



# National Standard of the People's Republic of China

GB 19301-2010

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## National food safety standard

### Raw milk

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- Issued by: Ministry of Health

*DISCLAIMER: The English version is an unofficial translation of the original in Chinese for information and reference purposes only. In case of a discrepancy the Chinese original standard will prevail.*

## Foreword

This standard replaces GB 19301-2003 “Hygienic standard for raw milk” and its Amendment No.1.

In comparison with GB 19301-2003, the major changes of this standard are as follows:

- The name of this standard has been changed to “Raw milk”;
- “Terms and definition” has been added;
- “Maximum levels of contaminants” has been directly referred to the provisions of GB 2762;
- “Maximum levels of mycotoxins” has been directly referred to the provisions of GB 2761;
- “Maximum residue limits for pesticides” has been directly referred to GB 2763 and the relevant national provisions and announcements;
- “Microbiological indexes” has been modified.

This standard replaces all previous standards, those issued editions are:

- GBn 33-1977, GB 19301-2003.

# National Food Safety Standard

## Raw milk

### 1. Scope

This standard applies to raw milk, but not to ready-to-eat raw milk.

### 2. Normative references

The documents cited in this standard are indispensable for the application of this standard. For dated references, only the noted date edition of the normative document is applicable to this standard. For undated references, the latest edition (including all the amendments hereof) of the normative document referred to applies.

### 3. Terms and definitions

#### 3.1 Raw milk

Raw milk means the ordinary milk expressed from the breast of healthy dairy animals complying with the relevant national requirements, without any components change. Colostrum within the first 7 days after giving birth, milk from animals using antibiotics and during withdrawal period, spoiled milk are excluded.

### 4. Technical requirements

#### 4.1 Sensory requirements: should comply with the provisions in Table 1.

Table 1 Sensory requirements

Items	Requirements	Test methods
Color	With consistent color of milk white or pale yellow.	Take an appropriate amount of the test sample and put into a 50mL beaker, observe the color and structural state under natural light. Smell and taste it after gargling with warm boiled water.
Taste and odor	With the proper taste of milk, no abnormal odor.	
Structural state	Well-proportioned liquid, no coagulation, no precipitate, no visible foreign matters	

#### 4.2 Physicochemical indexes: should comply with the provisions in Table 2.

Table 2 Physicochemical indexes

Items	Indexes	Test methods
Freezing Point <sup>a,b</sup> /(°C)	-0.500~-0.560	GB 5413.38
Relative density (20°C/4°C)≥	1.027	GB 5413.33
Protein (g/100g)≥	2.8	GB 5009.5
Fat/(g/100g) ≥	3.1	GB 5413.3
Impurity (mg/kg)≤	4.0	GB 5413.30
Non-fat milk solids (g/100g)≥	8.1	GB 5413.39
Acidity (°T) Bovine milk <sup>b</sup> Ovine milk	12~18 6~13	GB 5413.34

<sup>a</sup> Determine 3 hours after expressed.

<sup>b</sup> Only apply to Holstein cows.

**4.3 Maximum levels of contaminants: should comply with the provisions in GB 2762.**

**4.4 Maximum levels of mycotoxins: should comply with the provisions in GB 2761.**

**4.5 Maximum levels of microorganisms: should comply with the provisions in Table 3.**

**Table 3 Maximum levels of microorganisms**

Items	Maximum levels[CFU/g(mL)]	Test methods
Total plate count ≤	2×10 <sup>5</sup>	GB 4789.2

**4.6 Maximum residue limits for pesticides and veterinary drugs**

4.6.1 Maximum residue limits for pesticides should comply with GB 2763 and the relevant national provisions and announcements.

4.6.2 Maximum residue limits for veterinary drugs should comply with the relevant national provisions and announcements.