This is a summary based on the report of the National Health and Nutrition Survey, 2015 published by the Ministry of Health, Labor and Welfare.

For more information, please visit the following site (in Japanese): https://www.mhlw.go.jp/bunya/kenkou/kenkou_eiyou_chousa.html.

National Institute of Health and Nutrition

The National Health and Nutrition Survey (NHNS) Japan, 2015

Summary

Contents

Summary of the Survey

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

The purpose of this survey was to clarify the physical conditions, nutrient intake, and lifestyle of citizens based on the Health Promotion Act (Law No. 103, enacted in 2002) and to obtain basic data for the comprehensive promotion of their health.

2. Participants

In the Comprehensive Survey of Living Conditions in 2015 (approximately 2,000 areas with 59,000 households and 148,000 family members), participants included households and family members (aged 1 year and over as of November 1, 2015) in 300 area, stratified and randomly extracted from the general census areas.

The following households and family members were excluded from this survey:
<Households>
-Households of which the heads were not Japanese.
-Households which were provided with delivered/prepared meals three times a day.
-One-person households in a live-in situation or residing in dormitories provided with meals.
<Family Members>
-Infants aged 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 with the rest of the family.
-Those who were absent from the household which included migrant workers and those who were (a) working away from home, (b) away on business for a long period (3 months or more), (c) studying away from home, (d) admitted to a social welfare facility (including nursing care facilities), (e) admitted to a hospital for a long period, (f) put out to nurse, (g) imprisoned, and (h) not living together.

3. Purpose and Period of Survey

3.1 Survey items and target age

This survey consisted of a physical examination, dietary survey, and a lifestyle habits questionnaire. The age of the subjects was the age as of November 1, 2015. The survey items and the target age were as follows.

3.1.1 Physical examination

A) Height (aged 1 year and over)
B) Body weight (aged 1 year and over)
C) Abdominal circumference (aged 20 years and over)
D) Blood pressure: systolic and diastolic blood pressure (aged 20 years and over) measured twice a day.
E) Blood tests (aged 20 years and over)
F) Medical interview (aged 20 years and over) regarding the following:
    Drugs in use
        Anti-hypertensives
        Anti-arrhythmic
        Insulin or other oral drugs for treatment of diabetes mellitus
        Cholesterol-lowering
        Antihyperlipidemic (triglyceride lowering)
        Iron supplements for treatment of iron deficiency anemia
    Diagnosis and treatment
        Diagnosis of diabetes
        Treatment for diabetes
    Regular exercise habits
        Presence of restrictions for exercise due to medical reasons
        Frequency of exercise per week
        Average exercise duration per day
        Duration of regular exercise habit

3.1.2 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 for each family member on the day of the survey (meals cooked at home, home meal replacement, buying cooked food, using food delivery 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).

3.1.3 Lifestyle Habits Questionnaire (aged 20 years and over)

Participants were provided with a self-administered questionnaire, in which they answered questions about eating habits, physical activity, exercise, resting (sleep), alcohol intake, smoking, and dental health.
Further, the social environment was examined as an important item in 2015.

3.2 Survey period

The period of this survey was from November 2015.

A) Physical examination: Date on which the highest participation could be achieved, considering circumstances in the national census areas (several dates were established).
B) Dietary survey: One day, excluding Sunday and holidays.
C) Lifestyle habits questionnaire: During the survey period (November).

4. Organizations involved in the survey

The survey system was as follows:

Ministry of Health, Labour and Welfare
↓
(Prefecture / Special districts of cities with public health centers installed)
↓
Public health centers
↓
National health and nutrition investigators
↓
Survey participants

5. Data analyses

The comments related to the evaluation of results such as "significantly higher (or lower, increased, or decreased)" were made based on the statistical tests (level of statistical significance defined as $p < 0.05$). The details are presented below.

5.1 Analysis regarding annual changes

Age-adjusted values were calculated applying the 2010 Census population using the six age groups: 20-29 years, 30-39 years, 40-49 years, 50-59 years, 60-69 years, and ≥70 years[1]. The trend test was performed using the Joinpoint Regression Program which used the mean/proportion and standard error for each year[2]. To test the trend of 3 points, regression analysis was performed based on the oldest survey year. In these trend tests, the adjusted national values were used for the 2012 surveys[3].

5.2 Analysis regarding the comparison between groups

Regarding the comparison between groups, proportions were analyzed using Cochran-Mantel-Haenszel tests and means were analyzed using covariance analysis after adjusting age.

1 Directed estimation method
2 National Cancer Institute (NCI): Joinpoint Trend Analysis Software (https://surveillance.cancer.gov/joinpoint/).
3 Results of NHNS Japan, 2012 (https://www.mhlw.go.jp/bunya/kenkou/eiyou/dl/h24-houkoku.pdf).

6. Collection of Samples and Results

The results were analyzed by the National Institutes of Biomedical Innovation, Health and Nutrition. Of 5,327 target households for the survey, 3507 households that responded to the household status in the dietary survey questionnaire were included in the analysis were included in the analysis.

Number of samples collected with respect to age category

Men and Women	Physical Examination		Blood Test		Dietary Survey		Steps per day		Lifestyle questionnaire	
	n	%	n	%	n	%	n	%	n	%
Total	6,655	100.0	3,320	100.0	7,456	100.0	5,884	100.0	7,066	100.0
1-6 years	326	4.9	-	-	353	4.7	-	-	-	-
7-14 years	501	7.5	-	-	597	8.0	-	-	-	-
15-19 years	239	3.6	-	-	334	4.5	-	-	-	-
20-29 years	388	5.8	142	4.3	470	6.3	466	7.9	553	7.8
30-39 years	633	9.5	322	9.7	709	9.5	653	11.1	833	11.8
40-49 years	918	13.8	482	14.5	1,035	13.9	1,008	17.1	1,212	17.2
50-59 years	856	12.9	473	14.2	959	12.9	931	15.8	1,105	15.6
60-69 years	1,294	19.4	893	26.9	1,373	18.4	1,330	22.6	1,543	21.8
70 years and over	1,500	22.5	1,008	30.4	1,626	21.8	1,496	25.4	1,820	25.8

Men	Physical Examination		Blood Test		Dietary Survey		Steps per day		Lifestyle questionnaire	
	n	%	n	%	n	%	n	%	n	%
Total	3,064	100.0	1,337	100.0	3,502	100.0	2,693	100.0	3,260	100.0
1-6 years	176	5.7	-	-	182	5.2	-	-	-	-
7-14 years	259	8.5	-	-	315	9.0	-	-	-	-
15-19 years	122	4.0	-	-	165	4.7	-	-	-	-
20-29 years	174	5.7	57	4.3	225	6.4	220	8.2	256	7.9
30-39 years	301	9.8	114	8.5	347	9.9	308	11.4	405	12.4
40-49 years	382	12.5	153	11.4	453	12.9	438	16.3	553	17.0
50-59 years	378	12.3	165	12.3	440	12.6	421	15.6	519	15.9
60-69 years	589	19.2	382	28.6	640	18.3	617	22.9	713	21.9
70 years and over	683	22.3	466	34.9	735	21.0	689	25.6	814	25.0

Women	Physical Examination		Blood Test		Dietary Survey		Steps per day		Lifestyle questionnaire	
	n	%	n	%	n	%	n	%	n	%
Total	3,591	100.0	1,983	100.0	3,954	100.0	3,191	100.0	3,806	100.0
1-6 years	150	4.2	-	-	171	4.3	-	-	-	-
7-14 years	242	6.7	-	-	282	7.1	-	-	-	-
15-19 years	117	3.3	-	-	169	4.3	-	-	-	-
20-29 years	214	6.0	85	4.3	245	6.2	246	7.7	297	7.8
30-39 years	332	9.2	208	10.5	362	9.2	345	10.8	428	11.2
40-49 years	536	14.9	329	16.6	582	14.7	570	17.9	659	17.3
50-59 years	478	13.3	308	15.5	519	13.1	510	16.0	586	15.4
60-69 years	705	19.6	511	25.8	733	18.5	713	22.3	830	21.8
70 years and over	817	22.8	542	27.3	891	22.5	807	25.3	1,006	26.4

7. Others

・The number of analyzed subjects is shown in parentheses in the figures and tables.

・Because the values listed in the collection of results and samples are rounded off, the breakdown total may not match the total number.

Summary of the Results

Part I. Status regarding the social environment and the public needs

1. Intake of Balanced Diets

The proportion of those who eat balanced diets with staple foods, main dishes, and side dishes twice per day or more "almost every day" was 47.6% in men and 52.7% in women. Regarding age groups, the proportion tended to be lower in younger age groups.

Among staple foods, main dishes, and side dishes, the proportion of those who responded "sided dishes" as difficult to combine with other dishes was the highest in both men and women and the value was 76.7% and 74.0%, respectively. The proportion was similar, irrespective of the frequency of balanced diets with staple foods, main dishes, and side dishes.

Additionally, the frequency of eating balanced diets with staple foods, main dishes was significantly associated with a higher proportion of meeting tentative dietary goal for preventing life-style related diseases (Dietary Reference Intakes for Japanese, 2015) for carbohydrate and protein as well as the target (Healthy Japan 21, the second term) for vegetable intake.

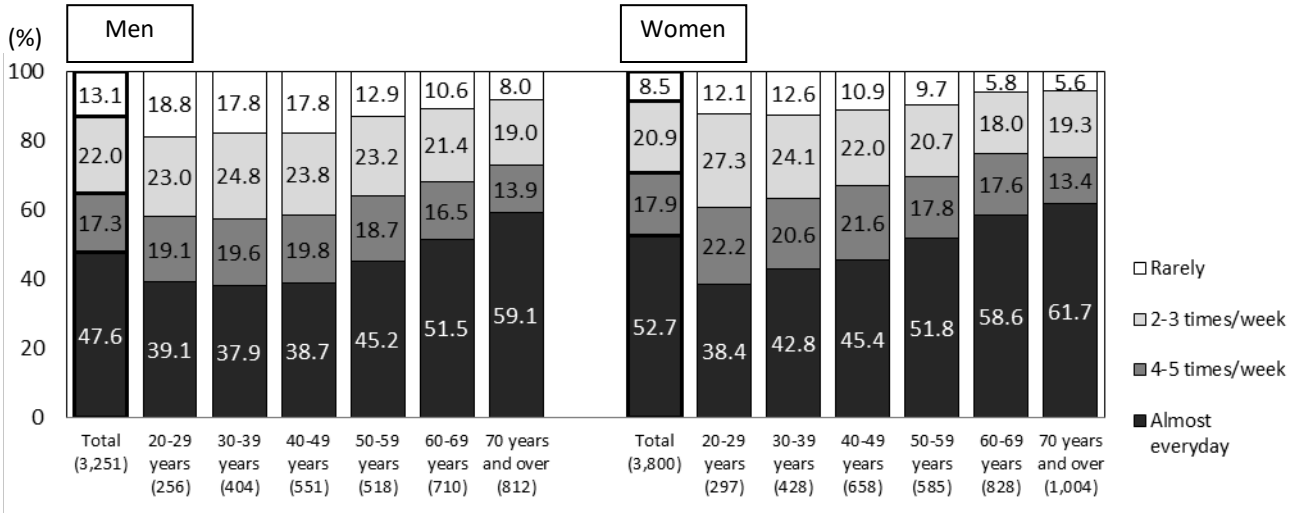


Figure 1. Proportion of those who eat balanced diets with staple foods, main dishes, and side dishes twice per day or more (aged 20 years and over, based on age and sex).

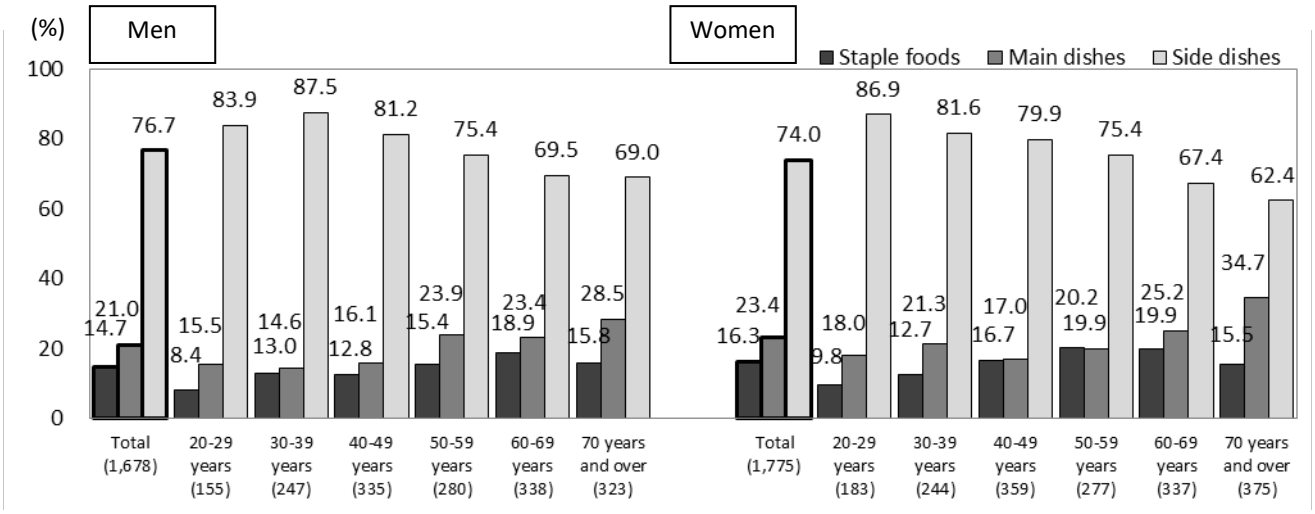


Figure 2. Dishes that are difficult combine with other dishes among staple foods (aged 20 years and over, based on age and sex).

* Multiple answers allowed.

* Those who responded that the frequency of eating balanced diets with staple foods, main dishes, and side dishes was "four to five times per week", "two to three times per week", or "rarely" were included in the analysis.

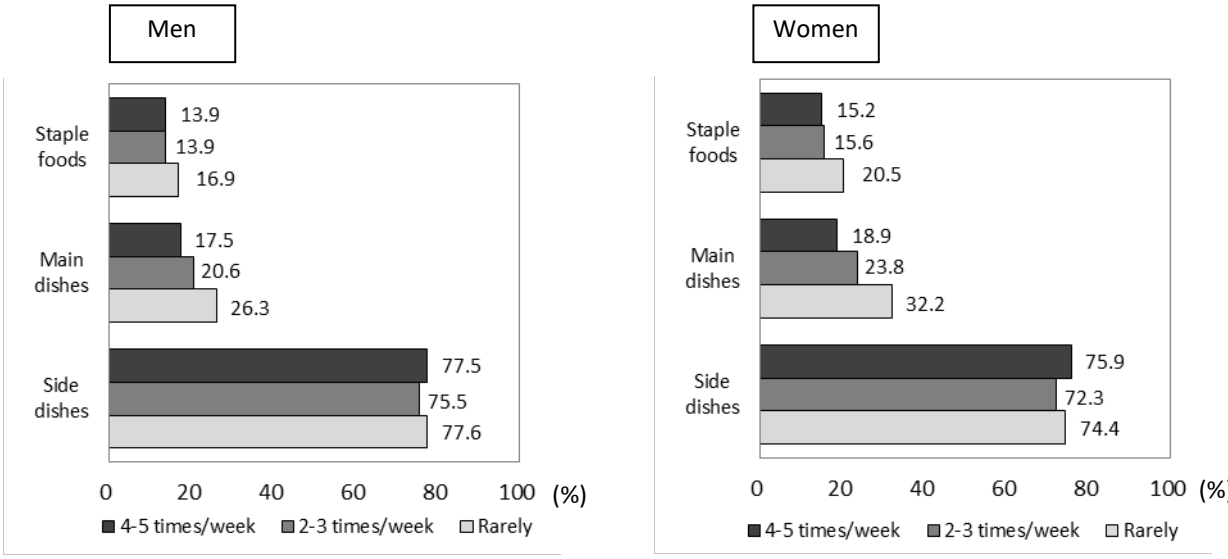


Figure 3. Dishes that are difficult combine with other dishes, according to the frequency eating balanced diets (aged 20 years and over, based on sex).

Table 1. Proportion of meeting tentative dietary goal for preventing life-style related diseases (Dietary Reference Intakes for Japanese, 2015) for carbohydrate and protein as well as the target (Healthy Japan 21) for vegetable intake according to the frequency of eating balanced diets with staple foods, main dishes, and side dishes (aged 20 years and over, based on sex).

Men

		†Those with 50-65% of energy intake from carbohydrate (%)	‡Those with ≥60 g of protein intake (%)	§Those with ≥350 g of vegetable intake (%)
Frequency of eating balanced diets with staple foods, main dishes, and side dishes twice a day or more	Almost everyday	64.2	80.4	42.4
	4-5 times/week	63.5	75.3	31.3
	2-3 times/week	56.8	68.1	25.0
	Rarely	58.1	66.5	19.3

Women

		†Those with 50-65% of energy intake from carbohydrate (%)	‡Those with ≥60 g of protein intake (%)	§Those with ≥350 g of vegetable intake (%)
Frequency of eating balanced diets with staple foods, main dishes, and side dishes twice a day or more	Almost everyday	64.9	80.6	38.5
	4-5 times/week	67.5	78.0	28.2
	2-3 times/week	55.6	67.7	22.2
	Rarely	58.0	58.7	17.4

† Proportion of meeting tentative dietary goal for preventing life-style related diseases of Dietary Reference Intakes for Japanese, 2015 for carbohydrate.

‡ Proportion of meeting tentative dietary goal for preventing life-style related diseases of Dietary Reference Intakes for Japanese, 2015 for protein.

§ Proportion of meeting the target of Healthy Japan 21, the second term for vegetable intake.

2. Status of Eating Out and Intake of Takeaway Foods

The proportion of those who eat out once a week or more was 40.6% in men and 25.1% in women and the proportion was higher in younger age groups. The proportion of those who eat takeaway foods was 41.1% in men and 39.4% in women, and the proportion was relatively high among individuals aged 20 to 59 years.
The proportion of those who eat out or eat takeaway foods regularly* was 41.3% in men and 29.2% in women and the proportion was the highest among individuals aged 20 to 29 years and was the lowest among individuals aged 70 years and over.
Additionally, the frequency of eating balanced diets with staple foods, main dishes, and side dishes was significantly lower in those who eat out or eat takeaway foods regularly* compared with that in those who eat such foods rarely*.
* "Those who eat out or eat takeaway foods regularly" refers to those who eat out or eat takeaway foods twice a week or more while "those who eat out or eat takeaway foods rarely" refers to those who eat out or eat takeaway foods once a week or less.

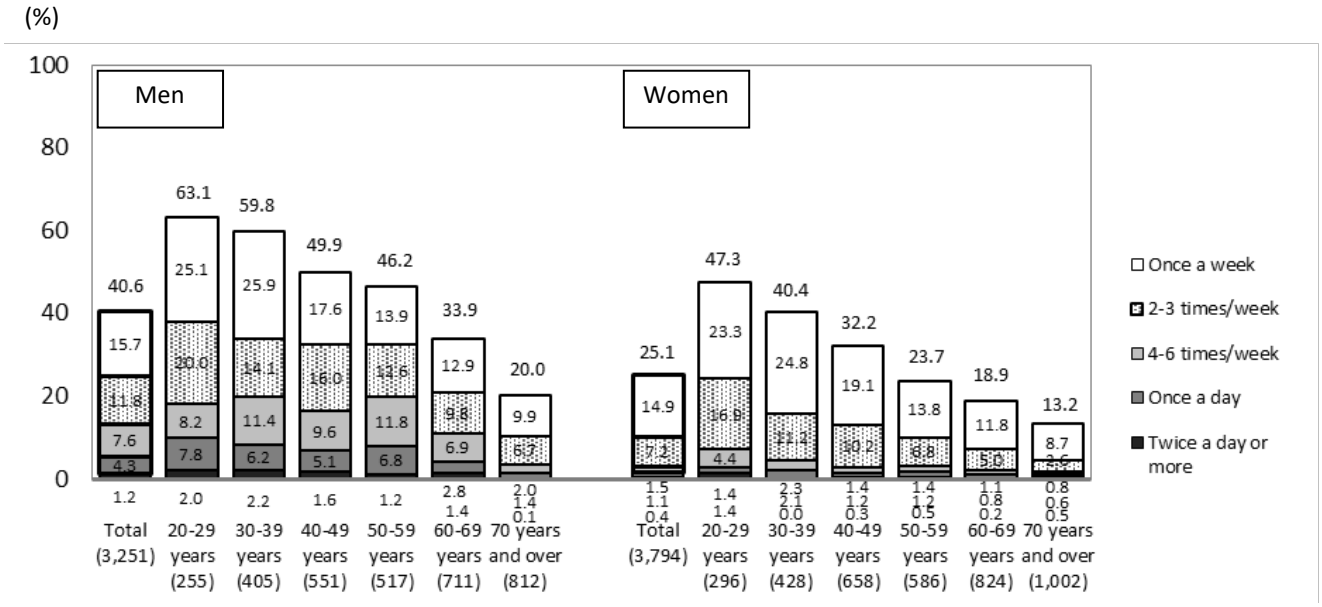


Figure 4. Proportion of those who eat out (aged 20 years and over, based on age and sex).

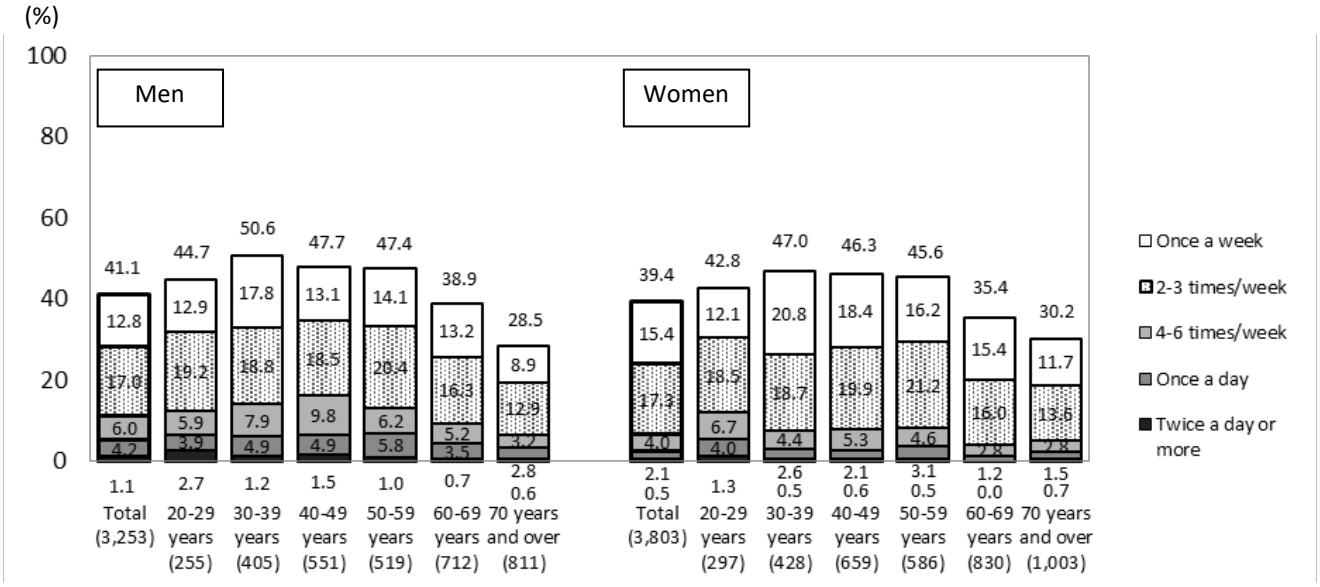


Figure 5. Proportion of those who eat takeaway foods (aged 20 years and over, based on age and sex).

Table 2. Proportion of those who eat out or eat takeaway foods (aged 20 years and over, based on sex).

Men

Frequency of eating out (%)		Frequency of eating takeaway foods (%)	
		Twice a week or more†	Once a week or less‡
Twice a week or more†		11.9	13.0
Once a week or less‡		16.4	58.7

Eat regularly 41.3% | Eat rarely 58.7%

Women

Frequency of eating out (%)		Frequency of eating takeaway foods (%)	
		Twice a week or more†	Once a week or less‡
Twice a week or more†		5.0	5.2
Once a week or less‡		19.0	70.8

Eat regularly 29.2% | Eat rarely 70.8%

† "Twice a week or more" consists of "twice to three times a week", "four to six times a week", "once a day", and "twice a day or more".

‡ "Once a week or less" consists of "once a week", "less than once a week", and "never".

Table 3. Proportion of those who eat out or eat takeaway foods regularly (aged 20 years and over, based on age and sex).

	Total		20-29 years		30-39 years		40-49 years		50-59 years		60-69 years		70 years and over	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Men	1,341	41.3	137	53.7	195	48.1	276	50.2	263	50.9	264	37.2	206	25.4
Women	1,106	29.2	126	42.6	143	33.4	227	34.5	193	32.9	201	24.4	216	21.6

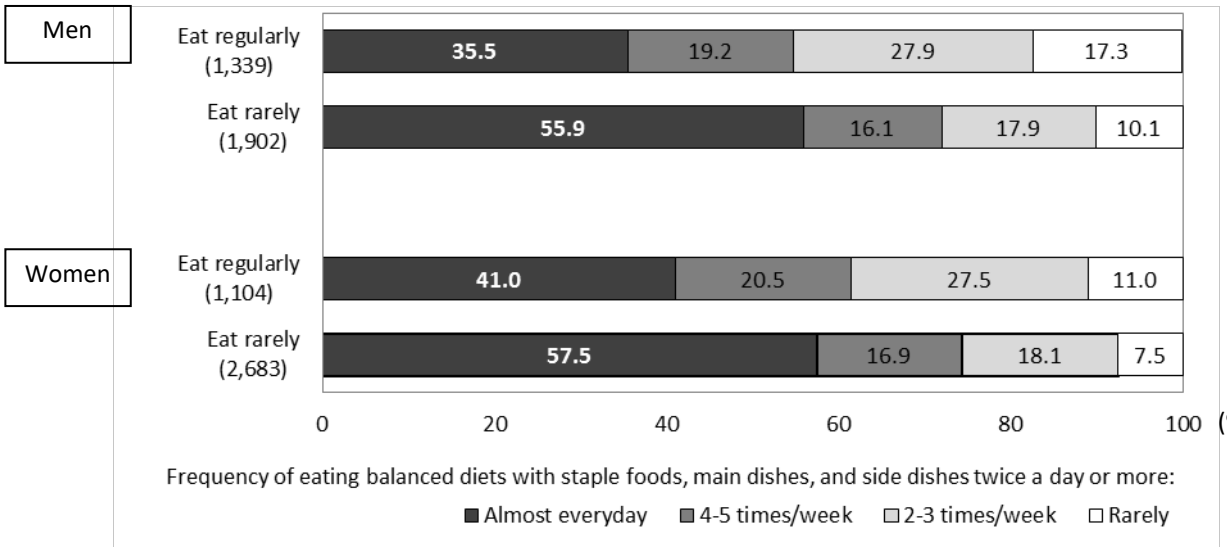


Figure 6. Frequency of eating balanced diets with staple foods, main dishes, and side dishes according to the frequency of eating out or eat takeaway foods (aged 20 years and over, based on sex).

* "Those who eat out or eat takeaway foods regularly" refers to those who eat out or eat takeaway foods twice a week or more while "those who eat out or eat takeaway foods rarely" refers to those who eat out or eat takeaway foods once a week or less.

3. Status of Food Label Use

The proportion of those who use food label while food purchase was 26.1% in men and 53.0% in women. Regarding nutrients were necessary in food labels, the proportion of those who responded "none" was the highest in men while the proportion of those who responded "energy" was the highest in women. The proportion of those who responded "energy" was the highest in those who use food label while food purchase and the value was 63.5%. On the other hand, the proportion of those who responded "none" was the highest in those who don't use food label while food purchase and the value was 45.3%.

* "Those who use food label while food purchase" refers to those who responded "always" and "sometimes", while "those who don't use food label while shopping" refers to those who responded "rarely" and "never".

