



**Food and Agriculture
Organization of
the United Nations**



**World Health
Organization**

**JOINT FAO/WHO ACTIVITIES ON RISK ASSESSMENT OF MICROBIOLOGICAL
HAZARDS IN FOODS**

**CALL FOR DATA AND EXPERTS ON MICROBIOLOGICAL HAZARD ASSOCIATED
WITH LOW MOISTURE FOODS**

Deadline: 31 March 2013

Introduction

Low moisture foods have historically been considered to present a minimal risk of causing illness, because they do not support the growth of pathogens. However, over the last few decades, a number of outbreaks of salmonellosis in a number of different countries have been associated with the consumption of ready-to-eat low moisture food products, including chocolate, raw almonds, breakfast cereals, dry spices and seasonings, paprika-seasoned potato chips, infant cereals, peanut butter, sesame, desiccated coconut and children's snacks made of puffed rice and corn with a vegetable seasoning. In many cases the number of *Salmonella* consumed that resulted in illness was low. In addition, illnesses due to *Escherichia coli* O157:H7 have also been attributed to low moisture foods such as nuts. These outbreaks underscore the need to ensure appropriate hygienic practices in the production of low moisture foods.

In November 2012, the 44th Session of the Codex Committee on Food Hygiene (CCFH) agreed to develop a Draft Code of Hygienic practice for Low moisture Foods which will apply to the control of microbiological hazards in foods having a water activity of 0.85 or below that are exposed to the processing environment following a microbial inactivation step, products that are not subjected to an inactivation step, or products in which low moisture ingredients that may be contaminated with pathogens such as *Salmonella* are added after an inactivation step. To facilitate this work, the Committee requested that FAO and WHO to undertake work to provide the Committee with scientific advice on;

- The low moisture foods that should be considered as the highest priorities for the Committee and the associated microbiological hazards. The ranking process should include, and not be limited to, dried fruits and vegetables, peanut butter, cereals, dry protein products (e.g. dried dairy products), confections (e.g. cocoa and chocolate), snacks (e.g. spiced chips, tree nuts, desiccated coconut, seeds for consumption, spices and dried aromatic herbs).
- Information relevant to the risk management of the microbiological hazards associated with the identified range of low moisture foods, with particular attention to the role of agricultural and handling/manufacturing practices in the introduction and control of hazards and the identification of the critical control points for mitigation of the risks associated with low moisture foods.

FAO and WHO want to ensure that all available and relevant information and data are collected, and are issuing an international call for data to raise awareness about data needs and invite all interested parties to provide both organizations with any relevant information/data, particularly that which may not be readily available in the public domain.

CALL FOR DATA

List of data and information requirements

Data and information on the following aspects are requested:

1. Details of the low moisture foods most commonly consumed and which should be considered in any ranking process.
2. Epidemiological data with foodborne diseases linked to low moisture foods:
 - a. the frequency of outbreaks or sporadic cases of illness linked to low moisture foods;
 - b. the details of past outbreaks or sporadic cases of illness linked to low moisture foods;
 - (1) Whether the outbreak / cases were confirmed or suspected and how this was determined (e.g. through laboratory confirmation, identification of risk factor by epidemiological investigation etc.)
 - (2) Number of cases, hospitalization and death
 - (3) Specific health status or risk factors of affected individuals, if any
 - (4) Causative foodborne pathogens
 - (5) Attributed low moisture food products
 - (6) Level of contamination
 - (7) Any other related information

Note: Please indicate whether there is an operational foodborne disease surveillance system in place which has been successful in identifying cases of foodborne illness related to low moisture foods? If not, is there any system in place that would facilitate the detection of foodborne disease linked to low moisture foods?

