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## **China - Peoples Republic of**

Post: Beijing

## **China's Maximum Levels for Contaminants in Foods**

### **Report Categories:**

**FAIRS Subject Report** 

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### **Report Highlights:**

On November 13, 2013, China released the National Food Safety Standard of Maximum Levels of Contaminants in Foods (GB 2762-2012), which became effective on June 1, 2014. The standard sets limits for lead, cadmium, mercury, arsenic, tin, nickel, chromium, nitrite, Benzo[a]pyrene, N-nitrosodimethylamine, polychlorinated biphenyl, 3-chloro-1, 2-propanediol in foods.

This report provides an unofficial translation of the standard.

#### **General Information:**

#### **BEGIN TRANSLATION**

### **Maximum Levels of Contaminants in Foods**

### **Foreword**

This standard partially replaces the Maximum Levels of Contaminants in Foods (GB 2762-2005).

This standard modifies the GB 2762-2005 in the following aspects:

- Modifies the standard name:
- Adds definitions for "Edible Parts":
- Adds principles of (standard) application;
- Removed limits for selenium, aluminum and fluorine;
- Adds limits for tin, nickel, 3-chloro-1, 2-propanediol and Nitrate;
- Adjust the limit specifications for N-nitrosoamine to N-nitrosodimethylamine, and modifies the limit specification of N-nitrosoamine to N-nitrosodimethylamine;
- Adds Appendix A;
- The limit specifications for rare earth shall follow provisions in the GB2762-2005.

### National Food Safety Standard for Maximum Levels of Contaminants in Foods

### 1 Scope

This standard sets limits for lead, cadmium, mercury, arsenic, tin, nickel, chromium, nitrite, Benzo[a]pyrene, N-nitrosodimethylamine, polychlorinated biphenyl, 3-chloro-1, 2-propanediol in foods.

### 2 Terminologies and definitions

### 2.1 Contaminants

Hazardous chemical substance not intentionally added to food, which is present in such food as a result of the production (including operations carried out in crop husbandry, animal husbandry and veterinary medicine), processing, packaging, storage, transportation, distribution, and consumption, or as a result of environmental contamination.

Contaminants in this standard refers to containmnats other than pesticide resudue, vetrinery drug reside, biotoxin, and radionuclides.

### 2.2 Edible part

The remaining part for edible use after mechanical processing, which remove the non-edible part (such as grain husk, fruit peeling, nuts cracking, removing bones in meat/fish, removing shell of shellfish).

Note 1: removing the non-edible part shall not apply any non-chemical means (such as refining of crude vegetable oil);

Note 2: quantity of the edible parts may vary when producing different products by different techniques using the same food materials. For example, the edible part could be 100% when processing cereal and whole-wheat flour from wheat, while the edible part is caculated by the actual flour extraction rate when producing wheat flour from wheat.

### 2.3 Limit

The maximum content of contaminants in food materials and/or the edible part of the finished food products.

### 3 Principles of (standard) application

- 3.1 Regardless of existence of the contaminant limits, the food producers and processors shall take control measures to keep the contaminant content at the minimum level.
- 3.2 This standard lists the contaminants that may pose high risks to the public health; the foods with the contaminant limits are foods that pose higher impact on consumers' dietary exposure.
- 3.3 Explanation of the Food Categories (Appendix A) is for defining scope of application of the contaminant limits, and is only applicable to this standard. When a contaminant limit is applied to a certain food category, all types of foods in the food category are subject to the limit unless otherwise specified.
- 3.4 Maximum levels of contaminants in foods are calculated by the edible parts of the food unless otherwise specified.
- 3.5 Maximum levels of contaminants in dried foods are calculated by the dehydration ratio or the concentration ratio of relevant food materials. The dehydration ratio or the concentration ratio could be determined by analysis of the food, by the information from the producer, or other available data.

