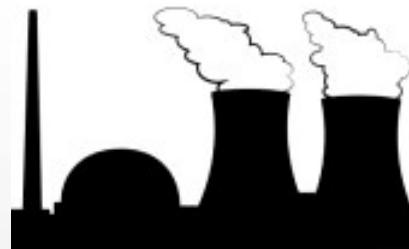


食物中的輻射



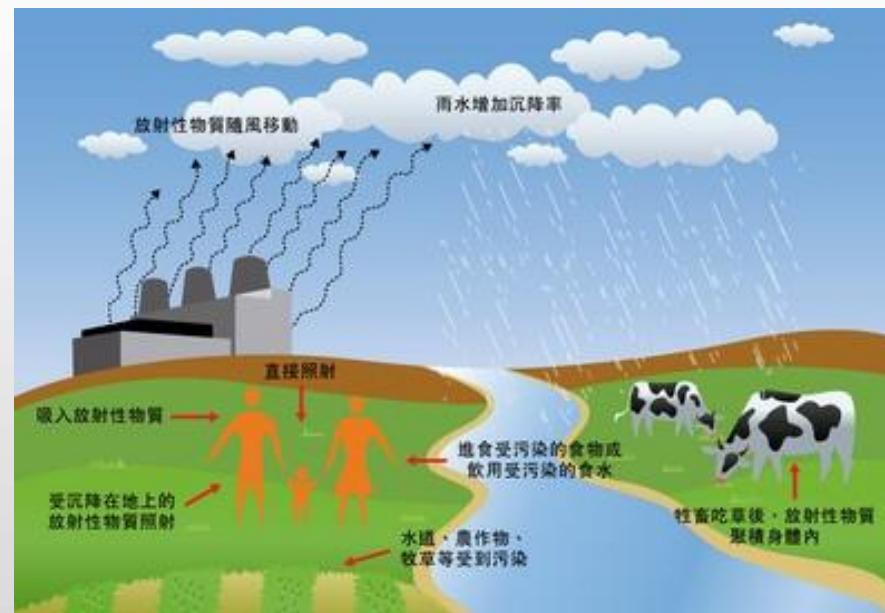
輻射來源

- 天然輻射
- 核電廠發生意外
- 核武器



核電廠發生意外

- 放射性物質會釋放到外部
- 擴散途徑
 - 直接照射
 - 風
 - 雨水



食物污染

- 放射性物質沉積在植物、土壤或水中
- 可經以下途徑進入食物鏈
 - 表層污染
 - 呼吸
 - 進食受輻射污染的養分
- 人類健康因進食受污染的食物後受到影響

