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RADIOACTIVITY SURVEY DATA in Japan

NUMBER 24
AUG. 1969

National Institute of Radiological Sciences
Chiba, Japan

Radioactivity Survey Data in Japan

Number 24

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National Institute of Radiological Sciences

Dietary Data

Strontium-90 and Cesium-137 in Milk

Part 1. (*National Institute of Animal Industry*)

The observation of the monthly variation in strontium-90 and cesium-137 content in milk was conducted at the National Institute of Animal Industry.

Samples were taken from the same cow, if possible, at the farm of the Institute and six other prefectural agricultural experimental stations, and analyzed by the method recommended by the Science and Technology Agency.

Sampling stations are indicated in Figure 1.

Results obtained during the period from April to December, 1968 are shown in Table 1.

Figure 1. Milk Sampling Stations

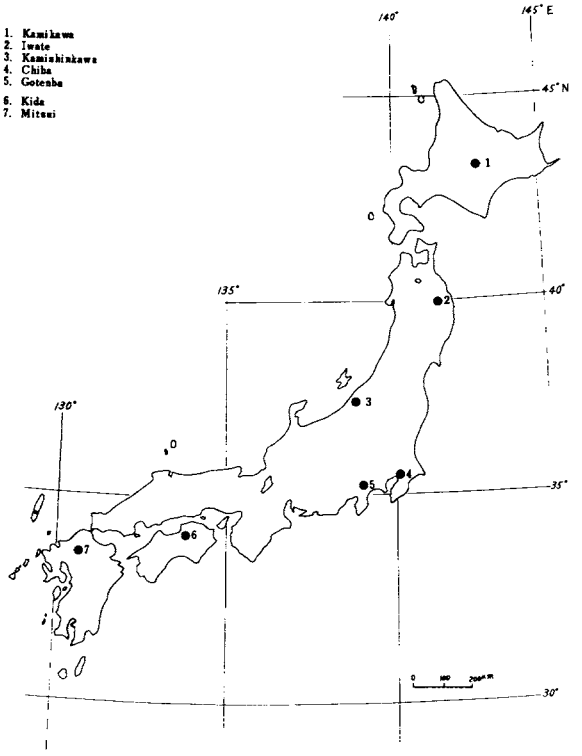


Table 1. ^{90}Sr and ^{137}Cs in Milk —Apr. to Dec., 1968—

By H. Danbara and T. Mitsuhashi
(*National Institute of Animal Industry*)

(Continued from Table 4, Issue No. 18 of this Publication)

Location	Component		^{90}Sr		^{137}Cs	
	Ca(g/ℓ)	K(g/ℓ)	(pCi/ℓ)	(pCi/gCa)	(pCi/ℓ)	(pCi/gK)
Apr. 1968						
Kamikawa, HOKKAIDO	1.1	1.5	35.7	32.5	107.0	71.3
Iwate, IWATE	1.0	1.4	11.8	11.8	42.9	30.6
Kamishinkawa, TOYAMA	1.0	1.4	8.9	8.9	14.1	10.1
Chiba, CHIBA	1.0	1.7	3.3	3.3	16.6	9.8
Gotemba, SHIZUOKA	1.0	1.6	6.1	6.1	22.3	13.9
Kida, KAGAWA	1.0	1.5	3.2	3.2	15.1	10.1
Mitsui, FUKUOKA	1.1	1.5	5.6	5.1	15.8	10.5
May '68						
Kamikawa, HOKKAIDO	1.0	1.5	20.8	20.8	74.8	49.9
Iwate, IWATE	0.9	1.2	7.8	8.7	27.8	23.2
Kamishinkawa, TOYAMA	1.0	1.5	10.3	10.3	17.4	11.6
Chiba, CHIBA	1.0	1.7	3.2	3.2	13.9	8.2
Gotemba, SHIZUOKA	1.0	1.6	6.1	6.1	23.0	14.4
Kida, KAGAWA	1.0	1.4	1.7	1.7	13.5	9.6
Mitsui, FUKUOKA						
June '68						
Kamikawa, HOKKAIDO	1.0	1.6	24.9	24.9	134.7	84.1
Iwate, IWATE	1.1	1.6	8.8	8.0	81.3	50.8
Kamishinkawa, TOYAMA	1.0	1.6	9.5	9.5	21.6	13.5
Chiba, CHIBA	1.1	1.5	4.4	4.0	31.4	20.9
Gotemba, SHIZUOKA	1.0	1.7	5.3	5.3	43.0	25.3
Kida, KAGAWA	1.0	1.4	2.7	2.7	16.8	12.0
Mitsui, FUKUOKA	1.0	1.4	3.8	3.8	15.5	11.1
July '68						
Kamikawa, HOKKAIDO	1.1	1.6	18.0	16.4	136.7	85.4
Iwate, IWATE	1.0	1.5	8.3	8.3	44.2	29.5
Kamishinkawa, TOYAMA	1.0	1.5	9.6	9.6	19.4	12.9
Chiba, CHIBA						
Gotemba, SHIZUOKA	1.0	1.6	7.5	7.4	40.6	25.4
Kida, KAGAWA	1.1	1.4	2.4	2.2	24.5	17.5
Mitsui, FUKUOKA	0.9	1.5	3.0	3.3	23.0	15.3
Aug. '68						
Kamikawa, HOKKAIDO	1.0	1.5	16.0	16.0	164.8	109.8
Iwate, IWATE	1.0	1.3	11.6	11.6	29.4	22.6
Kamishinkawa, TOYAMA	1.0	1.5	8.2	8.2	13.7	9.1
Chiba, CHIBA	0.9	1.7	3.6	4.0	14.3	8.4
Gotemba, SHIZUOKA	1.0	1.6	5.6	5.6	29.6	18.5
Kida, KAGAWA	1.1	1.5	1.8	1.6	12.4	8.3
Mitsui, FUKUOKA	0.9	1.4	3.2	3.6	7.7	5.5
Sept. '68						
Kamikawa, HOKKAIDO	1.1	1.3	17.0	15.5	65.4	50.3
Iwate, IWATE	1.0	0.9	12.3	12.3	35.4	39.3
Kamishinkawa, TOYAMA	1.0	1.5	9.3	9.3	15.4	10.3
Chiba, CHIBA	1.0	1.8	3.5	3.5	9.5	5.3
Gotemba, SHIZUOKA	0.9	1.7	7.2	8.0	27.8	16.4
Kida, KAGAWA	1.0	1.4	1.8	1.8	12.0	8.6
Mitsui, FUKUOKA	0.9	1.5	2.7	3.0	17.4	11.6
Oct. '68						
Kamikawa, HOKKAIDO	1.2	1.5	20.8	17.3	137.1	91.4
Iwate, IWATE	1.0	1.6	8.1	8.1	26.5	16.6
Kamishinkawa, TOYAMA	1.1	1.4	10.1	9.2	18.4	13.1
Chiba, CHIBA	1.0	1.6	3.4	3.4	21.3	13.3

Location	Component		^{90}Sr		^{137}Cs	
	Ca(g/ℓ)	K(g/ℓ)	(pCi/ℓ)	(pCi/gCa)	(pCi/ℓ)	(pCi/gK)
Gotemba, SHIZUOKA	1.0	1.7	2.5	2.5	39.0	22.9
Kida, KAGAWA	1.2	1.4	6.9	5.8	12.8	9.1
Mitsui, FUKUOKA	1.0	1.5	2.7	2.7	8.5	5.7
Nov. '68						
Kamikawa, HOKKAIDO	1.3	1.4	26.9	20.7	95.3	68.1
Iwate, IWATE	1.0	1.5	8.2	8.2	74.5	49.7
Kamishinkawa, TOYAMA	1.1	1.4	6.4	5.8	23.5	16.8
Chiba, CHIBA	1.0	1.4	3.4	3.4	60.7	43.4
Gotemba, SHIZUOKA	1.2	1.1	7.0	5.8	15.8	14.4
Kida, KAGAWA	1.1	1.4	2.0	1.8	30.0	21.4
Mitsui, FUKUOKA	0.9	1.4	2.3	2.6	14.0	10.0
Dec. '68						
Kamikawa, HOKKAIDO	1.0	1.2	17.8	17.8	39.0	32.5
Iwate, IWATE	1.0	1.4	8.9	8.9	57.5	41.1
Kamishinkawa, TOYAMA	1.1	1.3	6.5	5.9	17.0	13.1
Chiba, CHIBA	0.9	1.7	3.2	3.6	30.4	17.9
Gotemba, SHIZUOKA						
Kida, KAGAWA	0.9	1.2	3.8	4.2	15.1	12.6
Mitsui, FUKUOKA	1.1	1.4	2.5	2.3	15.5	11.1

Part 2. (*Japan Analytical Chemistry Research Institute*)

Since December 1961, milk samples from various parts of Japan have been collected by 25 prefectural public health laboratories and analyzed for strontium-90 and cesium-137 content at the Japan Analytical Chemistry Research Institute. Sampling locations are indicated in Figure 2.

