Advisory Council on Food and Environmental Hygiene

Safety Control on Japanese Food

PURPOSE

This paper provides an update on the monitoring of radiation contamination of food products imported from Japan by the Centre for Food Safety (CFS) since the Fukushima nuclear accident in March 2011.

BACKGROUND

2. Following the Fukushima nuclear power station accident in March 2011, CFS has stepped up surveillance of food produce imported from Japan since March 2011. CFS adopted the Guideline Levels for Radionuclides in Foods Contaminated Following a Nuclear or Radiological Emergency (Guideline Levels)¹ laid down by the Codex Alimentarius Commission (Codex) for testing the radiation levels of food products imported from Japan to ensure food safety. Three radionuclides, i.e. Iodine-131 (I-131), Caesium-134 (Cs-134) and Caesium (Cs-137), which are the main radionuclides representing health concern and most relevant in the acute phase of nuclear emergencies, are monitored under the current enhanced surveillance programme for food imported from Japan.

3. According to Codex, food products with radionuclide levels not exceeding the relevant Guideline Levels are considered to be safe for human consumption. If food is found to contain radionuclides exceeding the Guideline Levels, CFS will immediately detain the consignment and arrange for disposal. CFS releases the testing summary of relevant food products imported from Japan on its website every working day for reference by the public and the food trade.

¹ General Standard for Contaminants and Toxins in Food and Feed [CODEX STAN 193-1995, Amended 2010] (GSCTFF)", which are internationally accepted standards for protection of public health and facilitation of global trade, following a nuclear or radiological emergency. The Codex Guideline Levels for I-131 is 100 Bq/kg while that for Cs-134 and Cs-137 in food is 1000 Bq/kg.

Food Safety Order against imported food from Japan

4. CFS collects samples from food imported from Japan for examination of radiation level in a risk-based approach to ensure that they are safe for consumption. Three samples of vegetables taken on 23 March 2011 were found unsatisfactory. To protect public health and ensure food safety, the Director of Food and Environmental Hygiene issued an order ("the Order") under Section 78B of the Public Health and Municipal Services Ordinance (Cap. 132) on 24 March 2011, prohibiting the import and supply of all fruits and vegetables, milk, milk beverages and dried milk from five prefectures of Japan, i.e. Fukushima (福島), Ibaraki (茨城), Tochigi (櫪木), Gunma (群馬) and Chiba (千葉). All chilled or frozen game, meat and poultry, poultry eggs, and all live, chilled or frozen aquatic products from the above prefectures are also prohibited unless accompanied by radiation certificates issued by the Japanese authority attesting that the radiation levels do not exceed the Codex Guideline Levels. The Order remains in force to date.

5. In April 2011, the Expert Committee on Food Safety held a special meeting to discuss food safety issues related to the nuclear incident in Japan. It considered that the CFS's risk management approach was appropriate and in line with the international consensus.

LATEST DEVELOPMENTS

Local surveillance result

6. Based on information provided by the Japanese Ministry of Agriculture, Forestry and Fisheries (MAFF), Hong Kong is the top export destination of Japanese food, with export value estimated at 134.3 billion yen (22% of total) in 2014. According to the statistics provided by the Census and Statistics Department, Japanese fresh food products currently imported to Hong Kong mainly include meat, aquatic products, milk and dairy products, vegetables and fruits.

7. As at 10 Jun 2015, over 261,000 food samples have been tested by CFS. No samples were found unsatisfactory after the Order took effect. All surveillance results are uploaded onto the CFS website

every working day. Of these, 60 samples (including 55 tea product samples, two vegetable samples, one blueberry juice sample, one oat sample and one dried mushroom sample) were detected with low radioactivity levels not exceeding the Codex Guideline Levels, and hence should have no adverse health effects. Nevertheless, most traders concerned had voluntarily surrendered the food consignments involved for disposal or removed the food concerned from the market place.