### 4 Specifications

### 4.1 Lead

4.1.1 Please refer to Table 1 for lead limits in foods.

Table 1 Lead Limits in Foods

assorted cereal porridge, wheat and rice products with fillings] Cereal, gluten, assorted cereal porridge, wheat and rice products with fillings Vegetable and vegetable products Fresh vegetables (with the exception of brassica vegetables, leaf vegetables, leguminous vegetables, potatoes) Brassica vegetables, potatoes  Vegetable products  Fruit and its products Fresh fruit (with the exception of berries and other small fruits) Berries and other small fruits Berries and other small fruits Fruit products  Fruit products  Edible fungi and its products  Beans Bean products (with the exception of soy milk) Soy milk  Algae and algae products (with the exception of spirulina and its products)  Nuts and seeds (with the exception of coffee beans) Coffee beans  Meats (with the exception of viscera of the livestock and poultry) Viscera of the livestock and poultry  Viscera of the livestock and poultry  Fresh, frozen aquatic animal (with the exception of fish, crustacean, bivalves)  Fish, crustacean  bivalves  Aquatic products (with the exception of jellyfish products)  1.0  1.0  1.0  1.0  1.0  1.0  1.0  1.	Table 1 Lead Limits in Poods	
assorted cereal porridge, wheat and rice products with fillings] Cereal, gluten, assorted cereal porridge, wheat and rice products with fillings Vegetable and vegetable products Fresh vegetables (with the exception of brassica vegetables, leaf vegetables, leguminous vegetables, potatoes) Brassica vegetables, potatoes  Vegetable products  Fruit and its products Fresh fruit (with the exception of berries and other small fruits) Berries and other small fruits Berries and other small fruits Fruit products  Fruit products  Edible fungi and its products  Beans Bean products (with the exception of soy milk) Soy milk  Algae and algae products (with the exception of spirulina and its products)  Nuts and seeds (with the exception of coffee beans) Coffee beans  Meats (with the exception of viscera of the livestock and poultry) Viscera of the livestock and poultry  Viscera of the livestock and poultry  Fresh, frozen aquatic animal (with the exception of fish, crustacean, bivalves)  Fish, crustacean  bivalves  Aquatic products (with the exception of jellyfish products)  1.0  1.0  1.0  1.0  1.0  1.0  1.0  1.	Food Category (name)	`
Fresh vegetables, leaf vegetables, potatoes  Brassica vegetables, leaf vegetables, potatoes)  Cegetable products  Brassica vegetables, potatoes  Cegetable products  Leguminous vegetables, potatoes  Vegetable products  Fruit and its products  Fresh fruit (with the exception of berries and other small fruits)  Berries and other small fruits  Fruit products  Fruit products  Edible fungi and its products  Beans  Beans  Bean products (with the exception of soy milk)  Soy milk  Algae and algae products (with the exception of spirulina and its products)  Nuts and seeds (with the exception of coffee beans)  Coffee beans  Meats (with the exception of viscera of the livestock and poultry)  Viscera of the livestock and poultry  Neats (with the exception of fish, crustacean, bivalves)  Fish, crustacean  bivalves  Aquatic products (with the exception of jellyfish products)  1.0  1.0  1.0  1.0  1.0  1.0  1.0  1.	Grains and grain products P <sup>aP</sup> [with the exception of cereal, gluten, assorted cereal porridge, wheat and rice products with fillings]	0.2
Vegetable and vegetable products Fresh vegetables (with the exception of brassica vegetables, leaf vegetables, leguminous vegetables, potatoes) Brassica vegetables, leaf vegetables Leguminous vegetables, potatoes Vegetable products Fruit and its products Fresh fruit (with the exception of berries and other small fruits) Berries and other small fruits Berries and other small fruits Fruit products Fruit products  Edible fungi and its products Beans Bean products (with the exception of soy milk) Soy milk  Algae and algae products (with the exception of spirulina and its products)  Nuts and seeds (with the exception of coffee beans) Coffee beans Meat and meat products Meats (with the exception of viscera of the livestock and poultry) Viscera of the livestock and poultry Viscera of the livestock and poultry Fresh, frozen aquatic animal (with the exception of fish, crustacean, bivalves) Fish, crustacean bivalves Aquatic products (with the exception of jellyfish products)  1.0  0.1  0.2  0.3  0.2  0.1  0.1  0.2  0.2  0.5  0.5  0.5  0.5  0.5  0.5		0.5
Fresh vegetables (with the exception of brassica vegetables, leaf vegetables, leguminous vegetables, potatoes)  Brassica vegetables, leaf vegetables  Leguminous vegetables, potatoes  Vegetable products  Fruit and its products  Fresh fruit (with the exception of berries and other small fruits)  Berries and other small fruits  Fruit products  Fruit products  Edible fungi and its products  Beans and bean products  Beans products (with the exception of soy milk)  Soy milk  Algae and algae products (with the exception of spirulina and its products)  Nuts and seeds (with the exception of coffee beans)  Coffee beans  Meat and meat products  Meats (with the exception of viscera of the livestock and poultry)  Viscera of the livestock and poultry  Meat products  Fresh, frozen aquatic animal (with the exception of fish, crustacean, bivalves)  Fish, crustacean  bivalves  Aquatic products (with the exception of jellyfish products)  1.0  1.1  0.2  0.1  0.2  0.2  1.0  1.0	· ·	
Brassica vegetables, leaf vegetables Leguminous vegetables, potatoes Vegetable products  Fruit and its products  Fresh fruit (with the exception of berries and other small fruits) Berries and other small fruits Fruit products  Fruit products  Edible fungi and its products  Beans and bean products Beans and bean products Bean products (with the exception of soy milk) Soy milk  Algae and algae products (with the exception of spirulina and its products)  Nuts and seeds (with the exception of coffee beans) Coffee beans  Meats (with the exception of viscera of the livestock and poultry) Viscera of the livestock and poultry Meat products  Fresh, frozen aquatic animal (with the exception of fish, crustacean, bivalves)  Fish, crustacean bivalves  Aquatic products (with the exception of jellyfish products)  1.0  0.3  0.1  0.2  1.0  1.0  1.0  1.0  1.0  1.0	Fresh vegetables (with the exception of brassica vegetables, leaf	0.1
Leguminous vegetables, potatoes  Vegetable products  Fruit and its products  Fresh fruit (with the exception of berries and other small fruits)  Berries and other small fruits  Fruit products  Edible fungi and its products  Beans and bean products  Beans products (with the exception of soy milk)  Soy milk  Algae and algae products (with the exception of spirulina and its products)  Nuts and seeds (with the exception of coffee beans)  Coffee beans  Meats (with the exception of viscera of the livestock and poultry)  Viscera of the livestock and poultry  Viscera of the livestock and poultry  Meat products  Fresh, frozen aquatic animal (with the exception of fish, crustacean, bivalves)  Fish, crustacean  bivalves  Aquatic products (with the exception of jellyfish products)  1.0  1.0  1.0  1.0  1.0  1.0  1.0  1.		0.3
Vegetable products1.0Fruit and its products0.1Fresh fruit (with the exception of berries and other small fruits)0.1Berries and other small fruits0.2Fruit products1.0Edible fungi and its products1.0Beans and bean products0.2Bean products (with the exception of soy milk)0.5Soy milk0.05Algae and algae products (with the exception of spirulina and its products)1.0 (calculated in dry weight)Nuts and seeds (with the exception of coffee beans)0.2Coffee beans0.5Meat and meat products0.5Meats (with the exception of viscera of the livestock and poultry)0.2Viscera of the livestock and poultry0.5Meat products0.5Aquatic animal and its products1.0 (viscera removed)Fresh, frozen aquatic animal (with the exception of fish, crustacean, bivalves)1.0 (viscera removed)Fish, crustacean0.5bivalves1.5Aquatic products (with the exception of jellyfish products)1.0	<u> </u>	0.2
Fruit and its products Fresh fruit (with the exception of berries and other small fruits) Berries and other small fruits Fruit products  Edible fungi and its products  Beans and bean products Beans Bean products (with the exception of soy milk) Soy milk  Algae and algae products (with the exception of spirulina and its products)  Nuts and seeds (with the exception of coffee beans) Coffee beans  Meats (with the exception of viscera of the livestock and poultry) Viscera of the livestock and poultry Viscera of the livestock and poultry  O.5  Aquatic animal and its products Fresh, frozen aquatic animal (with the exception of fish, crustacean, bivalves) Fish, crustacean bivalves Aquatic products (with the exception of jellyfish products)  1.0  O.1  O.2  1.0  1.0  1.0 (calculated in dry weight)  O.2  O.5  O.5  Algae and algae products O.5  O.5  Algae and meat products  Fresh, frozen aquatic animal (with the exception of fish, crustacean, bivalves)  Fish, crustacean O.5  Aquatic products (with the exception of jellyfish products)		1.0
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Edible fungi and its products  Beans and bean products  Beans products (with the exception of soy milk)  Soy milk  Algae and algae products (with the exception of spirulina and its products)  Nuts and seeds (with the exception of coffee beans)  Coffee beans  Meat and meat products  Meats (with the exception of viscera of the livestock and poultry)  Viscera of the livestock and poultry  Meat products  Fresh, frozen aquatic animal (with the exception of fish, crustacean, bivalves)  Fish, crustacean  Divalves  Aquatic products (with the exception of jellyfish products)  1.0 (viscera removed)  1.5  Aquatic products (with the exception of jellyfish products)		
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Nuts and seeds (with the exception of coffee beans)  Coffee beans  Meat and meat products  Meats (with the exception of viscera of the livestock and poultry)  Viscera of the livestock and poultry  Meat products  Aquatic animal and its products  Fresh, frozen aquatic animal (with the exception of fish, crustacean, bivalves)  Fish, crustacean  Divideration of pellyfish products  1.0 (viscera removed)  0.5  1.5  Aquatic products (with the exception of jellyfish products)	Algae and algae products (with the exception of spirulina and its products)	,
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Viscera of the livestock and poultry  Meat products  Aquatic animal and its products  Fresh, frozen aquatic animal (with the exception of fish, crustacean, bivalves)  Fish, crustacean  bivalves  bivalves  Aquatic products (with the exception of jellyfish products)  1.0 (viscera removed)  0.5  1.5  1.0	•	0.2
Meat products  Aquatic animal and its products  Fresh, frozen aquatic animal (with the exception of fish, crustacean, bivalves)  Fish, crustacean  bivalves  bivalves  Aquatic products (with the exception of jellyfish products)  0.5  1.0 (viscera removed)  0.5  1.5		
Aquatic animal and its products  Fresh, frozen aquatic animal (with the exception of fish, crustacean, bivalves)  Fish, crustacean  bivalves  Aquatic products (with the exception of jellyfish products)  1.0 (viscera removed)  0.5  1.5	± •	
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Aquatic products (with the exception of jellyfish products)  1.0		
	bivalves	1.5
<b>J</b> 1	Jellyfish products	2.0
*	Milk and milk products	
Raw milk, pasteurized milk, sterilized milk, Fermented milk, modified milk	Raw milk, pasteurized milk, sterilized milk, Fermented milk, modified milk	0.05
Milk powders, non-demineralized whey powder 0.5		0.5
	Other dairy products	0.3