Three liters of fresh milk were purchased at a representative farm in each prefecture and carbonized by the public health laboratories. The carbonized samples were sent to the Japan Analytical Chemistry Research Institute and ashed, then analyzed using the method recommended by the Science and Technology Agency.

Results obtained during the period from April, 1968 to March, 1969 are shown in Table 2.

Figure 2. Milk Sampling Location

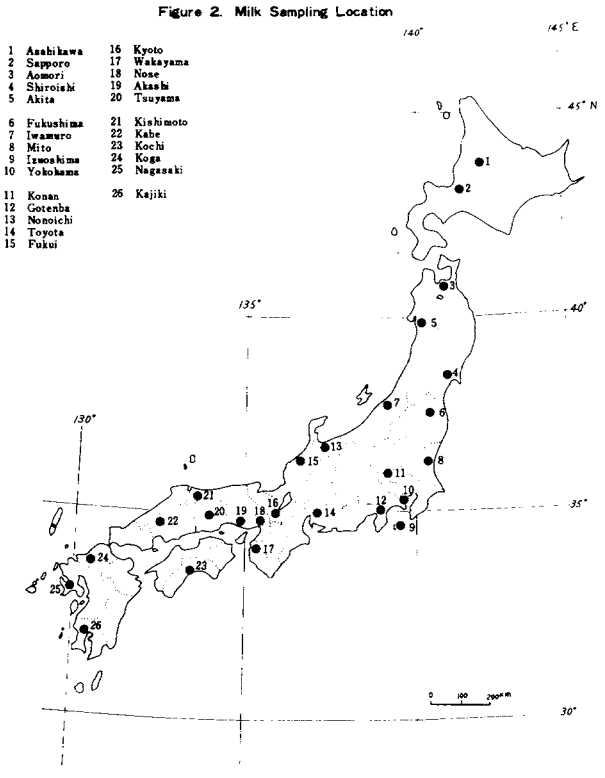


Table 2. ^{90}Sr and ^{137}Cs in Milk —Apr., 1968 to Mar., 1969—

By T. Asari, M. Chiba and M. Kuroda
(*Japan Analytical Chemistry Research Institute*)

(Continued from Table 1, Issue No. 20 of this Publication)

Location	Component			^{90}Sr		^{137}Cs	
	Ash(g/ℓ)	Ca(g/ℓ)	K(g/ℓ)	(pCi/ℓ)	(pCi/gCa)	(pCi/ℓ)	(pCi/gK)
Apr. 1968							
Asahikawa, HOKKAIDO	7.67	1.09	1.76	9.8	9.0	24.4	13.9
Aomori, AOMORI	7.00	1.18	1.37	17.2	14.6	15.4	11.2
Shiroishi, MIYAGI	7.67	1.23	1.66	5.4	4.4	13.4	8.1
Iwamuro, NIIGATA	6.67	1.15	1.37	9.4	8.2	13.8	10.1
Mito, IBARAKI	7.33	1.15	1.54	3.4	3.0	12.6	8.2
Nonoichi, ISHIKAWA	7.00	1.10	1.51	5.0	4.5	11.3	7.5
Toyota, AICHI	7.33	1.08	1.48	5.8	5.4	10.0	6.8
Fukui, FUKUI	7.33	1.03	1.34	6.4	6.2	11.8	8.8
Tsuyama, OKAYAMA	7.67	1.11	1.79	4.8	4.3	9.3	5.2
May '68							
Sapporo, HOKKAIDO	7.67	1.14	1.57	5.9	5.2	29.7	18.9
Akita, AKITA	8.00	1.14	1.63	4.4	3.9	13.7	8.4
Fukushima, FUKUSHIMA	9.33	1.22	1.77	7.7	6.3	25.0	14.1
Izuoshima, TOKYO	6.84	1.10	1.47	9.7	8.8	104.7	71.2
Yokohama, KANAGAWA	7.71	1.16	1.46	2.9	2.5	8.3	5.7
Konan, SAITAMA	7.00	1.11	1.42	4.7	4.2	16.3	11.5
Gotenba, SHIZUOKA	7.33	1.09	1.43	6.1	5.6	35.0	24.5
Kyoto, KYOTO	7.67	1.13	1.61	5.0	4.4	12.4	7.7
Wakayama, WAKAYAMA	8.33	1.10	1.56	7.7	7.0	9.5	6.1
Nose, OSAKA	7.33	1.10	1.58	4.6	4.2	13.0	8.2
Akashi, HYOGO	7.67	1.16	1.52	3.4	2.9	14.1	9.3
Kushimoto, TOTTORI	7.67	1.14	1.64	9.2	8.1	55.2	33.7
Kabe, HIROSHIMA	8.33	1.23	1.25	6.2	5.0	13.2	10.6
Kochi, KOCHI	7.67	1.23	1.61	4.6	3.7	17.0	10.6
Koga, FUKUOKA	7.33	1.08	1.50	7.6	7.0	10.2	6.8
Nagasaki, NAGASAKI	7.00	0.81	1.60	6.2	7.7	22.9	14.3
Kajiki, KAGOSHIMA	7.33	1.05	1.69	5.5	5.2	15.0	8.9
June '68							
Asahikawa, HOKKAIDO	7.33	1.16	1.49	17.5	15.1	40.5	27.2
Aomori, AOMORI	7.33	1.08	1.66	21.2	19.6	22.0	13.3
Shiroishi, MIYAGI	8.00	1.08	1.41	5.9	5.5	32.8	23.3
Iwamuro, NIIGATA	6.13	0.57	1.10	6.0	10.5	14.8	13.5
Gotenba, SHIZUOKA	6.67	0.90	0.79	7.4	8.2	46.8	59.2
Nonoichi, ISHIKAWA	7.33	1.15	1.58	7.3	6.3	15.3	9.7
Toyota, AICHI	8.56	1.18	1.50	6.6	5.6	13.7	9.1
Fukui, FUKUI	10.00	1.06	1.22	4.6	4.3	16.0	13.1
Tsuyama, OKAYAMA	5.00	0.76	1.00	3.9	5.1	11.6	11.6
July '68							
Sapporo, HOKKAIDO	7.47	1.04	1.38	8.3	8.0	33.3	24.1
Akita, AKITA	8.00	1.06	1.46	6.6	6.2	26.0	17.8
Fukushima, FUKUSHIMA	7.77	1.25	1.33	8.5	6.8	19.1	14.4
Mito, IBARAKI	7.67	1.08	1.67	4.4	4.1	17.3	10.4
Izuoshima, TOKYO	7.83	1.46	1.07	11.2	7.7	60.8	56.8
Yokohama, KANAGAWA	6.69	1.09	1.16	2.5	2.3	8.1	7.0
Konan, SAITAMA	6.90	0.98	1.35	5.5	5.6	15.7	11.6
Kyoto, KYOTO	6.67	0.95	1.27	3.9	4.1	10.2	8.0
Wakayama, WAKAYAMA	10.14	1.09	1.29	2.3	2.1	9.7	7.5
〃 〃	6.53	0.85	1.23	3.7	4.4	7.3	5.9
Nose, OSAKA	7.33	1.03	1.51	4.1	4.0	11.7	7.7
Akashi, HYOGO	7.33	0.98	1.52	2.7	2.8	8.6	5.7
Kishimoto, TOTTORI	6.67	0.83	1.31	10.0	12.0	26.6	20.3
Kabe, HIROSHIMA	6.37	0.92	1.23	4.4	4.8	9.9	8.0
Kochi, KOCHI	7.67	1.05	1.58	4.3	4.1	12.3	7.8