可能的健康問題

- 急性輻射病
 - 嘔心、嘔吐、異常疲倦、脫髮、皮膚灼傷及器官功能受損
- 長遠的健康問題
 - 有機會令人患癌風險增加



核素：碘-131、銫-134及銫-137

- 碘-131、銫-134及銫-137不會天然存於食物中
- 是人工產生的裂變產物
- 食物含有該等核素可能是由核反外泄應或地面核試所致

食物輻射水平的標準

- 食物安全中心採用食品法典委員會有關意外核污染後食物內放射性核素含量的指引限值

放射性核素	指引限值
	每公斤100貝可
碘-131	每公斤1,000貝可
銫-137	每公斤1,000貝可

減少食物中的放射性核素含量

- 適當的食物配製程序
 - 例如清洗、擦抹、大力拭擦或去皮／摘去外葉
- 把受輻射污染的食物存放較長時間，以便當中的半衰期較短的放射性核素可進行放射性衰變

食物監察

進口層面

- 使用手提測量計，檢查進口的食物表面是否受到污染



食物監察

進口、批發及零售層面

- 抽取食品樣本
- 使用輻射污染監察系統進行檢測



食物監察

進口、批發及零售層面

- 如有關食物批次未能通過手提測量計或輻射污染監察系統的檢測，會被扣起
- 樣本會交由政府化驗所作進一步作定量分析



日本進口食品的輻射監察措施



背景

- 日本於2011年3月11日發生大地震
- 引發海嘯
- 福島核電廠損壞
- 釋出放射性物質
- 若干食品已受到污染
- 對人體健康構成危害



食物監察

- 由2011年3月12日起，加強監察所有從日本進口食物的輻射水平
- 包括蔬菜、水果、奶類，以至肉類、水產、奶粉及其他加工食品

食物監察

食物樣本結果

截至2013年7月31日，已檢測的樣本超過143,000個

3個樣本的碘-131含量超出指引限值

1個白蘿蔔
每公斤含260貝可

1個蘿蔔
每公斤含800貝可

1個菠菜
每公斤含1,000貝可

另47個樣本含微量輻射水平，但未超出《食品法典委員會》指引限值

2個蔬菜

1個燕麥片

44個茶葉產品

第78B條命令

- 食環署署長於2011年3月23日根據當時的《公眾衛生及市政條例》第132章第78B條發出命令
- 禁止輸入和供應來自福島、茨城、栃木、千葉及群馬，並於2011年3月11日或之後收穫、製造、加工或包裝的指明食品，包括：
 - 所有蔬菜、水果、奶、奶類飲品、奶粉
 - 所有冷凍或冷藏野味、肉類、家禽、禽蛋及活生、冷凍或冷藏水產品，除非附有由日本主管當局所發證明書，證明有關食物的輻射水平並沒有超出指引限值



第78B條命令



香港特別行政區政府
憲報號外
政府印行

The Government of the Hong Kong
Special Administrative Region
Gazette Extraordinary

Published by Authority

2011年3月24日星期四
THURSDAY, 24 MARCH, 2011

第15卷第9期
號外公告編號 11
No. 9 VOL. 15
G.N. (E) No. 11

36 2011年第9期憲報號外 GAZETTE EXTRAORDINARY NO. 9/2011

《公眾衛生及市政條例》
(第 192 章)
(第 78B 條)
第 78B 條命令

命令編號: CPS/3/2011

食環處編號: FEH/OC/CE/STAB

致: 所有人士

本命令於 2011 年 3 月 24 日正午 12 時生效。

本人認為有合理理由相信有需要頒佈 A 指明的貨物作出本命令, 以防止公眾衛生造成危險, 或減少對公眾衛生造成危險的可能性, 或緩解任何對公眾衛生造成危險的不適後果(詳見載於 B 附註), 本人根據《公眾衛生及市政條例》(第 192 章第 78B 條)行使本人的權力, 作出命令:

- a. 禁止由 2011 年 3 月 24 日正午 12 時至另行公布時限內香港境內販賣及供應人香港的貨物輸入香港;
- b. 禁止由 2011 年 3 月 24 日正午 12 時至另行公布時限內香港境內香港「冠狀病毒病」患者在明確並於 2011 年 3 月 24 日正午 12 時之後輸入香港的擬引人食用的貨物。

若遵從本命令而遇到受困, 可在開始遵從本命令的起後 28 天內(即上文第一段註明的日期及時間), 向市政處上訴委員會提出上訴。

註: 任何違反本命令的人如違反本命令的任何條款, 即屬犯罪, 可處第 6 級罰款及監禁 12 個月。即使有關的人證明, 有關食物是根據本條例或任何其他條例而發出或批給的牌照、執照、許可或任何其他形式的授權的標的, 亦不構成該人的免責辯護。

日期: 2011 年 3 月 23 日

食物環境衛生處處長 張卓文

第78B條命令

- 命令自2011年3月24日正午生效，至今仍然有效
- 違反命令的任何條款，即屬犯罪，可被處最高罰款10萬元及監禁12個月



輻射水平證明書

- 中心分別於**2011年11月8日及2012年3月21**同意接納日本農林水產省提交從五個受影響的縣進口的水產品，以及肉類、家禽和禽蛋的輻射水平證明書
- 自此，來自該五縣的冷凍或冷藏肉類、家禽和禽蛋、以及水產品，如附有雙方同意的輻射水平證明書，均可進口香港

輻射水平證明書樣本

FISHERIES AGENCY
MINISTRY OF AGRICULTURE, FORESTRY AND FISHERIES, GOVERNMENT OF JAPAN
1-1-1, Roppongi-hills, Chiyoda-ku, Tokyo 100-0011, Japan

Certificate on radiation levels in food for export to Hong Kong

Consignee Code: Declaration Number:

DECLARER that the food of this consignment composed of: _____
 (description of consignment, product, number and type of packages, gross or net weight)
 shipped at _____ (establishment place)
 on _____ (date of departure)
 by _____ (place of loading)
 going to _____ (place of destination)
 which comes from the establishment _____ (name and address of establishment)

is falling into the category of the products in the table below and is originating from _____ (producer), has been received on _____ (date), and is required to laboratory analysis on _____ (date) (time) (name of laboratory), to determine the level of the radionuclides, iodine-131, caesium-134 and caesium-137, and hereby certify that the radiation levels do not exceed the standards laid down by the Codex Alimentarius Commission in the Guideline Levels for Radionuclides in Foods Contaminated following a Nuclear or Radiological Emergency.

