

Request and justification for lifting the import measures on Japanese food regarding radionuclides



January 2020

Food Industry Affairs Bureau
Ministry of Agriculture, Forestry and Fisheries
(MAFF) JAPAN

Control system of radionuclides in food

- ✓ Food is monitored by prefectural governments based on the maximum levels of radio-caesium ($^{134}\text{Cs}+^{137}\text{Cs}$) in food set by the Ministry of Health, Labour and Welfare. The products exceeding the levels are recalled and disposed of based on the Food Sanitation Act.
- ✓ Depending upon the prevalence of the incidence, the distribution is suspended for such products on an area basis, based on the Act on Special Measures Concerning Nuclear Emergency Preparedness (ASMCNEP).
- ✓ By this system, the food products exceeding the levels are neither distributed nor exported.

■ Establish maximum levels of radio-caesium (JMLs) in food*

| | |
|-----------------|-----------|
| Drinking water | 10 Bq/kg |
| Milk | 50 Bq/kg |
| Infant food(s) | 50 Bq/kg |
| General food(s) | 100 Bq/kg |

*The effect of radionuclides other than radio-caesium is taken into account in maximum levels setting

【The Food Sanitation Act】



■ Monitor radionuclides in food

- The Government establishes the guidelines on monitoring plans
- Prefectural governments conduct the monitoring tests

【ASMCNEP】

【If food exceeding the JMLs is observed】

- Recall and dispose of the food containing radionuclides above the maximum levels

【The Food Sanitation Act】



【If cases exceeding the JMLs are observed in a particular product over an area】

- Suspend shipment of the products from the area

【ASMCNEP】

IAEA's evaluation on Japan's measures

✓ The Joint FAO/IAEA Division states that Japan's "measures to monitor and respond to issues regarding radionuclide contamination of food are appropriate, and that the food supply chain is controlled effectively."

*"Monitoring foods, appropriate regulatory action and public communication are helping to maintain confidence in the safety of the food supply. Food restrictions continue to be revised and updated as necessary in line with the food monitoring results. This indicates the continued vigilance of the authorities in Japan and their commitment to protecting consumers and trade. Based on the information that has been made available, the Joint FAO/IAEA Division understands that **the measures to monitor and respond to issues regarding radionuclide contamination of food are appropriate, and that the food supply chain is controlled effectively** by the relevant authorities."*

Source: IAEA assessment on the September 2019 report ' Events and highlights on the progress related to recovery operations at Fukushima Daiichi Nuclear Power Station.'

Maximum levels of radio-caesium in food



| | | Codex | Japan | EU (Euratom 2016/52) | US |
|---|---------------------------|--|-----------------------------|---------------------------------|---------------------------|
| Annual additional radiation dose | | 1 mSv | 1 mSv | 1 mSv | 5 mSv |
| Assumed ratio of contaminated food | | 10 % | 50 % | 10 % | 30 % |
| Maximum levels of radio-caesium in food | Drinking water | | 10 Bq/kg | 1,000 Bq/kg (or liquid food) | |
| | Milk | | 50 Bq/kg | 1,000 Bq/kg (Dairy product) | |
| | Infant food | 1,000 Bq/kg | 50 Bq/kg | 400 Bq/kg | |
| | Other than the above food | 1,000 Bq/kg | 100 Bq/kg (General food) | 1,250 Bq/kg | 1,200 Bq/kg (All food) |
| | | Food consumed in small quantities [†] 10,000 Bq/kg | | Minor food 12,500 Bq/kg | |

† For food consumed in small quantities that represent a small percentage of total diet and hence a small addition to the total dose, the Codex Guideline Levels may be increased by a factor of 10. (Called 'minor food' in EU).

Note: The Japanese maximum levels of radio-caesium in food are set also in consideration of other radionuclides released by the accident namely ⁹⁰Sr, ¹⁰⁶Ru, ²³⁸Pu, ²³⁹Pu, ²⁴⁰Pu and ²⁴¹Pu.