3. Information on microbial contamination of low moisture foods
 - a. Information of the types of foodborne pathogens associated with these commodities generally and specific low moisture foods
 - b. Information on the prevalence and levels of contamination and the point on the food chain that such data represent
4. Information on the control and management of foodborne hazards linked to low moisture foods including the role of various agricultural and manufacturing practices in enhancing or mitigating these hazards – based on investigations of the above mentioned outbreaks and/or research, please provide the following information on low moisture foods where available:
 - a. Details of the products (origin of ingredients, characteristics such as pH and water activity etc.) and the processing and manufacturing steps they go through
 - b. Potential sources and routes of introduction of microbiological hazards of concern
 - c. Specific prevention and control measures taken throughout the food chain (primary production, processing, packing, storage and retail)
 - d. Information on performance of microbial reduction treatments on different hazard/pathogen levels
 - e. Legislation and regulations
 - f. Any other related information

5. Information on monitoring and inspection systems in place:
 - a. Target low moisture foods;
 - b. Target foodborne pathogens;
 - c. Points of monitoring and inspection in the food chain;
 - d. Frequency of monitoring/inspection;
 - e. Sampling plan and methodology used;
 - f. Commodities in which target pathogens were detected and range of levels detected (if the data were not provided at section 3.b);
 - g. Level of the contamination for regulatory action;
 - h. Rejection rate of the commodity;
 - i. Any other related information
6. Risk assessment and risk profiles: Details and references for risk assessment or risk profile work addressing foodborne diseases linked to low moisture foods
7. Contact person: Please provide name, title and full contact details of the contact person for follow-up and further details if needed.

Request for relevant information

FAO and WHO are requesting governments, interested organizations, health care providers, academia, the food industry, consumer groups, laboratories and individuals to submit any available data on the specific areas indicated above. These data may be published or unpublished. Reference should be made to related published studies, where applicable.

Confidential and/or unpublished data

FAO and WHO recognize that some of the information and relevant data which is now required may be unpublished or of a confidential nature. With regard to unpublished information and data, this remains the property of the author for subsequent publication by the owner as original material. Unpublished confidential studies that are submitted will be safeguarded in so far as it is possible to do so without compromising the work of FAO and WHO. Specific issues relating to confidentiality should be discussed directly between the information and data owners and FAO/WHO. For these and other issues please contact FAO and WHO at the contacts provided.

Deadline

Please submit any relevant information (electronic and/or hard copies - electronic submissions are preferred, either via e-mail (if not too large) or on CD ROM), in any official United Nations language (English, French, Spanish, Arabic, Chinese, Russian), and with title and short description of the content in English along with the list of data and information requirements if possible, to the addresses below, by **31 March 2013**.

Data submissions in response to the call for data should be sent to:

Nutrition and Consumer Protection Division
Attention: **Dr Masami Takeuchi**
Food and Agriculture Organization of the
United Nations
Viale delle Terme di Caracalla
00100 Rome, Italy
Telephone: + 39 06 5705 3076

and Department of Food Safety and Zoonoses
Attention: **Dr Mina Kojima**
World Health Organization
20, avenue Appia
1211 Geneva 27
Switzerland
Telephone: +41 22 791 2920

Facsimile: + 39 06 5705 4593
Email: Masami.Takeuchi@fao.org

Facsimile: +41 22 791 4807
Email: foodsafety@who.int

CALL FOR EXPERTS

In addition, FAO and WHO are currently in the process of identifying experts to participate in future work of FAO and WHO in the area of microbiological hazards associated with low moisture foods. All applicants should meet the following general criteria:

- Advanced University/College degree in microbiology, food technology, food science, epidemiology, public health or related fields
- Experience in food safety/risk analysis related to microbiological hazards in foods
- At least five years experience in relevant fields
- Scientific publications in peer-reviewed journals, in particular, relevant publications within the most recent ten years
- Good knowledge of the English language, both written and oral
- Leadership or invited participation in national or international scientific bodies, committees, and other expert advisory bodies pertinent to the scope of this work

In addition, specific experience/knowledge in one or more of the below areas if applicable:

- Production control of low moisture foods
- Establishment and performance analysis of sampling plans

Selection of experts

FAO and WHO place great value on the technical quality and independence of the participating experts as well as on the transparency of its selection process. Both organizations have developed well-defined procedures for selecting experts that promote the excellence and independence of opinions provided.

Applicants' curriculum vitae will be reviewed on the basis of the criteria listed above by a selection panel consisting of three or more individuals including at least two independent, internationally recognized external experts appointed by FAO or WHO. The highly qualified individuals selected from the applicants will be listed in an expert roster that will be used by FAO and WHO to invite experts to the future work in this area.