Food Category (name)	Limit (measured by Pb) mg/kg
Egg and egg products (with the exception of preserved egg and preserved egg sausage)	0.2
preserved egg and preserved egg sausage	0.5
Fat and its products	0.1
Condiment (with the exception of salt and spices)	1.0
Salt	2.0
Spices	3.0
Sugar and starch sugar	0.5
Starch and starch products	
Edible starch	0.2
Starch products	0.5
Baked food	0.5
Beverages	
Packaged drinking water	0.01 mg/L
Fruit and vegetable juice (with the exception of Concentrated fruit	
and vegetable juice/pulp)	0.05 mg/L
Concentrated fruit and vegetable juice (pulp)	0.5 mg/L
Protein containing drink (with the exception of milk containing	0.3 mg/L
drink)	
Milk containing drink	0.05 mg/L
Carbonated drink, tea drink	0.3 mg/L
Powdered drink	1.0
Other drinks	0.3 mg/L
Alcoholic beverage (with the exception of distilled spirit, Chinese rice	0.2
wine) Distilled spirit, Chinese rice wine	0.5
Cocoa product, chocolate and chocolate products, and candies	0.5
	0.2
Flavored ice, popsicle	0.3
Foods intended for special dietary uses Formula foods for infants and young children (with the exception of liquid products)	0.15 (in powdered product basis) 0.02 (in instant food
Liquid products	basis)
Complementary Foods for Infants and Young Children Cereal-based complementary foods for infants and young	,
children (with the exception of products that adds fish, liver and vegetables)	0.2
Products that adds fish, liver and vegetables  Canned complementary foods for infants and young children	0.3
(with the exception of products that contain raw materials of aquatic products and animal liver)	0.25
Products that contain raw materials of aquatic products and	0.3

