

**Food microbiology****Method 8: Meat and meat products—Detection and enumeration of *Enterobacteriaceae* without resuscitation—MPN technique and colony-count technique**

## PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee FT-004, Food Microbiology.

This Standard is identical with and reproduced from ISO 5552:1997, *Meat and meat products—Detection and enumeration of Enterobacteriaceae without resuscitation—MPN technique and colony-count technique*.

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee FT-004. After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than an Australian/New Zealand Standard.

The objective of this Standard is to specify a method for the detection and enumeration of *Enterobacteriaceae* present in all kinds of meat and meat products, including poultry.

As this Standard is reproduced from an International Standard, the following applies:

- (a) Its number appears on the cover and title page while the International Standard number appears only on the cover.
- (b) In the source text, 'this International Standard' should read 'this Australian Standard'.
- (c) A full point substitutes for a comma when referring to a decimal marker.
- (d) Substitute 'mL' for the 'ml' wherever it appears.

References to International Standards should be replaced by references to equivalent Australian Standards as follows:

<i>Reference International Standard</i>		<i>Australian Standard</i>	
ISO		AS	
6887	Microbiology of food and animal feeding stuffs—General guidance for the preparation of dilutions for microbiological examination	5013	Food microbiology
		5013.11.1	Method 11.1: Microbiology of food and animal feeding stuffs—Preparation of test samples, initial suspension and decimal dilutions for microbiological examination—General rules for the preparation of the initial suspension and decimal dilutions

ISO		AS	
7218	Microbiology—General guidance for microbiological examination	5013.14	Method 14: Microbiology of food and animal feeding stuffs—General rules for microbiological examination

With the exception of the above ISO documents, which have been adopted as Australian Standard, the ISO documents listed as normative references in Clause 2 have not been adopted as Australian Standards.

The laboratory should have a clearly defined quality control system to ensure that the apparatus, culture media, reagents and technique are suitable for the test. The use of positive controls is part of this system.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the appendix to which they apply. A ‘normative’ appendix is an integral part of a Standard, whereas an ‘informative’ appendix is only for information and guidance.

## 1 Scope

This International Standard specifies a method for the detection and enumeration of *Enterobacteriaceae* present in all kinds of meat and meat products, including poultry. Enumeration is carried out as follows:

- by calculation of the most probable number (MPN) after incubation at 35 °C or 37 °C in liquid medium; or
- by counting colonies in a solid medium after incubation at 35 °C or 37 °C.

The temperature used is to be the subject of agreement between the parties concerned, and is to be stated in the test report.

NOTE In the case of frozen foods, an incubation temperature of 30 °C is preferred when the aim of the enumeration is technological.

For low numbers, the MPN method is preferable, otherwise the colony-count method is preferred.

This International Standard does not include resuscitation procedures and the results should not, therefore, be related to criteria or specifications based on the assumption that resuscitation has been carried out.

A limitation on the applicability of this International Standard is imposed by susceptibility of the methods to a large degree of variability. The methods should be used and the results interpreted in the light of the information given in 10.3.

## 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 3100-2:1988, *Meat and meat products — Sampling and preparation of test samples — Part 2: Preparation of test samples for microbiological examination.*

ISO 6887:1983, *Microbiology of food and animal feeding stuffs — General guidance for the preparation of dilutions for microbiological examination.*

ISO 7218:1996, *Microbiology of food and animal feeding stuffs — General rules for microbiological examinations.*

ISO 7402:1993, *Microbiology — General guidance for the enumeration of Enterobacteriaceae without resuscitation — MPN technique and colony-count technique.*