the regions where ciguatera occurs. Primary seafood processors should avoid purchasing fish species associated with causing CP from established or emerging areas linked with CP.</i></p> <p>It is recommended that primary seafood processors who purchase fish directly from the fishermen obtain information about harvest locations to determine the potential for ciguateric fish based on knowledge of the regions where ciguatera occurs. Primarily seafood processors should ensure that fish species associated with CP from established or emerging areas linked with CP should be tested first before purchase to reduce exposure to hazard.</p> <p><u>Reason:</u></p> <p>1. Ciguatoxin occurrence is observed to be site-specific and fish weight is not a good predictor of fish toxicity. (Montejo et al., 2020).</p> <p><i>Government officials could determine or identify the fish species and toxin maximum level (ML) that could cause a health risk locally or regionally, by conducting their own research or by using information developed in similar regions, and relay this information to harvesters or producers.</i></p> <p>Government officials could determine or identify the fish species and toxin maximum level (ML) that could cause a health risk locally or regionally, by carrying out risk assessment studies or by using information developed in similar regions and translate such information to country's regulation.</p> <p><u>Consumer advice</u></p> <p><i>Be alert for advisories in regions where fish that may contain CTX are harvested either commercially or recreationally. Advisories could contain information about fish species to or fish sizes to avoid, symptoms of CP, and directions on how to preserve meal remnants for testing.</i></p> <p>Government in collaboration with international organization/s to develop a system of reporting and advisories for sharing of information.</p> <p>Advisories could contain information about fish species (e.g. scientific name, fish size, etc.), symptoms of CP, and directions on how to preserve meal remnants for testing in fish samples that may contain CTX that are harvested either commercially or recreationally.</p> <p><u>Reason:</u></p> <p>1. Fish weight is not a good predictor of fish toxicity. This only means that bigger fish does not always test positive for CTX (Montejo et al., 2020). In addition, larger fish are not always more toxic than smaller fish (Gaboriau, et al., 2014)</p>	