Results of the monitoring tests on radio-cesium ($^{134}\text{Cs}+^{137}\text{Cs}$) in food

[Number/ratio of samples exceeded the Codex guideline level (1,000Bq/kg)]



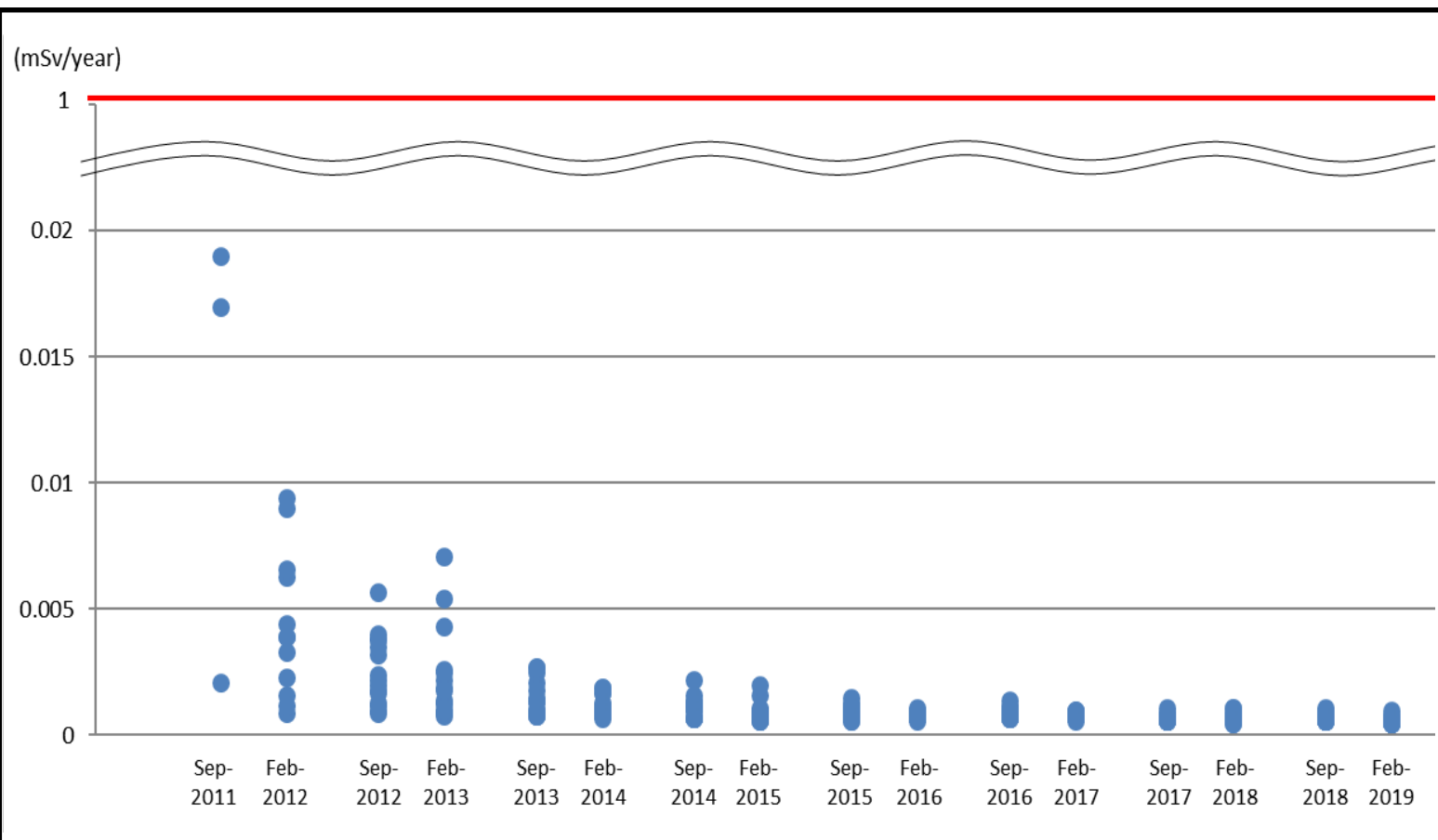
| | FY2012 (4.2012-3.2013) | | FY2013 (4.2013-3.2014) | | FY2014 (4.2014-3.2015) | | FY2015 (4.2015-3.2016) | | FY2016 (4.2016-3.2017) | | FY2017 (4.2017-3.2018) | | FY2018 (4.2018-3.2019) | |
|---|---------------------------|-----------------------|---------------------------|----------------------|---------------------------|----------------------|---------------------------|----------------------|---------------------------|----------------------|---------------------------|---------------------|---------------------------|----------------------|
| | Total | Excess (%) | Total | Excess (%) | Total | Excess (%) | Total | Excess (%) | Total | Excess (%) | Total | Excess (%) | Total | Excess (%) |
| Grains | 18,998 | 0 (0.00) | 12,962 | 0 (0.00) | 6,094 | 0 (0.00) | 5,136 | 0 (0.00) | 2,963 | 0 (0.00) | 2,044 | 0 (0.00) | 1,451 | 0 (0.00) |
| Vegetables | 19,004 | 1 (0.01) | 20,676 | 0 (0.00) | 17,520 | 0 (0.00) | 12,814 | 0 (0.00) | 11,272 | 0 (0.00) | 8,852 | 0 (0.00) | 6,967 | 0 (0.00) |
| Fruits | 5,635 | 0 (0.00) | 5,331 | 0 (0.00) | 4,147 | 0 (0.00) | 3,374 | 0 (0.00) | 2,712 | 0 (0.00) | 1,996 | 0 (0.00) | 1,577 | 0 (0.00) |
| Beef | 187,176 | 0 (0.00) | 231,072 | 0 (0.00) | 235,583 | 0 (0.00) | 274,071 | 0 (0.00) | 261,745 | 0 (0.00) | 255,210 | 0 (0.00) | 256,108 | 0 (0.00) |