Food Category (name)	Limit (measured by Pb) mg/kg
animal liver	
Others	
Jelly	0.5
Puffed foods	0.5
Tea	5.0
dry chrysanthemum	5.0
Tea made of leaf of Broadleaf Holly	2.0
Bee products	
Honey	1.0
Pollen	0.5
<sup>aP</sup> Paddy rice in the brown rice basis.	·

<sup>4.1.2</sup> Testing methods: by using methods provided in GB 5009.12.

## 4.2 Cadmium

## 4.2.1 Please refer to Table 2 for Cadmium limits in foods.

Table 2 Cadmium limits in foods

Food Category (name)	Limit (in Cd basis)
	mg/kg
Grains and grain products	
Grains (with the exception of paddy rice P <sup>aP</sup> )	0.1
Milled grain products (with the exception of brown rice, rice)	0.1
Paddy rice P <sup>aP</sup> , brown rice, rice	0.2
Vegetable and vegetable products	
Fresh vegetables (with the exception of leaf vegetables, Leguminous vegetables, root and tuber vegetables, stem vegetables)	0.05
Leaf vegetables	0.2
Leguminous vegetables, root and tuber vegetables, Stem vegetables (with the exception of celery)	0.1
Celery	0.2
Fruit and its products	
Fresh fruits	0.05
Edible fungi and its products	
Fresh edible fungi (with the exception of Shiitake mushroom and	0.2
Agaricus blazei Murill)	
Shiitake mushroom	0.5
Edible fungi products (with the exception of Agaricus blazei Murill	0.5
products )	
Beans and bean products	
Beans	0.2
Nuts and seeds	
Peanuts	0.5
Meat and meat products	
Meats (with the exception of viscera of the livestock and poultry)	0.1

	Limit (in Cd basis)
Food Category (name)	mg/kg
Liver of the livestock and poultry	0.5
Kidney of the livestock and poultry	1.0
Meat products (with the exception of liver products and kidney	
products)	0.1
Liver products	0.5
-	1.0
V 1	· ·
•	
Fish	0.1
Crustacean	0.5
Bivalves, gastropods, cephalopods, echinoderms	2.0 (viscera removed)
Aquatic products	
1 1	0.2
Anchovy, canned sailfish	0.3
Other fish products (with the exception of anchovy, sailfish	0.1
products)	0.1
Anchovy, canned sailfish anchovy, sailfish products	0.3
Egg and egg products	0.05
Condiment	
Salt	0.5
Fish condiment	0.1
Beverages	
Packaged drinking water (with the exception of mineral water)	0.005  mg/L
Mineral water	0.003  mg/L
<sup>aP</sup> Paddy rice in the brown rice basis.	
Kidney products  Aquatic animal and its products  Fresh, frozen aquatic animal  Fish  Crustacean  Bivalves, gastropods, cephalopods, echinoderms  Aquatic products  Canned fish (with the exception of anchovy, canned sailfish)  Anchovy, canned sailfish  Other fish products (with the exception of anchovy, sailfish products)  Anchovy, canned sailfish anchovy, sailfish products  Egg and egg products  Condiment  Salt  Fish condiment  Beverages  Packaged drinking water (with the exception of mineral water)  Mineral water	0.1 0.5 2.0 (viscera removed 0.2 0.3 0.1 0.3 0.05 0.5 0.1

<sup>4.2.2</sup> Testing methods: Tested using methods provided in GB/T 5009.15.