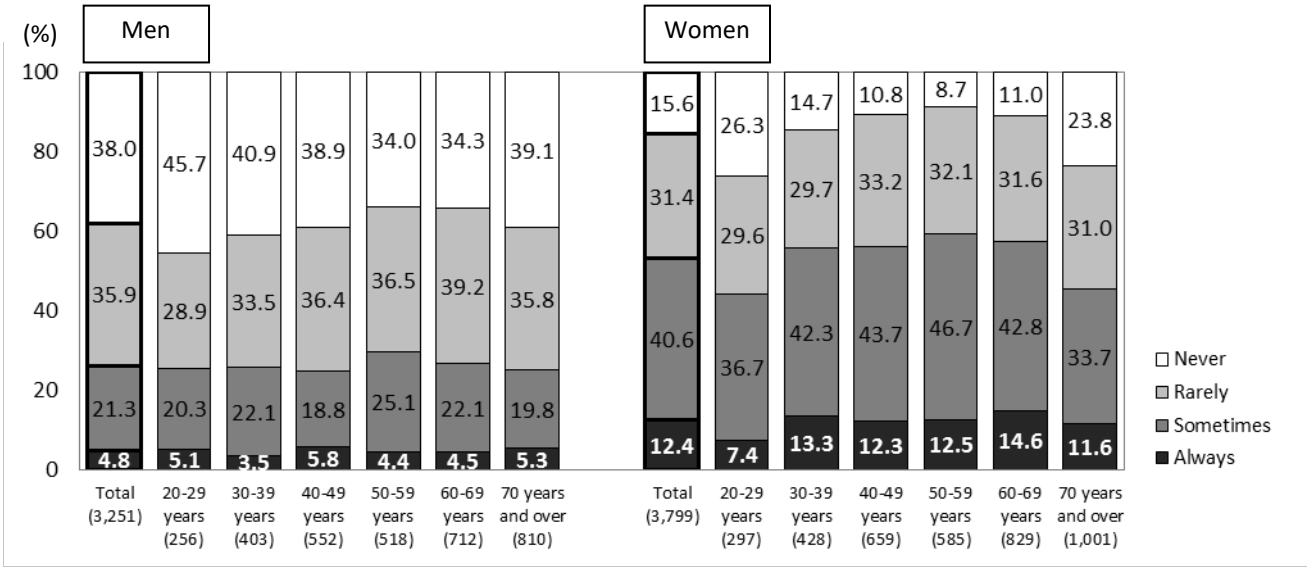


Figure 7. Proportion of those who use food label (aged 20 years and over, based on age and sex).

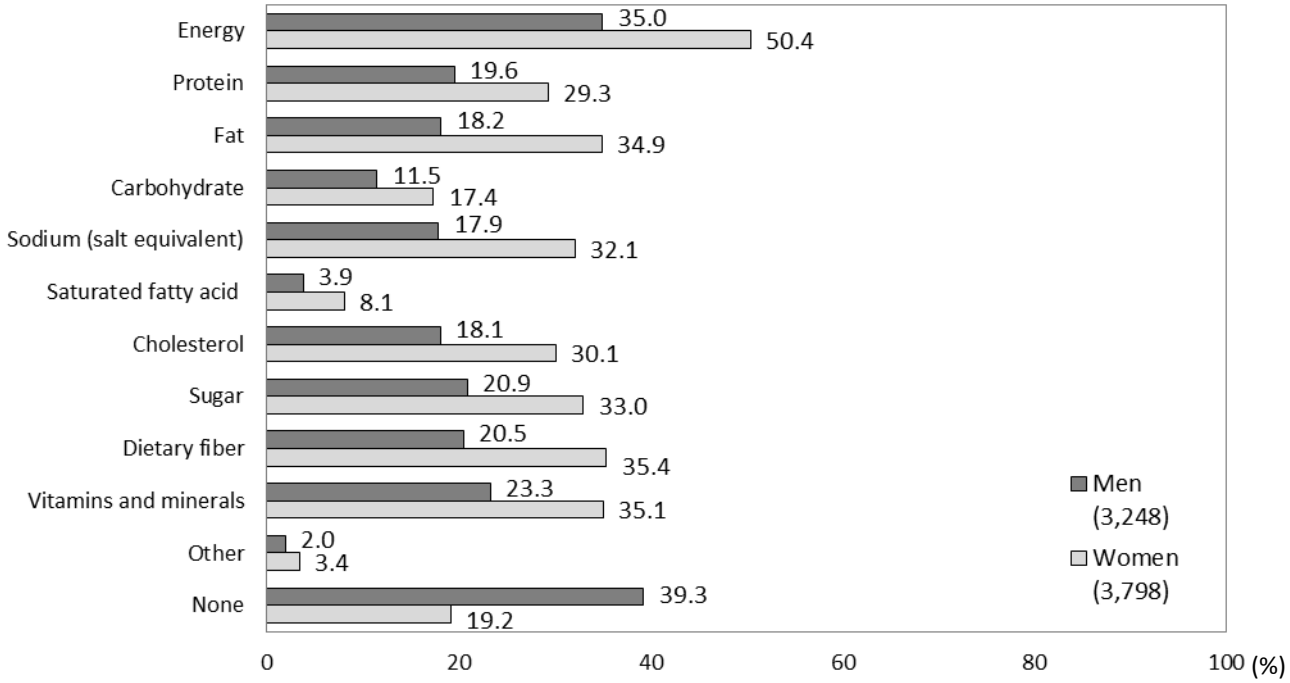


Figure 8. Nutrient contents needed in food label as a reference for purchasing food items (aged 20 years and over, based on sex).

* Multiple answers allowed.

Table 4. Nutrient contents necessary for food labels as a information for purchasing food items (aged 20 years and over, based on age and sex).

		Total		20-29 years		30-39 years		40-49 years		50-59 years		60-69 years		70 years and over	
		n	%	n	%	n	%	n	%	n	%	n	%	n	%
Men	Total	3,248	-	255	-	403	-	552	-	518	-	712	-	808	-
	Energy	1,137	35.0	110	43.1	169	41.9	233	42.2	209	40.3	218	30.6	198	24.5
	Protein	638	19.6	80	31.4	82	20.3	99	17.9	87	16.8	129	18.1	161	19.9
	Fat	590	18.2	41	16.1	77	19.1	98	17.8	95	18.3	123	17.3	156	19.3
	Carbohydrate	373	11.5	41	16.1	60	14.9	59	10.7	58	11.2	71	10.0	84	10.4
	Sodium (salt equivalent)	580	17.9	29	11.4	63	15.6	77	13.9	98	18.9	143	20.1	170	21.0
	Saturated fatty acid	128	3.9	10	3.9	17	4.2	26	4.7	20	3.9	27	3.8	28	3.5
	Cholesterol	588	18.1	18	7.1	72	17.9	97	17.6	107	20.7	133	18.7	161	19.9
	Sugar	680	20.9	37	14.5	78	19.4	108	19.6	111	21.4	182	25.6	164	20.3
	Dietary fiber	667	20.5	52	20.4	75	18.6	109	19.7	98	18.9	153	21.5	180	22.3
	Vitamins and minerals	758	23.3	77	30.2	126	31.3	140	25.4	128	24.7	146	20.5	141	17.5
	Other	65	2.0	3	1.2	12	3.0	13	2.4	8	1.5	12	1.7	17	2.1
	None	1,276	39.3	92	36.1	140	34.7	206	37.3	180	34.7	292	41.0	366	45.3
Women	Total	3,798	-	297	-	428	-	659	-	586	-	828	-	1,000	-
	Energy	1,915	50.4	181	60.9	253	59.1	410	62.2	362	61.8	412	49.8	297	29.7
	Protein	1,111	29.3	76	25.6	129	30.1	185	28.1	187	31.9	244	29.5	290	29.0
	Fat	1,325	34.9	93	31.3	136	31.8	237	36.0	236	40.3	351	42.4	272	27.2
	Carbohydrate	659	17.4	69	23.2	90	21.0	113	17.1	99	16.9	152	18.4	136	13.6
	Sodium (salt equivalent)	1,219	32.1	54	18.2	120	28.0	209	31.7	233	39.8	297	35.9	306	30.6
	Saturated fatty acid	308	8.1	10	3.4	35	8.2	61	9.3	65	11.1	81	9.8	56	5.6
	Cholesterol	1,145	30.1	48	16.2	84	19.6	173	26.3	189	32.3	335	40.5	316	31.6
	Sugar	1,254	33.0	86	29.0	137	32.0	215	32.6	222	37.9	319	38.5	275	27.5
	Dietary fiber	1,345	35.4	103	34.7	174	40.7	246	37.3	206	35.2	280	33.8	336	33.6
	Vitamins and minerals	1,333	35.1	115	38.7	196	45.8	247	37.5	223	38.1	262	31.6	290	29.0
	Other	130	3.4	7	2.4	18	4.2	24	3.6	28	4.8	28	3.4	25	2.5
	None	728	19.2	51	17.2	58	13.6	91	13.8	75	12.8	145	17.5	308	30.8

* The breakdown total is not 100% because multiple answers allowed.

* The shaded cells show the most selected point for each age category.

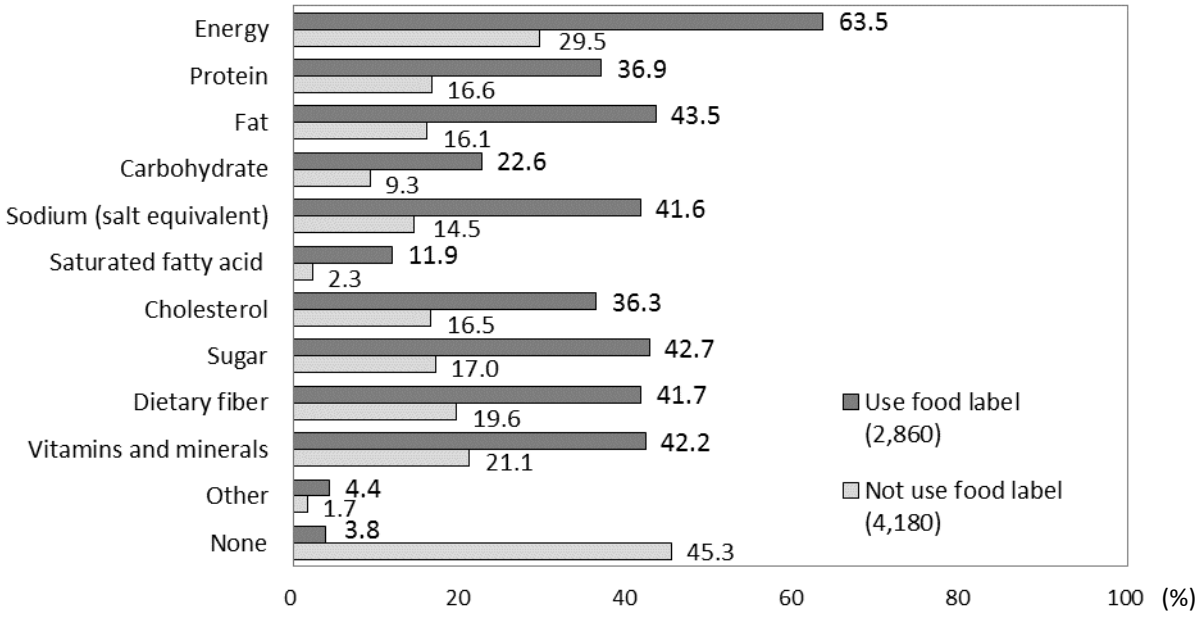


Figure 9. Nutrient contents necessary for food labels as information for purchasing food items according to the frequency of food label use (aged 20 years and over, total of men and women).

* "Those who use food label while shopping" refers to those who responded "always" and "sometimes", while "those who don't use food label when purchasing food" refers to those who responded "rarely" and "never".

4. Places to Promote Physical Activity

The proportion of those who responded "community center" as the place available to exercise was the highest in both men and women, and the value was 74.9% in men and 76.1% in women.
According to the status of exercise habits, the proportion of those who responded "parks allowed to exercise", "safe footpath and bicycle tracks", and "playgrounds, tennis courts, and baseball fields" as the place available to exercise was higher in those with regular exercise habits compared with that in those without. Among those without regular exercise habits, more than 60% of participants responded "community center", "parks allowed to exercise", and "safe footpath and bicycle tracks" as the place available to exercise.
Among those without regular exercise habits, except for those who responded "none", the proportions of those who responded "parks allowed to exercise", "safe footpath and bicycle tracks" and "gyms" as the place available to exercise where were required to be improved was relatively high and the values were more than 20%.

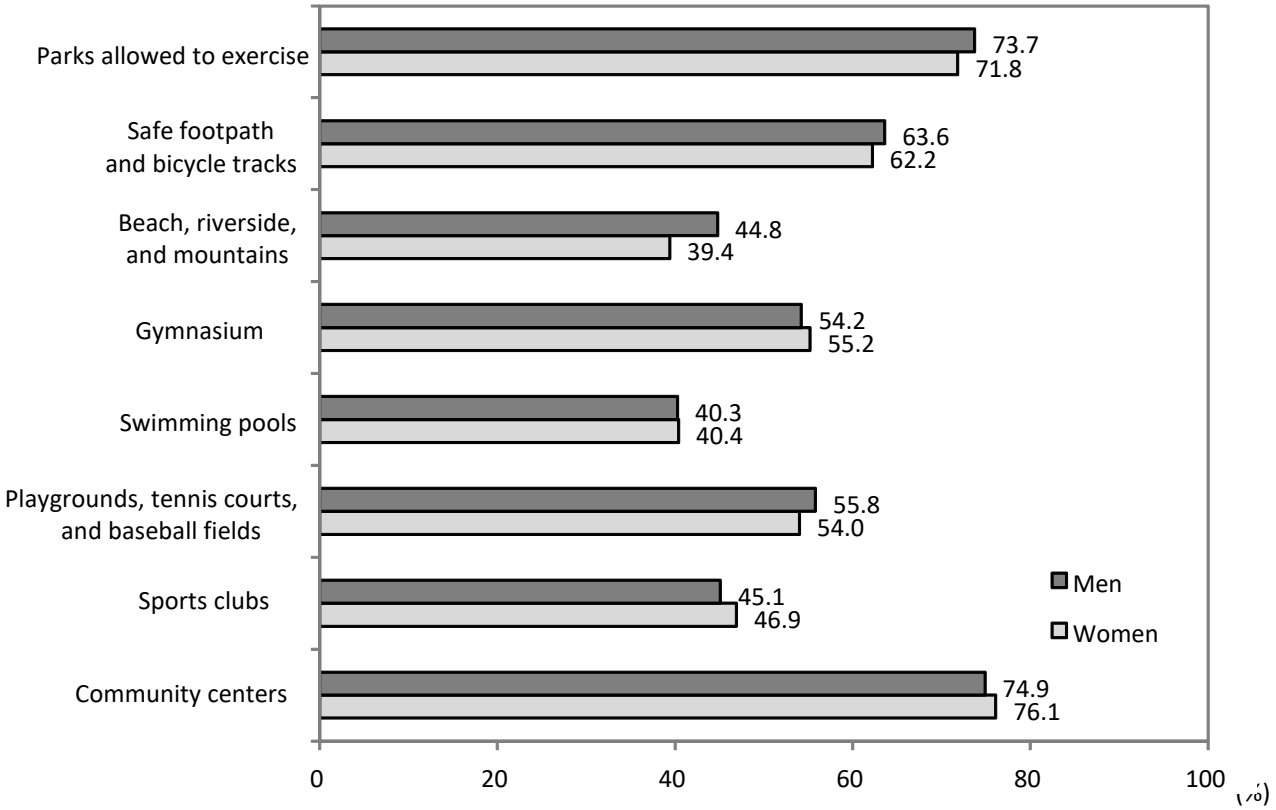


Figure 10. Place available to exercise in the neighborhood (aged 20 years and over, based on sex).

* "Place in the neighborhood" refers to the place where it takes 10 minutes or less by foot, bicycle, or car from home or the place in commuting route.

* The proportion of those who responded to each place was shown.

* The number of participants included in the analysis differed in each question because those without response were excluded from the analysis.

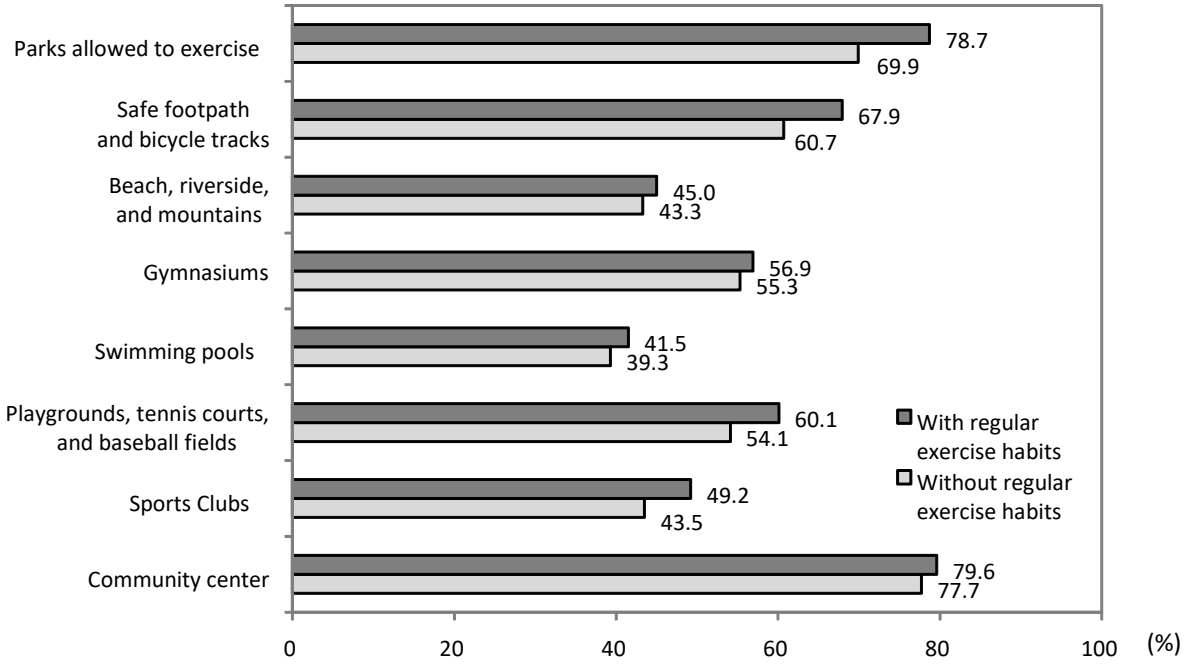


Figure 11. Place available to exercise according to the existence of exercise habits (aged 20 years and over, total of men and women).

* "Those with regular exercise habits" refers to those with exercise activities for 30 minutes or longer per session, twice a week or more for at least one year.

* The proportion of those who reported each of places as the place availables to exercise was shown.

* The number of participants included in the analysis differed in each question because those without response were excluded from the analysis.

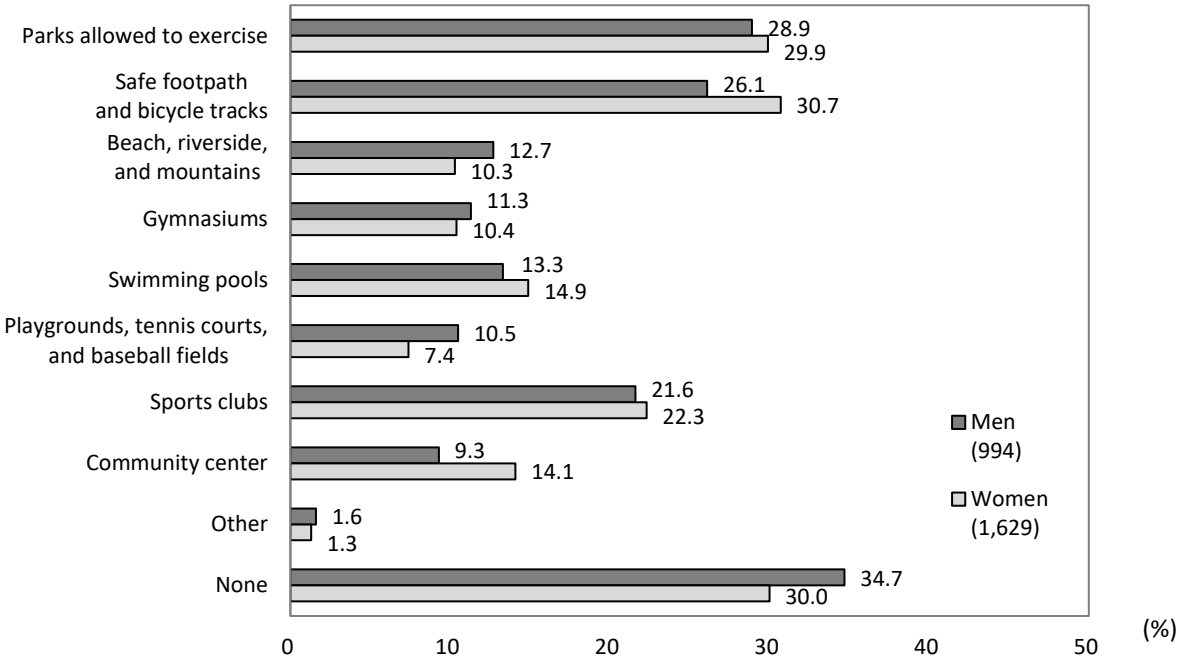


Figure 12. Place available to exercise where was required to be improved among those without regular exercise habits (aged 20 years and over, based on sex).

* "Exercise" refers to a leisure time activity, such as sports and training, conducted as an aim of health promotion or improvement of physical strength.

* Multiple responses were allowed.

5. Ensuring of Adequate Rest

Regarding barriers to ensure sufficient sleep, except for those who responded "none" or "other", the proportion of those who responded "job" as the barrier was the highest among men aged 20 to 50 years and the value was 31.6% in individuals aged 20 to 29 years, 39.3% in individuals aged 30 to 39 years, 40.5% in individuals aged 40 to 49 years, and 32.2% in individuals aged 50 to 59 years. In women, those who responded "using a mobile phone, texting, and/or playing video game before bedtime" was the highest in individuals aged 20 to 29 years (33.3%), while "child care" and "housework" were the highest in individuals aged 30 to 39 years (32.7%) and 40 to 49 years (27.9%), respectively. According to the mean sleeping duration per day, among participants whose sleeping duration were less than 6 hours/day, the proportion of those who responded "job" as the barrier was the highest, then "health status" in men while "housework" was the highest, then "job" in women, except for those who responded "none" or "other" as the barrier. Among those with barriers to ensure sufficient sleep duration, the proportion of those who responded "shortening of work hours" as the most necessary solution to ensure sufficient sleep duration was the highest in men aged 20 to 59 years while the highest response was "not play with cell phone before bedtime" in women aged 20 to 29 years, "support for housework" in women aged 40 to 49 years, and "improvement of health status" in both men and women aged 60 years and over.

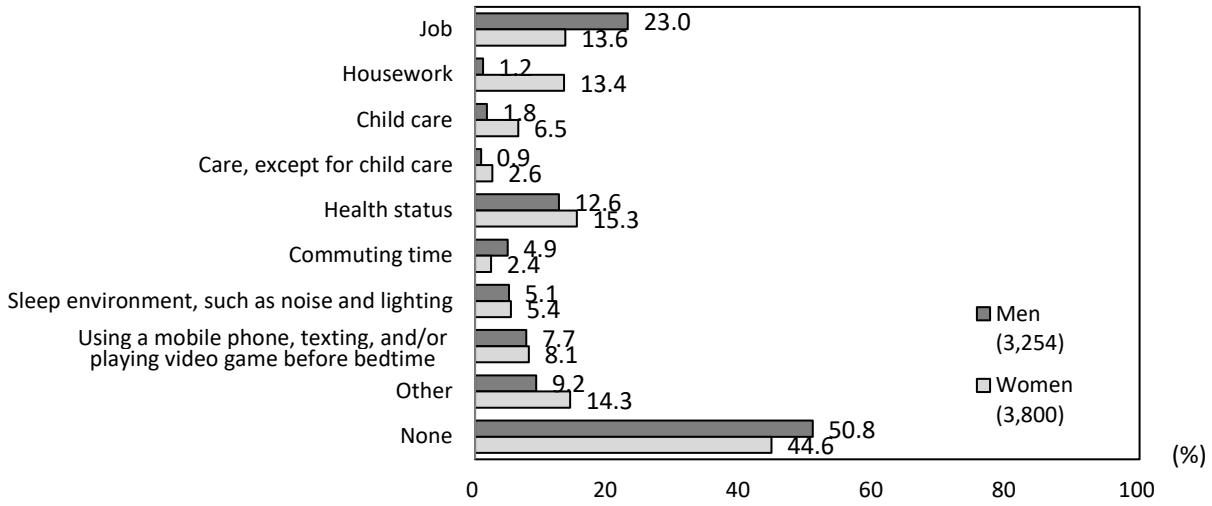


Figure 13. Barriers to ensure sufficient sleep duration (aged 20 years and over, based on sex).

* Multiple responses were allowed.

Table 5. Barriers to ensure sufficient sleep duration (aged 20 years and over, based on age and sex).

		n	First barrier		Second barrier		Third barrier	
Men	20-29 years	256	None	34.4%	Job	31.6%	Using a mobile phone, texting, and/or playing video games before bedtime	24.6%
	30-39 years	405	Job	39.3%	None	36.0%	Using a mobile phone, texting, and/or playing video games before bedtime	19.8%
	40-49 years	553	Job	40.5%	None	38.0%	Other	9.8%
	50-59 years	519	None	46.4%	Job	32.2%	Health status	10.0%
	60-69 years	713	None	63.1%	Health status	14.4%	Job	12.9%
	70 years and over	808	None	54.0%	Health status	20.0%	Other	11.8%
Women	20-29 years	297	Using a mobile phone, texting, and/or playing video game before bedtime	33.3%	Job	30.0%	None	24.2%
	30-39 years	428	Child care	32.7%	None	26.2%	Housework	22.4%
	40-49 years	659	None	36.0%	House work	27.9%	Job	20.5%
	50-59 years	586	None	37.5%	Job	19.6%	Other	18.1%
	60-69 years	829	None	53.9%	Other	18.5%	Health status	14.4%
	70 years and over	1,001	None	60.5%	Health status	22.1%	Other	12.3%

* Multiple responses were allowed.

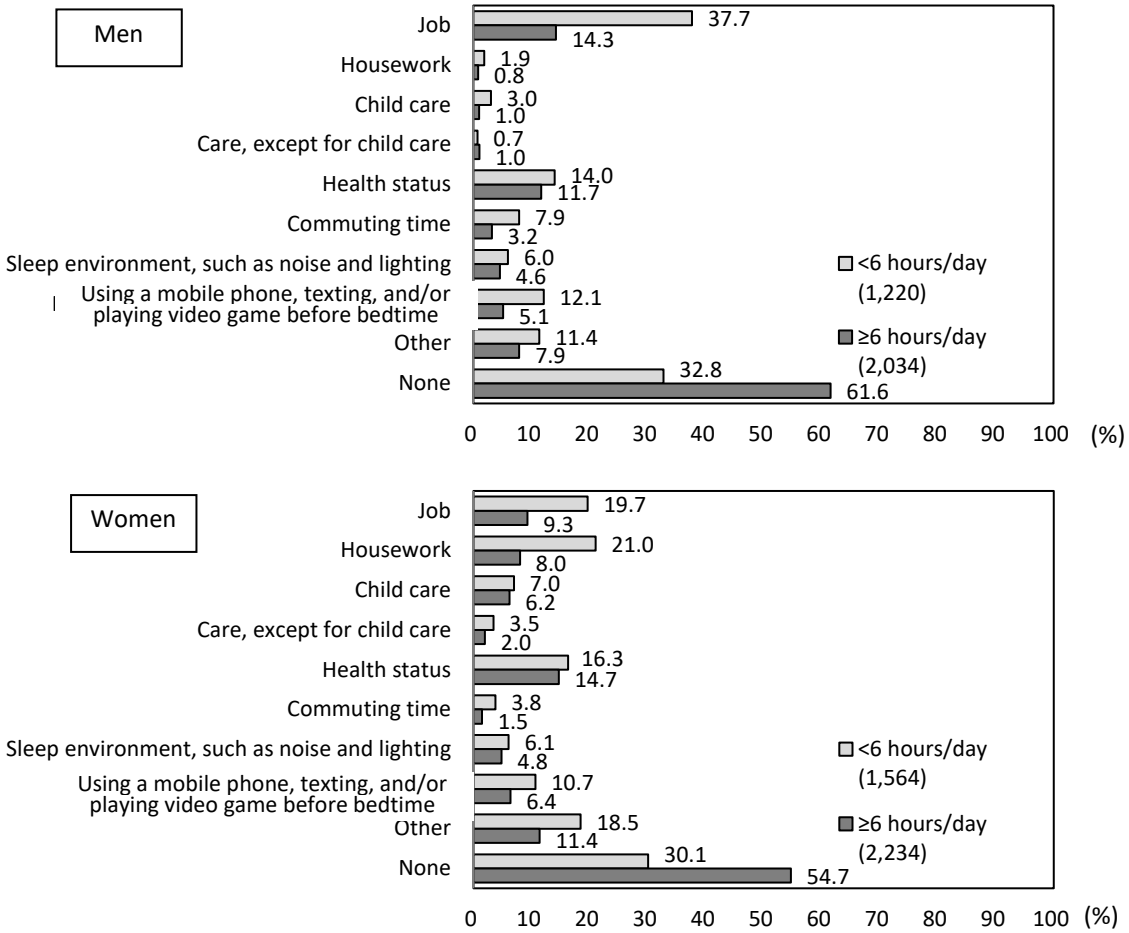


Figure 14. Barriers to ensure sufficient sleep duration according to mean sleep duration per day (aged 20 years and over, based on sex).

