

付録 8 Outline of the National Health and Nutrition Survey (NHNS) Japan, 2012

I. Outline of the Survey

1. Purpose of the National Health and Nutrition Survey (NHNS)

The purpose of this survey was to clarify citizens' physical conditions, nutrient intake, and lifestyle based on the Health Promotion Law (Law No.103, enacted in 2002), and to obtain basic data to comprehensively promote people's health. In 2012, we estimated the number of diabetics, which has been investigated every five years since 1997, and examined regional differences in physical conditions and lifestyles as important items.

2. Participants

Of the national census areas in 2010, participants (aged 1 year and over) of all households in 475 areas, consisting of 10 areas per prefecture (Tokyo: 15 areas) stratified and randomly extracted from general census areas (posterior number: 1) were selected. Total number of households and family members aged 1 year and over in the 475 areas were approximately 23,750 and 61,000, respectively.

Of the selected census areas, four alternative areas were re-selected to replace those unable to conduct this survey due to the influence of the Great East Japan Earthquake.

When establishing the number of samples for comparison among prefectures, the number of areas necessary to obtain a specific accuracy (relative error) was initially estimated for each prefecture, based on the single-year data from the National Health and Nutrition Survey in 2010. As a result, the number of areas required to obtain a specific accuracy (relative error: approximately 5%) in most prefectures was 20 to 30 areas per prefecture for items which are measured directly, such as items regarding dietary intakes (for example: vegetable intake) and physical examination and 60 to 70 areas per prefecture for items related to Lifestyle Questionnaire (for example: proportion of smokers among males).

If possible, the number of areas calculated above should be adopted; however, 10 areas per prefecture were chosen, in consideration of budget and survey-related burden, for the following reasons. With analysis of 10 areas per prefecture,

- (1) The accuracy of the relative error in each prefecture may be constant {relative error: vegetable intake, 7.9% and proportion of smokers (males), 13.9%}
- (2) There may be no prefecture with a markedly high relative error in comparison with prefecture-based comparisons using the five-year pooled data published in the National Health and Nutrition Survey Report in 2010, increasing the reliability of comparing values between superior and inferior groups based on the rank of prefecture.

However, concerning Tokyo, of which the population is large, the number of areas at the same scale

as previous was required to maintain the accuracy of national values; therefore, 15 areas were investigated.

The following households and family members were excluded from this survey:

<Households>

- Households of which the heads were foreigners
- Households of which the members were provided with delivered food meals three times a day
- One-person households in a live-in situation or residing in dormitories provided with meals

<Family members>

- Infants (age: 11 months or younger)
- Persons who were unable to eat regular meals, including home care patients taking only fluids or drugs due to illness
- Those not having meals together
- Those who were absent from the household: those working away from home, migrant workers, those who had been away on business for a long period (three months or more), those studying away from home, those admitted to social welfare facilities (including nursing care facilities), those admitted to hospitals over a long period, those put out to nurse, those imprisoned, and those not living together

3. Outline of Survey Content

A. Physical Examination

- (A) Height (aged 1 year and over)
- (B) Body weight (aged 1 year and over)
- (C) Abdominal circumference (aged 6 years and over)
- (D) Blood pressure: Systolic blood pressure and diastolic blood pressure (aged 20 years and over) measured twice
- (E) Blood test (aged 20 years and over)
- (F) Medical Interview (aged 20 years and over):

Use of medication

- Anti-hypertensive drug
- Anti-arrhythmic drug
- Treatment of diabetes mellitus using either insulin or oral drug
- Cholesterol-lowering drug
- Anti-hyperlipidemia drug

Habit of regular exercise

- Presence or absence of exercise, frequency of exercise per week, mean duration of exercise, and intensity of exercise

B. Dietary Survey (aged 1 year and over)

- (A) Household status: Name, birth date, sex, pregnant (gestational age) or lactating women, and occupation
- (B) Meal classification of the survey day of each family member (meals cooked at home, home meal replacement, buying cooked foods, using delivered food services, eating out, meals provided at school/workplace, etc.)
- (C) Food intake: Dish name, food name, volume, waste volume and proportional distribution by each household member

(D) Daily physical activity <the number of steps in a day> (aged 20 years and over)

C. Lifestyle Habits Questionnaire (aged 20 years and over)

Participants were provided self-administered questionnaire, in which they answered questions asking eating habits, physical activity, exercise, resting (sleep), alcohol intake, smoking, and dental health.

• Survey period

October 25 to December 7, 2012

A. Physical Examination: Date on which the highest participation could be achieved, considering circumstances in the national census areas (several dates may be established)

B. Dietary Survey: One day, excluding Sundays and Holidays

C. Lifestyle Habits Questionnaire: During the survey period

4. Details of Measurements

• Survey Staff

A team of survey included physician(s), registered dietitians, public health nurses, clinical laboratory technicians and clerks.

• Anthropometrics

A. **Height:** Participants took off their socks, placed their heels closely together, stood upright so that his/her back, buttocks, and both heels were in touch with the pillar of the height measuring device, let both upper arms hang down alongside the body, and the head was held in its normal position.

B. **Body weight:** Participants were requested to wear minimum clothes only and then stand still on the center of platform of the scales. It is preferable to weigh the participant completely naked. When a participant was weighed with clothes, the staff asked him/her to weigh the clothes at home in advance, and the weight of the clothes was subtracted from the measured value shown by the scales.

C. **Abdominal Circumference:** Participants were requested to stand upright, put their feet together, and let both arms hang down alongside the body to keep their abdominal wall relaxed. Then, abdominal circumference was measured at the level of the navel. Measurement immediately after eating was avoided as much as possible. The measuring staff stood in front of the subject and put a measuring tape directly around the abdomen. After confirming that the measuring tape was properly placed around the abdomen horizontally, the measuring staff read the tape to the nearest 0.5 cm at the end of the exhalation of a normal breath of the participant. It is preferable for participants not to wear underwear for an accurate measurement. Participants were, however, allowed to wear underwear if they preferred.

D. **Blood Pressure (BP):** The Riva-Rocci mercurial sphygmomanometer, as the measuring instrument, and the JIS manchette (BP cuff) were used.

BP was measured by the following procedures:

1. Instructions were given to the participants that activities that might affect BP, such as physical exercise, eating, smoking, exposure to cold and others, should be avoided before measurement.
2. Participants were instructed to void and then to take a rest quietly and calmly for five minutes or longer before the measurement.
3. BP was measured on a sitting position (on a chair preferably with a backrest).
4. The BP was measured with the right upper arm. When it was impossible, the measurement was done with the left arm.
5. Any clothes constricting the upper arm were taken off before the manchette was placed around the arm.

Steps of Measurement

[First Measurement]*1)

1. The staff placed the mercurial sphygmomanometer in a vertical position.
2. The staff squeezed all the air out from the manchette. Then he/she placed the rubber bladder of the manchette carefully around the right upper arm of the subject to cover the brachial artery. The staff was instructed to wrap the arm in such a way that the manchette would not touch the bladder when the dia-

phragm of the stethoscope was placed on the inner part of the elbow. The manchette was placed around the arm loosely enough to allow one or two fingers to be placed under it, so that the lower edge of the manchette would come to about 2 to 3 cm above the bend in the elbow.

3. The subject was instructed to straighten the arm so that the center of the manchette would be on the same level as the heart of the subject.
4. The staff estimated the systolic BP by the palpation method, then dropped the pressure in the manchette to zero (0) for a short while by deflating it, then got the pressure up again to a level more than 30 mmHg higher than the BP estimated by the palpation method (= targeted pressure), and finally measured the systolic BP and the diastolic BP with the aid of a stethoscope.
5. If Korotkov's sound was already heard at the targeted pressure, the pressure was immediately reduced, and the following procedures*2) were followed.
6. The speed at which the mercury was going down was set at one graduation (2 mmHg) per second.
7. The point at which the Korotkov's sound was first heard was regarded as the systolic BP value, and the point at which the Korotkov's sound disappeared, was the diastolic BP value. If the diastolic BP value was determined to be the midpoint between markings, the value of the next marking after the last sound was regarded as the diastolic BP.
8. The staff's eyes were kept level with the value displayed on the manometer.
9. The minimum reading unit of the graduation was required to be an even number, and when it was in-between two numbers, the nearest value was adopted.

[Second Measurement]*2)

1. After the first measurement, the manchette around the subject's arm was removed for a short while, and the air in the manchette was completely removed.
2. After one or two minutes, the staff placed the manchette around the participant's arm again, and then measured the BP for the second time, following the steps 2 to 9 given in the above *1).
3. The following two points were especially noted for the second measurement:
 - Do not use the palpation method.
 - Do not allow the subject to breathe deeply between the first measurement and the second one.

E. **Blood Test:** Blood was drawn from an elbow vein using a tourniquet at least four hours after the last meal.

◆ **Blood Test Methods** ◆

Item to be Checked	Method of Measurement	Measuring Instrument	Reagent	Standard Reference Material
Hemoglobin Alc	Latex agglutination nephelometry method	BM-9030	Rapidia Auto HbA1c-L	Rapidia Auto HbA1c HbA1c set for control
Total cholesterol	Cholesterol Dehydrogenase (UV) method	BM8060	T-CHO-reagent KL "KOKUSAI"	Lipid Calibrator (KL)
HDL-cholesterol	Direct method	BM8060	Choles-test-NHDL	Choles-test N Calibrator
LDL-cholesterol	Direct method	BM8060	Choles-test-LDL	Choles-test N Calibrator

F. **One-day Physical Activity Measurement (Steps Measurement):** The number of steps in a day was measured by a pedometer (Arnes200S, AS200). Each participant set the device on his/her belt or another suitable place with the clip as soon as he/she got up in the morning, and continued measuring steps until he/she went to bed.

• **Procedure for Dietary Survey**

The survey was undertaken on the days when people would take normal diets, excluding the public holidays or ceremonial days when special meals could be taken. Before implementation of the survey, the purpose and methods of the survey were explained to the participants. After the questionnaire for Dietary Survey was distributed to each household, the subjects were explained how to fill out the questionnaire and how to weigh the food they used with scales during the survey. If the amount of food used was too small to weigh, an estimated quantity was recorded. In addition, the survey staff (registered dietitians and others) visited each target household in person to ensure that participants had filled out the questionnaire properly and to make necessary correction and instruction.

• Confidentiality

Since some questions in this survey might be perceived intrusive, all possible measures and special care were taken to ensure protection and management of personal information, so that the participants would not feel anxious on this matter.

5. Organizations Involved in the Survey

- The Ministry of Health, Labour and Welfare established the Committee for the Planning and Analysis of the National Health and Nutrition Survey in Japan, 2012 which provided opinions on the design and analysis of this survey from technical standpoints.
- Ministry of Health, Labour and Welfare planned the survey and the public health centers regulating each district conducted it under the supervision of the health departments and offices of the prefectures, government ordinance-designated cities, or special wards.
- Each public health center organized the National Health and Nutrition Survey Team, for which the director of the public health center served as the team leader.
- National Institute of Health and Nutrition entered, calculated and tabulated the data on survey sheets which had been submitted to the Ministry of Health, Labour and Welfare.

6. Data Analyses

(1) Estimation of national values

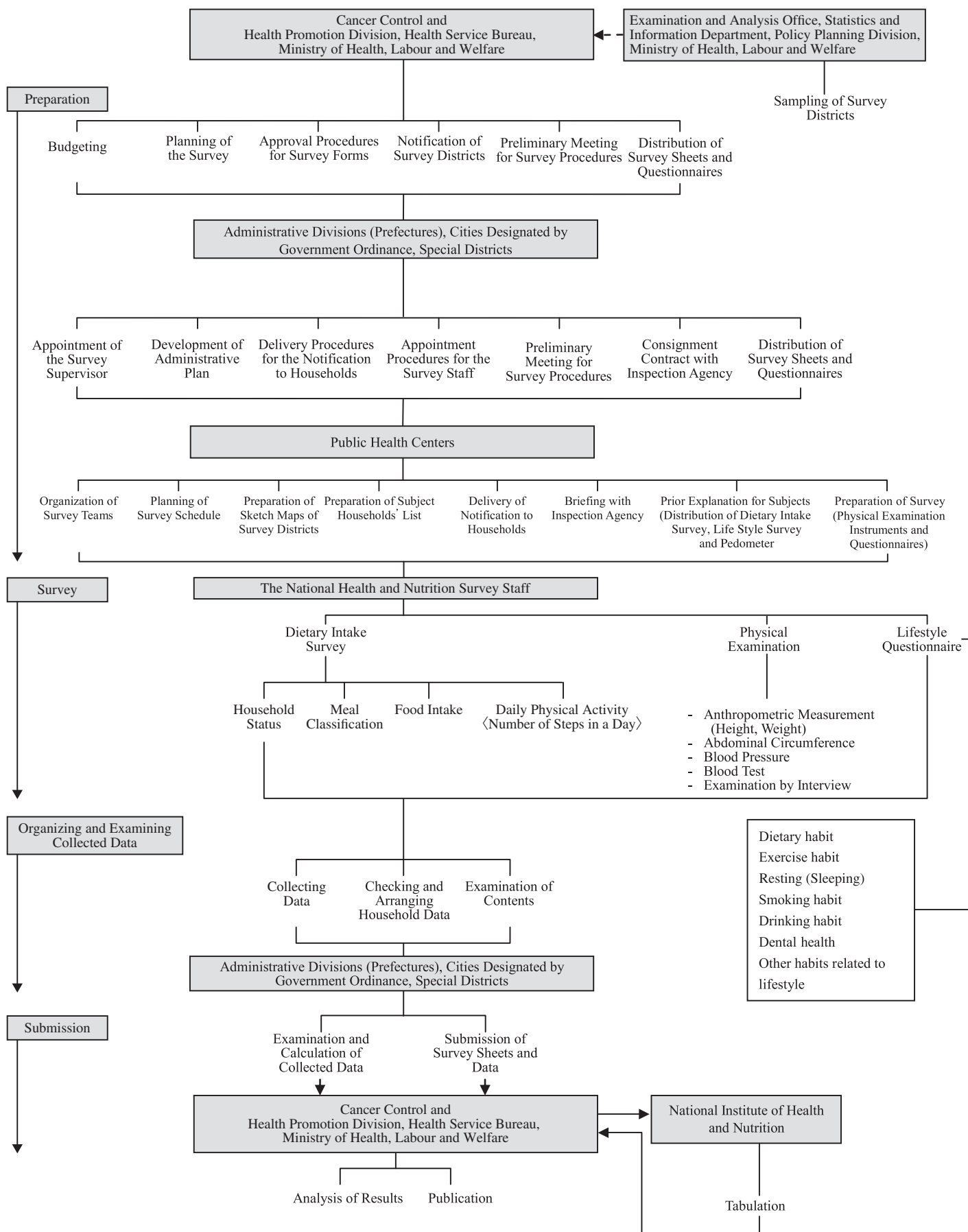
When estimating national values (Chapters 1 and 2), weighting was performed to correct for differences between the number of households previously analyzed in each prefecture and that in this survey, for comparison with the results of the National Health and Nutrition Surveys before 2011.

The weight of each prefecture was calculated by dividing the total number of households during the past three years in each prefecture by the number of households in 2012. Using this value, the mean, standard deviation, median and proportion were calculated, and regarded as national weight-adjusted values (national adjusted values). These national values were not adjusted for gender or age, as reported in the previous survey results.

For the number of households analyzed during the past three years, we adopted the values used between 2008 and 2010, excluding 2011, when the survey could not be conducted in three prefectures: Iwate, Miyagi, and Fukushima.

(2) Estimation for each prefecture

When estimating the results to each prefecture (Chapter 3), age adjustment was conducted. Mean age of the participants in each item was applied, and the mean and proportion were calculated for each prefecture. When the age ranges differed between males and females in the item, different mean ages were used for males and females, and when they were same, the mean age of males and females combined was used.



(as of November 2012)

7. Collection of Results and Samples

The results were analyzed by the National Institute of Health and Nutrition.
The number of households surveyed and analyzed is presented below.

Number of households selected	Number of households participated [*]
24,555 households	12,750 households

^{*}Number of households that responded to a question regarding the household status in the dietary intake survey

Twelve regional blocks

Regional Block	Name of Prefecture
Hokkaido	Hokkaido
Tohoku	Aomori, Iwate, Miyagi, Akita, Yamagata, Fukushima
Kanto I	Saitama, Chiba, Tokyo, Kanagawa
Kanto II	Ibaraki, Tochigi, Gunma, Yamanashi, Nagano
Hokuriku	Niigata, Toyama, Ishikawa, Fukui
Tokai	Gifu, Aichi, Mie, Shizuoka
Kinki I	Kyoto, Osaka, Hyogo
Kinki II	Nara, Wakayama, Shiga
Chugoku	Tottori, Shimane, Okayama, Hiroshima, Yamaguchi
Shikoku	Tokushima, Kagawa, Ehime, Kochi
Kita (Northern) Kyushu	Fukuoka, Saga, Nagasaki, Oita
Minami (Southern) Kyushu	Kumamoto, Miyazaki, Kagoshima, Okinawa

A. Number of samples collected with respect to age category

Males and Females	Physical Examination		Blood Test		Dietary Survey		Steps per day		Lifestyle Survey	
	n	%	n	%	n	%	n	%	n	%
Total	26,208	100.0	14,149	100.0	32,228	100.0	24,449	100.0	30,166	100.0
1-6 years	1,400	5.3	-	-	1,645	5.1	-	-	-	-
7-14 years	1,968	7.5	-	-	2,556	7.9	-	-	-	-
15-19 years	794	3.0	-	-	1,301	4.0	-	-	-	-
20-29 years	1,634	6.2	737	5.2	2,255	7.0	2,005	8.2	2,688	8.9
30-39 years	2,981	11.4	1,660	11.7	3,650	11.3	3,413	14.0	4,288	14.2
40-49 years	3,172	12.1	1,840	13.0	3,948	12.3	3,672	15.0	4,475	14.8
50-59 years	3,388	12.9	2,206	15.6	4,110	12.8	3,880	15.9	4,674	15.5
60-69 years	5,074	19.4	3,638	25.7	5,851	18.2	5,545	22.7	6,365	21.1
70 years and over	5,797	22.1	4,068	28.8	6,912	21.4	5,934	24.3	7,676	25.4

Males	Physical Examination		Blood Test		Dietary Survey		Steps per day		Lifestyle Survey	
	n	%	n	%	n	%	n	%	n	%
Total	11,871	100.0	5,775	100.0	15,084	100.0	11,180	100.0	13,983	100.0
1-6 years	703	5.9	-	-	846	5.6	-	-	-	-
7-14 years	963	8.1	-	-	1,271	8.4	-	-	-	-
15-19 years	424	3.6	-	-	702	4.7	-	-	-	-
20-29 years	767	6.5	299	5.2	1,078	7.1	953	8.5	1,305	9.3
30-39 years	1,344	11.3	628	10.9	1,715	11.4	1,588	14.2	2,062	14.7
40-49 years	1,415	11.9	690	11.9	1,835	12.2	1,680	15.0	2,115	15.1
50-59 years	1,444	12.2	826	14.3	1,859	12.3	1,724	15.4	2,172	15.5
60-69 years	2,286	19.3	1,555	26.9	2,763	18.3	2,590	23.2	3,004	21.5
70 years and over	2,525	21.3	1,777	30.8	3,015	20.0	2,645	23.7	3,325	23.8

Females	Physical Examination		Blood Test		Dietary Survey		Steps per day		Lifestyle Survey	
	n	%	n	%	n	%	n	%	n	%
Total	14,337	100.0	8,374	100.0	17,144	100.0	13,269	100.0	16,183	100.0
1-6 years	697	4.9	-	-	799	4.7	-	-	-	-
7-14 years	1,005	7.0	-	-	1,285	7.5	-	-	-	-
15-19 years	370	2.6	-	-	599	3.5	-	-	-	-
20-29 years	867	6.0	438	5.2	1,177	6.9	1,052	7.9	1,383	8.5
30-39 years	1,637	11.4	1,032	12.3	1,935	11.3	1,825	13.8	2,226	13.8
40-49 years	1,757	12.3	1,150	13.7	2,113	12.3	1,992	15.0	2,360	14.6
50-59 years	1,944	13.6	1,380	16.5	2,251	13.1	2,156	16.2	2,502	15.5
60-69 years	2,788	19.4	2,083	24.9	3,088	18.0	2,955	22.3	3,361	20.8
70 years and over	3,272	22.8	2,291	27.4	3,897	22.7	3,289	24.8	4,351	26.9

B. Number of samples collected with respect to districts and prefectures

(n)

Prefectures	Physical Examination	Blood Test	Dietary Survey	Steps per day	Lifestyle Survey
Hokkaido	340	242	499	388	506
Tohoku	3,337	1,992	4,639	3,604	4,515
Aomori	588	242	754	579	756
Iwate	524	297	692	540	649
Miyagi	523	259	689	530	740
Akita	624	389	822	636	776
Yamagata	607	457	990	759	934
Fukushima	471	348	692	560	660
Kanto I	2,425	821	2,551	1,914	2,297
Saitama	706	247	816	573	661
Chiba	678	222	651	505	628
Tokyo	453	191	508	407	493
Kanagawa	588	161	576	429	515
Kanto II	4,048	2,123	4,806	3,608	4,465
Ibaraki	668	467	1,125	827	1,021
Tochigi	922	421	994	706	935
Gunma	876	429	984	724	898
Yamanashi	678	309	748	580	691
Nagano	904	497	955	771	920
Hokuriku	2,195	1,350	2,886	2,284	2,623
Niigata	679	414	872	714	837
Toyama	487	345	725	566	671
Ishikawa	551	289	619	487	518
Fukui	478	302	670	517	597
Tokai	2,012	962	2,269	1,735	2,168
Gifu	633	267	673	496	584
Aichi	364	198	426	294	387
Mie	371	223	505	397	513
Shizuoka	644	274	665	548	684
Kinki I	1,254	637	1,607	1,179	1,503
Kyoto	371	236	499	383	504
Osaka	388	160	543	340	464
Hyogo	495	241	565	456	535
Kinki II	1,478	718	1,867	1,356	1,611
Nara	705	240	706	551	591
Wakayama	385	237	650	431	537
Shiga	388	241	511	374	483
Chugoku	2,612	1,576	3,179	2,471	3,025
Tottori	620	278	729	534	678
Shimane	556	459	671	519	609
Okayama	479	312	632	537	608
Hiroshima	521	247	559	419	537
Yamaguchi	436	280	588	462	593
Shikoku	2,208	1,157	2,522	1,969	2,431
Tokushima	488	223	516	428	503
Kagawa	796	296	710	546	720
Ehime	595	365	718	517	594
Kochi	329	273	578	478	614
Kita-Kyushu	2,274	1,303	2,733	2,001	2,485
Fukuoka	653	299	792	552	672
Saga	491	344	599	464	558
Nagasaki	503	284	570	390	564
Oita	627	376	772	595	691
Minami-Kyushu	2,025	1,268	2,670	1,940	2,537
Kumamoto	505	414	815	591	794
Miyazaki	452	266	510	370	488
Kagoshima	332	262	496	430	514
Okinawa	736	326	849	549	741

8. Accuracy of the Estimation for Each Prefecture

The relative error that can be achieved in most of the prefectures (approximately 80%), and the mean range of the 95% confidence interval of the prefecture ranks are shown below.

The results were compared with the prefectural status using the five-year (2006 to 2010) pooled data published in the National Health and Nutrition Survey Report in 2010, and the values were similar. Therefore, regarding the prefectural results in Chapter 3, the prefectures were divided into four groups, and the results were compared between the first (top 25%) and fourth (bottom 25%) quartiles, as described in the National Health and Nutrition Survey Report in 2010.

Prefectural results	Relative error achieved in many of the prefectures		95% confidence interval of the prefecture ranks (\pm SD)	
	2012	Data pooled from 2006 until 2010	2012	Data pooled from 2006 until 2010
Mean BMI (Males)	1.5%	1.6%*	27.6 \pm 8.5	26.2 \pm 9.7*
Mean BMI (Females)	1.6%	1.7%*	26.7 \pm 7.8	26.5 \pm 9.5*
Mean vegetable intake (Males)	4.8%	5.0%	21.5 \pm 8.3	21.8 \pm 7.8
Mean vegetable intake (Females)	4.6%	4.7%	23.1 \pm 9.1	18.6 \pm 7.1
Mean salt intake (Males)	3.4%	3.4%	20.3 \pm 6.7	22.6 \pm 8.5
Mean salt intake (Females)	2.9%	3.5%	19.5 \pm 8.0	22.0 \pm 8.3
Mean steps per day (Males)	5.3%	5.4%	25.3 \pm 8.2	23.8 \pm 8.3
Mean steps per day (Females)	5.6%	5.2%	29.5 \pm 6.9	24.8 \pm 9.6
Smoking (Males)	10.8%	11.0%	31.3 \pm 8.2	32.2 \pm 7.6

*In the National Health and Nutrition Survey Report in 2010, the physical status was published as the proportion of obese persons, and the mean BMI was not published.