Food surveillance in Japan

8. Since the Fukushima accident, the Japanese Government has put in place a food surveillance system to enhance the radiation monitoring of food grown or produced in Japan. It adopted a set of provisional regulation values for radionuclides in different food categories, which were different from the Codex guideline levels. In April 2012, the Ministry of Health, Labour and Welfare of Japan revised the standard limits for radioactive caesium in food. The revised limits are much more stringent than Codex (**Appendix I**). Restrictions on distribution and/or consumption of food were imposed on food found to have radiation level exceeding the Japanese standards².

9. Information from the Japan Ministry of Health, Labour and Welfare (MHLW or 日本厚生勞動省) showed that over 1,103,000 samples had been collected in Japan as at 25 May 2015³. The number of foods detected with radiation at levels exceeding Japan's own action limits was in a decreasing trend.

² Press release by Japan MHLW on 23 March 2011. Available from URL: http://www.mhlw.go.jp/english/topics/2011eq/dl/food-110323.pdf

³ According to the information posted on the Japan MHLW website <u>http://www.mhlw.go.jp/english/topics/2011eq/index_food_radioactive.html</u> (last accessed 10 Jun 2015)

Sampling period	Number of	Number of	
	food samples	food samples	
	tested	detected with	Percentage
		levels	(%)
		exceeding	
		Japan's limits	
19 Mar 2011 - 31 Mar	137,037	1,204	0.88
2012	157,057	1,204	0.88
FY 2012	278,275	2,372	0.85
FY 2013	326,582	975	0.30
FY 2014	314,216	565	0.18
FY 2015 (as of 25	16 0.19	56 ⁴	0.11
May 2015)	46,948		0.11
Total	1,103,058	5,172	0.47

Table 1.Radionuclide test results of food by MHLW

Continuous assessment by international authorities

10. Early in April 2011, the Food and Agriculture Organization of the United Nations (FAO) and World Health Organization (WHO) commented that radiation levels measured in other countries by the United Nations organizations were far below the level of background radiation and thus did not present health or transportation safety hazards⁵. They also advised the food authorities of different countries that their scientific justifications for implementing relevant food control measures should follow Codex guidelines.

11. In May 2013, the United Nations Scientific Committee on the effects of Atomic Radiation (UNSCEAR) also concluded that the radiation exposures in neighboring countries resulting from the Fukushima nuclear incident would be of no consequence for the health of individuals. The exposures of both marine and terrestrial non-human biota following the incident were considered too low for acute effects to

⁴ As of 25 May 2015, 56 food samples (involving 29 agricultural products, 23 wild animal meat and 4 fishery products) were detected with radiation at levels exceeding Japan's limits in FY 2015. The samples were collected in 8 prefectures, namely Fukushima, Miyagi, Tochigi, Gunma, Chiba, Iwate, Yamagata and Nagano. All the samples were wild animals and plants.

⁵ According to the information posted on the World Health Organization's website, available from URL: <u>http://www.who.int/hac/crises/jpn/faqs/en/index7.html</u>

be observed in general⁶.

12. The International Atomic Energy Agency (IAEA) has been following up the incident closely. The Japanese Government has regularly submitted updated reports on the recovery progress at the nuclear power station to IAEA. The IAEA has also organized onsite inspections and arranged extensive discussions with the relevant institutions in Japan to better understand the situation. According to the assessment⁷ of IAEA released in June 2015, systems were in place and were being implemented to prevent food and agricultural products with levels of caesium radionuclides exceeding the national regulatory limits from entering the food supply chain. The Joint IAEA/FAO Division also considered that the measures taken by the Japanese authorities to monitor and respond to issues regarding radionuclide contamination of food were appropriate, and that the food supply chain was under control.

13. Regarding concerns over continuous radioactive water leakage from the Fukushima nuclear power station, the IAEA was of the view that the situation in the marine environment was stable based on the available information but monitoring of the marine environment was recommended. In addition, the IAEA mentioned in its report⁸ in May 2015 that there were still a range of challenging issues to be managed, such as the persistent underground water ingress to main buildings and the accumulation of contaminated water on-site; the long-term management of radioactive waste; as well as those related to the removal of nuclear fuel, damaged fuel and fuel debris.