Location	Component			^{90}Sr		^{137}Cs	
	Ash(g/ℓ)	Ca(g/ℓ)	K(g/ℓ)	(pCi/ℓ)	(pCi/gCa)	(pCi/ℓ)	(pCi/gK)
Koga, FUKUOKA	7.50	0.70	1.41	7.0	10.0	17.0	12.1
Nagasaki, NAGASAKI	7.33	1.06	0.87	5.2	4.9	30.2	34.7
Kajiki, KAGOSHIMA	7.50	1.24	1.41	5.5	4.4	20.3	14.4
Aug. '68							
Asahikawa, HOKKAIDO	7.57	1.15	1.61	9.0	7.8	29.2	18.1
Aomori, AOMORI	7.17	1.10	1.49	29.7	27.0	36.4	24.4
Shiroishi, MIYAGI	7.00	1.03	1.59	5.3	5.1	19.8	12.5
Iwamuro, NIIGATA	5.73	0.89	1.13	5.5	6.2	8.0	7.1
Gotenba, SHIZUOKA	7.10	1.07	1.17	3.7	3.5	46.7	39.9
Nonoichi, ISHIKAWA	7.40	1.11	1.62	5.7	5.1	12.8	7.9
Toyota, AICHI	6.90	1.08	1.18	4.0	3.7	8.5	7.2
Fukui, FUKUI	6.57	1.27	1.07	4.4	3.5	16.9	15.8
Sept. '68							
Sapporo, HOKKAIDO	7.40	1.07	1.53	5.0	4.7	30.7	20.1
Akita, AKITA	7.87	1.18	1.92	6.8	5.7	18.3	9.5
Fukushima, FUKUSHIMA	8.23	1.46	1.34	8.6	5.9	24.4	18.2
Mito, IBARAKI	7.33	1.01	1.61	2.2	2.2	16.1	10.0
Izuoshima, TOKYO	6.67	1.02	1.37	9.2	9.0	76.1	55.7
Yokohama, KANAGAWA	7.22	1.42	1.26	2.0	1.4	11.7	9.3
Konan, SAITAMA	6.95	0.96	1.58	6.0	6.3	22.0	13.9
Kyoto, KYOTO	6.70	1.05	1.36	4.2	4.0	7.7	5.7
Nose, OSAKA	6.97	0.95	1.34	3.0	3.2	12.3	9.2
Akashi, HYOGO	6.43	0.89	1.38	1.9	2.1	9.2	6.7
Tsuyama, OKAYAMA	7.37	1.07	1.42	6.8	6.4	25.1	17.7
Kushimoto, TOTTORI	7.00	1.05	1.44	7.9	7.5	21.3	14.8
Kabe, HIROSHIMA	6.77	0.91	1.43	3.4	3.7	10.2	7.1
Kochi, KOCHI	10.27	0.98	1.48	3.9	4.0	10.7	7.2
Koga, FUKUOKA	7.23	0.99	1.44	6.0	6.1	9.3	6.5
Nagasaki, NAGASAKI	6.80	1.12	1.27	7.2	6.4	17.6	13.9
Kajiki, KAGOSHIMA	7.37	1.08	1.36	6.8	6.3	22.0	16.2
Oct. '68							
Asahikawa, HOKKAIDO	7.10	1.17	1.55	8.9	7.6	40.0	25.8
Aomori, AOMORI	7.07	1.01	1.50	27.6	27.3	31.8	21.2
Shiroishi, MIYAGI	7.17	1.11	1.62	3.1	2.8	22.5	13.9
Iwamuro, NIIGATA	6.90	1.02	1.28	4.6	4.5	14.8	11.6
Mito, IBARAKI	7.50	1.05	1.50	3.1	3.0	14.8	9.9
Gotenba, SHIZUOKA	7.17	1.01	1.51	11.7	11.6	61.3	40.6
Nonoichi, ISHIKAWA	7.00	1.03	1.36	3.3	3.2	16.1	11.8
Toyota, AICHI	7.73	1.10	1.55	5.0	4.5	10.6	6.8
Fukui, FUKUI	7.43	1.10	1.44	7.3	6.6	13.8	9.6
Tsuyama, OKAYAMA	7.23	1.01	1.57	3.4	3.4	13.6	8.7
Nov. '68							
Sapporo, HOKKAIDO	7.67	1.12	1.62	6.6	5.9	27.8	17.2
Akita, AKITA	7.27	1.02	1.36	5.2	5.1	15.4	11.3
Fukushima, FUKUSHIMA	7.33	1.11	1.46	8.4	7.6	23.7	16.3
Izuoshima, TOKYO	6.20	0.89	1.23	8.2	9.2	36.4	29.6
Konan, SAITAMA	6.77	0.95	1.10	4.7	4.9	14.0	12.7
Kyoto, KYOTO	7.00	1.03	1.33	2.8	2.7	13.6	10.2
Wakayama, WAKAYAMA	5.92	0.88	1.05	3.2	3.6	7.7	7.3
Nose, OSAKA	8.00	1.16	1.51	3.7	3.2	12.7	8.4
Akashi, HYOGO	7.03	0.94	1.24	2.4	2.6	7.0	5.6
Kishimoto, TOTTORI	7.40	1.06	1.31	8.7	8.2	33.0	25.2
Kabe, HIROSHIMA	7.57	1.10	1.44	6.0	5.5	19.9	13.8
Kochi, KOCHI	7.13	1.20	1.31	11.5	10.0	6.1	4.7
Koga, FUKUOKA	6.87	1.03	1.36	2.2	2.1	9.2	6.8
Nagasaki, NAGASAKI	6.47	1.01	1.30	5.3	5.2	17.6	13.5
Kajiki, KAGOSHIMA	7.60	1.05	1.59	8.4	8.0	24.3	15.3
Dec. '68							
Asahikawa, HOKKAIDO	7.60	1.11	1.64	6.3	5.7	23.7	14.5

