



# Radiation Measurement Results of 64 Items in December



When samples include natural radionuclides we can't deny the possibility of their radiation value counted together in our results.

The list below only shows the measurement results of the samples brought in.

Radioactive contamination level may differ according to sampling points even within the same address.

## ★Gamma-ray

(Bq/Kg raw:Weight of raw sample Bq/Kg dry:Weight of dried sample)

Samples	Sampling Point	Sampling Month	Measurement Result	Uncertainty	Total Amount of Cesium	Minimum Limit of Detection	
Brown rice	Kamiogawa, Ogawa, Iwaki	Oct-16	Cs137 — Bq/Kg raw	± — Bq/Kg raw	Under Minimum Limit of Detection	Cs137	1.0 Bq/Kg raw
			Cs134 — Bq/Kg raw	± — Bq/Kg raw		Cs134	0.9 Bq/Kg raw
Brown rice	Imaniida, Yosima, Iwaki	Oct-15	Cs137 — Bq/Kg raw	± — Bq/Kg raw	Under Minimum Limit of Detection	Cs137	1.0 Bq/Kg raw
			Cs134 — Bq/Kg raw	± — Bq/Kg raw		Cs134	0.9 Bq/Kg raw
Brown rice (Glutinous rice)	Watanabe, Iwaki	Oct-16	Cs137 — Bq/Kg raw	± — Bq/Kg raw	Under Minimum Limit of Detection	Cs137	1.0 Bq/Kg raw
			Cs134 — Bq/Kg raw	± — Bq/Kg raw		Cs134	0.9 Bq/Kg raw
Polished rice	Tainai, Niigata	2016	Cs137 — Bq/Kg raw	± — Bq/Kg raw	Under Minimum Limit of Detection	Cs137	0.8 Bq/Kg raw
			Cs134 — Bq/Kg raw	± — Bq/Kg raw		Cs134	0.7 Bq/Kg raw
Polished rice	Akita	Oct-16	Cs137 — Bq/Kg raw	± — Bq/Kg raw	Under Minimum Limit of Detection	Cs137	1.0 Bq/Kg raw
			Cs134 — Bq/Kg raw	± — Bq/Kg raw		Cs134	0.9 Bq/Kg raw
Polished rice	Iitomi, Mito, Ibaraki	Sep-16	Cs137 — Bq/Kg raw	± — Bq/Kg raw	Under Minimum Limit of Detection	Cs137	1.0 Bq/Kg raw
			Cs134 — Bq/Kg raw	± — Bq/Kg raw		Cs134	0.9 Bq/Kg raw
Polished rice	Tohno, Iwaki	Sep-16	Cs137 — Bq/Kg raw	± — Bq/Kg raw	Under Minimum Limit of Detection	Cs137	1.2 Bq/Kg raw
			Cs134 — Bq/Kg raw	± — Bq/Kg raw		Cs134	1.1 Bq/Kg raw
Polished rice	Imaniida, Yosima, Iwaki	Oct-15	Cs137 — Bq/Kg raw	± — Bq/Kg raw	Under Minimum Limit of Detection	Cs137	1.2 Bq/Kg raw
			Cs134 — Bq/Kg raw	± — Bq/Kg raw		Cs134	1.1 Bq/Kg raw
