

Outline for the Results of the National Health and Nutrition Survey Japan, 2007

This report was prepared by National Institute of Health and Nutrition as a summary English report of the National Health and Nutrition Survey conducted by Ministry of Health, Labour and Welfare in 2007.

I. Outline of the survey

1. Purpose of the survey

This survey, based on the Health Promotion Law (Law No. 103, enacted in 2002), aims to ascertain the actual state of health, food intake, nutritional intake, and lifestyles of the Japanese people and to obtain basic data for implementing effective measures for health improvement, etc.

2. Survey subjects

The survey was conducted on members of households within the survey district established in 2007 for, and based on, basic research on the living conditions of Japanese people who were aged 1 year or older as of November 1, 2007.

Subjects of the survey were members of households within 300 survey district units. Subjects were selected by stratified random sampling out of the survey districts established in 2007 for, and based on, basic research on the living conditions of the Japanese.

The survey was conducted on 3,586 households and the numbers of study subjects are shown as follows:

Total number	Total number	1 – 6	7 – 14	15 – 19	20 – 29	30 – 39	40 – 49	50 – 59	60 – 69	70 or older
Physical checkup	8,000	431	690	338	541	1,056	1,001	1,183	1,345	1,415
Blood test	4,018	-	-	-	207	590	558	714	934	1,012
Nutritional intake survey	8,885	488	795	393	665	1,201	1,107	1,268	1,426	1,542
Lifestyle survey	8,119	-	-	443	720	1,262	1,200	1,399	1,495	1,600

Male	Total number	1 – 6	7 – 14	15 – 19	20 – 29	30 – 39	40 – 49	50 – 59	60 – 69	70 or older
Physical checkup	3,662	218	331	173	238	453	467	537	620	625
Blood test	1,625	-	-	-	89	200	210	265	413	448
Nutritional intake survey	4,164	243	392	201	304	540	537	587	664	696
Lifestyle survey	3,759	-	-	225	324	570	575	655	699	711

Female	Total number	1 – 6	7 – 14	15 – 19	20 – 29	30 – 39	40 – 49	50 – 59	60 – 69	70 or older
Physical checkup	4,338	213	359	165	303	603	534	646	725	790
Blood test	2,393	-	-	-	118	390	348	449	524	564
Nutritional intake survey	4,721	245	403	192	361	661	570	681	762	846
Lifestyle survey	4,360	-	-	218	396	692	625	744	796	889

3. Items checked

- 1) Questionnaire survey on physical checkup
 - a) Height and weight (subjects aged 1 year or older)
 - b) Abdominal circumference (subjects aged 6 years or older)
 - c) Blood pressure (subjects aged 15 years or older)
 - d) Blood test (subjects aged 20 years or older)
 - e) Daily physical activity <step count> (subjects aged 15 years or older)
 - f) Examination by interview <agents taken, physical exercise> (subjects aged 20 years or older)
- 2) Questionnaire survey on nutritional intake (subjects aged 1 year or older)
Food intake, nutritional intake, and meal patterns of each household member <meal-skipping, eating-out and other habits>
- 3) Questionnaire survey on lifestyle (subjects aged 15 years or older)
A questionnaire survey was conducted to ascertain lifestyle in general, such as eating habits, physical activity, physical exercise, rest (sleep), alcohol intake, smoking, and dental health. Especially in the survey conducted in 2007, each subject's actual amount of rest and sleep, as well as current diabetes status, was ascertained in order to collect basic data to promote the areas of "Rest and Sleep" and "Diabetes" in Health Japan 21.

4. Date of the survey

- 1) Questionnaire survey on physical checkup: November 2007
- 2) Questionnaire survey on nutritional intake: on a specific day in November 2007 (excluding Sundays and public holidays).
- 3) Questionnaire survey on lifestyle: on the same day as the Questionnaire survey on nutritional intake was conducted.

5. Survey methods

- 1) Questionnaire survey on physical checkup: The study subjects were gathered together at the test site and the survey staff of doctors, registered dieticians, health nurses and other healthcare workers took measurements of each item to be checked and asked each subject about his/her physical condition.
- 2) Questionnaire survey on nutritional intake: The habitual dietary intake of each study subject in each household was estimated using weighed dietary records, and registered nurses (survey staff) explained, collected and checked every questionnaire survey sheet.
- 3) Questionnaire survey on lifestyle: A self-administered questionnaire survey was conducted using the delivery and collection method.

6. Survey system

The survey system used was as follows:

Ministry of Health, Labour and Welfare - Administrative Divisions (Prefectures) • Cities with Public Health Centers • Special Districts - Public Health Centers - The National Health and Nutrition Survey Staff

Since numerical values given in this survey results are rounded off, the total for the given values may differ slightly from the actual total sum.

II Outline of the results

Part 1. Current diabetes status

1. Diabetes

Table 1. Test subjects

	(Number of subjects)							
	Total number	20 – 29	30 – 39	40 – 49	50 – 59	60 – 69	70 or older	(Regrouped) 40-74
Total number	4,003	204	589	557	711	934	1,008	2,624
Male	1,619	88	200	210	264	411	446	1,082
Female	2,384	116	389	347	447	523	562	1,542

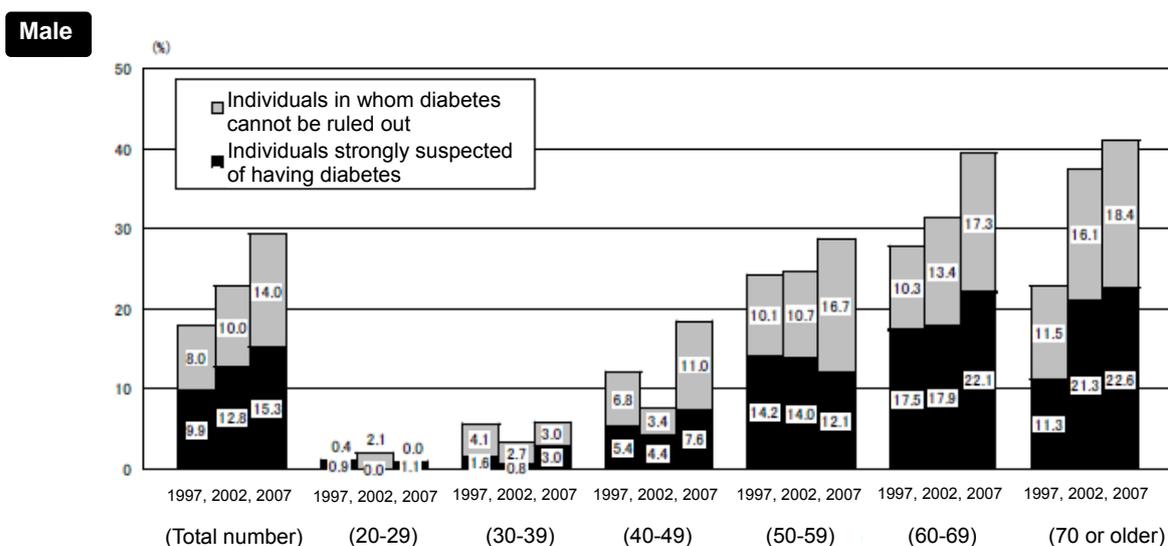
Test subjects consisted of those people whose hemoglobin A1c had been measured.

1.1 Current status of “individuals strongly suspected of having diabetes” and “individuals in whom diabetes cannot be ruled out”

▼ Criteria for identifying “individuals strongly suspected of having diabetes” and “individuals in whom diabetes cannot be ruled out” ▼ (same as that used for the diabetes surveys conducted in 1997 and 2002)

- 1) “Individuals strongly suspected of having diabetes” were defined as those having a hemoglobin A1c of 6.1% or more, or as those who responded to the questionnaire by saying that they were currently receiving diabetes treatment.
- 2) “Individuals in whom diabetes cannot be ruled out” were defined as those with hemoglobin A1c of 5.6% or more and less than 6.1% (other than those specified in 1).