| Livestock products (other than beef and milk) | 2,148 | 0 (0.00) | 2,265 | 0 (0.00) | 1,834 | 0 (0.00) | 1,544 | 0 (0.00) | 1,432 | 0 (0.00) | 1,196 | 0 (0.00) | 915 | 0 (0.00) |
| Milk and infant foods | 5,215 | 0 (0.00) | 4,973 | 0 (0.00) | 4,461 | 0 (0.00) | 3,666 | 0 (0.00) | 3,207 | 0 (0.00) | 2,552 | 0 (0.00) | 1,917 | 0 (0.00) |
| Tea, drinking water and beverages | 1,674 | 0 (0.00) | 1,140 | 0 (0.00) | 804 | 0 (0.00) | 636 | 0 (0.00) | 557 | 0 (0.00) | 497 | 0 (0.00) | 401 | 0 (0.00) |
| Processed foods | 8,506 | 4 (0.05) | 9,919 | 0 (0.00) | 9,220 | 0 (0.00) | 8,525 | 0 (0.00) | 7,498 | 0 (0.00) | 6,177 | 0 (0.00) | 4,956 | 0 (0.00) |
| Fishery products (other than freshwater) | 18,658 | 16 (0.09) | 20,261 | 1 (0.00) | 21,328 | 0 (0.00) | 18,939 | 0 (0.00) | 18,501 | 0 (0.00) | 16,465 | 0 (0.00) | 13,282 | 0 (0.00) |
| Fishery products (freshwater) | 3,343 | 1 (0.03) | 3,394 | 0 (0.00) | 3,251 | 0 (0.00) | 2,385 | 0 (0.00) | 2,149 | 0 (0.00) | 2,054 | 0 (0.00) | 2,113 | 0 (0.00) |
| Edible fungi (cultivated) | 4,390 | 17 (0.39) | 3,949 | 0 (0.00) | 4,438 | 0 (0.00) | 4,425 | 0 (0.00) | 4,520 | 0 (0.00) | 3,981 | 0 (0.00) | 3,673 | 0 (0.00) |
| Wild plants and wild edible fungi | 2,478 | 24 (0.97) | 3,664 | 21 (0.57) | 4,135 | 4 (0.10) | 4,032 | 0 (0.00) | 4,827 | 3 (0.06) | 3,953 | 0 (0.00) | 3,963 | 0 (0.00) |
| Game meat | 1,255 | 108 (8.61) | 1,411 | 39 (2.76) | 1,403 | 28 (2.00) | 764 | 10 (1.31) | 1,715 | 35 (2.04) | 1,719 | 6 (0.35) | 2,177 | 13 (0.60) |
| Total | 278,480 | 171 (0.06) | 321,017 | 61 (0.02) | 314,218 | 32 (0.01) | 340,311 | 10 (0.00) | 323,098 | 38 (0.01) | 306,696 | 6 (0.00) | 299,500 | 13 (0.00) |