9. Notes

• Calculation of Nutrient Intakes

“The Standard Tables of Food Composition in Japan, 2010” (STFC 2010) completed by the Subdivision on Resources, the Council for Science and Technology, Ministry of Education, Culture, Sports, Science and Technology, Japan was used to calculate nutrient intakes.

For some foods, food codes for cooked foods (i.e., vegetables, fish, and meat) were published in STFC 2010. In case a participant reported cooked food intake and the code for cooked food was available in STFC 2010, corresponding nutrient values were used. For those foods the cooked codes were not available, nutrient intakes were calculated considering yield factor through cooking referring in STFC 2010.

• Food Groups

The classification of food groups is shown in Table 1 on Pages 61-67. Please note: “Butters (small classification 76)” and “Animal fats (small classification 79)” are handled as “animal food” in this report. There have been several changes from the National Nutrition Survey, 2001, as below:

A. Classification

Classification of “Jams” was changed from “Sugars” to “Fruits”, that of “Miso” was changed from “Pulses” to “Seasonings and Spices”, and that of “Mayonnaise” was changed from “Fats and Oils” to “Seasonings and Spices”.

B. Amount of food intake

The amount of food items was entered as cooked weight for some foods. For example, the “Rice” of “Rice and Rice products” was calculated as “cooked rice” or “rice gruels”, “Dried buckwheat noodles” of “Other cereals and Other cereal products” was calculated as “boiled buckwheat noodles”, “*Wakame* (dried products)” of “Algae” was calculated as “*Wakame* (soaked in water)” and “Teas” of “Beverages” was calculated as “tea (infusion)”.

• Classification of Meals

A. Home Cooked Meals

- Meals cooked and eaten at home or bento (bag lunch) prepared at home

B. Ready-made Meals

Delivered meals eaten at home or ready-made meals eaten at home

C. Eating Out

Meals eaten at restaurants or delivered meal eaten at outside of the home, e.g. workplace

D. Meals Provided at School, Worksite etc.

- Meals provided at day-care center or kindergarten
- School lunch
- Meals provided at worksite

E. Others

- Only sweets, snacks, fruits, dairy products, or beverages without staple foods
- Supplements only (tablet, drink)
- No meal at all (skipping)

• Classification of Blood Pressure Levels

	Systolic blood pressure (mmHg)		Diastolic blood pressure (mmHg)
Optimum blood pressure	< 120	and	< 80
Normal blood pressure	< 130	and	< 85
High normal blood pressure	130~139	or	85~89
Mild hypertension	140~159	or	90~99
Moderate hypertension	160~179	or	100~109
Serious hypertension	≥ 180	or	≥ 110
Systolic hypertension	≥ 140	and	< 90

The numerical values in the table are averages of duplicated measurements.

(Source: “Classification of Blood Pressure Levels, 2009” by The Japanese Society of Hypertension)

• Criteria for Obesity

Body mass index (BMI) was calculated as body weight (kg) divided by height (m) squared. Obesity and underweight are classified as below:

	Thin (Underweight)	Normal	Obesity
BMI(kg/m ²)	Less than 18.5	≥ 18.5 and < 25.0	25.0 or more

(Source: “Standard Criteria for Assessment of Obesity, 2011” by Japan Society for the Study Obesity)

Assessment of Obesity by School Health Statistical Survey Method

The obesity of individuals aged 6-14 years was assessed by the standard weight by height and age.

	Underweight		Normal	Overweight		
	− 20% or less			20% or more		
	Severe Underweight	Slight Underweight		Slight Overweight	Moderate Overweight	Severe Overweight
Obesity Level	− 30% or less	> − 30% and ≤ − 20%	> − 20% and < 20%	≥ 20% and < 30%	≥ 30% and < 50%	50% or more

Degree of Obesity (degree of over/under weight) = (Observed Weight (kg) – Standard Weight by Height (kg)) ÷ Standard Weight by Height (kg) × 100 (%)

Standard Weight by Height (kg) = a × Observed Height (cm) – b

Age	Coefficient			
	Males		Females	
	a	b	a	b
6	0.461	32.382	0.458	32.079
7	0.513	38.878	0.508	38.367
8	0.592	48.804	0.561	45.006
9	0.687	61.390	0.652	56.992
10	0.752	70.461	0.730	68.091
11	0.782	75.106	0.803	78.846
12	0.783	75.642	0.796	76.934
13	0.815	81.348	0.655	54.234
14	0.832	83.695	0.594	43.264

(References)

Japan School Health Society: *Jido Seito no Kenko Shindan Manual* (Manual of Health Checkups for School Children), Daiichi Hoki Shuppan, Tokyo; 2006, Murata M, Ito K.: Study on QOL and health index from the viewpoint of physical activity. In: Murata M, editor, Research for Health Index and QOL from the Viewpoints of the Nutrition/Exercise/Rest of Infants Summary Report Tokyo: Ministry of Health, welfare, and Labour; 2003

• Assessment of Possible Metabolic Syndrome

Fasting blood glucose and triglyceride were not measured in the survey, and were not included in assessment of possible metabolic syndrome in the report. Therefore, possible metabolic syndrome in this report is defined as below.

Those who are highly suspected to have metabolic syndrome (visceral adiposity)

Those who have abdominal circumference of ≥ 85 cm (males) or ≥ 90 cm (females) and meet more than two of the following three indexes (blood lipid, blood pressure, and blood glucose)

Those who have a possibility to develop metabolic syndrome (visceral adiposity)

Those who have abdominal circumference of ≥ 85 cm (males) or ≥ 90 cm (females) and meet one of the following three indexes (blood lipid, blood pressure, and blood glucose)

* “Meet” implies when one meets the following “Level” and/or is taking “Medication” listed in the following medicines.

Abdominal Circumference	Abdominal circumference (Circumference of one’s waist) Males: 85 cm or more, Females : 90 cm or more		
Index	Blood Lipid	Blood Pressure	Blood Glucose
Level	• HDL Cholesterol Level: Less than 40 mg/dL	• Systolic Blood Pressure: 130 mmHg or more • Diastolic Blood Pressure: 85 mmHg or more	• Hemoglobin Alc Level (NGSP): 6.0% or more
Medication	• Cholesterol-lowering drug • Anti-hyperlipidemic drug	• Anti-hypertensive drug	• Treatment of diabetes mellitus using either insulin or oral drug

• Assessment of “Persons in Whom Diabetes is Strongly Suspected” and “Those in Whom the Possibility of Diabetes cannot be Ruled Out”

Persons in whom diabetes is strongly suspected

Those with hemoglobin Alc measurement, who have hemoglobin Alc level (NGSP) of 6.5% or more, or those who answered “have been diagnosed as diabetes” and “are currently being treated for diabetes” in a questionnaire

Those in whom the possibility of diabetes cannot be ruled out

Those with hemoglobin Alc measurement, who have hemoglobin Alc level (NGSP) of 6.0% or more but less than 6.5%, and do not meet the criteria of “persons in whom diabetes is strongly suspected”

* The same criteria as the ones in “Actual Situation of Diabetes (1995 and 2002)”

◆Table 1◆ Food Groups Used for the National Health and Nutrition Survey

Large Classification	No.	Medium Classification	No.	Small Classification	No.	Foods
Cereals	1	Rice and Rice products	1	Rice	1	<Paddy rice grain> Brown rice, Half-milled rice, Under-milled rice, Well-milled rice, Well-milled rice with embryo <Cooked paddy rice> Brown rice, Half-milled rice, Under-milled rice, Well-milled rice, Well-milled rice with embryo <Paddy rice gruels> Brown rice, Half-milled rice, Under-milled rice, Well-milled rice (rice:water = 1:5 in volume) <Paddy rice diluted gruels> Brown rice, Half-milled rice, Under-milled rice, Well-milled rice <Paddy rice thin gruels> Brown rice, Half-milled rice, Under-milled rice, Well-milled rice <Upland rice grain> Brown rice, Half-milled rice, Under-milled rice, Well-milled rice <Cooked upland rice> Brown rice, Half-milled rice, Under-milled rice, Well-milled rice
				Rice products	2	Quick-cooking rice, <i>Onigiri</i> (rice ball), <i>Yaki-onigiri</i> (rice ball baked), <i>Kiritanpo</i> (baked tube-shaped cooked rice), Rice flour, Nonglutinous rice products (noodles), Rice-koji, Rice cake, <i>Sekihan</i> (steamed with adzuki beans or cowpeas), <i>Akumaki</i> (lye-soaked and cooked rice in bamboo leaf wrapping), <i>Shiratamako</i> (flour milled in water), <i>Domyojiko</i> (steamed flour)
		Wheat flour and Wheat products	2	Wheat flour	3	Soft flour, Medium flour, Hard flour, Hard flour (whole), Premixed flour (for hot cakes), Premixed flour (for <i>Tempura</i>)
				Breads (except Japanese buns)	4	White table bread, Bread type rolls, Hardtack, French bread, Rye bread, Raisin bread, Soft rolls, Croissants, English muffins, Naan
				Japanese buns	5	Bean jam bun, Custard cream bun, Jam bun, Cornet with chocolate cream
				Japanese noodles and Chinese noodles	6	<i>Udon</i> (raw), <i>Udon</i> (boiled), <i>Hoshi-udon</i> , <i>Hoshi-udon</i> (boiled), <i>Somen</i> and <i>Hiyamugi</i> (dry form), <i>Somen</i> and <i>Hiyamugi</i> (boiled), <i>Tenobe-somen</i> and <i>Tenobe-hiyamugi</i> (dry form), <i>Tenobe-somen</i> and <i>Tenobe-hiyamugi</i> (boiled), Chinese noodles (raw), Chinese noodles (boiled), Steamed Chinese noodles, Dried Chinese noodles, Dried Chinese noodles (boiled), <i>Okinawa</i> noodles (raw), <i>Okinawa</i> noodles (boiled), Dried <i>Okinawa</i> noodles, Dried <i>Okinawa</i> noodles (boiled)
				Precooked noodles	7	Chinese noodles (dried by frying, seasoned), Chinese noodles (dried by frying), Chinese noodles (dried by hot air), Chinese style instant cup noodles (dried by frying), Chinese style instant cup noodles (dried by frying, chow mein type), Chinese style instant cup noodles (dried by hot air), Japanese style instant cup noodles (dried by frying)
				Macaroni and Spaghetti	8	Macaroni and spaghetti, Macaroni and spaghetti (boiled)
				Other wheat products	9	<i>Fu</i> (steamed type), <i>Kanze-fu</i> , <i>Komachi-fu</i> , <i>Ita-fu</i> , <i>Kuruma-fu</i> , <i>Fu</i> (steamed tubular type), Wheat germ, Chio tzu pastry, Shao mai pastry, Pizza crust, Bread crumbs (wet form), Bread crumbs (semi-dry form), Bread crumbs (dry form)
		Other cereals and Other cereal products	3	Buckwheat and Buckwheat products	10	Buckwheat flour (straight), Buckwheat flour (inner layer), Buckwheat flour (middle layer), Buckwheat flour (outer layer), Parboiled grain, Buckwheat noodles (raw), Buckwheat noodles (boiled), Dried buckwheat noodles, Dried buckwheat noodles (boiled)
				Corn and Corn products	11	Corn (whole grain), Corn (Cultivar: Cuzco, oil-roasted and salted), Popcorn, Cornflakes
				Other cereals	12	Amaranth, Foxtail millet, Foxtail millet (glutinous cake), Oatmeal, <Barley> Under-milled pressed grain, Pressed grain, Split grain, Noodles (dry form), Noodles (boiled), Roasted flour, Proso millet, Proso millet (glutinous cake), Job's tears, Japanese barnyard millet, Sorghum (milled grain), Rye (whole flour), Rye (Flour)
Potatoes and Starches	2	Potatoes and Potato products	4	Sweet potatoes and Sweet potato products	13	Sweet potatoes, Sweet potatoes (steamed), Sweet potatoes (baked), <i>Mushikiriboshi</i> (sliced and dried after steaming)
				Potatoes and Potato products	14	Potatoes, Potatoes (steamed), Potatoes (boiled), Dehydrated mashed potato
				Other potatoes and Potato products	15	Jerusalem-artichoke, Konjac (fine powder), Konjac (block), Konjac (made from corn), Konjac (noodles), <i>Satoimo</i> , <i>Satoimo</i> (boiled), <i>Satoimo</i> (frozen), <i>Mizuimo</i> , <i>Mizuimo</i> (boiled), <i>Yatsugashira</i> , <i>Yatsugashira</i> (boiled), <i>Ichioimo</i> , <i>Nagaimo</i> , <i>Nagaimo</i> (boiled), <i>Yamatoimo</i> , Japanese yam, White yam
		Starches and Starch products	5	Starches and Starch products	16	Cassava starch, Kudzu starch, Rice starch, Wheat starch, Sweet potato starch, Potato starch, Corn starch, Kudzu starch noodles (dried), Kudzu starch noodles (boiled), Tapioca pearls, <i>Ryokuto-harusame</i> (made from mung bean starch), <i>Harusame</i> (made from potato and sweet potato starches)
Sugars and Sweeteners	3	Sugars and Sweeteners	6	Sugars and Sweeteners	17	Brown sugar lump, <i>Wasanbonto</i> (traditional non-centrifugal soft white cane sugar), Soft sugar (white), Soft sugar (yellow), Granulated sugar, Soft sugar (coarse crystal, superior), Soft sugar (coarse crystal, medium), Soft sugar (cubes), <i>Korizato</i> : crystal candy sugar, Candy sugar for coffee, Powdered sugar, Glucose syrup, Honey, Maple syrup
Pulses	4	Soybeans and Soybean products	7	Soybeans (whole beans) and its products	18	Soybeans (domestic, dried), Soybeans (boiled), Soybeans (U.S.A., dried), Soybeans (China, dried), Soybeans (Brazil, dried), Soybeans (canned in water), <i>Kinako</i> (whole bean type: roasted and ground beans), <i>Kinako</i> (hulled bean type: roasted and ground beans), <i>Budo-mame</i> (beans cooked with sugar and salt)
				<i>Tofu</i> (Bean curd)	19	<i>Momen-tofu</i> (regular tofu), <i>Kinugoshi-tofu</i> (tofu with whey), <i>Soft-tofu</i> , <i>Packed-tofu</i> , <i>Okinawa-tofu</i> , <i>Yushi-dofu</i> , <i>Yaki-tofu</i> (grilled tofu), <i>Kori-dofu</i> (frozen, thawed and dried tofu), <i>Tofu-yo</i> , <i>Tofu-chikuwa</i> (steamed type), <i>Tofu-chikuwa</i> (baked type)
				<i>Abura-age</i>	20	<i>Nama-age</i> (fried slices of drained tofu), <i>Abura-age</i> (fried thin slices of pressed tofu), <i>Ganmodoki</i> (fried mixture of crushed tofu, vegetables and ground yam)
				<i>Natto</i> (Fermented soybeans)	21	<i>Itohiki-natto</i> (fermented whole soybean), <i>Hikiwari-natto</i> (fermented dehulled and split soybean), <i>Goto-natto</i> , <i>Tera-natto</i> (<i>Shiokara-natto</i> , <i>Hama-natto</i>)
		Other pulses and Pulse products	8	Other soybean products	22	<i>Okara</i> (traditional product: insoluble residue from soy milk processing), <i>Okara</i> (modern product: insoluble residue from soy milk processing), Soy milk (regular type), Soy milk (reconstituted type), Soy milk (drink type, coffee flavored), <i>Yuba</i> (wet type: film formed on surface of boiling soy milk), <i>Yuba</i> (dried type), <i>Kinzanji-miso</i> , <i>Hishio-miso</i>
					23	Adzuki beans (dried), Adzuki beans (boiled), Adzuki beans (boiled, canned in syrup), <i>Koshi-an</i> (strained <i>An</i> (bean paste)), <i>Sarashi-an</i> (powder of strained <i>An</i> (bean paste)), <i>Tsubushi-an</i> (whole bean <i>An</i> (bean paste) with sugar), Kidney beans (dried), Kidney beans (boiled), <i>Uzura-mame</i> (beans cooked with sugar and salt), Kidney beans (<i>Koshi-an</i>), <i>Mame-kinton</i> (sweetened whole beans with bean paste), Peas (dried), Peas (boiled), Peas (oil-roasted and salted), <i>Shio-mame</i> (roasted and salted), <i>Uguisu-mame</i> (green peas cooked with sugar and salt), Cowpeas (dried), Cowpeas (boiled), Broad beans (dried), Broad beans (oil-roasted and salted), <i>Otafuku-mame</i> (beans cooked with sugar and salt or soy sauce), <i>Fuki-mame</i> (hulled beans cooked with sugar and salt), Rice beans (dried), Chickpeas (dried), Chickpeas (boiled), Chickpeas (oil-roasted and salted), Scarlet runner beans (dried), Scarlet runner beans (boiled), Lima beans (dried), Mung beans (dried), Mung beans (boiled), Lentils (dried)

Large Classification	No.	Medium Classification	No.	Small Classification	No.	Foods
Nuts and Seeds	5	Nuts and Seeds	9	Nuts and Seeds	24	Almonds, Almonds (oil-roasted and salted), Hemp seeds, Perilla seeds, Cashew nuts (oil-roasted and salted), Pumpkin seeds (roasted and salted), Japanese torrey seeds (roasted), Ginkgo nuts, Ginkgo nuts (boiled), Japanese chestnuts, Japanese chestnuts (boiled), Japanese chestnuts (<i>kanroni</i> : boiled and sweetened), Chinese chestnuts (roasted), Walnuts (roasted), Poppy seeds, Coconut powder, Sesame seeds (dried), Sesame seeds (roasted), Sesame seeds (hulled), Sweet acorns, Watermelon seeds (roasted and salted), Japanese horse chestnuts (steamed), Lotus seeds (raw), Lotus seeds (dried), Water chestnuts, Pistachio nuts (roasted and salted), Sunflower seeds (oil-roasted and salted), Brazil nuts (oil-roasted and salted), Hazel nuts (oil-roasted and salted), Pecan nuts (oil-roasted and salted), Macadamia nuts (roasted and salted), Pine nuts, Pine nuts (roasted), Peanuts (dried), Peanuts (roasted), Peanuts (oil-roasted and salted), Peanut butter, Peanuts, Peanuts (boiled)
Vegetables	6	Green and yellow vegetables	10	Tomatoes	25	Tomatoes, Cherry tomatoes, Tomatoes (canned products, whole)
				Carrots	26	<i>Ha-ninjin</i> (cultivar for leaf use), Carrot (regular: European type), Carrot (boiled), Carrot (without skin), Carrot (without skin, boiled), Carrot (frozen), <i>Kintoki</i> (oriental type), <i>Kintoki</i> (boiled), <i>Kintoki</i> (without skin), <i>Kintoki</i> (without skin, boiled), <i>Minikyarroto</i> (baby carrot)
				Spinach	27	Spinach, Spinach (boiled), Spinach (frozen)
				Sweet peppers	28	Green sweet pepper, Green sweet pepper (sautéed), Red sweet pepper, Red sweet pepper (sautéed), Yellow sweet pepper, Yellow sweet pepper (sautéed), <i>Tomapi</i>
				Other green and yellow vegetables	29	<i>Asatsuki</i> , <i>Asatsuki</i> (boiled), <i>Ashitaba</i> , <i>Ashitaba</i> (boiled), Asparagus, Asparagus (boiled), <i>Sayaingen</i> , <i>Sayaingen</i> (boiled), En-dive, Domiao (young stems and leaves of garden peas), <i>Sayaendo</i> (immature pods of garden peas), <i>Sayaendo</i> (boiled), <i>Osaka-shirona</i> , <i>Osaka-shirona</i> (boiled), Saltwort, Saltwort (boiled), Okra, Okra (boiled), Turnip (leaves), Turnip (leaves, boiled), Pumpkin (<i>cucurbita moschata</i>), Pumpkin (boiled), Pumpkin (<i>cucurbita maxima</i>), Pumpkin (boiled), Pumpkin (frozen), Spaghetti squash, Leaf mustard, <i>Gyoja-ninniku</i> , <i>Kyona</i> , <i>Kyona</i> (boiled), Qin cai, Qin cai (boiled), Watercress, Kale, <i>Kogomi</i> , <i>Komatsuna</i> , <i>Komatsuna</i> (boiled), Shandong cai, Shandong cai (boiled), Sweet pepper, Perilla (leaves), Perilla (seeds), Yard beans, Yard beans (boiled), Garland chrysanthemum, Garland chrysanthemum (boiled), Water shield (bottled in water), <i>Sugukina</i> , Water dropwort, Water dropwort (boiled), Ta cai, Ta cai (boiled), <i>Kaiware-daikon</i> , <i>Ha-daikon</i> (cultivar for leaf use), <i>Daikon</i> (leaves), <i>Daikon</i> (leaves, boiled), <i>Tsumamina</i> , <i>Taisai</i> , <i>Takana</i> (broad leaf mustard), Japanese angelica-tree, Japanese angelica-tree (boiled), Qing gin cai, Qing gin cai (boiled), Field horsetail, Field horsetail (boiled), New Zealand spinach, Malabar nightshade, Malabar nightshade (boiled), Red peppers (leaves), Red peppers (leaves, sautéed), Red peppers (raw), Red peppers (dried), Summer cypress seeds (boiled), <i>Nagasaki-hakusai</i> , <i>Nagasaki-hakusai</i> (boiled), Shepherd's purse, Turnip rape (flower buds and stems), Turnip rape (flower buds and stems, boiled), Rape (stems and leaves), Rape (stems and leaves, boiled), Chinese chive, Chinese chive (boiled), <i>Hana-nira</i> , <i>Ki-nira</i> (blanching culture), <i>Kuki-ninniku</i> , <i>Kuki-ninniku</i> (boiled), <i>Ha-negi</i> , <i>Konegi</i> , <i>Nozawana</i> , Red garlic, Bai cai, Basil, Parsley, <i>Hinona</i> , <i>Hiroshimana</i> , Swiss chard, Swiss chard (boiled), Broccoli, Broccoli (boiled), <i>Mizukakena</i> , <i>Kiri-mitsuba</i> (without roots), <i>Kiri-mitsuba</i> (boiled), <i>Ne-mitsuba</i> (with roots), <i>Ne-mitsuba</i> (boiled), <i>Ito-mitsuba</i> (young leaves), <i>Ito-mitsuba</i> (boiled), Brussels sprouts, Brussels sprouts (boiled), Water pepper sprouts, Tossa jute, Tossa jute (boiled), Water convolvulus, Water convolvulus (boiled), <i>Yomena</i> , Mugwort, Mugwort (boiled), Leeks, Leeks (boiled), Head lettuce (butter type), Leaf lettuce, Red-tip leaf lettuce, Rocket salad, Turfed stone leeks, Turfed stone leeks (boiled)
		Other vegetables	11	Cabbages	30	Cabbage, Cabbage (boiled), Green ball, Red cabbage
				Cucumber	31	Cucumber
				<i>Daikon</i> (Japanese radishes)	32	<i>Daikon</i> (Japanese radishes), <i>Daikon</i> (boiled), <i>Daikon</i> (without skin), <i>Daikon</i> (without skin, boiled), <i>Kiriboshi-daikon</i> (cut and dried root)
				Onions	33	Onions, Onions (leached in water), Onions (boiled), Red onions
				Chinese cabbage	34	Chinese cabbage, Chinese cabbage (boiled)
				Other vegetables	35	Artichoke, Artichoke (boiled), Asparagus (canned in brine), Asparagus (white), <i>Udo</i> , <i>Yama-udo</i> , <i>Edamame</i> (immature soybeans), <i>Edamame</i> (boiled), <i>Edamame</i> (frozen), Snap peas, Green peas, Green peas (boiled), Green peas (frozen), Green peas (canned in brine), Turnip, Turnip (boiled), Turnip (without skin), Turnip (without skin, boiled), Cauliflower, Cauliflower (boiled), <i>Kanpyo</i> (dried shavings of immature bottle gourd fruit), <i>Kanpyo</i> (boiled), Chrysanthemum, Chrysanthemum (boiled), <i>Kikunori</i> (dried petal board after steaming), Arrowhead, Arrowhead (boiled), Kohlrabi, Kohlrabi (boiled), Edible burdock, Edible burdock (boiled), Winged beans, <i>Ha-shoga</i> (young rhizome with leaves), Ginger, Oriental pickling melon, <i>Zuiki</i> (petiole of taro), <i>Zuiki</i> (boiled), Dried <i>Zuiki</i> , Dried <i>Zuiki</i> (boiled), <i>Sugukina</i> (root), Zucchini, Celery, Royal fern, Royal fern (boiled), <i>Hoshi-zenmai</i> , <i>Hoshi-zenmai</i> (boiled), Broad beans, Broad beans (boiled), Bamboo shoots, Bamboo shoots (boiled), Bamboo shoots (canned in water), Chicory, Japanese silverleaf, Japanese silverleaf (boiled), Wax gourd, Wax gourd (boiled), Sweet corn, Sweet corn (boiled), Sweet corn (Immature kernels on cob, frozen), Sweet corn (immature kernels, frozen), Sweet corn (canned product, cream style), Sweet corn (canned product, whole kernel style), Young sweet corn, Red chicory, Eggplant, Eggplant (boiled), Eggplant (western type), Eggplant (western type, fried), Bitter gourd, Bitter gourd (sautéed), Garlic, <i>Nebuka-negi</i> (sheaths blanched by covering with soil), Radish, Chayote, Table beet, Table beet (boiled), Japanese butterbur, Japanese butterbur (boiled), <i>Fukinoto</i> , <i>Fukinoto</i> (boiled), Hyacinth beans, Sponge gourd, Sponge gourd (boiled), Horseradish, Manchurian wild rice, <i>Myoga</i> , <i>Myoga-take</i> (blanching-cultured young stems and leaves), <i>Mukago</i> (aerial bulbils of yams), Alfalfa sprouts, Soybean sprouts, Soybean sprouts (boiled), Black gram sprouts, Black gram sprouts (boiled), Mung bean sprouts, Mung bean sprouts (boiled), Lily bulb, Lily bulb (boiled), <i>Esharotto</i> , Rhubarb, Rhubarb (boiled), Lettuce, Cos lettuce, East Indian lotus root, East Indian lotus root (boiled), <i>Wasabi</i> (raw), Bracken (raw), Bracken (boiled), Bracken (dried)
		Vegetable juices	12	Vegetable juices	36	Tomato juice (canned product), Tomato juice cocktail (canned product), Carrot juice (canned)
		Pickles	13	Leaf pickles	37	<i>Osaka-shirona</i> (salted pickles), Turnip leaves (salted pickles), Turnip leaves (<i>Nukamiso-zuke</i> : pickled in salty rice bran paste), Leaf mustard (salted pickles), <i>Kyona</i> (salted pickles), Shandong cai (salted pickles), <i>Taisai</i> (salted pickles), <i>Takana</i> : broad leaf mustard (salted pickles), <i>Nozawana</i> (salted pickles), <i>Nozawana</i> (pickles, seasoned), Chinese cabbage (salted pickles), Kim chee, <i>Hinona</i> (pickles, sweetened), <i>Hiroshimana</i> (salted pickles), <i>Mizukakena</i> (salted pickles)

