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# GAIN Report

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## China - Peoples Republic of

**Post:** Beijing

### China Notifies Standard for Maximum Levels of Mycotoxins in Foods

**Report Categories:**

FAIRS Subject Report

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**Report Highlights:**

On June 3, 2019, China notified the World Trade Organization of the Draft National Food Safety Standard for Maximum Levels of Mycotoxins in Foods as SPS/N/CHN/1146. The Standard, once finalized and implemented, will replace the National Food Safety Standard for Maximum Levels of Mycotoxins in Foods (GB 2761-2017). The deadline for comment submission is August 2, 2019, while the proposed date of entry is yet to be determined. Comments can be sent to China's SPS Enquiry Point at [sps@aqsiq.gov.cn](mailto:sps@aqsiq.gov.cn). The following report contains an unofficial translation of this draft standard.

**General Information:**  
**BEGIN TRANSLATION**

## **National Food Safety Standard**

### **Maximum Levels of Mycotoxins in Foods**

#### **Foreword**

This standard replaces GB 2761-2017 - “National Food Safety Standard for Maximum Levels of Mycotoxins in Foods”.

This standard modifies the GB 2761-2017 in the following aspects:

- Revised Note 1 in the section of “Edible Part”;
- Revised the limits for Aflatoxin B<sub>1</sub>;
- Revised the limits for Aflatoxin M<sub>1</sub>;
- Revised the limits for Deoxynivalenol;
- Added limits for Fumonisin;
- Added the conversion ratio for liquid-form formula foods for infants and young children;
- Removed the note “excluding hawthorn sheet” in Table 4;
- Removed the note “Paddy rice in the brown rice basis”;
- Revised Appendix A.

# **National Food Safety Standard**

## **Maximum Levels of Mycotoxins in Foods**

### **1 Scope**

This standard sets limits for Aflatoxin B<sub>1</sub>, Aflatoxin M<sub>1</sub>, Deoxynivalenol, Patulin, Ochratoxin A, Zearalenone and Fumonisin in foods.

### **2 Terminologies and Definitions**

#### **2.1 Mycotoxin**

The toxic secondary metabolite produced by organisms of the fungi in the process of growth and reproduction.

#### **2.2 Edible parts**

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

Note 1: removal of the non-edible parts cannot be done with chemical or biological means (for example, refining of crude vegetable oil);

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

#### **2.3 Limit**

Maximum level of mycotoxin content permitted in the edible parts of food materials and/or finished food products.

### **3 Principles of (Standard) Application**

3.1 Regardless of existence of the mycotoxin limits, the food producers and processors should take control measures to keep the mycotoxin content in foods at the minimum level.

3.2 This standard lists the mycotoxins that may pose high risks to public health; the foods with the mycotoxin limits are foods that have higher impact on consumers' dietary exposure.

3.3 Explanation of the Food Categories (Appendix A) is for defining scope of application of the mycotoxin limits, and is only applicable to this standard. When a mycotoxin 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 mycotoxins in foods are calculated by the edible parts of the food unless otherwise specified