# 4.3 Mercury

## 4.3.1 Please refer to Table 3 for Mercury limits in foods.

Table 3 Mercury limits in foods

	Limit (in Hg basis) mg/kg	
Food Category (name)	Total mercury	Methyl mercury <sup>a</sup> a
Aquatic animal and its products (with the exception of carnivorous fishes and its products)		0.5
Carnivorous fishes and its products		1.0
Grains and grain products		
Paddy rice P <sup>bP</sup> , brown rice, rice, corn, corn flour (grit, flake), wheat, wheat flour	0.02	_
Vegetable and vegetable products		
Fresh vegetables	0.01	_

	Limit (in Hg basis) mg/kg	
Food Category (name)	Total mercury	Methyl mercury <sup>a</sup> a
Edible fungi and its products	0.1	_
Meat and meat products		
Meats	0.05	
Milk and milk products		
Raw milk, pasteurized milk, sterilized milk, modified milk,	0.01	
fermented milk	0.01	
Egg and egg products		
Fresh egg	0.05	
Condiment		
Salt	0.1	_
Beverage		
Mineral water	0.001 mg/L	
Foods intended for special dietary uses		
Canned complementary foods for infants and young children	0.02	-

<sup>&</sup>lt;sup>aP</sup> For aquatic animal and its products, total mercury could be tested; if the total mercury level is lower than the limit of methyl mercury, it is not necessary to test the methyl mercury; otherwise, the methyl mercury shall be tested. <sup>bP</sup> Paddy rice in the brown rice basis.

### 4.4 Arsenic

### 4.4.1 Please refer to Table 4 for arsenic limits in foods.

Table 4 Arsenic limits in foods

Food Catagory (nome)	Limit (in As	(in As basis) mg/kg	
Food Category (name)	Total arsenic	Inorganic Arsenic	
Grains and grain products			
Grains (with the exception of grains P <sup>aP</sup> )	0.5	_	
Hulled grains (with the exception of brown rice, rice)	0.5	_	
Raw rice P <sup>aP</sup> , brown rice, rice		0.2	
Aquatic animal and its products (with the exception of fish and its products)	_	0.5	
<u></u>		0.1	
Fish and its products		0.1	
Vegetable and vegetable products			
Fresh vegetables	0.5		
Edible fungi and its products	0.5	_	
Meat and meat products	0.5	_	
Milk and milk products			

<sup>4.3.2</sup> Testing methods: Tested using methods provided in GB/T 5009.17.

	Limit (in As	basis) mg/kg
Food Category (name)	Total arsenic	Inorganic Arsenic
Raw milk, pasteurized milk, sterilized milk, modified milk, Fermented milk	0.1	_
Milk powders	0.5	_
Fat and its products	0.1	_
Condiment (with the exception of aquatic Dressing, algae condiment and spices)	0.5	_
Aquatic Dressing (with the exception of fish condiment)		0.5
Fish condiment		0.1
Sugar and starch sugar	0.5	_
Beverages		
Packaged drinking water	0.01 mg/L	
Cocoa product, chocolate and chocolate products and candies		
Cocoa product, chocolate and chocolate products	0.5	
Foods intended for special dietary uses		
Cereal-Based Complementary Foods for Infants and Young		0.4
Children (with the exception of products that are added with	_	0.2
algae)		0.2
Products that are added with algae	_	0.3
Canned complementary foods for infants and young children (with the exception of products that are made from liver of aquatic		0.1
products and animals)	_	0.1
Products that are made from liver of aquatic products and		
animals	_	0.3
<sup>aP</sup> Paddy rice in the brown rice basis.		

<sup>4.4.2</sup> Testing methods: Tested using methods provided in GB/T 5009.11.

### 4.5 Tin

### 4.5.1 Please refer to Table 5 for tin limits in foods.

Table 5 Tin limits in foods

Food Category (name)	Limit (in Sn basis) mg/kg
Foods (with the exception of beverages, formula foods for infants and young children, complementary foods for infants and young children)  Paper	250
Beverages	150
Formula foods for infants and young children, complementary foods for infants and young children	50
<sup>aP</sup> Only apply to foods packaged in containers of tinned plate sheet.	

<sup>4.5.2</sup> Testing methods: Tested using methods provided in GB/T 5009.16.

### 4.6 Nickel

4.6.1 Please refer to Table 6 for nickel limits in foods.

### Table 6 nickel limits in foods

Food Category (name)	Limit (in Ni basis) mg/kg
Oil and its products	
Products mainly produced of hydrogenated vegetable oil and	1.0
hydrogenated vegetable oil.	1.0

4.6.2 Testing methods: Tested using methods provided in GB/T 5009.138.

### 4.7 Chromium

4.7.1 Please refer to Table 7 for chromium limits in foods.

### Table 7 Chromium limits in foods

Food Category (name)	Limit (in Cr basis) mg/kg
Grains and grain products Grains P <sup>aP</sup>	1.0
Milled grains products	1.0
Vegetable and vegetable products Fresh vegetables	0.5
Beans and bean products Beans	1.0
Meat and meat products	1.0
Aquatic animal and its products	2.0
Milk and milk products	
Raw milk, pasteurized milk, sterilized milk, modified milk, Fermented milk	0.3
Milk powders	2.0
<sup>aP</sup> Paddy rice in the brown rice basis.	