Figure 1. Annual variation in the percentage of “individuals strongly suspected of having diabetes” and “individuals in whom diabetes cannot be ruled out”



Female

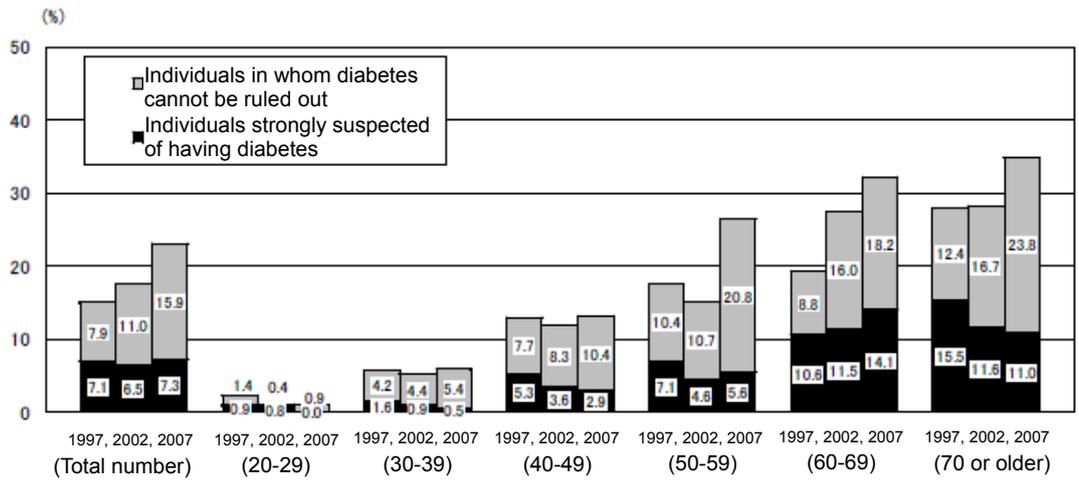


Table 2. Percentage of “individuals strongly suspected of having diabetes” and “individuals in whom diabetes cannot be ruled out”

		Total number		20-29		30-39		40-49		50-59		60-69		70 or older		(Regrouped) 40-74	
		Actual No.	%	Actual No.	%	Actual No.	%	Actual No.	%	Actual No.	%	Actual No.	%	Actual No.	%	Actual No.	%
Total number	Individuals strongly suspected of having diabetes	420	10.5	1	0.5	8	1.4	26	4.7	57	8.0	165	17.7	163	16.2	318	12.1
	(Individuals from among those specified above, who are also on medications)*	193	4.8	1	0.5	2	0.3	11	2.0	13	1.8	88	9.4	78	7.7	149	5.7
	Individuals in whom diabetes cannot be ruled out	606	15.1	1	0.5	27	4.6	59	10.6	137	19.3	166	17.8	216	21.4	443	16.9
	Other than those specified above	2,977	74.4	202	99.0	554	94.1	472	84.7	517	72.7	603	64.6	629	62.4	1,863	71.0
	Total number	4,003	100.0	204	100.0	589	100.0	557	100.0	711	100.0	934	100.0	1,008	100.0	2,624	100.0
Male	Individuals strongly suspected of having diabetes	247	15.3	1	1.1	6	3.0	16	7.6	32	12.1	91	22.1	101	22.6	186	17.2
	(Individuals from among those specified above, who are also on medications)*	120	7.4	1	1.1	2	1.0	8	3.8	8	3.0	50	12.2	51	11.4	94	8.7
	Individuals in whom diabetes cannot be ruled out	226	14.0	0	0.0	6	3.0	23	11.0	44	16.7	71	17.3	82	18.4	170	15.7
	Other than those specified above	1,146	70.8	87	98.9	188	94.0	171	81.4	188	71.2	249	60.6	263	59.0	726	67.1
	Total number	1,619	100.0	88	100.0	200	100.0	210	100.0	264	100.0	411	100.0	446	100.0	1,082	100.0
Female	Individuals strongly suspected of having diabetes	173	7.3	0	0.0	2	0.5	10	2.9	25	5.6	74	14.1	62	11.0	132	8.6
	(Individuals from among those specified above, who are also on medications)*	73	3.1	0	0.0	0	0.0	3	0.9	5	1.1	38	7.3	27	4.8	55	3.6
	Individuals in whom diabetes cannot be ruled out	380	15.9	1	0.9	21	5.4	36	10.4	93	20.8	95	18.2	134	23.8	273	17.7
	Other than those specified above	1,831	76.8	115	99.1	366	94.1	301	86.7	329	73.6	354	67.7	366	65.1	1,137	73.7
	Total number	2,384	100.0	116	100.0	389	100.0	347	100.0	447	100.0	523	100.0	562	100.0	1,542	100.0

* “Subjects who are on medications” were defined as those who responded to the questionnaire by saying that they had used “insulin injection or any blood glucose lowering drugs”

1-2. Estimates for the number of “individuals strongly suspected of having diabetes” and “individuals in whom diabetes cannot be ruled out”

“Individuals strongly suspected of having diabetes” and “individuals in whom diabetes cannot be ruled out” were estimated at approximately 8.9 and 22.10 million, respectively, based on data obtained by multiplying the survey results by the estimated population aged 20 years or older, broken down by gender and age classification (total population: approximately 0.14 billion) as of October 1, 2007 (Table 3).

Table 3. Estimates of the number of “individuals strongly suspected of having diabetes” and “individuals in whom diabetes cannot be ruled out”
(2007)

	2007
“Individuals strongly suspected of having diabetes”	About 8.9 million
“Individuals in whom diabetes cannot be ruled out”	About 13.2 million
“Individuals strongly suspected of having diabetes” and “individuals in whom diabetes cannot be ruled out”	About 22.1 million

(Reference) Table 4. Estimates of the number of “individuals strongly suspected of having diabetes” and “individuals in whom diabetes cannot be ruled out”
(1997 and 2002)

	1997	2002
“Individuals strongly suspected of having diabetes”	About 6.9 million	About 7.4 million
“Individuals in whom diabetes cannot be ruled out”	About 6.8 million	About 8.8 million
“Individuals strongly suspected of having diabetes” and “individuals in whom diabetes cannot be ruled out”	About 13.7 million	About 16.2 million

(Reference)

- In this report, we used the same criteria for identifying “individuals in whom diabetes cannot be ruled out” as those used for the diabetes surveys conducted in 1997 and 2002 (hemoglobin A1c of 5.6 or more and less than 6.1%); however, hemoglobin A1c values of 5.5% or more and less than 6.1% are also shown as reference values since subjects with hemoglobin A1c of 5.5% or more are defined as being in need of supervision in the medical examination conducted as part of healthcare projects for the elderly.

- Table 5. Percentage of “individuals strongly suspected of having diabetes” and “individuals in whom diabetes cannot be ruled out” (When hemoglobin A1c values of “individuals in whom diabetes cannot be ruled out” are 5.5% or more and less than 6.1%.)

* “Subjects who are on medications” were defined as those who responded to the questionnaire by saying that they had used “insulin injection or any blood glucose lowering drugs”

		Total number		20-29		30-39		40-49		50-59		60-69		70 or older		(Regrouped) 40-74	
		Actual No.	%	Actual No.	%	Actual No.	%	Actual No.	%	Actual No.	%	Actual No.	%	Actual No.	%	Actual No.	%
Total number	Individuals strongly suspected of having diabetes	420	10.5	1	0.5	8	1.4	26	4.7	57	8.0	165	17.7	163	16.2	318	12.1
	(Individuals from among those specified above, who are also on medications)*	193	4.8	1	0.5	2	0.3	11	2.0	13	1.8	88	9.4	78	7.7	149	5.7
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	(Individuals from among those specified above, who are also on medications)*	120	7.4	1	1.1	2	1.0	8	3.8	8	3.0	50	12.2	51	11.4	94	8.7
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Female	Individuals strongly suspected of having diabetes	173	7.3	0	0.0	2	0.5	10	2.9	25	5.6	74	14.1	62	11.0	132	8.6
	(Individuals from among those specified above, who are also on medications)*	73	3.1	0	0.0	0	0.0	3	0.9	5	1.1	38	7.3	27	4.8	55	3.6
	Individuals in whom diabetes cannot be ruled out	380	15.9	1	0.9	21	5.4	36	10.4	93	20.8	95	18.2	134	23.8	273	17.7
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▼Criteria for identifying “individuals strongly suspected of having diabetes” and “individuals in whom diabetes cannot be ruled out”

- 1) “Individuals strongly suspected of having diabetes” were defined as those having a hemoglobin A1c of 6.1% or more, or as those who responded to the questionnaire by saying that they were currently receiving diabetes treatment.
- 2) “Individuals in whom diabetes cannot be ruled out” were defined as those with hemoglobin A1c of 5.5% or more and less than 6.1% (other than those specified in 1).