Location	Component			^{90}Sr		^{137}Cs	
	Ash(g/ℓ)	Ca(g/ℓ)	K(g/ℓ)	(pCi/ℓ)	(pCi/gCa)	(pCi/ℓ)	(pCi/gK)
Aomori, AOMORI	6.77	1.00	1.36	13.8	13.8	17.6	12.9
Shiroishi, MIYAGI	6.70	0.99	1.49	6.6	6.7	17.4	11.7
Iwamuro, NIIGATA	5.90	0.78	1.29	6.9	8.8	18.0	14.0
Yokohama, KANAGAWA	7.15	1.11	1.33	2.5	2.3	10.1	7.6
Gotenba, SHIZUOKA	7.63	1.04	1.61	11.9	11.4	62.7	38.9
Nonoichi, ISHIKAWA	7.07	1.05	1.58	6.5	6.2	15.0	9.5
Toyota, AICHI	7.63	1.06	1.57	3.7	3.5	10.2	6.5
Fukui, FUKUI	7.17	1.27	1.28	6.2	4.9	13.0	10.2
Tsuyama, OKAYAMA	7.23	1.08	1.62	8.5	7.8	28.8	17.8
Jan. 1969							
Sapporo, HOKKAIDO	8.37	1.10	1.59	5.9	5.4	24.2	15.2
Akita, AKITA	8.00	1.14	1.53	3.8	3.3	17.5	11.4
Fukushima, FUKUSHIMA	8.30	1.24	1.61	6.5	5.2	15.6	9.7
Mito, IBARAKI	7.37	1.33	1.25	5.7	4.3	14.2	11.4
Izuoshima, TOKYO	6.86	1.02	1.44	8.0	8.0	38.7	26.8
Konan, SAITAMA	7.33	1.10	1.40	4.9	4.5	9.3	6.6
Kyoto, KYOTO	7.70	0.81	1.24	7.3	9.0	6.8	5.5
Wakayama, WAKAYAMA	5.78	0.86	0.74	2.0	2.3	3.6	4.9
Nose, OSAKA	7.83	1.24	1.51	3.1	2.5	14.2	9.4
Akashi, HYOGO	8.10	1.14	1.62	3.0	2.6	11.3	7.0
Kishimoto, TOTTORI	7.70	1.08	1.70	8.4	7.8	46.3	27.2
Kabe, HIROSHIMA	8.07	1.15	1.22	7.8	6.8	17.1	14.0
Kochi, KOCHI	7.53	1.08	1.58	9.2	8.5	13.4	8.5
Koga, FUKUOKA	7.93	1.26	1.62	2.1	1.7	13.6	8.4
Nagasaki, NAGASAKI	7.63	1.25	1.50	7.1	5.7	16.5	11.0
Kajiki, KAGOSHIMA	7.97	1.20	1.54	5.2	4.3	20.4	13.2
Feb. '69							
Asahikawa, HOKKAIDO	7.83	1.21	1.44	5.4	4.5	15.5	10.8
Aomori, AOMORI	7.60	1.08	1.49	8.5	7.9	33.1	22.2
Iwamuro, NIIGATA	7.17	0.99	1.56	4.4	4.4	25.1	16.1
Yokohama, KANAGAWA	7.42	1.04	1.43	1.1	1.1	12.9	9.0
Nonoichi, ISHIKAWA	7.50	1.03	1.49	4.5	4.4	21.2	14.2
Toyota, AICHI	7.63	1.09	1.51	2.1	1.9	29.8	19.7
Fukui, FUKUI	8.20	1.22	1.31	4.8	3.9	34.3	26.2
Tsuyama, OKAYAMA	7.57	1.11	1.57	4.0	3.6	16.9	10.8
Shiroishi, MIYAGI	7.80	0.95	1.38	3.9	4.1	20.8	15.1
Mar. '69							
Sapporo, HOKKAIDO	7.73	1.14	1.48	5.2	4.6	31.4	21.2
Akita, AKITA	7.60	1.09	1.40	4.2	3.9	18.3	13.1
Fukushima. FUKUSHIMA	7.77	1.14	1.50	5.4	4.7	17.1	11.4
Mito, IBARAKI	7.83	1.13	1.44	3.2	2.8	19.5	13.5
Izuoshima, TOKYO	6.92	0.99	1.50	8.9	9.0	40.6	27.1
Yokohama, KANAGAWA	7.06	0.95	1.29	1.5	1.6	14.9	11.6
Konan, SAITAMA	7.33	1.12	1.22	4.5	4.0	28.9	23.7
Gotenba, SHIZUOKA	7.73	1.15	1.60	5.6	4.9	52.7	32.9
Kyoto, KYOTO	7.57	1.17	1.52	1.8	1.5	12.8	8.4
Wakayama, WAKAYAMA	8.22	0.94	1.10	2.9	3.1	6.9	6.3
Nose, OSAKA	8.60	1.20	1.67	3.5	2.9	15.3	9.2
Akashi, HYOGO	8.00	1.05	1.63	2.4	2.3	7.4	4.5
Kishimoto, TOTTORI	7.07	1.01	1.36	6.6	6.5	7.3	5.4
Kabe, HIROSHIMA	8.53	1.09	1.29	4.8	4.8	33.9	26.3
Kochi, KOCHI	9.57	1.25	1.55	2.8	2.2	11.7	7.5
Koga, FUKUOKA	8.10	1.07	1.63	4.4	4.1	13.5	8.3
Nagasaki, NAGASAKI	10.43	1.10	1.59	3.5	3.2	22.2	14.0
Kajiki, KAGOSHIMA	7.90	1.05	1.60	4.9	4.7	17.0	10.6

Strontium-90 and Cesium-137 in Powdered Milk

(*Japan Analytical Chemistry Research Institute*)

Since 1960, the Japan Analytical Chemistry Research Institute has analyzed the strontium-90 and cesium-137 content in powdered milk.

The samples were purchased on the open market from powdered milk producers.

The analysis of strontium-90 and cesium-137 content was carried out using the method recommended by the Sience and Technology Agency.

Results obtained during the period from November, 1968 to March, 1969 are shown in Table 3.

Table 3. ^{90}Sr and ^{137}Cs in Powdered Milk —Nov., 1968 to Mar., 1969—

By T. Asari, M. Chiba and M. Kuroda
(*Japan Analytical Chemistry Research Institute*)

(Continued from Table 2, Issue No. 20, of this Publication)

Name of Producer	Purchase Date	Component (% by Weight)			^{90}Sr		^{137}Cs	
		Ash(%)	Ca(%)	K(%)	(pCi/100g)	(pCi/gCa)	(pCi/100g)	(pCi/gK)
MORINAGA	Nov. 1968	2.74	0.30	0.41	2.4	8.0	7.4	18.0
〃	〃	2.50	0.31	0.39	2.6	8.4	7.5	19.2
〃	〃	2.48	0.35	0.38	3.0	8.6	8.1	21.3
〃	〃	3.11	0.28	0.41	1.9	6.8	6.2	15.1
〃	〃	2.44	0.28	0.36	2.4	8.6	7.4	20.6
〃	〃	2.51	0.32	0.39	2.1	6.6	9.1	23.3
YUKIJIRUSHI	〃	2.66	0.34	0.41	1.8	5.3	7.2	17.6
〃	〃	2.50	0.31	0.42	2.6	8.4	4.9	11.7
〃	〃	3.02	0.31	0.38	2.3	7.4	5.2	13.7
〃	〃	2.81	0.30	0.38	2.2	7.3	7.6	20.0
〃	〃	3.21	0.32	0.41	1.4	4.4	3.8	9.3
〃	〃	2.28	0.30	0.40	2.4	8.0	5.6	14.0
MORINAGA	Mar. 1969	3.00	0.31	0.43	1.8	5.8	5.8	13.5
〃	〃	2.81	0.31	0.38	1.9	6.1	7.1	18.7
〃	〃	2.62	0.34	0.40	2.6	7.6	6.4	16.0
〃	〃	2.74	0.29	0.41	2.1	7.2	6.6	16.1
〃	〃	2.36	0.31	0.41	2.4	7.7	3.6	8.8
〃	〃	2.55	0.30	0.36	2.5	8.3	9.0	25.0
YUKIJIRUSHI	〃	2.64	0.34	0.39	2.1	6.2	5.6	14.4
〃	〃	2.33	0.28	0.38	1.9	6.8	7.4	19.5
〃	〃	2.70	0.28	0.40	2.3	8.2	5.5	13.8
〃	〃	2.18	0.30	0.41	2.2	7.3	7.6	18.5
〃	〃	2.45	0.29	0.40	1.5	5.2	8.3	20.8
〃	〃	2.68	0.31	0.43	2.0	6.5	4.7	10.9

Strontium-90 and Cesium-137 in Vegetables

(Japan Analytical Chemistry Research Institute)

The Japan Analytical Chemistry Research Institute has analyzed the strontium-90 and cesium-137 content in vegetables obtained from 12 prefectures. Sampling locations are shown in Figure 3. The samples were taken twice at the same location during the harvest period. At the prefectural public health laboratories, several kgs of the fresh vegetable samples were washed with water, and the inedible parts removed, then only the edible parts ashed at 450℃. These samples were then sent to the Japan Analytical Chemistry Research Institute and analyzed for strontium-90 and cesium-137 content, using the method recommended by the Science and Technology Agency.

Results obtained during the period from April, 1968 to March, 1969 are shown in Table 4.