Legend : Table created by MAFF based on the monthly data of "Levels of radioactive contaminants in foods tested in respective prefectures" by press released date (MHLW)
https://www.mhlw.go.jp/english/topics/2011eq/index_food_radioactive.html

- The game meat exceeding 1,000Bq/kg (at least from FY 2016 to 2018) were all sampled from area where distribution is already restricted and they are tested only for the monitoring purpose (not for sales).
- If relying on the Codex guideline level of 10,000Bq/kg for food with small consumption, there has been no excess sample for wild plants and wild edible fungi for more than 5 years (since last detection in May 2013), and no excess sample (out of around 2,200 samples) for game meat during FY2018.

Estimation of radiological annual intake from food in Japan

✓ According to the biannual market basket surveys, the effective dose from radio-caesium in food has been estimated as far below the intervention exemption level of 1 mSv/year (0.0005~0.0010 mSv/year in early 2019). Considering the share of Japanese food in total intake, the effect is significantly lower for consumers in the foreign countries.



1 mSv/year
(Intervention exemption level, recommended as safe for the public)

I received 0.03mSv of cosmic radiation from 10 hour aeroplane flight!*



* <http://www.unscear.org/unscear/en/faq.html>

Exposure from the accidental releases ($^{134}\text{Cs} + ^{137}\text{Cs}$) at 15 monitoring sites (Sep 2012~)

Note: In the long term, the majority of radiation doses through food intake, derived from the TEPCO's Fukushima Daiichi Nuclear Power Station accident, are attributed to radio-caesium.

Source: https://www.mhlw.go.jp/stf/houdou/0000205937_00006.html (In Japanese)

List of countries which lifted the import measures

✓ Total 54 countries and regions have introduced import measures on Japanese food following the nuclear power plant accident in 2011, and more than 60%, 34 of them have totally lifted the measures.

(As of 8 January 2020)

| Month, Year | Countries |
|-------------|--|
| June 2011 | Canada |
| " | Myanmar |
| July 2011 | Serbia |
| Sep. 2011 | Chile |
| Jan. 2012 | Mexico |
| Apr. 2012 | Peru |
| June 2012 | Guinea |
| July 2012 | New Zealand |
| Aug. 2012 | Colombia |
| Mar. 2013 | Malaysia |
| Apr. 2013 | Ecuador |
| Sep. 2013 | Vietnam |
| Jan. 2014 | Iraq |
| " | Australia |
| May 2015 | Thailand (Except 3 species of wild animals) |
| Nov. 2015 | Bolivia |
| Feb. 2016 | India |

| Month, Year | Countries |
|-------------|---------------|
| May 2016 | Kuwait |
| Aug. 2016 | Nepal |
| Dec. 2016 | Mauritius |
| " | Iran |
| Apr. 2017 | Qatar |
| " | Ukraine |
| Oct. 2017 | Pakistan |
| Nov. 2017 | Saudi Arabia |
| Dec. 2017 | Argentina |
| Feb. 2018 | Turkey |
| July 2018 | New Caledonia |
| Aug. 2018 | Brazil |
| Dec. 2018 | Oman |
| Mar. 2019 | Bahrain |
| June 2019 | Congo DR |
| Oct. 2019 | Brunei |
| Jan. 2020 | Philippines |