1-3. Treatment status of individuals strongly suspected of having diabetes

With regard to the treatment status of individuals strongly suspected of having diabetes, the percentage of those receiving treatment had increased, compared with results reported in 1997 and 2002.

Figure 2-1. Annual variation in the treatment status of individuals strongly suspected of having diabetes (subjects aged 20 years or older)

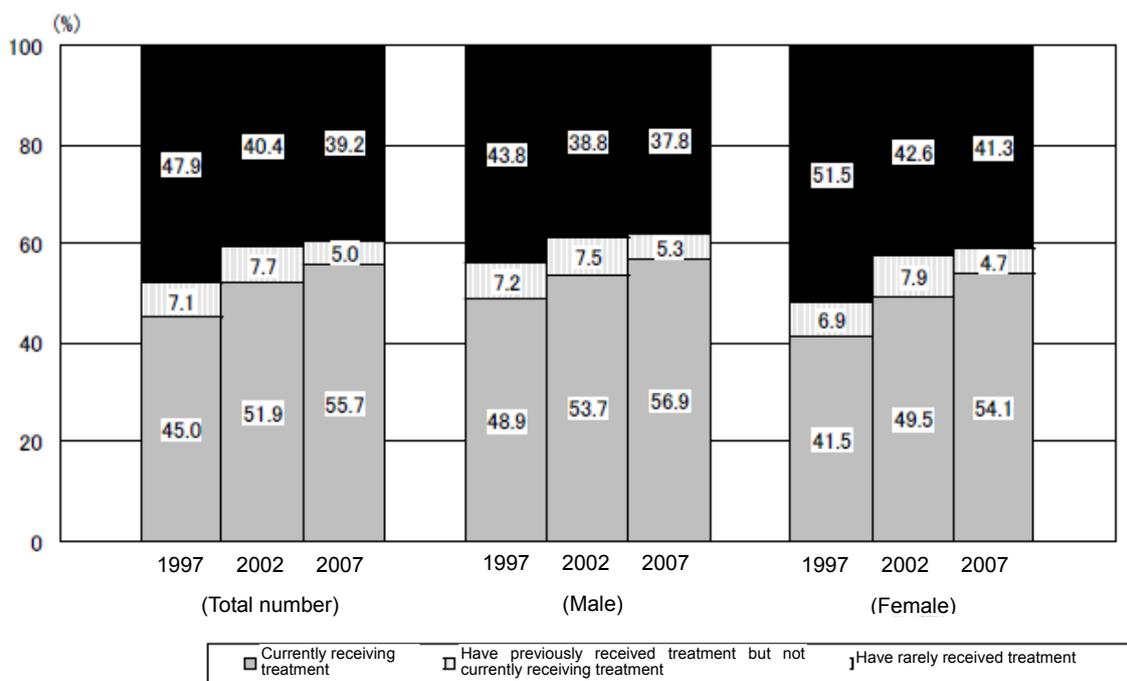
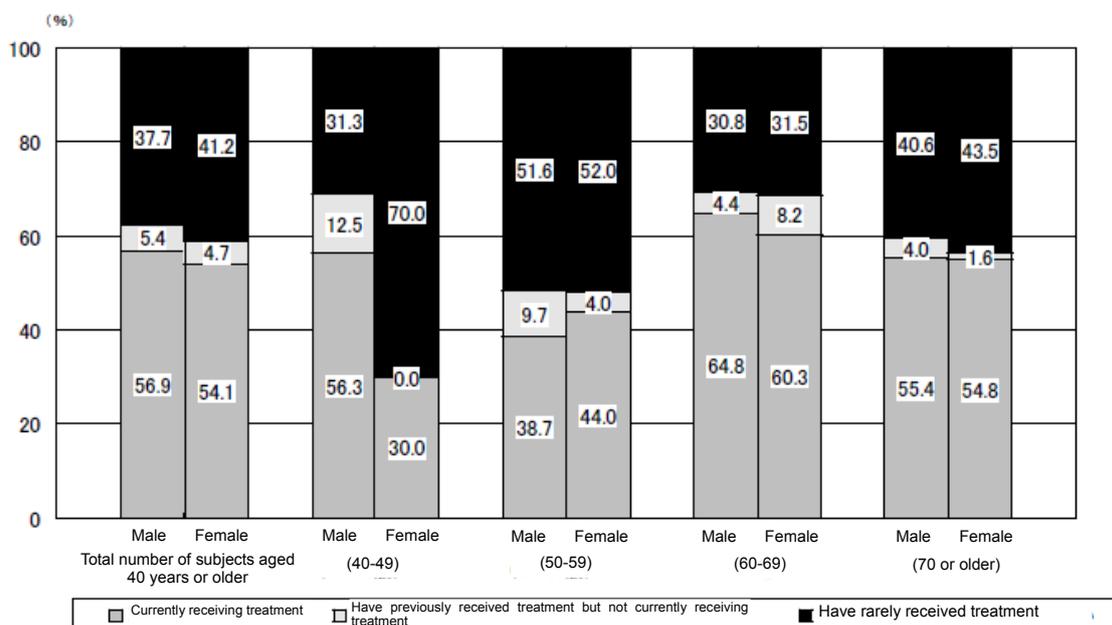


Figure 2-2. Treatment status of individuals strongly suspected of having diabetes (subjects aged 40 years or older)