* Multiple responses were allowed.

Table 6. The most necessary solution to ensure sufficient sleep duration among those with barriers to ensure sufficient sleep (aged 20 years and over, based on age and sex).

		n	First barrier		Second barrier		Third barrier	
Men	20-29 years	150	Shortening of work hours	28.7%	Not use a mobile phone, texting, and/or playing video game before bedtime	26.0%	None	11.3%
	30-39 years	235	Shortening of work hours	38.7%	Not use a mobile phone, texting, and/or playing video game before bedtime	20.4%	None	9.8%
	40-49 years	312	Shortening of work hours	34.6%	None	15.7%	Improvement of sleep environment	15.1%
	50-59 years	259	Shortening of work hours	31.3%	Other	13.5%	Improvement of health status	13.1%
	60-69 years	248	Improvement of health status	35.5%	None	20.6%	Improvement of sleep environment/other	12.1%
	70 years and over	287	Improvement of health status	43.6%	None	25.1%	Other	13.2%
Women	20-29 years	210	Not use a mobile phone, texting, and/or playing video game before bedtime	31.4%	Shortening of work hours	16.2%	Improvement of sleep environment	10.0%
	30-39 years	284	None	19.7%	Support with child care	17.6%	Not use a mobile phone, texting, and/or playing video game before bedtime	17.3%
	40-49 years	375	Support with housework	20.8%	None	18.4%	Other	14.4%
	50-59 years	344	Other	18.3%	Improvement of health status	17.4%	Shortening of work hours	14.5%
	60-69 years	367	Improvement of health status	25.3%	Other	21.8%	None	18.3%
	70 years and over	388	Improvement of health status	42.5%	None	20.1%	Other	16.2%

* Except for those without barriers to ensure sufficient sleep.

6. Prevention of Passive Smoking

According to places, the proportion of those exposed passive smoking past one month (except for regular smokers) was the highest in "restaurants" (41.4%), followed by "places of amusement" (33.4%) and "workplace" (30.9%).
Among non-smoker, the proportion of those who responded "restaurants" as the place where the promotion of countermeasures to prevent passive smoking were required to be taken was the highest (35.0%), followed by "street" (34.8%) and "outdoor places where children go or are placed, such as parks and commuting routes" (28.2%).

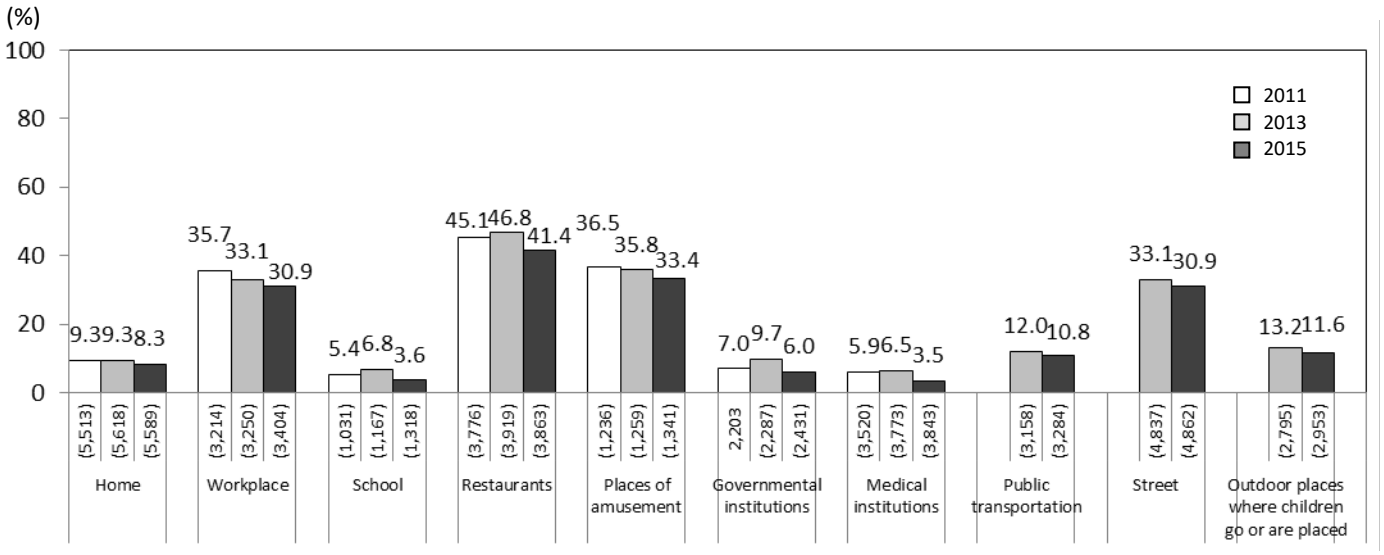


Figure 15. Proportion of those exposed passive smoking in 2011, 2013, and 2015 (aged 20 years and over, total of men and women, except for regular smokers).

* "Those exposed passive smoking" refers to those exposed passive smoking every day at home or once a month or more out of home.

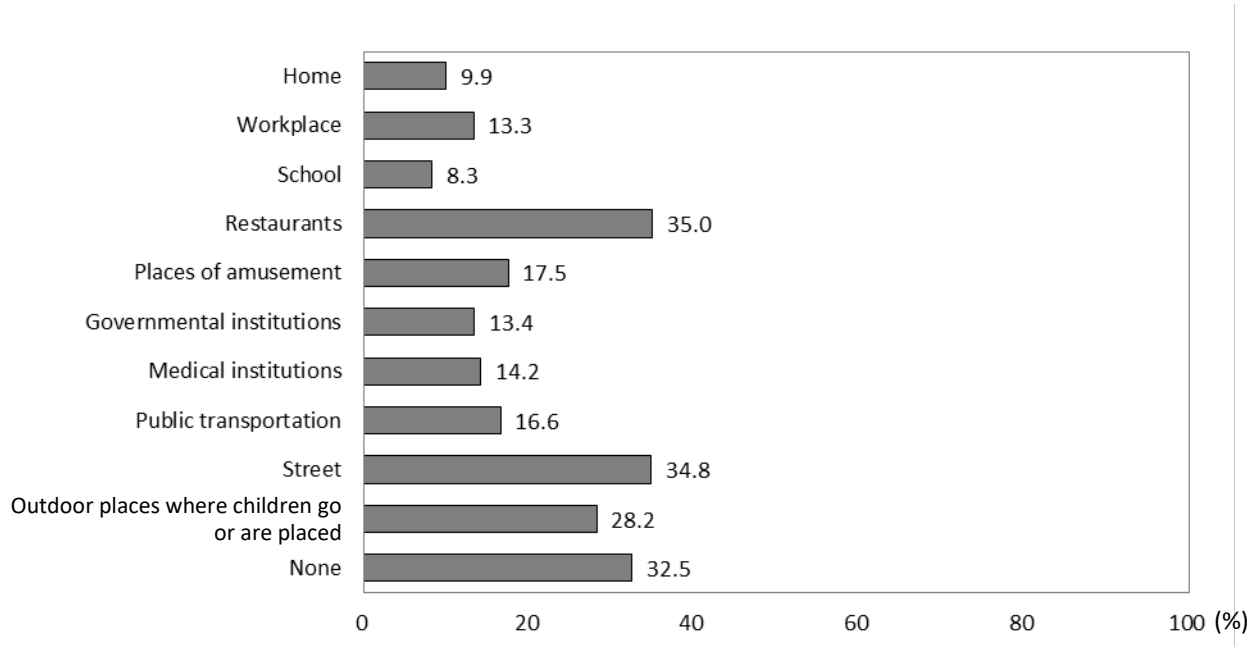


Figure 16. Place where the promotion of countermeasures to prevent passive smoking are required to be taken among non-smokers (aged 20 years and over, total of men and women).

* Multiple responses were allowed.
* Places of amusement including amusement arcades, pachinko parlors, and race tracks.
* Governmental institutions including municipal offices and community centers.
* Outdoor places where children go or are placed including parks and commuting routes.

7. Community Ties

The proportion of those who agreed to "people around here are willing to help each other" was 55.9% and the value significantly increased compared with the findings in 2011 among all age groups, except for individuals aged 40 to 49 years and individuals aged 70 years and over.
Additionally, the proportion of those who agreed to "most people in the neighborhood can be trusted", "most people in the neighborhood greet each other", and "if there is a problem, people would work together to deal with the situation" was 55.7%, 82.0%, and 52.4%, respectively, and the value tended to be higher in older age groups.

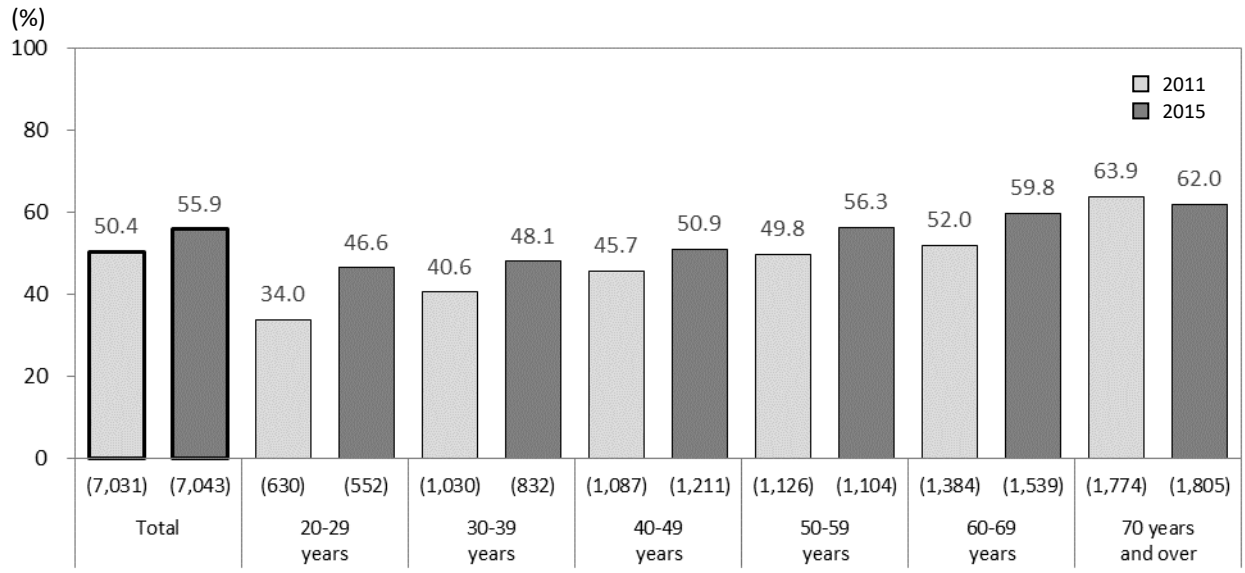


Figure 17. Proportion of those who thought "people around here are willing to help each other" in 2011 and 2015 (aged 20 years and over, based on age, total of men and women).

Table 7. Community Ties (aged 20 years and over, based on age, total of men and women).

		Total		20-29 years		30-39 years		40-49 years		50-59 years		60-69 years		70 years and over	
		n	%	n	%	n	%	n	%	n	%	n	%	n	%
Most people in the neighborhood help each other	Total	7,043	100.0	552	100.0	832	100.0	1,211	100.0	1,104	100.0	1,539	100.0	1,805	100.0
	Agree	3,935	55.9	257	46.6	400	48.1	617	50.9	622	56.3	920	59.8	1,119	62.0
	Strongly agree	639	9.1	43	7.8	40	4.8	64	5.3	62	5.6	119	7.7	311	17.2
	Somewhat agree	3,296	46.8	214	38.8	360	43.3	553	45.7	560	50.7	801	52.0	808	44.8
	Neither	2,367	33.6	218	39.5	327	39.3	480	39.6	374	33.9	478	31.1	490	27.1
	Disagree	741	10.5	77	13.9	105	12.6	114	9.4	108	9.8	141	9.2	196	10.9
	Somewhat disagree	463	6.6	39	7.1	59	7.1	69	5.7	73	6.6	104	6.8	119	6.6
	Strongly disagree	278	3.9	38	6.9	46	5.5	45	3.7	35	3.2	37	2.4	77	4.3
Most people in the neighborhood can be trusted	Total	7,040	100.0	552	100.0	832	100.0	1,211	100.0	1,103	100.0	1,537	100.0	1,805	100.0
	Agree	3,919	55.7	231	41.8	372	44.7	657	54.3	640	58.0	889	57.8	1,130	62.6
	Strongly agree	619	8.8	41	7.4	40	4.8	60	5.0	63	5.7	113	7.4	302	16.7
	Somewhat agree	3,300	46.9	190	34.4	332	39.9	597	49.3	577	52.3	776	50.5	828	45.9
	Neither	2,591	36.8	252	45.7	375	45.1	463	38.2	392	35.5	559	36.4	550	30.5
	Disagree	530	7.5	69	12.5	85	10.2	91	7.5	71	6.4	89	5.8	125	6.9
	Somewhat disagree	336	4.8	42	7.6	44	5.3	65	5.4	45	4.1	63	4.1	77	4.3
	Strongly disagree	194	2.8	27	4.9	41	4.9	26	2.1	26	2.4	26	1.7	48	2.7
Most people in the neighborhood greet each other	Total	7,049	100.0	553	100.0	832	100.0	1,211	100.0	1,104	100.0	1,540	100.0	1,809	100.0
	Agree	5,782	82.0	373	67.5	608	73.1	975	80.5	917	83.1	1,346	87.4	1,563	86.4
	Strongly agree	1,773	25.2	103	18.6	131	15.7	194	16.0	230	20.8	418	27.1	697	38.5
	Somewhat agree	4,009	56.9	270	48.8	477	57.3	781	64.5	687	62.2	928	60.3	866	47.9
	Neither	1,000	14.2	143	25.9	179	21.5	186	15.4	150	13.6	154	10.0	188	10.4
	Disagree	267	3.8	37	6.7	45	5.4	50	4.1	37	3.4	40	2.6	58	3.2
	Somewhat disagree	197	2.8	21	3.8	30	3.6	41	3.4	28	2.5	33	2.1	44	2.4
	Strongly disagree	70	1.0	16	2.9	15	1.8	9	0.7	9	0.8	7	0.5	14	0.8
If there is a problem, people would work together to deal with the situation	Total	7,039	100.0	552	100.0	833	100.0	1,211	100.0	1,103	100.0	1,537	100.0	1,803	100.0
	Agree	3,685	52.4	212	38.4	341	40.9	583	48.1	585	53.0	895	58.2	1,069	59.3
	Strongly agree	696	9.9	40	7.2	42	5.0	68	5.6	66	6.0	149	9.7	331	18.4
	Somewhat agree	2,989	42.5	172	31.2	299	35.9	515	42.5	519	47.1	746	48.5	738	40.9
	Neither	2,732	38.8	278	50.4	400	48.0	526	43.4	425	38.5	534	34.7	569	31.6
	Disagree	622	8.8	62	11.2	92	11.0	102	8.4	93	8.4	108	7.0	165	9.2
	Somewhat disagree	393	5.6	34	6.2	44	5.3	72	5.9	63	5.7	82	5.3	98	5.4
	Strongly disagree	229	3.3	28	5.1	48	5.8	30	2.5	30	2.7	26	1.7	67	3.7

Part II. Results of basic items

Chapter 1. Physical Condition and Diabetes

1. Status Regarding Obesity and Underweight

The proportion of obese (BMI ≥ 25 kg/m^2) was 29.5% in men and 19.2% in women, with no significant change over the past 10 years in both the sexes.
The proportion of underweight (BMI < 18.5 kg/m^2) was 4.2% in men 11.1% in women and, with a significant increase in the number of women, over the past 10 years. Additionally, the proportion of underweight women aged 20-29 years was 22.3%.
The proportion of elderly individuals aged 65 years or above, who had a low BMI (≤ 20 kg/m^2) was 16.7%, with no significant change in the proportion, over the past 10 years.

* Evaluation of obesity: BMI (Body mass index[kg/m^2]: body weight [kg]/(height [m])^2) was used to evaluate obesity (Obesity Criteria-Reviewing Committee of Japan Society for the Study of Obesity, 2011).

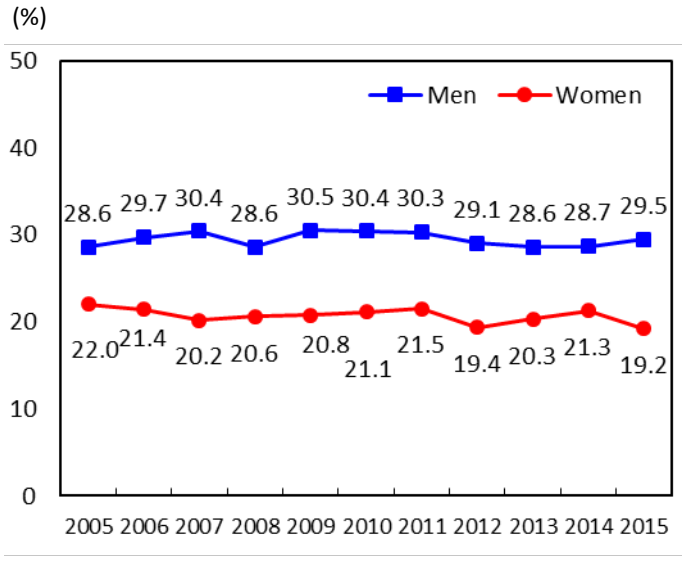


Figure 18-1. Annual changes in the proportion of obesity (BMI ≥ 25 kg/m^2) (aged 20 years and over) (2005 to 2015)

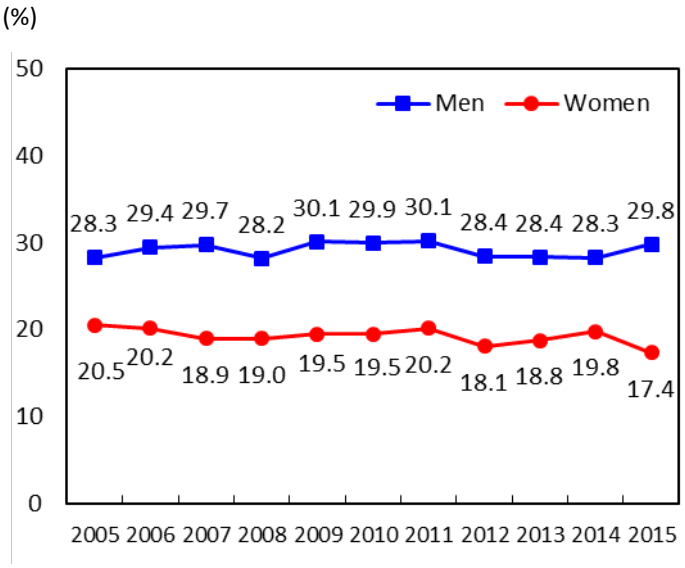


Figure 18-2. Annual changes in the age-adjusted proportion of obesity (BMI ≥ 25 kg/m^2) (aged 20 years and over) (2005 to 2015)

* Pregnant women excluded.

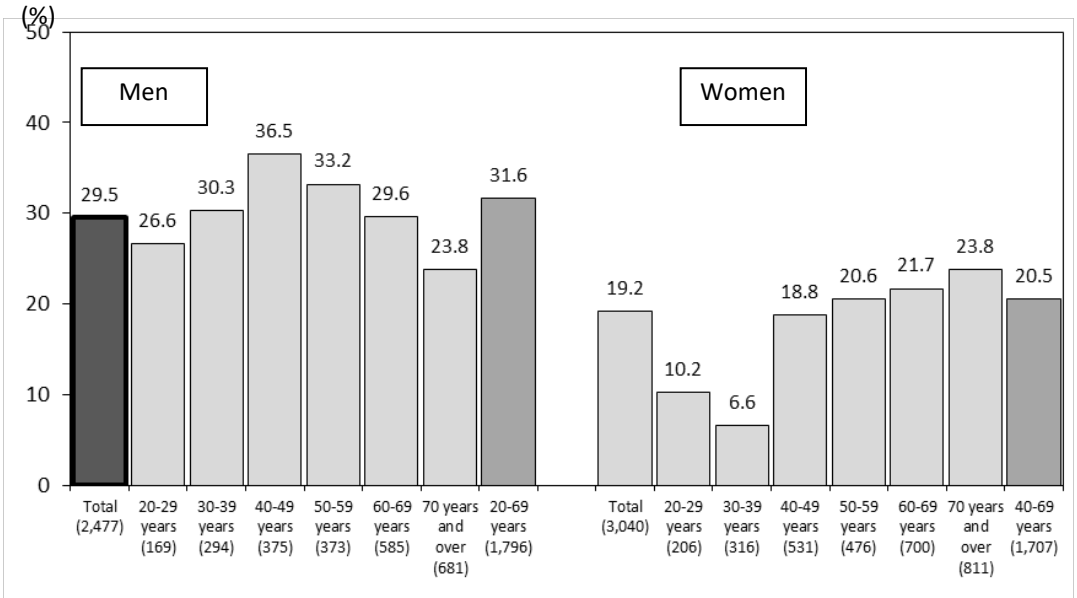


Figure 19. Proportion of obesity (BMI ≥ 25 kg/m^2) (aged 20 years and over, based on age and sex).

* Pregnant women excluded.

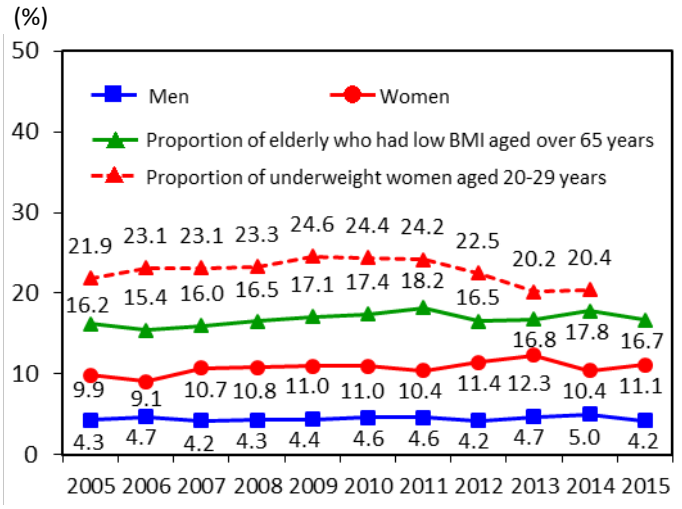


Figure 20-1. Annual changes in the proportion of underweight persons (BMI<18.5 kg/m^2) (aged 20 years and over) or those with Malnutrition (BMI ≤ 20 kg/m^2) (aged 20 years and over) (2005 to 2015)

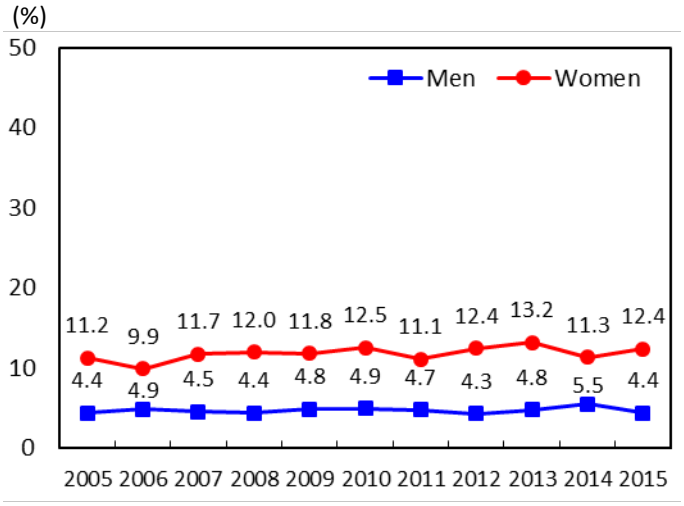


Figure 20-2. Annual changes in the age-adjusted proportion of underweight persons (BMI<18.5 kg/m^2) (aged 20 years and over) (2005 to 2015)

* Pregnant women excluded.
* Annual changes in the proportion of underweight women aged 20-29 years were 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, in the case of 2014, the results were calculated as the mean of 2013, 2014, and 2015.

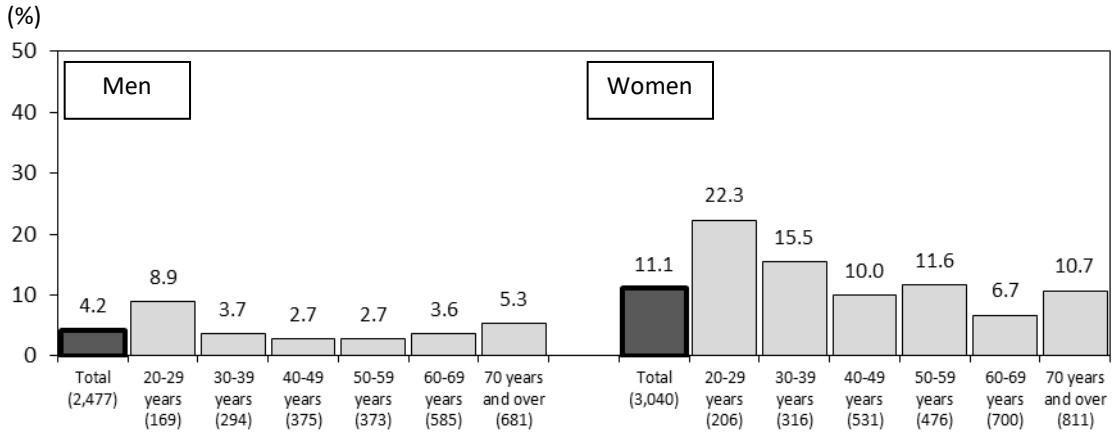


Figure 21. Proportion of underweight persons (BMI < 18.5 kg/m^2) (aged 20 years and over, based on age and sex)

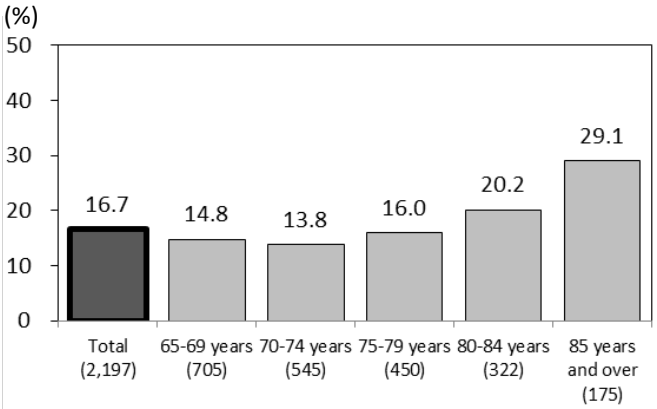


Figure 22. Proportion of those with malnutrition (BMI ≤ 20 kg/m^2) (aged 65 years and over, men and women based on age)

2. Status Regarding Those in Whom Diabetes is Strongly Suspected

The proportion of "those in whom diabetes is strongly suspected" was 19.5% in men and 9.2% in women, which has not changed significantly since 2006.

* "Those in whom diabetes is strongly suspected" was defined as those with a hemoglobin A1c (NGSP) value of 6.5% or higher, or who responded "Yes" to the question "Have you ever received diabetes treatment?"

