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**NATIONAL STANDARD OF THE  
PEOPLE'S REPUBLIC OF CHINA**

**GB/T 27405-2026**

Replacing GB/T 27405-2008

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**Criterion on the quality control of laboratories - Microbiological  
testing of food**

实验室质量控制规范 食品微生物检测

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## Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1.Structure and Drafting Rules of Standardization Documents". Drafting. This document supersedes GB/T 27405-2008 "Laboratory Quality Control Standard for Microbiological Testing of Food" and is consistent with GB/T 27405-2008. In comparison, aside from structural adjustments and editorial changes, the main technical changes are as follows:

- a) The scope has been changed (see Chapter 1, Chapter 1 of the.2008 edition);
- b) Some terms and definitions have been added (see 3.1, 3.2, 3.6, 3.15);
- c) General requirements have been added (see Chapter 4);
- d) The structural requirements have been changed (see Chapter 5, 5.1 of the.2008 edition);
- e) Added general requirements for resource requirements (see 6.1);
- f) Personnel requirements have been changed (see 6.2.1, 5.1.1 of the.2008 version);
- g) The requirements for facilities and environmental conditions have been changed (see 6.3.3 and 6.3.4, 5.2.2 in the.2008 edition);
- h) The device requirements have been changed (see 6.4,

## 1 Scope

GB/T 27405-2026 is the Chinese national standard covering quality control in a food microbiology laboratory. Here the quality control includes the media themselves and the reference strains, because a plate that does not grow what it should produces a clean result that means nothing. It fixes the requirements on the facilities and environment, the equipment and its calibration, the reagents and reference materials, the competence and training of the analysts, the method validation and the quality control that runs alongside routine work. It replaces GB/T 27405-2008, one of the four GB/T 2740x laboratory quality standards revised together in this batch. It was issued on 28 January 2026 and has been in force since 1 March 2026, replacing GB/T 27405-2008. The document is under the responsibility of the Standardization Administration of China. This page is published from the official record of the 2026 edition; the clause text of a standard this recent is not yet in circulation, and the figures, limits and tables it contains are those of the document itself, delivered in full with the English translation.

This document specifies general requirements for the competence, impartiality, and consistent operation of food microbiology testing laboratories. This document applies to those engaged in food quality, food additives, edible fungi agents, animal feed, food processing machinery, food packaging materials, and food... Quality control and proficiency assessment of laboratories for microbiological testing of water used in food production and treatment, as well as environmental samples from food processing, and other disciplines. This is for reference use in microbiology testing laboratories.

## 2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included. For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies. This document.

GB 4789.28 National Food Safety Standard. Quality Requirements for Culture Media and Reagents for Microbiological Testing of Food

GB 4789.45 General Rules for Validation of Microbiological Test Methods (National Food Safety Standard)

GB/T 19001 Quality Management System Requirements

GB 19489 General Requirements for Laboratory Biosafety

GB/T 27025-2019 General requirements for the competence of testing and calibration laboratories

## GB 50346 Technical Specification for Biosafety Laboratory Construction

### 3 Terms and Definitions

The following terms and definitions apply to this document.

#### 3.1 Quality Management Regarding quality management.

Note. Quality management may include quality policies and quality objectives, and how to achieve these quality objectives through quality planning, quality assurance, quality control, and quality improvement. The process. [Source: GB/T 19000-2016, 3.3.4]

3.2 quality control As part of quality management, it is dedicated to meeting quality requirements. [Source: GB/T 19000-2016, 3.3.7]

3.3 top management A person or group of people who commands and controls an organization at the highest level. Note

1.Top managers have the right to authorize and provide resources within the organization.

Note

2.If the scope of the management system only covers a part of the organization, then the top manager refers to the person who manages and controls that part of the organization. An individual or a group of people. [Source: GB/T 19000-2016, 3.1.1]