Glutinous rice	Japan	2016	Cs137 — Bq/Kg raw	± — Bq/Kg raw	Under Minimum Limit of Detection	Cs137	1.1 Bq/Kg raw
			Cs134 — Bq/Kg raw	± — Bq/Kg raw		Cs134	1.0 Bq/Kg raw
Carrot	Iwaki	Dec-16	Cs137 — Bq/Kg raw	± — Bq/Kg raw	Under Minimum Limit of Detection	Cs137	2.0 Bq/Kg raw
			Cs134 — Bq/Kg raw	± — Bq/Kg raw		Cs134	1.8 Bq/Kg raw
Chinese cabbage	Ogawa, Iwaki	Dec-16	Cs137 — Bq/Kg raw	± — Bq/Kg raw	Under Minimum Limit of Detection	Cs137	1.7 Bq/Kg raw
			Cs134 — Bq/Kg raw	± — Bq/Kg raw		Cs134	1.5 Bq/Kg raw
Eggplant	Watanabe, Iwaki	Dec-16	Cs137 — Bq/Kg raw	± — Bq/Kg raw	Under Minimum Limit of Detection	Cs137	1.3 Bq/Kg raw
			Cs134 — Bq/Kg raw	± — Bq/Kg raw		Cs134	1.2 Bq/Kg raw
Spinach	Taira, Iwaki	Dec-16	Cs137 — Bq/Kg raw	± — Bq/Kg raw	Under Minimum Limit of Detection	Cs137	1.0 Bq/Kg raw
			Cs134 — Bq/Kg raw	± — Bq/Kg raw		Cs134	1.0 Bq/Kg raw
Broccoli	Tohno, Iwaki	Nov-16	Cs137 — Bq/Kg raw	± — Bq/Kg raw	Under Minimum Limit of Detection	Cs137	2.4 Bq/Kg raw
			Cs134 — Bq/Kg raw	± — Bq/Kg raw		Cs134	2.2 Bq/Kg raw
Wasabi leaves	Ogawa, Iwaki	Dec-16	Cs137 — Bq/Kg raw	± — Bq/Kg raw	Under Minimum Limit of Detection	Cs137	2.6 Bq/Kg raw
			Cs134 — Bq/Kg raw	± — Bq/Kg raw		Cs134	2.1 Bq/Kg raw
Potato	Iitomi, Mito, Ibaraki	Jul-16	Cs137 — Bq/Kg raw	± — Bq/Kg raw	Under Minimum Limit of Detection	Cs137	1.4 Bq/Kg raw
			Cs134 — Bq/Kg raw	± — Bq/Kg raw		Cs134	1.2 Bq/Kg raw
Taro	Iritohno, Tohno, Iwaki	Nov-16	Cs137 — Bq/Kg raw	± — Bq/Kg raw	Under Minimum Limit of Detection	Cs137	1.8 Bq/Kg raw
			Cs134 — Bq/Kg raw	± — Bq/Kg raw		Cs134	1.6 Bq/Kg raw
Tokkuri potato	Iritohno, Tohno, Iwaki	Nov-16	Cs137 — Bq/Kg raw	± — Bq/Kg raw	Under Minimum Limit of Detection	Cs137	1.8 Bq/Kg raw
			Cs134 — Bq/Kg raw	± — Bq/Kg raw		Cs134	1.6 Bq/Kg raw
Shiitake mushroom	Watanabe, Iwaki	Dec-16	Cs137 3.5 Bq/Kg raw	± 1.6 Bq/Kg raw	3.5	Cs137	2.3 Bq/Kg raw
			Cs134 — Bq/Kg raw	± — Bq/Kg raw		Cs134	1.8 Bq/Kg raw
Apple	Yamagata	Nov-16	Cs137 — Bq/Kg raw	± — Bq/Kg raw	Under Minimum Limit of Detection	Cs137	2.2 Bq/Kg raw
			Cs134 — Bq/Kg raw	± — Bq/Kg raw		Cs134	2.1 Bq/Kg raw