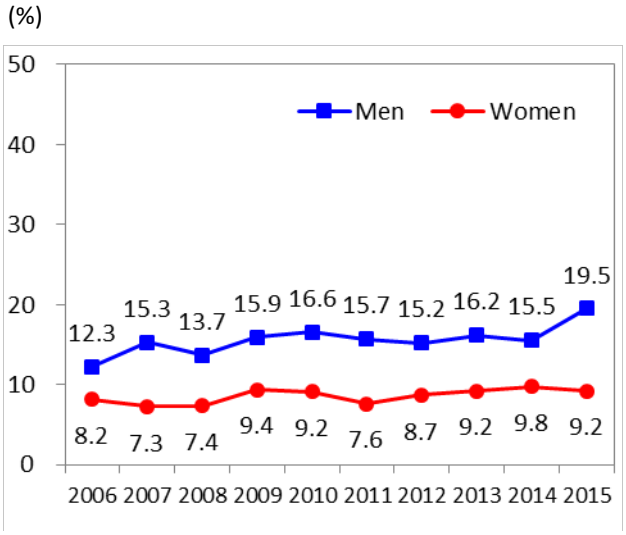


Figure 23-1. Annual changes in the proportion of "those in whom diabetes is strongly suspected" (aged 20 years and over) (2005 to 2015)

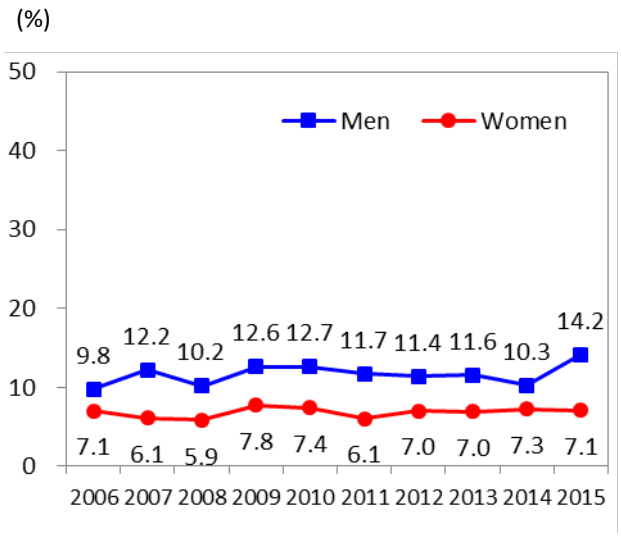


Figure 23-2. Annual changes in the age-adjusted proportion of "those in whom diabetes is strongly suspected" (aged 20 years and over) (2005 to 2015)

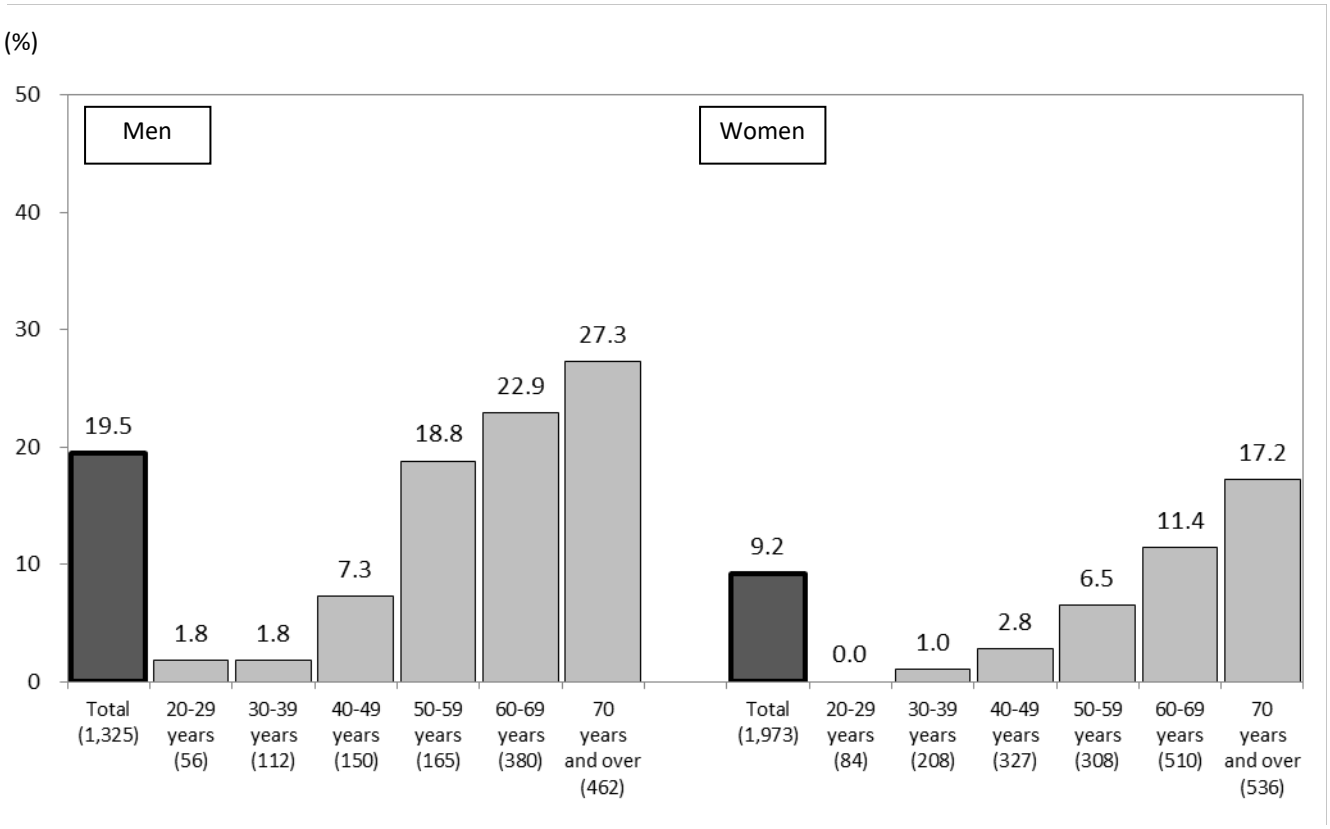


Figure 24. Proportion of "those in whom diabetes is strongly suspected" (aged 20 years and older, based on age and sex)

3. Status Regarding Blood Pressure

The mean systolic blood pressure was 133.8 mmHg in men and 127.2 mmHg in women. The values in both men and women have significantly decreased over the past 10 years.
The proportion of those with a systolic blood pressure of 140 mmHg or higher was 34.1% in men and 25.1% in women. These values have decreased significantly in both men and women, over the past 10 years.

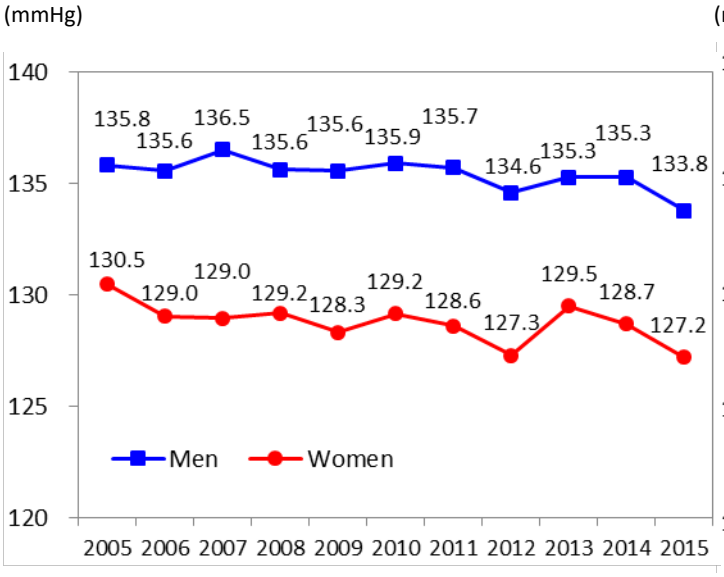


Figure 25-1. Annual changes in the mean systolic blood pressure (aged 20 years and over) (2005 to 2015)

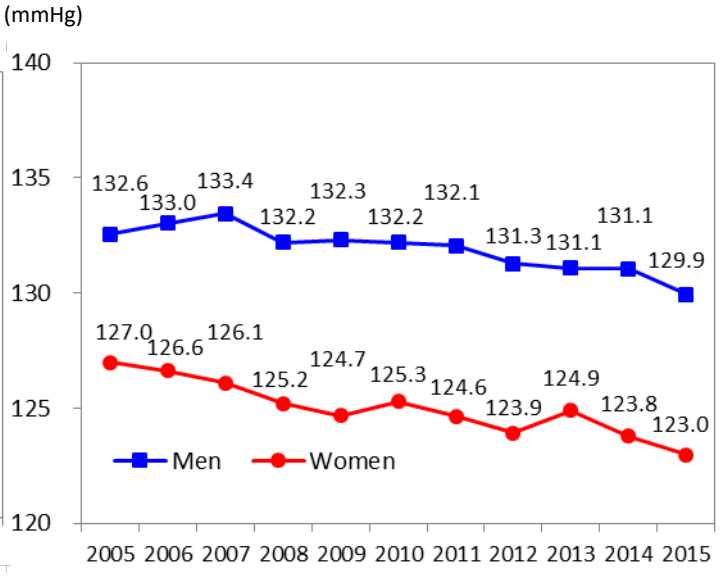


Figure 25-2. Annual changes in the age-adjusted mean systolic blood pressure (aged 20 years and over) (2005 to 2015)

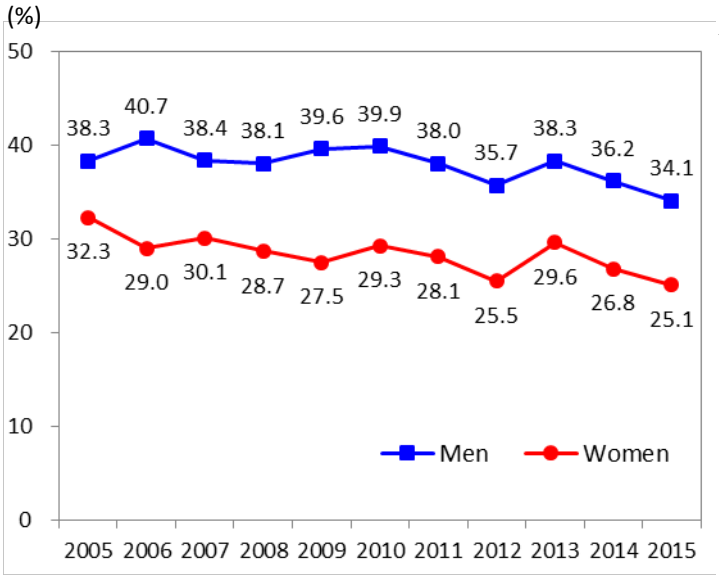


Figure 26-1. Annual changes in the proportion of those with a systolic blood pressure of 140 mmHg or higher (aged 20 years and over) (2005 to 2015)

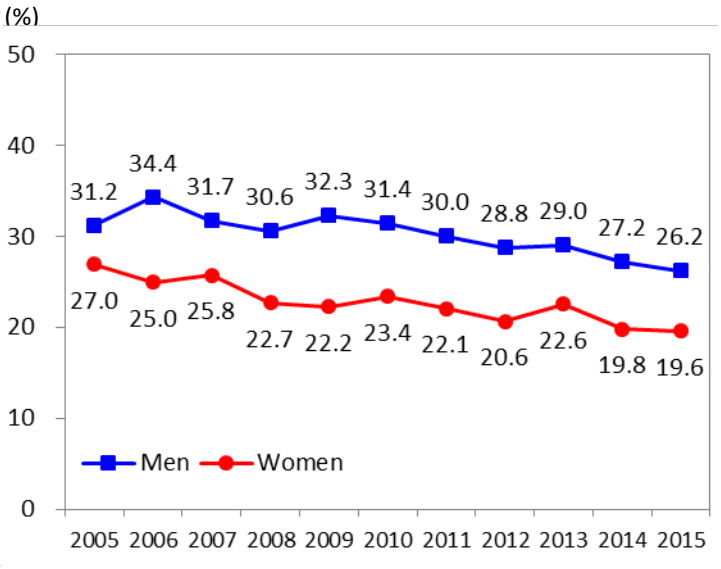


Figure 26-2. Annual changes in the age-adjusted proportion of those with a systolic blood pressure of 140 mmHg or higher (aged 20 years and over) (2005 to 2015)

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

4. Status Regarding Blood Cholesterol

The mean serum total cholesterol levels were 195.8 mg/dL in men and 207.9 mg/dL in women. There was no significant change in these levels over the past 10 years.
The proportion of those with a serum total cholesterol level of 240 mg/dL or higher was 9.8% in men and 17.8% in women. There was no significant change in these proportions over the past 10 years.

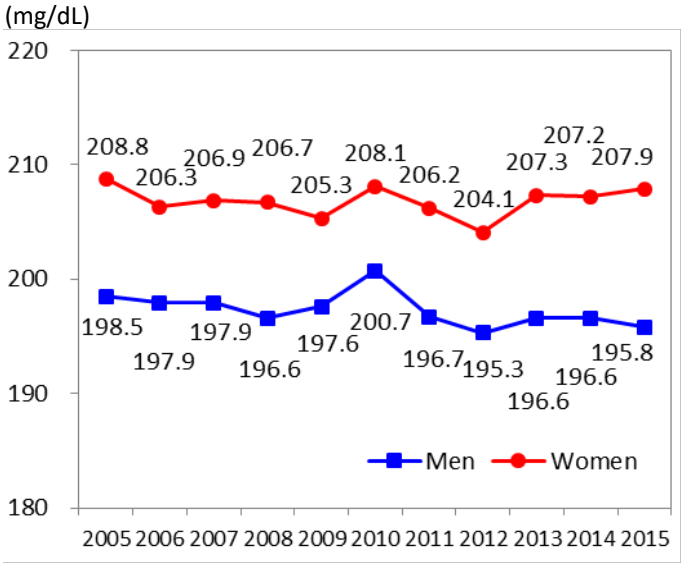


Figure 27-1. Annual changes in the mean serum total cholesterol level (aged 20 years and over) (2005 to 2015)

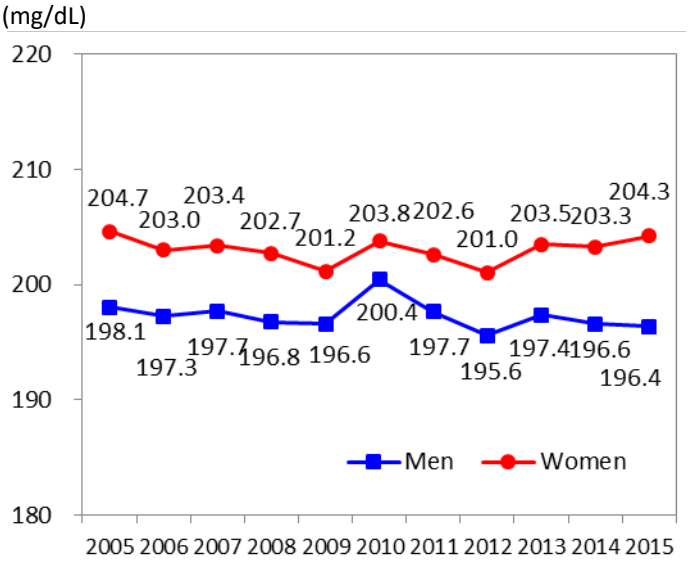


Figure 27-2. Annual changes in the age-adjusted mean serum total cholesterol level (aged 20 years and over) (2005 to 2015)

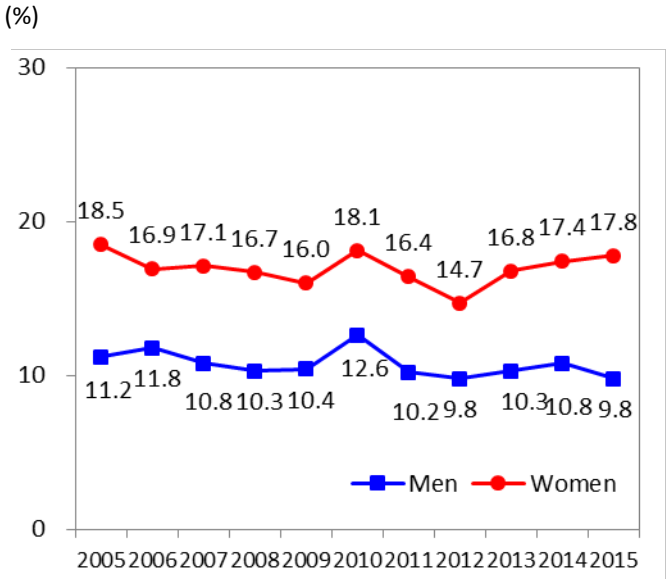


Figure 28-1. Annual changes in the proportion of those with serum total cholesterol level of 240 mg/dL or higher (aged 20 years and over) (2005 to 2015)

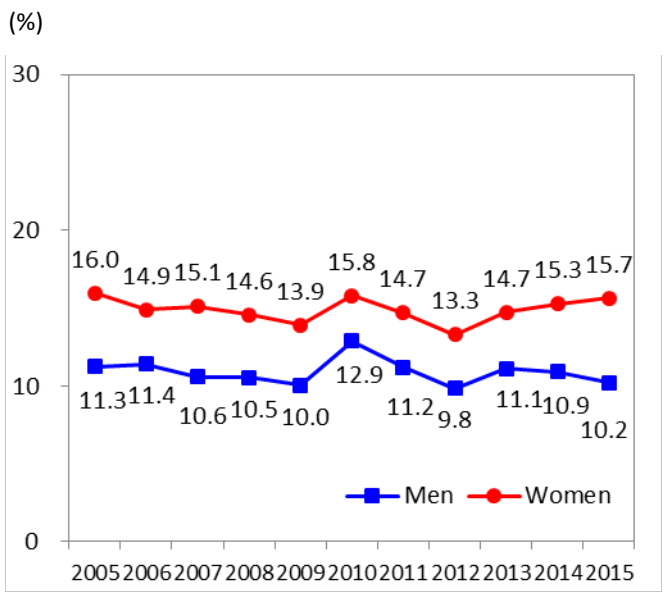


Figure 28-2. Annual changes in the age-adjusted proportion of those with serum total cholesterol level of 240 mg/dL or higher (aged 20 years and over) (2005 to 2015)

Chapter 2. Status Regarding Nutrition/Dietary Habits

1. Salt Intake

The mean salt intake was 10.0 g in total participants, and 11.0 g in men and 9.2 g in women. These values show a significant decrease in all participants, men, and women over the past 10 years.

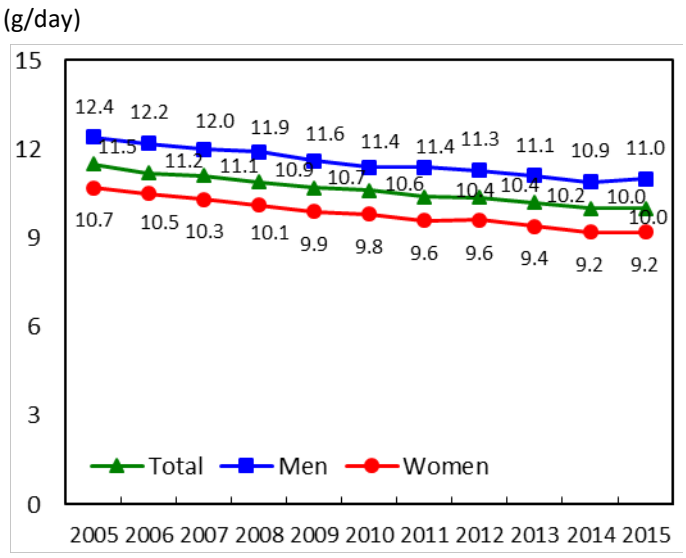


Figure 29-1. Annual changes in the mean salt intake (aged 20 years and over) (2005 to 2015)

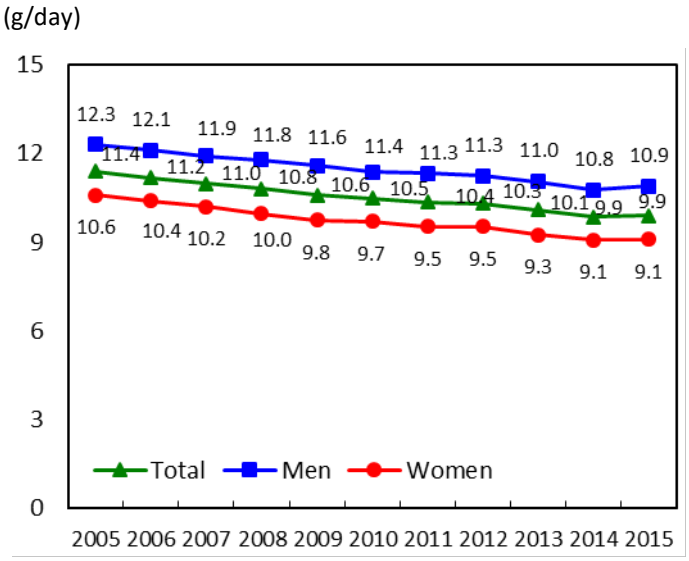


Figure 29-2. Annual changes in the age-adjusted mean salt intake (aged 20 years and over) (2005 to 2015)

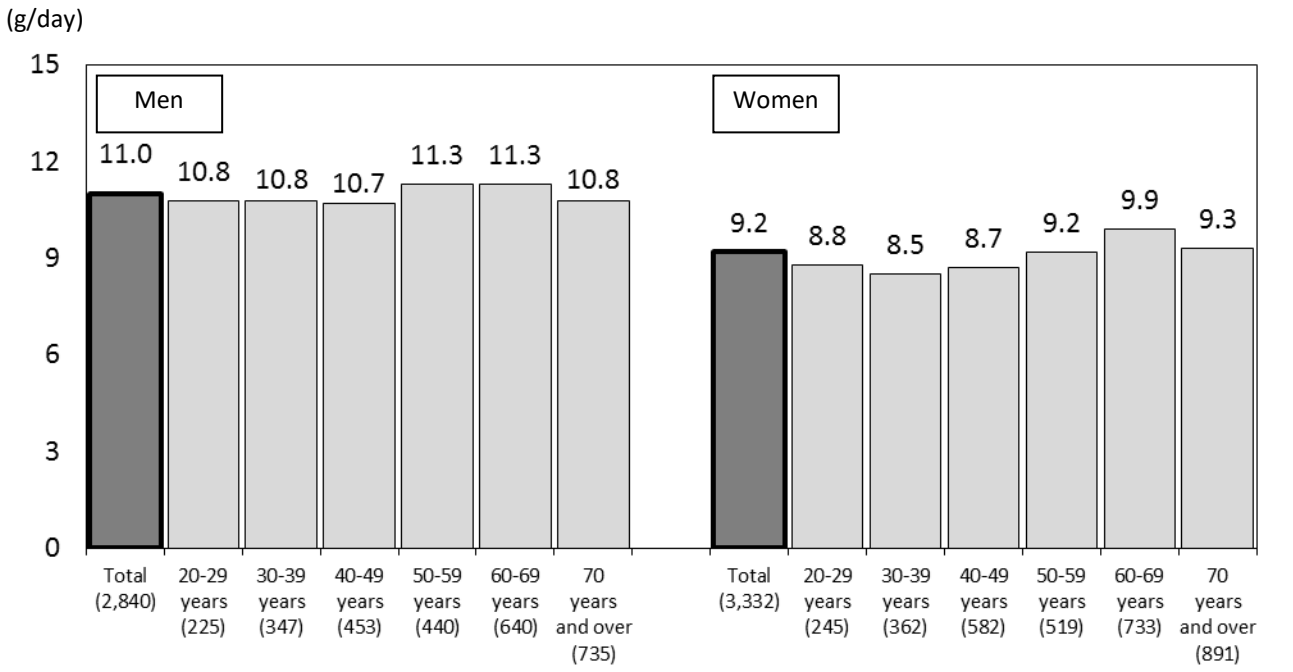


Figure 30. Mean salt intake (aged 20 years and over, based on age and sex)

2. Vegetable Intake

The mean vegetable intake was 293.6 g in total participants, and 299.4 g in men and 288.7 g in women. There was no significant change in the intake in all participants, men, and women over the past 10 years.
The mean vegetable intake was the lowest in individuals aged 20 to 29 years and the highest in individuals aged 60 to 69 years among both men and women.

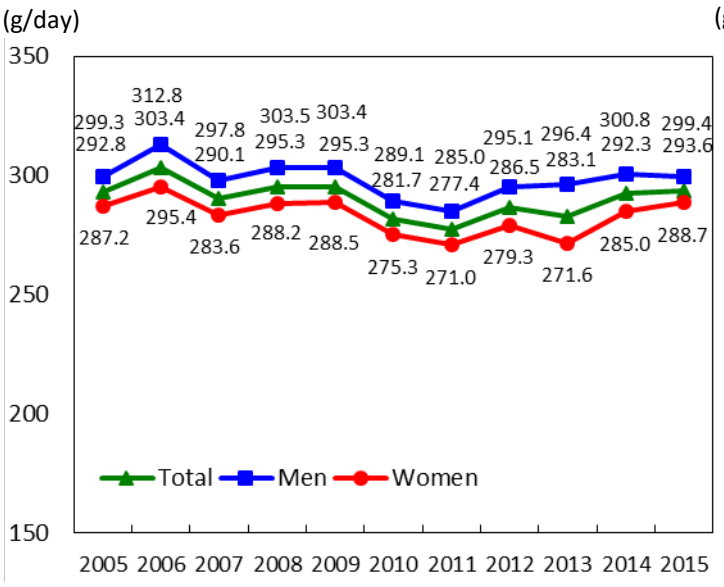


Figure 31-1. Annual changes in the mean vegetable intake (aged 20 years and older) (2005 to 2015)

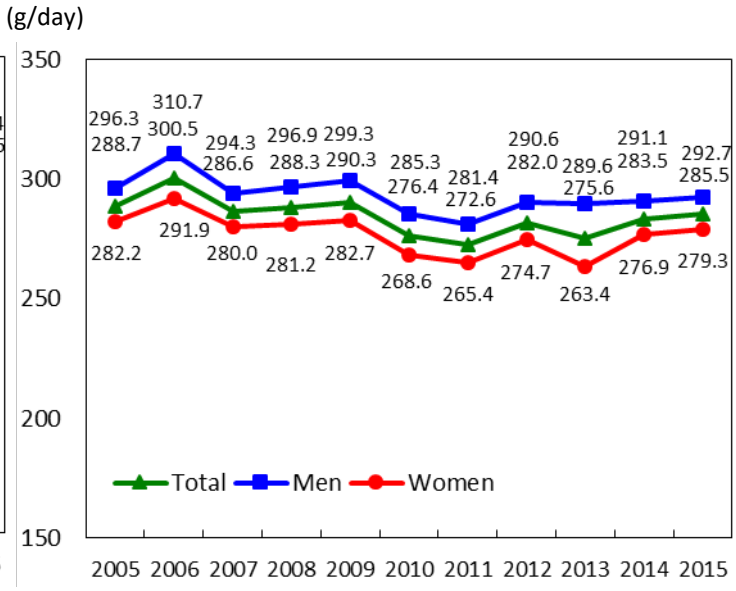
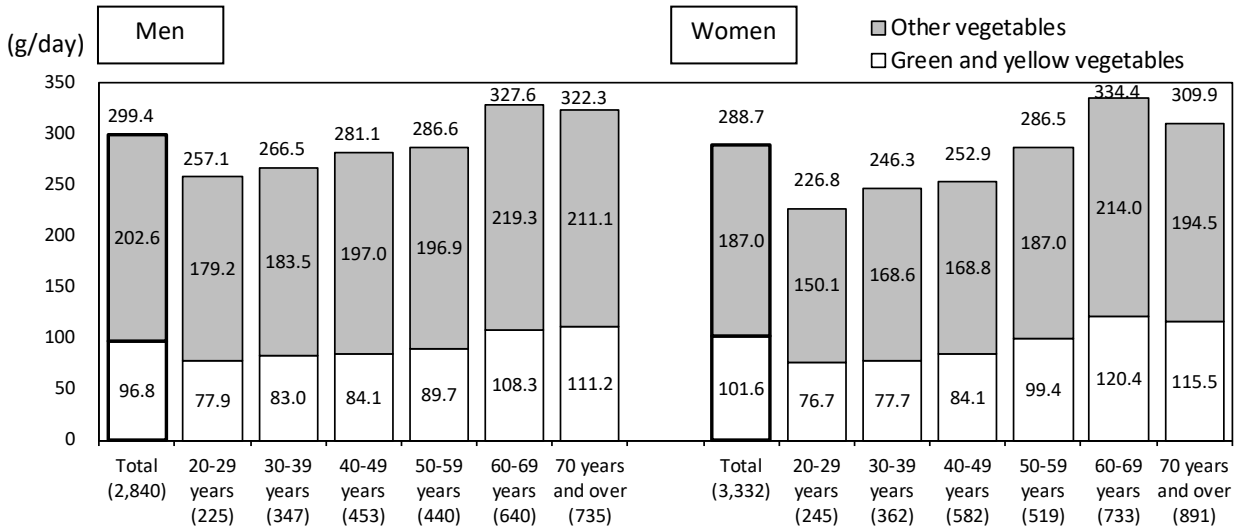


Figure 31-2. Annual changes in the age-adjusted mean vegetable intake (aged 20 years and older) (2005 to 2015)



Percentage of those with vegetable intake of 350 g or more (%)	33.7	22.7	23.9	29.8	31.4	40.5	39.7		31.4	18.4	22.4	22.0	29.5	40.4	38.6

Figure 32. Mean vegetable intake (aged 20 years and over, based on age and sex)

3. Breakfast Skipping

The breakfast skipping rate was 14.3% in men and 10.1% in women. The highest proportion of those skipping breakfast was observed among individuals aged 30 to 39 in men and individuals aged 20 to 29 years in women, and the proportion was 25.6% and 25.3%, respectively.

