



JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON FOOD HYGIENE

Forty-fifth Session

Hanoi, Viet Nam, 11 – 15 November 2013

INFORMATION FROM THE INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO) (ISO/TC/SC9)

Prepared by ISO(ISO/TC/SC9)

1. Sub-Committee 9 “Microbiology” of ISO/Technical Committee 34 “Food Products”, conducts standardization of methods in the field of microbiological analysis of the food chain: from primary production stage to food and animal feed products, including the environment of food production and handling.
2. ISO/TC34/SC9 is chaired by Dr Bertrand Lombard (ANSES, France) and the secretary is Dr Gwénola Hardouin (AFNOR).
3. Twenty-one working groups have been established to conduct standardization works within the scope of ISO/TC34/SC9. Thirty five countries are registered in this sub-committee as participating countries (P-members) and 27 as observing countries (O-members).
4. Fourteen international organizations are in liaison with ISO/TC34/SC9. Among them:
 - a. Codex Alimentarius Commission

Collaboration between ISO/TC34 (including ISO/TC34/SC9) and Codex is important to strengthen mutual coordination in the works, to avoid inconsistency and duplication of work, and to enable ISO/TC34/SC9 to meet the needs of CCFH in terms of reference methods at international level.

The Codex Secretariat (Verna Carolissen) attended the ISO/TC34/SC9 plenary meeting in 2012 and gave a short update by phone in 2013.
 - b. CEN/TC275/WG6 “Microbiology of the food chain”.

CEN/TC275/WG6 is convened by Alexandre Leclercq (Institut Pasteur, FR) and the secretary is Dr Gwénola Hardouin (AFNOR). This is a working group of the European CEN/Technical Committee 275 “Food analysis – Horizontal methods” (under the responsibility of Germany).

In order to avoid duplication of work and to develop synergies, most projects developed within ISO/TC34/SC9 are conducted in partnership with CEN/TC275/WG6 according to an agreement on technical cooperation between ISO and CEN (Vienna Agreement). Common ISO/CEN Standards are published.
 - c. IDF-ISO/TC34/SC5 “Milk and milk products” to harmonize ISO/TC34/SC5 and ISO/TC34/SC9 Standards.
 - d. AOAC International, in particular to harmonize protocols for method validation.

ISO/TC34/SC9 Standards

Scope

5. Standardization in the field of human food and animal feed, covering the food chain from primary production to consumption, as well as environmental samples in the area of food production and food handling, in particular, but not limited to, sampling, test methods and analysis, food and feed safety.

Standards

6. Seventy five ISO Standards have been published under the direct responsibility of ISO/TC34/SC9 since its creation.

7. Several standards have been published or under development contain full validation by collaborative studies, see the standards highlighted in grey.

Standards published

Standard reference	Date of publication	Title of the Standard
ISO 4831	2006	Horizontal method for the detection and enumeration of coliforms -- Most probable number technique
ISO 4832	2006	Horizontal method for the enumeration of coliforms -- Colony-count technique
ISO 4833-1	2013	Horizontal method for the enumeration of microorganisms -- Part 1: Colony count at 30 degrees C by the pour plate technique
ISO 4833-2	2013	Horizontal method for the enumeration of microorganisms -- Part 2: Colony count at 30 degrees C by the surface plating technique
ISO 6579/A1	2007	Annex D: Detection of <i>Salmonella</i> spp. in animal faeces and in environmental samples from the primary production stage
ISO/TS 6579-2	2012	Horizontal method for the detection, enumeration and serotyping of <i>Salmonella</i> -- Part 2: Enumeration by a miniaturized most probable number technique
ISO 6888-1	1999	Horizontal method for the enumeration of coagulase-positive staphylococci (<i>Staphylococcus aureus</i> and other species) -- Part 1: Technique using Baird-Parker agar medium
ISO 6888-2	1999	Horizontal method for the enumeration of coagulase-positive staphylococci (<i>Staphylococcus aureus</i> and other species) -- Part 2: Technique using rabbit plasma fibrinogen agar medium
ISO 6888-3	2003	Horizontal method for the enumeration of coagulase-positive staphylococci (<i>Staphylococcus aureus</i> and other species) -- Part 3: Detection and MPN technique for low numbers
ISO 7251	2005	Horizontal method for the detection and enumeration of presumptive <i>Escherichia coli</i> -- Most probable number technique
ISO 7937	2004	Horizontal method for the enumeration of <i>Clostridium perfringens</i> -- Colony-count technique
ISO 11289	1993	Heat-processed foods in hermetically sealed containers -- Determination of pH
ISO/TS 13136	2012	Real-time polymerase chain reaction (PCR)-based method for the detection of food-borne pathogens -- Horizontal method for the detection of Shiga toxin-producing Escherichia coli (STEC) and the determination of O157, O111, O26, O103 and O145 serogroups
ISO 13307	2013	Primary production stage -- Sampling techniques
ISO 13720	2010	Meat and meat products -- Enumeration of presumptive <i>Pseudomonas</i> spp.
ISO 13722	2010	Meat and meat products -- Enumeration of <i>Brochothrix thermosphacta</i> -- Colony-count technique
ISO 15213	1996	Horizontal method for the enumeration of sulfite-reducing bacteria growing under anaerobic conditions
ISO 15214	1998	Horizontal method for the enumeration of mesophilic lactic acid bacteria -- Colony-count technique at 30 degrees C