※"—" used in Measurement Result and Uncertainty shows that the value is below the detection limit.

But it does not necessarily mean 0(zero)Bq/Kg.

## ★Gamma-ray

(Bq/Kg raw:Weight of raw sample Bq/Kg dry:Weight of dried sample)

Samples	Sampling Point	Sampling Month	Measurement Result		Uncertainty	Total Amount of Cesium	Minimum Limit of Detection
Persimmon	Motooka, Tomioka, Futaba	Nov-16	Cs137	51.1	Bq/Kg raw ± 6.4 Bq/Kg raw	59.0	Cs137 2.8 Bq/Kg raw
			Cs134	7.9	Bq/Kg raw ± 1.4 Bq/Kg raw		Cs134 2.9 Bq/Kg raw
Persimmon (peel and seed)	Ogawa, Iwaki	Dec-16	Cs137	—	Bq/Kg raw ± — Bq/Kg raw	Under Minimum Limit of Detection	Cs137 2.4 Bq/Kg raw
			Cs134	—	Bq/Kg raw ± — Bq/Kg raw		Cs134 2.1 Bq/Kg raw
Persimmon(pulp)	Ogawa, Iwaki	Dec-16	Cs137	—	Bq/Kg raw ± — Bq/Kg raw	Under Minimum Limit of Detection	Cs137 1.3 Bq/Kg raw
			Cs134	—	Bq/Kg raw ± — Bq/Kg raw		Cs134 1.1 Bq/Kg raw
Kiwi(pulp)	Naraha, Futaba	Dec-16	Cs137	9.8	Bq/Kg raw ± 2.2 Bq/Kg raw	11.4	Cs137 1.4 Bq/Kg raw
			Cs134	1.6	Bq/Kg raw ± 0.8 Bq/Kg raw		Cs134 1.3 Bq/Kg raw
Chinese quince	Fukushima	Dec-16	Cs137	—	Bq/Kg raw ± — Bq/Kg raw	Under Minimum Limit of Detection	Cs137 1.5 Bq/Kg raw
			Cs134	—	Bq/Kg raw ± — Bq/Kg raw		Cs134 1.3 Bq/Kg raw
Yuzu (citrus fruits)	Hiwatashi, Namie, Futaba	Dec-16	Cs137	196	Bq/Kg raw ± 39.0 Bq/Kg raw	231	Cs137 1.5 Bq/Kg raw
			Cs134	34.6	Bq/Kg raw ± 6.9 Bq/Kg raw		Cs134 1.4 Bq/Kg raw
Yuzu (citrus fruits)	Ide, Naraha, Futaba	Dec-16	Cs137	10.7	Bq/Kg raw ± 2.5 Bq/Kg raw	10.7	Cs137 1.6 Bq/Kg raw
			Cs134	—	Bq/Kg raw ± — Bq/Kg raw		Cs134 1.4 Bq/Kg raw
Yuzu (citrus fruits)	Iwaki	Dec-16	Cs137	—	Bq/Kg raw ± — Bq/Kg raw	Under Minimum Limit of Detection	Cs137 1.4 Bq/Kg raw
			Cs134	—	Bq/Kg raw ± — Bq/Kg raw		Cs134 1.2 Bq/Kg raw
Mandarin orange (pulp)	Iwaki	Dec-16	Cs137	—	Bq/Kg raw ± — Bq/Kg raw	Under Minimum Limit of Detection	Cs137 1.2 Bq/Kg raw
			Cs134	—	Bq/Kg raw ± — Bq/Kg raw		Cs134 1.1 Bq/Kg raw
Mandarin orange (peel)	Iwaki	Dec-16	Cs137	—	Bq/Kg raw ± — Bq/Kg raw	Under Minimum Limit of Detection	Cs137 5.3 Bq/Kg raw
			Cs134	—	Bq/Kg raw ± — Bq/Kg raw		Cs134 4.1 Bq/Kg raw
Greenling	Off the coast of Shioyazaki, Iwaki	Dec-16	Cs137	—	Bq/Kg raw ± — Bq/Kg raw	Under Minimum Limit of Detection	Cs137 1.6 Bq/Kg raw