### **4 Specifications**

#### **4.1 Aflatoxin B<sub>1</sub>**

4.1.1 Please refer to Table 1 for Aflatoxin B<sub>1</sub> limits in foods.

Table 1 Aflatoxin B<sub>1</sub> Limits in Foods

Food Category (name)	Limit µg /kg
Grains and grain products	
Corn, corn flour (grits) and grain products containing corn materials	20
Paddy rice, brown rice, rice (flour)	10
Wheat, barley, other grains	5.0
Wheat flour, cereal, other husked grains	5.0
Beans and bean products	
Fermented bean products	5.0
Nuts and seeds	
Fresh and dried nuts and seeds	
Peanut	20
Ready-to-eat fresh and dried nuts and seeds (not including peanut)	5.0
Nuts and seed products	
Cooked nuts and seeds (not including peanut)	5.0
Cooked peanut	20
Sesame paste	20
Nut and seed products containing peanut materials	20
Oil and oil products	
Vegetable oil and fat (not including peanut oil, corn oil)	10
Peanut oil, corn oil	20
Condiment	
Soy sauce, vinegar, fermented paste	5.0
Foods intended for special dietary uses	
Formula foods for infants and young children <sup>a</sup>	
Formula foods for infants <sup>b</sup> , formula foods for older infants <sup>b</sup> and formula foods for young children <sup>b</sup>	0.5 (in powdered product basis)
Formulas for special medical purposes intended for infants	0.5 (in powdered product basis)
Complementary foods for infants and young children	
Cereal-based complementary foods for infants and young children	0.5
Formula foods for special medical purposes <sup>c</sup> (not including products under the “formulas for special medical purposes intended for infants” category)	0.5 (in solid product basis)
Complementary food supplement (only limit to products containing grains, nuts and beans)	0.5
Sports nutritional food <sup>c</sup>	0.5
Nutrient supplementary food for pregnant and lactating women (only limit to products containing grains, nuts and beans)	0.5
Others	
Puffed foods containing corn	20
<p>a Liquid-form formula foods for infants and young children are converted at the rate 8:1</p> <p>b Products using soybean and soybean protein products as the major source of protein</p> <p>c Products using beans and soybean protein products as the major materials.</p>	

4.1.2 Testing method: using methods provided in GB 5009.22.

## 4.2 Aflatoxin M<sub>1</sub>

4.2.1 Please refer to Table 2 for Aflatoxin M<sub>1</sub> limits in foods.

Table 2 Aflatoxin M<sub>1</sub> Limits in Foods

Food Category (name)	Limit µg /kg
Milk and milk products (not including raw milk, pasteurized milk, sterilized milk, modified milk, and fermented milk)	0.5
Raw milk, pasteurized milk, sterilized milk, modified milk, and fermented milk	0.2
Foods intended for special dietary uses	
Formula foods for infants and young children <sup>a</sup>	
Formula foods for infants <sup>b</sup> , formula foods for older infants <sup>b</sup> and formula foods for young children <sup>b</sup>	0.5 (in powdered product basis)
Formulas for special medical purposes intended for infants	0.5 (in powdered product basis)
Formula foods for special medical purposes <sup>c</sup> (not including varieties related to formulas for special medical purposes intended for infants)	0.5 (in solid product basis)
Complementary food supplement (only limit to products containing milk)	0.5
Sports nutritional food <sup>c</sup>	0.5
Nutrient supplementary food for pregnant and lactating women (only limit to products containing milk)	0.5
<sup>a</sup> Liquid-form formula foods for infants and young children are converted at the rate 8:1 <sup>b</sup> Products using milks and milk protein products as the major source of protein <sup>c</sup> Products using milks or milk protein as the major materials	

4.2.2 Testing method: using methods provided in GB 5009.24.

### 4.3 Deoxynivalenol

4.3.1 Please refer to Table 3 for Deoxynivalenol limits in foods.

Table 3 Deoxynivalenol Limits in Foods

Food Category (name)	Limit µg /kg
Grains and grain products	
Barley, wheat, oat, highland barley, corn	2000 <sup>a</sup>
Barley kernel, wheat flour, oatmeal, wheat flour products, corn flour (grit)	1000
Wheat or rice flour products with fillings <sup>b</sup>	750
Baked foods	750
Foods intended for special dietary uses	
Cereal-based complementary foods for infants and young children	200
<sup>a</sup> The limit applies to unprocessed barley, wheat, oat, highland barley, corn kernel <sup>b</sup> Only limit to products using wheat flour as the material	

4.3.2 Testing method: using methods provided in GB5009.111.

#### 4.4 Patulin

4.4.1 Please refer to Table 4 for Patulin limits in foods.

Table 4 Patulin Limits in Foods

Food Category (name) <sup>a</sup>	Limit µg /kg
Fruit and its products Fruit products	50
Beverages Fruit and vegetable juice	50
Liquor	50
<sup>a</sup> Only limited to products produced from apple and hawthorn.	