Current import restrictions imposed by other economies

14. In response to the incident, the Japanese Government has been monitoring radioactive materials in foods and imposing shipping restriction on items exceeding its regulatory values ⁹. Many

⁶ According to the UNSCEAR 2013 Report to the General Assembly (Volume I), available from URL: <u>http://www.unscear.org/docs/reports/2013/13-85418_Report_2013_GA_Report.pdf</u>

 ⁷ Fukushima Daiichi Status Updates on 8 June 2015, available from URL: <u>https://www.iaea.org/newscenter/focus/fukushima/status-update</u>

⁸ Mission Report: IAEA International Peer Review Mission on Mid-And-Long-Term Roadmap Towards the Decommissioning of TEPCO's Fukushima Daiichi Nuclear Power Station Units 1-4 (Third Mission), available from URL: <u>https://www.iaea.org/sites/default/files/missionreport130515.pdf</u>

MAFF – Approach to assuring food safety. Available from URL:

countries/areas also imposed various restrictions on food imported from Japan and enhanced their surveillance of food imported from Japan. As time passes and surveillance data accumulate, these control measures also change.

15. In general, countries in the vicinity of Japan, like Mainland China, Taiwan and Korea continue their restrictions on import of Japanese food. Upon the discovery of illegal import of food products from banned prefectures of Japan under misleading labels in March 2015, the Taiwanese authorities require all food imported from Japan to be accompanied by certificates of origin and import of certain food products produced in specific prefectures (e.g. tea products, food products for infants and young children, dairy products and aquatic products, etc.) to be accompanied with certificates of radiation inspection.

16. In view of reports on Japan's continuous discharge of radioactive water and uncertainties over future development, the Republic of Korea has since 9 September 2013 tightened control on fishery products by imposing a total ban of fishery products from the five prefectures of Fukushima, Ibaraki, Tochigi, Gunma, and Chiba, as well as Miyagi, Iwate and Aomori.

17. The US has last made revisions in May 2015 to the control measures on the import of Japanese food in response to Japan's self-imposed export criteria. There is no obvious tightening of control by the US on food products imported from Japan recently.

18. Some countries have lifted their restrictions in varying degrees. For instance, Singapore and EU countries scaled down their restriction and did not impose a total ban on all food types from any particular prefecture of Japan. Countries like Australia, New Zealand and Canada have essentially lifted all of their import restrictions. The current situation is summarized in a table in **Appendix II**.

http://www.maff.go.jp/e/export/report/food/guideline.html

WAY FORWARD

19. Taking into account the overall surveillance results, the latest expert opinions of IAEA and the established mechanism to monitor and assess import control measures imposed by other countries/places upon food products imported from Japan, CFS considers the existing control measures adequate for the protection of public health.

20. CFS will remain vigilant and continue with its current risk-based strategy for surveillance of food products imported from Japan, and will also keep track of the situation of the Fukushima nuclear power plant in Japan and the development in related regions, as well as the latest measures taken by other countries/places against food products imported from Japan. In the meantime, CFS will keep in view the recommendations made by international agencies including WHO and IAEA on the issue. Based on such recommendations, CFS will develop strategies for testing relevant food products, make timely adjustment to the strategies accordingly in consultation with experts, and take necessary surveillance measures to ensure food safety and protect public health.

ADVICE SOUGHT

21. Members are invited to note and comment on our current measures for safety control on food imported from Japan.

Food and Health Bureau Food and Environmental Hygiene Department Centre for Food Safety June 2015

Appendix I

	General foods	Milk	Infant food	Drinking water/ bottled water
Japan	100	50	50	10
standard				
limits <u>from 1</u>				
<u>April 2012</u>				
Japan	500	200	_	200
provisional	(Vegetables/	(Milk,		
values	grains/ meat,	dairy		
before 1	eggs, fish,	products)		
<u>April 2012</u>	etc.)			
Codex#	1,000	1,000	1,000	—
Codex*	—	_	_	10 (bottled /
				packaged
				drinking water)

Japan standard limits for radioactive caesium (Cs-134 + Cs-137)

Notes:

#Codex guideline levels for radionuclides in foods contaminated following a nuclear or radiological emergency

*Codex standard for packaged water (other than natural mineral water); for routine condition but not radiological emergency

The four categories of food as established by Japan: (i) drinking water; (ii) milk; (iii) general foods; and (iv) infant foods. Drinking water is the water used for cooking and for tea drinks, which is substitute for water. Milk includes also milk drinks. Infant food includes infant formula and food and drinks sold as intended for infant (including follow-up formula, snacks, weaning food, etc. for young children).