<sup>4.7.2</sup> Testing methods: Tested using methods provided in GB/T 5009.123.

### 4.8 Nitrite

4.8.1 Please refer to Table 8 for Nitrite and Nitrate limits in foods.

### Table 8 Nitrite and Nitrate limits in foods

	Limits	
Food Category (name)	mg/kg	
rood Category (name)	Nitrite	Nitrate (In
	(In NaNOR <sub>2R</sub> basis )	NaNOR <sub>3R</sub> basis)
Vegetable and vegetable products		
Pickled vegetables	20	_

	Limits	
Food Category (name)	mg/kg	
	Nitrite (L. N. NOP. 1	Nitrate (In
	(In NaNOR <sub>2R</sub> basis )	NaNOR <sub>3R</sub> basis)
Milk and milk products		
Raw milk	0.4	_
Milk powders	2.0	_
Beverages		
Packaged drinking water (with the exception of	0.005 mg/L (in	
mineral water)	NOR <sub>2PR</sub> -P basis)	
Minaral restan	$0.1 \text{ mg/L (in NOR}_{2PR}^{-P}$	45 mg/L (in
Mineral water	basis )	NOR <sub>3PR</sub> -P basis)
Foods intended for special dietary uses		
Formula foods for infants and young children		
Infant Formula	2.0P <sup>aP</sup> (in powdered	100 (in powdered
miant Polinula	product basis)	product basis)
	2.0P <sup>aP</sup> (in powdered	100P <sup>bP</sup> (in
Older infants & young children formula	` =	powdered product
	product basis)	basis)
General standard of formulas for special	2.0 (in powdered	100 (in powdered
medical purposes intended for infants	product basis)	product basis)
Complementary foods for infants and young		
children		
Cereal-based complementary foods for	$2.0P^{cP}$	100P bP
infants and young children	2.0F	1001
Canned complementary foods for infants	$4.0P^{cP}$	200P <sup>bP</sup>
and young children	4.01	200F

#### Benzo[a]pyrene 4.9

4.9.1 Please refer to Table 9 for Benzo[a]pyrene limits in foods.

Table 9 Benzo[a]pyrene limits in foods.

Food Category (name)	Limit μg/kg
Grains and grain products	
Paddy rice P <sup>aP</sup> , brown rice, rice, wheat, wheat flour, corn, corn	5.0
flour (grits, flakes)	5.0
Meat and meat products	
Smoked, roasted, grilled meat	5.0
Aquatic animal and its products	
Smoked, roasted aquatic products	5.0

<sup>&</sup>lt;sup>aP</sup>Only apply to milk based products.

<sup>bP</sup> Not applicable to products that have vegetables and fruits added.

<sup>cP</sup> Not applicable to products that have beans added.

<sup>4.8.2</sup> Testing methods: beverages shall be tested by using methods provided in GB/T 8538; other products shall be tested by using methods provided in GB 5009.33.

Fat, oil and its products	10
<sup>aP</sup> Paddy rice in the brown rice basis.	

4.9.2 Testing methods: Tested using methods provided in GB/T 5009.27.

### 4.10 N-nitrosodimethylamine

4.10.1 Please refer to Table 10 for N-NITROSODIMETHYLAMINE limits in foods.

Table 10 N-NITROSODIMETHYLAMINE limits in foods

Food Category (name)	Limit μg/kg
Meat and meat products	
Meat products (with the exception of canned meat)	3.0
Aquatic animal and its products	
Aquatic products (with the exception of canned aquatic products)	4.0

<sup>4.10.2</sup> Testing methods: Tested using methods provided in GB/T 5009.26.

### 4.11 Polychlorinated biphenyl

4.11.1 Please refer to Table 11 for polychlorinated biphenyl limits in foods.

Table 11 Polychlorinated biphenyl limits in foods

Food Category (name)	Limit P <sup>aP</sup> mg/kg
Aquatic animal and its products 0.5	
<sup>a P</sup> polychlorinated biphenyl is calculated by total of PCB28, PCB52, PCB101, PCB118, PCB138 PCB153 and PCB180.	

<sup>4.11.2</sup> Testing methods: Tested using methods provided in GB/T 5009.190.

### 4.12 3-chloro-1, 2-propanediol

4.12.1 Please refer to Table 12 for 3-chloro-1, 2-propanediol limits in foods.

Table 12 3-chloro-1, 2-propanediol limits in foods

Food Category (name)	Limit mg/kg
Condiment P <sup>aP</sup>	
Liquid condiment	0.4
Solid condiment	1.0
<sup>aP</sup> Only limited to products that are added acid-hydrolyzed vegetable protein.	

4.12.2 Testing methods: Tested using methods provided in GB/T 5009.191.

## Appendix A Explanation of the Food Categories

A.1 Please refer to the Table A.1 for explanation of the food categories.

