



National Standard of the People's Republic of China

GB 19301—2010

National food safety standard

Raw Milk

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Issued by the Ministry of Health
of the People's Republic of China

Preface

This standard replaces GB 19301-2003 (Hygienic Standard for Raw Milk) and No.1 modified note.

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”
- Add the section of “terms and definition”
- Contamination requirement is quoted from GB2762 directly
- Mycotoxins requirement is quoted from GB2761 directly
- Pests residues requirement is quoted from GB2763, National requirement and bulletin directly.
- Microbiological requirement is 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 raw milk for ready to eat.

2. Normative reference

The following normative documents are absolutely necessarily for the application of this standard. For dated references, only the dated edition of the normative document is referred to apply. For undated references, the latest edition including all the modified notes of the normative document is referred to apply.

3. Terms and Definition

3.1 Raw milk

Raw milk means the normal mammary secretion of healthy milking animals which comply with national requirement and without either addition to it or extraction from it. Colostrum within the first 7 days after giving birth, milk from animals undergoing treatment of veterinary drugs and specified withholding time, spoiled milk are excluded.

4. Technical requirement

4.1 Sensory requirement

Sensory requirement is specified in Table 1.as below.

Table1. Sensory requirement

Item	Requirement	Test method
Color	Ivory white or pale yellow	Add moderate test sample into a 50ml beaker, and observe the color, structure and appearance of the test sample with nature daylight. Smell and taste after gargling with warm water
Taste and aroma	Natural milk aroma, no abnormal flavor	
Structure and appearance	Well-proportioned liquid, no coagulation, no precipitate, no foreign matter by eyes	

4.2 Chemical and physical requirements

Chemical and physical requirements are specified in Table 2 as below.

Table 2 Chemical and physical requirements

Item	Criteria	Test method
Freezing Point ^{a, b} / (°C)	-0.500 ~ -0.560	GB 5413.38
Specific gravity (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
Milk Solids-not-fat (g/100g) ≥	8.1	GB 5413.39
Acidity (°T)		GB 5413.34
Bovine Milk ^b	12-18	
Ovine Milk	6-13	
^a Inspection after 3hours of milking		
^b only applies to Holstein cows		

4.3 Contamination limit

Contamination limit should comply with GB2762.

4.4 Mycotoxins limit

Mycotoxins limit should comply with GB2761.

4.5 Microbiological requirement

Microbiological requirement is specified in Table 3 as below.

Table 3 Microbiological limit

Item	Limit [CFU/g(ml)]	Test method
Aerobic plate count ≤	2*10 ⁶	GB 4789.2

4.6 Residues of Pesticides and veterinary drugs

4.6.1 Residues of pesticides should comply with GB2763, National requirement and bulletin.

4.6.2 Residues of veterinary drugs should comply with National requirement

and bulletin.