Figure 3. Vegetables Sampling Location

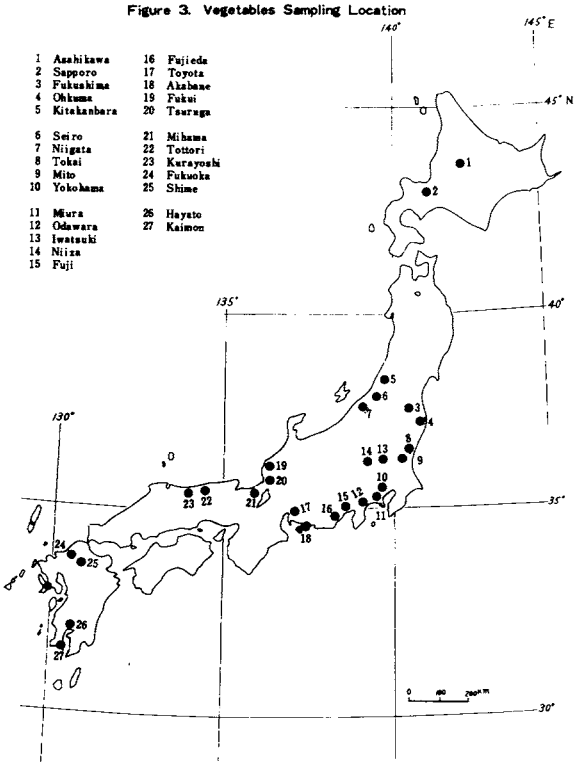


Table 4. ^{90}Sr and ^{137}Cs in Vegetables —Apr., 1968 to Mar., 1969—

By T. Asari, M. Chiba and M. Kuroda
(*Japan Analytical Chemistry Research Institute*)

(Continued from Table 3, Issue No. 20, of this Publication)

Location	Month Harvested	Component (% by Weight) Ash(%)	Ca(%)	K(%)	^{90}Sr (pCi/kg)	^{90}Sr (pCi/gCa)	^{137}Cs (pCi/kg)	^{137}Cs (pCi/gK)
(Spinach)								
Toyota, AICHI	Apr. '68	1.40	0.08	0.49	16.5	20.6	9.0	1.8
Okuma, FUKUSHIMA	May '68	1.25	0.07	0.43	26.0	37.1	16.9	3.9
Fukushima, FUKUSHIMA	〃	1.33	0.15	0.34	34.1	22.8	20.0	5.9
Akabane, AICHI	〃	1.43	0.04	0.52	31.0	77.5	10.1	1.9
Fukui, FUKUI	〃	1.75	0.25	0.52	64.4	25.7	17.5	3.4
Tottori, TOTTORI	〃	1.30	0.06	0.47	19.5	32.4	13.9	3.0
Kurayoshi, TOTTORI	〃	1.30	0.16	0.35	65.7	41.1	20.6	5.9
Sapporo, HOKKAIDO	June '68	2.03	0.14	0.73	21.2	15.2	13.8	1.9
Asahikawa, HOKKAIDO	〃	1.75	0.05	0.69	19.1	38.2	14.5	2.1
Tsuruga, FUKUI	〃	1.60	0.20	0.45	159.0	79.6	41.7	9.3
Sapporo, HOKKAIDO	Oct. '68	2.68	0.07	1.03	29.0	41.5	32.3	3.1
Asahikawa, HOKKAIDO	〃	1.19	0.06	0.38	37.3	62.2	30.5	8.0
Okuma, FUKUSHIMA	〃	1.43	0.08	0.41	37.0	46.3	23.7	5.8
Fukushima, FUKUSHIMA	〃	2.01	0.18	0.56	43.5	24.2	33.1	5.9
Toyota, AICHI	〃	1.08	0.03	0.50	8.1	26.9	3.0	0.6
Mito, IBARAKI	Nov. '68	1.23	0.07	0.35	12.5	17.8	24.8	7.1
Tokai, IBARAKI	〃	1.63	0.06	0.70	30.2	50.4	16.0	2.3
Fuji, SHIZUOKA	〃	0.95	0.06	0.16	35.4	59.0	16.3	10.2
Fujieda, SHIZUOKA	〃	0.82	0.04	0.20	35.1	87.7	60.9	30.5
Akabane, AICHI	〃	1.32	0.07	0.40	40.8	58.2	20.4	5.1
Fukui, FUKUI	〃	0.83	0.11	0.33	11.4	10.4	7.6	2.3
Tsuruga, FUKUI	〃	1.42	0.09	0.50	78.6	87.3	19.8	4.0
Tottori, TOTTORI	〃	1.53	0.05	0.63	15.4	30.8	10.7	1.7
Kurayoshi, TOTTORI	〃	1.53	0.07	0.57	26.5	37.8	18.7	3.3
Fukuoka, FUKUOKA	〃	1.35	0.06	0.53	12.1	20.1	19.1	3.6
Iwaki, SAITAMA	Dec. '68	1.27	0.03	0.49	12.1	40.3	13.4	2.7
Niiza, SAITAMA	〃	2.03	0.10	0.80	42.1	42.1	15.8	2.0
Shime, FUKUOKA	〃	1.17	0.04	0.42	11.1	27.7	29.0	6.9
Mito, IBARAKI	Jan. '69	1.34	0.05	0.50	11.5	23.1	3.8	0.76
Tokai, IBARAKI	〃	1.87	0.06	0.73	14.3	23.8	17.3	2.4
Fuji, SHIZUOKA	〃	0.94	0.04	0.29	23.9	59.9	32.2	11.1
Fujieda, SHIZUOKA	〃	2.25	0.07	0.61	80.9	115.0	37.4	6.1
Fukuoka, FUKUOKA	〃	1.26	0.05	0.43	9.3	18.5	21.6	8.0
Yokohama, KANAGAWA	Feb. '69	1.92	0.05	0.78	25.8	51.6	22.3	3.1
Odawara, KANAGAWA	〃	1.18	0.07	0.32	26.3	37.6	17.3	5.4
Shime, FUKUOKA	〃	0.55	0.02	0.20	6.9	34.7	10.6	5.3
Yokohama, KANAGAWA	Mar. '69	1.59	0.05	0.61	12.0	24.1	9.9	1.6
Odawara, KANAGAWA	〃	1.08	0.06	0.28	16.9	28.2	20.2	7.2
Iwaki, SAITAMA	〃	1.70	0.06	0.65	15.5	25.8	12.5	1.9
Niiza, SAITAMA	〃	1.47	0.06	0.46	29.8	49.6	10.4	2.3