Appendix II

Import restriction and sampling of food from Japan by Hong Kong and some overseas economies

Economy	Import restriction in force	Number of samples taken
Hong Kong ¹⁰	Prohibiting the import and supply of all fruits, vegetables, milk, milk beverages and dried milk from five prefectures of Japan, i.e. Fukushima, Ibaraki, Tochigi, Gunma and Chiba. Chilled or frozen game, meat, poultry and poultry aggs, and live, chilled or frozen aquatic	261,222 (as of 10 June 2015) ¹¹
	poultry eggs, and live, chilled or frozen aquatic products from the above prefectures are also prohibited unless accompanied by radiation certificates issued by the Japanese authority attesting that the radiation levels do not exceed the Codex Guideline Levels.	
Mainland China	Suspending all food import from 10 prefectures (Fukushima, Gunma, Tochigi, Ibaraki, Chiba, Miyagi, Niigata, Nagano, Saitama, Tokyo) since 2011	NA
Taiwan	Suspending processing import applications of all food from five prefectures (Fukushima, Gunma, Tochigi, Ibaraki, Chiba).	70,420 (as of 1 June 2015) ¹⁵

¹⁰ Press release: Hong Kong to prohibit imports of fresh produce and milk products from five prefectures in Japan. Available from URL:

http://www.cfs.gov.hk/english/press/2011_03_23_1_e.html 食物安全中心 核事故與食物安全 URL: http://www.cfs.gov.hk/tc_chi/programme/programme_rafs/programme_rafs_fc_01_30_Nuclear_E vent_and_Food_Safety.html

¹² 國質檢總局〔2011〕44 號《關於進一步加強從日本進口食品農產品檢驗檢疫監管的公告》 Available from URL:

http://www.aqsiq.gov.cn/xxgk13386/xxgkztfl/zjgg/2011/201104/t20110408181705.htm13國質檢食函〔2011〕411 號《關於調整日本輸華食品農產品》Available from URL:
http://www.guangzhou.cn.emb-japan.go.jp/Kigyoshien/doc/2011No.411.pdf

Economy	Import restriction in force	Number of samples taken
	Starting from 15 May 2015, all food imported from Japan should be accompanied with a certificate of origin issued by a credible authority. Radiation certificate is also required for specific food products imported from 8 prefectures in Japan. ¹⁴	
Republic of Korea	Suspending imports of certain agricultural products (e.g. vegetables, fruits, cereals, tea leaves, mushrooms, etc.) from 13 prefectures (Fukushima, Gunma, Tochigi, Ibaraki, Chiba, Miyagi, Yamanashi, Iwate, Nagano, Saitama, Kanagawa, Shizuoka and Aomori).	
	Suspending imports of livestock products due to disease control regulation (not in relation to radiation issue). In case the suspension of imports of livestock products is lifted, radiation certificate is required for livestock products from 13 prefectures (Fukushima, Gunma, Tochigi, Ibaraki, Chiba, Miyagi, Yamanashi, Iwate, Nagano, Saitama, Kanagawa, Shizuoka and Aomori).	
	Tightening import control since September 2013 by imposing a total ban on fishery products from eight prefectures (Fukushima, Gunma, Tochigi, Ibaraki, Chiba, Miyagi, Iwate	

 ¹⁴ 台灣衛生福利部食品藥物管理署 公告資訊(2015-05-23). URL: <u>http://www.fda.gov.tw/TC/newsContent.aspx?id=13570&chk=899239bc-c299-4cad-84e5-dbd211</u> <u>c68bf4¶m=pn%3d3%26cid%3d4%26cchk%3df11420b2-cf8e-4d3a-beb5-66521b800453#.V</u> <u>XkpKPmqpBc</u>
 15 公務衛生短利並為早藤伽管理署 鼻充金早超針於測庫項 UDL:

