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Restrict Concentrations of Radionuclides in Foods (Draft)

Report Categories:
FAIRS Subject Report
Approved By:
Scott Sindelar
Prepared By:
M. Meador and Ma Jie

Report Highlights:
On August 16, China notified the WTO of National Food Safety Standard: Restrict concentrations of radionuclides in foods as SPS/N/CHN/629. This standard specifies investigation levels and restricts concentrations of 12 artificial radionuclides and 7 natural radionuclides in foods. This standard applies to all kinds of food under normal circumstances. The date for submission of final comments to China is October 15, 2013. The proposed date of entry is to be determined.

Comments can be sent to China's SPS Enquiry Point at sps@aqsiq.gov.cn

This report is an INFORMAL translation of this document.

General Information:

BEGINE TRANSLATION

National Food Safety Standard - Restrict Concentrations of Radionuclides in Foods (Draft Standard for Comments)

GB14882-201X

Forward

This Standard is to replace the Restrict Concentrations of Radionuclides in Foods (GB 14882-94). Compared to GB 14882-94, the amendments to this Standard are mainly as follows:

– Amendment made to the name of standard;
– Amendment made to the scope;
– Addition of the definition of "investigation threshold";
– Addition of "application principles"
– Addition of the provisions for the investigation threshold indicators of the radionuclides in foods;
– Deletion of the provision for the concentration tolerance limits of artificial radionuclides 1>^{147}Pm;
– Adjustment of the natural radioelements uranium and thorium to ^{234}U, ^{238}U, ^{232}Th;
– Addition of the provisions for the investigation threshold and concentration tolerance limits of the artificial radionuclides of ^{60}Co, ^{103}Ru, ^{106}Ru, ^{134}Cs,^{238}Pu and ^{241}Am, and the natural radionuclide of ^{210}Pb; and
– Amendment made to the method of food classification.

National Food Safety Standard

Concentration Tolerance Limits for Radionuclides in Foods

1. Scope

This Standard is to prescribe the investigation thresholds and concentration tolerance limits for the radionuclides of ^{3}H, ^{60}Co, ^{89}Sr, ^{90}Sr, ^{103}Ru, ^{106}Ru,^{131}I, ^{134}Cs, ^{137}Cs, ^{238}Pu, ^{239}Pu, ^{241}Am, ^{210}Pb, ^{210}Po, ^{226}Ra, ^{228}Ra, ^{232}Th, ^{234}U and ^{238}U. This Standard shall apply to all kinds of food under normal conditions.

2. Terms and Definitions

2.1 Investigation Threshold

Investigation shall be conducted when the value of the effective dose, daily intake, pollution per unit area/volume exceeds the set value. For the purpose of this Standard, the investigation threshold shall mean the prescribed value for the activity concentration (or mass concentration) of a radionuclide in any foods under normal conditions

3. Application Principles

3.1 No matter whether an investigation threshold or concentration tolerance limit is set, a food producer or processor shall take necessary measures to control the content of radionuclides in foods to the minimum level.

3.2 Unless otherwise specified, the investigation threshold and concentration tolerance limit for the radionuclides in any food shall be calculated based on the normal edible part of the food.

3.3 The investigation threshold and concentration tolerance limit are applicable to direct edible foods, and to those foods recovered from their dried or concentrated status through dilution or water regaining; they shall not be applied to any dried or concentrated food directly. Milk powder may be converted to the corresponding amount of fresh milk (1kg whole milk powder for 7kg fresh milk) before applying the investigation threshold and concentration tolerance limit for the purpose of this Standard.

3.4 The two categories of foods, i.e. baby foods and dairy products, and other foodstuffs, shall be given corresponding investigation thresholds and concentration tolerance limits respectively.

4. Indicator Requirements

4.1 Artificial Radionuclides

4.1.1 The investigation thresholds and concentration tolerance limits for the artifical radionuclides in foods are set forth in Table 1.

Table 1- Investigation Thresholds and Concentration Tolerance Limits for Artificial Radionuclides in Foods

Radionuclides	Investigation Thresholds (Bq/kg)	Concentration Tolerance Limits (Bq/kg)

	Baby foods and dairy products	Other foodstuffs	Baby foods and dairy products	Other foodstuffs
^{238}Pu ,^{239}Pu, ^{241}Am	0.1	1	0.3	3
^{90}Sr, ^{106}Ru ,^{131}I	10	10	30	30
^{60}Co, ^{89}Sr, ^{103}Ru , ^{134}Cs, ^{137}Cs	100	100	300	300
^{3}H[a]	100	1000	300	3000
[a]represents the numerical value of organically bond tritium(OBT).				

4.1.2 As for foods of low consumption (e.g. less than 10kg/person per year), such as spice and tea, the investigation threshold and concentration tolerance may be 10 times of that provided in Table 1 for other foods.

4.1.3 The nuclides in different groups shall be dealt separately, and they shall not be summed up. The nuclides detected in a single group shall be summed up for their activities when used for comparing with the indicator of investigation threshold or concentration tolerance limit.

4.1.4 Test method: To be determined with the method provided in GB 14883.

4.2 Natural Radionuclides

4.2.1 The investigation thresholds and concentration tolerance limits for the natural radionuclides in foods are set forth in Table 2.

Table 2- Investigation Thresholds and Concentration Tolerance Limits for Natural Radionuclides in Foods

Radionuclides	Investigation Thresholds Bq/kg		Concentration Tolerance Limits Bq/kg	
	Baby foods and dairy products	Other foodstuffs	Baby foods and dairy products	Other foodstuffs
^{210}Pb	0.2	0.6	0.3	1.1
^{210}Po	0.1	0.9	0.2	1.2
^{226}Ra	0.1	1.0	0.4	2.3
^{228}Ra	0.06	0.4	0.1	1.0
^{232}Th	0.1	0.8	0.3	2.4
^{234}U	1.4	3.8	4.1	11.2
^{238}U	1.5	4.1	4.4	12.2

4.2.2 As for the foods that contain comparatively high-level background concentration natural nuclides, e.g. the tea containing ^{210}Pb, ^{210}Po, ^{226}Ra and ^{228}Ra, or the sea foods containing ^{210}Po, the

indicators for their respective investigation threshold and concentration tolerance limit may be 10 times that provided in Table 2 for other foods.

4.2.3 Test method: To be determined as per the method provided in GB 14883.

END TRANSLATION