Location	Month Harvested	Component (% by weight) Ash(%)	Ca(%)	K(%)	^{90}Sr (pCi/kg)	^{90}Sr (pCi/gCa)	^{137}Cs (pCi/kg)	^{137}Cs (pCi/gK)
(Japanese Radish Whole)								
Toyota, AICHI	Apr. '68	0.98	0.02	0.39	9.2	45.9	5.1	1.3
Fukushima, FUKUSHIMA	May '68	0.71	0.03	0.27	7.3	24.2	13.4	4.9
Okuma, FUKUSHIMA	〃	0.89	0.03	0.33	54.0	180.0	8.6	2.6
Yokohama, KANAGAWA	〃	0.69	0.03	0.21	11.8	39.4	14.8	7.0
Miura, KANAGAWA	〃	0.76	0.03	0.22	30.0	100.0	7.7	3.5
Akabane, AICHI	〃	1.00	0.02	0.39	41.1	206.0	17.0	4.4
Sapporo, HOKKAIDO	July '68	0.70	0.02	0.27	10.6	52.8	12.1	4.7
Asahikawa, HOKKAIDO	〃	0.70	0.02	0.28	26.1	30.0	34.1	12.2
Niigata, NIIGATA	〃	0.65	0.03	0.22	71.7	239.0	14.4	6.6
Seiro, NIIGATA	〃	0.41	0.01	0.15	11.5	115.0	9.9	6.6
Niiza, SAITAMA	〃	0.55	0.02	0.21	10.8	54.0	6.1	2.9
Iwaki, SAITAMA	〃	1.10	0.04	0.47	24.8	61.9	16.3	3.5
Hayato, KAGOSHIMA	〃	0.42	0.02	0.16	32.3	161.0	14.9	9.3
Kaimon, KAGOSHIMA	〃	0.67	0.02	0.24	11.6	58.2	12.5	5.2
Okuma, FUKUSHIMA	Aug. '68	0.46	0.02	0.19	11.6	58.3	4.3	2.3
Toyota, AICHI	Oct. '68	0.73	0.02	0.34	12.9	64.5	6.4	1.9
Sapporo, HOKKAIDO	Nov. '68	0.42	0.04	0.19	94.8	236.0	40.3	21.2
Asahikawa, HOKKAIDO	〃	0.60	0.03	0.24	24.4	81.2	6.9	2.8
Fukushima, FUKUSHIMA	〃	0.61	0.04	0.21	9.4	23.4	6.6	3.2
Niigata, NIIGATA	〃	0.51	0.02	0.18	35.7	178.0	9.6	5.4
Kitakanbara, NIIGATA	Nov. '68	0.63	0.03	0.24	24.5	81.6	4.9	2.0
Fuji, SHIZUOKA	〃	0.48	0.02	0.18	25.5	128.0	7.7	4.3
Fujieda, SHIZUOKA	〃	0.37	0.01	0.16	26.7	267.0	9.6	6.0
Akabane, AICHI	〃	0.61	0.02	0.25	8.4	41.9	3.5	1.4
Mihama, FUKUI	〃	0.60	0.02	0.23	37.6	187.0	9.1	3.9
〃	〃	0.62	0.02	0.25	31.2	156.0	6.3	2.5
Yokohama, KANAGAWA	Dec. '68	0.57	0.03	0.19	4.7	15.7	4.1	2.2
Miura, KANAGAWA	〃	0.48	0.02	0.17	10.6	52.9	3.3	1.9
Iwaki, SAITAMA	〃	0.58	0.02	0.23	13.0	65.2	4.0	1.7
Niiza, SAITAMA	〃	0.41	0.03	0.15	10.1	33.6	2.9	1.9
Tsuruga, FUKUI	〃	0.55	0.02	0.19	115.0	577.0	8.7	4.6
〃	〃	0.49	0.02	0.16	78.9	394.0	7.3	4.6
Shime, FUKUOKA	〃	0.52	0.02	0.20	11.1	55.4	2.1	1.0
Fukuoka, FUKUOKA	〃	0.58	0.02	0.19	6.1	30.5	11.3	5.9
Kaimon, KAGOSHIMA	〃	0.58	0.02	0.25	18.5	92.7	12.5	5.0
Hayato, KAGOSHIMA	〃	0.54	0.02	0.22	34.4	172.0	11.9	5.4
Fujieda, SHIZUOKA	Jan. '69	0.44	0.02	0.16	24.0	120.0	4.2	2.6
Fuji, SHIZUOKA	〃	0.35	0.01	0.15	18.8	188.0	3.8	2.5
Fukuoka, FUKUOKA	〃	0.64	0.02	0.22	12.4	61.9	12.1	5.5
Shime, FUKUOKA	〃	1.46	0.07	0.53	33.9	48.5	8.1	1.5
(Japanese Radish Leaf)								
Toyota, AICHI	Apr. '68	1.21	0.12	0.36	45.6	38.0	18.2	5.1
Yokohama, KANAGAWA	May '68	1.72	0.38	0.18	112.0	29.4	36.7	20.4
Miura, KANAGAWA	〃	1.42	0.23	0.19	8.0	3.5	19.1	10.1
Akabane, AICHI	〃	1.41	0.11	0.44	225.0	204.0	45.7	10.4
Hayato, KAGOSHIMA	July '68	1.51	0.23	0.31	226.0	98.4	73.1	23.6
Kaimon, KAGOSHIMA	〃	1.62	0.22	0.28	71.7	32.6	35.7	12.8
Toyota, AICHI	Oct. '68	1.02	0.08	0.34	34.0	42.5	6.1	1.8
Akabane, AICHI	Nov. '68	1.26	0.10	0.37	45.0	45.0	6.5	1.8
Mihama, FUKUI	〃	1.03	0.07	0.29	108.0	155.0	12.1	4.2
〃	〃	1.00	0.06	0.32	66.3	110.0	8.7	2.7
Yokohama, KANAGAWA	Dec. '68	1.40	0.20	0.26	26.5	13.2	9.6	3.7
Miura, KANAGAWA	〃	1.04	0.10	0.25	46.8	46.8	7.8	3.1
Tsuruga, FUKUI	〃	0.93	0.07	0.16	254.0	363.0	22.1	13.8
〃	〃	1.01	0.10	0.18	134.0	134.0	19.3	10.7
Kaimon, KAGOSHIMA	〃	1.41	0.15	0.37	100.0	66.9	70.8	19.1
Hayato, KAGOSHIMA	〃	1.17	0.08	0.35	81.9	102.0	19.2	5.5

Strontium-90 and Cesium-137 in Total Diet

(Japan Analytical Chemistry Research Institute)

Since June 1963, the Japan Analytical Chemistry Research Institute has conducted analyses of total diet samples from the 19 prefectures shown in Figure 4.

One city and one village in each prefecture were chosen as representative of urban and rural districts of these prefectures, respectively. Ten families from each family presented a normal portion of the regular diet consumed in one day by an adult or a child. Diets at special occasions were avoided.

Composite samples from the 10 families were ashed together and analyzed using the method recommended by the Science and Technology Agency.

Results obtained during the period from May to December, 1968 are shown in Table 5.

Figure 5 shows the all Japan mean values of total diet.

Figure 4. Total Diet Sampling Location

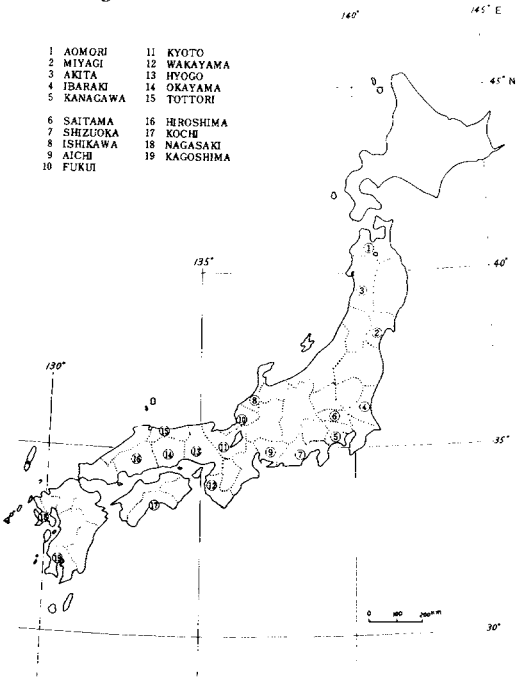


Table 5. ^{90}Sr and ^{137}Cs in Total Diet —May to Dec., 1968—

By T. Asari, M. Chiba and M. Kuroda
(*Japan Analytical Chemistry Research Institute*)

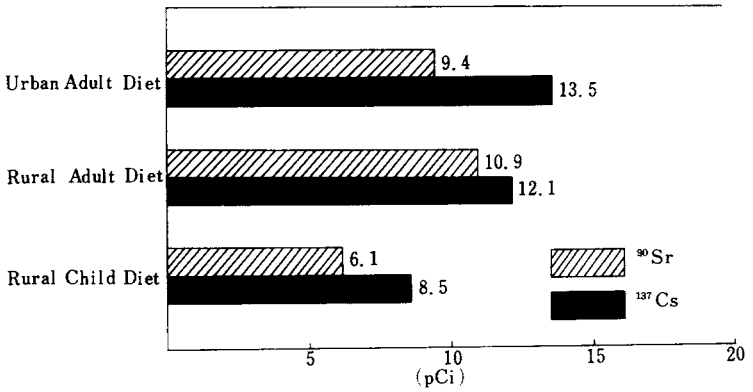
(Continued from Table 5, Issue No. 20, of this Publication)

