



CALL FOR EXPERTS ON CIGUATERA FISH POISONING

Deadline: 1 April 2018

Background

Ciguatera fish poisoning (CFP) is one of the most common food-borne illnesses related to seafood consumption. While CFP has been known for centuries, its true incidence remains unclear; few years ago, it was estimated that 10 000–50 000 people per year suffer from this illness (Lehane, L. 2000)¹.

CFP is caused by the consumption of herbivorous fish that have become toxic from feeding on toxic benthic dinoflagellates (*Gambierdicus toxicus*) or from carnivorous fish that have consumed toxic herbivorous fish that have fed on dinoflagellates. According to a report published by FAO in 2004², more than 400 species of fish are known to be vectors of ciguatera, and *Gambierdicus toxicus* is found primarily in the tropics in association with macro algae usually attached to dead corals. The same report concluded that the available data on ciguatoxins (CTXs) were not suitable for risk assessment.

In a further FAO publication from 2014³, Ciguatera dinoflagellates were predicted to become one of the increasing food safety threats due to climate change. In 2015, FAO organized an interagency meeting⁴ to discuss ciguatera fish poisoning as an increasing food safety threat. During the meeting a plan of action was defined and the need of international level guidance was identified.

At the 32nd Session of the Codex Committee on Fisheries and Fishery Products (2016), CFP was raised by the Pacific Nations as an issue that increasingly affects the tropical and subtropical regions of the Pacific Ocean, Indian Ocean, and Caribbean Sea, between the latitudes 35°N and 35°S. Indeed, it was noted that due to climate change the frequency of storms and hurricanes increases as well as the sea surface temperature (SST), which impacts on the distribution and proliferation of CTXs and makes the occurrence of CFP less predictable.

In addition to climate change, globalization of trade might also contribute to the spread of CTX. As such, further guidance might be needed for those countries that did not consider ciguatoxins in their risk management programs in the past.

-

¹ Lehane, L. 2000. Ciguatera update. *Med. J. Aust.* 172(4): 176-179

² FAO Food and Nutrition Paper 80 "Marine Biotoxins" (http://www.fao.org/3/a-y5486e.pdf), providing basic information about ciguatera, including: chemical structures and properties of ciguatoxins, methods of analysis, source, habitat and distribution, occurrence and accumulation in seafood, toxicity, prevention of intoxication, a summary of cases and outbreaks of Ciguatera Fish Poisoning (CFP) and regulations.

³ FAO Fisheries and Aquaculture Technical Paper 574, "Assessment and management of seafood safety and quality" (http://www.fao.org/3/a-i3215e.pdf)

⁴ Together with the World Health Organization (WHO), UNESCO's Intergovernmental Oceanographic Panel on Harmful Algal Blooms (UNESCO-IOC), and the International Atomic Energy Agency (IAEA) (http://www.fao.org/blogs/blue-growth-blog/managing-ciguatera-fish-poisoning-requires-broad-partnerships/en/)

CFP was raised at the Codex Committee on Contaminants in Food at its 11th Session (CCCF11¹). The Committee agreed to request scientific advice from FAO/WHO to allow the development of appropriate risk management options. In particular, the requested scientific advice to FAO/WHO entails:

- full evaluation of known CTXs (toxicological assessment and exposure assessment), including geographic distribution and rate of illness; congeners; methods of detection; and
- based on this, guidance for the development of risk management options.

Objective of this call

The objective of this call is to identify qualified scientists willing to serve as experts in the forthcoming expert consultations on CFP that will take place in Rome on 19-23 November 2018 to develop scientific advice for guiding the elaboration of appropriate Codex texts and to advise Member States.

According to the procedures described in the FAO/WHO framework for the provision of scientific advice on food safety and nutrition², the FAO/WHO Secretariat establishes a list of qualified scientists, and then select relevant experts from this list according to the process outlined below. These experts will assist the Secretariat with preparatory work and/or participate in the meeting.

Basic and essential qualifications of experts

FAO and WHO place great value on the technical qualification and independence of the participating experts as well as to the transparency of its selection process.

Assessing the available scientific data and providing scientific advice on CFP and the related risks is a multidisciplinary exercise. Experts are expected to have a high level of expertise and experience within their scientific area relevant to CFP, assessment of the risk and potential management options as demonstrated in the peer-reviewed literature or contribution to relevant national or international meetings and/or reports. The mutual respect and understanding between scientists from various disciplines and nationalities is a key element of success in reaching a consensus based on the best available science. An understanding of the overall food safety risk analysis process would be of advantage.

Qualified experts will be selected from the responses to this call for experts based on their experience, skills and competencies. Selected experts will be notified in time and are then requested to review the literature and prepare background papers in advance of the meeting. Meetings are conducted in English and participation in the meeting is required for the whole duration, usually five days. The cost of participation is covered by FAO/WHO, however, honoraria are not provided.

Successful candidates should meet most or all of the following qualifications:

- a. Advanced university degree(s) in toxicology, food science, epidemiology, public health, medicine, marine biology, or other topic related fields;
- b. Proven academic track record on the topics covered in this call or proven experience in delivering scientific assessments on CFP, food safety, and/or risk assessments at national, regional or international level;

CCCF11 report available at: \(^1\) http://www.fao.org/fao-who-codexalimentarius/sh-proxy/en/?lnk=1&url=https%253A%252F%252Fworkspace.fao.org%252Fsites%252Fcodex%252FMeetings%252FCX-735-11%252FREPORT%252FREP17 CFe.pdf

² Available at: http://www.fao.org/3/a-a1296e.pdf

- c. At least 5 years of experience in food safety/risk analysis related to CTXs or other marine biotoxins;
- d. Ability to converse in and write documents in English;
- e. Familiarity with MS-office productivity suite; and
- f. Leadership or invited participation in national or international scientific bodies, committees, etc. that are pertinent to the above disciplines and described tasks.

Criteria and process for selection of experts

Expressions of interest will be reviewed by a panel of three or more individuals including at least one independent, internationally recognized expert appointed by FAO/WHO. The panel will review the applications, and from the list of qualified scientists, FAO and WHO will select experts, based on the requirements described above, as well as taking geographic and gender criteria into account.

Appointment of experts

Experts will be invited in their personal capacity on the basis of their expert knowledge and they will not represent any institution or employer. The views of the independent expert would not necessarily be reflective of any views and positions of his or her employer. All experts will be required to complete a Declaration of Interest form before participation in the expert meeting can be confirmed.

Application

Interested applicants should submit their *curriculum vitae* including a description of their education, work experience, two personal references that have knowledge of their professional qualifications and a list of peer reviewed publications relevant to the topics above to the addresses listed below. Please do not include reprints in your submission unless specifically requested at a later date.

Correspondence

Please submit expressions of interest to:

Mrs Esther Garrido Gamarro

Fisheries and Aquaculture Department Food and Agriculture Organization of the United Nations Viale delle Terme di Caracalla 00153 Rome, Italy

Telephone: +39 06 570 56712

Email: Esther.GarridoGamarro@fao.org

And

Dr Markus Lipp

Food Safety and Quality Unit Food and Agriculture Organization of the United Nations Viale delle Terme di Caracalla 00153 Rome, Italy

Telephone: +39 06 570 53283 Email: Markus.Lipp@fao.org And

Dr Angelika Tritscher

Department of Food Safety and Zoonoses World Health Organization 20, Avenue Appia 1211 Geneva 27 Switzerland

Telephone: +41 22 791 3569 Email: Tritschera@who.int