	Table A.1 Explanation of the 1 ood Categories
	Fresh fruit (unprocessed fruit, surface-treated, peeled or pre-cut, frozen fruit)
	Berries and other small fruit
l 🗕	Other fresh fruit (including sugar cane)
l Tu	Fruit products
it a	Canned fruit
ınd	Dried fruit
its	Fruit processed with vinegar, oil, or salt
pr	Fruit jam (paste)
odı	Candied and preserved fruit (including hawthorn strips)
Fruit and its products	Fermented fruit products
<b>3</b> 2	Cooked or fried fruit
	Fruit dessert Fruit dessert
	Other fruit products
	Fresh vegetables (unprocessed, surface-treated, peeled/sliced or stripped, frozen
	vegetables)
Ve	Brassica vegetables
get po	Leaf vegetables (including leaf brassica vegetables)
abl tato	Leguminous vegetables
e a	Root and tuber vegetables (such as potatoes, carrots, radish, ginger, etc.)
Vegetable and vegetable products (includ potatoes, but exclusive of edible fungi)	Stem vegetables (including bean sprouts)
veg It e	Other fresh vegetables (including melons, bulb vegetables, aquatic
eta eta	vegetables, sprouting vegetables, and perennial vegetables, such as bamboo
ble usiv	shoots)
) pr	Vegetable products
odı of e	Canned vegetable
uct: dib	Dried vegetable
s (ii le f	Pickled vegetable (such as vegetables picked by soy paste, salt,
nch un;	sugar/vinegar)
udi gi)	Vegetable puree
ling	Fermented vegetable products
	Boiled or fried vegetable
	Other processed vegetable
H	Fresh edible fungi (unprocessed, surface-treated, peeled/sliced or stripped, frozen
Edi a pr	edible fungi)
Edible fungi and its products	Lentinus edodes
fur its uct	Agaricus blazei Murill
ngi.	Other fresh edible fungi
	Fungi products

ı	
	Canned fungi
	Dried fungi
	Pickled fungi (such as edible fungis picked by soy paste, salt, sugar/vinegar)
	Boiled or fried fungi
	Other fungi products
	Grains
	Rice
	Corn
	Wheat
	Barley
Gr	Other grains [Such as millet, sorghum, rye, oat, buckwheat, etc.]
<b>ai</b> n	Milled grain products
ıs a	Brown Rice
nd	Rice
97	Wheat flour
ain	Corn flour (grits, flakes)
pr	Cereal
odı	Other husked grains (such as millet, sorghum, barley, broomcorn millet, etc.)
Grains and grain products (not including baked food)	Grains products
l ŝ	·
ot	Rice products (such as rice powder, glutinous rice ball flour and other products, etc.)
inc	Wheat flour products
lud	Fresh pastas and noodles and similar products (such as noodles,
ing	dumpling wraps, wontons wrap, shuo mai wrap, etc.)
ba	Dried pastas and noodles and similar products
ke	Fermented wheat flour product
d fc	Batters (e.g. for breading or batters for fish or poultry), breading, frying
)od	powder
	Gluten
	Other wheat flour products
	Corn products
	Other grain products (such as wheat and rice products with fillings, assorted
	cereal porridge, etc.)
Beans and bean products	Beans (dried beans, powdered dried beans)
	Bean products
	Non-fermented bean products (such as soy milk, bean curd, dried bean curd,
	bean curd stick, cooked bean products, puffed soybean protein food, soybean
	meat, etc.)
	Fermented bean products (such as fermented bean curd, natto, fermented
an	soybeans and products)
	Canned beans
n d	Fresh algae (unprocessed, surface-treated, sliced or stripped, frozen algae)

	spirulina
	Other fresh algae
	Algae products
	Canned algae
	Dried algae
	Boiled or fried algae
	Other algae products
	Fresh nuts and seeds
Nuts and seeds	Tree nuts
uts an seeds	Oil seeds (exclusive of grains seeds and beans)
ind	Seeds for beverages and sweeteners (such as cocoa and coffee beans, etc.)
<b>-</b>	Nuts and seeds products
Nuts and seeds	Cooked nuts and seeds (with and without shell)
8 2	Coated nuts and seeds
nd	Canned nuts and seeds
see	Nut or seed paste, including peanut butter, etc.
ds	Other processed nuts (e.g. pickled nut kernels)
	Meats (fresh, chilled and frozen meat, etc.)
	Meat of livestock and poultry
	Viscera of the livestock and poultry (such as liver, kidney, lungs and
	intestines, etc.)
	Meat products (Including viscera products)
	Pre-processed meat product
Me	Pre-flavored meat products (seasoned or flavored raw/fresh meat)
at :	Cured meat product (brined meat, preserved pork, preserved duck,
Meat and mea	Chinese-style ham, Chinese sausage, etc.)
, in	Cooked meat product
eat	Canned meat
pro	Thick gravy cooked meat
t products	Smoked, baked or grilled meat product
cts	Fried meat
	Western hams (smoked and cooked)
	Sausage
	Fermented meat product
	Cooked dried meat product (such as crushed dried meat, dried meat,
	meat crisp, etc.)
	Other cooked meat products
pr fi	Fresh and frozen fish and fishery product
Fish and fishery products	Fish
and ry rets	Non-carnivorous fish
" -	Carnivorous fishes (such as shark, tunas, etc.)