* The breakfast skipping rate was defined as the proportion of those who skipped breakfast on the day of the survey (any one day).

* Skipping breakfast refers any of the following: not eating at all, consuming only supplements such as tablets or nutrition-supplement drink, or consuming only foods/drinks such as confectionery, fruits, dairy products, or soft drinks.

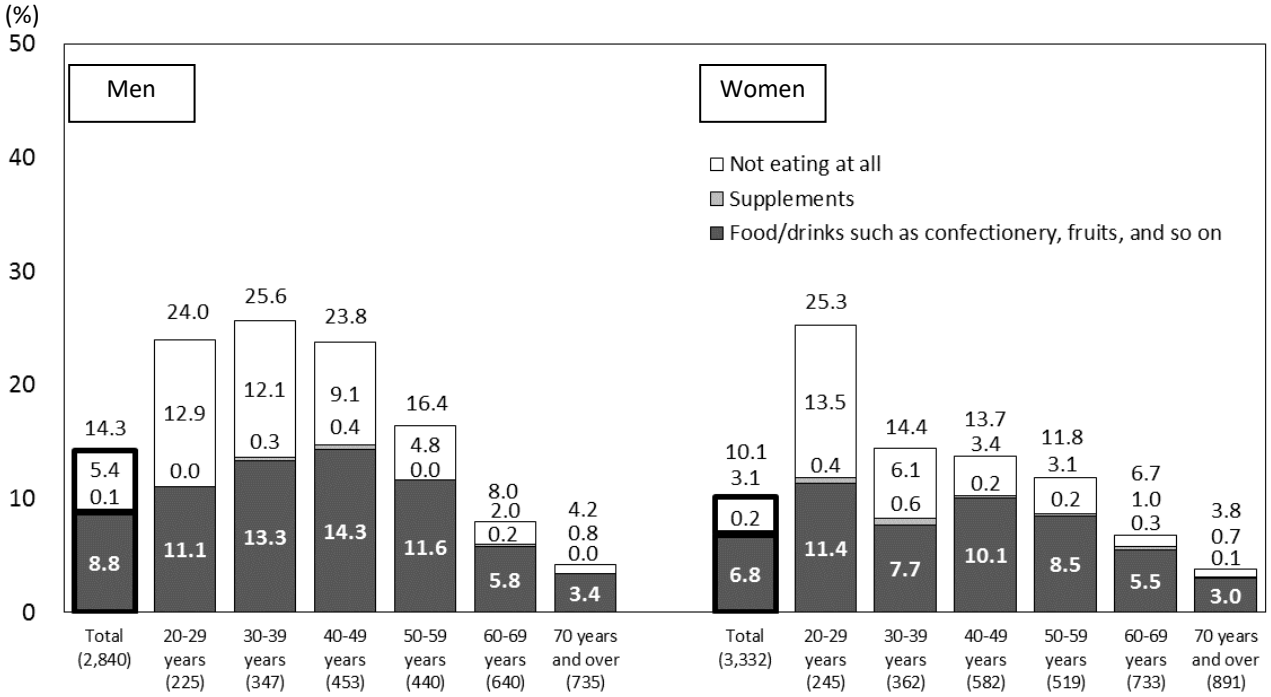


Figure 33. Details of breakfast skipping (aged 20 years and over, based on age and sex)

Table 8. Annual changes in breakfast skipping rate (aged 20 years and over, based on age and sex) (2005 to 2015)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Men	14.3	14.2	14.7	15.8	15.5	15.2	16.1	14.2	14.4	14.3	14.3
20-29 years	33.1	30.5	28.6	30.0	33.0	29.7	34.1	29.5	30.0	37.0	24.0
30-39 years	27.0	22.8	30.2	27.7	29.2	27.0	31.5	25.8	26.4	29.3	25.6
40-49 years	16.2	20.8	17.9	25.7	19.3	20.5	23.5	19.6	21.1	21.9	23.8
50-59 years	11.7	13.1	11.8	15.1	12.4	13.7	15.0	13.1	17.8	13.4	16.4
60-69 years	5.6	5.8	7.4	8.1	9.1	9.2	6.3	7.9	6.6	8.5	8.0
70 yearsand over	2.8	2.2	3.4	4.6	4.9	4.2	3.7	3.9	4.1	3.2	4.2
Women	9.3	8.9	10.5	12.8	10.9	10.9	11.9	9.7	9.8	10.5	10.1
20-29 years	23.5	22.5	24.9	26.2	23.2	28.6	28.8	22.1	25.4	23.5	25.3
30-39 years	15.0	13.9	16.3	21.7	18.1	15.1	18.1	14.8	13.6	18.3	14.4
40-49 years	10.3	11.0	12.8	14.8	12.1	15.2	16.0	12.1	12.2	13.5	13.7
50-59 years	8.3	7.7	9.7	13.4	10.6	10.4	11.2	9.2	13.8	10.7	11.8
60-69 years	5.5	4.6	5.1	8.6	7.2	5.4	7.6	6.5	5.2	7.4	6.7
70 yearsand over	2.8	2.2	3.8	5.2	4.7	4.6	3.8	3.6	3.8	4.4	3.8

* Values are presented as percentages.

Chapter 3. Physical Activity, Exercise, and Sleep

1. Exercise Habits

The proportion of those who exercised regularly was 37.8% in men and 27.3% in women. These proportions showed no significant change in both men and women, over the past 10 years. The lowest proportion of those who exercised regularly was observed among individuals aged 20 to 29 years in both men and women, and the value was 17.1% and 8.3%, respectively.

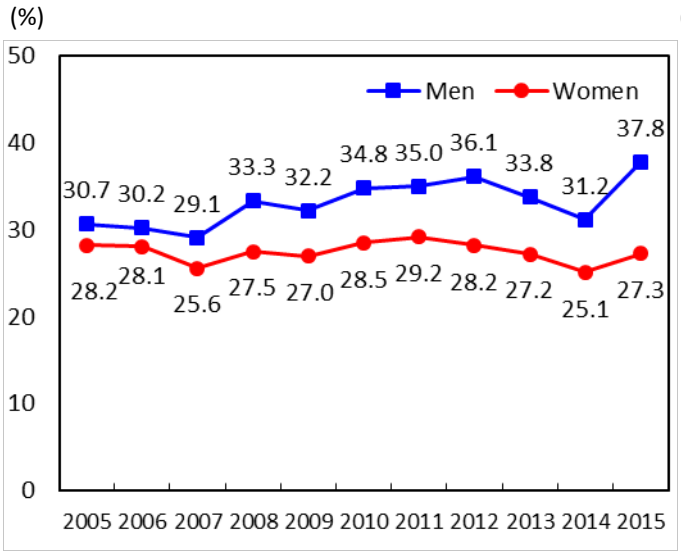


Figure 34-1. Annual changes in the proportion of those who exercised regularly (aged 20 years and over) (2005 to 2015)

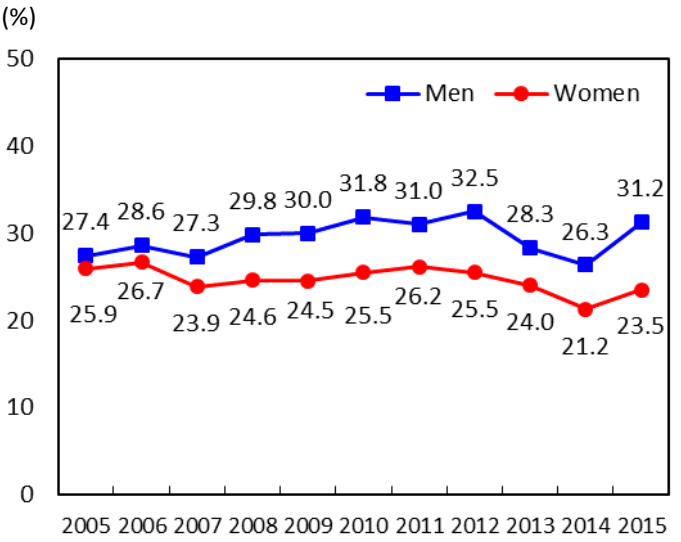


Figure 34-2. Annual changes in the age-adjusted proportion of those who exercised regularly (aged 20 years and over) (2005 to 2015)

* Regular exercise was defined as exercise activities for 30 minutes or longer per session, twice a week or more for at least one year.

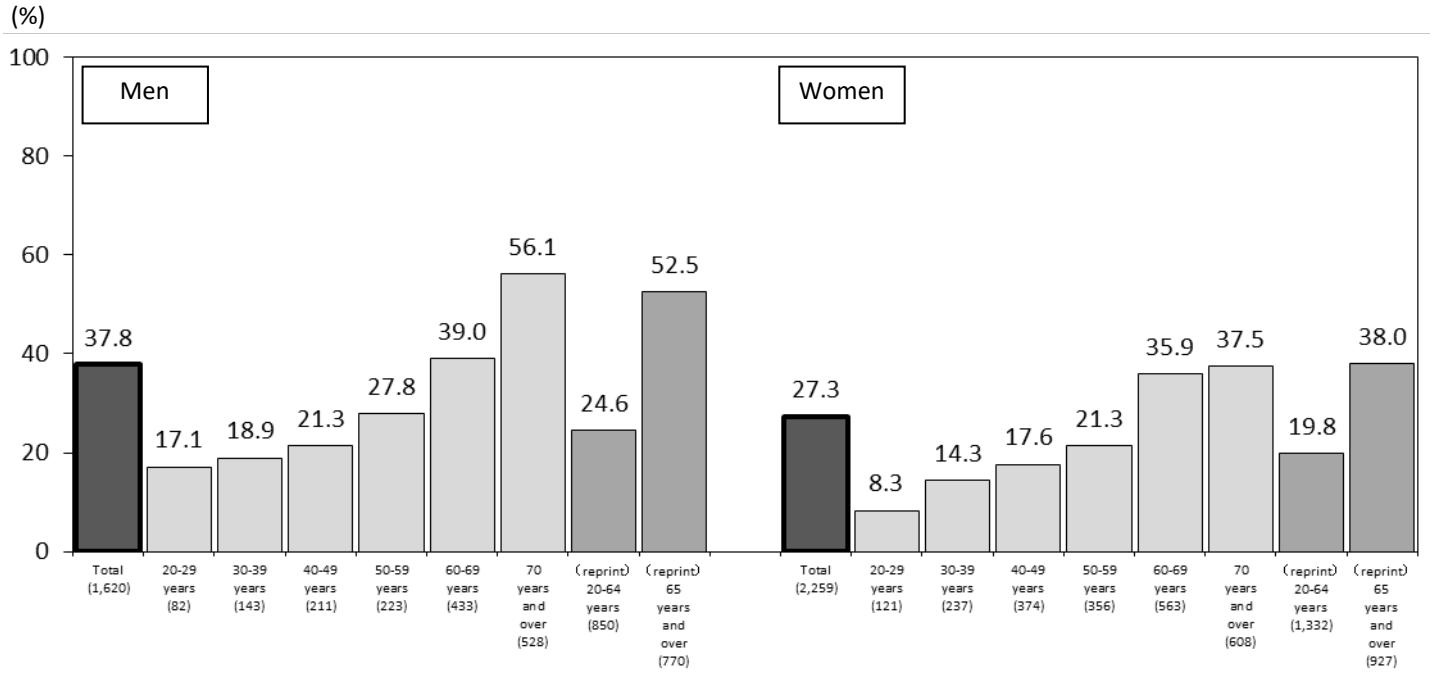


Figure 35. Proportion of those with regular exercise (aged 20 years and over, based on age and sex)

2. Daily step counts

The mean number of steps walked were 7,194 in men and 6,227 in women. Over the past 10 years, the number significantly decreased until 2008 but not after 2009 while no change was observed in women.
The mean number of steps in men and women aged 20-64 years was 7,970 and 6,991, respectively, while that in men and women aged 65 years and over was 5,919 and 4,924, respectively.

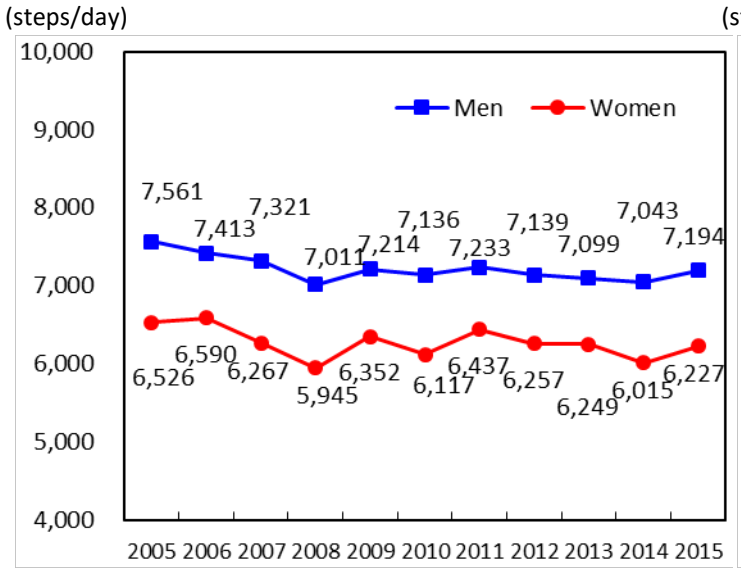


Figure 36-1. Annual changes in the mean number of steps (aged 20 years and over) (2005 to 2015)

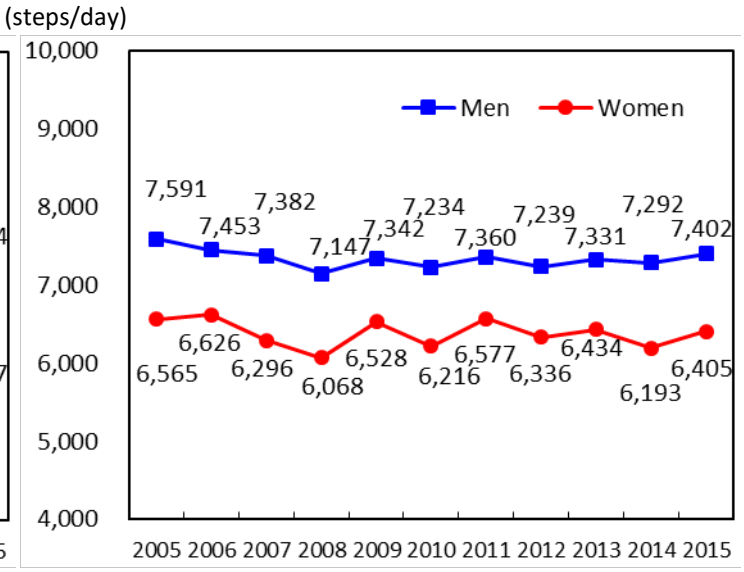


Figure 36-2. Annual changes in the age-adjusted mean number of steps (aged 20 years and over) (2005 to 2015)

* The persons taking less than 100 steps or 50,000 steps and over were excluded from the 2012 survey.

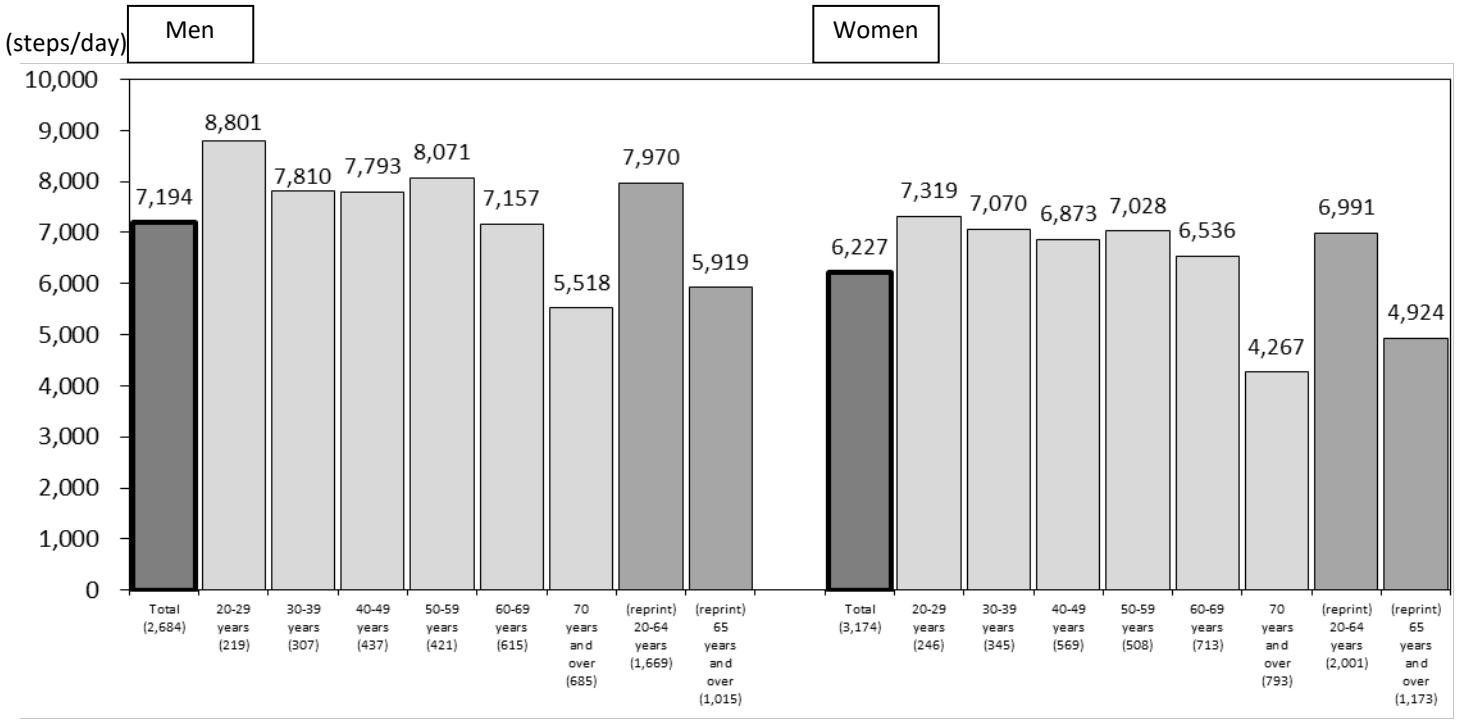


Figure 37. Mean number of steps (aged 20 years and over, based on age and sex)

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

3. Sleep Duration

The proportion of those whose mean sleeping duration during the past month was 6-7 hours/day was the highest and the value was 33.9% in men and 34.2% in women. Over the past 10 years, the proportion of those whose mean sleeping duration during the past month was less than 6 hours/day* significantly increased from 2007.
According to mean sleeping duration per day, the proportion of those who reported impaired quality of sleep was the highest in participants whose mean sleeping duration was less than 6 hours/day, for all contents of the quality of sleep. The proportion of those who responded "I feel drowsy during the day" was the highest among both men and women whose mean sleeping duration was less than 6 hours/day and the value was 44.5 % and 48.7 %, respectively.

* Those whose mean sleeping duration during the past month was less than 6 hours/day refers those who responded their mean sleeping duration during the past month was less than 5 hours/day and 5-6 hours/day.

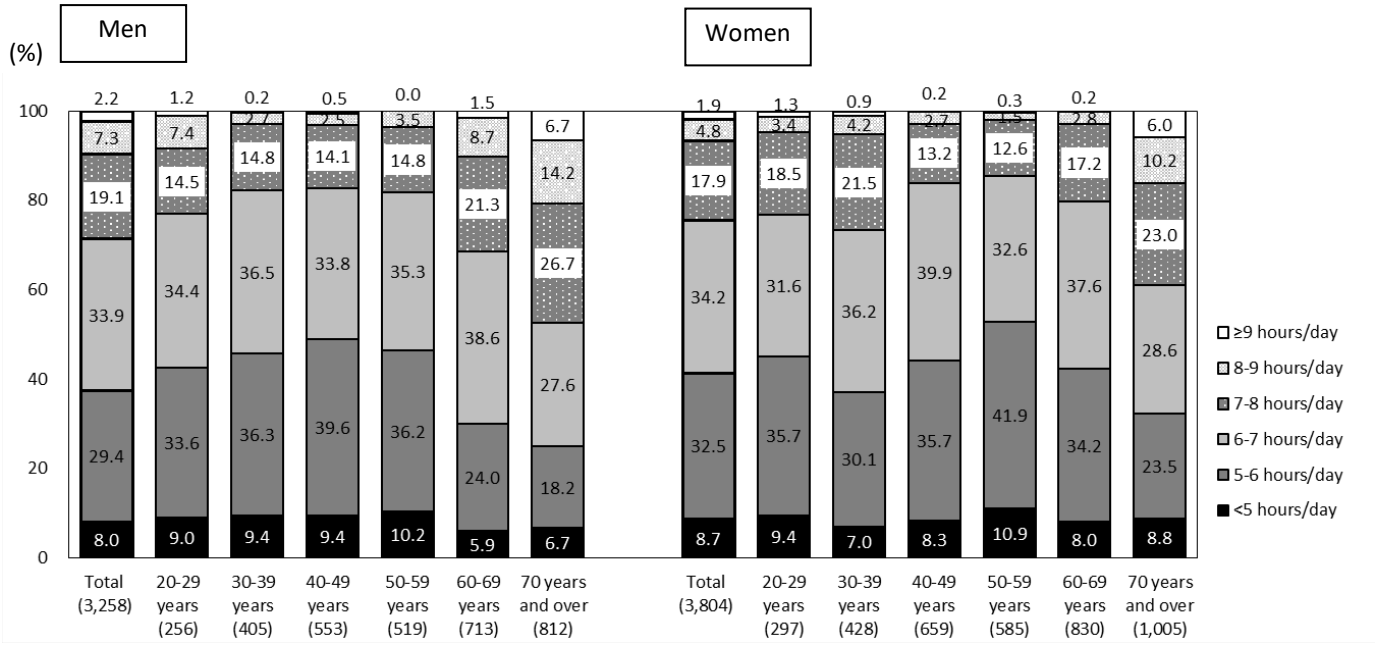


Figure 38. Proportion of mean sleep duration per day (aged 20 years and over, based on age and sex)

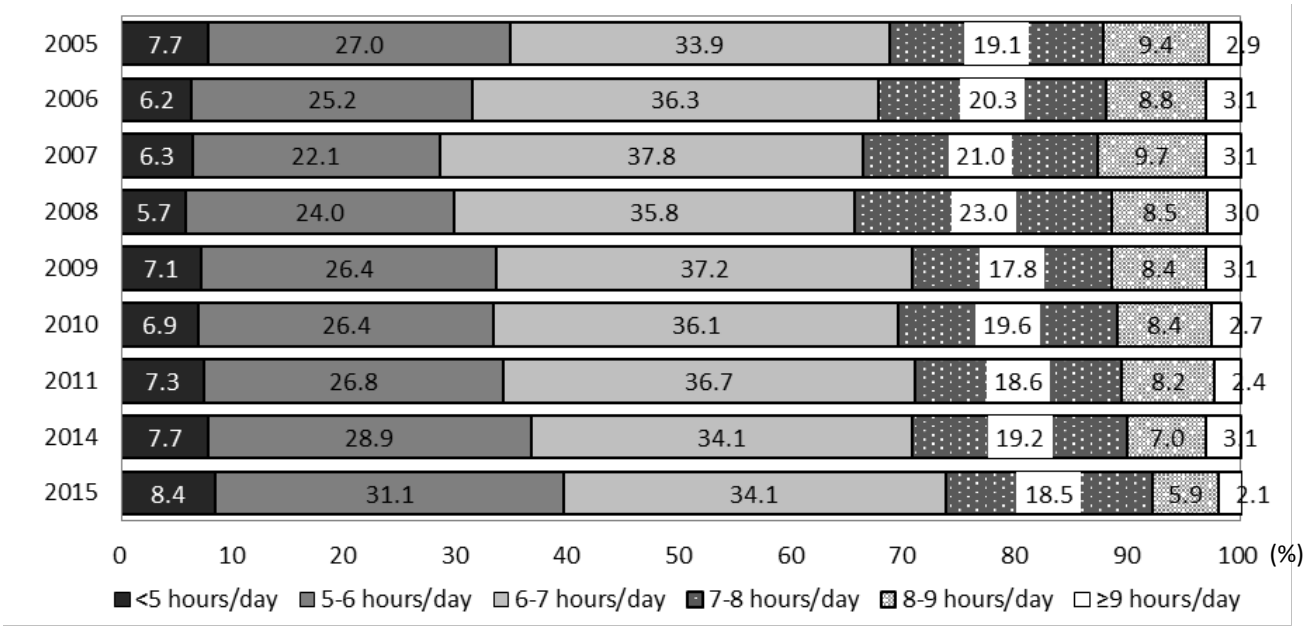


Figure 39. Annual changes in the proportion of mean sleep duration per day (aged 20 years and over, total of men and women) (2005 to 2015)

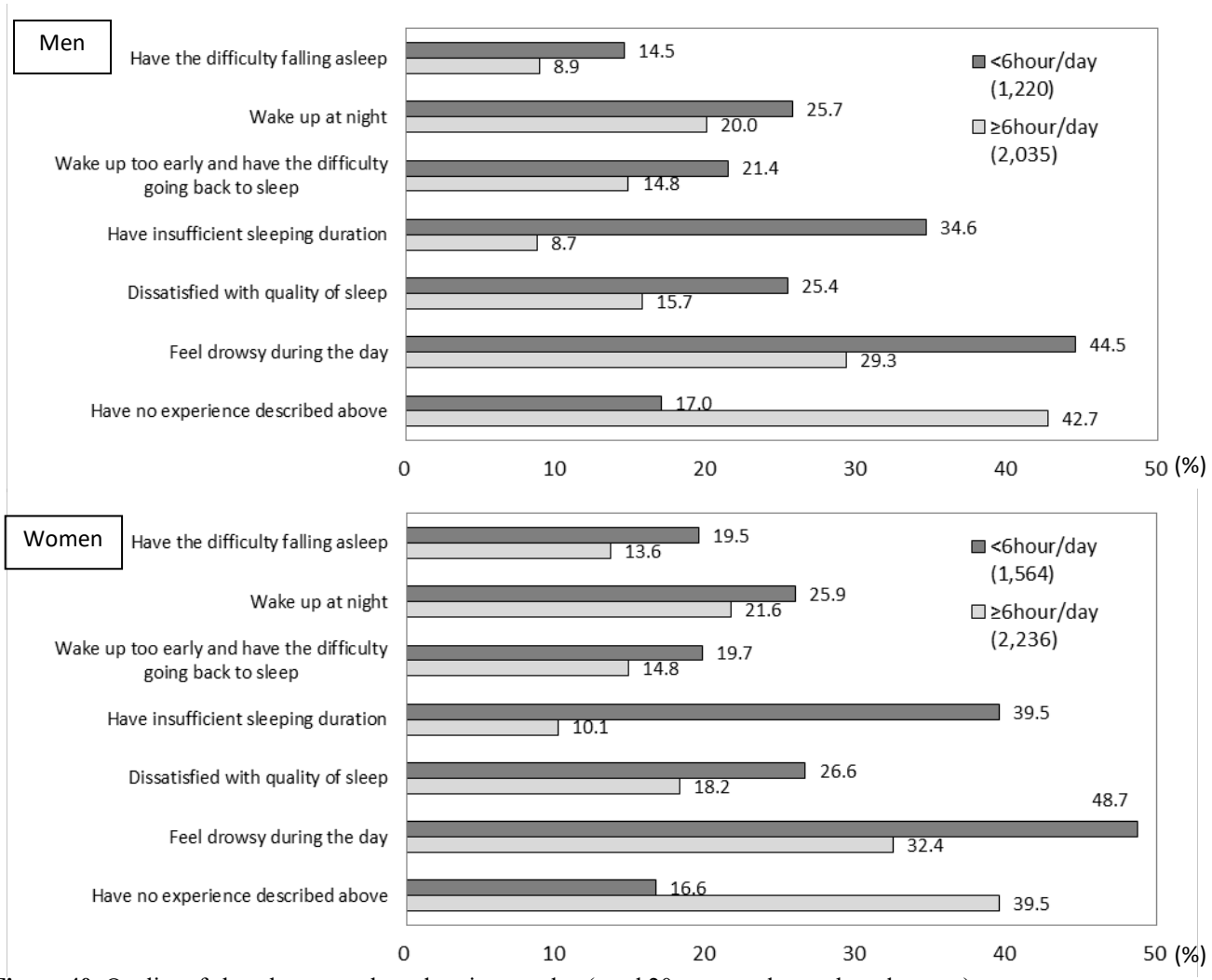


Figure 40. Quality of sleep by mean sleep duration per day (aged 20 years and over, based on sex)

* The proportion of those who experienced each of components three times or more in the past month was shown.