Large Classification	No.	Medium Classification	No.	Small Classification	No.	Foods
Vegetables	6	Pickles	13	Other pickles	38	Turnip (salted pickles), Turnip (without skin, salted pickles), Turnip (<i>Nukamiso-zuke</i> : pickled in salty rice bran paste), Turnip (without skin, <i>Nukamiso-zuke</i>), Cucumber (salted pickles), Cucumber (pickled in soy sauce), Cucumber (<i>Nukamiso-zuke</i> : pickled in salty rice bran paste), Cucumber (pickles, sweet type), Cucumber (pickles, sour type), Zha Cai, Ginger (pickles), Ginger (pickles, sweetened), Oriental pickling melon (salted pickles), Oriental pickling melon (<i>Nara-zuke</i> : pickled with <i>sake</i> lees), <i>Sugukina</i> (pickles), <i>Daikon</i> (<i>Nukamiso-zuke</i> : pickled in salty rice bran paste), <i>Shiooshidaikon-zuke</i> (produced by new processing), <i>Hoshidaikon-zuke</i> (produced by traditional processing), <i>Moriguchi-zuke</i> (slender root cultivar pickled with <i>sake</i> lees), <i>Daikon</i> (<i>Bettara-zuke</i> : pickled with rice koji), <i>Daikon</i> (<i>Miso-zuke</i> : pickled with miso), <i>Fukujin-zuke</i> (pickled with <i>dai-kon</i> , eggplant, immature sword pods, east Indian lotus root), <i>Shinachiku</i> (desalted: boiled, fermented and salted shoots), Eggplant (salted pickles), Eggplant (<i>Nukamiso-zuke</i> : pickled in salty rice bran paste), Eggplant (<i>Koji-zuke</i> : pickled small oval type with rice koji), Eggplant (<i>Karashi-zuke</i> : pickled small oval type with mustard), Eggplant (<i>Shiba-zuke</i> : pickled with perilla leaf, cucumber, <i>Myoga</i> , etc.), Chayote (salted pickles), <i>Yamagobo</i> (<i>Miso-zuke</i> : pickled with miso), Scallion (raw), Scallion (pickles, sweetened), <i>Wasabi-zuke</i> (pickled with <i>sake</i> lees), <i>Ume-zuke</i> (salted pickles), <i>Ume-zuke</i> (pickles, seasoned), <i>Umeboshi</i> , <i>Umeboshi</i> (pickles, seasoned), <i>Umebishio</i> (sweetened puree), Green olives (pickles), Ripe olives (pickles), Stuffed olives (pickles)
Fruits	7	Fruits	14	Strawberries	39	Strawberries
			Citrus fruits	40	<i>Iyokan</i> (<i>Iyo</i>), Satsuma mandarins(early ripening type), Satsuma mandarin, Satsuma mandarins (early ripening type, juice sacs), Satsuma mandarins (juice sacs), Satsuma mandarins (canned in light syrup, solids), Navel, Valencia, Oroblanco, Kumquats, Grapefruit, Grapefruit (canned in light syrup), <i>Sanbokan</i> , <i>Sudachi</i> (peel), Tangors, Tangelos, <i>Natsumikan</i> , <i>Natsumikan</i> (canned in heavy syrup), <i>Hassaku</i> , <i>Hyuganatsu</i> , <i>Hyuganatsu</i> (juice sacs), Pummelo, Pummelo (candied peel), <i>Ponkan</i> , <i>Yuzu</i> (peel), Lemons (whole)	
				Bananas	41	Bananas, Bananas (dried)
				Apples	42	Apples, Apples (canned in heavy syrup)
		Other fruits	43	Akebia (flesh), Akebia (peel), Acerolas, Atemoya, Avocados, Apricots, Apricots (dried), Apricots (canned in heavy syrup), Figs, Figs (dried), Figs (canned in heavy syrup), Mume (Japanese apricots), <i>Kaki</i> (Japanese persimmons, nonastringent), <i>Kaki</i> (astringency removed), <i>Kaki</i> (dried), Chinese quinces, Kiwifruit, Kiwano, Guava, Gooseberries, Oleasters, Coconut milk, Coconut Water, Carambola, Cherries, Cherries (U.S.A.), Cherries (canned in heavy syrup), Pomegranates, Watermelon, Japanese plums, European plums (raw), European plums (dried), Cherimoya, Durian, Japanese pears, Japanese pears (canned in heavy syrup), Chinese pears, European pears, European pears (canned in heavy syrup), Jujube (dried), Dates (dried), Pineapple, Pineapple (canned in heavy syrup), Pineapple (candied), Blue-berried honeysuckle, Papayas, Papayas (unripe), Pitaya, Loquats, Loquats (canned in heavy syrup), Grapes, Raisins, Grapes (canned in heavy syrup), Blueberries, White sapote, Oriental melon, Quinces, Mangoes, Mangosteen, Melon (greenhouse culture), Melon (open culture), Peaches, Peaches (canned in heavy syrup, solids), Nectarines, Chinese bayberries, Lychees, Raspberries, Longans (dried)		
Jams	15	Jams	44	Apricot jam (heavily sweetened), Apricot jam (lightly sweetened), Strawberry jam (heavily sweetened), Strawberry jam (lightly sweetened), Marmalade (heavily sweetened), Marmalade (lightly sweetened), Grape jam, Blueberry jam, Apple jam		
Fruit juices and Fruit juice beverages	16	Fruit juices and Fruit juice beverages	45	Acerolas (10% fruit juice beverage), Mume (Japanese apricots, 20% fruit juice beverage), Satsuma mandarins (straight fruit juice), Satsuma mandarins (reconstituted fruit juice), Satsuma mandarins (juice with juice sacs), Satsuma mandarins (50% fruit juice beverage), Satsuma mandarins (20% fruit juice beverage), Satsuma mandarins (canned in light syrup, liquid), Valencia (straight fruit juice), Valencia (reconstituted fruit juice), Valencia (50% fruit juice beverage), Valencia (30% fruit juice beverage), <i>Kabosu</i> (juice), Guava (20% fruit juice beverage (nectar)), Guava (10% fruit juice beverage), Grapefruit (straight fruit juice), Grapefruit (reconstituted fruit juice), Grapefruit (50% fruit juice beverage), Grapefruit (20% fruit juice beverage), <i>Shiikuwasha</i> (juice), <i>Shiikuwasha</i> (10% fruit juice beverage), <i>Sudachi</i> (juice), Sour oranges (juice), Pineapple (straight fruit juice), Pineapple (reconstituted fruit juice), Pineapple (50% fruit juice beverage), Pineapple (10% fruit juice beverage), Passion fruit (juice), Grapes (straight fruit juice), Grapes (reconstituted fruit juice), Grapes (70% fruit juice beverage), Grapes (10% fruit juice beverage), Peaches (30% fruit juice beverage (nectar)), Peaches (canned in heavy syrup, liquid), <i>Yuzu</i> (juice), Limes (juice), Apples (straight fruit juice), Apples (reconstituted fruit juice), Apples (50% fruit juice beverage), Apples (30% fruit juice beverage), Lemons (juice)		
Mushrooms	8	Mushrooms	17	Mushrooms	46	Winter mushrooms, Winter mushrooms (boiled), Winter mushrooms (bottled in seasoning), <i>Arage-kikurage</i> (dried), <i>Arage-kikurage</i> (dried, boiled), <i>Kikurage</i> (dried), <i>Kikurage</i> (dried, boiled), <i>Shiro-kikurage</i> (dried), <i>Shiro-kikurage</i> (dried, boiled), <i>Kuroawabitate</i> , <i>Nama-shiitake</i> , <i>Nama-shiitake</i> (boiled), <i>Hoshi-shiitake</i> , <i>Hosh-ishitake</i> (boiled), <i>Hatakeshimeji</i> , <i>Bunashimeji</i> , <i>Bunashimeji</i> (boiled), <i>Honshimeji</i> , <i>Tamogitake</i> , <i>Nameko</i> , <i>Nameko</i> (boiled), <i>Nameko</i> (canned in brine), <i>Numerisugitake</i> , <i>Usuhiratake</i> , Eryngii, Oyster mushrooms, Oyster mushrooms (boiled), <i>Maitake</i> , <i>Maitake</i> (boiled), <i>Maitake</i> (dried), Common mushrooms , Common mushrooms (boiled), Common mushrooms (canned in brine, solids), <i>Matsutake</i> , <i>Matsutake</i> (canned in water), <i>Yanagimatsutake</i>
Algae	9	Algae	18	Algae	47	Sea lettuce (dried), Green laver, Purple laver, Purple laver (toasted)/Unknown type of laver, Purple laver (seasoned and toasted), <i>Arame</i> (steamed and dried), <i>Iwa-nori</i> (dried), <i>Ego-nori</i> (dried), <i>Okuyuto</i> (algae cake), <i>Ogo-nori</i> (salted, desalted), <i>Kawa-nori</i> (dried), Green caviar, <i>Enaga-oni-kombu</i> , <i>Gagome-kombu</i> (dried), <i>Naga-kombu</i> , <i>Matsumae-kombu</i> , <i>Ma-kombu</i> (dried)/Unknown type of kombu (dried), <i>Mitsuishi-kombu</i> , <i>Rishiri-kombu</i> , <i>Kizami-kombu</i> , <i>Kezuri-kombu</i> , <i>Shio-kombu</i> , <i>Kom-bu</i> (<i>tsukudani</i> : simmered in soy sauce and sugar), <i>Suizenji-nori</i> (dried, soaked in water), <i>Tengusa</i> (dried), <i>Tokoroten</i> (gelidium jelly), Agar-agar, Agar jelly, <i>Tosaka-nori</i> (red, salted, desalted), <i>Tosaka-nori</i> (green, salted, desalted), <i>Hijiki</i> (boiled and dried), <i>Hitoegusa</i> (dried), <i>Hitoegusa</i> (<i>tsukudani</i> : simmered in soy sauce and sugar), <i>Fu-nori</i> , <i>Matsumo</i> (dried), <i>Mukade-nori</i> (salted, desalted), <i>Okinawa-mozuku</i> (salted, desalted), <i>Mozuku</i> (salted, desalted), <i>Wakame</i> (raw), <i>Wakame</i> (dried products), <i>Wakame</i> (dried, soaked in water), <i>Ita-wakame</i> (made into sheets and dried), <i>Wakame</i> (Haiboshi, soaked in water), <i>Wakame</i> (cut and dried), <i>Wakame</i> (stipe and center vein, salted, desalted), <i>Wakame</i> (fruit-bearing leaves, raw)
Fishes and Shellfishes	10	Raw fishes and Shellfishes	19	Horse mackerels and Sardines	48	Horse mackerel, Horse mackerel (boiled), Horse mackerel (baked), Atlantic horse mackerel, Atlantic horse mackerel (boiled), Atlantic horse mackerel (baked), Brownstriped mackerel scad, Brownstriped mackerel scad (baked), Big-eye sardine, Japanese anchovy, Japanese pilchard, Japanese pilchard (boiled), Japanese pilchard (baked), <i>Mezashi</i> (skewered, salted and semi-dried whole), <i>Mezashi</i> (baked), Mackerel, Mackerel (boiled), Mackerel (baked), Atlantic mackerel, Atlantic mackerel (boiled), Atlantic mackerel (baked), <i>Shimesaba</i> (vinegar marinated fillet), Pacific saury, Pacific saury (baked), Striped jack (cultured), Pacific herring, Pacific herring (ovary)
				Salmons and Trouts	49	Pink salmon, Pink salmon (baked), Coho salmon (cultured), Coho salmon (cultured, baked), Masu salmon, Masu salmon (baked), Chum salmon, Chum salmon (boiled), Chum salmon (baked), Atlantic salmon (cultured), Atlantic salmon (cultured, baked), Rainbow trout (cultured in sea), Rainbow trout (cultured in sea, baked), Rainbow trout (cultured in freshwater), Sockeye salmon, Sockeye salmon (baked), Chinook salmon, Chinook salmon (baked)

Large Classification	No.	Medium Classification	No.	Small Classification	No.	Foods
Fishes and Shellfishes	10	Raw fishes and Shellfishes	19	Sea breams and Righteye flounders	50	Matsubara's red rockfish, Tile fish, Tile fish (boiled), Tile fish (baked), Japanese parrot fish, Golden-thread, Golden-thread (surimi), Butterfish, Pacific halibut, Brown sole, Brown sole (boiled), Brown sole (baked), Marbled sole, Righteye flounder (with ovary), Righteye flounder (with ovary, boiled), Sablefish, Alfonsino, Yellow sea bream, Black sea bream, Crimson sea bream, Red sea bream (wild), Red sea bream (cultured), Red sea bream (cultured, boiled), Red sea bream (cultured, baked), Walleye pollack, Walleye pollack (surimi), <i>Sukimidara</i> (skinned, salted and dried fillet), Pacific cod, Pacific cod (baked), Pacific cod (milt), Bastard halibut (wild), Bastard halibut (cultured), Southern blue whiting
				Tunas, Marlins and Swordfishes	51	Blue marlin, Striped marlin, Swordfish, Skipjack (caught in spring), Skipjack (caught in autumn), Frigate mackerel, Skipjack (<i>Namari-bushi</i> : boiled and semi-dried fillet), Yellowfin tuna, Bluefin tuna (lean meat), Bluefin tuna (fatty meat), Albacore, Southern bluefin tuna (lean meat), Southern bluefin tuna (fatty meat), Young bluefin tuna, Big-eye tuna
				Other fishes	52	Fat greenling, Common Japanese conger, Common Japanese conger (steamed), Amago salmon (cultured), Ayu sweetfish (wild), Ayu sweetfish (wild, baked), Ayu sweetfish (viscera), Ayu sweetfish (viscera, baked), Ayu sweetfish (cultured), Ayu sweetfish (cultured, baked), Ayu sweetfish (cultured, viscera), Ayu sweetfish (cultured, viscera, baked), Pacific ocean perch, Anglerfish, Anglerfish (liver: viscera), Japanese sand lance, Three-line grunt, Char (cultured), Japanese dace, Eel (cultured), Eel (liver: viscera), Eel (<i>Shirayaki</i> : mild-baked and steamed fillet), Eel (<i>Kabayaki</i> : mild-baked, steamed, seasoned and baked fillet), Filefish, Rays, Lizardfish, Pale chub, Angry rockfish, Devil stinger, Scorpionfish, Japanese sculpin, Japanese sculpin (boiled), Barracuda, Barracuda (baked), Leatherjackets, Amberjack, Japanese whiting, Kichiji rockfish, Blue sprat, Pink cuskeel, Croaker, Croaker (baked), Carp (cultured), Carp (cultured, boiled), Carp (cultured, viscera), Bar-tailed flathead, Big-eye flathead, Gizzard shad, Dogfish, Blue shark, Dried shark fin, Halfbeak, Spanish mackerel, Spanish mackerel (baked), Dolphinfin, Sole, Japanese icefish, Silver warehou, Japanese seaperch, Black-tipped fusilier, Yellowstriped butterfish, Hairtail, Japanese surfmelt, Tilapia, Loach, Loach (boiled), Flying fish, Catfish, Japanese argentine, Yellowfin goby, Sandfish, Spangled emperor, Conger pike, Barracouta, Goldstriped amberjack, Ocellate puffer (cultured), Purple puffer, Crucian carp, Crucian carp (boiled), Yellowtail, Yellowtail (baked), Yellowtail (young, cultured), Gurnard, Hoki, Atka mackerel, Striped mullet, Willow shiner, Southern black cod, Silver pomfret, Gnomefish, Gnomefish (boiled), Girella, Japanese stingfish, Hake, Lamprey, Seema (cultured), Pond smelt
				Shellfishes	53	Bloody clams, Jackknife clams, Short-necked clams, Abalone, Mussels (Blue mussels), Japanese scallops (cultured), Oysters (cultured), Oysters (cultured, boiled), Turban shell, Turban shell (baked), Freshwater clams, Pen shells (adductor muscle), Pond snails, Whelks, Japanese abalone, Cockles (foot), Ivory shells, Hen clams, Hard clams, Hard clams (boiled), Hard clams (baked), Common shield-clams, Scallops, Scallops (boiled), Scallops (adductor muscle), Surf clams, Keen's gaper (siphon), Sea urchin
				Cephalopods	54	Neon flying squid, Swordtip squid, Cuttlefish, Japanese common squid, Japanese common squid (boiled), Japanese common squid (baked), Firefly squid, Firefly squid (boiled), Spear squid, Ocellated octopus, Common octopus, Common octopus (boiled), Sea cucumber, Sea squirt
				Prawns, Shrimps and Crabs	55	Northern shrimp, Japanese spiny lobster, Kuruma prawn (cultured), Kuruma prawn (cultured, boiled), Kuruma prawn (cultured, baked), Sakura shrimps (dried, boiled), Chinese prawn, Shiba shrimp, Giant tiger prawn (cultured), Blue crab, Horsehair crab, Horsehair crab (boiled), Tanner crab, Tanner crab (boiled), King crab, King crab (boiled), Antarctic krill, Antarctic krill (boiled), Mantis shrimp (boiled)
		Seafood, and Processed products	20	Seafood (salted, semi-dried and dried)	56	Horse mackerel (<i>Hirakiboshi</i> : salted and semi-dried split), Horse mackerel (<i>Hirakiboshi</i> , baked), Brownstriped mackerel scad (<i>Hirakiboshi</i> : salted and semi-dried split), Brownstriped mackerel scad (<i>Kusaya</i> : brine-soaked and dried scad), Ayu sweetfish (<i>Uruka</i> : salted and fermented viscera), Japanese sand lance (<i>Niboshi</i> : boiled and dried whole), Big-eye sardine (<i>Maruboshi</i> : salted and dried whole), Japanese anchovy (<i>Niboshi</i> : boiled and dried whole), Japanese pilchard (<i>Shioiwashi</i> : salted whole body), Japanese pilchard (<i>Namaboshi</i> : mild salted and semi-dried whole), Japanese pilchard (<i>Marubosh</i> : salted and dried whole), <i>Shirasuboshi</i> (boiled and dried whitebait), <i>Shirasuboshi</i> (<i>Chirimen</i> : semi-dried type), <i>Tatamiwashi</i> (sheet of dried larvae), Japanese anchovy (<i>Mirinboshi</i> : split seasoned with <i>Mirin</i> and dried), Japanese pilchard (<i>Mirinboshi</i> : split seasoned with <i>Mirin</i> and dried), Filefish (<i>Ajitsuke-hirakiboshi</i> : seasoned and dried fillet), Skipjack (<i>Namari-bushi</i> : boiled and semi-dried fillet), <i>Katsuo-bushi</i> (boiled, smoke-dried and molded fillet), Skipjack (<i>Kezuri-bushi</i> : shaved <i>Katsuo-bushi</i>), Skipjack (<i>Kezuri-bushi tsukudani</i> : simmered <i>Katsuo-bushi</i> in soy sause and sugar), Skipjack (<i>Shiokara</i> : salted and fermented viscera, <i>syutou</i>), Righteye flounders (dried), Blue sprat (seasoned and dried), Caviar (salted product), Gizzard shad (<i>Amazuke</i> : marinated in vinegar and sugar), Pink salmon (salted), Chum salmon (<i>Aramaki</i> : mild salted whole body), Chum salmon (<i>Aramaki</i> , baked), Chum salmon (<i>Shiozake</i>), <i>Ikura</i> (salted roe), <i>Sujiko</i> (salted ovary), <i>Mefun</i> (salted and fermented kidney), Sockeye salmon (smoked), <i>Saba-bushi</i> (boiled, smoke-dried and molded fillet), <i>Shiosaba</i> (plain salted fillet), Atlantic mackerel (<i>Hirakiboshi</i> : mild salted and semi-dried split), Pacific saury (<i>Hirakiboshi</i> : mild salted and semi-dried split), Pacific saury (<i>Mirinboshi</i> : seasoned with <i>Mirin</i> and dried fillet), <i>Shishamo</i> smelt (semi-dried), <i>Shishamo</i> smelt (semi-dried, baked), Atlantic capelin (semi-dried), Atlantic capelin (semi-dried, baked), <i>Tarako</i> (salted roe), <i>Tarako</i> (baked), <i>Karashi-mentaiko</i> (salted roe with red pepper powder), Pacific cod (salted fillet), Pacific cod (dried split), <i>Denbu</i> (mashed and seasoned meat), Pacific herring (<i>Migaki-nishin</i> : dried fillet), Pacific herring (<i>Hirakiboshi</i> : dried split), Pacific herring (smoked), Pacific herring (ovary, dried), Pacific herring (ovary, salted, desalted), Sandfish (<i>Namaboshi</i> : salted and semi-dried whole), Atka mackerel (salted), Atka mackerel (<i>Hirakiboshi</i> : mild salted and semi-dried split), Striped mullet (<i>Karasumi</i> : salted and dried roe), Lamprey (dried), Abalone (steamed and dried), Abalone (<i>Shiokara</i> : salted and fermented), Scallops (adductor muscle, dried), Sakura shrimps (dried), Sakura shrimps (<i>Niboshi</i> : boiled and dried), Boiled and dried shrimps, <i>Ganzuke</i> (salted and fermented fiddler crabs), Firefly squids (seasoned and smoked), <i>Surume</i> (dried squid), <i>Saki-ika</i> (baked and slender cut <i>Surume</i>), Squid (seasoned and smoked), Squid (<i>Shiokara</i> , <i>Akazukuri</i> : salted and fermented meat and liver), Opossum shrimps (<i>Shiokara</i> : salted and fermented), Sea urchin (<i>Tsubu-uni</i> : salted whole gonads), <i>Neri-uni</i> (salted whole gonad paste), Jellyfish (salted, desalted), Sea cucumber (<i>Konowata</i> : salted and fermented viscera), Sea squirt (<i>Shiokara</i> : salted and fermented meat and viscera)
				Seafood (canned)	57	Sardine (canned in brine), Sardine (canned with seasoning), Sardine (canned in tomato sauce), Sardine (canned in oil), Sardine (canned, <i>Kabayaki</i> : baked and seasoned fillet), Skipjack (canned with seasoning), Skipjack (canned in oil), Pink salmon (canned in brine), Chum salmon (canned in brine), Mackerel (canned in brine), Mackerel (canned, <i>Miso-ni</i> : canned with miso), Mackerel (canned with seasoning), Pacific saury (canned with seasoning), Pacific saury (canned, <i>Kabayaki</i>), Tuna (canned light meat in brine), Tuna (canned white meat in brine), Tuna (canned meat with seasoning), Tuna (canned light meat in oil), Tuna (canned white meat in oil), Short-necked clams (canned in brine), Short-necked clams (canned with seasoning), Abalone (canned in brine), Apple snails (canned in brine), Oysters (canned in oil, smoked), Topshells (canned with seasoning), Scallops (adductor muscle, canned in brine), Ark shells (canned with seasoning), Tanner crab (canned in brine), King crab (canned in brine), Squid and cuttlefishes (canned with seasoning)