Date: _____
 Done in _____ on _____
 Name of authorized representative of consignor: _____
 Title: _____
 Category of food: _____
 All live, chilled or frozen aquatic products

Note: Sampling is under the authority of the Ministry of Agriculture, Forestry and Fisheries.
 * The laboratory performing the analysis must be a laboratory accredited by Japan Accreditation Board.

MAFF
Ministry of Agriculture, Forestry and Fisheries

Certificate on radiation levels in food for export to Hong Kong

Consignee Code: Declaration Number:

DECLARER that the food of this consignment composed of: _____
 (description of consignment, product, number and type of packages, gross or net weight)
 shipped at _____ (establishment place)
 on _____ (date of departure)
 by _____ (identification of transporter)
 going to _____ (place and country of destination)
 which comes from the establishment _____ (name and address of establishment)

In falling into the category of the products in the table below and is originating from _____ (producer), has been received on _____ (date), and is required to laboratory analysis on _____ (date) (time) (name of laboratory), to determine the level of the radionuclides, iodine-131, caesium-134 and caesium-137, and hereby certify that the radiation levels do not exceed the standards laid down by the Codex Alimentarius Commission in the Guideline Levels for Radionuclides in Foods Contaminated following a Nuclear or Radiological Emergency.

Date: _____
 Done in _____ on _____
 Stamp of authorized representative of competent authority

Table
 Category of food:
 All chilled or frozen game, meat and poultry, all poultry eggs

* In the case of sampling of beef, every individual cattle is subject to laboratory analysis and a part of each cattle's meat is used for that purpose. In the case of sampling of the other species, laboratory analysis is carried out in accordance with the table of sampling plan of Annex.

* The laboratory performing the analysis must be a laboratory accredited by Japan Accreditation Board.

MAFF
Ministry of Agriculture, Forestry and Fisheries

Certificate on radiation levels in food for export to Hong Kong

Consignee Code: Declaration Number:

DECLARER that the food of this consignment composed of: _____
 (description of consignment, product, number and type of packages, gross or net weight)
 shipped at _____ (establishment place)
 on _____ (date of departure)
 by _____ (identification of transporter)
 going to _____ (place and country of destination)
 which comes from the establishment _____ (name and address of establishment)

In falling into the category of the products in the table below and is originating from _____ (producer), has been received on _____ (date), and is required to laboratory analysis on _____ (date) (time) (name of laboratory), to determine the level of the radionuclides, iodine-131, caesium-134 and caesium-137, and hereby certify that the radiation levels do not exceed the standards laid down by the Codex Alimentarius Commission in the Guideline Levels for Radionuclides in Foods Contaminated following a Nuclear or Radiological Emergency.

Date: _____
 Done in _____ on _____
 Stamp of authorized representative of competent authority

Table
 Category of food:
 All chilled or frozen game, meat and poultry, all poultry eggs

* In the case of sampling of beef, every individual cattle is subject to laboratory analysis and a part of each cattle's meat is used for that purpose. In the case of sampling of the other species, laboratory analysis is carried out in accordance with the table of sampling plan of Annex.

* The laboratory performing the analysis must be a laboratory accredited by Japan Accreditation Board.

水產品

輻射水平證明書樣本

野味、肉類、家禽及禽蛋

輻射水平證明書樣本

總結

- 福島核電站事故至今尚未完全解決
- 放射性銫的半衰期長達數十年
- 食環署認為有必要維持禁止輸入和供應來自福島、茨城、栃木、千葉及群馬，並於2011年3月11日或之後收穫、製造、加工或包裝的食品
- 中心會繼續密切監察事態發展和日本進口食品樣本的檢測結果，並按風險分析採取適當的監察措施，確保日本進口食品的安全

~ 完 ~