Table 9. The quality of sleep by mean sleep duration per day (aged 20 years and over, based on age and sex)

	Total		20-29 years		30-39 years		40-49 years		50-59 years		60-69 years		70 years and over	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Men	3,255	-	256	-	405	-	553	-	519	-	713	-	809	-
1. Have the difficulty falling asleep	358	11.0	38	14.8	42	10.4	65	11.8	41	7.9	76	10.7	96	11.9
2. Wake up at night	721	22.2	26	10.2	72	17.8	106	19.2	98	18.9	184	25.8	235	29.0
3. Wake up too early and have the difficulty going back to sleep	563	17.3	15	5.9	44	10.9	80	14.5	93	17.9	162	22.7	169	20.9
4. Have insufficient sleeping duration	599	18.4	84	32.8	118	29.1	139	25.1	115	22.2	82	11.5	61	7.5
5. Dissatisfied with quality of sleep	629	19.3	69	27.0	103	25.4	118	21.3	111	21.4	113	15.8	115	14.2
6. Feel drowsy during the day	1,139	35.0	99	38.7	166	41.0	192	34.7	187	36.0	231	32.4	264	32.6
7. Have no experience described above	1,076	33.1	79	30.9	109	26.9	173	31.3	170	32.8	252	35.3	293	36.2
Women	3,802	-	297	-	428	-	659	-	586	-	829	-	1,003	-
1. Have the difficulty falling asleep	608	16.0	43	14.5	55	12.9	60	9.1	98	16.7	155	18.7	197	19.6
2. Wake up at night	888	23.4	53	17.8	100	23.4	118	17.9	125	21.3	191	23.0	301	30.0
3. Wake up too early and have the difficulty going back to sleep	638	16.8	19	6.4	42	9.8	71	10.8	85	14.5	156	18.8	265	26.4
4. Have insufficient sleeping duration	844	22.2	121	40.7	123	28.7	196	29.7	164	28.0	140	16.9	100	10.0
5. Dissatisfied with quality of sleep	822	21.6	81	27.3	131	30.6	144	21.9	162	27.6	148	17.9	156	15.6
6. Feel drowsy during the day	1,486	39.1	160	53.9	202	47.2	288	43.7	227	38.7	298	35.9	311	31.0
7. Have no experience described above	1,144	30.1	60	20.2	114	26.6	179	27.2	158	27.0	295	35.6	338	33.7

* The breakdown total is not 100% because multiple answers allowed.

* The shaded cells show the most selected point for each age category.

Chapter 4. Alcohol Consumption and Smoking Status

1. Alcohol Consumption

The proportions of those who drink alcohol at a level which increases the risk of life-style related diseases were 13.9% in men and 8.1% in women. When compared to the findings of 2012, 2014, and 2015 surveys, no significant increase was observed in both men and women. The highest proportions were observed in men aged 50 to 59 years and women aged 40 to 49 years.

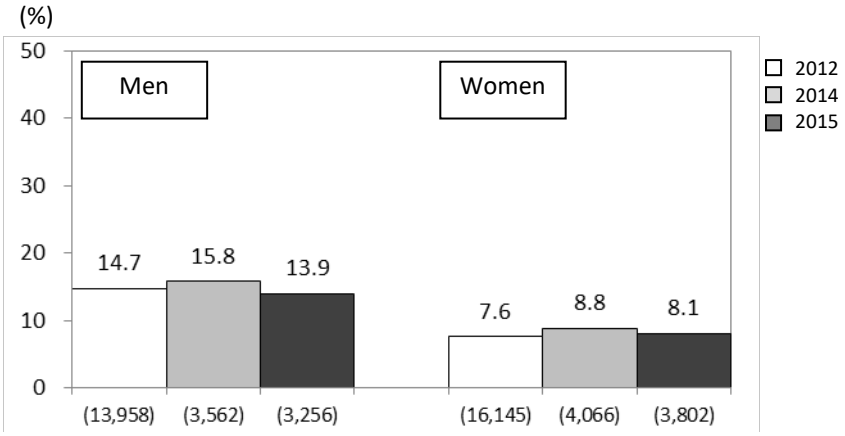


Figure 41. Annual changes in the proportion of those who drink alcohol at a level which increases the risk of life-style related diseases in 2012, 2014, and 2015 (aged 20 years and over, based on sex)

* The age-adjusted proportions of men and women who consumed alcohol at a level which increases the risk of life-style related diseases were 14.6% and 7.9%, respectively in 2012, 15.7% and 9.5%, respectively in 2014, and 13.6% and 8.6%, respectively in 2015. Compared to the trends from 2012, there was no significant change in both men and women.

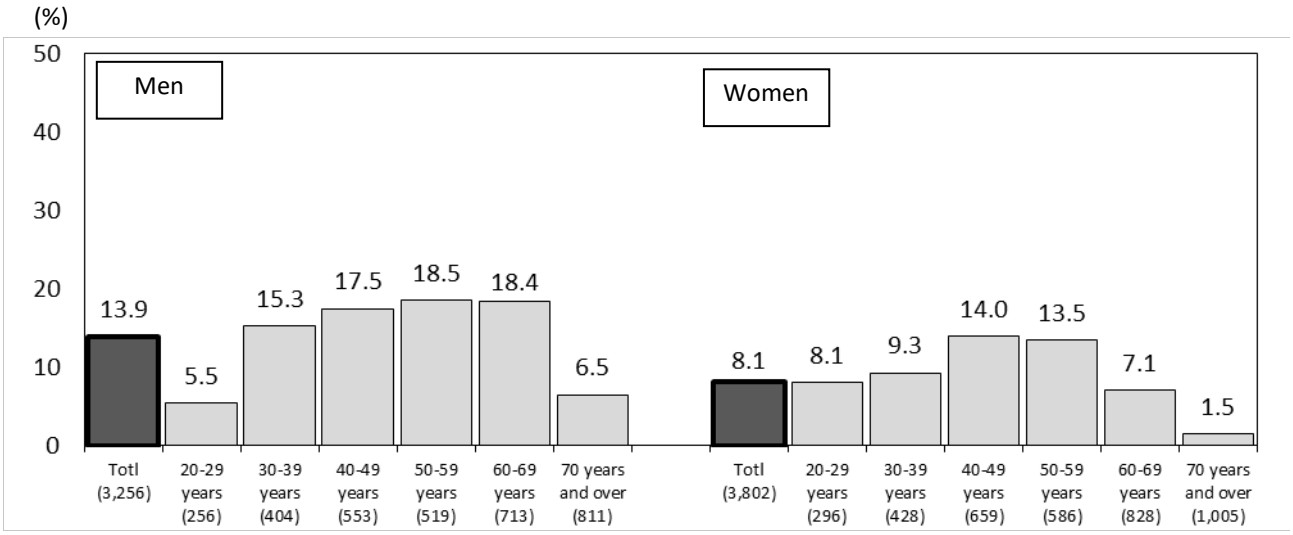


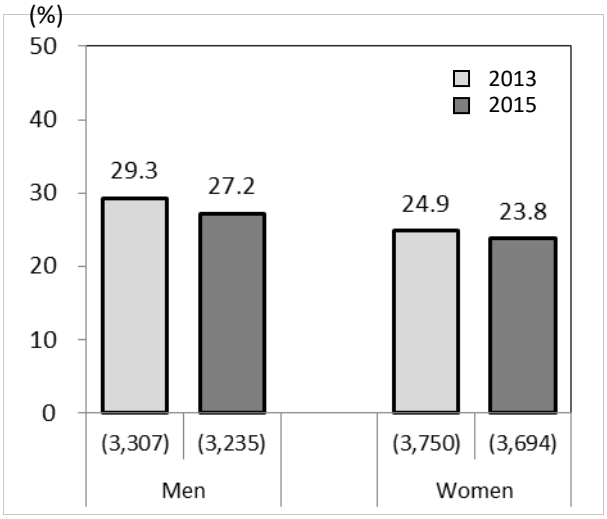
Figure 42. Proportion of those who drink alcohol at a level which increases the risk of life-style related diseases (aged 20 years and over, based on age and sex)

* "Those who drink alcohol at a level which increases the risk of life-style related diseases" refers to men and women who consumed 40 g or more and 20 g or more, respectively of pure alcohol daily. This included:
(1) Men who consumed 360 mL or more of sake every day, 360 mL or more 5 to 6 times a week, 540 mL or more 3 to 4 times a week, 900 mL or more once or twice a week or 900 mL or more 1 to 3 times a month.
(2) Women who consumed 180 mL or more of sake every day, 180 mL or more 5 to 6 times a week, 180 mL or more 3 to 4 times a week, 540 mL or more once or twice a week or 900 mL or more 1 to 3 times a month.

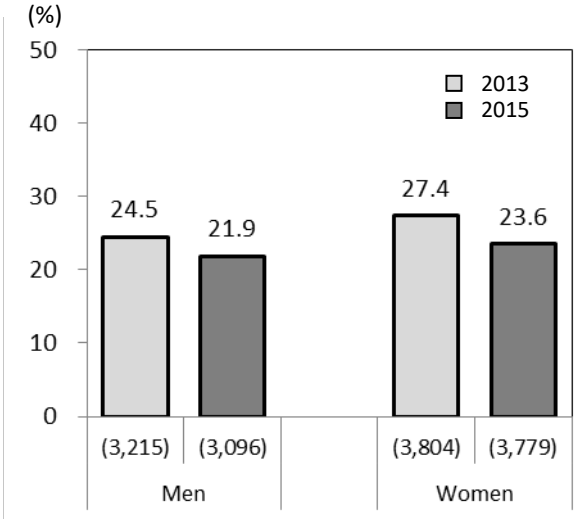
2. Knowledge of Harmful Alcohol Consumption

The proportions of those who know the amount of alcohol consumption which increase the risk of life-style related diseases for men (360 mL or more of sake per day) were 27.2% in men and 23.8% in women. The corresponding values of those who know the amount of alcohol consumption which increase the risk of life-style related diseases for women (180 mL or more of sake per day) were 21.9% in men and 23.6% in women.

When compared to the findings of 2013 surveys, the proportions of those who know the amount of alcohol consumption which increase the risk of life-style related diseases for men did not significantly change in both men and women, while the proportions of those who know the amount of alcohol consumption which increase the risk of life-style related diseases for women significantly decreased in both men and women.



a. The proportions of those who know the amount of alcohol consumption which increase the risk of life-style related diseases for men



b. The proportions of those who know the amount of alcohol consumption which increase the risk of life-style related diseases for women

Figure 43. Annual changes in the proportions of those who know the amount of alcohol consumption which increase the risk of life-style related diseases (aged 20 years and over, based on sex) (2013 and 2015)

3. Smoking Status

The proportion of regular smokers was 18.2% in total participants, and 30.1% in men and 7.9% in women. There has been a significant decrease in the numbers of regular smokers among both men and women over the past 10 years. The highest proportion of regular smokers was observed among individuals aged 30 to 39 years in men and individuals aged 40 to 49 years in women.

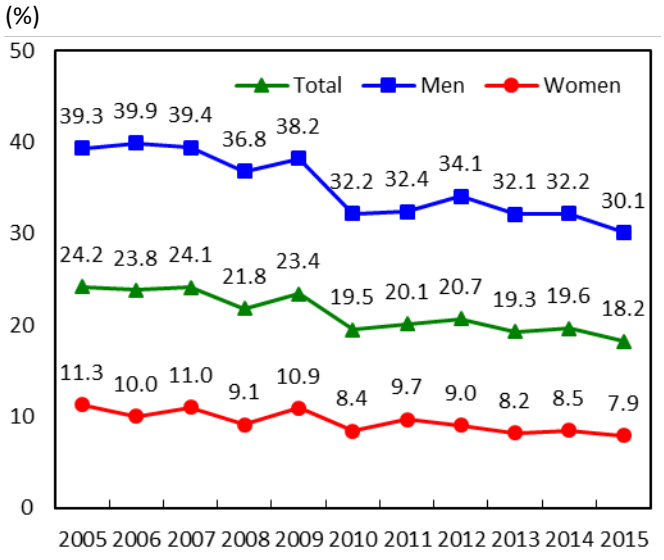


Figure 44-1. Annual changes in the proportion of regular smokers (aged 20 years and over) (2005 to 2015)

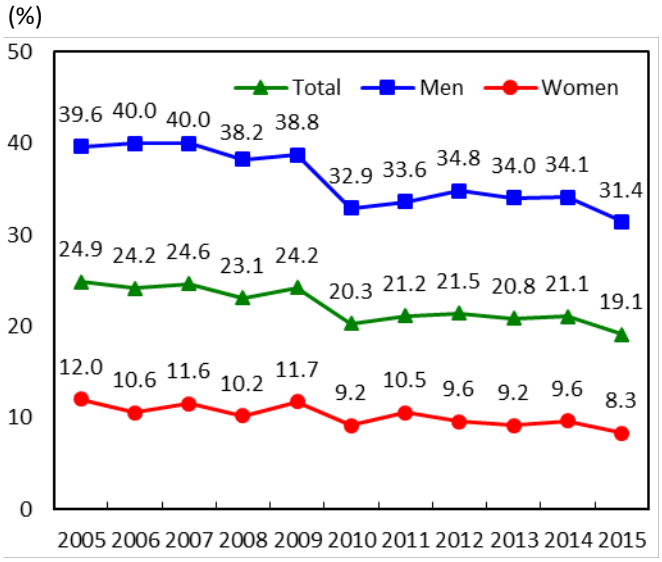


Figure 44-2. Annual changes in the age-adjusted proportion of regular smokers (aged 20 years and over) (2005 to 2015)

*"Regular smokers" refers to those who reported: smoking every day or sometimes (after 2013); smoking every day or sometimes during the past month (in respondents who reported smoking cigarettes) (from 2011 to 2012); and smoking (or had smoked) 100 cigarettes or more in a total or 6 months or longer (from 2005 to 2010).

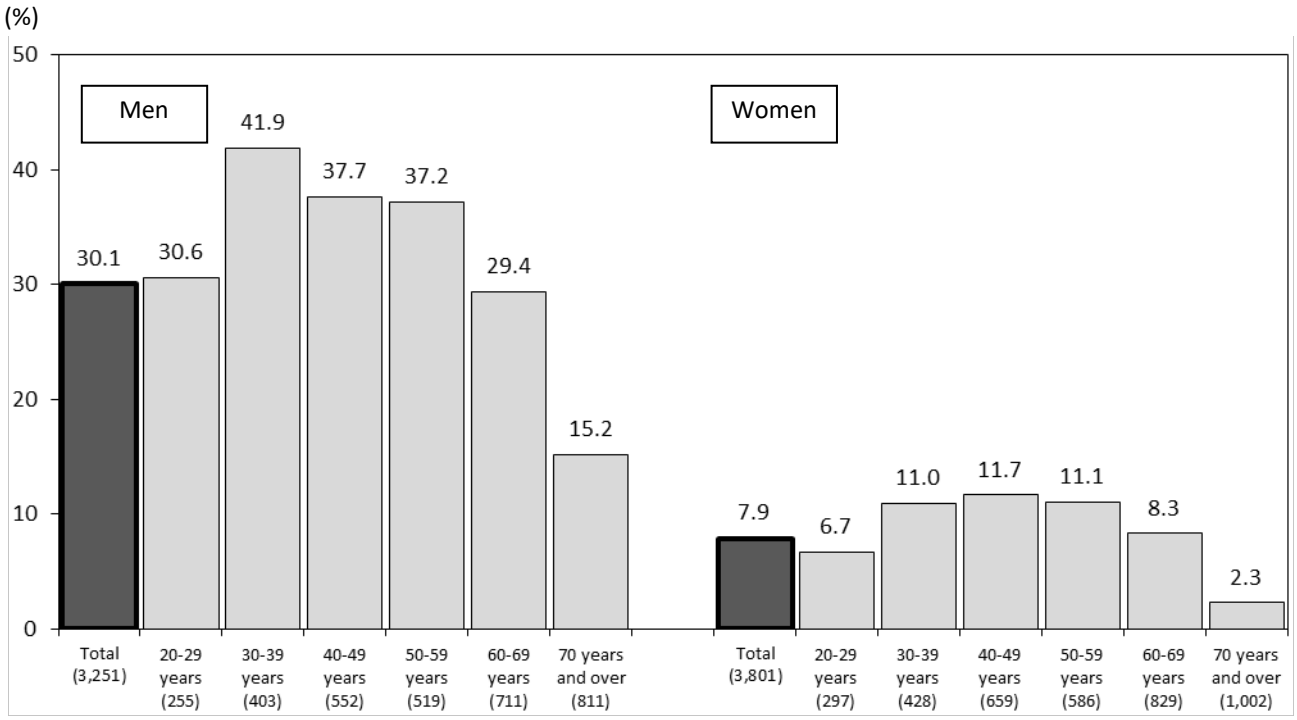


Figure 45. Proportion of regular smokers (aged 20 years and over, based on age and sex)

4. Number of Cigarettes and Willingness to Quit Smoking

Among the regular smokers, the proportion of those smoking 21 or more cigarettes per day was 10.0% in total participants, and 12.4 % in men and 2.0% in women. There has been a significant decrease in the proportion among both men and women over the past 10 years.

Among the regular smokers, was 27.9% in total participants, and 26.1 % in men and 33.6% in women. There was no significant change in both men and women since 2007.

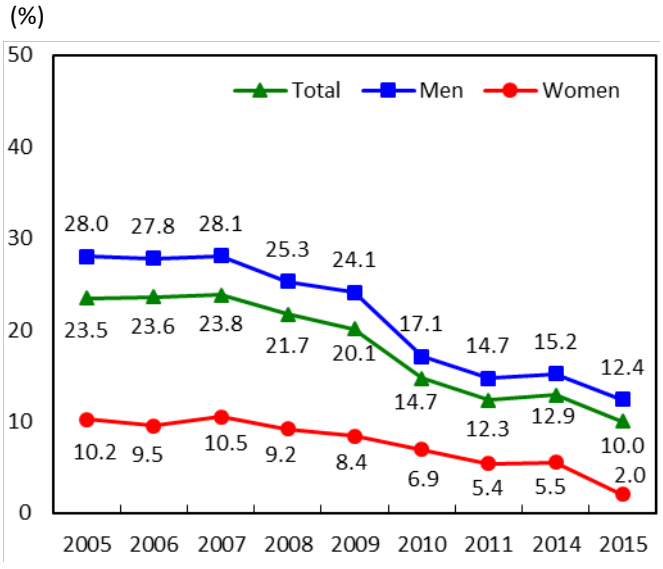


Figure 46-1. Annual changes in the proportion of those smoking 21 or more cigarettes per day (aged 20 years and over) (2005 to 2015)

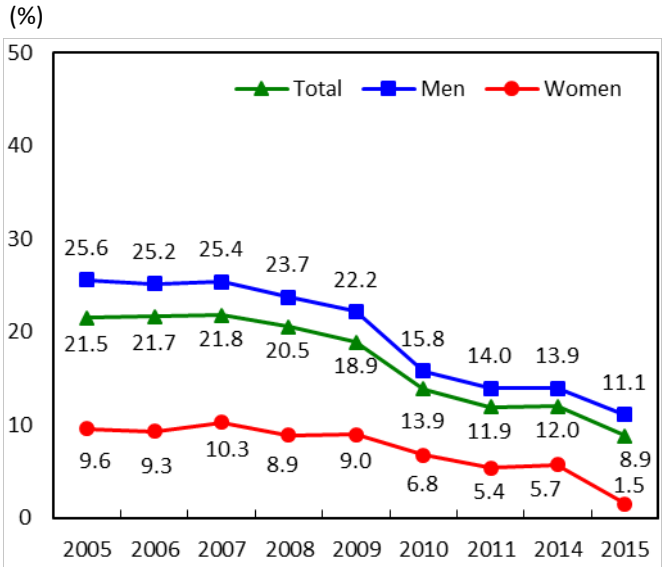


Figure 46-2. Annual changes in the age-adjusted proportion of those smoking 21 or more cigarettes per day (aged 20 years and over) (2005 to 2015)

* No survey was conducted in 2012 and 2013.

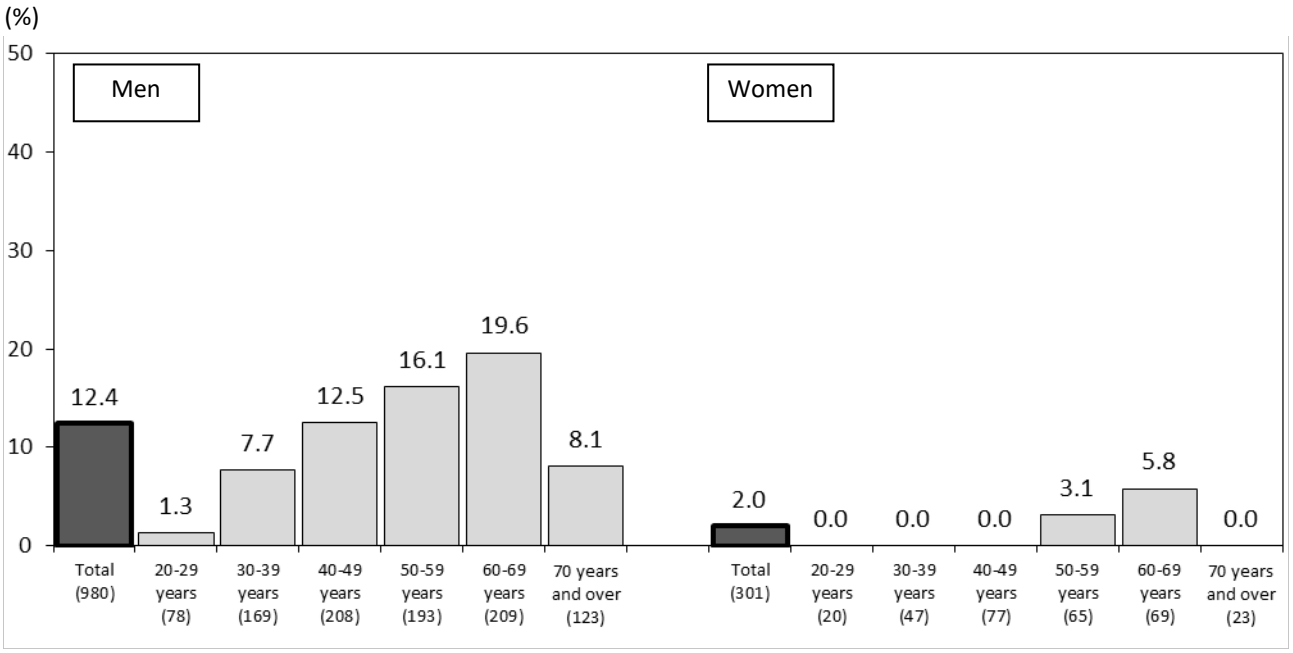


Figure 47. Proportion of those smoking 21 or more cigarettes per day (aged 20 years and over, based on age and sex)

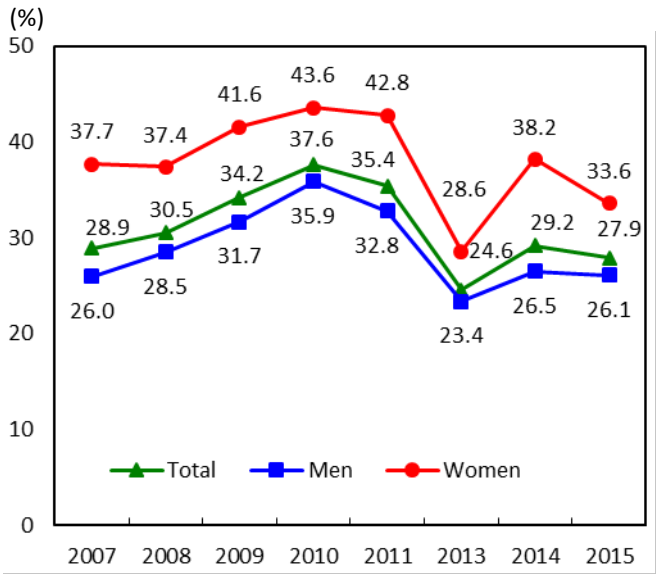


Figure 48-1. Annual changes in the proportion of those willing to quit smoking among regular smoker (aged 20 years and over) (2007 to 2015)

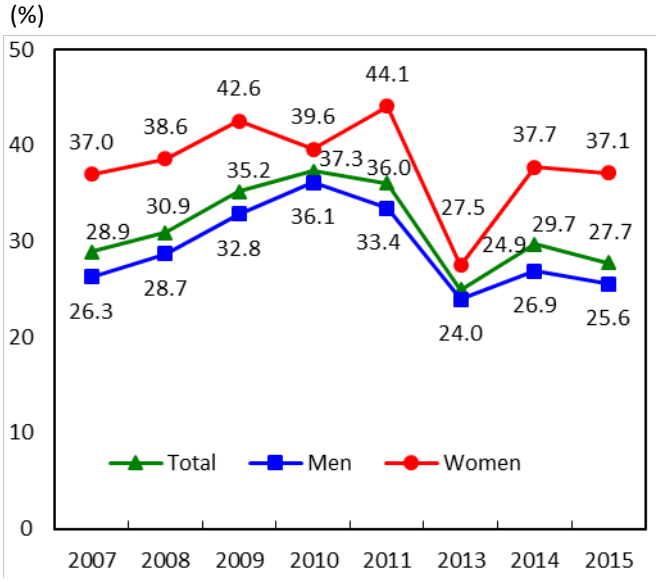


Figure 48-2. Annual changes in the age-adjusted proportion of those willing to quit smoking among regular smoker (aged 20 years and over) (2007 to 2015)

* No survey was conducted in 2012.

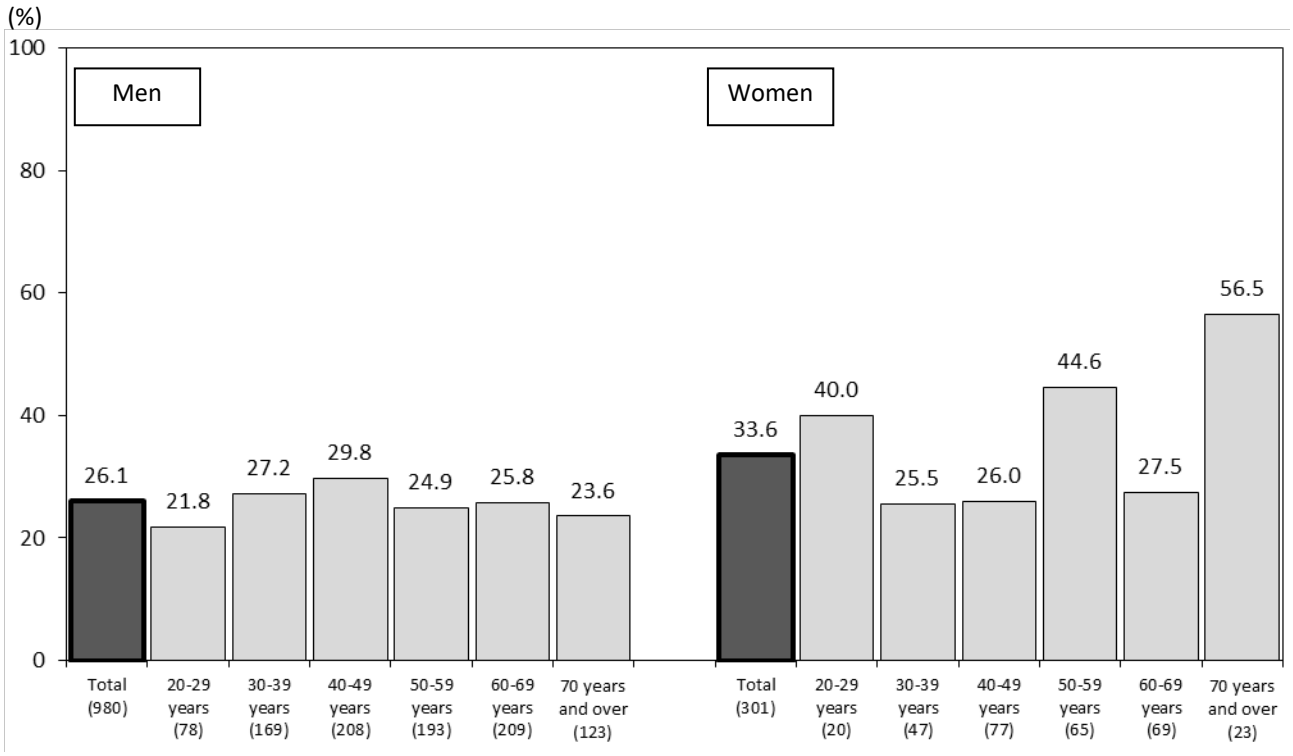


Figure 49. Proportion of those willing to quit smoking among regular smoker (aged 20 years and over, based on age and sex)

5. Neighborhood Availability of Smoking Cessation Clinics

The proportion of those having any smoking cessation clinics in the neighborhood was 34.6% in men and 42.9% in women with more than 50% of men among all age groups who answered as “I don’t know”.
Among those willing to quit smoking, more than 50% of both men and women answered they didn’t know whether there were any smoking cessation clinics in the neighborhood.