¹⁵ 台灣衛生福利部食品藥物管理署 最新食品輻射監測專區. URL: <u>http://www.fda.gov.tw/TC/siteList.aspx?pn=1&sid=2356</u>

Economy	Import restriction in force	Number of samples taken
	and Aomori). Radiation certificate is also required for fishery products from 8 prefectures (Hukkai, Tokyo, Ganagawa, Aichi, Mie, Ehime, Gumamoto, Kagoshima).	
Singapore	 Suspending imports of all food products originated from areas close and around the Fukushima Nuclear Power Plant. Suspending imports of seafood and forest products from other areas in Fukushima. Requiring both a certificate of origin and surveillance certificate for specific products (e.g. meat products) from Fukushima (other than areas close and around the Fukushima Nuclear Plant). 	More than 18,000 (as of July 2014) ¹⁶
	Requiring radiation certificate for import of seafood and products from the forest from three prefectures (Ibaraki, Tochigi, Gunma). Requiring a certificate of origin for all food products from Japan to identify the prefecture of origin of the food product.	
EU ¹⁷	Applicable feed and food products originating in or consigned from 15 prefectures intended to be imported to the EU must be tested before leaving Japan and are subject to random testing	NA

¹⁶ Agri-Food & Veterinary Authority of Singapore, Food from Japan is Safe. URL: http://www.ava.gov.sg/files/avavision/Issue2_2014/food bites food from japan is

http://www.ava.gov.sg/files/avavision/Issue2_2014/food-bites-food-from-japan-is-safe.html
 Commission Implementing Regulation (EU) No 322/2014, available from URL: http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L__2014.095.01.0001.01.ENG

Economy	Import restriction in force	Number of samples taken
	in the EU. The exceptions are for certain personal consignments of feed and food and alcoholic beverages.	
	Requiring feed and food products from the remaining 32 prefectures to be accompanied by a declaration stating the prefecture of origin and be randomly tested upon arrival in the EU	
US	Suspending specific food items, including certain vegetables, fish products and livestock originating from 14 prefectures that the Government of Japan has restricted for sale or export.	1,345 (as of 10 March 2014) ¹⁸
	Detaining specific food products including milk, filled milk, milk-based infant formula produced from 5 prefectures (Fukushima, Iwate, Miyagi, Gunma, and Tochigi) unless shown to be free from radionuclide contamination.	
Canada ¹⁹	No restrictions on Japanese food and radiation certification not required since June 2011.	NA
Australia ²⁰	No restrictions on Japanese food and radiation certification not required since January 2014.	More than 1,400 tests (as of 23 Jan 2014) ²¹

 ¹⁸ U.S. Food and Drug Administration. FDA Response to the Fukushima Dai-ichi Nuclear Power Facility Incident. URL : <u>http://www.fda.gov/NewsEvents/PublicHealthFocus/ucm247403.htm</u>
 ¹⁹ Japan Nuclear Crisis: Information for Canadians Regarding Imported and Domestic Food

¹⁹ Japan Nuclear Crisis: Information for Canadians Regarding Imported and Domestic Food. Available: http://www.inspection.gc.ca/food/imports/iapan.nuclear.crisis/eng/1384447285082/1384448

http://www.inspection.gc.ca/food/imports/japan-nuclear-crisis/eng/1384447285082/13844489403 88

²⁰ Food Standards Australia New Zealand: Safety of food from Japan. Available from URL: <u>http://www.foodstandards.gov.au/consumer/safety/foodjapan/pages/default.aspx</u>

²¹ Department of Agriculture, Australian Government. IFN01-14 - Monitoring food imported from Japan for radionuclides. URL : <u>http://www.agriculture.gov.au/import/food/notices/ifn01</u>

Economy	Import restriction in force	Number of samples taken
New Zealand	No restrictions on Japanese food and radiation	NA
	certification not required since July 2012.	
Malaysia,	No restrictions on Japanese food and radiation	NA
Vietnam,	certification not required.	
Myanmar,		
Mexico, Chile,		
Peru, Guinea,		
Columbia,		
Serbia, Ecuador		