Large Classification	No.	Medium Classification	No.	Small Classification	No.	Foods
Fishes and Shellfishes	10	Seafood, and Processed products	20	Seafood (<i>Tsukudani</i>)	58	Japanese sand lance (<i>Tsukudani</i> : simmered whole in soy sauce and sugar), Japanese sand lance (<i>Ameni</i> : simmered whole in glucose syrup and soy sauce), Japanese anchovy (<i>Tazukuri</i> : dried young anchovy), Japanese sculpin (<i>Tsukudani</i> : simmered whole in soy sauce and sugar), Skipjack (<i>Kakuni</i> : cut <i>Namari</i> boiled in soy sauce and sugar), Yellowfin goby (<i>Tsukudani</i> : boiled whole in soy sauce), Yellowfin goby (<i>Kanroni</i> : simmered whole in soy sauce and sugar), Crucian carp (<i>Kanroni</i> : simmered whole in soy sauce, sugar and glucose syrup), Pond smelt (<i>Tsukudani</i> : simmered whole in soy sauce and sugar), Pond smelt (<i>Ameni</i> : simmered whole in glucose syrup and soy sauce), Short-necked clams (<i>Tsukudani</i> : simmered meat in soy sauce and sugar), Hard clams (<i>Tsukudani</i> : simmered meat in soy sauce and sugar), Shrimps (<i>Tsukudani</i> : simmered whole in soy sauce and sugar), Firefly squids (<i>Tsukudani</i> : simmered meat in soy sauce and sugar), <i>Kiriika-ameni</i> (boiled slender cut <i>Surime</i> in glucose syrup and soy sauce), <i>Ika-arare</i> , <i>Opossum shrimps</i> (<i>Tsukudani</i> : simmered whole in soy sauce and sugar)
				Seafood (Fish paste products)	59	<i>Kanifumi-kamaboko</i> (steamed kamaboko given crab flavor), <i>Kobumaki-kamaboko</i> (steamed kamaboko rapped with <i>kombu</i>), <i>Sumaki-kamaboko</i> (steamed kamaboko covered with straw), <i>Mushi-kamaboko</i> (steamed kamaboko), <i>Yakinuki-kamaboko</i> (baked kamaboko), <i>Yaki-chikuwa</i> (baked tubular kamaboko), <i>Datemaki</i> (rolled up baked kamaboko of surimi and egg), <i>Tsumire</i> (boiled red meat fish paste), <i>Naruto</i> (boiled stick kamaboko with cross section of red swirl), <i>Hanpen</i> (boiled fish-cake made of surimi and yam paste), <i>Satsuma-age</i> (fried surimi)
				Fish hams and Sausages	60	Fish ham, Fish sausage
Meats	11	Animal meats	21	Beefs	61	<Beefs, Japanese beef cattle> Chuck; Chuck (without subcutaneous fat); Chuck (lean); Chuck (fat); Chuck loin; Chuck loin (without subcutaneous fat); Chuck loin (lean); Rib loin; Rib loin (without subcutaneous fat); Rib loin (lean); Rib loin (fat); Sirloin; Sirloin (without subcutaneous fat); Sirloin (lean); Flank or short plate; Inside round; Inside round (without subcutaneous fat); Inside round (lean); Inside round (fat); Outside round; Outside round (without subcutaneous fat); Outside round (lean); Rump; Rump (without subcutaneous fat); Rump (lean); Fillet, <Beefs, dairy fattened steer> Chuck/Unknown part; Chuck (without subcutaneous fat)/Unknown part (lean); Chuck (lean); Chuck (fat); Chuck loin; Chuck loin (without subcutaneous fat); Chuck loin (lean); Rib loin; Rib loin (baked); Rib loin (boiled); Rib loin (without subcutaneous fat); Rib loin (lean); Rib loin (fat); Sirloin; Sirloin (without subcutaneous fat); Sirloin (lean); Flank or short plate; Inside round; Inside round (without subcutaneous fat); Inside round (lean); Inside round (fat); Outside round; Outside round (without subcutaneous fat); Outside round (lean); Rump; Rump (without subcutaneous fat); Fillet, <Imported beefs> Chuck; Chuck (without subcutaneous fat); Chuck (lean); Chuck (fat); Chuck loin; Chuck loin (without subcutaneous fat); Rib loin (lean); Rib loin (fat); Sirloin; Sirloin (without subcutaneous fat); Sirloin (lean); Flank or short plate; Inside round; Inside round (without subcutaneous fat); Inside round (lean); Inside round (fat); Outside round; Outside round (without subcutaneous fat); Outside round (lean); Rump; Rump (without subcutaneous fat); Fillet, <Others> Tongue; Sinew; Tail, <Beef products> Roast beef; Corned beef (canned); Beef (canned with seasoning); Beef jerky; Smoked tongue
				Porks	62	<Porks, large type breeds> Picnic shoulder; Picnic shoulder (without subcutaneous fat); Picnic shoulder (lean); Picnic shoulder (fat); Boston butt; Boston butt (without subcutaneous fat); Boston butt (lean); Boston butt (fat); Loin; Loin (without subcutaneous fat, baked); Loin (boiled); Loin (without subcutaneous fat); Loin (lean); Loin (fat); Belly; Inside ham; Inside ham (without subcutaneous fat); Inside ham (without subcutaneous fat, baked); Inside ham (without subcutaneous ham, boiled); Inside ham (lean); Inside ham (fat); Outside ham; Outside ham (without subcutaneous fat); Outside ham (lean); Outside ham (fat); Fillet (lean), <Porks, medium type breeds> Picnic shoulder; Picnic shoulder (without subcutaneous fat); Picnic shoulder (lean); Picnic shoulder (fat); Boston butt; Boston butt (without subcutaneous fat); Boston butt (lean); Boston butt (fat); Loin; Loin (without subcutaneous fat); Loin (lean); Loin (fat); Belly; Inside ham; Inside ham (without subcutaneous fat); Inside ham (lean); Inside ham (fat); Outside ham; Outside ham (without subcutaneous fat); Outside ham (lean); Outside ham (fat); Fillet (lean), Ground meat, <Offals> Tongue, Feet (boiled), Cartilage (boiled)
				Hams and Sausages	63	<Hams> Bone-in; Boneless; Loin; Shoulder; Pressed; Mixed pressed; Chopped; Uncooked (fresh); Uncooked (ripened), <Bacon> Bacon; Loin; Shoulder, <Sausages> Vienna; Semi-dry; Dry; Frankfurter; Bologna; Lyoner; Livers Mixed; Fresh sausage, <Others> Roast pork
				Other animal meats	64	Wild boar, <i>Inobuta</i> (crossbred pig (domesticated × wild)), Rabbit (meat, lean), Horse (meat), Deer (meat), Mutton (loin), Mutton (leg), <Lambs> Shoulder; Loin; Leg, Goat (meat, lean)
		Poultryes	22	Chickens	65	<Fowl meats> Wing; Breast; Breast (without skin); Thigh; Thigh (without skin); <i>Sasami</i> (deep pectoral muscle), <Broiler meats> Wing; Breast; Breast (without skin); Thigh; Thigh (baked); Thigh (boiled); Thigh (without skin); Thigh (without skin, baked); Thigh (without skin, boiled); <i>Sasami</i> ; <i>Sasami</i> (baked); <i>Sasami</i> (boiled), Ground meat, <Offals> Skin (breast); Skin (thigh); Cartilage bone, <Others> Roast meat (canned with seasoning)
				Others	66	<i>Aigamo</i> (crossbred duck (domesticated × wild)), Duck (domesticated), Japanese quail, Duck (without skin), Common pheasant (without skin), Turkey (without skin), Sparrow, Pigeon (without skin), Guinea fowl (without skin)
		Offals	23	Offals	67	<Beefs> Heart; Liver; Kidney; Rumen (boild)/Unknown offal parts; Reticulum (boild); Omasum; Abomasum (boild); Small intestine; Large intestine; Rectum; Uterus (boild), <Porks> Heart; Liver; Kidney; Stomach (boiled); Small intestine (boiled); Large intestine (boiled); Uterus; Liver paste; Smoked liver, <Poultryes> Heart; Liver; Gissard; Foie gras (boiled)
		Others	24	Whale meat	68	Whale (meat), Whale (ventral groove meat), Whale (blubber), <i>Sarashi-kujira</i> (salted, sliced and boiled tail fluke)
				Other meats and Processed products	69	Rice hopper (<i>tsukudani</i> : simmered whole without wings and legs in soy sauce and sugar), Bullfrog, Snapping turtle, Wasp (maggot, canned with seasoning)
Eggs	12	Eggs	25	Eggs	70	Silky fowl's eggs, Japanese quail's eggs, Japanese quail's eggs (boiled and canned in brine), Hen's eggs, Hen's eggs (boiled), Hen's eggs (poached), Hen's eggs (boiled and canned in brine), Hen's eggs (sugared), Hen's eggs (dried), Hen's eggs (yolk), Hen's eggs (yolk, boiled), Hen's eggs (yolk, sugared), Hen's eggs (yolk, dried), Hen's eggs (white), Hen's eggs (white, boiled), Hen's eggs (white, dried), <i>Tamago-dofu</i> (steamed beaten egg with soup stock), <i>Atsuyakitamago</i> (omelet with sugar), <i>Dashimakitamago</i> (omelet with stock), Pidam
Milks	13	Milk and Dairy products	26	Milk	71	Raw milk (Jersey), Raw milk (Holstein), Ordinary liquid milk, Milk containing recombined milk (high fat), Milk containing recombined milk (low-fat), Skimmed milk
				Cheeses	72	<Natural cheeses> Edam, Emmental, Cottage, Camembert, Cream, Gouda, Cheddar, Parmesan, Blue <Other cheeses> Processed cheese, Cheese spread

Large Classification	No.	Medium Classification	No.	Small Classification	No.	Foods
Milks	13	Milk and Dairy products	26	Fermented milk and Lactic acid bacteria beverages	73	Yogurt (whole milk, unsweetened), Yogurt (skimmed, sweetened), Yogurt (liquid type), Lactic acid bacteria beverage (ordinary milk-solids, nonfat), Lactic acid bacteria beverage (pasteurized after fermentation, used by dilution), Lactic acid bacteria beverage (low milk-solids, nonfat)
				Other dairy products	74	Milk beverage (coffee flavored), Milk beverage (fruit flavored), Whole milk powder, Skimmed milk powder, Modified milk powder, Evaporated whole milk, Condensed whole milk (sweetened), Cream (milk fat), Cream (milk and vegetable fats), Cream (vegetable fat), Whipped cream (milk fat), Whipped cream (milk and vegetable fats), Whipped cream (vegetable fat), Coffee whitener (liquid, milk fat), Coffee whitener (liquid, milk and vegetable fats), Coffee whitener (liquid, vegetable fat), Coffee whitener (powder, milk fat), Coffee whitener (powder, vegetable fat), Ice cream (high fat), Ice cream (regular), Ice milk, Lactic ice (regular), Lactic ice (low fat), Ice cream (soft type), Sherbet, Cheese whey powder
		Others	27	Others	75	Human milk, Goat milk
Fats and Oils	14	Fats and Oils	28	Butters	76	Salted butter, Unsalted butter, Fermented butter
				Margarines	77	Margarine (soft type), Margarine (fat spread)
				Vegetable fats and oils	78	Olive oil, Sesame oil, Rice bran oil, Safflower oil, Soybean oil, Vegetable oil (blend), Corn oil, Rapeseed oil, Sunflower oil, Cottonseed oil, Peanut oil
				Animal fats	79	Beef tallow, Lard
				Others	80	Palm oil, Palm kernel oil, Coconut oil, Shortening
Confectioneries	15	Confectioneries	29	Traditional confectioneries	81	<i>Amanatto</i> : glazed beans (Adzuki beans), <i>Amanatto</i> (Kidney beans), <i>Amanatto</i> (Green peas), <i>Aniri-namayatsuhashi</i> (<i>Nikkei</i> (<i>Cinnamomum okinawaense</i>) – flavored rice ravioli filled with <i>An</i> (adzuki bean paste)), <i>Imagawayaki</i> (baked sweet dough stuffed with <i>An</i> (adzuki bean paste)), <i>Uiro</i> (steamed sweet rice dough), <i>Uguisu-mochi</i> (Adzuki bean paste-stuffed rice cake covered with roasted and ground soybean), <i>Kashiwa-mochi</i> (<i>An</i> (Adzuki bean paste)-stuffed steamed rice cake wrapped in a white oak leaf), <i>Kasutera</i> (sponge cake), <i>Kanoko</i> (<i>Neri-yokan</i> -centered <i>An</i> (adzuki bean paste) coated with glazed adzuki bean and agar), <i>Karukan</i> (steamed sweet dough made from rice flour and mashed yam), <i>Kibi-dango</i> (sugar coated <i>Gyuhhi</i>), <i>Gyuhhi</i> (kneaded steamed glutinous rice dough with sugar), <i>Kirizansyo</i> (Japanese pepper-seasoned kneaded rice sweet dough), <i>Kingyokuto</i> (sweat agar jelly), <i>Kintsuba</i> (baked dough-covered <i>An</i> (adzuki bean paste)), <i>Kusa-mochi</i> (mugwort-seasoned rice cake stuffed with <i>An</i> (adzuki bean paste)), <i>Kushi-dango</i> : skewered steamed rice dumpling (Adzuki bean paste), <i>Kushi-dango</i> (Soy sauce), <i>Geppei</i> (Chinese style baked dough stuffed with <i>An</i> (adzuki bean paste)), <i>Sakura-mochi</i> : <i>An</i> (adzuki bean paste)-stuffed dough in a salted cherry leaf (<i>Kanto</i> style), <i>Sakura-mochi</i> (<i>Kansai</i> style), <i>Daifuku-mochi</i> (rice cake stuffed with <i>An</i> (adzuki bean paste)), <i>Taruto</i> (<i>An</i> (adzuki bean paste)-centered rolled sponge cake), <i>Chimaki</i> (steamed rice dough wrapped in green bamboo leaves), <i>Chatsu</i> (baked green tea leaf-seasoned sweet dough stuffed with <i>An</i> (adzuki bean paste)), <i>Dorayaki</i> (a pair of baked round sweet dough filled with <i>An</i> (adzuki bean paste)), <i>Nerikiri</i> (molded kneaded <i>gyuhhi</i> and <i>An</i> (adzuki bean paste)), <i>Kasutera-manju</i> (sponge cake stuffed with <i>An</i> (adzuki bean paste)), <i>Kuzu-zakura</i> (steamed kudzu starch dough stuffed with <i>An</i> (adzuki bean paste)), <i>Kuri-manju</i> (baked sweet dough stuffed with <i>An</i> (adzuki bean paste) and chopped glazed chestnuts), <i>To-manju</i> (baked sweet dough stuffed with <i>An</i> (adzuki bean paste)), <i>Mushi-manju</i> (steamed sweet dough stuffed with <i>An</i> (adzuki bean paste)), <i>Manju</i> (steamed bread, Chinese style, adzuki bean paste), <i>Manju</i> (steamed bread, Chinese style, meat and vegetable), <i>Monaka</i> (glutinous rice wafer cups stuffed with <i>An</i> (adzuki bean paste)), <i>Yubeshi</i> (steamed sweet rice dough seasoned with soy sauce), <i>Neri-yokan</i> (agar-mixed <i>An</i> (adzuki bean paste) pudding), <i>Mizu-yokan</i> (agar-mixed <i>An</i> (adzuki bean paste) jelly), <i>Mushi-yokan</i> (wheat flour-mixed <i>An</i> (adzuki bean paste)), <i>Amedama</i> (drops), <i>Imokarinto</i> (fried and sugar-coated sweet potato bar), <i>Okoshi</i> (molded roasted rice with syrup), <i>Onoroke-mame</i> (baked rice dough-coated roasted peanuts), <i>Karinto</i> : fried and sugar-coated dough cake (brown sugar), <i>Karinto</i> (sugar), <i>Gokabo</i> (roasted glutinous rice stick covered with sweetened roasted soybean flour paste), <i>Tansan-senbei</i> (soft wheat flour cracker made using soda water from hot springs), <i>Kawara-senbei</i> (regular), <i>Maki-senbei</i> (rolled), <i>Nanbu-senbei</i> : mixed with seeds or nuts (with sesame seeds), <i>Shiogama</i> (molded-sugar mixed roasted glutinous rice flour with perilla leaf powder), Chinese style cookie, <i>Hina-arare</i> : mixed <i>Arare</i> (roasted rice dough) with glazed adzuki beans and roasted soybeans for Doll's Festival (<i>Kanto</i> style), <i>Hina-arare</i> (<i>Kansai</i> style), <Rice crackers> <i>Age-senbei</i> (fried and salted); <i>Amakara-senbei</i> (seasoned with sweetened soy sauce); <i>Arare</i> (glutinous rice cracker); <i>Shio-senbei</i> (seasoned with soy sauce), <i>Eisei-boro</i> (made from starch dough), <i>So-ba-boro</i> (made from buckwheat and wheat flour dough), <i>Matsukaze</i> (baked sweet dough), <i>Mishima-mame</i> (sugar-coated roasted soybeans), <i>Yatsuhashi</i> (baked <i>Nikkei</i> (<i>cinnamomum okinawaense</i>)-flavored rice sweet dough in Japanese harp shape), <i>Rakugan</i> : molded sugar-mixed grain or bean flour (regular), <i>Mugi-rakugan</i> , <i>Morokoshi-rakugan</i> , Wheat flour snack
				Cakes, Buns and Pastries	82	Custard cream puff (Éclair), Sponge cake, Short cake, Danish pastry, Doughnut (yeast leavened), Doughnut (cake type), Pie pastry, Apple pie, Meat pie, Butter cake, Hot cake, Waffle (custard cream), Waffle (jam)
				Biscuits	83	Wafers, Cracker (oil-sprayed), Cracker (soda), Sablé, Puff pie, Biscuit (hard), Biscuit (soft), Pretzels, Russian cake
				Candies	84	Caramel, Tablet candy (fruit juice type), Jelly candy, Jelly beans, China marble, Drops, Butterscotch, Brittles (with roasted peanuts), Marshmallows
				Others	85	Custard pudding, <Jellies> Orange; Coffee; Milk; Wine, Bavarian cream, Corn snack, Potato chips (regular), Potato chips (fabricated), Chocolate biscuits, White chocolate, Milk chocolate, Marrons glacés, <Chewing gums> Stick; Sugar-coated; Bubble
Beverages	16	Alcoholic beverages	30	Sake	86	<i>Sake</i> , <i>Junmai</i> , <i>Honjozo</i> , <i>Ginjo</i> , <i>Junmai-ginjo</i> , <i>Siro-zake</i> (cloudy <i>Mirin</i> containing solid particles of rice and rice koji in suspension)
				Beer	87	Beer (pale), Beer (black), Beer (stout), <i>Happoshu</i> (sparkling beverage brewed with less than 25% malt)
				Wines, Spirits and Others	88	<wine> White; Red; Rose, Shaoxing giu, <i>Shochu</i> (35% alcohol, <i>Ko-ru</i> : distilled through a continuous still), <i>Shochu</i> (25% alcohol, <i>Otsu-ru</i> : distilled through a pot still), Whiskey, Brandy, Vodka, Gin, Rum, Maotai giu, <i>Umeshu</i> (liqueur made from Japanese apricots), Synthetic <i>sake</i> , Medicinal liqueur, Curacao, Fortified wine, Peppermint liqueur, Vermouth (sweet type), Vermouth (dry type)
		Other beverages	31	Teas	89	<i>Gyokuro</i> : high grade tea (tea), <i>Gyokuro</i> (infusion), <i>Maccha</i> : finely ground tea (powder), <i>Sencha</i> : common grade tea (tea), <i>Sencha</i> (infusion), <i>Kamairi-cha</i> : pan-fired tea (infusion), <i>Ban-cha</i> : coarse grade tea (infusion), <i>Hoji-cha</i> : roasted tea (infusion), <i>Genmai-cha</i> : mixture of tea and roasted rice (infusion), Oolong tea (infusion), Black tea (tea), Black tea (infusion)
				Coffees and Cocoas	90	Coffee (filter method, infusion), Instant coffee (powder), Coffee drink, Pure cocoa (powder), Milk cocoa (powder)
				Others	91	<i>Ama-zake</i> (sweet beverage made from rice koji), <i>Kobu-cha</i> : kombu powder for drink (powder), Fruit flavored and colored drink (carbonated, not containing fruit juice), Cola drink, Clear soft drink (carbonated), <i>Mugi-cha</i> : roasted barley (infusion)

Large Classification	No.	Medium Classification	No.	Small Classification	No.	Foods
Seasonings and Spices	17	Seasonings	32	Sauces	92	Worcester sauce (common type), Worcester sauce (semi-thick type), Worcester sauce (thick type)
				<i>Shoyu</i> : soy sauces	93	<i>Koikuchi-syoyu</i> (common type), <i>Usukuchi-syoyu</i> (light color type), <i>Tamari-syoyu</i> (full-bodied type), <i>Saishikomi-syoyu</i> (refermented type), <i>Shiro-syoyu</i> (extra light color type)
				Edible salts	94	<i>Syokuen</i> (common salt), <i>Namien</i> (common salt), Refined salt
				Mayonnaise	95	Mayonnaise (whole egg type), Mayonnaise (egg yolk type)
				Miso	96	Rice-koji miso (sweet type), Rice-koji miso (light yellow type), Rice-koji miso (dark yellow type), Barley-koji miso, Soy-bean-koji miso, Rice-koji miso (light yellow type, powder type), Instant miso (paste type)
		Spices and Others	33	Other seasonings	97	<i>Mirin</i> : sweetened <i>shochu</i> by rice koji (<i>Hon-mirin</i>), <i>Mirin</i> (<i>Honnaosi</i>), Doubanjiang, Hot pepper sauce, Cayenne pepper oil, Grain vinegar, Rice vinegar, Wine vinegar, Cider vinegar, <Soup stocks> <i>Katsuo-bushi</i> extract; <i>Kombu</i> extract; <i>Katsuo-bushi</i> and <i>kombu</i> extract; <i>Shiitake</i> extract; <i>Niboshi</i> extract; Chicken bone stock; Chicken, pork and vegetable extract; Beef and vegetables extract; Consomme (cubes), Seasoning mix (granule), <i>Mentsuyu</i> : seasoned soy sauce for Japanese noodles (straight), <i>Mentsuyu</i> (triple strength), Oyster sauce, Ma Po dow fu sauce, Meat sauce, <Tomato processed goods> Puree; Paste; Ketchup; Tomato sauce; Chili sauce, Japanese style dressing (oil-free), French dressing, Thousand Island dressing, Curry roux, Hash roux, <i>Sakekasu</i> (<i>Sake</i> less), <i>Mirinfu-chomiryo</i> (sweet cooking seasoning)
				Spices and Others	98	Gelatin, Allspice, Onion powder, Mustard (powder), Mustard (paste), Mustard (prepared, French type), Mustard (grain), Curry powder, Clove, <Peppers> Black; White; Mixed, Japanese pepper, Cinnamon, Ginger (dried, ground), Ginger (paste), Sage, Thyme, Chili powder, Red pepper, Nutmeg, Garlic powder, Garlic (paste), Basil (ground), Parsley (dried), Paprika, <i>Wasabi</i> (powder, mixed with mustard powder), <i>Wasabi</i> (paste), Yeast (baker's yeast, compressed), Yeast (baker's yeast, dried), Baking powder