I	Shellfish
	Mollusc
	Cephalopods
	Bivalves
	Echinoderms
	Gasteropod
	Other mollusc
	Other fresh and frozen aquatic products
	Processed fish and fishery products
	Canned aquatic products
	Minced fish products (including fish balls, etc.)
	Pickled fish and fishery product
	Roe product
	Dried fish and fishery products (air-dry, heat dry, pressure dry)
	Smoked or grilled fishery product
	Fermented fishery product
	Other fishery product
	Raw milk
	pasteurized milk
≾	sterilized milk
	Modified milk
an	Fermented milk
d n	Evaporated milk and sweetened condensed milk
nilk	Milk powders
þr	Whey powder and whey protein powder (including non-demineralized whey
l bo	powder)
Milk and milk products	Cheese
91	Processed cheese
	Other dairy products
	Fresh egg
	Egg products
$\mathbf{E}_{\mathbf{g}}$	Sauced egg
99 29	Salted egg in wine
nd	Preserved egg
egg	Salted egg
Ş pr	Dehydrated egg product (such as egg white or yolk powder, egg white chips,
Egg and egg products	etc.)
uct	Heat-clotted egg product (e.g. yolk cream, preserved egg sausage)
S	Frozen egg products (such as frozen eggs)
	Other egg products
p s it d	37 (11 11 10)

	Animal fats (such as lard, tallow, fish oil, cream, butter, anhydrous butter oil, etc.)
	Fat products
	Hydrogenated vegetable oil and products with hydrogenated vegetable oil as the major content (such as margarine, shortenings)  Blend edible oil  Other fat products
	-
Condiment	Salt Tasty agent and taste aid Vinegar Soy sauce Bean paste, wheat paste and derivatives Cooking wine Spices Spices and powdered spices Spice oil Spiced pastes (e.g. mustard seasonings, wasabi) Other spice processed product Aquatic Dressing Fish condiment (such as fish gravy, etc.) Other aquatic dressing (such as oyster oil, shrimp oil, etc.) Blended condiments (such as solid mixes for soups and broths, chicken essence, chicken powder, mayonnaise, salad dressing, flavored clear soup, etc.) Other condiment
Drinks	Packaged drinking water  Mineral water  Drinking distilled water Other packaged drinking water  Fruit and vegetable juice (such as apple juice, apple cider vinegar, hawthorn juice, hawthorn vinegar, etc.)  Fruit and vegetable juice (pulp)  Concentrated fruit and vegetable juice (pulp)  Other fruit and vegetable juice (nectar) drink (including fermented product)  Protein containing drink  Milk containing drink (Fermented milk containing drink, Recombined milk containing drink, Lactobacillus drink)  Plant protein containing drink  Blended protein containing drink  Carbonated drink  Tea drink  Coffee drink  Plant drink

	Flavored drink Drink for special usage (such as sports drink, nutritional drink, etc.) Powdered drink (including instant coffee) Other drink
Alcoholic beverage	Distilled spirit (such as Liquor, Brandy, Whisky, Vodka, Rum, etc.) Integrated alcoholic beverage Fermented Alcoholic Beverages (such as Grape wine, Chinese rice wine, Fruit wine, beer, etc.)
Sugar and starch sugar	Sugar Refined sugar and its product (e.g. cane sugar, beet sugar, crystal sugar, fruit sugar) Other sugar and syrup (such as brown sugar, brown granulated sugar, rock sugar in tablet, molasses, molasses, partially inverted sugar, maple syrup) Starch sugars (fructose, dextrose, cerelose, partially inverted sugar, including molasses, etc.)
Starch & starch products (including starch extracted from grains, beans and root plants	Edible starch Starch products Noodles and vermicelli made from starch Lotus root starch Other starch products (such as shrimp-flavor starch flake)
Baked food	Bread Pastry (including moon cakes) Biscuits (such as biscuits or cookies with fillings, waffles, and egg-biscuit-roll) Other baked foods
Cocoa product, chocolate and chocolate products and candies	Cocoa products, chocolate and chocolate products (including chocolate and chocolate products with cocoa butter alternatives)  Candies (including gum-based candy)
Frozen drinks	Ice creams, ice cream bar Flavored ice and ice bars Edible ice Other frozen drinks
intend ed for specia l dietar	Formula foods for infants and young children Infant Formula Older infants and young children formula

	General Standard of Formulas for Special Medical Purposes Intended for Infants  Complementary Foods for Infants and Young Children  Cereal-Based Complementary Foods for Infants and Young Children
	Canned Complementary Foods for Infants and Young Children Other foods intended for special dietary uses
Others (other foods in addition to the above food categories)	Jelly Puffed foods Bee products (such as honey, pollen, etc.) Tea Dried chrysanthemum Tea made of leaf of Chinese Holly