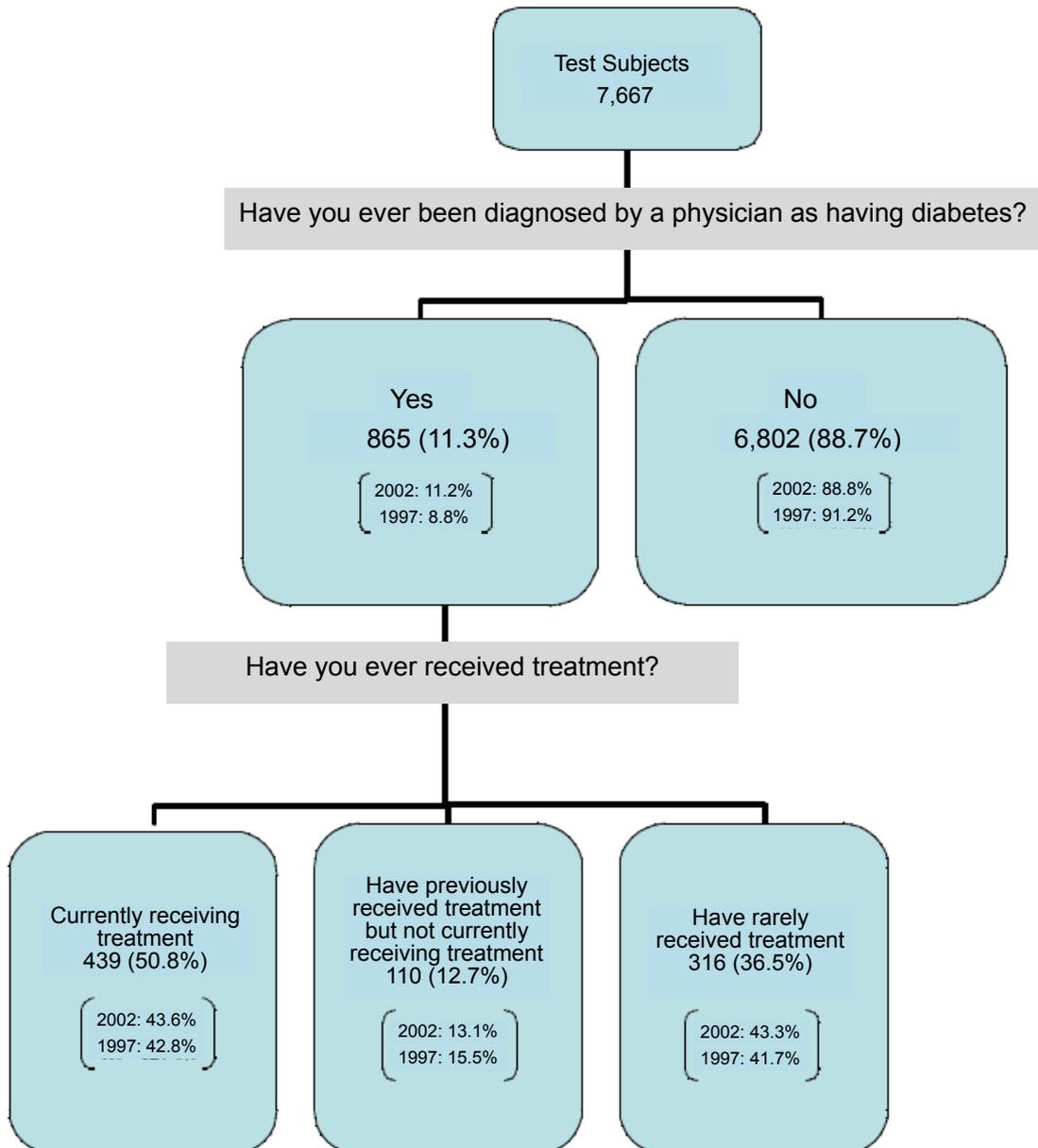


*Figure 2-2 shows the results of questions asking “individuals strongly suspected of having diabetes (i.e. those having a hemoglobin A1c of 6.1% or more, or those who responded to the questionnaire by saying they were currently receiving diabetes treatment)” as described in page 6 and 7 of this report, whether they had ever received treatment for diabetes previously. Subjects having rarely received treatment in Figure 2-1 and 2-2 included those who had never been diagnosed by a physician as having diabetes (62 males and 54 females).

1-4. Medical care for diabetes

The percentage of subjects diagnosed by a physician as having diabetes (including those with “borderline diabetes”, “having signs of diabetes”, “being about to develop diabetes”, “having a high level of blood glucose” or other such indications) was approximately the same as that reported in 1997; however, the percentage of subjects currently receiving treatment had increased.

Figure 3. Current status of medical care for diabetes (subjects aged 20 years or older)

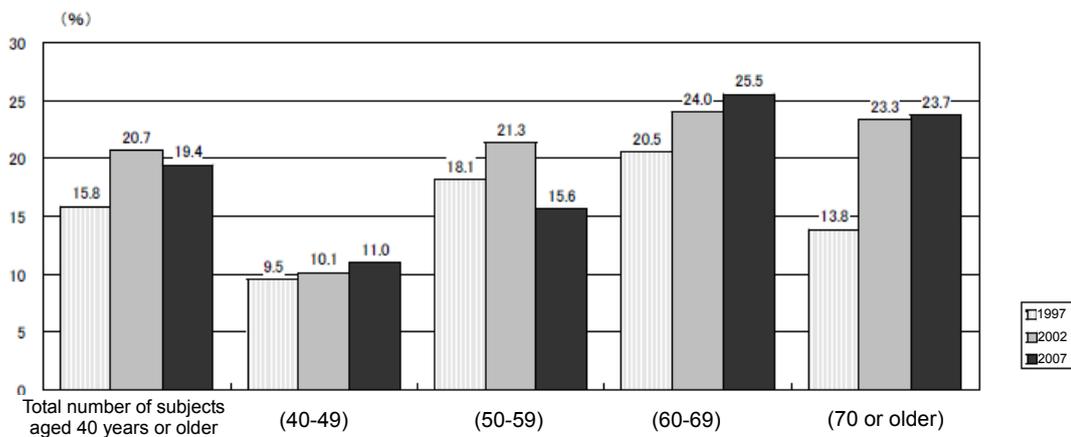


1-5. Current status of subjects diagnosed by a physician as having diabetes

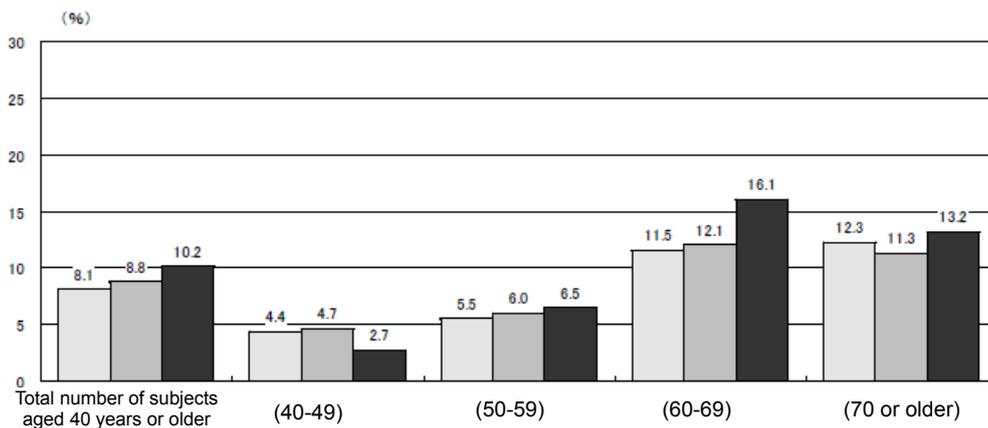
The percentage of subjects diagnosed by a physician as having diabetes (including those with “borderline diabetes”, “having signs of diabetes”, “being about to develop diabetes”, “having a high level of blood glucose” or other such indications) was 19.4% in males and 10.2% in females, respectively, among the subjects aged 40 years or older.

Figure 4. Annual variation in the percentage of subjects diagnosed by a physician as having diabetes (subjects aged 40years or older)

Male



Female



*Subjects diagnosed by a physician as having diabetes include those with “borderline diabetes”, “having signs of diabetes”, “being about to develop diabetes”, “having a high level of blood glucose or other such indications.”

1-6. Actual state of complications in subjects diagnosed by a physician as having diabetes

Neurological disorders comprised the highest percentage of complications in subjects diagnosed by a physician as having diabetes, totaling 11.8%. The results were broken down by treatment experience. Of those subjects with complications, approximately 70% were “currently receiving treatment.”

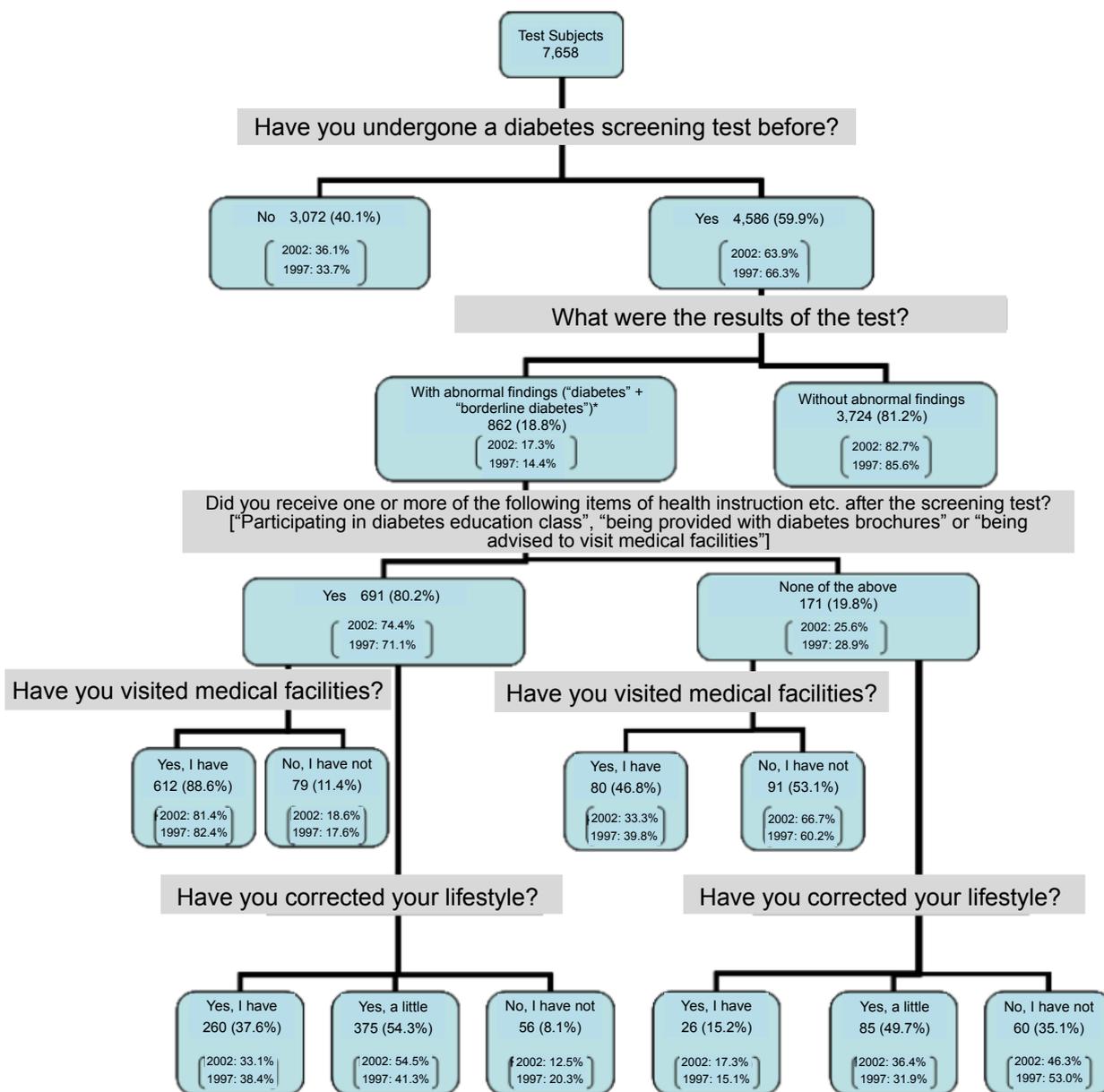
Table 6. Percentage of complications in subjects diagnosed by a physician as having diabetes (total number of subjects aged 20 years or older)