			Cs134	—	Bq/Kg raw ± — Bq/Kg raw		Cs134 1.4 Bq/Kg raw
Dried dark sleeper	Ibaraki	2016	Cs137	—	Bq/Kg raw ± — Bq/Kg raw	Under Minimum Limit of Detection	Cs137 1.8 Bq/Kg raw
			Cs134	—	Bq/Kg raw ± — Bq/Kg raw		Cs134 1.7 Bq/Kg raw
Hijiki Seaweed	Chiba	Dec-16	Cs137	—	Bq/Kg raw ± — Bq/Kg raw	Under Minimum Limit of Detection	Cs137 2.0 Bq/Kg raw
			Cs134	—	Bq/Kg raw ± — Bq/Kg raw		Cs134 1.8 Bq/Kg raw
Dried Udon noodle	Yotukura, Iwaki (production)	unknown	Cs137	—	Bq/Kg raw ± — Bq/Kg raw	Under Minimum Limit of Detection	Cs137 1.2 Bq/Kg raw
			Cs134	—	Bq/Kg raw ± — Bq/Kg raw		Cs134 1.1 Bq/Kg raw
Buckwheat noodle	Aizu(production)	unknown	Cs137	—	Bq/Kg raw ± — Bq/Kg raw	Under Minimum Limit of Detection	Cs137 1.4 Bq/Kg raw
			Cs134	—	Bq/Kg raw ± — Bq/Kg raw		Cs134 1.3 Bq/Kg raw
Miso (Fermented soybean paste)	Iitomi, Moto, Ibaraki	Sep-15	Cs137	—	Bq/Kg raw ± — Bq/Kg raw	Under Minimum Limit of Detection	Cs137 1.1 Bq/Kg raw
			Cs134	—	Bq/Kg raw ± — Bq/Kg raw		Cs134 1.0 Bq/Kg raw
Brandy	unknown	unknown	Cs137	—	Bq/Kg raw ± — Bq/Kg raw	Under Minimum Limit of Detection	Cs137 1.6 Bq/Kg raw
			Cs134	—	Bq/Kg raw ± — Bq/Kg raw		Cs134 1.4 Bq/Kg raw
Vegetable juice	Japan · Foreign countries	unknown	Cs137	—	Bq/Kg raw ± — Bq/Kg raw	Under Minimum Limit of Detection	Cs137 1.1 Bq/Kg raw
			Cs134	—	Bq/Kg raw ± — Bq/Kg raw		Cs134 0.9 Bq/Kg raw
Soymilk	Japanese soybean used (Aichi production)	unknown	Cs137	—	Bq/Kg raw ± — Bq/Kg raw	Under Minimum Limit of Detection	Cs137 1.2 Bq/Kg raw
			Cs134	—	Bq/Kg raw ± — Bq/Kg raw		Cs134 1.0 Bq/Kg raw
School lunch	Takasaka, Uchigo, Iwaki	Dec-16	Cs137	—	Bq/Kg raw ± — Bq/Kg raw	Under Minimum Limit of Detection	Cs137 1.3 Bq/Kg raw
			Cs134	—	Bq/Kg raw ± — Bq/Kg raw		Cs134 1.2 Bq/Kg raw
School lunch	Takasaka, Uchigo, Iwaki	Dec-16	Cs137	—	Bq/Kg raw ± — Bq/Kg raw	Under Minimum Limit of Detection	Cs137 1.1 Bq/Kg raw
			Cs134	—	Bq/Kg raw ± — Bq/Kg raw		Cs134 1.0 Bq/Kg raw
School lunch	Matugadai, Jyoban, Iwaki	Dec-16	Cs137	—	Bq/Kg raw ± — Bq/Kg raw	Under Minimum Limit of Detection	Cs137 1.4 Bq/Kg raw
			Cs134	—	Bq/Kg raw ± — Bq/Kg raw		Cs134 1.3 Bq/Kg raw
Ginkgo (edible part)	Nogami, Okuma, Futaba	Nov-16	Cs137	485	Bq/Kg raw ± 97.0 Bq/Kg raw	574	Cs137 17.9 Bq/Kg raw
			Cs134	89.2	Bq/Kg raw ± 20.5 Bq/Kg raw		Cs134 14.4 Bq/Kg raw