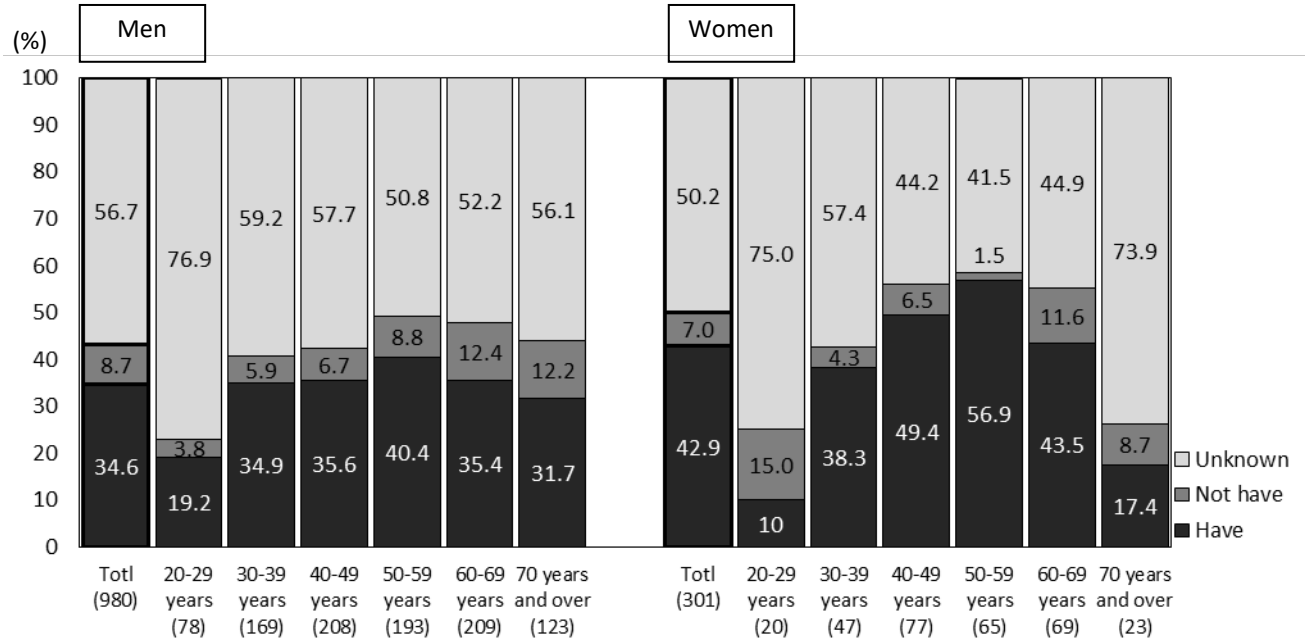


Figure 50. Proportion of those having any smoking cessation clinics in the neighborhood (aged 20 years and over, based on age and sex)

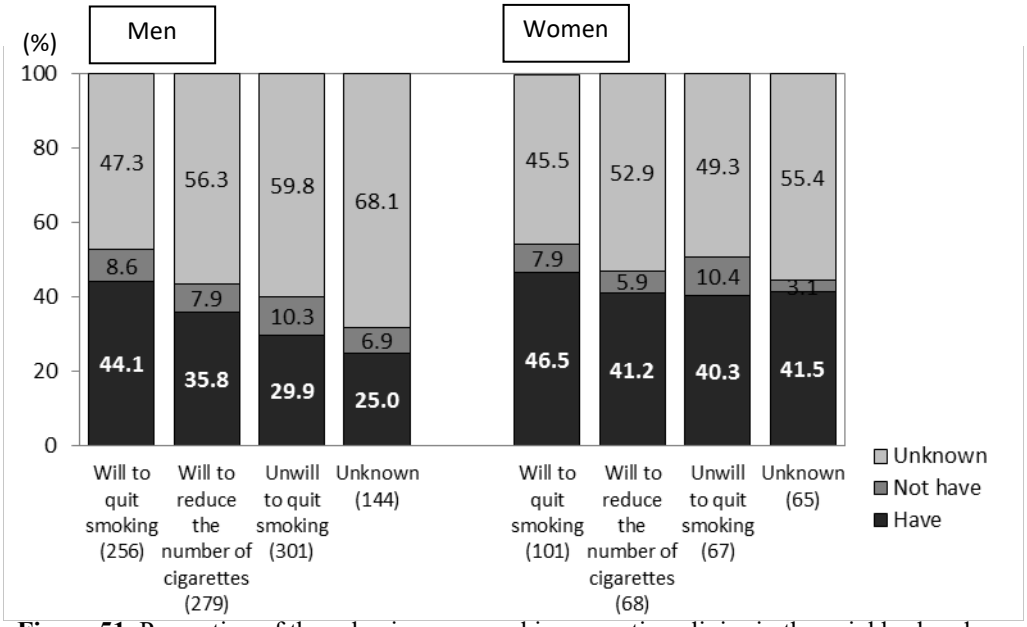


Figure 51. Proportion of those having any smoking cessation clinics in the neighborhood according to the willingness to quit smoking (aged 20 years and over, based on sex)

Chapter 5. Dental Health (Oral Health)

1. Dental Health (Oral Health)

The proportion of those without the difficulty of chewing any food items was 75.2% in total participants. When compared to the findings of 2009, 2013, and 2015 surveys, a significant increasing trend was observed among individuals aged 40 to 59 years, but not among individuals aged 60 years and over.
The proportion of those who chewing well and eating slowly was 47.2 % in men and 58.2% in women with the highest proportion among individuals aged 70 years and over in both men and women.

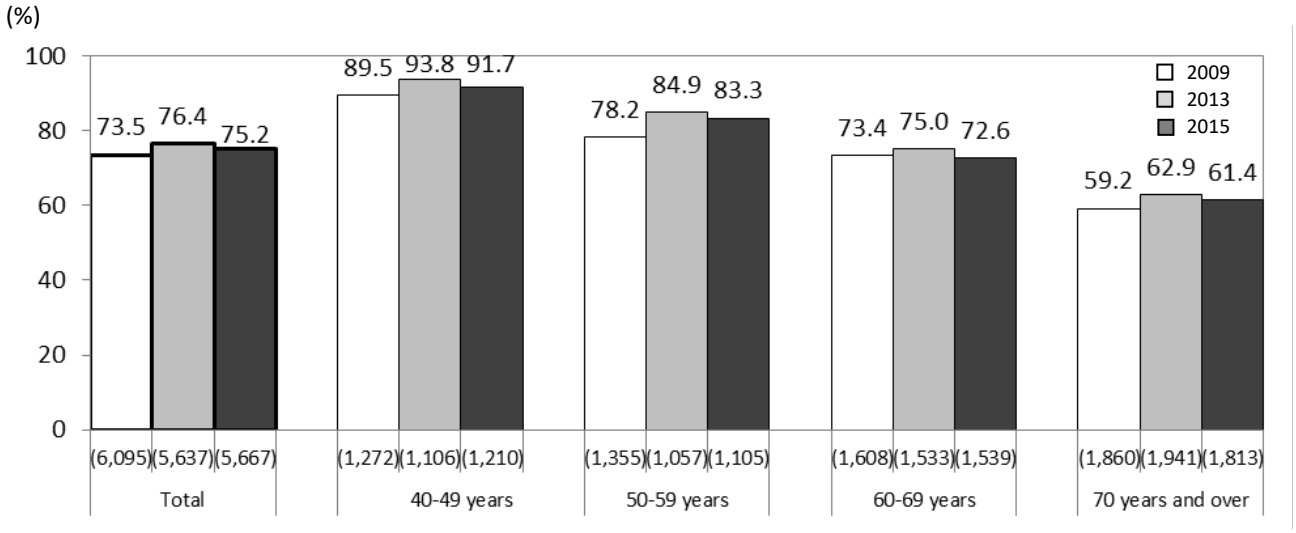


Figure 52. Annual changes in the proportion of those without the difficulty of chewing any food items (aged 40 years and over, total of men and women, based on age) (2009, 2013, and 2015)

*The age-adjusted proportions of those without the difficulty of chewing any food items was 74.1% in 2009, 78.1% in 2013, and 76.2% in 2015 with a significantly increasing trend from 2009 to 2015.

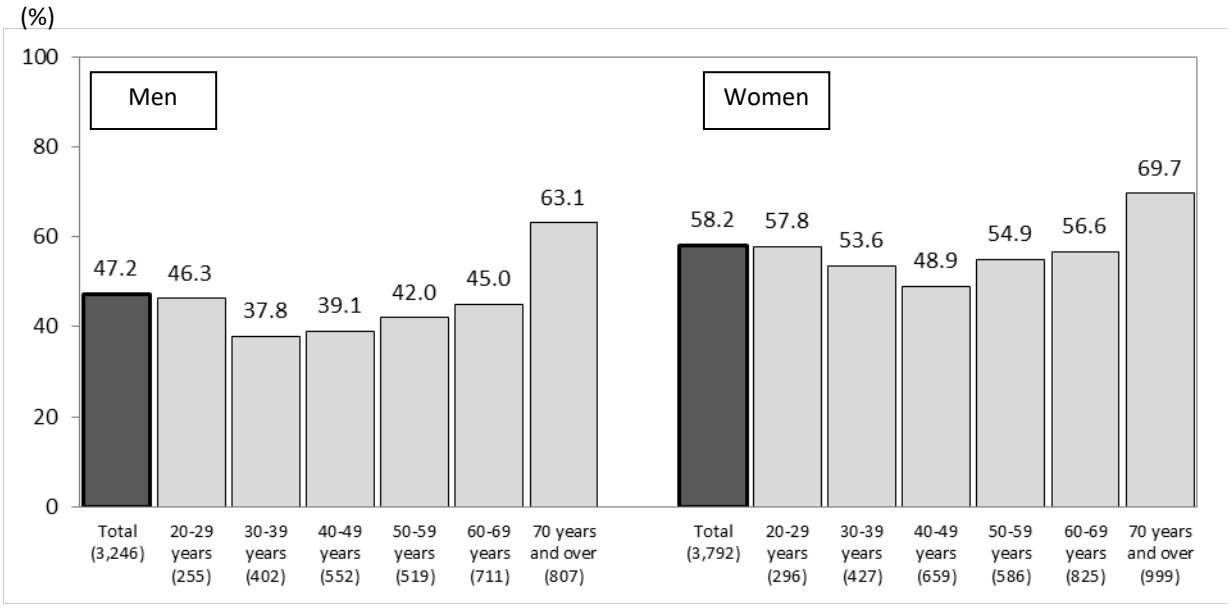


Figure 53. Proportion of those who chewing well and eating slowly (aged 20 years and over, based on age and sex)

Regarding oral status while eating, the proportion of those with the difficulty of chewing by both sides of back teeth was more than 40% of participants; 46.4% in individuals aged 60 to 69 years and 42.2% in individuals aged 70 years and over. The proportion of those who reported the difficulty of chewing hard food items compared to half a year ago, suffocation while drinking tea and soups, and dry mouth was 32.2%, 25.9%, and 25.1%, respectively.
According to the chewing function, the proportion of those who reported poor oral status was significantly higher among all questions on oral status while eating; the proportion of those reported the difficulty of chewing by both sides of back teeth was 71.0% and the proportion of those reported the difficulty of chewing hard food items compared to half a year ago was 58.4%.

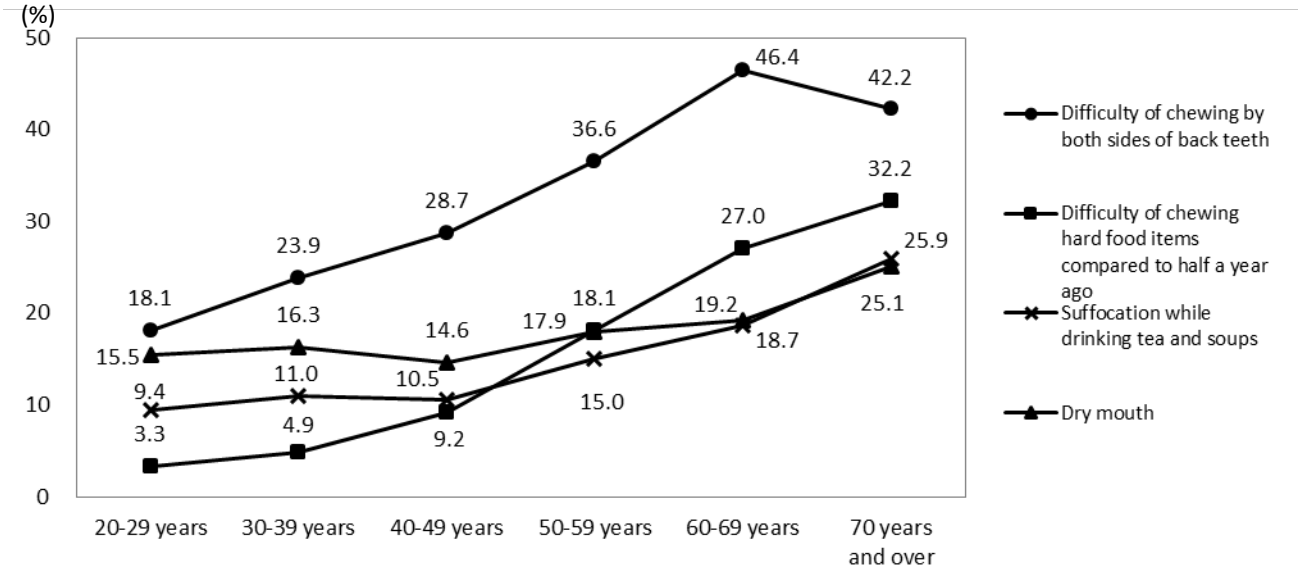


Figure 54. Oral status while eating (aged 20 years and over, total of men and women, based on age)
*The proportion of those who reported "the difficulty of chewing hard food items compared to half a year ago", "suffocation while drinking tea and soups", "dry mouth", and "the difficulty of chewing by both sides of back teeth" was shown.

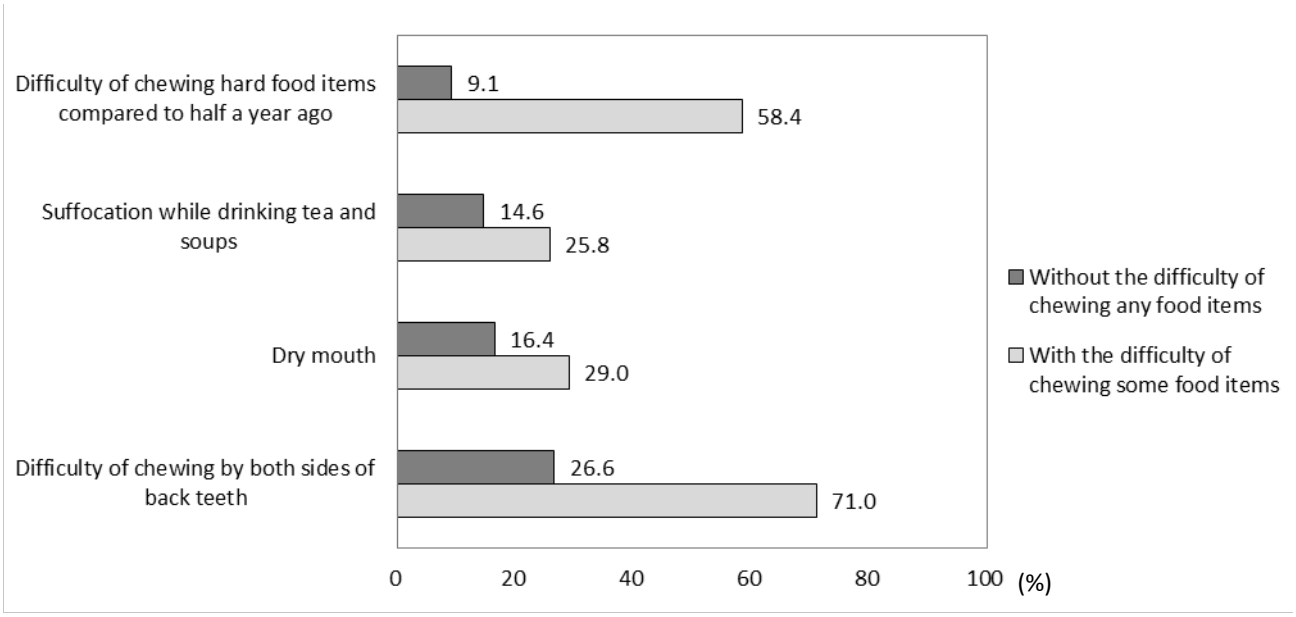


Figure 55. Oral status while eating according to chewing function (aged 20 years and over, total of men and women)
* "Those with the difficulty of chewing some food items" refers to those reported the difficulty of chewing "a part of food items" or "most of the food items" or those could not chewing.
* The number of participants included in the analysis differed in each question because those without response were excluded from the analysis.

< Appendix > Status of Intake by Nutrients/Food Groups

1. Intake of Nutrients

Table 10. Age-dependent nutrient intake

Nutrients		Total	1- 6 years	7-14 years	15-19 years	20-29 years	30-39 years	40-49 years	50-59 years	60-69 years	70 years and over	(reprint) 20 years and over
Participants	n	7,456	353	597	334	470	709	1,035	959	1,373	1,626	6,172
Energy	kcal	1,889	1,283	1,963	2,243	1,953	1,901	1,908	1,942	1,959	1,796	1,898
Protein	g	69.1	44.6	69.9	79.9	70.4	67.5	67.4	71.1	73.3	68.5	69.8
Animal protein	g	37.3	25.2	40.0	46.5	39.2	36.5	35.8	38.0	38.9	36.1	37.3
Fat	g	57.0	40.4	64.7	75.6	64.1	59.2	59.4	58.4	57.4	48.4	56.2
Animal fat	g	28.7	21.0	35.3	39.7	32.6	29.5	28.9	28.5	28.5	24.6	28.0
Saturated fatty acid	g	15.65	12.84	20.72	21.23	17.63	16.14	15.99	15.58	15.14	12.72	15.02
Monosaturated fatty acid	g	19.47	13.40	21.54	26.94	22.54	20.61	20.84	20.08	19.42	15.91	19.21
Omega-6 fatty acid	g	9.54	6.35	9.85	12.48	10.55	9.94	10.04	10.01	9.74	8.30	9.54
Omega-3 fatty acid	g	2.20	1.23	1.88	2.49	2.13	2.07	2.14	2.28	2.48	2.31	2.27
Cholesterol	mg	313	206	322	416	342	308	301	324	330	294	313
Carbohydrate	g	257.8	181.4	268.0	299.9	261.4	257.2	255.8	257.9	264.6	256.9	259.0
Dietary fiber	g	14.5	8.7	13.3	13.8	12.4	12.9	13.4	14.6	16.8	16.5	15.0
Water-soluble dietary fiber	g	3.4	2.1	3.2	3.2	3.0	3.1	3.2	3.4	3.9	3.7	3.5
Water-insoluble dietary fiber	g	10.6	6.3	9.7	10.1	9.0	9.4	9.8	10.7	12.3	12.1	11.0
Vitamin A RE	μgRE	534	415	563	509	481	496	479	535	597	569	540
Vitamin D	μg	7.5	4.4	5.7	6.5	6.5	6.2	6.2	7.5	9.3	9.3	7.9
Vitamin E	mg	6.6	4.3	6.1	7.5	6.4	6.2	6.4	6.8	7.5	6.8	6.8
Vitamin K	μg	242	132	190	231	207	217	231	244	288	275	254
Vitamin B_1	mg	0.86	0.57	0.90	1.04	0.91	0.83	0.85	0.86	0.91	0.84	0.86
Vitamin B_2	mg	1.17	0.83	1.27	1.24	1.12	1.05	1.07	1.18	1.25	1.23	1.17
Niacin	mg	14.6	7.3	11.8	15.1	14.0	14.3	14.8	16.0	16.4	14.8	15.2
Vitamin B_6	mg	1.13	0.71	1.02	1.16	1.05	1.04	1.06	1.15	1.27	1.22	1.16
Vitamin B_{12}	μg	5.9	3.1	5.0	5.1	5.0	5.1	4.9	6.1	7.2	7.1	6.2
Folate	μg	291	154	236	264	249	253	263	300	345	343	306
Pantothenic acid	mg	5.50	4.00	6.01	6.19	5.32	5.16	5.23	5.51	5.84	5.56	5.49
Vitamin C	mg	98	53	68	79	72	69	76	95	127	133	104
Sodium	mg	3,811	2,124	3,422	3,955	3,837	3,794	3,755	4,014	4,151	3,919	3,937
Salt equivalent	g	9.7	5.4	8.7	10.0	9.7	9.6	9.5	10.2	10.5	10.0	10.0
Potassium	mg	2,295	1,499	2,184	2,202	2,004	2,062	2,116	2,332	2,605	2,543	2,356
Calcium	mg	517	436	657	505	449	437	456	496	560	557	509
Magnesium	mg	244	148	223	236	218	224	232	256	276	264	252
Phosphorus	mg	990	692	1,067	1,091	954	930	941	1,009	1,057	1,005	994
Iron	mg	7.6	4.2	6.6	7.8	7.1	7.0	7.1	7.8	8.5	8.3	7.8
Zinc	mg	8.0	5.4	8.6	9.9	8.5	8.0	8.0	8.1	8.3	7.7	8.0
Copper	mg	1.13	0.69	1.07	1.23	1.10	1.08	1.08	1.16	1.23	1.19	1.16
Fat-energy ratio	%	26.9	27.8	29.5	30.4	29.0	27.9	27.9	27.0	26.1	23.9	26.4
Carbohydrate-energy ratio	%	58.4	58.3	56.2	55.3	56.5	57.7	57.8	58.1	58.7	60.8	58.8
Animal protein ratio	%	52.3	54.9	56.2	56.8	53.4	51.9	51.3	51.9	51.3	50.8	51.5
Cereal-energy ratio	%	41.2	39.9	41.6	43.1	44.2	43.8	43.1	40.6	38.7	40.2	41.1

Abbreviations: RE, retinol equivalents

* Nutrient values are shown as the mean value per person per day.

* The intake from fortified foods and supplements could not be determined.

Table 11. Age-dependent nutrient intake in male participants

Nutrients		Total	1- 6 years	7-14 years	15-19 years	20-29 years	30-39 years	40-49 years	50-59 years	60-69 years	70 years and over	(reprint) 20 years and over
Participants	n	3,502	182	315	165	225	347	453	440	640	735	2,840
Energy	kcal	2,110	1,361	2,087	2,641	2,222	2,161	2,168	2,186	2,180	1,986	2,130
Protein	g	75.4	46.7	74.2	92.6	78.3	74.8	75.1	77.6	79.3	74.0	76.4
Animal protein	g	40.9	26.5	42.6	53.8	43.5	41.0	40.1	41.4	42.5	39.0	40.9
Fat	g	62.1	43.5	69.2	87.0	72.0	65.7	64.7	63.1	61.2	51.9	61.1
Animal fat	g	31.9	22.6	38.0	47.0	37.7	34.0	31.9	31.1	31.0	26.7	30.9
Saturated fatty acid	g	16.90	14.19	22.15	24.55	19.80	17.60	16.81	16.34	16.02	13.55	16.05
Monosaturated fatty acid	g	21.46	14.41	23.21	31.10	25.66	23.24	22.96	22.06	21.04	17.24	21.16
Omega-6 fatty acid	g	10.45	6.63	10.55	14.54	11.78	11.03	11.09	11.12	10.48	8.91	10.44
Omega-3 fatty acid	g	2.40	1.29	1.98	2.81	2.30	2.30	2.42	2.55	2.68	2.51	2.50
Cholesterol	mg	338	209	334	458	365	337	323	355	362	317	340
Carbohydrate	g	285.6	191.5	283.9	358.6	298.9	292.9	290.8	286.6	288.4	279.7	287.6
Dietary fiber	g	14.9	9.0	13.9	15.4	13.1	13.3	13.9	14.8	16.8	17.0	15.4
Water-soluble dietary fiber	g	3.5	2.2	3.4	3.7	3.1	3.1	3.3	3.4	3.9	3.8	3.5
Water-insoluble dietary fiber	g	10.9	6.5	10.1	11.3	9.6	9.7	10.2	10.8	12.3	12.5	11.3
Vitamin A RE	μgRE	560	418	598	605	513	533	494	532	625	598	562
Vitamin D	μg	7.9	4.6	6.0	6.9	6.5	6.5	6.7	7.9	9.9	10.0	8.4
Vitamin E	mg	6.9	4.5	6.5	8.2	6.5	6.6	6.6	7.0	7.7	7.0	7.0
Vitamin K	μg	248	135	202	269	221	218	242	253	286	283	259
Vitamin B_1	mg	0.93	0.60	0.95	1.25	1.02	0.91	0.95	0.91	0.98	0.88	0.93
Vitamin B_2	mg	1.23	0.89	1.34	1.42	1.21	1.12	1.11	1.23	1.31	1.28	1.23
Niacin	mg	16.0	7.6	12.5	17.5	15.4	16.2	16.9	17.7	17.9	16.2	16.9
Vitamin B_6	mg	1.21	0.74	1.08	1.33	1.15	1.13	1.16	1.23	1.34	1.31	1.25
Vitamin B_{12}	μg	6.5	3.3	5.2	5.5	5.2	5.9	5.6	6.6	7.9	8.0	6.9
Folate	μg	298	155	245	296	264	263	276	306	348	351	314
Pantothenic acid	mg	5.89	4.18	6.36	7.21	5.82	5.56	5.67	5.86	6.16	5.91	5.87
Vitamin C	mg	95	54	67	89	71	70	75	88	120	132	101
Sodium	mg	4,149	2,184	3,583	4,427	4,243	4,251	4,200	4,461	4,463	4,245	4,321
Salt equivalent	g	10.5	5.5	9.1	11.2	10.8	10.8	10.7	11.3	11.3	10.8	11.0
Potassium	mg	2,379	1,575	2,297	2,506	2,124	2,180	2,216	2,372	2,638	2,635	2,432
Calcium	mg	529	468	689	578	473	443	459	493	550	570	513
Magnesium	mg	259	156	236	266	237	243	249	271	289	279	268
Phosphorus	mg	1,063	733	1,125	1,258	1,038	1,013	1,018	1,079	1,121	1,073	1,066
Iron	mg	7.9	4.4	6.9	8.6	7.6	7.5	7.5	8.3	8.9	8.7	8.3
Zinc	mg	8.9	5.6	9.2	11.6	9.6	9.1	9.0	9.0	9.0	8.4	8.9
Copper	mg	1.22	0.72	1.12	1.41	1.20	1.20	1.19	1.26	1.31	1.27	1.25
Fat-energy ratio	%	26.2	28.2	29.8	29.7	28.6	27.2	26.7	26.0	25.0	23.1	25.5
Carbohydrate-energy ratio	%	59.4	58.0	55.8	56.2	57.3	58.8	59.4	59.6	60.3	62.0	60.1
Animal protein ratio	%	52.6	55.4	56.6	56.8	53.4	52.8	51.2	52.2	51.8	50.6	51.7
Cereal-energy ratio	%	42.9	40.0	41.7	45.4	46.9	45.9	45.8	42.9	40.5	41.3	43.1

Abbreviations: RE, retinol equivalents

* Nutrient values are shown as the mean value per person per day.

