Second edition 2017-06

Microbiology of the food chain — Horizontal method for detection and enumeration of *Campylobacter* spp. —

Part 1: **Detection method**

Microbiologie de la chaîne alimentaire — Méthode horizontale pour la recherche et le dénombrement de Campylobacter spp. —

Partie 1: Méthode de recherche



ISO 10272-1:2017(E)

This is a preview of "ISO 10272-1:2017". Click here to purchase the full version from the ANSI store.



COPYRIGHT PROTECTED DOCUMENT

© ISO 2017, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office Ch. de Blandonnet 8 • CP 401 CH-1214 Vernier, Geneva, Switzerland Tel. +41 22 749 01 11 Fax +41 22 749 09 47 copyright@iso.org www.iso.org

CO	ntent	S	Page	
Fore	eword		v	
Intr	oductio	on	vi	
1	Scop	oe	1	
2	Nori	native references	1	
3		ns and definitions		
4	Prin	2		
	4.1	General		
	4.2	Enrichment in selective liquid medium		
		4.2.1 Detection procedure A		
		4.2.2 Detection procedure B	2	
		4.2.3 Detection procedure C		
	4.3	Isolation on selective solid medium		
		4.3.1 Detection procedure A		
		4.3.2 Detection procedure B		
		4.3.3 Detection procedure C		
		4.3.4 Detection procedure A, B and C		
	4.4	Confirmation	3	
5	Cult	ure media and reagents	3	
6	Equi	pment and consumables	3	
7	Sam	pling	4	
8	Prep	paration of test sample	4	
9	Procedure			
	9.1	General	4	
	9.2	Test portion and initial suspension	5	
		9.2.1 General		
		9.2.2 Detection procedure A		
		9.2.3 Detection procedure B		
	0.0	9.2.4 Detection procedure C		
	9.3	Enrichment.		
		9.3.1 Detection procedure A		
	0.4	9.3.2 Detection procedure BIsolation		
	9.4	9.4.1 Detection procedure A		
		9.4.2 Detection procedure B		
		9.4.3 Detection procedures A, B and C		
	9.5	Confirmation of <i>Campylobacter</i>		
	7.0	9.5.1 General		
		9.5.2 Selection of colonies for confirmation		
		9.5.3 Examination of morphology and motility		
		9.5.4 Study of aerobic growth at 25 °C		
		9.5.5 Detection of oxidase activity		
		9.5.6 Interpretation	7	
	9.6	Identification of Campylobacter species (optional)	8	
		9.6.1 General		
		9.6.2 Detection of catalase activity		
		9.6.3 Detection of hippurate hydrolysis		
		9.6.4 Detection of indoxyl acetate hydrolysis		
	_	9.6.5 Interpretation		
10	-	ression of results		
11	Perf	ormance characteristics of the method	9	

ISO 10272-1:2017(E)

This is a preview of "ISO 10272-1:2017". Click here to purchase the full version from the ANSI store.

	11.1	Interlaboratory study	9	
	11.2	Sensitivity	9	
	11.3	Specificity	9	
	11.4	LOD ₅₀	9	
12		eport		
Annex A (normative) Diagram of procedures				
Annex B (normative) Culture media and reagents				
Annex C (informative) Method validation studies and performance characteristics				
Bibliography				
	- O - I			

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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by the European Committee for Standardization (CEN), Technical Committee CEN/TC 275, Food Analysis — Horizontal methods, in collaboration with ISO Technical committee ISO/TC 34, Food products, Subcommittee SC 9, Microbiology, in accordance with the agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 10272-1:2006), which has been technically revised with the following main changes:

- samples from the primary production stage have been added to the scope;
- the detection method was extended to include the option of a second enrichment broth (Preston broth), primarily to overcome problems with background flora resistant to third generation ß-lactams (like cefoperazone in Bolton broth);
- the detection method was extended to include the option of direct plating on mCCDA;
- the note on the use of closed containers with reduced headspace as an alternative to incubation in a microaerobic atmosphere has been deleted;
- the confirmation tests on study of microaerobic growth at 25 °C and aerobic growth at 41,5 °C were replaced by the study of aerobic growth at 25 °C;
- performance testing for the quality assurance of the culture media has been added to <u>Annex B</u>;
- performance characteristics have been added to <u>Annex C</u>.

A list of all parts in the ISO 10272 series can be found on the ISO website.

Introduction

The main changes, listed in the foreword, introduced in this document compared to ISO 10272-1:2006 are considered as minor (see ISO 17468).

Because of the large variety of food and feed products, this horizontal method 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 this horizontal method as far as possible and that deviations from this will only be made if absolutely necessary for technical reasons.

When this document is next reviewed, account will be taken of all information then available regarding the extent to which this horizontal method has been followed, and the reasons for deviations from this in the case of particular products. The harmonization of test methods cannot be immediate and, for certain group of products, International Standards and/or national standards may already exist that do not comply with this horizontal method. It is hoped that when such standards are reviewed, they will be changed to comply with this document so that eventually the only remaining departures from this horizontal method will be those necessary for well-established technical reasons.