Without neurological disorders	With neurological disorders	
757 (88.2%)	101 (11.8%)	
	(Regrouped) Currently receiving treatment	79 (78.2%)
	(Regrouped) Have previously received treatment, but not currently receiving treatment	10 (9.9%)
	(Regrouped) Have rarely received treatment	12 (11.9%)
Without retinopathy	With retinopathy	
766 (89.4%)	91 (10.6%)	
	(Regrouped) Currently receiving treatment	67 (73.6%)
	(Regrouped) Have previously received treatment, but not currently receiving treatment	8 (8.8%)
	(Regrouped) Have rarely received treatment	16 (17.6%)
Without nephropathy	With nephropathy	
760 (88.9%)	95 (11.1%)	
	(Regrouped) Currently receiving treatment	70 (73.7%)
	(Regrouped) Have previously received treatment, but not currently receiving treatment	9 (9.5%)
	(Regrouped) Have rarely received treatment	16 (16.8%)
Without foot gangrene	With foot gangrene	
850 (99.3%)	6 (0.7%)	
	(Regrouped) Currently receiving treatment	4 (66.7%)
	(Regrouped) Have previously received treatment, but not currently receiving treatment	1 (16.7%)
	(Regrouped) Have rarely received treatment	1 (16.7%)

1-7. Diabetes screening test and health instruction, etc.

Among those subjects who had previously undergone a diabetes screening test as part of a physical checkup, or who “have been diagnosed as having diabetes” or “as having borderline diabetes”, 80.2% responded “Yes” to one or more of the following questions: After the screening test, “Did you participate in diabetes education class?”, “Were you provided with diabetes brochures?” and “Were you advised to visit medical facilities?”. Of those subjects, approximately 90% responded that they had subsequently corrected their lifestyle.

Figure 5. Diabetes screening test and health instruction, etc.
(subjects aged 20 years or older)



* Subjects with abnormal findings include those “diagnosed as having diabetes”, “having borderline diabetes”, “having signs of diabetes”, “being about to develop diabetes” and “having a high level of blood glucose” or other such indications.

1-8. Source of information on prevention and treatment of diabetes

A large number of both male and female subjects reported that they had obtained information on the prevention and treatment of diabetes from “television and radio”, “newspapers” and “magazines and books” (multiple answers were allowed). (See Figure 6-1). When the results were broken down by information source, the percentage choosing “television and radio” and “magazines and books” as information sources was especially high for females in the 40 - 69 age group. The percentage of those choosing “physical checkup and complete medical checkup” was particularly high for males aged 50 years or older (Figure 6-2).

Figure 6-1. Source of information on prevention and treatment of diabetes (subjects aged 20 years or older)

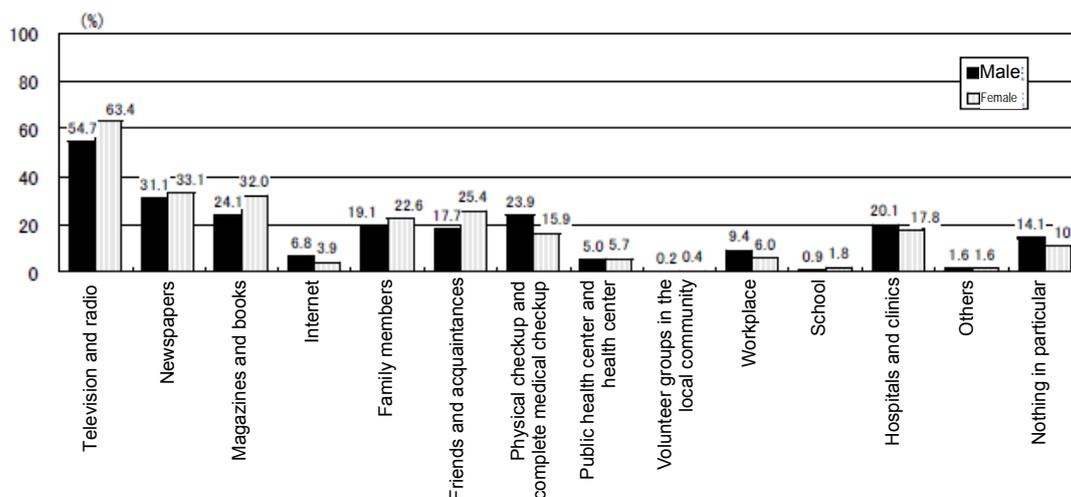
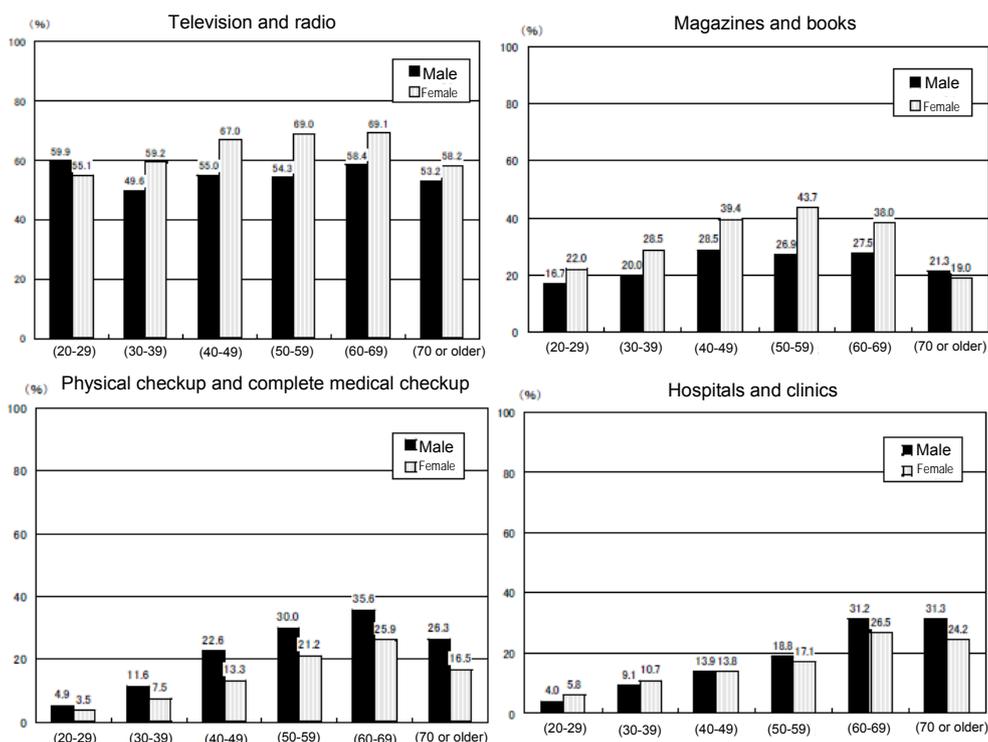


