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Microbiology of the food chain — Carcass sampling for microbiological analysis

Microbiologie de la chaîne alimentaire — Prélèvement d'échantillons sur des carcasses en vue de leur analyse microbiologique

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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

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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.

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 (www.iso.org/directives).

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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 WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information.

The committee responsible for this document is ISO/TC 34, *Food products*, Subcommittee SC 9, *Microbiology*.

This second edition cancels and replaces the first edition (ISO 17604:2003), which has been technically revised. It also incorporates the Amendment ISO 17604:2003/Amd.1:2009.

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Introduction

It is generally agreed that the determination of microbial counts and the prevalence and/or numbers of pathogenic microorganisms on carcasses is essential for validation and verification in risk-based slaughter hygiene assurance systems [e.g. those employing the hazard analysis critical control points (HACCP) principles and quality assurance systems].

Moreover, many laboratories are involved in (regional, national, and international) monitoring or surveillance programmes on the prevalence and/or counts of pathogenic microorganisms to gather information for risk assessment. The design of such monitoring and surveillance programmes will benefit from the use of standardized and internationally accepted sampling procedures.

A harmonized sampling method, as described in this International Standard, can also be of interest for trade in meat and meat products.

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Microbiology of the food chain — Carcass sampling for microbiological analysis

1 Scope

This International Standard specifies sampling methods for the detection and enumeration of microorganisms on the surface of carcasses or parts of carcasses of slaughtered meat animals. The microbiological sampling can be carried out as part of

— process hygiene control (to validate and or verify process control, e.g. total counts and *Enterobacteriaceae*) in slaughter establishments for large mammals, poultry, and game,

— risk-based assurance systems for product safety, and

— monitoring or surveillance programmes for the prevalence and/or numbers of pathogenic microorganisms.

This International Standard includes the use of excision and swabbing techniques depending on the reason for sample collection. It also includes the use of carcass rinsing for the examination of carcasses of poultry and some small animals. Annex A shows sampling sites on the carcasses of various animal species.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 6887-1, *Microbiology of food and animal feeding stuffs — Preparation of test samples, initial suspension and decimal dilutions for microbiological examination — Part 1: General rules for the preparation of the initial suspension and decimal dilutions*

ISO 6887-2, *Microbiology of food and animal feeding stuffs — Preparation of test samples, initial suspension and decimal dilutions for microbiological examination — Part 2: Specific rules for the preparation of meat and meat products*

ISO 7218, *Microbiology of food and animal feeding stuffs — General requirements and guidance for microbiological examinations*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1
carcass
body of an animal after slaughter and dressing

3.2
excision technique
removal of measured areas of the surface tissue or skin by cutting

3.3
game
wild mammal or bird that is hunted for human consumption and farmed mammal or bird, including ratite (e.g. ostrich, emu), other than domestic ungulates and birds

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