Table 2 ◆ Occupation Classification

No.	Category	Examples
People engaged in jobs that generate income (wages, salaries, operating profits, and others), <u>including side jobs and part-time works</u>		
01	Professional or Technical Work	Scientific researchers, Engineers and Technicians, Physicians, Dentists, Veterinarians, Pharmacists, Public health nurses, Midwives, Nurses, Medical Technologists, Dental hygienists, Dietitians, Acupressure therapists, Acupuncturists, Moxibustionists, Judo therapists, Social welfare staff (e.g. nursery staff), Legal workers (e.g. Judges, Prosecutors, Lawyers), Certified Public Accountants, Certified tax accountants, Teachers, Religious workers, Writers, Reporters, Editors, Artists, Photographers, Designers, Illustrators, Cartoonists, Musicians, Stage artists, Other professional and technical workers (e.g. Private teachers, Professional athletes)
02	Management	Government officials (ex. Prefectural assembly members, Governors, Mayors), Executives of companies or corporations, Directors of companies or corporations (ex. Factory managers, General managers, Stationmasters, Section chiefs), Other managerial workers
03	Clerks	General clerks (ex. Clerks in general affairs departments, Receptionists, Information clerks, Secretaries), Accounting clerks, Outside clerical workers (e.g. Bill collectors), Clerical workers in transportation and communications, Other clerical workers (ex. Stenographers, Typists, Key punchers, Operators of electronic machinery)
04	Sales	Sales workers of commodities (e.g. Retail dealers, Restaurant managers, Salespersons, Traveling salespersons, Commodity brokers), Sales related workers (e.g. Real estate agents, Insurance agents, Pawn brokers)
05	Services	Life-supporting service workers (e.g. Housekeepers, Domestic helpers, Home helpers), Environmental health industry workers (e.g. Barbers, Beauticians, Launderers and dry cleaners), Food service workers, Serving workers, Superintendents of residences and buildings, Other service workers (ex. Travel attendants, Temporary keepers)
06	Security Services	Self-Defense officials, Police officers, Prison guards, Fire fighters, Security guards
07	Agriculture	Farmers, Sericulturists, Poultry breeders, Apiculturist, Livestock farmers, Gardeners, Landscape gardeners
08	Forestry	Forest managers, Timber fellers and loggers, Timber collectors and log transporters, Charcoal makers and firewood log makers
09	Fisheries	Fishermen, Seaweed and shell gatherers, Captains, navigators, chief engineers and engineers of fishing boat, Aquiculture workers
10	Transportation/Communications	Car drivers, Train drivers, Ship pilots, Aircraft pilots, Workers operating other transportation (e.g. Conductors, Railway transportation-related workers, Deckhands, Ship engineers, Train inspectors), Communication workers (e.g. Radiotelegraphists, Wiretelegraphists, Telephone operators, Mail and telegram deliverers)
11	Manufacture	Manufacturers (e.g. Metal material, Chemical products, Ceramic products, Stone and clay products, Foods, Beverages, Tobaccos, Clothing, Textile, Wood, bamboo, grass and vine products, Pulp, paper and paper products, Rubber and plastic products, Leather and leather products), Assembling and repairing workers (ex. General machine, Electric machine, Transportation equipment, Measuring and optical instrument), Metal processing workers, Welders and frame cutter, Spinners, Printing and book-binding workers, Boiler operators, Construction machinery operators, Electrical workers, Excavation workers, Construction assistants (<i>Tobishoku</i>), Reinforcing workers, Construction workers, Construction labourers, Carrying labourers, Other labourers (ex. Sweepers, garbage collectors and others)
People not engaged in the above-mentioned jobs (01 - 11)		
12	Housekeepers/Domestic Helpers	People engaged in daily housekeeping (housewives of ordinary households)
13	Others	Inoccupation (people who are unemployed due to their old age, illness, disabilities, or other reasons)
14	Day-care Center Children	Children who go to day-care center on weekdays
15	Kindergarten Children	Children who go to kindergarten on weekdays
16	Other Children	Children who do not go to day-care center or kindergarten
17	Elementary School Students 1st – 2nd Grade	Pupils at elementary school (1st – 2nd grade)
18	Elementary School Students 3rd – 4th Grade	Pupils at elementary school (3rd – 4th grade)
19	Elementary School Students 5th – 6th Grade	Pupils at elementary school (5th – 6th grade)
20	Junior High School Students	Pupils at junior high school (1st – 3rd grade)
21	Other Students	Students at high school, college, graduate school, vocational school, and others

II. Outline of Results

Chapter 1. Diabetes

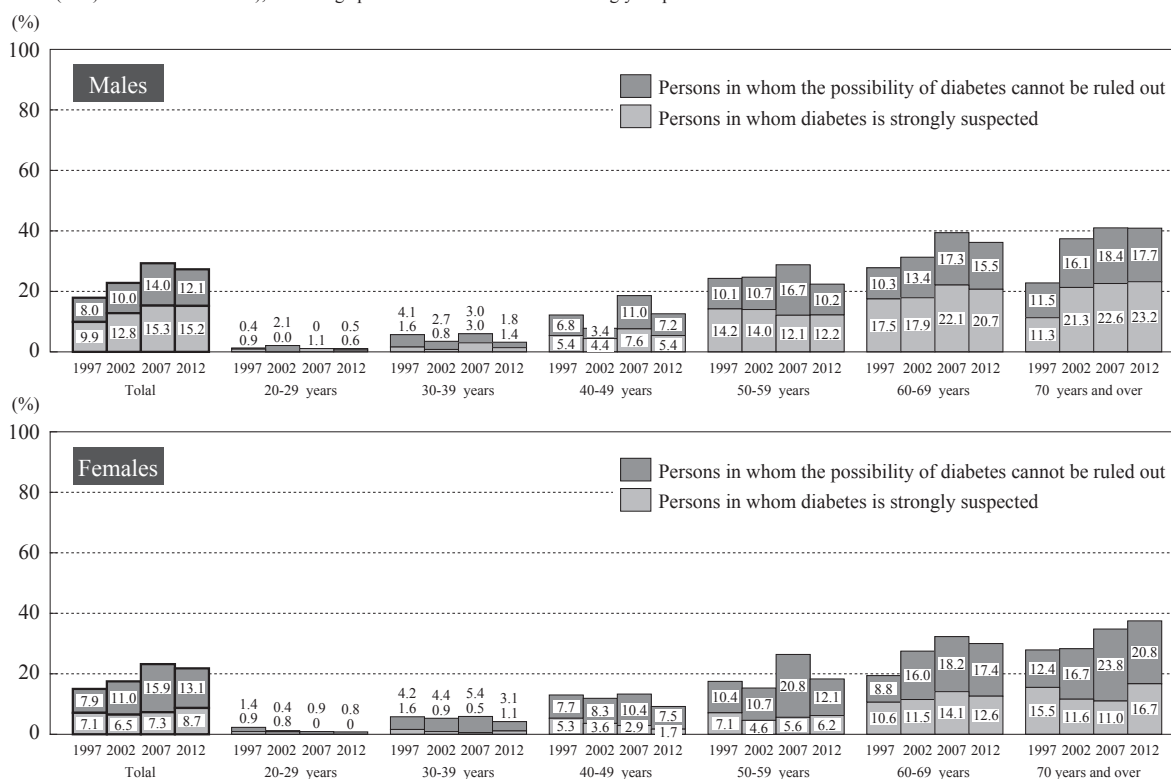
1. Status Regarding “Persons in Whom Diabetes is Strongly Suspected” and “Those in Whom the Possibility of Diabetes cannot be Ruled Out”

The proportions of “persons in whom diabetes is strongly suspected” in males and females were 15.2 and 8.7%, respectively. The former was similar to that reported in 2007, but the latter was higher than in 2007. The proportions of “those in whom the possibility of diabetes cannot be ruled out” in males and females were 12.1 and 13.1%, respectively. The former was similar to that reported in 2007, but the latter was lower than in 2007.

Figure 1. Annual Changes in the Proportions of “Persons in Whom Diabetes is Strongly Suspected” and “Those in Whom the Possibility of Diabetes cannot be Ruled Out” (aged 20 years and over, with respect to gender/age category)

・ Definition of “persons in whom diabetes is strongly suspected” and “those in whom the possibility of diabetes cannot be ruled out”

1. “Persons in whom diabetes is strongly suspected” refers to those with a hemoglobin A1c (NGSP) value of 6.5% or higher (before 2007: hemoglobin A1c (JDS) value of 6.1% or higher) or those who selected “1. Yes” to Question 6 of the lifestyle questionnaire, “Have you ever been diagnosed with diabetes in a hospital or on a health checkup?”, and “1. I have continuously received diabetes treatment” or “2. Diabetes treatment was previously discontinued, but I am once again receiving diabetes treatment” to Question 6-1, “Have you ever received diabetes treatment?”.
2. “Those in whom the possibility of diabetes cannot be ruled out” refers to those with a hemoglobin A1c (NGSP) value of 6.0 to 6.4% (before 2007: hemoglobin A1c (JDS) value of 5.6 to 6.0%), excluding “persons in whom diabetes is strongly suspected”.



* For evaluation, JDS values were used in 1997, 2002, and 2007. In 2012, NGSP values were used.

* The adjusted national values were used in 2012.

Table 1. Proportions of “Persons in Whom Diabetes is Strongly Suspected” and “Those in Whom the Possibility of Diabetes cannot be Ruled Out” (aged 20 years and over, with respect to gender/age category, adjusted national value)

		Total	20-29 years	30-39 years	40-49 years	50-59 years	60-69 years	70 years and over
Males	Proportion of persons in whom diabetes is strongly suspected (%)	15.2	0.6	1.4	5.4	12.2	20.7	23.2
	Proportion of persons in whom the possibility of diabetes cannot be ruled out (%)	12.1	0.5	1.8	7.2	10.2	15.5	17.7
Females	Proportion of persons in whom diabetes is strongly suspected (%)	8.7	0	1.1	1.7	6.2	12.6	16.7
	Proportion of persons in whom the possibility of diabetes cannot be ruled out (%)	13.1	0.8	3.1	7.5	12.1	17.4	20.8

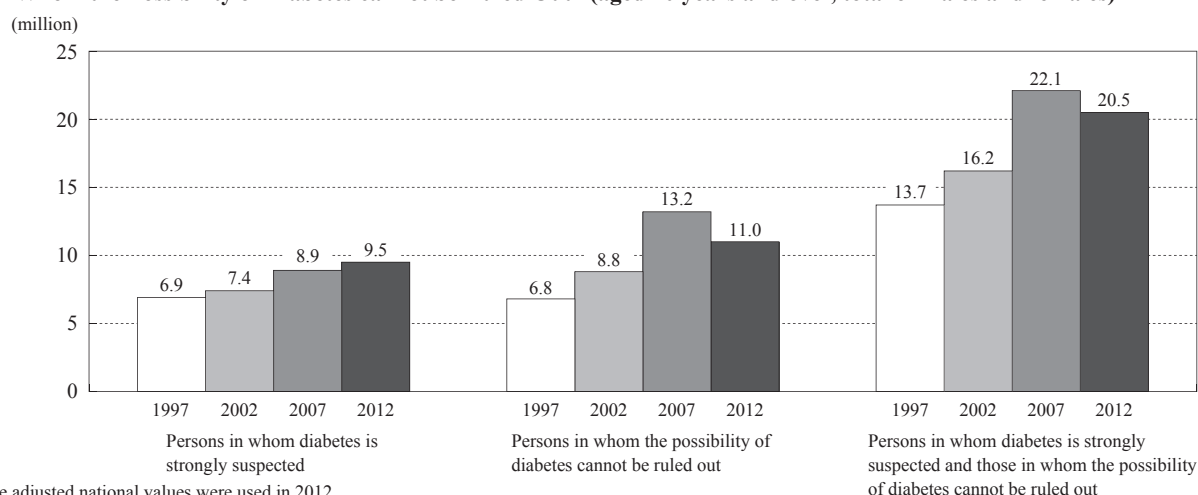
*The results of this survey were examined based on statistical analysis (level of significance: 5%).

*Survey result values presented were rounded, thus the total number may not match the sum.

2. Estimated Numbers of “Persons in Whom Diabetes is Strongly Suspected” and “Those in Whom the Possibility of Diabetes cannot be Ruled Out”

The number of “persons in whom diabetes is strongly suspected” was estimated to be approximately 9.5million. That of “those in whom the possibility of diabetes cannot be ruled out” was estimated to be approximately 11million. The total number of these persons was approximately 20.5million, showing a decrease for the first time after 1997.

Figure 2. Annual Changes in the Estimated Numbers of “Persons in Whom Diabetes is Strongly Suspected” and “Those in Whom the Possibility of Diabetes cannot be Ruled Out” (aged 20 years and over, total of males and females)



Note: Calculation of the estimated number of “persons in whom diabetes is strongly suspected” and “those in whom the possibility of diabetes cannot be ruled out”: estimated national values were calculated by multiplying the proportions of “persons in whom diabetes is strongly suspected” and “those in whom the possibility of diabetes cannot be ruled out” with respect to gender/age category by the national population with respect to gender/age category described in the “Population Estimates (as of October 1, 2012)” published by the Statistics Bureau, Ministry of Internal Affairs and Communications.

Table 2. Age Distribution of the Analyzed Subjects

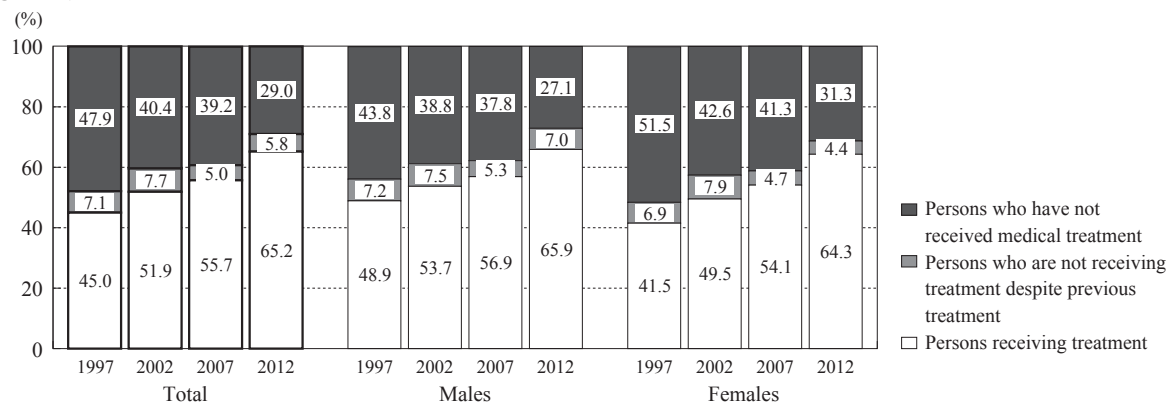
			Total	20-29 years	30-39 years	40-49 years	50-59 years	60-69 years	70 years and over
Males	1997	n	2,403	234	317	443	486	532	391
		(%)	100.0	9.7	13.2	18.4	20.2	22.1	16.3
	2002	n	2,150	145	257	295	429	546	478
		(%)	100.0	6.7	12.0	13.7	20.0	25.4	22.2
	2007	n	1,619	88	200	210	264	411	446
		(%)	100.0	5.4	12.4	13.0	16.3	25.4	27.5
	2012	n	5,752	299	626	687	824	1,552	1,764
		(%)	100.0	5.2	10.9	11.9	14.3	27.0	30.7
Females	1997	n	3,656	423	553	703	761	661	555
		(%)	100.0	11.6	15.1	19.2	20.8	18.1	15.2
	2002	n	3,196	253	456	472	694	663	658
		(%)	100.0	7.9	14.3	14.8	21.7	20.7	20.6
	2007	n	2,384	116	389	347	447	523	562
		(%)	100.0	4.9	16.3	14.6	18.8	21.9	23.6
	2012	n	8,337	435	1,028	1,147	1,376	2,075	2,276
		(%)	100.0	5.2	12.3	13.8	16.5	24.9	27.3

* Persons in whom hemoglobin A1c values were measured were analyzed.

3. Status Regarding Diabetes Treatment

Of “persons in whom diabetes is strongly suspected”, the proportions of those receiving treatment in males and females were 65.9 and 64.3%, respectively, showing increases.

Figure 3-1. Treatment of “Persons in Whom Diabetes is Strongly Suspected” (aged 20 years and over, with respect to gender)

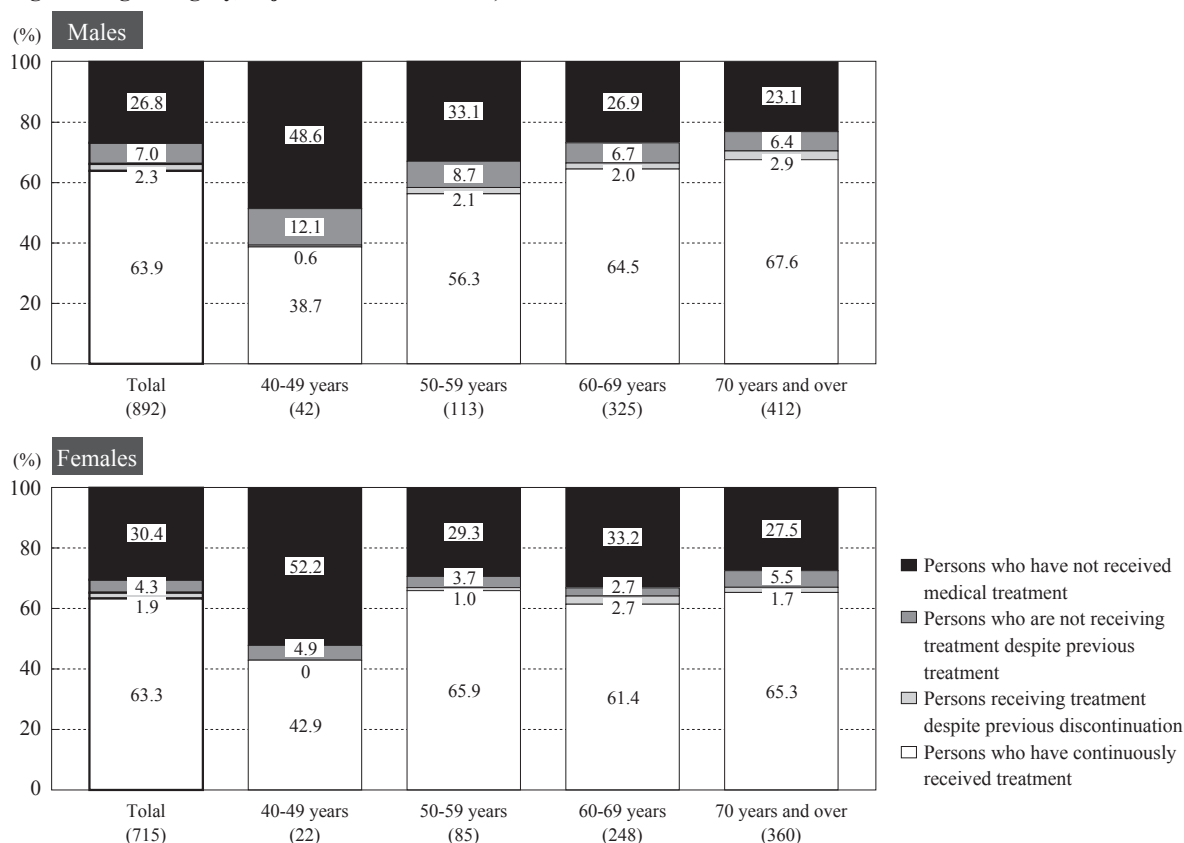


* Persons who have not received medical treatment include those who have not been diagnosed with diabetes.

* Persons receiving treatment in 2012 consist of those who have continuously received treatment (total: 63.1%, males: 63.6%, females: 62.4%) and those receiving treatment despite previous discontinuation (total: 2.1%, males: 2.3%, females: 1.9%).

* The adjusted national values were used in 2012.

Figure 3-2. Treatment Status in “Persons in Whom Diabetes is Strongly Suspected” (aged 40 years and over, with respect to gender/age category, adjusted national values)



* Persons who have not received treatment include those who have not been diagnosed with diabetes.

Chapter 2. Status Regarding Physical Condition, Diet, and Lifestyle

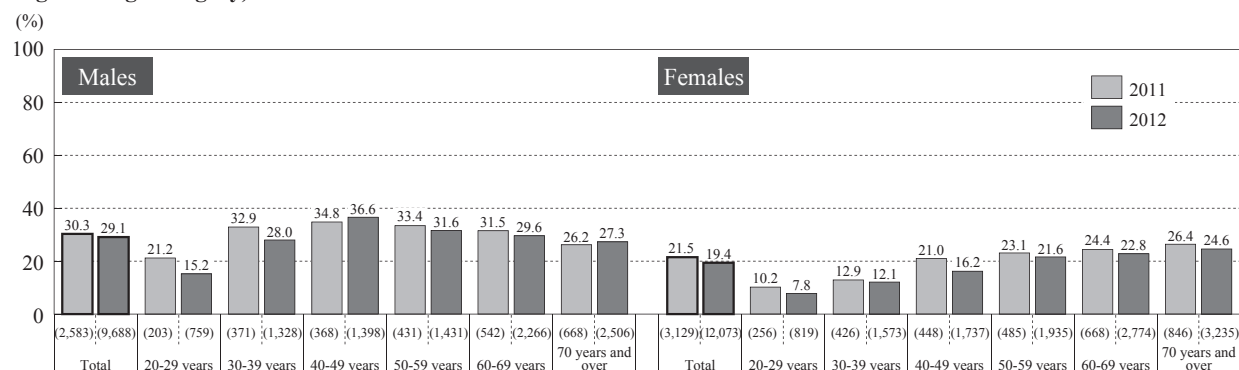
1. Obesity and Underweight

The proportions of obesity (BMI: ≥ 25) in males and females were 29.1 and 19.4%, respectively. The former was similar to that of the previous year, whereas the latter was lower. The proportions of underweight (BMI: < 18.5) in males and females were 4.2 and 11.4%, respectively; there were no changes in comparison with the previous year.

· Evaluation of obesity

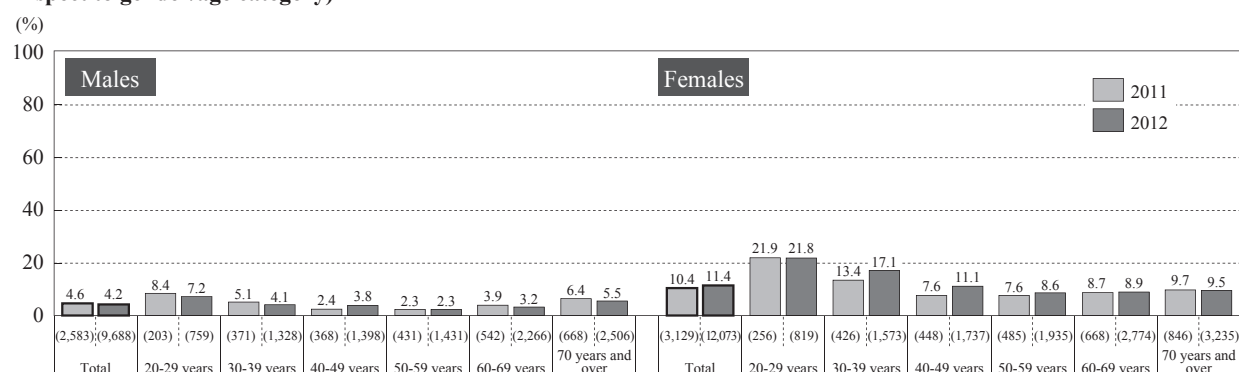
The presence or absence of obesity was evaluated using the body mass index (BMI, body weight [kg]/(height [m])²) (Obesity Criteria-Reviewing Committee of Japan Society for the Study of Obesity, 2000).

Figure 4-1. Annual Changes in the Proportion of Obese Persons (BMI: ≥ 25) (aged 20 years and over, with respect to gender/age category)



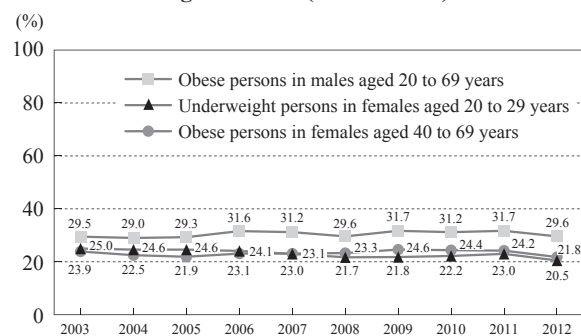
* The adjusted national values were used in 2012.

Figure 4-2. Annual Changes in the Proportion of Underweight Persons (BMI: < 18.5) (aged 20 years and over, with respect to gender/age category)



* The adjusted national values were used in 2012.

Figure 4-3. Annual Changes in the Proportion of Obese and Underweight Persons (2003 to 2012)

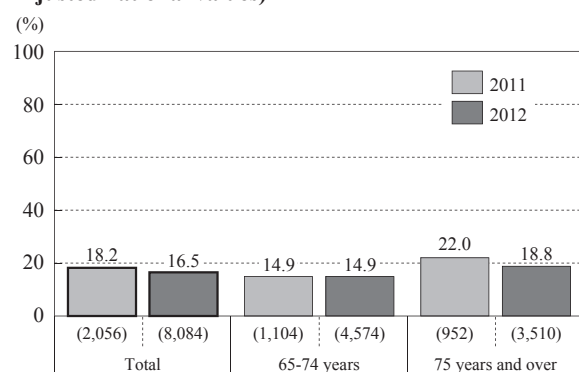


* The proportion of underweight in females aged 20 to 29 years was calculated based on the results standardized with moving averages.

Moving average: to minimize the variation of the results on the graphs, the mean of the annual results and those before and after the year were calculated. However, with respect to 2012, the results of the single year were presented.

* With respect to 2012, adjusted national values were adopted.

Figure 4-4. Proportion of Elderly Persons with Malnutrition (BMI: ≤ 20) (aged 65 years and over, total of males and females with respect to age category, adjusted national values)

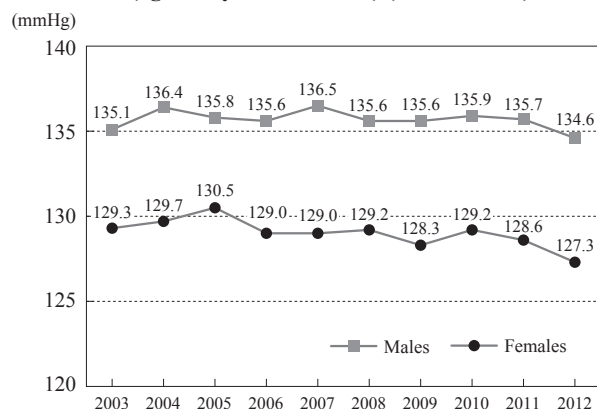


* With respect to 2012, adjusted national values were adopted.

