USDA Foreign Agricultural Service
GAIN Report
Global Agricultural Information Network

THIS REPORT CONTAINS ASSESSMENTS OF COMMODITY AND TRADE ISSUES MADE BY USDA STAFF AND NOT NECESSARILY STATEMENTS OF OFFICIAL U.S. GOVERNMENT POLICY

Voluntary _ Public

Date: 2/12/2015
GAIN Report Number: CH15005

China - Peoples Republic of

Post: Beijing

China's National Food Safety Standard on Nut and Seed Food

Report Categories:
FAIRS Subject Report
Approved By:
Jennifer Clever
Prepared By:
Chris Frederick, Jennifer Clever, and Wu Bugang

Report Highlights:
On December 31, 2014, China's National Health and Family Planning Commission (NHFPC) published its final rule, the National Food Safety Standard on Nut and Seed Food (GB 19300-2014). This rule will replace the *Hygienic Standard on Roasted Food (GB 19300-2003)* and the *Hygienic Standard on Food of Nuts (GB 16326-2005),* and will take effect on May 24, 2015. China originally notified the National Food Safety Standard on Nut and Seed Food to the WTO as G/N/SPS/CHN/523 during its draft stage in 2012. The following report contains an unofficial translation of this final rule.

General Information:

On December 31, 2014, China's National Health and Family Planning Commission (NHFPC) published its final rule, the National Food Safety Standard on Nut and Seed Food (GB 19300-2014). This rule will replace the *Hygienic Standard on Roasted Food (GB 19300-2003)* and the *Hygienic Standard on Food of Nuts (GB 16326-2005),* and will take effect on May 24, 2015. China originally notified the National Food Safety Standard on Nut and Seed Food to the WTO as G/N/SPS/CHN/523 during its draft stage in 2012. The following report contains an unofficial translation of this final rule.

BEGIN TRANSLATION

National Food Safety Standard of P.R China
Food of Nuts and Seeds
GB 19300-2014
Issued on: December 24, 2014
Implemented on: May 24, 2015
Issued by: National Health and Family Planning Commission of China

Preface
This Standard replaces GB 19300-2003 "Hygienic Standard on Roasted Food" and GB 16326-2005 "Hygienic Standard on Food of Nuts." The changes are as follows:

- The standard title has been modified as "National Food Safety Standard Food of Nuts and Seeds";
    - The scope has been modified;
        - The terms and definitions have been added;
        - Classification has been added;
        - The sensory requirements have been modified;
        - The physical and chemical indexes have been modified;
        - Pesticide residue limits have been added to food of dry raw nuts and seeds;
        - The limits of microbes have been modified;
        - Annexes have been added.

National Food Safety Standard
Food of Nuts and Seeds
1. Scope
The Standard applies to food of dry raw and cooked nuts and seeds.
2. Terms and Definitions
2.1 Food of Nuts and Seeds
Food that uses nuts, seeds or their kernels as main ingredients and have been processed
2.1.1 Nuts
Seeds of woody plants with a hard shell, including walnuts, chestnuts, apricot kernels, almond kernels, hickory nuts, pistachios, torreya grandis nuts, macadamia nuts, and pine nuts.
2.1.2 Seeds

Seeds of melons, fruits, oil plants and other plants, including sunflower seeds, watermelon seeds, pumpkin seeds, peanuts, broad beans, peas, and soybeans

2.1.3 Seed Kernels (including nut kernels)

The part of a nut or seed with its shell removed.

2.2 Food of Dry Raw Nuts and Seeds

Food of nuts and seeds that has been treated by cleaning, screening, shelling, or drying but has not been processed through cooking

2.3 Food of Cooked Nuts and Seeds

Food that uses nuts, seeds or their kernels as main ingredients and has been processed through roasting, frying, steaming, boiling or other cooking processes, with or without addition of other ingredients;

Note: Food of cooked nuts and seeds are traditionally called food of roasted nuts and seeds.

2.4 Moldy filaments

Filaments with mold on shell or kernel

3. Classification

Food of nuts and seeds are classified into two categories based on different ways of processing: food of dry raw nuts and seeds and food of cooked nuts and seeds.

4. Technical Requirements

4.1 Ingredient Requirements

The ingredients shall meet corresponding safety standards and relevant regulations.

4.2 Sensory Requirements

The sensory requirements shall comply with the provisions listed in Table 1.

Table 1. Sensory requirements

Items	Requirements	Testing Method
Odor and taste	No such smell as rancidity	Take a proper amount of samples, place them in a clean, dry, and white porcelain plate, observe in the natural light, and taste them. The moldy grains are expressed as a percentage of the moldy grain number, and the detailed testing method is described in Annex A.
Moldy filaments/ % In-shell products ≤ Shelled products ≤	 2.0 0.5	
Foreign matters	No visible foreign matters	

4.3 Physical and Chemical Indexes

Physical and chemical indexes shall comply with the provisions of Table 2.

