



Food and Agriculture Organization of the United Nations

CORRIGENDUM

Reference the FAO call made below, the Phase II application deadline has been extended to **15 June 2022** to fill the gaps of the required expertise. Please see below the document carefully to review the deadline.

Scientific advice on cell-based food products and food safety considerations Call for experts

Phase I application deadline – 30 April 2022

Phase II application deadline – 15 June 2022

Background

In 1932, Winston Churchill stated: “We shall escape the absurdity of growing a whole chicken in order to eat the breast or wing, by growing these parts separately under a suitable medium” (Churchill, 1932). After decades of research and development, the technology has now matured, and Churchill’s idea has become a reality. The production can be done via *in vitro* cultivation of animal cells and then processed into products whose composition can be comparable to conventional animal products without needing the whole animal (Post, 2014; Kadim *et al.*, 2015).

Since the initial studies in the early 2000s, cell-based food production methodologies have been well characterized, meaning they are now ready to move from laboratories to production facilities. In 2013, the first beef burger produced through this technology was presented to the world (Post, 2013). In December 2020, the first cell-based chicken nuggets were approved in Singapore. As of November 2021, there are more than 75 start-ups developing various cell-based products around the world (Byrne, 2021). This commercial landscape is fast expanding with many types of products and commodities such as various types of meat, poultry, fish, aquatic products, dairy and eggs in the pipeline for future commercialization.

One of the most pressing questions consumers raise is safety of such products. At the same time, there are several other legitimate issues that are important to consider, including ethical issues, consumer preference/acceptance, production cost, prices of the products, environmental considerations, regulatory requirements such as approval mechanisms and labelling rules and so forth. Given that the process involves relatively new technologies, techniques and/or production steps, it is likely that most countries consider implementing a regulatory process that addresses all the relevant issues before such products become available in the market.

Terminology and definitions

Various terms are currently in use, as yet there is no internationally harmonized terminology to indicate this type of food product or the production process (Ong, Choudhury and Naing, 2020). For example, some people call meat analogues “cell-based”, “cultured”, “cell-based” or “cultivated” meat. Product marketers may call it “animal-free”, “clean” or “slaughter-free” meat. Some might identify the whole technology as “cellular agriculture” or “cell-culturing”. For the purpose of the expert consultation, and without setting a precedence, the term “cell-based” is used, as in cell-based food products and cell-based food production.

Expert consultation and its scope

In order for the Food and Agriculture Organization of the United Nations (FAO) to assist its Members by providing sound scientific advice for informed decision-making, a 3-day expert consultation will be held in Rome, Italy or Singapore in the last quarter of 2022, if the global situations allow it. Otherwise, a series of virtual/hybrid meetings will take place to cover the necessary agenda items. As it is a multidisciplinary topic, a wide variety of expertise will be considered to form the expert group. However, as the primary target audience of the end product is national food safety competent authorities, the scope of the consultation is strictly technical and it prioritizes food safety issues.

Desired outcome

Documented expert consultation results with the fact-based technical information and good practices will enable FAO Members, particularly low- and middle-income countries (LMICs), to be equipped with technical knowledge and preparedness on food safety aspects of cell-based food products.

Partners and collaborators

FAO liaises with various technical partner agencies for this initiative. Such partners include the Organisation for Economic Co-operation and Development (OECD), the World Organisation for Animal Health (OIE) and the World Health Organization (WHO) as well as international bodies such as the Codex Alimentarius Commission. FAO also consults various regulatory agencies and academic institutions worldwide for voluntary technical contributions.

Objectives

The primary objective of the expert consultation is to develop a technical document with up-to-date technical knowledge on the multidisciplinary topic of cell-based food production, with a focus on the food safety aspects, through the process of expert elicitation. Specific objectives include 1) to concisely summarize the relevant technical matters for the national food safety competent authorities, particularly those in LMICs, to consider their potentially required actions; 2) to exchange the information on technical knowledge and good practices among competent authorities in various regulatory frameworks to learn from each other; and 3) to identify the needs for global actions and make expert recommendations for possible follow-up actions for FAO. This enables FAO to coordinate the global discussions and action planning with the partner agencies and stakeholders at the global level.