4.4.2 Testing method: using methods provided in GB 5009.185.

#### 4.5 Ochratoxin A

4.5.1 Please refer to Table 5 for Ochratoxin A limits in foods.

Table 5 Ochratoxin A Limits in Foods

Food Category (name)	Limit µg /kg
Grains and grain products Grains Milled grain products	5.0 5.0
Beans and bean products Beans	5.0
Liquor Grape wine	2.0
Nuts and seeds Roasted coffee beans	5.0
Beverages Grind coffee (roasted coffee) Instant coffee	5.0 10.0

4.5.2 Testing method: using methods provided in GB 5009.96

#### 4.6 Zearalenone

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

Table 6 Zearalenone Limits in Foods

Food Category (name)	Limit µg /kg
Grains and grain products Wheat, wheat flour Corn, corn flour (grits)	60 60

4.6.2 Testing method: using methods provided in GB 5009.209.

#### 4.7 Fumonisin

4.7.1 Please refer to Table 7 for Fumonisin limits in foods

Table 7 Fumonisin Limits in Foods

Food Category (name)	Limit <sup>a</sup> µg /kg
Grains and grain products	
Corn	4000 <sup>b</sup>
Corn flour (grits)	2000
Grain products containing corn materials	1000
Foods intended for special dietary uses	
Cereal-based complementary foods for infants and young children that contain corn materials	200
<sup>a</sup> Fumonisin limit is calculated by the sum of Fumonisin B <sub>1</sub> , Fumonisin B <sub>2</sub> and Fumonisin B <sub>3</sub> .	
<sup>b</sup> The limit applies to corn kernel	

4.7.2 Testing method: using methods provided in GB 5009.240.

### Appendix A

#### Explanation of the Food Categories

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

Table A.1 Explanation of the Food Categories

Fruit and fruit products	<p>Fresh fruit (unprocessed, surface-treated, peeled or pre-cut, frozen fruit)</p> <ul style="list-style-type: none"> <li>Berries and other small fruits (such as cranberry, gooseberry)</li> <li>Other fresh fruits (including sugar cane)</li> </ul> <p>Fruit products</p> <ul style="list-style-type: none"> <li>Canned fruit</li> <li>Dried fruit</li> <li>Fruit processed with vinegar, oil, or salt</li> <li>Fruit jam (paste)</li> <li>Candied and preserved fruit (including hawthorn sheets)</li> <li>Fermented fruit product</li> <li>Cooked or fried fruit</li> <li>Fruit dessert</li> <li>Other fruit products</li> </ul>
Grains and grain products (not including baked products)	<p>Grains</p> <ul style="list-style-type: none"> <li>Paddy rice</li> <li>Corn</li> <li>Wheat</li> <li>Barley</li> <li>Other grains [such as millet, sorghum, rye, oat, buckwheat, highland barley]</li> </ul> <p>Milled grain products</p> <ul style="list-style-type: none"> <li>Brown rice (including edible rice bran)</li> <li>Rice (flour) (including color rice)</li> <li>Wheat flour (including edible wheat bran)</li> <li>Corn flour (grits)</li> <li>Cereal</li> <li>Other husked grains (such as millet, sorghum, barley, broomcorn)</li> </ul>

millet, etc.)

Grain products

Rice products (such as rice noodle)