Location	Month	Daily Intake						
		Ash(g)	Ca(mg)	K(g)	^{90}Sr (pCi)	^{90}Sr (pCi/gCa)	^{137}Cs (pCi)	^{137}Cs (pCi/gK)
(URBAN ADULT DIET)								
Aomori, AOMORI	May 1968	21.1	1076	1.81	23.1	21.5	21.7	12.0
〃 〃	Nov. 〃	17.9	303	1.50	9.9	32.7	16.2	10.8
Sendai, MIYAGI	June 〃	18.4	519	1.83	5.6	10.8	15.9	8.7
〃 〃	Nov. 〃	20.9	506	1.91	6.1	12.1	15.1	7.9
Akita, AKITA	May 〃	14.5	287	1.17	12.9	44.9	9.1	7.8
〃 〃	Nov. 〃	15.1	571	1.16	12.5	21.9	12.3	10.6
Mito, IBARAKI	May 〃	16.3	556	1.63	7.5	13.5	13.4	8.2
〃 〃	Nov. 〃	17.1	498	1.77	7.6	15.3	14.8	8.4
Yokohama, KANAGAWA	June 〃	18.1	433	1.87	5.7	13.2	12.8	6.8
〃 〃	Nov. 〃	18.9	435	2.03	9.0	20.7	13.2	6.5
Omiya, SAITAMA	May 〃	16.5	640	1.77	10.8	6.9	10.9	6.2
〃 〃	Nov. 〃	18.3	880	1.88	9.2	10.5	20.3	10.8
Shimada, SHIZUOKA	June 〃	15.7	339	1.84	6.2	18.3	11.7	6.4
〃 〃	Nov. 〃	9.2	185	1.08	11.1	60.0	8.0	7.4
Kanazawa, ISHIKAWA	May 〃	28.8	1011	1.70	15.1	14.9	10.8	6.4
〃 〃	Nov. 〃	20.7	584	1.86	11.8	20.2	19.3	10.4
Kariya, AICHI	June 〃	20.0	554	1.99	5.6	10.1	13.3	6.7
〃 〃	Nov. 〃	20.4	667	2.13	8.2	12.3	18.3	8.6
Fukui, FUKUI	May 〃	14.9	383	1.41	8.9	23.2	8.3	5.9
〃 〃	Nov. 〃	21.8	451	1.92	15.4	34.1	18.1	9.4
Kyoto, KYOTO	May '68	17.3	545	1.54	8.5	15.6	12.9	8.4
〃 〃	Nov. 〃	15.1	430	1.64	7.1	16.5	11.5	7.0
Wakayama, WAKAYAMA	May 〃	14.3	878	1.01	4.4	5.0	8.2	8.1
〃 〃	Nov. 〃	13.0	527	1.08	5.2	9.9	5.9	5.5
Kakogawa, HYOGO	June 〃	19.4	598	1.35	5.5	9.2	9.6	7.1
〃 〃	Nov. 〃	23.5	825	1.86	6.1	7.4	12.1	6.5
Okayama, OKAYAMA	May 〃	23.1	319	1.73	5.5	17.2	11.4	6.6
〃 〃	Nov. 〃	16.1	465	1.63	6.6	14.2	8.5	5.2
Tottori, TOTTORI	June 〃	24.9	500	1.78	17.5	35.0	19.2	10.8
〃 〃	Nov. 〃	22.7	824	2.28	13.7	16.6	15.3	6.7
Hiroshima, HIROSHIMA	May 〃	14.8	389	1.31	9.4	24.2	9.0	6.9
〃 〃	Nov. 〃	15.9	393	1.87	5.4	13.7	15.5	8.3
Kochi, KOCHI	May 〃	15.8	412	1.48	9.0	21.8	8.2	5.5
〃 〃	Nov. 〃	17.6	459	1.73	7.8	17.0	11.6	7.7
Nagasaki, NAGASAKI	May 〃	22.2	584	1.53	8.8	15.1	14.1	9.2
〃 〃	Nov. 〃	24.5	551	1.81	9.8	17.8	14.2	7.8
Kagoshima, KAGOSHIMA	May 〃	23.9	739	2.03	15.4	20.8	23.7	11.7
〃 〃	Nov. 〃	18.5	525	1.86	8.6	16.4	18.3	9.8
(RURAL ADULT DIET)								
Aomori, AOMORI	May 1968	19.4	417	1.42	15.1	36.2	14.0	9.9
〃 〃	Nov. 〃	16.2	499	1.12	9.2	18.4	10.2	9.1
Natori, MIYAGI	June 〃	19.9	408	1.77	6.1	15.0	11.7	6.6
〃 〃	Nov. 〃	23.7	519	2.16	6.2	11.9	14.2	6.6
Yuwa, AKITA	May 〃	22.3	529	1.74	22.8	43.1	15.3	8.8
〃 〃	Nov. 〃	14.7	478	1.28	16.7	34.9	21.0	16.4
Tokai, IBARAKI	May 〃	18.8	803	1.57	12.9	16.1	11.2	7.1
〃 〃	Nov. 〃	20.0	638	2.04	12.9	20.2	16.3	8.0
Totsuka, KANAGAWA	June 〃	19.3	309	1.65	5.3	17.2	14.3	8.7
〃 〃	Nov. 〃	19.7	335	2.06	8.4	25.1	32.9	16.0
Niiza, SAITAMA	May 〃	19.7	615	1.61	9.7	15.8	8.5	5.3
〃 〃	Nov. 〃	19.6	1194	1.66	8.2	6.9	12.6	7.6
Kakegawa, SHIZUOKA	June 〃	5.2	126	0.38	2.8	22.2	5.3	13.9
〃 〃	Nov. 〃	12.6	275	1.58	10.1	36.7	9.2	5.8