2. Blood Pressure

The mean systolic blood pressure in males and females were 134.6 and 127.3 mmHg, respectively. The proportions of persons with a systolic blood pressure of 140 mmHg or higher in males and females were 35.7 and 25.5%, respectively. Regarding annual changes, males did not show any marked changes in the mean value or proportion of persons with a systolic blood pressure of 140 mmHg or higher over the past 10 years. Females showed decreases in both parameters.

Figure 5. Annual Changes in the Mean Systolic Blood Pressure (aged 20 years and over) (2003 to 2012)

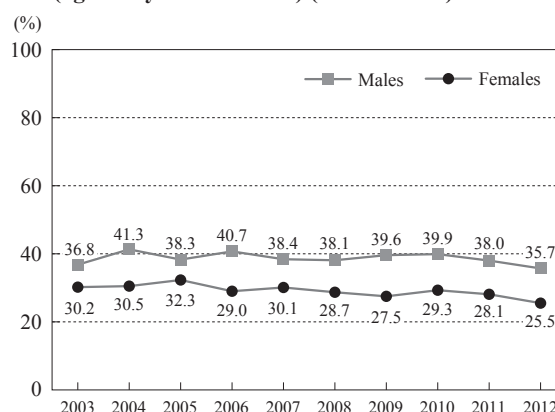


* Persons taking drugs are included.

* Mean of two measurements. In persons in whom the blood pressure was measured only once, the single value was adopted.

* The adjusted national values were used in 2012.

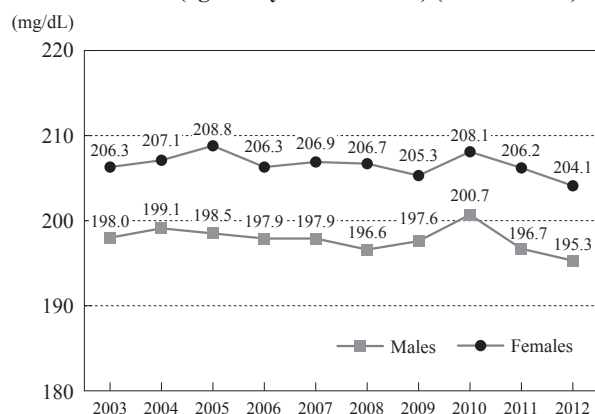
Figure 6. Annual Changes in the Proportion of Persons with a Systolic Blood Pressure of 140 mmHg or Higher (aged 20 years and over) (2003 to 2012)



3. Blood Cholesterol

The mean serum total cholesterol levels in males and females were 195.3 and 204.1 mg/dL, respectively. The proportions of persons with a serum total cholesterol level of 240 mg/dL or higher in males and females were 9.8 and 14.7%, respectively. Regarding annual changes, males did not show any marked changes in the mean value or proportion of persons with a serum total cholesterol level of 240 mg/dL or higher over the past 10 years. Females showed decreases in both parameters.

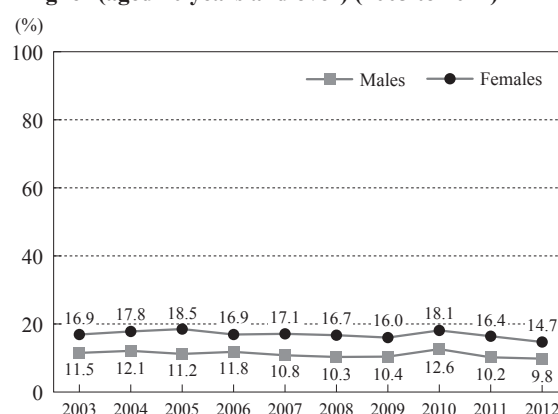
Figure 7. Annual Changes in the Mean Serum Total Cholesterol Level (aged 20 years and over) (2003 to 2012)



* Persons taking drugs are included.

* The adjusted national values were used in 2012.

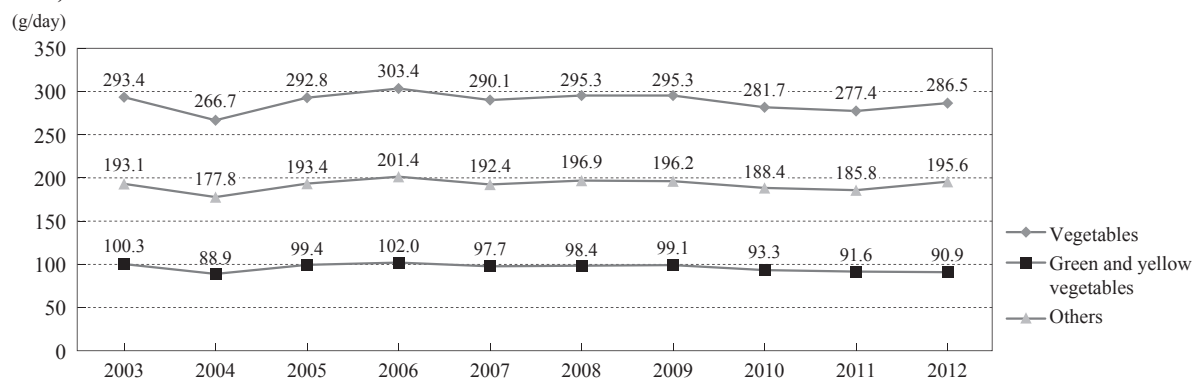
Figure 8. Annual Changes in the Proportion of Persons with a Serum Total Cholesterol Level of 240 mg/dL or Higher (aged 20 years and over) (2003 to 2012)



4. Vegetable/Fruit Intake

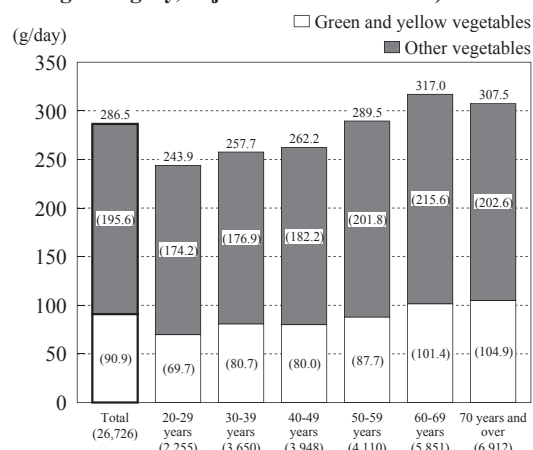
The mean vegetable intake in adults was 286.5 g. There was no age at which it reached 350 g. The mean fruit intake was 108.5 g. With respect to age category, intake was approximately 60 g in persons aged 20 to 49 years.

Figure 9. Annual Changes in the Mean Vegetable Intake (aged 20 years and over, total of males and females) (2003 to 2012)



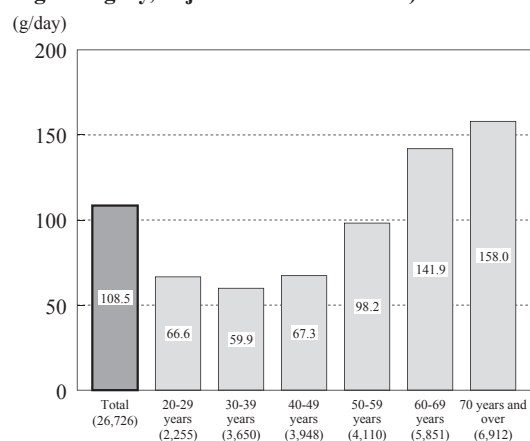
* The adjusted national values were used in 2012.

Figure 10-1. Mean Vegetable Intake (aged 20 years and over, total of males and females with respect to age category, adjusted national values)



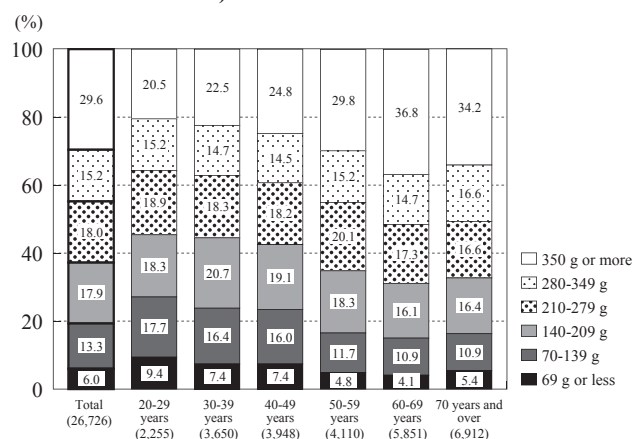
* The graphs of "other vegetables" refer to the total intake of vegetables other than green and yellow vegetables.

Figure 11-1. Mean Fruit Intake (aged 20 years and over, total of males and females with respect to age category, adjusted national values)



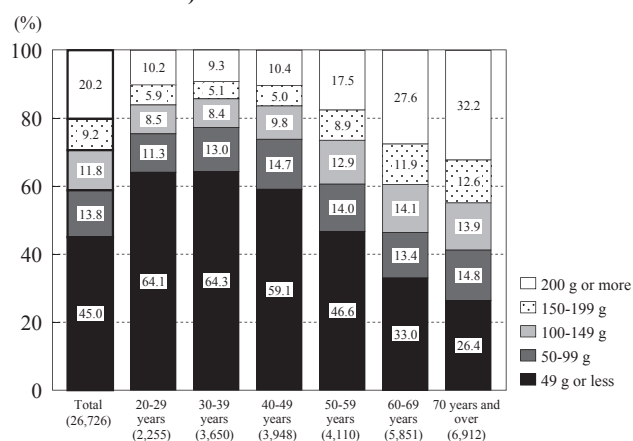
* Fruit dose not include jam.

Figure 10-2. Vegetable Intake (aged 20 years and over, total of males and females with respect to age category, adjusted national values)



* The nutrient intake survey was a one-day survey using the household division method.

Figure 11-2. Fruit Intake (aged 20 years and over, total of males and females with respect to age category, adjusted national values)



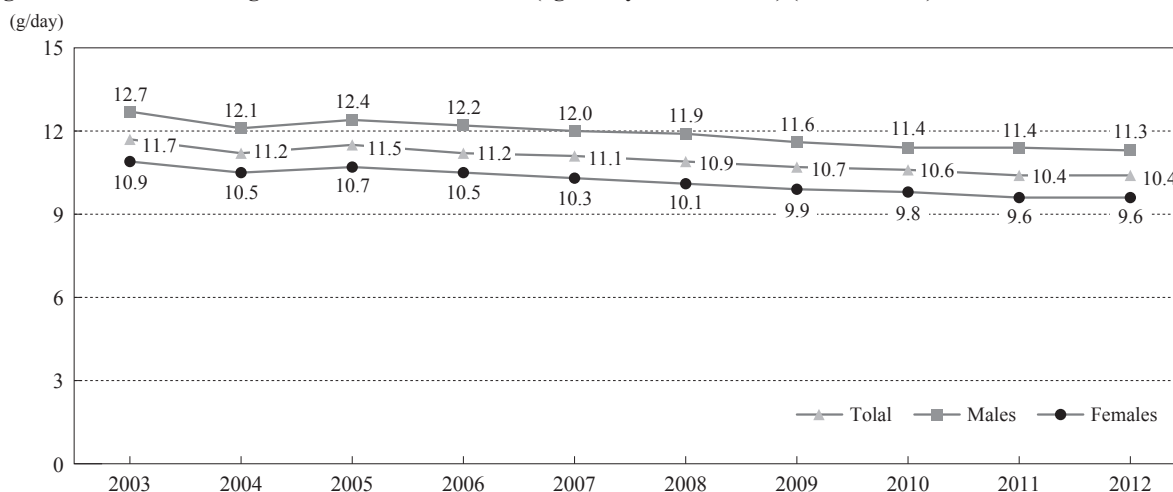
* The nutrient intake survey was a one-day survey using the household division method.

* Fruit dose not include jam.

5. Salt Intake

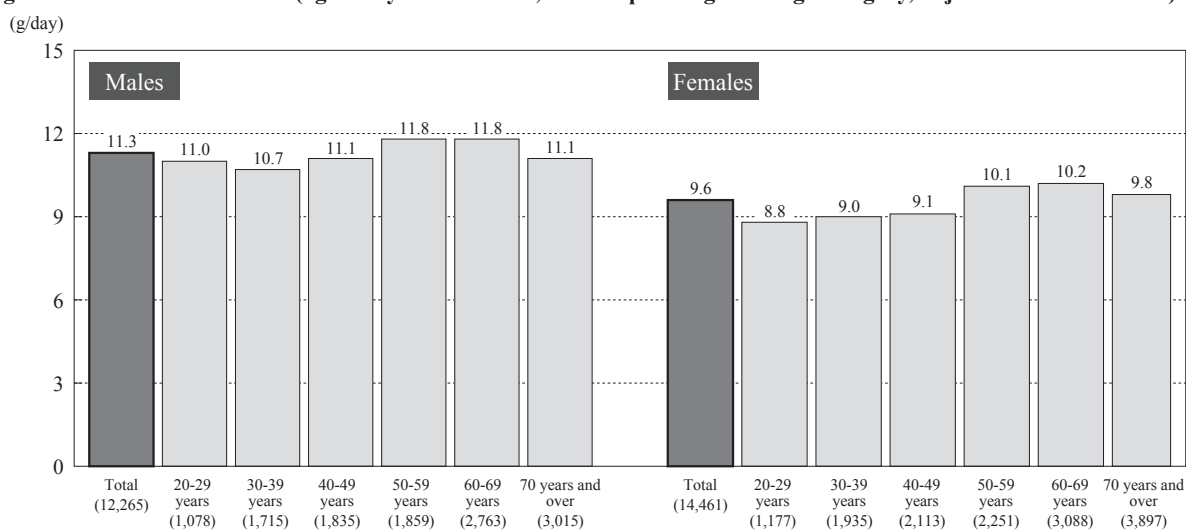
The mean salt intake in male and female adults was 11.3 and 9.6 g, respectively. Neither males nor females showed any changes in comparison with values of the previous year.

Figure 12-1. Annual Changes in the Mean Salt Intake (aged 20 years and over) (2003 to 2012)



* The adjusted national values were used in 2012.

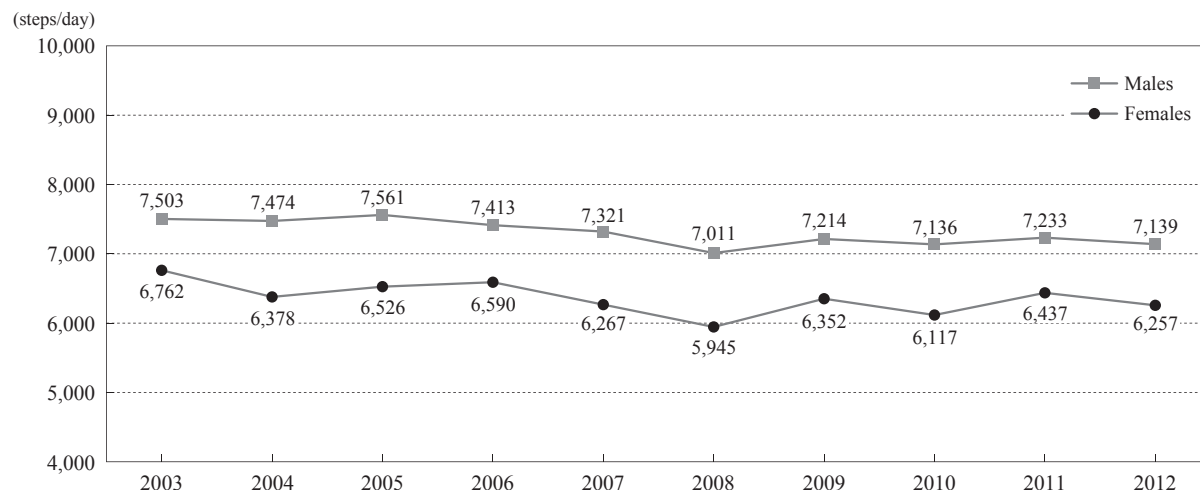
Figure 12-2. Mean Salt Intake (aged 20 years and over, with respect to gender/age category, adjusted national values)



6. Number of Steps

The mean number of steps in males and females was 7,139 and 6,257, respectively. In males, this value was similar to that of the previous year. In females, there was a decrease.

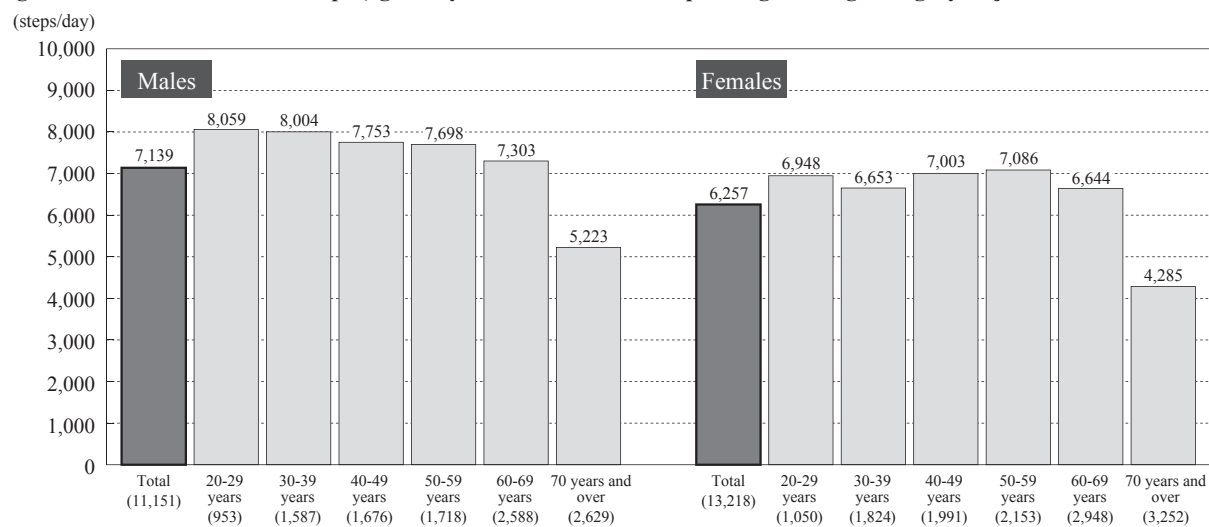
Figure 13-1. Annual Changes in the Mean Number of Steps (aged 20 years and over) (2003 to 2012)



* The people less than 100 steps or 50,000 steps and over were excluded in 2012.

* The adjusted national values were used in 2012.

Figure 13-2. Mean Number of Steps (aged 20 years and over, with respect to gender/age category, adjusted national values)

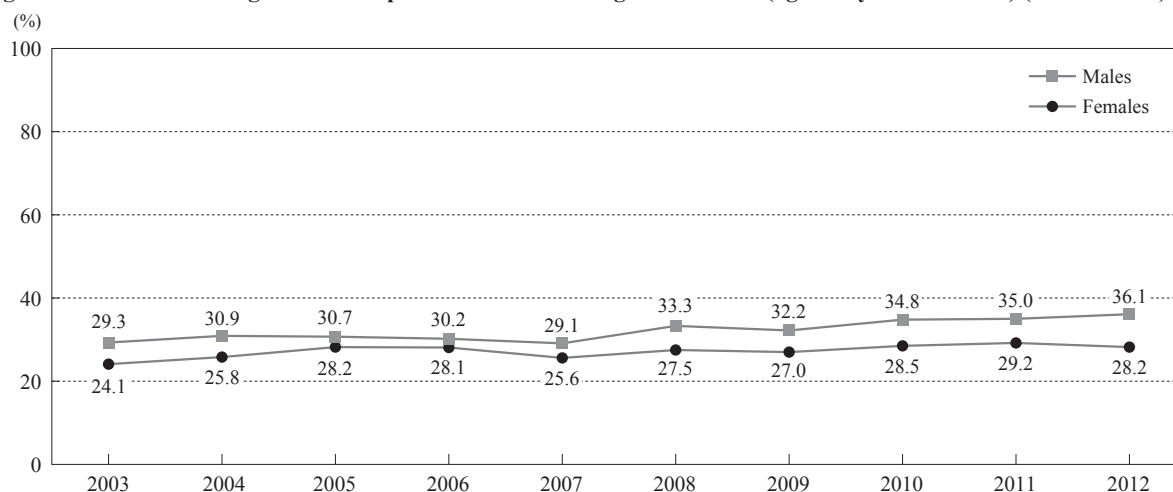


* The people less than 100 steps or 50,000 steps and over were excluded.

7. Exercise Habits

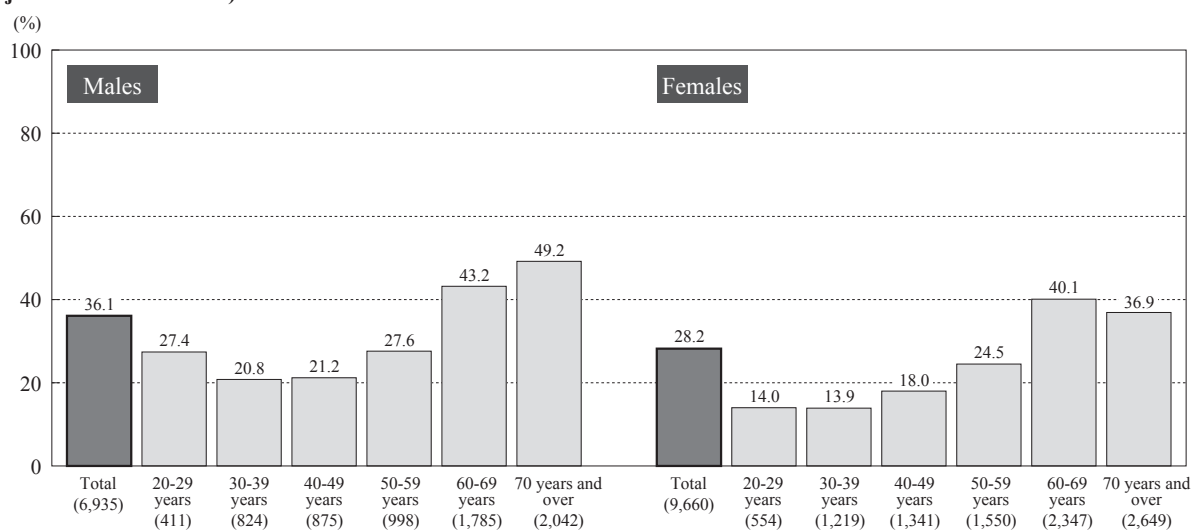
The proportions of habit of regular exercise in males and females were 36.1 and 28.2%, respectively. There were no changes in comparison with the previous year. With respect to age category, the percentage was approximately 20% in males aged 30 to 49 years, and under 20% in females aged 20 to 49 years.

Figure 14-1. Annual Changes in the Proportion of Habit of Regular Exercise (aged 20 years and over) (2003 to 2012)



* “Habit of regular exercise” refers to those who perform exercise activities for 30 minutes or more per session, twice a week or more, continued for at least one year.
 * The adjusted national values were used in 2012.

Figure 14-2. Proportion of Habit of Regular Exercise (aged 20 years and over, with respect to gender/age category, adjusted national values)

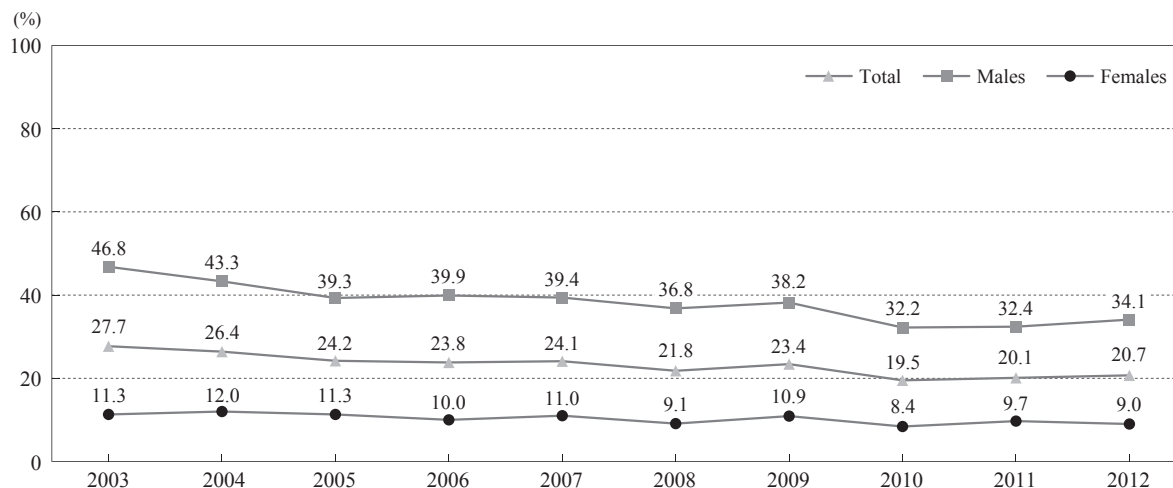


* “Habit of regular exercise” refers to those who perform exercise activities for 30 minutes or more per session, twice a week or more, continued for at least one year.

