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Third edition  
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**Microbiology of food and animal feeding  
stuffs — Horizontal method for the  
enumeration of presumptive *Bacillus  
cereus* — Colony-count technique at  
30 °C**

*Microbiologie des aliments — Méthode horizontale pour le  
dénombrement de *Bacillus cereus* présumptifs — Technique par  
comptage des colonies à 30 °C*



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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 7932 was prepared by Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 9, *Microbiology*.

This third edition cancels and replaces the second edition (ISO 7932:1993) and Technical Corrigendum 1 (ISO 7932:1993/Cor.1:1997).

In this edition the previous confirmation tests [mannitol/egg yolk/polymyxin (MYP) agar medium, glucose fermentation, Voges-Proskauer reaction and nitrate reduction] are replaced by the following:

- haemolysis reaction;
- MYP agar medium.

This edition introduces precision data obtained during an interlaboratory trial based on ISO 7932:1993 and using the following confirmation tests: MYP agar medium, glucose agar medium, VP medium and nitrate medium.

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## 0 Introduction

**0.1** This International Standard is intended to provide general guidance for the microbiological examination of food products not dealt with by existing International Standards and to be taken into account by organizations preparing microbiological test methods for application to foods or to animal feeding stuffs. Because of the large variety of products within this field of application, these guidelines may not be appropriate in every detail for certain products and for some other products it may be necessary to use different methods. Nevertheless, it is hoped that in all cases every attempt will be made to apply the guidelines provided as far as possible and that deviations from them will only be made if absolutely necessary for technical reasons.

When this International Standard is next reviewed, account will be taken of all information then available regarding the extent to which the guidelines have been followed and the reasons for deviation from them in the case of particular products.

The harmonization of test methods cannot be immediate and, for certain groups of products, International Standards and/or national standards may already exist that do not comply with the guidelines. In cases where International Standards already exist for the product to be tested, they should be followed, but it is hoped that when such standards are reviewed they will be changed to comply with this International Standard so that eventually the only remaining departures from these guidelines will be those necessary for well-established technical reasons.

**0.2** It appears that the spores of many, if not most, strains of *B. cereus* germinate readily on the surface of culture media used for enumeration. In most cases there does not seem to be a need for heat shock treatment to provoke germination. Sometimes a heat shock procedure is desirable, for example for spore counts or to inhibit growth of vegetative bacterial cells. In such cases, treatment for 10 min at 80 °C is recommended.