Location	Month	Daily Intake						
		Ash(g)	Ca(mg)	K(g)	^{90}Sr (pCi)	^{90}Sr (pCi/gCa)	^{137}Cs (pCi)	^{137}Cs (pCi/gK)
Matsuto, ISHIKAWA	May 1968	19.6	466	1.15	13.4	28.8	6.9	6.0
〃 〃	Nov. 〃	13.4	253	1.44	12.6	49.8	12.7	8.8
Nishio, AICHI	June 〃	15.9	437	1.64	5.5	12.6	7.8	4.8
〃 〃	Nov. 〃	11.9	400	1.33	6.2	15.5	7.9	5.9
Kanazu, FUKUI	June 〃	13.4	515	1.55	25.6	49.7	10.4	7.4
〃 〃	Nov. 〃	13.3	207	1.37	12.1	58.5	10.6	7.7
Miyama, KYOTO	May 〃	17.4	327	1.47	13.2	40.4	8.8	6.0
〃 〃	Nov. 〃	17.3	419	2.08	17.1	40.8	12.1	5.8
Hidaka, WAKAYAMA	May 〃	19.5	850	1.51	5.9	6.9	6.6	4.4
〃 〃	Nov. 〃	16.3	381	1.72	11.2	29.4	7.4	4.3
Kakogawa, HYOGO	June 〃	14.0	472	1.20	7.1	15.0	13.4	11.2
〃 〃	Nov. 〃	15.7	534	1.81	8.3	15.5	11.0	6.1
Tsudaka, OKAYAMA	May 〃	14.8	477	1.56	6.3	13.2	8.5	5.4
〃 〃	Nov. 〃	18.2	464	1.71	6.8	14.7	9.2	5.4
Fukube, TOTTORI	June 〃	17.9	512	1.73	18.2	35.5	12.1	7.0
〃 〃	Nov. 〃	19.1	966	2.15	14.7	15.2	18.2	8.5
Shiwa, HIROSHIMA	May 〃	18.5	747	1.97	16.1	21.6	10.7	5.4
〃 〃	Dec. 〃	16.5	475	2.40	8.3	17.5	13.1	5.4
Haruno, KOCHI	May 〃	19.8	515	1.66	13.5	26.2	9.6	5.8
〃 〃	Nov. 〃	23.0	660	2.02	13.0	19.7	10.3	5.1
Tokitsu, NAGASAKI	May 〃	22.6	513	1.66	10.3	20.1	12.6	7.6
〃 〃	Nov. 〃	17.1	518	1.45	5.6	10.8	9.3	6.4
Shiwa, KAGOSHIMA	May 〃	13.9	520	1.38	5.9	11.3	15.0	10.9
〃 〃	Nov. 〃	18.1	434	1.98	12.2	28.1	20.2	10.2
(RURAL CHILD DIET)								
Aomori, AOMORI	May 〃	10.3	244	0.79	9.4	38.5	9.7	12.3
〃 〃	Nov. 〃	16.9	499	1.06	8.4	16.8	9.5	9.0
Natori, MIYAGI	June 〃	14.5	378	1.31	3.8	10.1	9.4	7.2
〃 〃	Nov. 〃	21.1	481	1.91	4.9	10.2	14.6	7.6
Yuwa, AKITA	May 〃	11.0	266	0.79	8.6	32.3	5.5	7.0
〃 〃	Nov. 〃	4.9	228	0.61	4.9	21.5	5.4	8.9
Tokai, IBARAKI	May 〃	13.6	398	1.18	7.4	18.6	8.7	7.4
〃 〃	Nov. 〃	13.5	447	1.40	6.6	14.8	10.4	7.4
Totsuka, KANAGAWA	June 〃	11.9	336	1.17	2.6	7.7	9.9	8.5
〃 〃	Nov. 〃	14.5	336	1.38	4.5	13.4	12.9	9.3
Niiza, SAITAMA	May 〃	13.0	502	1.32	5.2	10.4	7.3	5.5
〃 〃	Nov. 〃	12.4	487	1.15	5.4	11.1	9.0	7.8
Kakegawa, SHIZUOKA	June 〃	6.8	273	0.37	2.2	8.1	6.0	16.2
〃 〃	Nov. 〃	8.3	166	1.03	6.6	39.8	7.8	7.6
Matsuto, ISHIKAWA	May 〃	11.0	542	0.67	5.2	9.6	7.9	11.8
〃 〃	Nov. 〃	9.5	200	1.01	4.5	22.5	9.6	9.5
Nishio, AICHI	June 〃	12.4	575	1.13	2.5	4.3	7.2	6.4
〃 〃	Nov. 〃	7.5	236	0.93	4.1	17.4	10.1	10.9
Kanazu, FUKUI	June 〃	8.4	366	1.15	12.5	34.2	6.0	3.9
〃 〃	Nov. 〃	8.8	227	0.95	6.4	28.2	9.8	10.3
Miyama, KYOTO	May 〃	10.8	234	0.95	8.0	34.2	4.8	5.1
〃 〃	Nov. 〃	15.2	432	1.55	11.6	26.9	10.6	6.8
Hidaka, WAKAYAMA	May 〃	6.8	470	0.58	2.9	6.2	4.9	8.4
〃 〃	Nov. 〃	8.2	349	0.99	3.9	11.2	4.5	4.5
Kakogawa, HYOGO	June 〃	10.9	403	1.04	7.0	17.4	10.5	10.1
〃 〃	Nov. 〃	14.8	540	1.60	5.6	10.4	8.5	5.3
Tsudaka, OKAYAMA	May 〃	6.1	207	0.63	2.0	9.7	4.9	7.8
〃 〃	Nov. 〃	8.3	233	0.90	3.8	16.3	7.3	8.1
Fukube, TOTTORI	June 〃	14.3	602	1.37	12.9	21.4	11.9	8.7
〃 〃	Nov. 〃	11.5	662	1.39	10.0	15.1	13.1	9.4
Shiwa, HIROSHIMA	May 〃	12.8	660	1.20	8.5	12.9	7.8	6.5
〃 〃	Dec. 〃	17.3	524	2.31	8.3	15.8	15.3	6.6

Location	Month	Daily Intake						
		Ash(g)	Ca(mg)	K(g)	^{90}Sr (pCi)	^{90}Sr (pCi/gCa)	^{137}Cs (pCi)	^{137}Cs (pCi/gK)
Haruno, KOCHI	May 1968	9.4	339	0.98	4.6	13.6	6.9	7.0
〃 〃	Nov. 〃	11.4	301	1.29	8.6	28.6	6.0	4.7
Tokitsu, NAGASAKI	May 〃	9.8	438	1.00	4.7	10.7	7.7	7.7
〃 〃	Nov. 〃	9.1	182	0.70	3.3	18.1	6.2	8.9
Shiwa, KAGOSHIMA	May 〃	7.3	224	0.65	2.9	12.9	6.1	9.4
〃 〃	Nov. 〃	9.6	306	1.26	8.2	26.8	10.4	8.3

Figure 5. ^{90}Sr and ^{137}Cs in Total Diet
—All Japan Mean Values—
—May to Dec., 1968—



Strontium-90 and Cesium-137 in Tea

(Janan Analytical Chemistry Research Institute)

Since 1963, the Japan Analytical Chemistry Research Institute has analyzed the strontium-90 and cesium-137 content in processed-tea.

Tea samples were sent by the prefectural public health laboratories of Saitama, Shizuoka and Kyoto.

Sampling locations are shown in Figure 6.

The samples were ashed between 400° to 500 ℃, and analyzed by the method recommended by the Science and Technology Agency.

Results obtained during the period from May to August 1968 are shown in Table 6.

Figure 6. Tea Sampling Location

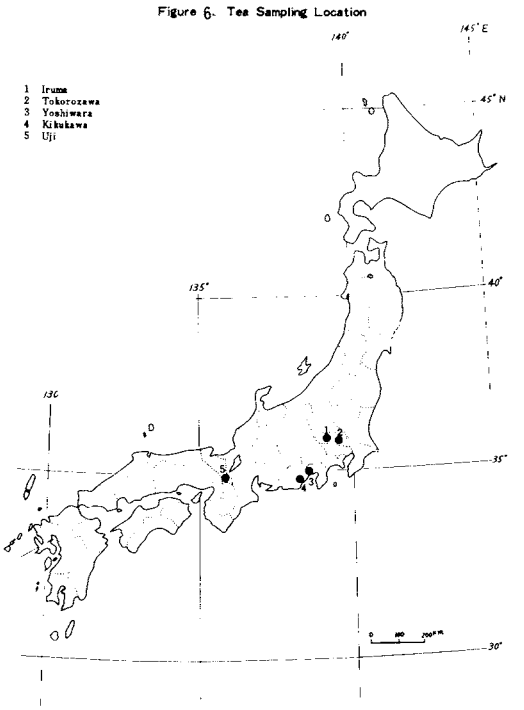


Table 6. ^{90}Sr and ^{137}Cs in Processed Tea —May to Aug., 1968—

By T. Asari, M. Chiba and M. Kuroda
(*Japan Analytical Chemistry Research Institute*)

(Continued from Table 9, Issue No. 21, of this Publication)

Location	Pick	Date of Sampling	Component (% by Weight)			^{90}Sr		^{137}Cs	
			Ash(%)	Ca(%)	K(%)	(pCi/kg)	(pCi/gCa)	(pCi/kg)	(pCi/gK)
Iruma, SAITAMA	1st	May 1968	6.18	0.43	1.82	340	79.0	258	14.2
Tokorozawa, SAITAMA	〃	〃	6.26	0.50	1.85	320	63.9	230	12.4
Uji, KYOTO	〃	〃	4.70	0.29	1.57	240	82.8	142	9.0
〃	〃	〃	5.28	0.34	1.66	303	89.1	179	10.8
Yoshiwara, SHIZUOKA	〃	〃	5.08	0.31	1.80	457	14.7	409	22.7
Kikukawa, SHIZUOKA	〃	〃	5.35	0.34	1.86	190	55.9	247	13.3
Uji, KYOTO	2nd	JuIy '68	5.60	0.36	1.76	282	78.4	144	8.2
〃	〃	〃	4.58	0.32	1.44	381	119.0	198	13.7
Iruma, SAITAMA	〃	〃	5.56	0.49	1.60	328	67.0	238	14.9
Tokorozawa, SAITAMA	〃	〃	5.28	0.41	1.60	285	69.5	281	17.5
Yoshiwara, SHIZUOKA	3rd	Aug. '68	5.42	0.40	1.59	420	105.0	302	19.0
Kikukawa, SHIZUOKA	〃	〃	4.87	0.32	1.63	397	124.0	243	14.4