8. Smoking Status

The proportion of regular smokers was 20.7%. With respect to gender, the percentages in males and females were 34.1 and 9.0%, respectively, similar to those in the previous year.

Figure 15-1. Annual Changes in the Proportion of Regular Smokers (aged 20 years and over) (2003 to 2012)

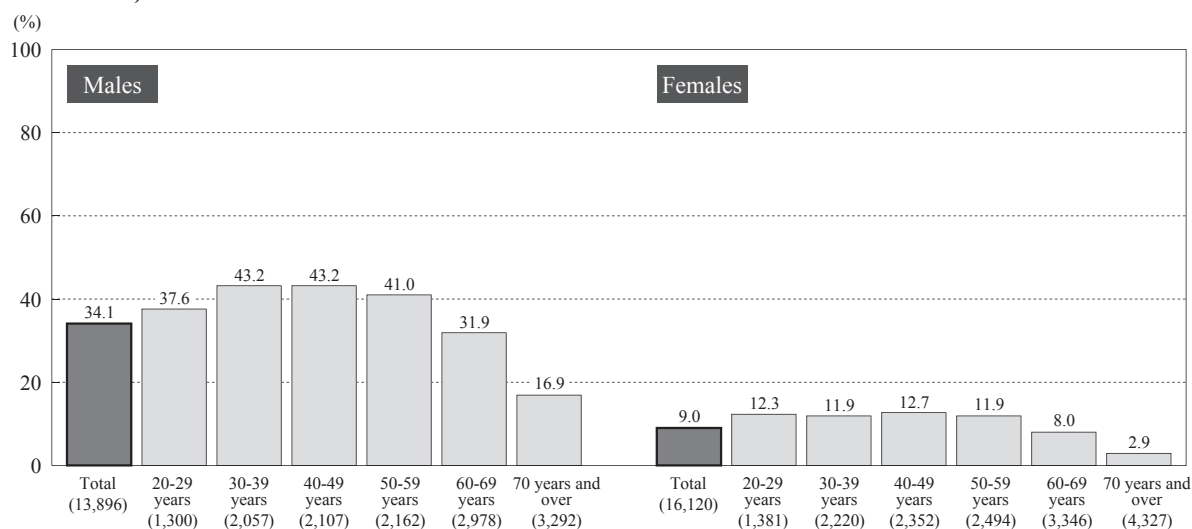


* "Regular Smokers" refers to those who reported smoking (every day or sometimes) during the past month, among those who have smoked cigarettes.

* 2003 to 2010: those who have (had) smoked a total of 100 cigarettes or more or for 6 months or more

* The adjusted national values were used in 2012.

Figure 15-2. Proportion of Regular Smokers (aged 20 years and over, with respect to gender/age category, adjusted national values)

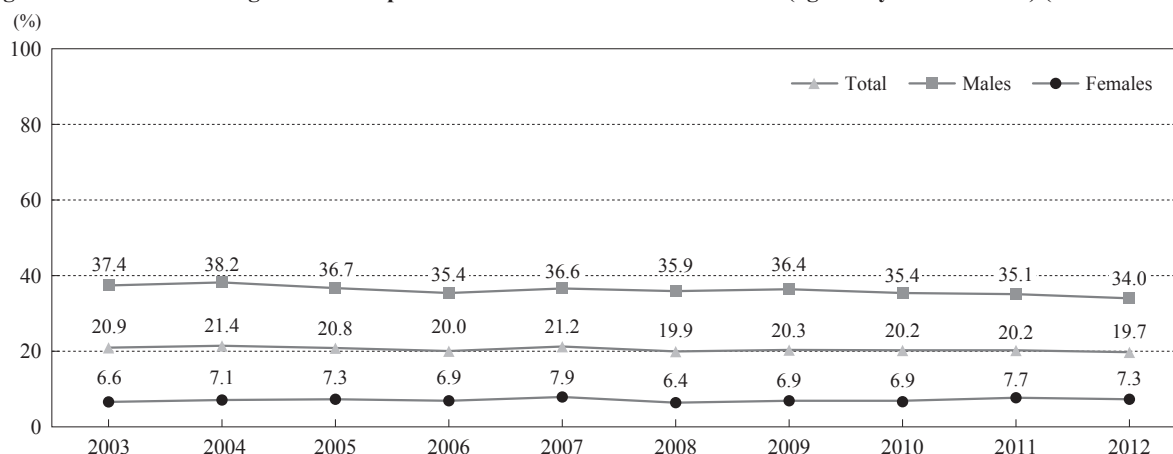


* "Regular Smokers" refers to those who reported smoking (every day or sometimes) during the past month, among those who have smoked cigarettes.

9. Alcohol Consumption

The proportions of alcohol consumption in males and females were 34.0 and 7.3%, respectively, similar to those in the previous year. Furthermore, the proportions of persons who drink alcohol at a level which increases the risk of lifestyle-related diseases were 14.7 and 7.6% in males and females, respectively.

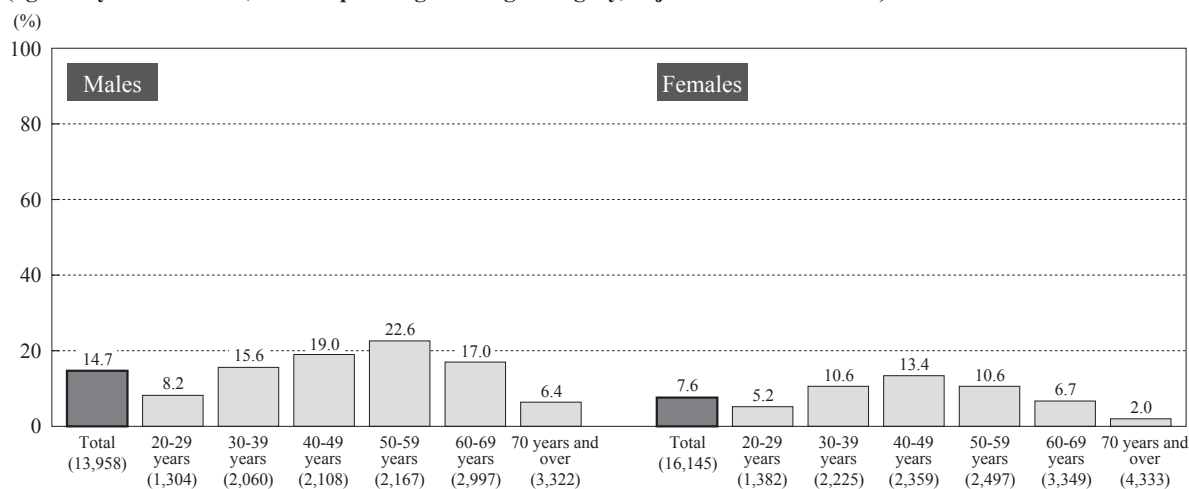
Figure 16-1. Annual Changes in the Proportion of Persons Who Drink Alcohol (aged 20 years and over) (2003 to 2012)



* "Persons who drink alcohol" refers to those who drink 180 mL/day or more of alcohol three times a week or more.

* The adjusted national values were used in 2012.

Figure 16-2. Proportion of Persons Who Drink Alcohol at a Level Which Increases the Risk of Lifestyle-related Diseases (aged 20 years and over, with respect to gender/age category, adjusted national values)



* "Persons who drink alcohol at a level which increases the risk of lifestyle-related diseases" refers to males with a daily pure alcohol intake of 40 g or more and females with that of 20 g or more.

The total number of these persons was calculated using the following formula:

- ① Males: those drinking 360mL or more of *sake* every day + those drinking 360 mL or more 5 to 6 times a week + those drinking 540 mL or more 3 to 4 times a week + those drinking 900 mL or more once or twice a week + those drinking 900 mL or more 1 to 3 times a month
- ② Females: those drinking 180 mL or more of *sake* every day + those drinking 180 mL or more 5 to 6 times a week + those drinking 180 mL or more 3 to 4 times a week + those drinking 540 mL or more once or twice a week + those drinking 900 mL or more 1 to 3 times a month

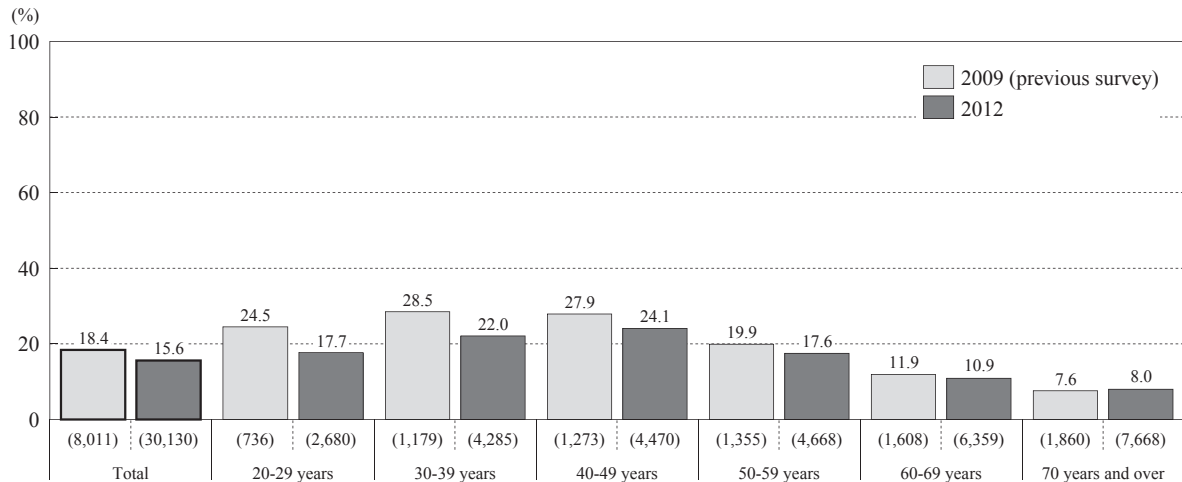
A cup (180 mL) of *sake* corresponds to the following volumes: an average-sized bottle of beer (approximately 500 mL), 20% *Shochu* (135 mL), 25% *Shochu* (110 mL), 30% *Shochu* (80 mL), 7% Chu-Hi (350 mL), a glass of double-whisky and water (60 mL), and two glasses of wine (240 mL).

10. Sleep

The proportion of persons with shortage of sleep during the past one month was 15.6%, showing a decrease in comparison with the percentage in 2009.

Figure 17-1. Annual Changes in the Proportion of Persons with Shortage of Sleep (aged 20 years and over, total of males and females with respect to age category)

Question: Have you got enough sleep in the past one month?

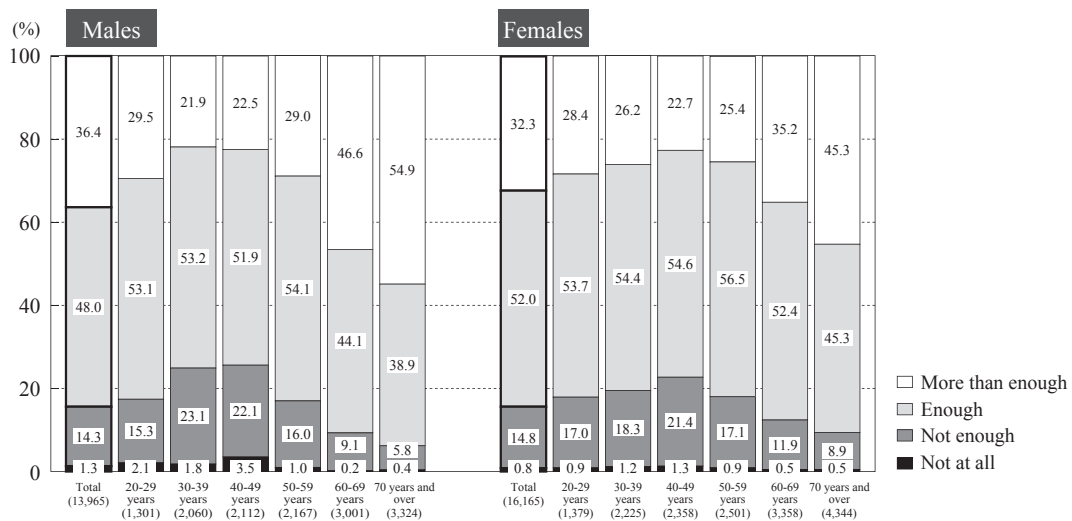


* "Persons with shortage of sleep" refers to those who selected "not enough" or "no sleep".

* In the previous survey (2009), the same item was investigated.

* With respect to 2012, adjusted national values were used in 2012.

Figure 17-2. Status of Sleep (aged 20 years and over, with respect to gender/age category, adjusted national values)

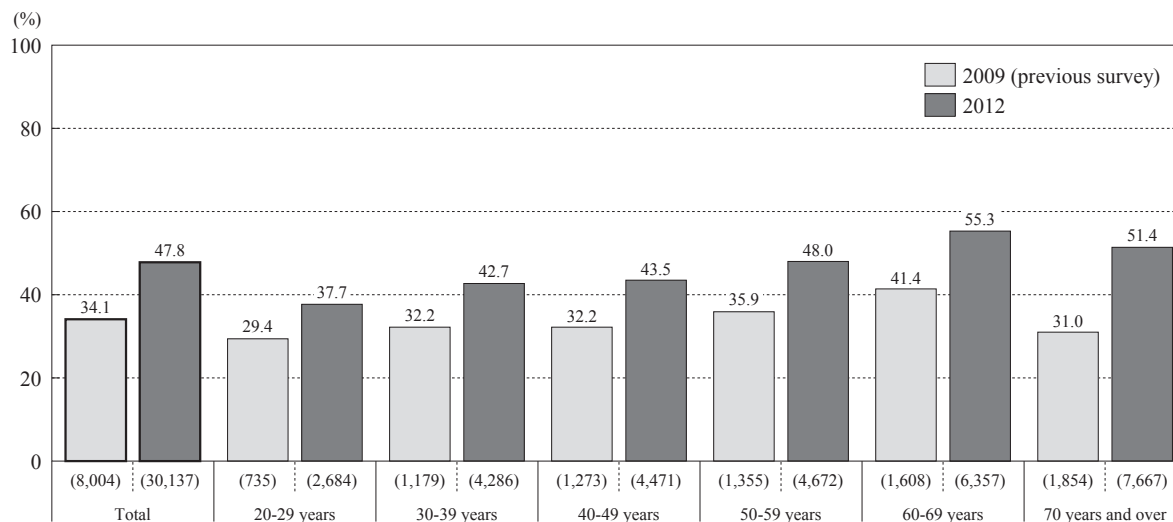


11. Dental Health (Oral Health)

The proportion of persons who underwent a dental checkup during the previous year was 47.8%, showing an increase in comparison with the percentage in 2009.

Figure 18-1. Annual Changes in the Proportion of Persons Who Underwent a Dental Checkup during the Previous Year (aged 20 years and over, total of males and females with respect to age category)

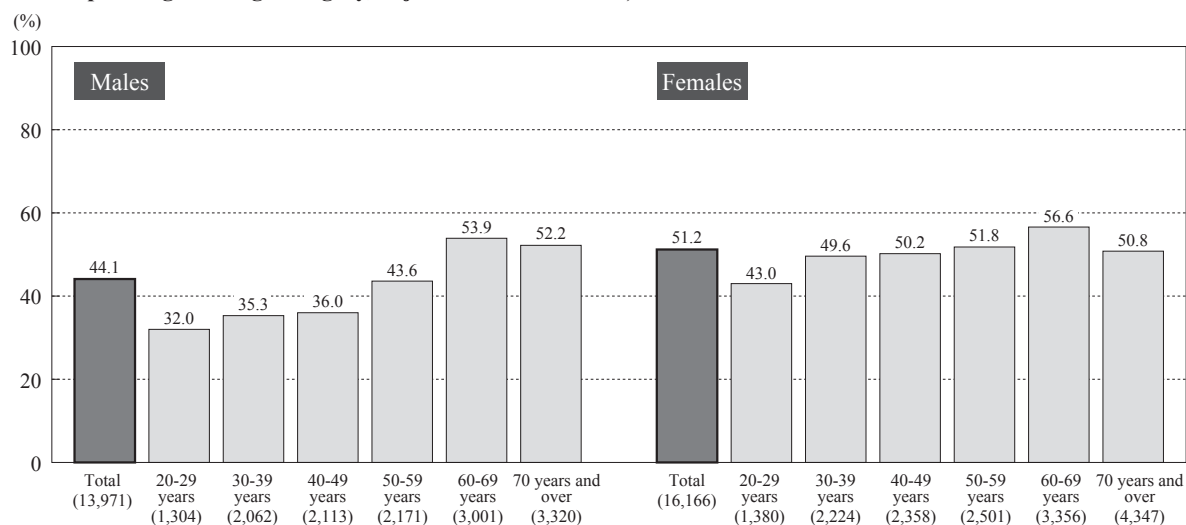
Question: Did you undergo a dental checkup during the previous year?



* In the previous survey (2009), the same item was investigated.

* With respect to 2012, adjusted national values were used in 2012.

Figure 18-2. Proportion of Persons Who Underwent a Dental Checkup during the Previous Year (aged 20 years and over, with respect to gender/age category, adjusted national values)

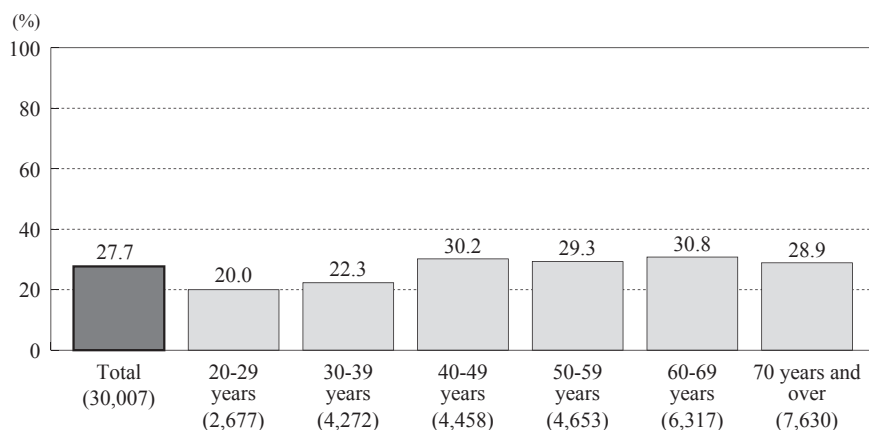


12. Participation in Volunteer Activities Related to Health Care

The proportion of persons who participated in volunteer activities related to health care during the previous year was 27.7%.

Figure 19. Proportion of Persons Who Participated in Volunteer Activities Related to Health Care during the Previous Year (aged 20 years and over, total of males and females with respect to age category, adjusted national values)

Question: Did you participate in volunteer activities (including help/support for neighbors) related to health care during the previous year?



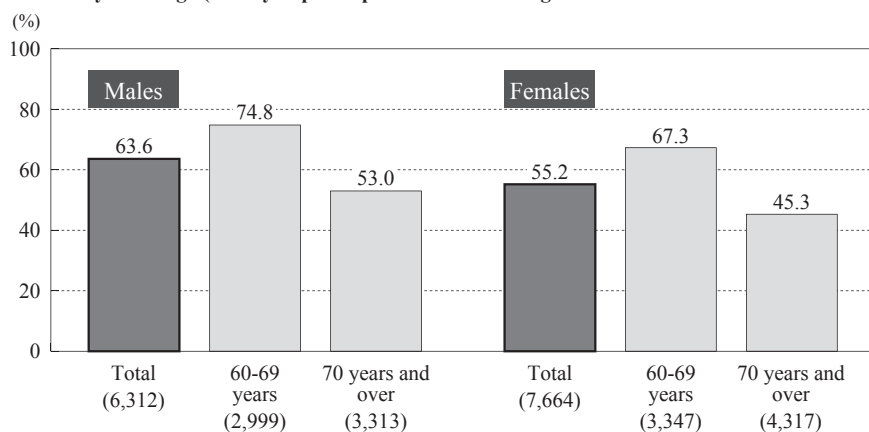
“Persons who participated in volunteer activities related to health care” refers to those who reported participation in at least one of the following activities related to health care: ① activities to improve lifestyle-related factors, such as diet, ② sports/culture/art-related activities, ③ activities for community arrangement, ④ activities for children, ⑤ activities for the elderly, ⑥ crime/disaster prevention-related activities, ⑦ activities to protect nature and the environment, and ⑧ other activities.

13. Social Participation by Elderly Persons

The proportions of 60-year-old or older persons who were working or participating in regional activities in males and females were 63.6 and 55.2%, respectively.

Figure 20. Proportion of Elderly Persons Participating in Social Activities (aged 60 years and over, with respect to gender/age category, adjusted national values)

Question: Are you currently working? (or do you participate in volunteer/regional social activities or have hobbies/practice?)



Chapter 3. Prefectural Results Regarding Physical Condition and Lifestyle

With respect to physical condition (BMI) and lifestyle, age adjustment was conducted in each prefecture. The prefectures were divided into quartiles (high to low). The results were compared between the first (top 25%) and the fourth (bottom 25%) quartiles. There were significant differences in BMI, vegetable intake, salt intake, number of steps, and proportion of regular smokers (males) between the two groups.

Table 3. Prefectural Results Regarding Physical Status (BMI) and Lifestyle

	National mean	Prefectural status	
		First quartile	Fourth quartile
1. Mean BMI (kg/m ²)			
Males (aged 20 to 69 years)	23.6	24.2	23.1
Females (aged 40 to 69 years)	22.5	23.3	22.0
2. Mean vegetable intake (g/day)			
Males (aged 20 years and over)	297	332	264
Females (aged 20 years and over)	280	310	253
3. Mean salt intake (g/day)			
Males (aged 20 years and over)	11.3	12.2	10.4
Females (aged 20 years and over)	9.6	10.3	8.8
4. Mean number of steps in a day (steps/day)			
Males (aged 20 to 64 years)	7,791	8,308	6,829
Females (aged 20 to 64 years)	6,894	7,295	6,278
5. Smoking (%)			
Males (aged 20 years and over)	33.6	38.4	29.0

* The data were examined with respect to prefectures, and the prefectures were divided into 4 quartiles (high to low). The group consisting of the top 25% prefectures was established as the high group, and the group consisting of the bottom 25% prefectures was established as the low group.

* For comparison, values adjusted by the mean age in the age category of each parameter were used.

* Because the national means in Chapter 3 were adjusted with age, they differ from the corrected national values in Chapter 1 and 2.

Prefectural Results Regarding Physical Condition (BMI) and Lifestyle

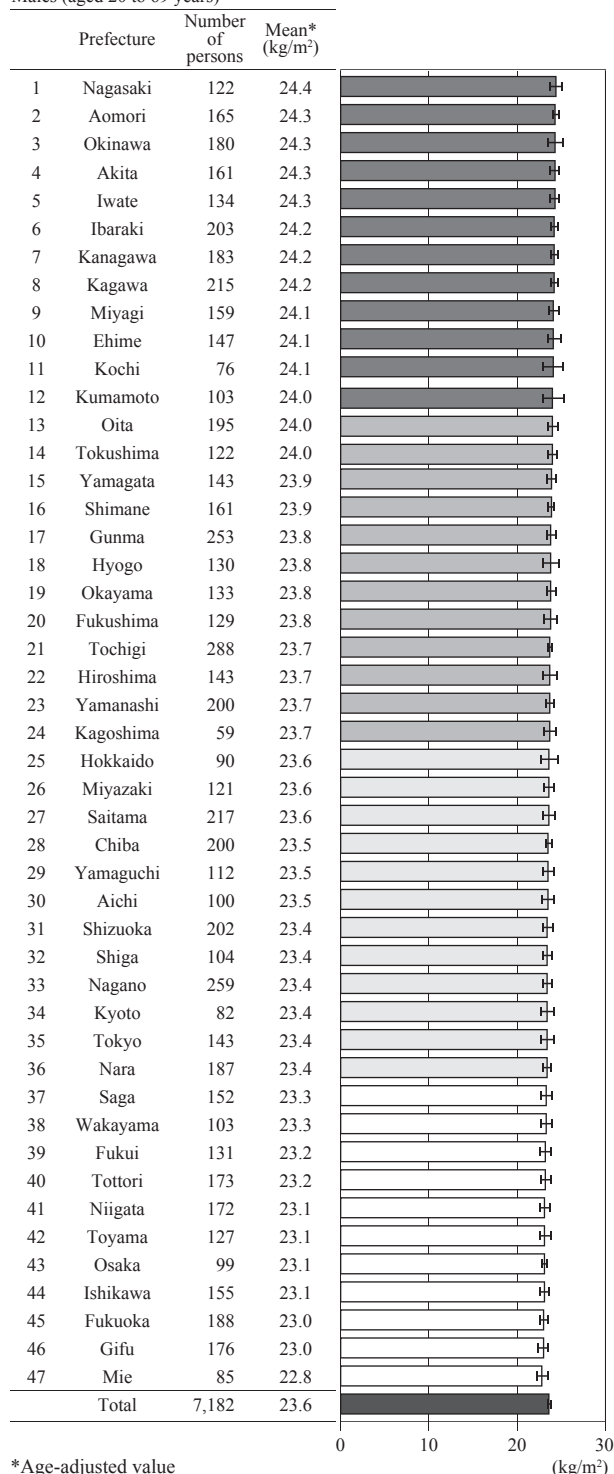
- The prefectures were divided into quartiles (high to low), represented by color. For evaluation, additional decimal places were calculated to show differences in rank, as needed.
- Concerning the transverse axis error range of the figure, the proportion or 95% confidence interval of the mean is presented.