* The intake from fortified foods and supplements could not be determined.

Table 12. Age-dependent nutrient intake in female participants

Nutrients		Total	1- 6 years	7-14 years	15-19 years	20-29 years	30-39 years	40-49 years	50-59 years	60-69 years	70 years and over	(reprint) 20 years and over
Participants	n	3,954	171	282	169	245	362	582	519	733	891	3,332
Energy	kcal	1,694	1,200	1,825	1,854	1,706	1,652	1,706	1,735	1,766	1,639	1,700
Protein	g	63.5	42.4	65.1	67.5	63.2	60.4	61.5	65.6	68.1	64.1	64.3
Animal protein	g	34.1	23.8	37.0	39.4	35.3	32.3	32.4	35.1	35.8	33.8	34.1
Fat	g	52.5	37.0	59.7	64.6	56.8	52.9	55.3	54.5	54.0	45.5	52.1
Animal fat	g	26.0	19.2	32.1	32.6	27.9	25.2	26.6	26.3	26.3	22.9	25.4
Saturated fatty acid	g	14.54	11.41	19.11	18.00	15.63	14.75	15.35	14.94	14.38	12.03	14.14
Monosaturated fatty acid	g	17.70	12.32	19.67	22.88	19.68	18.09	19.19	18.40	18.00	14.81	17.55
Omega-6 fatty acid	g	8.74	6.05	9.06	10.47	9.41	8.88	9.22	9.08	9.09	7.79	8.76
Omega-3 fatty acid	g	2.02	1.17	1.75	2.18	1.98	1.85	1.92	2.06	2.31	2.13	2.08
Cholesterol	mg	291	203	308	374	320	281	283	297	301	276	290
Carbohydrate	g	233.2	170.7	250.1	242.7	226.9	222.9	228.5	233.6	243.8	238.1	234.5
Dietary fiber	g	14.2	8.4	12.6	12.2	11.8	12.5	13.0	14.4	16.8	16.1	14.7
Water-soluble dietary fiber	g	3.3	2.1	3.0	2.8	2.9	3.0	3.1	3.4	3.8	3.6	3.4
Water-insoluble dietary fiber	g	10.4	6.1	9.2	8.9	8.5	9.0	9.5	10.6	12.3	11.8	10.8
Vitamin A RE	μgRE	512	413	524	416	452	461	468	537	572	546	520
Vitamin D	μg	7.2	4.2	5.5	6.1	6.5	6.0	5.8	7.2	8.8	8.7	7.5
Vitamin E	mg	6.4	4.0	5.8	6.7	6.3	5.9	6.1	6.7	7.3	6.5	6.6
Vitamin K	μg	236	129	175	193	195	216	222	236	290	269	249
Vitamin B_1	mg	0.80	0.54	0.84	0.83	0.81	0.75	0.78	0.81	0.85	0.80	0.81
Vitamin B_2	mg	1.11	0.77	1.18	1.07	1.04	0.99	1.04	1.13	1.20	1.19	1.13
Niacin	mg	13.3	7.1	10.9	12.8	12.8	12.6	13.1	14.6	15.1	13.6	13.8
Vitamin B_6	mg	1.05	0.67	0.96	1.00	0.97	0.95	0.97	1.08	1.20	1.15	1.08
Vitamin B_{12}	μg	5.4	2.7	4.8	4.7	4.9	4.3	4.4	5.7	6.5	6.4	5.6
Folate	μg	285	153	226	234	234	243	253	295	342	337	299
Pantothenic acid	mg	5.15	3.80	5.61	5.19	4.86	4.78	4.89	5.22	5.56	5.27	5.18
Vitamin C	mg	101	52	69	69	74	69	78	102	133	134	107
Sodium	mg	3,512	2,059	3,242	3,495	3,465	3,357	3,409	3,636	3,879	3,649	3,610
Salt equivalent	g	8.9	5.2	8.2	8.9	8.8	8.5	8.7	9.2	9.9	9.3	9.2
Potassium	mg	2,220	1,418	2,057	1,905	1,893	1,949	2,039	2,298	2,577	2,467	2,291
Calcium	mg	507	401	620	434	427	430	454	499	568	546	506
Magnesium	mg	231	140	208	205	201	205	219	243	265	250	238
Phosphorus	mg	925	649	1,002	927	876	851	881	950	1,000	949	933
Iron	mg	7.2	4.1	6.3	7.0	6.6	6.5	6.7	7.4	8.2	7.9	7.5
Zinc	mg	7.3	5.2	8.0	8.2	7.5	7.1	7.3	7.4	7.6	7.1	7.3
Copper	mg	1.05	0.65	1.01	1.06	1.00	0.97	1.00	1.08	1.15	1.12	1.07
Fat-energy ratio	%	27.5	27.4	29.2	31.0	29.4	28.6	28.9	27.9	27.1	24.5	27.2
Carbohydrate-energy ratio	%	57.4	58.6	56.5	54.3	55.8	56.6	56.6	56.9	57.3	59.9	57.6
Animal protein ratio	%	52.0	54.3	55.9	56.8	53.4	51.0	51.3	51.6	50.9	51.0	51.3
Cereal-energy ratio	%	39.7	39.8	41.5	40.8	41.7	41.9	40.9	38.7	37.0	39.4	39.5

Abbreviations: RE, retinol equivalents

* Nutrient values are shown as the mean value per person per day.

* The intake from fortified foods and supplements could not be determined.

2. Intake by Food Groups

Table 13. Age-dependent intake by food groups in participants

	Food groups	Total	1- 6 years	7-14 years	15-19 years	20-29 years	30-39 years	40-49 years	50-59 years	60-69 years	70 years and over	(reprint) 20 years and over
Total	Participants (n)	7,456	353	597	334	470	709	1,035	959	1,373	1,626	6,172
	Cereals	430.7	271.0	442.1	542.3	475.6	464.6	456.0	437.4	419.2	400.2	432.7
	Potatoes and starches	50.9	37.3	56.3	52.8	48.2	50.9	45.6	48.4	51.4	56.6	51.0
	Sugars and sweeteners	6.6	3.7	5.3	6.1	6.0	6.3	5.6	6.3	7.5	8.0	6.9
	Pulses	60.3	31.1	47.1	51.6	54.0	51.3	57.1	64.7	71.1	69.5	63.8
	Nuts and seeds	2.3	0.7	2.0	1.9	1.5	1.5	2.0	2.8	3.1	2.7	2.5
	Vegetables	281.9	156.3	246.3	262.9	241.3	256.2	265.3	286.5	331.2	315.5	293.6
	Green and yellow vegetables	94.4	55.4	72.5	81.3	77.3	80.3	84.1	95.0	114.8	113.5	99.4
	Fruits	107.6	94.5	80.9	81.5	61.5	56.2	68.2	91.2	145.9	163.8	112.3
	Mushrooms	15.7	7.0	12.6	15.2	13.5	14.0	15.5	16.9	18.6	17.3	16.6
	Seaweed	10.0	4.5	7.6	8.7	7.9	7.7	8.6	10.3	12.1	13.0	10.7
	Fish and shellfish	69.0	30.5	45.8	55.6	52.9	58.5	54.0	75.1	86.4	89.1	74.2
	Meats	91.0	57.4	101.2	148.0	122.6	110.4	107.4	92.9	81.7	61.6	88.8
	Eggs	35.5	22.0	34.8	53.1	39.3	33.0	33.8	37.2	37.5	33.6	35.4
	Milks	132.2	212.2	304.6	141.8	104.3	89.0	96.2	104.5	117.3	128.3	110.4
	Fats and oils	10.8	7.3	11.2	15.2	12.6	11.9	12.2	11.6	10.6	8.2	10.7
	Confectionaries	26.7	29.3	36.9	34.1	27.0	24.9	25.0	26.5	26.1	23.2	25.1
	Beverages	788.7	287.2	421.1	630.7	704.1	830.3	848.3	951.8	906.8	837.5	861.5
	Seasonings and spices	85.7	47.9	68.4	77.2	92.4	87.8	95.1	96.0	90.9	82.7	90.0
Men	Participants (n)	3,502	182	315	165	225	347	453	440	640	735	2,840
	Cereals	503.1	283.4	474.0	668.7	572.1	555.0	552.6	525.7	491.1	453.7	510.8
	Potatoes and starches	51.9	37.4	56.8	61.1	49.8	53.6	48.4	45.8	50.9	57.8	51.7
	Sugars and sweeteners	6.5	3.5	5.6	6.1	5.1	7.0	5.5	6.3	7.1	8.3	6.9
	Pulses	62.3	30.9	50.0	55.6	55.4	51.4	58.5	68.4	71.7	74.4	66.0
	Nuts and seeds	2.3	0.9	2.0	2.6	1.6	1.7	1.8	2.6	3.3	2.7	2.5
	Vegetables	288.1	154.2	259.3	296.9	257.1	266.5	281.1	286.6	327.6	322.3	299.4
	Green and yellow vegetables	92.5	55.0	75.2	92.8	77.9	83.0	84.1	89.7	108.3	111.2	96.8
	Fruits	98.5	107.7	80.7	88.5	51.2	49.0	54.0	72.0	129.9	159.9	100.5
	Mushrooms	15.8	6.2	12.8	14.7	15.0	13.5	16.3	16.2	18.5	18.0	16.8
	Seaweed	10.6	4.6	8.6	7.5	9.4	8.2	8.8	12.4	12.6	13.7	11.4
	Fish and shellfish	74.7	31.8	46.6	56.0	52.5	66.5	60.6	82.6	95.4	98.2	81.7
	Meats	106.3	59.2	112.0	184.6	148.3	130.2	130.4	106.2	94.5	69.6	104.2
	Eggs	38.0	20.6	35.8	56.3	42.0	35.9	34.8	42.0	41.8	35.2	38.3
	Milks	129.9	236.5	326.4	176.1	108.1	84.0	76.8	83.0	100.1	123.7	98.5
	Fats and oils	11.7	7.7	11.5	16.9	13.6	13.9	13.2	13.0	11.3	8.7	11.7
	Confectionaries	23.6	31.4	37.4	31.9	19.8	19.5	19.7	20.9	22.8	21.9	21.1
	Beverages	860.2	298.9	422.4	732.0	803.2	924.5	938.7	1082.8	1001.1	898.3	952.2
	Seasonings and spices	96.9	48.0	68.7	87.2	105.5	102.4	116.2	113.1	100.3	93.7	103.7
Women	Participants (n)	3,954	171	282	169	245	362	582	519	733	891	3,332
	Cereals	366.6	257.8	406.5	418.9	387.0	377.9	380.9	362.6	356.4	356.1	366.2
	Potatoes and starches	50.0	37.1	55.7	44.6	46.8	48.4	43.4	50.7	51.8	55.6	50.4
	Sugars and sweeteners	6.6	3.8	5.0	6.2	6.9	5.6	5.7	6.4	7.9	7.8	6.9
	Pulses	58.6	31.4	43.9	47.6	52.7	51.2	56.0	61.6	70.7	65.4	61.8
	Nuts and seeds	2.3	0.5	2.0	1.2	1.5	1.3	2.2	2.9	2.9	2.7	2.5
	Vegetables	276.5	158.5	231.7	229.7	226.8	246.3	252.9	286.5	334.4	309.9	288.7
	Green and yellow vegetables	96.0	55.7	69.4	70.0	76.7	77.7	84.1	99.4	120.4	115.5	101.6
	Fruits	115.7	80.5	81.2	74.6	71.0	63.2	79.2	107.4	159.9	167.0	122.5
	Mushrooms	15.7	7.9	12.4	15.7	12.2	14.6	15.0	17.5	18.8	16.7	16.4
	Seaweed	9.5	4.5	6.4	9.8	6.5	7.3	8.5	8.5	11.7	12.5	10.0
	Fish and shellfish	64.0	29.1	45.0	55.3	53.3	50.9	48.9	68.8	78.6	81.7	67.8
	Meats	77.4	55.4	89.2	112.3	99.0	91.4	89.4	81.6	70.5	55.0	75.8
	Eggs	33.4	23.6	33.7	49.9	36.9	30.2	33.0	33.1	33.8	32.4	33.0
	Milks	134.3	186.3	280.3	108.4	100.8	93.9	111.2	122.8	132.3	132.0	120.6
	Fats and oils	9.9	6.9	10.7	13.4	11.7	10.1	11.4	10.5	10.1	7.7	9.9
	Confectionaries	29.4	27.0	36.4	36.2	33.5	30.1	29.1	31.2	28.9	24.3	28.5
	Beverages	725.4	274.8	419.5	531.9	613.1	740.1	777.9	840.8	824.5	787.4	784.3
	Seasonings and spices	75.7	47.8	68.0	67.5	80.4	73.9	78.8	81.5	82.7	73.6	78.3

* Food values are shown in grams and are mean values per person per day. Food for specified health use is included in the regular food group.

3. Annual changes in the intakes of energy and nutrients associated with staple foods, main dishes, and side dished from 1995 to 2015.

* Age-and sex-dependent nutrition intake from 1995 to 2015 is shown because the intake at the individual level has been available since 1995 when the dietary assessment method was changed.

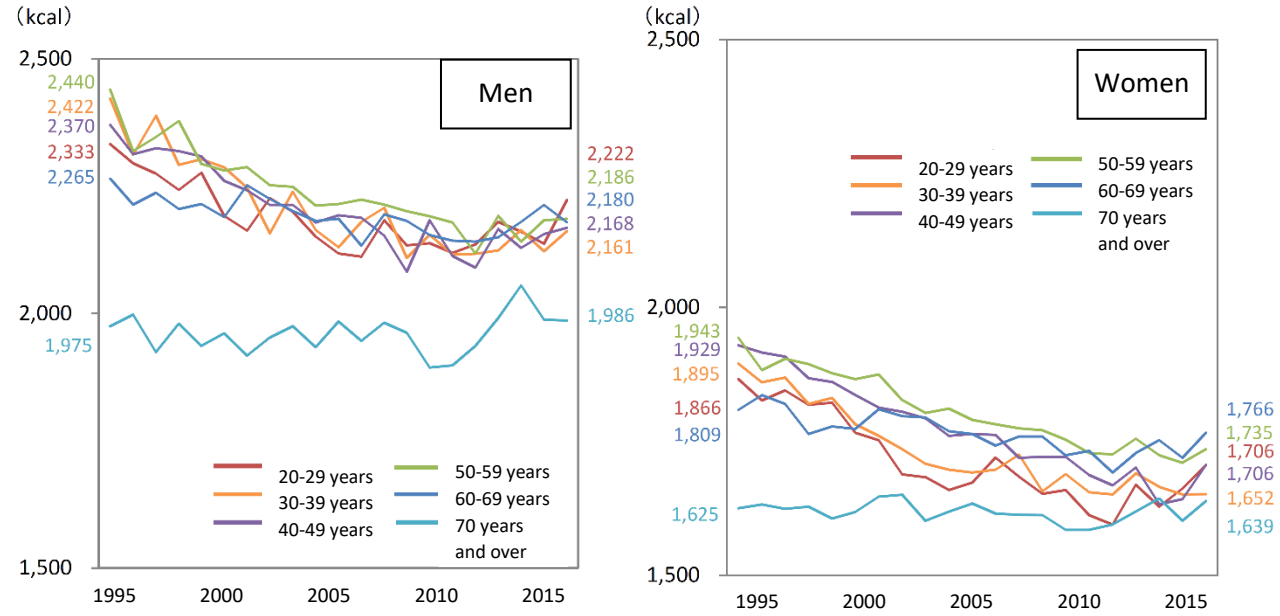


Figure 56. Annual changes in the mean energy intake in participants from 1995 to 2015 (aged 20 years and over, based on age and sex)

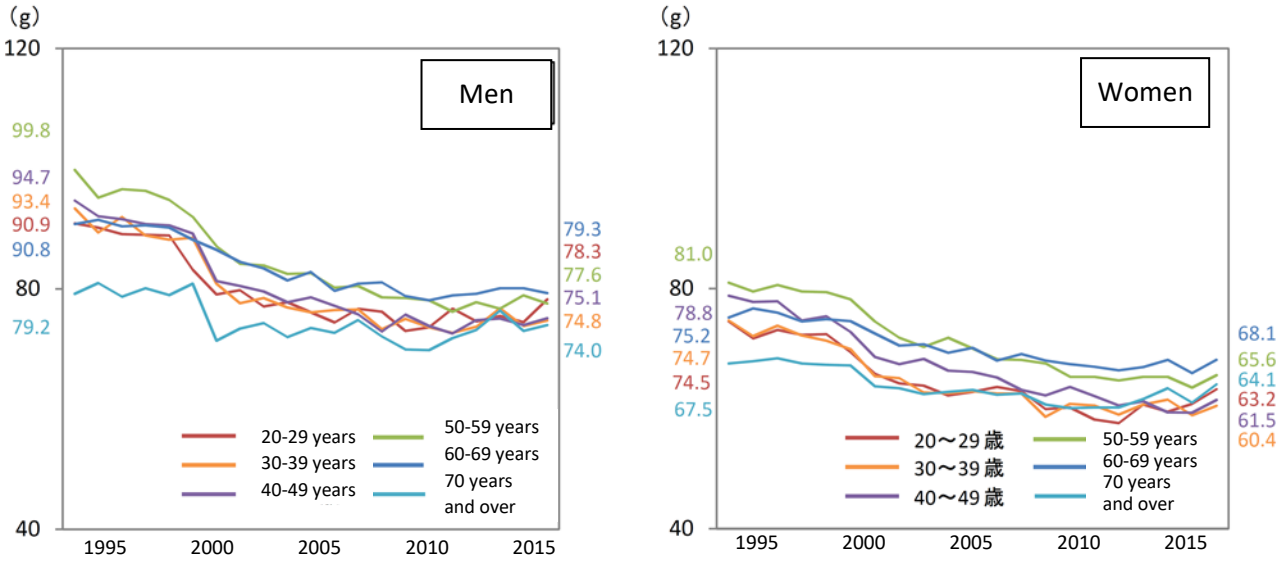


Figure 57. Annual changes in the mean protein intake in participants from 1995 to 2015 (aged 20 years and over, based on age and sex)

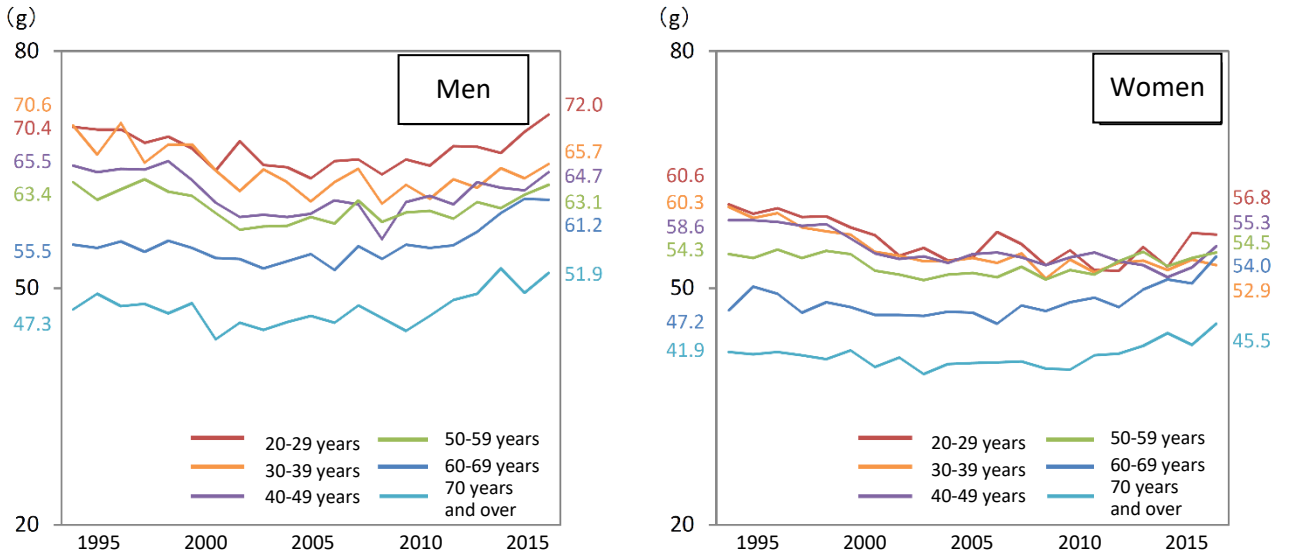


Figure 58. Annual changes in the mean fat intake in participants from 1995 to 2015 (aged 20 years and over, based on age and sex)

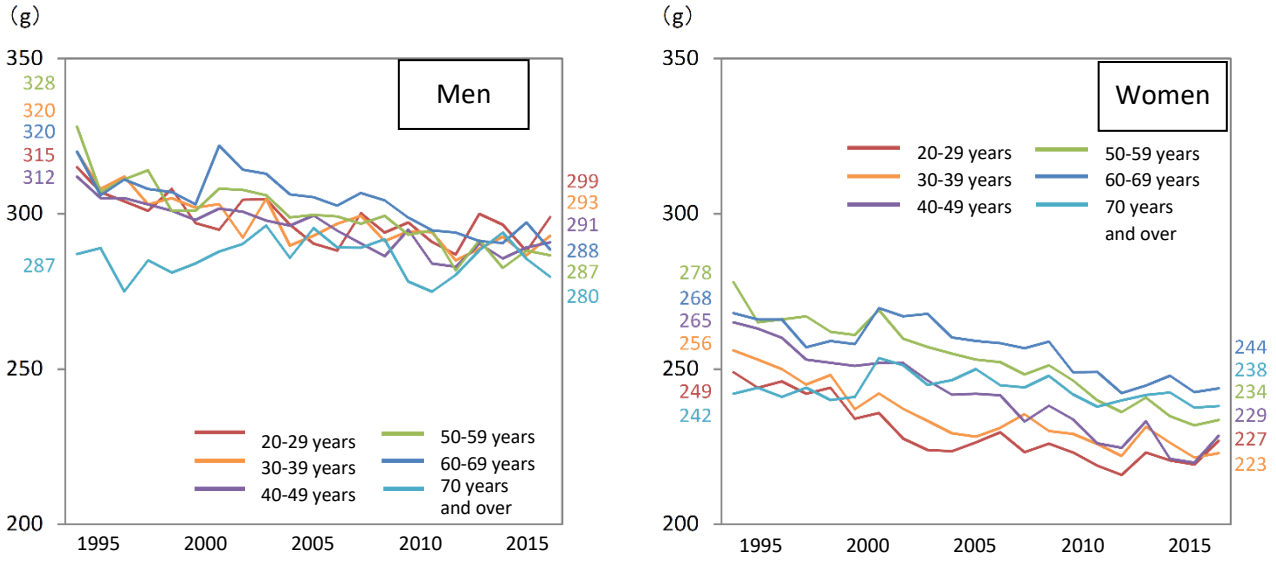


Figure 59. Annual changes in the mean carbohydrate intake in participants from 1995 to 2015 (aged 20 years and over, based on age and sex)

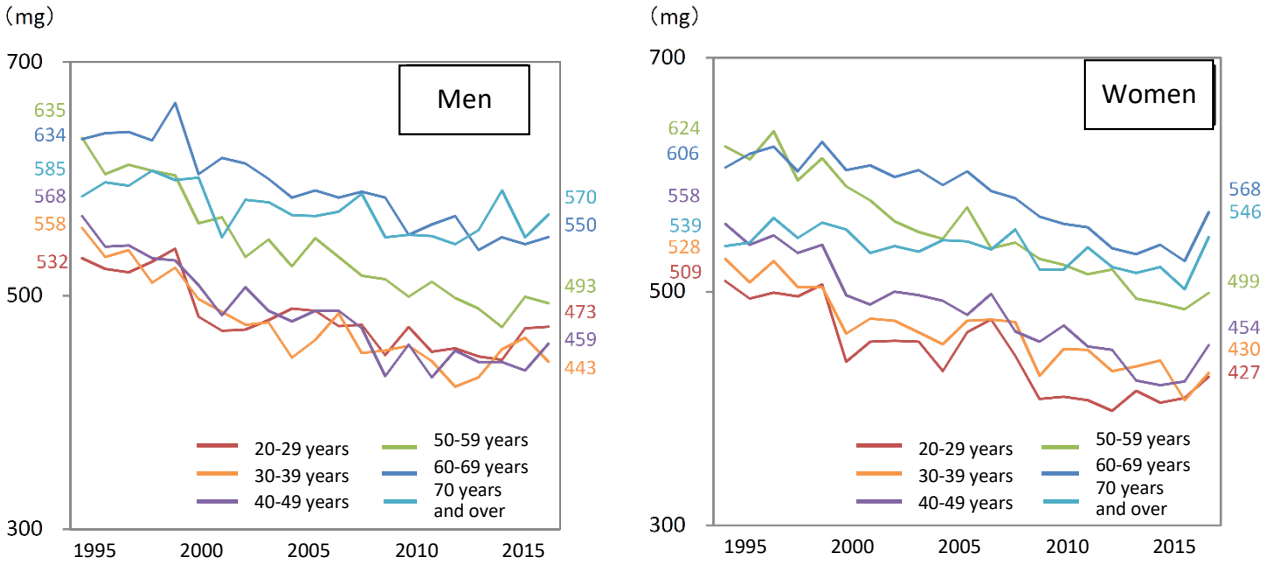


Figure 60. Annual changes in the mean calcium intake in participants from 1995 to 2015 (aged 20 years and over, based on age and sex)

Figure 61. Annual changes in the mean dietary fiber intake in participants from 2001 to 2015 (aged 20 years and over, based on age and sex)

* The fiber intake has been available since 2001 when the 5th edition of Standard Tables of Food Composition in Japan was used for calculation of nutrition intake.

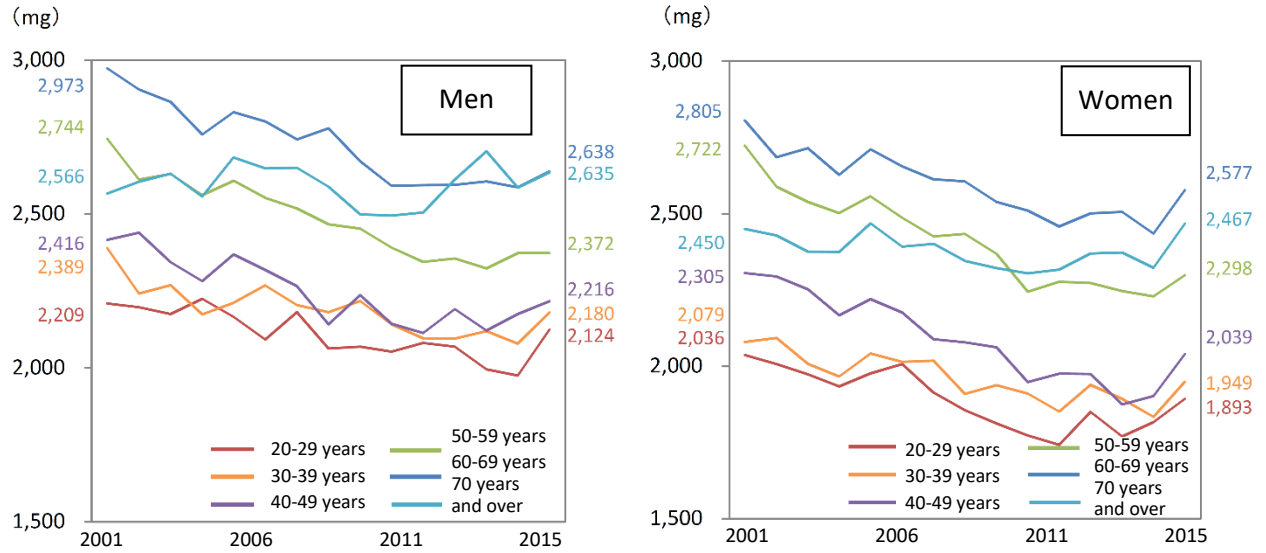


Figure 62. Annual changes in the mean potassium intake in participants from 2001 to 2015 (aged 20 years and over, based on age and sex)

* The potassium intake has been available since 2001 when the 5th edition of Standard Tables of Food Composition in Japan was used for calculation of nutrition intake.