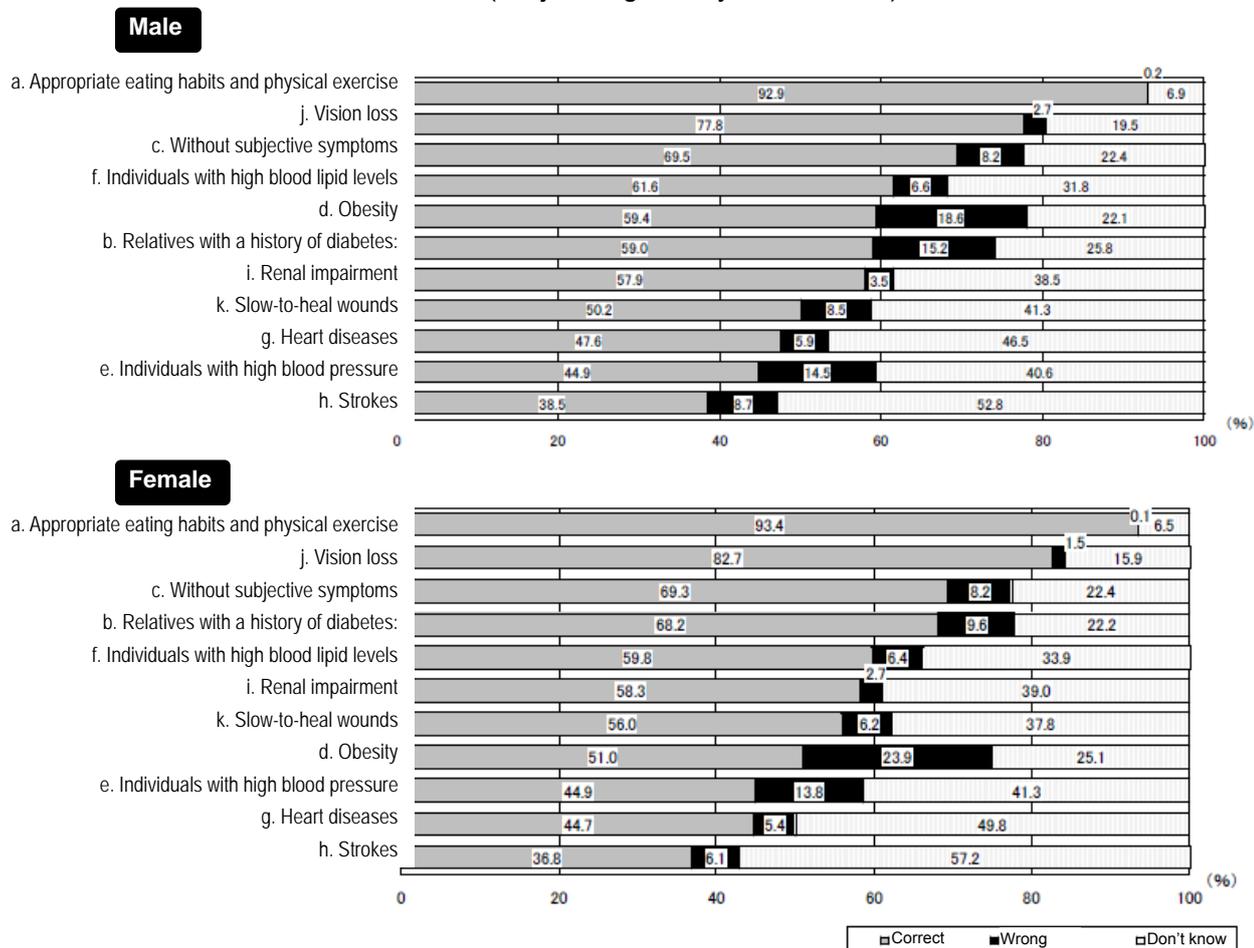
Figure 6-2. Source of information on prevention and treatment of diabetes (by information source)



1-9. Current status of knowledge regarding diabetes

The correct answers to the questions on diabetes in both males and females were as follows: “Appropriate eating and exercise habits are effective in preventing diabetes” and “Diabetes can cause vision loss in adults.”

Figure 7. Current status of knowledge regarding diabetes
(subjects aged 20 years or older)



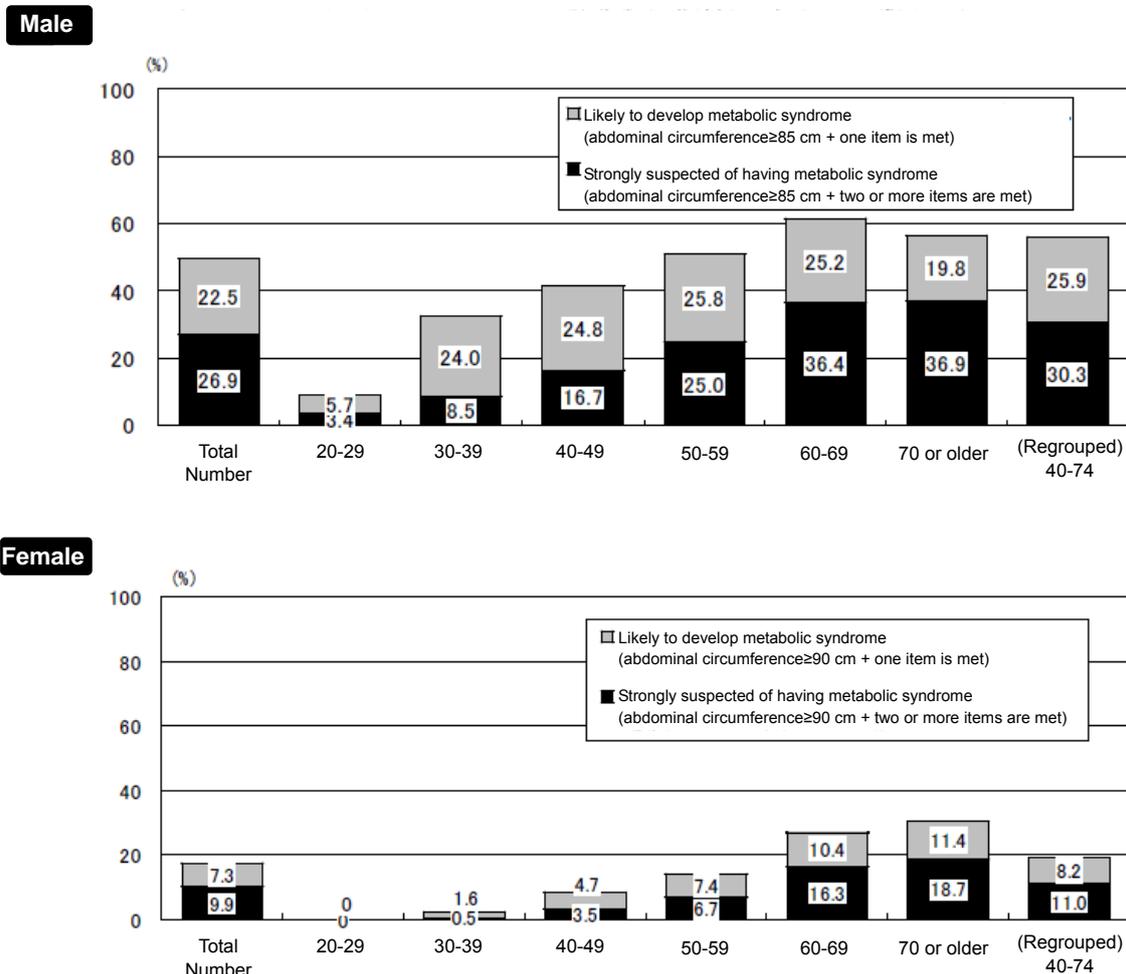
<Questions>

- a. Appropriate eating and physical exercise habits are effective in preventing diabetes.
- b. When you have blood-related family members with diabetes, you are also likely to develop diabetes.
- c. You often don't notice symptoms, even when getting diabetes.
- d. If you are overweight, you are likely to develop diabetes.
- e. Many people with diabetes have high blood pressure.
- f. Many people with diabetes have high blood cholesterol and neutral fat.
- g. Even people with mild diabetes are likely to develop angina and suffer a heart attack.
- h. Even people with mild diabetes are likely to suffer strokes.
- i. Diabetes can cause renal impairment.
- j. Diabetes can lead to vision loss in adults.
- k. In people with diabetes, wounds are slow to heal.