In selecting experts FAO and WHO will consider, in addition to scientific and technical excellence, diversity and complementarities of scientific backgrounds, and balanced representation from geographic regions, including developing and developed countries, as well as gender. Selected experts may be required to assist in the preparation of background papers.

Appointment of experts

The experts will be invited to contribute only in their individual scientific capacity. An expert will not represent the government of country of which he or she is a citizen, or the institution with which he or she is associated. The experts designated will not receive any remuneration, however, where a physical expert meeting is held, travel costs, subsistence allowance and other related expenses will be the exclusive responsibility of FAO and WHO.

Applications

Interested applicants should submit their curriculum vitae (CV) to the FAO Food Safety Expert Roster at <http://www.fao.org/food/expert-roster/> (please see the Annex 1 for the detailed instruction). Your CV should include a description of education and work experience and 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). Applicants must have a good working knowledge of English as correspondence and any future meeting will be in English only.

Before participating in any related activity, the selected experts will be required to declare any potential interests associated with the subjects and substances that will be evaluated through completion of a standard form developed by FAO or WHO. They will be asked to indicate in writing any interest (financial and intellectual) on their part or that of their spouse that may 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; a recipient of research or other study grants from such enterprises or associations; or shareholdings in commercial enterprises active in fields related to food safety. These declarations will be evaluated and retained by the Joint Secretariat. In addition, a confidentiality undertaking is also to be signed to ensure proper handling of dossiers and proprietary information.

Deadline

Applications should be sent to FAO and WHO through the online system at <http://www.fao.org/food/expert-roster/> (please see the Annex 1 for the detailed instruction) by **31st March 2013**. Applications received after that date will be evaluated only if additional expertise is required and the evaluation and selection will follow the same procedure as described.

Annex 1: Instruction for interested applicants for the call for experts

Step 1: Prepare your CV

Please prepare your CV file preferably in the PDF format. Your CV should include a description of your education, work experience and a list of peer reviewed publications relevant to the topic (please do not include reprints in your submission unless specifically requested at a later date). Please make your CV file as one file, and consider naming it as *yourlastname.pdf*.

Step 2: Registration and application submission through the online system

Please follow the steps below:

1. access FAO food safety expert roster at: <http://www.fao.org/food/expert-roster>
2. click “registration” in the box of the right column
3. please fill out the form and click “Register” then you will be able to create your username and password
4. on the next screen, click “click here to login” (if this does not appear, please go back to #1 then you will see the login box)
5. type in your username and password, then click “LOGIN”, then you will be directed to a page that says “thank you for registering with us”
6. click “edit your profile” on the page
7. you will see a pop-up message to choose if you would like your CV to be considered by other similar activities of other UN agencies. If you would like it, please click “I agree”, and if you only would like to submit your CV to FAO/WHO, please click “I disagree”
8. You have now 4 tabs to complete (from the left, 1: personal and contact information, 2: area of expertise, 3: upload documents and 4: comments). Please fill out the first tab with (*) indicates the mandatory fields. Once finished all the items under the first tab, **please make sure to click “save”** on the bottom left side, then click the second tab: area of expertise, on the top.
9. Under the second tab, area of expertise, **please make sure you select “JEMRA”** for the question “Which category of assignment are you applying for?” For this question and any other questions, if you would like to select multiple options, please hold the Ctrl key (PC) or command key (Mac) to select them.
10. Once you finish answering all the items under the second tab, **please make sure to click “save”** on the bottom left side, then click the third tab: upload documents, on the top.
11. Click “Browse...” (PC) or “choose file...” (Mac) to upload your CV prepared at Step 1. Once you finish choosing the file, **please make sure to click “save”** on the bottom left side, then click the fourth tab: comments, on the top.
12. Under the fourth tab: comments, it is important to indicate that your application submission is a response to the current call. **Please write that you are responding to the “call for experts on microbiological hazard associated low moisture foods”**. Also please write your specific areas of expertise relevant to this call for experts in the comment box.
13. Once you finish writing your comment, **please make sure to click the red button “Submit application”**. Then your application process is completed.
14. Please note that with your username and password, you can modify/withdraw your application anytime. If you have any questions about the system, please contact food-quality@fao.org.