Call for experts

FAO invites relevant experts to apply for the call for experts on the topic of cell-based food products and food safety considerations. All applications should meet the following general criteria:

- Advanced University/College degree in cellular/molecular biology, biotechnology, microbiology, food technology, food science, food safety, agricultural science, veterinary medicine, epidemiology, public health, or related fields of cell-based food,
- Experience in researching/developing cell-based food products, scientifically researching food safety issues on cell-based food products/production, or being involved in regulatory reviews of cell-based food products or similar food types existing in the country,
- At least three years, preferably more than five years, of experience in relevant fields,
- Scientific publications in peer-reviewed journals, in particular publications relevant to this call within the last 10 years,
- Good knowledge of the English language, both written and oral, and
- Evidence of leadership or invited participation in national or international scientific bodies, committees, and other expert advisory bodies pertinent to the scope of this work.

Some examples for the desired profiles of the experts

- Regulatory experts in national competent authorities tasked to manage food safety aspects of new/novel food, food from new sources, or alternate proteins.
- Academic researchers conducting original research or literature reviews on the topic of cell-based food products in both natural science and social science.
- Experts who have conducted substantial literature syntheses on the topic of cell-based foods with global / regional national data.

Resource people

Experts in stakeholder groups (non-government organizations, industry associations and private sector) are also welcomed to apply for the call. As discussion of the topic requires specific understanding of the current state of the art in application of the related technology, the first-hand information from industry experts is valuable. FAO plans to form a group of such resource people to advise the expert group during the expert meeting. Resource people will be fully acknowledged and participate in the expert consultation in full, except for the session to develop recommendations.

Application submission

Interested applicants should complete the online application at <https://forms.office.com/r/YHvsCJBWQn>. Before clicking the “submit” button on the online application form, applicants will be asked to attach their CVs in Word or PDF. The CV should be written in English and include a description of education, relevant work experience, evidence of national or international expertise on the topic, including a list of peer-reviewed publications relevant to the factors indicated above (please do not include reprints in your submission unless specifically requested at a later date).

Application deadlines

Applications will be reviewed in two phases. The applications sent by 23.59 hrs on **30 April 2022** in the applicants’ time zones will be reviewed in the Phase I to select up to twenty-five (25) experts and resource people. After the Phase I, a rapid gap analysis of required expertise will be conducted by FAO. All the applications sent by 23.59 hrs on **15 June 2022** in the applicants’ time zones will be reviewed in Phase II to select up to 10 experts and resource people. All the selected experts in both Phase I and II will be contacted at the same time in June 2022.

Selection of experts and resource people

The selection panel, consisting of three or more individuals appointed by FAO, will review the applicants' curricula vitae (CV) based on the general criteria listed above. In selecting experts, FAO will consider, in addition to scientific and technical excellence, diversity and complementarities of scientific backgrounds and representation from geographic regions, including low- and middle-income countries, as well as gender. Selected experts will be notified and invited to participate in the expert consultation which is planned in November 2022. Selected experts may be asked to assist in the preparation of background papers and report drafts (in English). Unsuccessful candidates are not routinely notified.

Appointment of experts

An appointed expert will not represent the government of country of which they are a citizen, nor the institution or group with which he or she is associated. The selected individuals will attend the meeting in their personal capacity as scientific and technical experts with responsibility for providing independent advice to FAO. The experts designated will not receive any remuneration, however, where a physical expert meeting is held, travel costs and a daily subsistence allowance will be covered by FAO.

Before participating in any related activity, all the selected experts will be required to declare any potential interests associated with the topic of the meeting. Experts will be asked to indicate, in writing, all interests (financial and intellectual) on their part or that of their spouse that may affect, or be perceived to affect, their scientific independence as experts, including one or more of the following conditions: employment (past or present) by any commercial enterprise or private or civil sector association; receipt of research or other study grants from such enterprises or associations; shareholdings in commercial enterprises active in fields related to food safety. Identification of an interest does not necessarily indicate a conflict nor automatically exclude an individual from participation. For example, as an expert, it is expected that many, if not all, will be employed in some capacity related to the subject matter. These declarations must be completed and evaluated before a formal invitation will be issued. Declaration documents will be retained by the secretariat and a summary of declarations will be included in the report of the work. In addition, a confidentiality undertaking must also be completed prior to appointment to ensure proper handling of dossiers and proprietary information.

Contact

Any questions regarding the call should be sent to Masami Takeuchi (pronouns: she, her, hers) at Masami.Takeuchi@fao.org, Food Safety Officer, Food Systems and Food Safety Division, the Food and Agriculture Organization of the United Nations.

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