2. Metabolic syndrome

Among subjects aged 40 to 74 years, 1 out of 2 males and 1 out of 5 females are strongly suspected of having, or likely to develop, metabolic syndrome (Visceral Fat Syndrome).

Figure 8: Metabolic syndrome (visceral fat syndrome) (subjects aged 20 years or older)



* The numbers of those who have metabolic syndrome and those who are likely to develop metabolic syndrome in the 40 to 74 population are estimated at about 10.7 million and about 9.4 million, respectively, with a total estimated at about 20.1 million, based on the estimated numbers of those strongly suspected of having metabolic syndrome and those likely to develop the syndrome, respectively, for the 40 to 74 population (a total of about 58 million), classified by sex and age group, as of October 1, 2007.

(Reference) Table 7. Estimates of the numbers of people who have metabolic syndrome (visceral fat syndrome) and who are likely to develop diabetes (2004, 2005 and 2006)

* The results from the 2006 and 2007 surveys cannot be directly compared because “neutral fat-lowering drugs” have been added to a question on “agents taken” since the 2007 survey.

	2004	2005	2006
Those strongly suspected of having metabolic syndrome (people who Have Metabolic Syndrome)	About 9.4 million	About 9.2 million	About 9.6 million
Those likely to develop metabolic syndrome	About 10.2 million	About 9.8 million	About 9.8 million

Assessment of “suspected of having metabolic syndrome (visceral fat syndrome)”

In the blood test conducted under the National Health and Nutrition Survey, it was impossible to make assessments using the fasting blood sugar level and neutral fat level, which are diagnostic criteria for metabolic syndrome because performing fasting blood collection is difficult for large numbers of people. Therefore, assessments in this report were made as follows:

Those strongly suspected of having metabolic syndrome

Abdominal circumference is 85 cm or more for males, or 90 cm or more for females, and two or more of the three items (blood lipid, blood pressure, and blood sugar) are met.

* “Meeting an item” means meeting the following “criteria” and/or “agents taken”.

Those likely to develop metabolic syndrome

Abdominal circumference is 85 cm or more for males, or 90 cm or more for females, and one of the three items (blood lipid, blood pressure, and blood sugar) is met.

Abdominal circumference:	Abdominal circumference (waist circumference)	Male: 85 cm or more	Female: 90 cm or more
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Item	Blood lipid	Blood pressure	Blood sugar
Criteria	- <u>HDL cholesterol level < 40mg/dl</u>	- Systolic blood pressure level \geq 130 mmHg - Diastolic blood pressure level \geq 85 mmHg	- <u>Hemoglobin A_{1c} \geq 5.5%</u>
Agents taken	- Taking anticholesterol agent - Neutral fat-lowering agent	- Taking hypotensive agent	- Taking hypoglycemic agent - Using insulin injection

(Reference: Health and Labour Sciences Research Health Sciences Total Research Project “Study on an Efficient Protocol for Community Health Examinations—Interim Report of Health Measures Index Study and Research Team”, August 2005)

* The criteria for blood sugar, an assessment item for suspected metabolic syndrome, was specified as “hemoglobin A_{1c} 5.5%” because a hemoglobin A_{1c} of 5.5% or higher is defined as being in need of supervision in the medical examination conducted as part of healthcare projects for the elderly.

(Reference) Diagnostic criteria for metabolic syndrome

(Japan Atherosclerosis Society, Japan Diabetes Society, Japanese Society of Hypertension, Japan Society for the Study of Obesity, Japanese Circulation Society, Japanese Society of Nephrology, Japanese Society on Thrombosis and Hemostasis, Japanese Society of Internal Medicine, April 2005)

(* The form of presentation of the diagnostic criteria has been partially changed to almost correspond to the data provided above for comparison.)

Metabolic syndrome

In addition to the accumulation of visceral fat (intraabdominal fat), two or more of the following items must be met:

* "Meeting an item" means meeting the following "criteria" and/or "agents taken".

Accumulation of visceral fat (intraabdominal fat)	Waist circumference Male: 85 cm or more Female: 90 cm or more (Visceral fat area Equivalent to 100 cm ² or more (for both males and females))
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Item	Blood lipid	Blood pressure	Blood sugar
Criteria	<u>-Neutral fat (TG) level</u> ≥ 150mg/dl (Hypertriglyceridemia) <u>- HDL cholesterol level</u> < 40 mg/dl (hypo-HDL cholesterolemia)	- Systolic blood pressure level ≥ 130 mmHg - Diastolic blood pressure level ≥ 85 mmHg	<u>- Fasting blood sugar level</u> ≥ 110 mg/dl
Agents taken	- Drug therapy for hypertriglyceridemia - Drug therapy for hypo-HDL cholesterolemia	- Drug therapy for hypertension	- Drug therapy for diabetes

* It is preferable to measure visceral fat mass by CT scan, etc.

* Waist circumference must be measured at the level of the navel in the standing position, during light exhalation. If there is marked fat accumulation and the navel is deviated downward, waist circumference must be measured at the height of the midpoint between the inferior border of the rib and the anterior superior iliac spine.

* Although it is recommended to perform a glucose tolerance test for subjects diagnosed as having metabolic syndrome, the test is not essential for diagnosis.

* The presence of diabetes or hypercholesterolemia does not preclude a diagnosis of metabolic syndrome.

Part 2. Physical status and lifestyle

1. Trend in prevalence of obesity

Compared with the statistics of 20 years ago (1987) and 10 years ago (1997), prevalence of obesity tended to increase in males regardless of age group, whereas that of obesity in the age group of 30-69 years decreased in female.

Also, the prevalence of low weight (underweight) people was on the rise in the 20 – 49 age group.

Figure 9-1. Changes in prevalence of obesity and underweight

(subjects aged 20 years or older) [①20 years. ago (1987)・②10 years. ago (1997)・③2007]

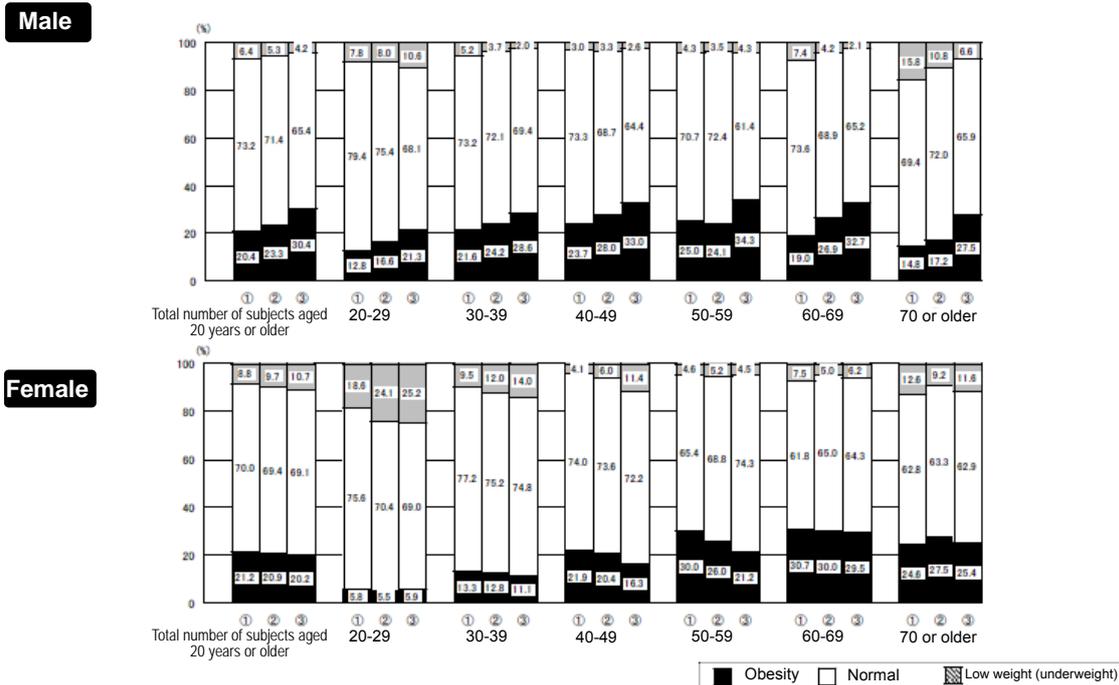
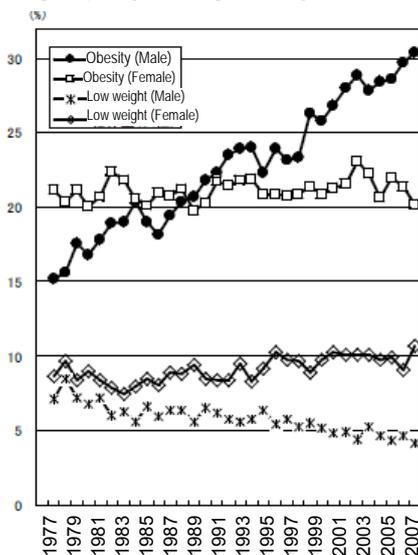