The 95% confidence interval refers to the interval of which it is 95% certain that it contains the true value when repeatedly extracting and investigating samples from the same number of persons.

The accuracy of the values may be assumed increased with a reduction of the confidence interval.

1. BMI

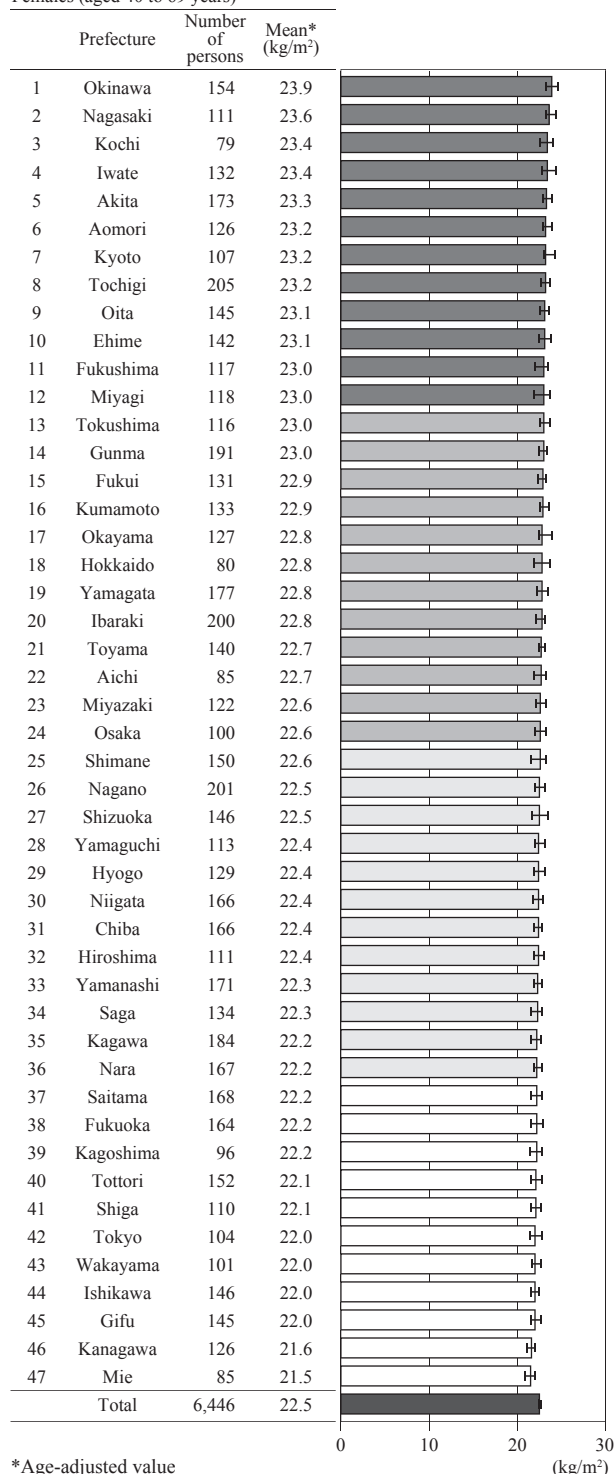
Males (aged 20 to 69 years)



*Age-adjusted value

*The values were rounded off to the first decimal place.

Females (aged 40 to 69 years)

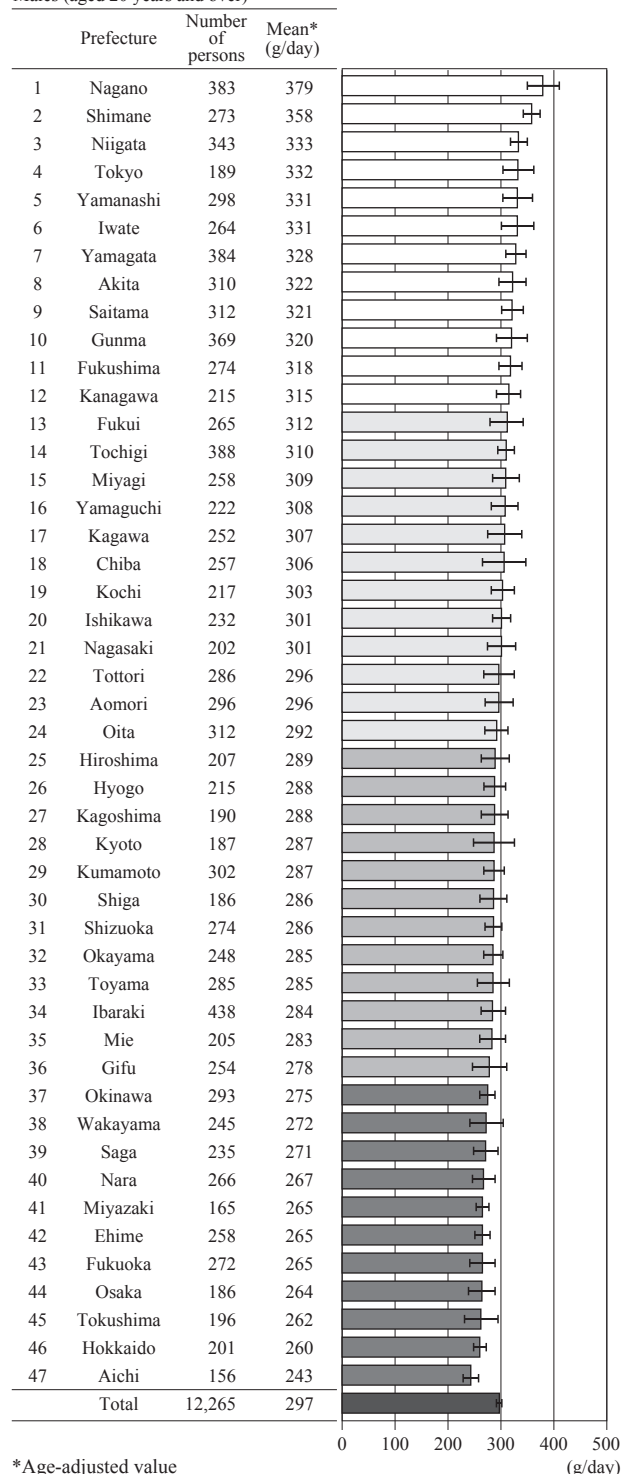


*Age-adjusted value

*The values were rounded off to the first decimal place.

2. Vegetable Intake

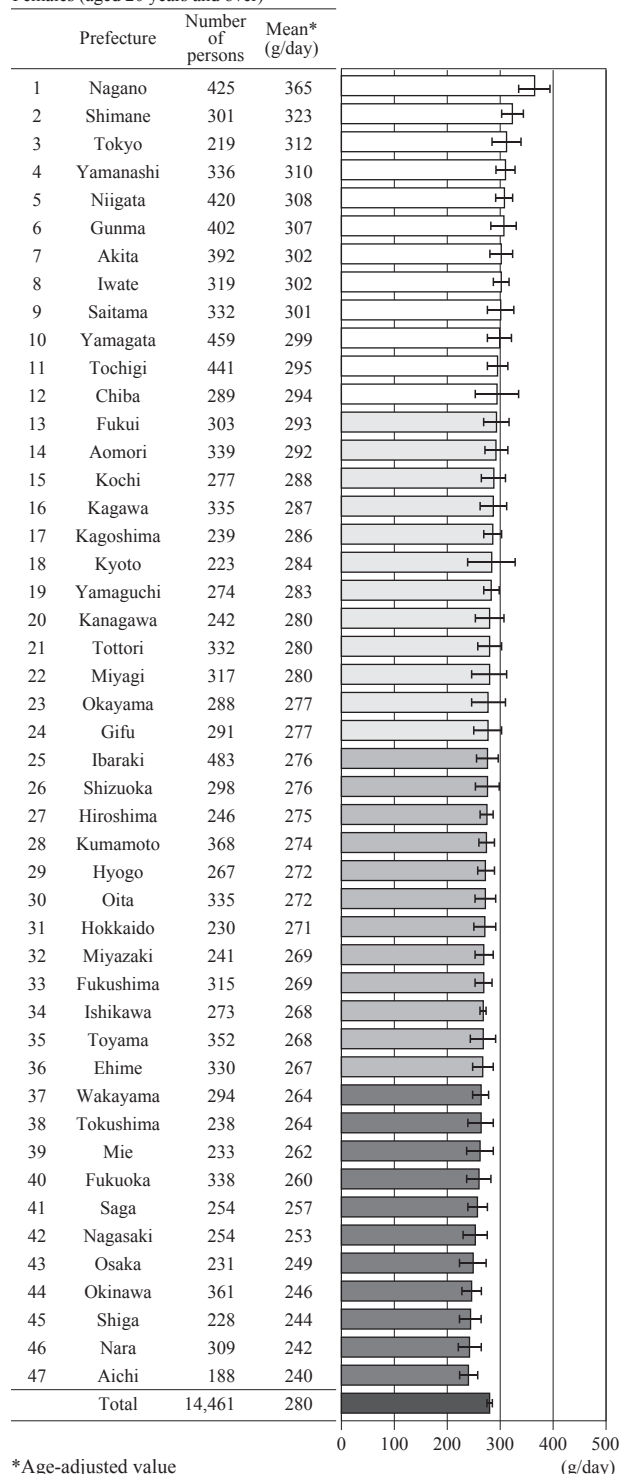
Males (aged 20 years and over)



*Age-adjusted value

*The values were rounded off to the closest whole number.

Females (aged 20 years and over)

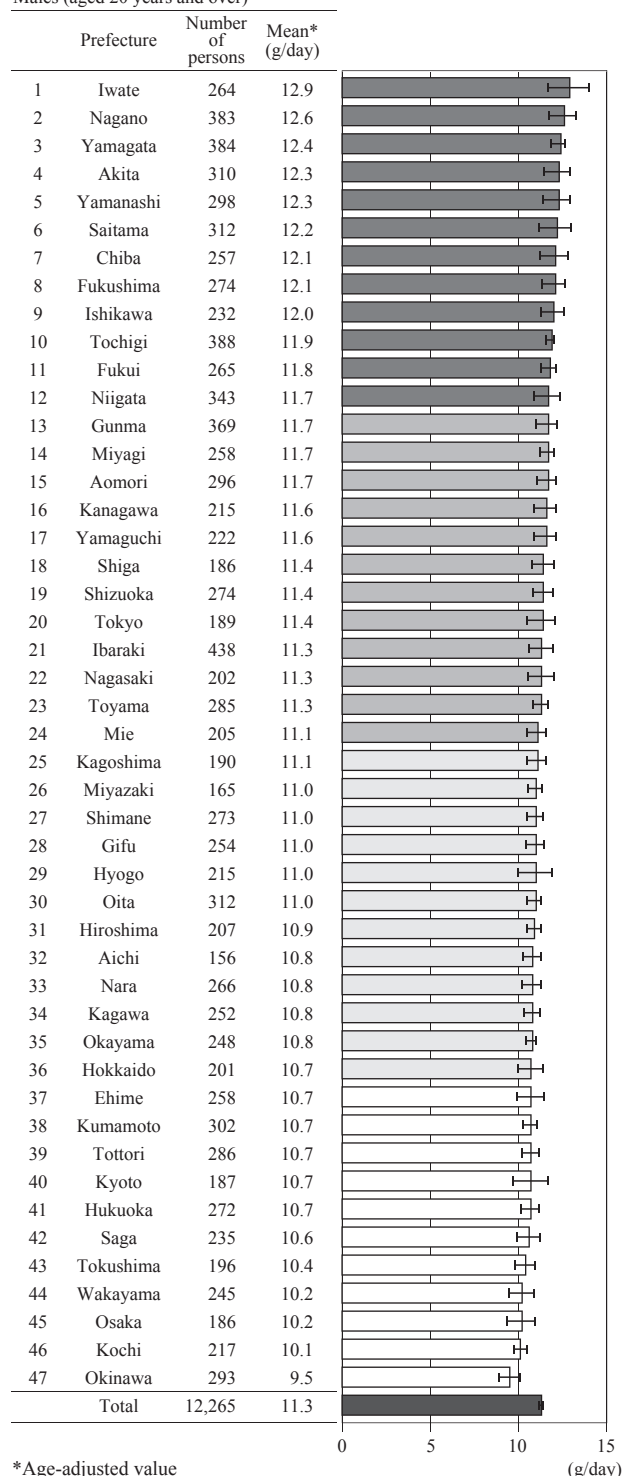


*Age-adjusted value

*The values were rounded off to the closest whole number.

3. Salt Intake

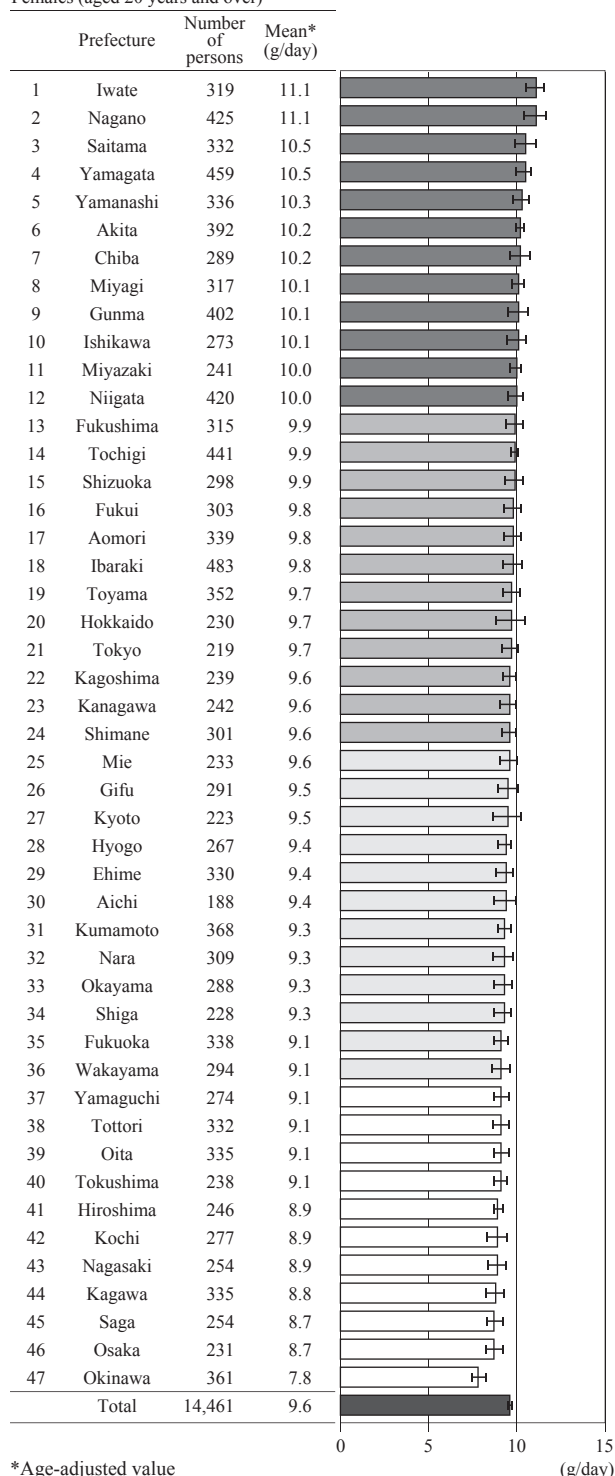
Males (aged 20 years and over)



*Age-adjusted value

*The values were rounded off to the first decimal place.

Females (aged 20 years and over)

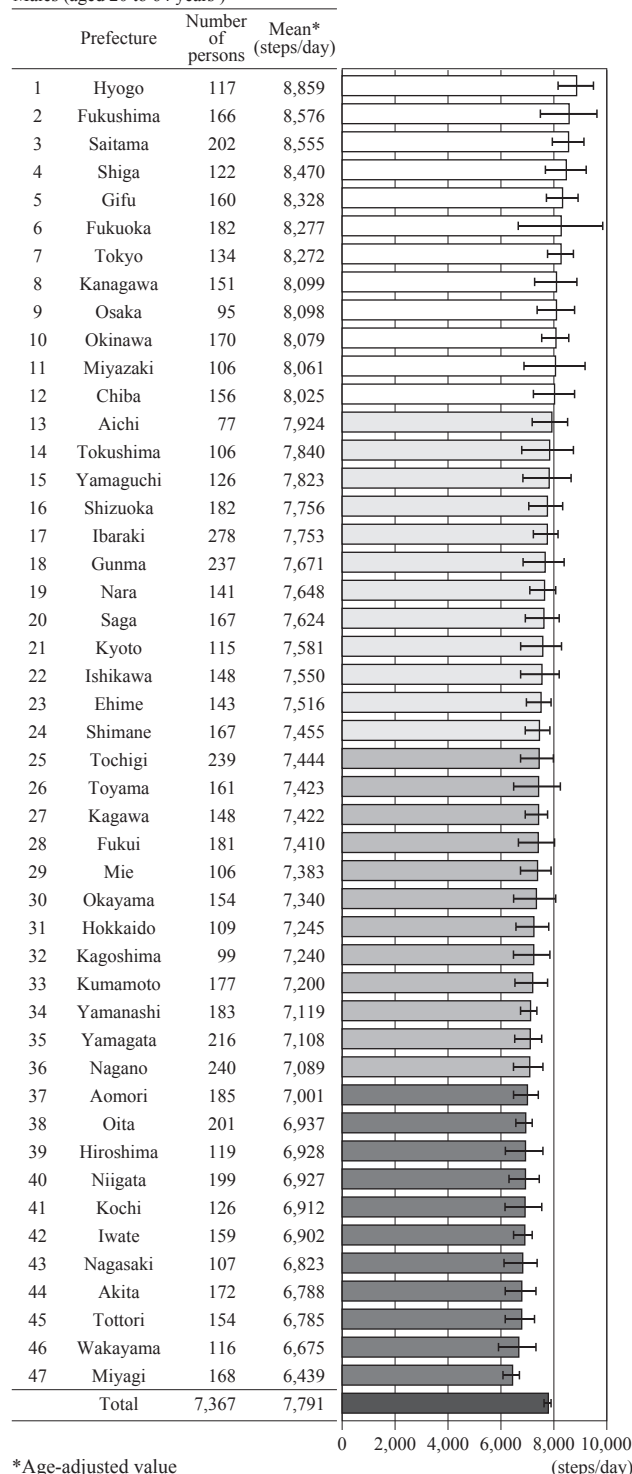


*Age-adjusted value

*The values were rounded off to the first decimal place.

4. Number of Steps per Day

Males (aged 20 to 64 years)

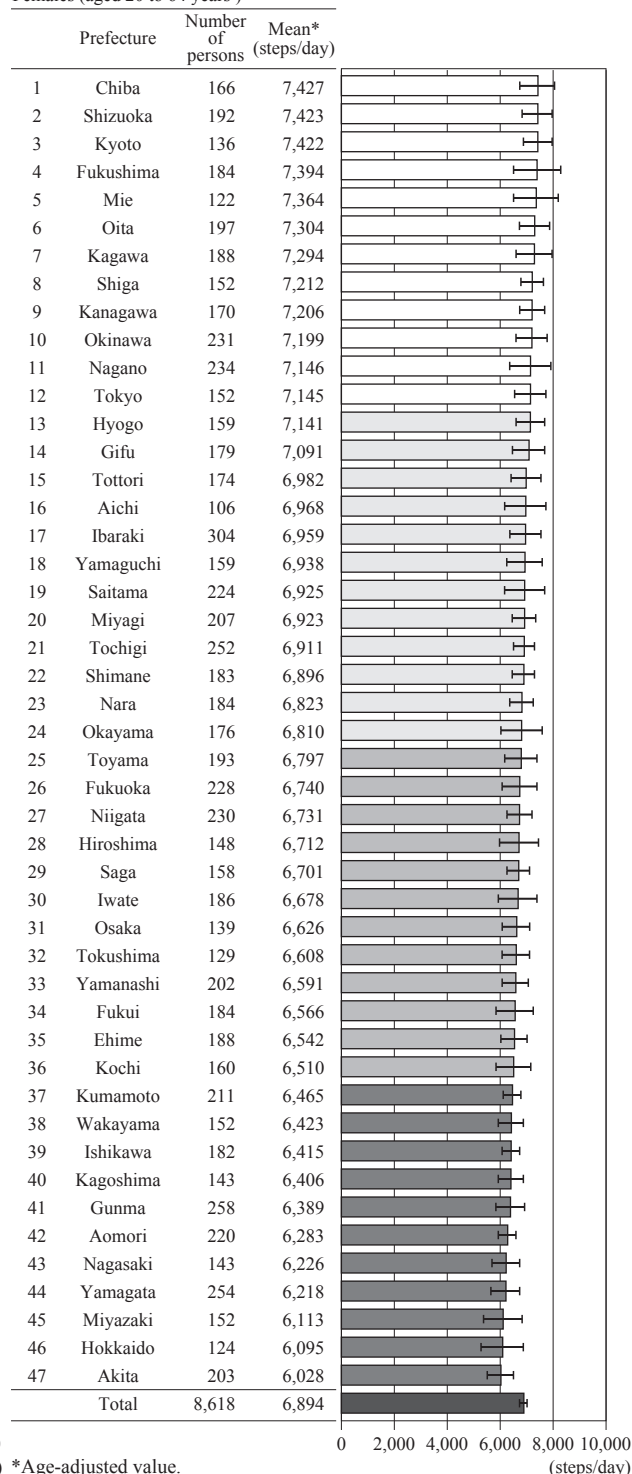


*Age-adjusted value

*The values were rounded off to the closest whole number.

*The people less than 100 steps or 50,000 steps and over were excluded.

Females (aged 20 to 64 years)



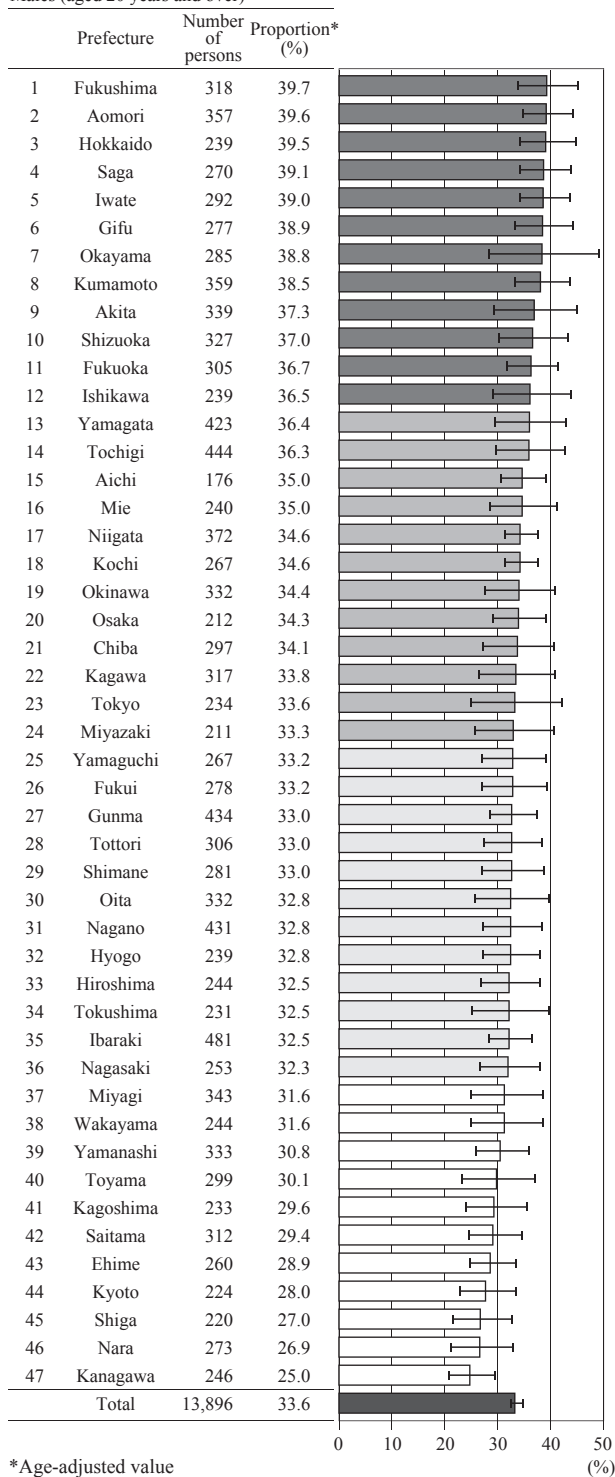
*Age-adjusted value.

*The values were rounded off to the closest whole number.

*The people less than 100 steps or 50,000 steps and over were excluded.

5. Proportion of Regular Smokers

Males (aged 20 years and over)



*Age-adjusted value

*The values were rounded off to the first decimal place.