\*"—" used in Measurement Result and Uncertainty shows that the value is below the detection limit.

But it does not necessary mean 0(zero)Bq/Kg.

## ★Gamma-ray

(Bq/Kg raw:Weight of raw sample Bq/Kg dry:Weight of dried sample)

Samples	Sampling Point	Sampling Month	Measurement Result		Uncertainty	Total Amount of Cesium	Minimum Limit of Detection	
Ginkgo (outer seed coat and leaf only)	Nogami, Okuma, Futaba	Nov-16	Cs137	716	Bq/Kg raw $\pm$ 143 Bq/Kg raw	861	Cs137	13.8 Bq/Kg raw
			Cs134	145	Bq/Kg raw $\pm$ 30.0 Bq/Kg raw		Cs134	13.1 Bq/Kg raw
Japanese rose (leaf and fruit)	Okuma, Futaba	Nov-16	Cs137	370	Bq/Kg raw $\pm$ 74.0 Bq/Kg raw	452	Cs137	19.8 Bq/Kg raw
			Cs134	82.3	Bq/Kg raw $\pm$ 20.7 Bq/Kg raw		Cs134	19.0 Bq/Kg raw
Swamp water	Ogawa, Iwaki	Dec-16	Cs137	—	Bq/L $\pm$ — Bq/L	Under Minimum Limit of Detection	Cs137	0.07 Bq/L
			Cs134	—	Bq/L $\pm$ — Bq/L		Cs134	0.05 Bq/L
Swamp mud	Ogawa, Iwaki	Dec-16	Cs137	321	Bq/Kg raw $\pm$ 36.3 Bq/Kg raw	362	Cs137	5.1 Bq/Kg raw
			Cs134	41.1	Bq/Kg raw $\pm$ 6.2 Bq/Kg raw		Cs134	6.1 Bq/Kg raw
Farm soil	Tabito, Iwaki	Dec-16	Cs137	771	Bq/Kg raw $\pm$ 86.1 Bq/Kg raw	879	Cs137	3.4 Bq/Kg raw
			Cs134	108	Bq/Kg raw $\pm$ 14.9 Bq/Kg raw		Cs134	3.3 Bq/Kg raw
Farm soil	Oohisa, Iwaki	May-11	Cs137	335	Bq/Kg raw $\pm$ 39.4 Bq/Kg raw	381	Cs137	4.0 Bq/Kg raw
			Cs134	45.7	Bq/Kg raw $\pm$ 7.8 Bq/Kg raw		Cs134	4.5 Bq/Kg raw
Ash of the wood-burning stove	Hishidaira, Komoro, Nagano	Apr-16	Cs137	68.2	Bq/Kg raw $\pm$ 8.5 Bq/Kg raw	82.8	Cs137	6.1 Bq/Kg raw
			Cs134	14.6	Bq/Kg raw $\pm$ 2.8 Bq/Kg raw		Cs134	7.6 Bq/Kg raw
Vacuum cleaner dust Panasonic Cyclonic	Tairashimohirakubo, Iwaki	Dec-16	Cs137	8540	Bq/Kg raw $\pm$ 1710 Bq/Kg raw	10,330	Cs137	42.9 Bq/Kg raw
			Cs134	1790	Bq/Kg raw $\pm$ 360 Bq/Kg raw		Cs134	41.9 Bq/Kg raw
Vacuum cleaner dust Dyson Cyclonic	Onahamahanabatake, Iwaki	Dec-16	Cs137	1760	Bq/Kg raw $\pm$ 350 Bq/Kg raw	2,183	Cs137	94.2 Bq/Kg raw
			Cs134	423	Bq/Kg raw $\pm$ 105 Bq/Kg raw		Cs134	92.5 Bq/Kg raw
Air dust	Tabito Elementary School (Schoolyard)	Dec-16	Cs137	—	Bq/m <sup>3</sup> $\pm$ — Bq/m <sup>3</sup>	Under Minimum Limit of Detection	Cs137	0.0040 Bq/m <sup>3</sup>
			Cs134	—	Bq/m <sup>3</sup> $\pm$ — Bq/m <sup>3</sup>		Cs134	— Bq/m <sup>3</sup>
Air dust	Tabito Nursery School (Playground)	Dec-16	Cs137	—	Bq/m <sup>3</sup> $\pm$ — Bq/m <sup>3</sup>	Under Minimum Limit of Detection	Cs137	0.0040 Bq/m <sup>3</sup>
			Cs134	—	Bq/m <sup>3</sup> $\pm$ — Bq/m <sup>3</sup>		Cs134	— Bq/m <sup>3</sup>
Air dust	Tamatsuyu Nursery School (Playground)	Dec-16	Cs137	—	Bq/m <sup>3</sup> $\pm$ — Bq/m <sup>3</sup>	Under Minimum Limit of Detection	Cs137	0.0040 Bq/m <sup>3</sup>
			Cs134	—	Bq/m <sup>3</sup> $\pm$ — Bq/m <sup>3</sup>		Cs134	— Bq/m <sup>3</sup>
Air dust	Izumi Nursery School (Playground)	Dec-16	Cs137	—	Bq/m <sup>3</sup> $\pm$ — Bq/m <sup>3</sup>	Under Minimum Limit of Detection	Cs137	0.0051 Bq/m <sup>3</sup>
			Cs134	—	Bq/m <sup>3</sup> $\pm$ — Bq/m <sup>3</sup>		Cs134	— Bq/m <sup>3</sup>