ISO/TS 15216-2	2013	Horizontal method for determination of hepatitis A virus and norovirus in food using real-time RT-PCR -- Part 2: Method for qualitative detection
ISO 17410	2001	Horizontal method for the enumeration of psychrotrophic microorganisms
ISO 21527-1	2008	Horizontal method for the enumeration of yeasts and moulds -- Part 1: Colony count technique in products with water activity greater than 0,95
ISO 21527-2	2008	Horizontal method for the enumeration of yeasts and moulds -- Part 2: Colony count technique in products with water activity less than or equal to 0,95
ISO 21567	2004	Horizontal method for the detection of <i>Shigella</i> spp.
ISO 21807	2004	Determination of water activity
ISO 21871	2006	Horizontal method for the determination of low numbers of presumptive <i>Bacillus cereus</i> -- Most probable number technique and detection method

Standards published and under revision

Project reference	Published standard reference: date of publication	Estimated date of publication	Title of the Standard
ISO 6579-1	ISO 6579:2002	2016	Horizontal method for the detection of <i>Salmonella</i> spp.
ISO 7932	ISO 7932:2004	2016	Horizontal method for the enumeration of presumptive <i>Bacillus cereus</i> -- Colony-count technique at 30 degrees C
ISO 10272-1	ISO 10272-1:2006	2016	Horizontal method for detection and enumeration of <i>Campylobacter</i> spp. -- Part 1: Detection method
ISO 10272-2	ISO 10272-2:2006	2016	Horizontal method for detection and enumeration of <i>Campylobacter</i> spp. -- Part 2: Colony-count technique
ISO 10273	ISO 10273:2003	2016	Horizontal method for the detection of presumptive pathogenic <i>Yersinia enterocolitica</i>
ISO 11290-1	ISO 11290-1:1996	2016	Horizontal method for the detection and enumeration of <i>Listeria monocytogenes</i> -- Part 1: Detection method
ISO 11290-2	ISO 11290-2:1998	2016	Horizontal method for the detection and enumeration of <i>Listeria monocytogenes</i> -- Part 2: Enumeration method
ISO 15216-1	ISO/TS 15216-1:2013	2016	Horizontal method for determination of hepatitis A virus and norovirus in food using real-time RT-PCR -- Part 1: Method for quantification
ISO 16140-1	ISO 16140:2003	2015	Method validation - Part 1: Vocabulary
ISO 16140-2		2015	Method validation - Part 2: Protocol for the validation of alternative (proprietary) methods against a reference method
ISO 16649-1	ISO 16649-1:2001	2016	Horizontal method for the enumeration of β-glucuronidase-positive <i>Escherichia coli</i> -- Part 1: Colony-count technique at 44°C using membranes and 5-bromo-4-chloro-3-indolyl β -D-glucuronide
ISO 16649-2	ISO 16649-2:2001	2016	Horizontal method for the enumeration of β-glucuronidase-positive <i>E. coli</i> -- Part 2: Colony-count technique at 44°C using 5-bromo-4-chloro-3-indolyl β -D-glucuronide
ISO 16649-3	ISO/TS 16649-3:2005	2014	Horizontal method for the enumeration of β-glucuronidase-positive <i>E. coli</i> -- Part 3: Most probable number technique using 5-bromo-4-chloro-3-indolyl- β -D-glucuronide
ISO	ISO 16654:2001	2016	Horizontal method for the detection of <i>Escherichia coli</i>

16654/AMD1			O157
ISO 17604	ISO 17604:2003	2015	Carcass sampling for microbiological analysis
ISO 18593	ISO 18593:2004	2016	Horizontal methods for sampling techniques from surfaces using contact plates and swabs
ISO 21528-1	ISO 21528-1:2004	2016	Horizontal methods for the detection and enumeration of <i>Enterobacteriaceae</i> -- Part 1: Detection and enumeration by MPN technique with pre-enrichment
ISO 21528-2	ISO 21528-2:2004	2016	Horizontal methods for the detection and enumeration of <i>Enterobacteriaceae</i> -- Part 2: Colony-count method
ISO 21872	ISO/TS 21872-1:2007 ISO/TS 21872-2:2007	2016	Horizontal method for the detection of potentially enteropathogenic <i>Vibrio</i> spp. — Detection of species of <i>Vibrio parahaemolyticus</i> , <i>V. cholerae</i> and <i>V. vulnificus</i>
ISO 22964	ISO/TS 22964:2006	2016	Horizontal methods for the detection of <i>Cronobacter</i> spp. (<i>Enterobacter sakazakii</i>)

Standards under development

Standard reference	Estimated Date of publication	Title of the Standard
ISO/TR 6579-3	2013	Horizontal method for the detection, enumeration and serotyping of <i>Salmonella</i> - Part 3: Guidance for serotyping
ISO/TS 17919	2013	Polymerase chain reaction (PCR) for the detection of food-borne pathogens -- Detection of botulinum type A, B, E, and F neurotoxin-producing clostridia
ISO 18465	2016	Microbiology of food and animal feed - Horizontal method for the quantification of <i>Bacillus cereus</i> emetic toxin (cereulide) using LC-MS/MS
ISO 18743	2014	Detection of <i>Trichinella</i> Larvae in meat — Physical method by digestion
ISO 18744	2014	Detection and enumeration of <i>Cryptosporidium</i> and <i>Giardia</i> in fresh leafy green vegetables and berry fruits
ISO/TS 18867	2014	Polymerase chain reaction (PCR) for the detection of food-borne pathogens - Detection of pathogenic <i>Yersinia enterocolitica</i> and <i>Yersinia pseudotuberculosis</i>
ISO 19020	2016	Horizontal method for the detection of staphylococcal enterotoxins in food
ISO 19343	2016	Detection and quantification of histamine