Table 2. Physical and Chemical Indexes

Items	Index				Testing Method
	Dry raw		Cooked		
	Nuts	Seeds	Sunflower Seeds	Others	
Peroxide value [a] (measured in fat), g/100g ≤	0.08	0.40	0.80	0.50	The sample pretreatment is as shown in Annex B, and the peroxide value is determined in accordance with the methods specified in GB 5009.37.
Acid value [a] (measured in fat)(KOH) mg/g ≤	3				
[a] The acid value and peroxide value are not required for food of broad beans and chestnuts with low fat content.					

4.4 Limits of Contaminants and Mycotoxins

4.4.1 Limits of contaminants shall comply with provisions of GB 2762, where food of beans shall comply with provisions on beans and their products specified in GB 2762 and other varieties shall comply with provisions of nuts and seeds specified in GB 2762.

4.4.2 Limits of mycotoxins shall comply with provisions of GB 2761, where food of beans shall comply with provisions of beans and their products specified in GB 2761 and other varieties shall comply with provisions of nuts and seeds specified in GB 2761.

4.5 Limits of Pesticide Residues

Limits of pesticide residues in food of dry raw nuts and seeds shall comply with provisions of GB 2763.

4.6 Limits of Microorganism

4.6.1 Limits of pathogens shall comply with provisions of GB 29921.

4.6.2 Limits of microorganisms in food of cooked nuts and seeds and in food of dry raw nuts and seeds shall comply with provisions specified in Table 3.

Table 3 Maximum Limits for Microorganisms

Item	Sampling Plan[a] and Limit (If not specified, it shall be expressed in CFU/g)				Testing Method
	n	c	m	M	
Coliform group	5	2	10	10^2	GB 4789.3 *Plate Count Method*
Mold[b] ≤	25				GB 4789.15
[a] The sample shall be collected and processed in accordance with *GB 4789.1*. [b] Only applies to food of cooked nuts and seeds processed through roasting.					

4.7 Food Additives

The use of food additives shall comply with provisions of GB 2760. (GB 2760-2011 Part I, Part II in English; GB 2760-2014 in Chinese)

Annex A

Testing Method for Moldy Filaments

Take samples of 1 kg ~ 2 kg for small and medium granules of nuts and seeds, or take samples of 3 kg～5 kg for big and especially big filaments of nuts and seeds, take 200 grains from the samples (weight range reference is as shown in Table A.1) with the method of sample quartering, select the moldy filaments, and then count the number of moldy granules as n_1. For granules with shells, take out the granules with moldy shells first, shell the remained granules, check and take out moldy kernels from the shelled granules, and add the number of granules with moldy shells and the number of granules with moldy kernels together as the number of moldy products with shells. For granules without shells, directly check and take out the moldy kernels. The index of moldy granules is calculated by formula (A.1) :

$f = n_1/200 \times 100\%$ .....（A.1）

f —— index of moldy filaments for a product, %;

n_1 —— the number of moldy filaments.

Table A.1 Table of Sample Amount of Moldy Filaments for Reference

Names of food of nuts and seeds	Weight range of 200 filaments for reference (g)
Small filaments: sunflower seed, watermelon seed, pumpkin seed, pea, green soybean, pine nut, etc.	30～100
Medium filaments: apricot kernel, almond kernel, pistachio, peanut, broad bean, cashew, hazelnut, etc.	100～500
Big filaments: chest nut, hickory (small), macadamia nut, etc.	550～1 100
Ultra big filaments: walnut (big), pecan, brazil nut, etc.	1,500～3,000

Annex B

Sample Pretreatment for Testing of Acid Value and Peroxide Value

B.1 Shelling

Nuts and seeds with shells shall be shelled, and their edible parts shall be taken out. With regard to seed kernels with green membranes (for example, pumpkin seeds and snakegourd seeds), the green membranes adhering to the kernel surface shall be removed.

Method of removing green membranes: spay water of Grade 3 onto surface of shelled seed kernels, 5 minutes later rub hands on the kernels to remove green membranes, then place the seed kernels without green membranes into an oven and roast them at the temperature 50 °C for 45 minutes.

B.2 Extraction of Fat

Smash a proper amount of samples, place them in a conical flask with plug, add 100 mL of light petroleum with the boiling range of 30 °C～60 °C into the flask, shake the flask for 1 minutes, lay the flask aside for 12 hours, filter the content through a funnel with anhydrous sodium sulfate, place the filtered liquid in a water bath of 60°C to make the light petroleum totally evaporate, and keep the remained oil for further use. The oil extracted shall meet the determination requirements specified in GB/T 5009.37.

END TRANSLATION