\*"—" used in Measurement Result and Uncertainty shows that the value is below the detection limit.

But it does not necessary mean 0(zero)Bq/Kg.



## ★Beta-ray

(Bq/Kg raw:Weight of raw sample Bq/Kg dry:Weight of dried sample)

Samples	Sampling Point	Sampling Month	Measurement Result			Uncertainty		Minimum Limit of Detection	
Sea water (lower)	1.5km south of Fukushima Nuclear Power Plant1(0.7km off-shore)	Sep-16	T(Free)	Under Minimum Limit of Detection	Bq/L	± —	Bq/L	4.86	Bq/L
Sea water (lower)	1.5km south of Fukushima Nuclear Power Plant1(1.1km off-shore)	Sep-16	T(Free)	Under Minimum Limit of Detection	Bq/L	± —	Bq/L	3.84	Bq/L
Canned salmon	USA (production)	2012	Sr90	Under Minimum Limit of Detection	Bq/Kg dry	± —	Bq/Kg dry	0.16	Bq/Kg dry
Canned salmon	USA (production)	2014	Sr90	Under Minimum Limit of Detection	Bq/Kg dry	± —	Bq/Kg dry	0.15	Bq/Kg dry
Sea water (surface)	4km south of Fukushima Nuclear Power Plant1(1km off-shore)	Sep-16	Sr90	0.0009	Bq/L	± 0.0001	Bq/L	0.0004	Bq/L
Sea water (surface)	1.5km south of Fukushima Nuclear Power Plant1(0.7km off-shore)	Sep-16	Sr90	0.0012	Bq/L	± 0.0002	Bq/L	0.0005	Bq/L
Sea water (lower)	1.5km south of Fukushima Nuclear Power Plant1(0.7km off-shore)	Sep-16	Sr90	0.0007	Bq/L	± 0.0002	Bq/L	0.0005	Bq/L
Sea water (surface)	1.5km south of Fukushima Nuclear Power Plant1(1.1km off-shore)	Sep-16	Sr90	0.0012	Bq/L	± 0.0002	Bq/L	0.0005	Bq/L

T(Free) : Tritium(Free water) T(Organization) : Tritium(Organization bound water) Sr90 : Strontium90

※The value below Minimum Limit of Detection does not necessary mean 0(zero)Bq/Kg.