<p>(not including baked)</p>	<p>Wheat flour products</p> <ul style="list-style-type: none"> <li>Fresh noodles and similar products (e.g. un-boiled noodles, “skin” or wrap for dumplings/wontons/<i>shao mai</i>)</li> <li>Dried noodles and similar products</li> <li>Fermented wheat flour products</li> <li>Batters (e.g. batters for fish and poultry), coating powder, frying powder</li> <li>Gluten</li> <li>Other wheat flour products</li> </ul> <p>Corn products (such as corn noodles, corn flakes)</p> <p>Other grain products (such as wheat or rice flour products with fillings, canned cereal porridge)</p>
<p>Beans and bean products</p>	<p>Beans (dried beans, and powder of milled dry beans)</p> <p>Bean products</p> <ul style="list-style-type: none"> <li>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.)</li> <li>Fermented bean products (such as fermented bean curd, natto, fermented soybeans, and fermented soybean products)</li> <li>Canned beans</li> <li>Other bean products (such as sweetened bean paste)</li> </ul>
<p>Nuts and seeds</p>	<p>Fresh and dried nuts and seeds (not including seeds of grains/beans, including coffee beans and cocoa beans)</p> <p>Nuts and seeds products</p> <ul style="list-style-type: none"> <li>Cooked nuts and seeds (with and without shell)</li> <li>Canned nuts and seeds</li> <li>Nuts and seeds paste (such as peanut butter)</li> <li>Other nuts and seed products (such as pickled nuts)</li> </ul>
<p>Milk and milk products</p>	<p>Raw milk</p> <p>Pasteurized milk</p> <p>Sterilized milk</p> <p>Modified milk</p> <p>Fermented milk</p> <p>Evaporated milk and sweetened condensed milk</p> <p>Milk powders</p> <p>Whey powder and whey protein powder (including non-demineralized whey powder)</p> <p>Cheese</p> <p>Process(ed) cheese</p> <p>Other dairy products (including casein)</p>
<p>Fat and oils</p>	<p>Vegetable oil and fat (including blend oil, and blend oil added with fish oil)</p> <p>Animal fat (such as lard, tallow, fish oil, krill oil, cream, butter, anhydrous milk fat, etc.)</p> <p>Fat products</p> <ul style="list-style-type: none"> <li>Hydrogenated vegetable oil and products mainly made from hydrogenated vegetable oil (such as margarine, shortening, etc.)</li> <li>Other fat products</li> </ul>

<b>Condiment</b>	<ul style="list-style-type: none"> <li>Salt</li> <li>MSG</li> <li>Vinegar</li> <li>Soy sauce</li> <li>Fermented paste</li> <li>Spices <ul style="list-style-type: none"> <li>Spices and powdered spices</li> <li>Spice oil</li> <li>Spiced pastes (e.g. mustard seasonings, wasabi)</li> <li>Other spice processed product</li> </ul> </li> <li>Aquatic dressing <ul style="list-style-type: none"> <li>Fish condiment (such as fish gravy, etc.)</li> <li>Other aquatic dressing (such as oyster oil, shrimp oil, etc.)</li> </ul> </li> <li>Blended condiments (such as cooking wine, solid mixes for soups and broths, chicken essence, chicken powder, mayonnaise)</li> <li>Other condiments</li> </ul>
<b>Beverages</b>	<ul style="list-style-type: none"> <li>Packaged drinking water <ul style="list-style-type: none"> <li>Mineral water</li> <li>Drinking distilled water</li> <li>Other packaged drinking water</li> </ul> </li> <li>Fruit and vegetable juice (such as apple juice, apple cider vinegar, hawthorn juice, hawthorn vinegar, etc.) <ul style="list-style-type: none"> <li>Fruit and vegetable juice (pulp)</li> <li>Concentrated fruit and vegetable juice (pulp)</li> <li>Fruit and vegetable juice (pulp) beverages</li> </ul> </li> <li>Drinks containing protein <ul style="list-style-type: none"> <li>Drinks containing milk (drinks containing fermented milk, recombined drinks containing milk, drinks containing lactose)</li> <li>Drinks containing plant protein</li> <li>Drinks containing mixed proteins</li> <li>Other protein drinks</li> </ul> </li> <li>Carbonated drink</li> <li>Tea drink</li> <li>Coffee drink</li> <li>Plant drink</li> <li>Flavored drink</li> <li>Powdered drink [including instant coffee, ground coffee (roast coffee)]</li> <li>Other beverages</li> </ul>
<b>Liquor</b>	<ul style="list-style-type: none"> <li>Distilled spirit (such as liquor, brandy, whisky, vodka, rum, etc.)</li> <li>Integrated alcoholic beverage</li> <li>Fermented alcoholic beverages (such as grape wine, Chinese rice wine, fruit-flavored beer, beer, etc.)</li> </ul>
<b>Baked Foods</b>	<ul style="list-style-type: none"> <li>Bread</li> <li>Pastry (including mooncake)</li> <li>Biscuit</li> <li>Other baked foods</li> </ul>

**END OF TRANSLATION**