# INTERNATIONAL JOURNAL OF FOOD MICROBIOLOGY

*An official journal of the International Committee on Food Microbiology and Hygiene (ICFMH) of the IUMS*

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## DESCRIPTION

The *International Journal of Food Microbiology* publishes papers dealing with all aspects of food microbiology. Articles must present information that is novel, has high impact and interest, and is of high scientific quality. They should provide scientific or technological advancement in the specific field of interest of the journal and enhance its strong international reputation. Preliminary or confirmatory results as well as contributions not strictly related to *food microbiology* will not be considered for publication.

Full-length original research papers, review articles and book reviews in the fields of *bacteriology, mycology, virology, parasitology*, and *immunology* as they relate to the production, processing, service and consumption of foods and beverages are welcomed. Within this scope, topics of specific interest include: (1) incidence and types of food and beverage *microorganisms*, microbial interactions, *microbial ecology* of foods, intrinsic and extrinsic factors affecting microbial survival and growth in foods, and *food spoilage*; (2) microorganisms involved in food and beverage fermentations (including probiotics and starter cultures); (3) *food safety*, indices of the sanitary quality of foods, microbiological *quality assurance*, biocontrol, microbiological aspects of *food preservation* and novel preservation techniques, predictive microbiology and *microbial risk assessment*; (4) foodborne microorganisms of *public health* significance, and microbiological aspects of foodborne diseases of microbial origin; (5) methods for microbiological and immunological examinations of foods, as well as rapid, automated and molecular methods when validated in food systems; and (6) the biochemistry, physiology and molecular biology of microorganisms as they directly relate to *food spoilage, foodborne disease* and *food fermentations*.

Papers that do not have a direct food or beverage connection will not be considered for publication. The following examples provide some guide as to the type of papers that will not be admitted to the formal review process (for a more extensive list please refer to the journal's *Guide for Authors*:

- Studies in animal models that determine the responses of probiotic microorganisms in the gastrointestinal tract;
- Fundamental physiology and gene expression studies of food/ beverage microorganisms, unless they directly relate to the food/ beverage ecosystem;
- The isolation and characterization of antimicrobial substances such as essential oils, bacteriocins etc, unless their efficacy is tested and validated in the food/beverage ecosystem;
- Development of new methods for the analysis of microorganisms, unless the method is tested and validated in the food/beverage ecosystem.

This journal also publishes special issues of selected, peer-reviewed papers from suitable meetings, workshops, conferences, etc, related to the field of food microbiology.
AUDIENCE

Industrial and food Microbiologists, Bacteriologists, Immunologists, Mycologists, Parasitologists, Virologists, Food Hygienists.

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Donglai (Donna) Zhang, Shanghai Academy of Agricultural Sciences, Shanghai, China
INTRODUCTION

Types of paper

- Full-length Research Articles are complete reports of original, scientifically sound research. They must contribute new knowledge and be organized as described in this Guide. Manuscripts should not exceed 8000 words. Please follow carefully the organization of the sections described in "Preparation of text files" (see below).
- Reviews are papers which provide an analysis of a scientific or applied field, which include all important findings and bring together reports from a number of sources. Manuscripts should not exceed 12,000 words (excluding references). Review articles may be invited by the Editor or the Editorial Board. Alternatively, potential authors considering the preparation of a Review article should contact the Editor to suggest the topic and its scope, providing an outline in the form of major headings and a summary statement. In any case, such articles are subject to the normal processes of peer review and revision.

Subjects not considered for publication

- Development of methods if not validated in situ. To be suitable for publication in IJFM, new methods for the detection and/or quantification of target microorganisms must be validated in artificially and naturally contaminated foods. Such papers focusing on method development without application in the food matrix should be submitted to journals dealing with microbiological methods or applied microbiology.
- Natural and safe antimicrobial substances: since an extended literature is available on this subject, IJFM publishes only relevant and innovative papers. More specifically:
  - in the case of essential oils, spices and chemical compounds: the antimicrobial activity should be tested in real food systems to validate their efficacy, testing in vitro only would not be sufficient for publication in IJFM. Moreover a detailed chemical analysis of the natural extract should be presented with indication of which compounds are exerting the antimicrobial activity;
  - for bacteriocins, surveys of bacteriocin-producing strains in food products would not be considered unless the genes responsible for production were genetically characterized to show originality of such genes. IJFM gives priority to papers describing new bacteriocins (as determined by genetic approaches, N-terminal sequencing or results on antimicrobial spectrum and mechanisms) and application of bacteriocinogenic strains in situ, other than surveys of bacteriocin-producing strains in food products.
- Surveys focusing on the detection and quantification of toxins and microbial metabolites (mycotoxins, bacterial toxins, biogenic amines) and papers presenting new methods for detection and quantification of toxins and microbial metabolites will not be published in IJFM, unless they do contain correlated microbiological data of food safety significance. Papers presenting analytical data only should be sent to toxicology or food control journals.
- Gut microbiology and probiotic-targeted papers will have to present relevant direct links to food microbiology/safety. Animal models or studies in which the host is the main target of investigation should be submitted to appropriate journals and not to IJFM.
- Microbiological aspects of the production of ingredients should be submitted to suitable biotechnology journals. However, papers that consider the use of microorganisms to enhance the level of specific vitamins, amino acids, flavours, colours, polysaccharides etc in foods/beverages will be considered by IJFM.
- Papers where the microbiology is only focused on primary production, without a clear connection to quality and safety of foods, should be sent to journals related to primary production.
- Microbiology specifically related to human health without a clear focus on its relation to foods/beverages should be submitted to medical journals or similar.
- Repetition of studies conducted in other countries and locations, e.g. work on patterns of antibiotic resistance, prevalence of specific pathogens etc., will not be considered unless new scientific information has been achieved and clearly documented in the manuscript.

Furthermore:

- the word "probiotic" should only be used for organisms where real health effects are shown;
- "prediction and validation" should only be used if prediction and validation are really carried out with new independent data;
- for papers on modelling, parameter values should always be presented also with a measure of their confidence (confidence interval, standard error).
the number of significant digits should be in relation to the accuracy of the data measured. It should be noted that significant number are NOT digits after the decimal point. Both 34 and 0.00025 have two significant figures and 34.0 and 0.000252 have three significant figures. Figures like 234.573 generally have largely overdone accuracy. Log numbers of microbial concentrations generally have only one digit after the decimal point.

Lastly, it is responsibility of the authors to pay attention to grammar and spelling.

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DIVAPRA, Faculty of Agriculture, University of Turin
Via Leonardo da Vinci 44
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Italy
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A peer review system involving two or three reviewers is used to ensure high quality of manuscripts accepted for publication. The Editor-in-Chief and Editors have the right to decline formal review of the manuscript when it is deemed that the manuscript is:
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2) lacking technical merit;
3) focused on foods or processes that are of narrow regional scope and significance;
4) of insufficient novelty for a wide international readership;
5) fragmentary and provides marginally incremental results; or
6) is poorly written.

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