Figure 9-2. Changes in prevalence of obesity and underweight (subjects aged 20 years or older)



Obesity is determined by BMI (Body Mass Index)
(The Examination Committee of Criteria for "Obesity Disease" in Japan, Japan Society for the Study of Obesity, 2000)

BMI = weight [kg] / (height [m])²
Less than 18.5: Low weight (underweight)
18.5 or more but less than 25: Normal
25 or more: Obesity

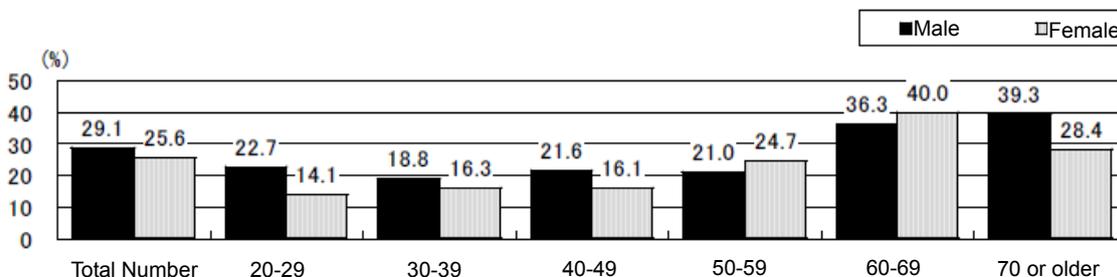
(Reference) Table 8 Changes in prevalence of obesity and underweight (subjects aged 20 years or older)

Annual	Obesity		Low weight (underweight)		Annual	Obesity		Low weight (underweight)		(%)
	Male	Female	Male	Female		Male	Female	Male	Female	
1976	15.2	21.1	7.1	8.7	1992	23.9	21.8	5.6	9.5	
1977	15.6	20.4	8.5	9.7	1993	24.0	21.9	5.8	8.3	
1978	17.6	21.1	7.2	8.4	1994	22.3	20.9	6.4	9.2	
1979	16.8	20.0	6.8	9.0	1995	23.9	20.9	5.4	10.3	
1980	17.8	20.7	7.2	8.4	1996	23.2	20.8	5.8	9.8	
1981	18.9	22.4	6.0	7.9	1997	23.3	20.9	5.3	9.7	
1982	19.0	21.8	6.3	7.5	1998	26.3	21.4	5.5	8.9	
1983	20.4	20.5	5.6	8.0	1999	25.8	20.9	5.2	9.8	
1984	19.0	20.1	6.6	8.5	2000	26.8	21.3	4.8	10.3	
1985	18.2	21.0	5.9	8.1	2001	28.0	21.6	4.9	10.1	
1986	19.4	20.8	6.4	8.9	2002	28.9	23.1	4.4	10.1	
1987	20.4	21.2	6.4	8.8	2003	27.8	22.2	5.3	10.1	
1988	20.7	19.8	5.6	9.4	2004	28.4	20.6	4.7	9.8	
1989	21.8	20.3	6.5	8.5	2005	28.6	22.0	4.3	9.9	
1990	22.3	21.7	6.2	8.4	2006	29.7	21.4	4.7	9.1	
1991	23.5	21.5	5.8	8.4	2007	30.4	20.2	4.2	10.7	

2. Regular exercisers

The average daily step count of 7,321 steps for males and 6,267 steps for females, respectively, is below the “Health Japan 21” target values of 9,200 steps for males and 8,300 steps for females.

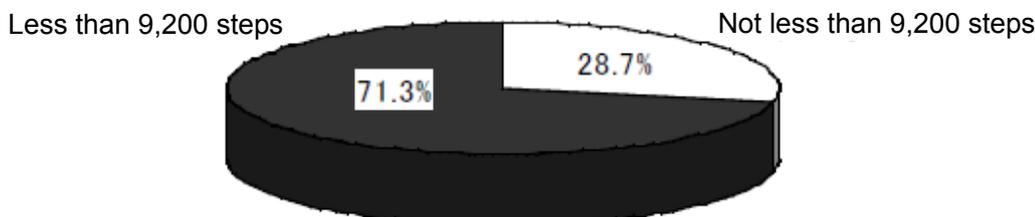
Figure 10. Percentage of regular exercisers (subjects aged 20 years or older)



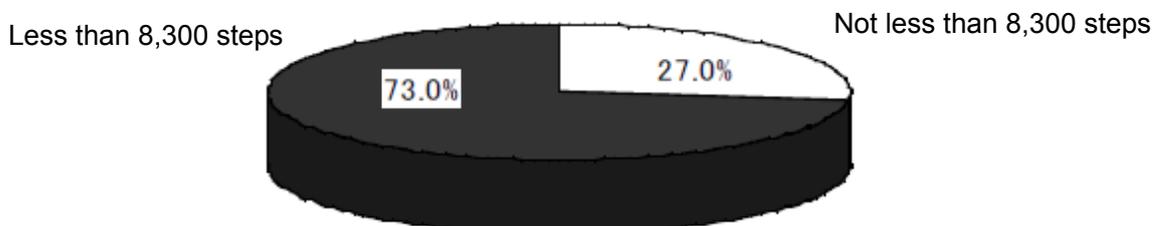
Regular exercisers: Those who exercise at least two days a week, 30 minutes or more each time, and have continued doing so for at least one year

Figure 11. Average step count and percentage distribution (subjects aged 20 years or older)

Male Average step count: 7,321 steps



Female Average step count: 6,267 steps



(Reference)

“Health Japan 21” Target Values

Daily step count

Not less than 9,200 steps for adult males

Not less than 8,300 steps for adult females

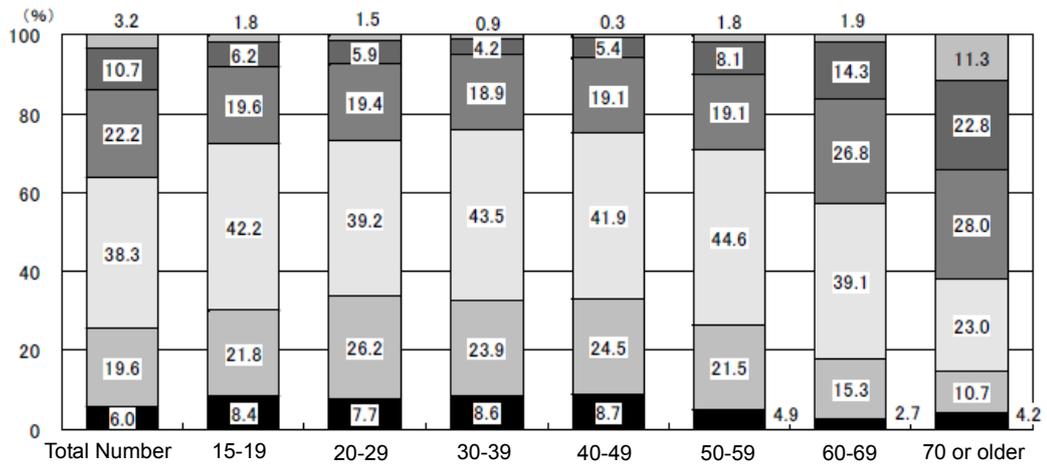
3. Current amount of sleep and rest

3-1. Average sleep duration

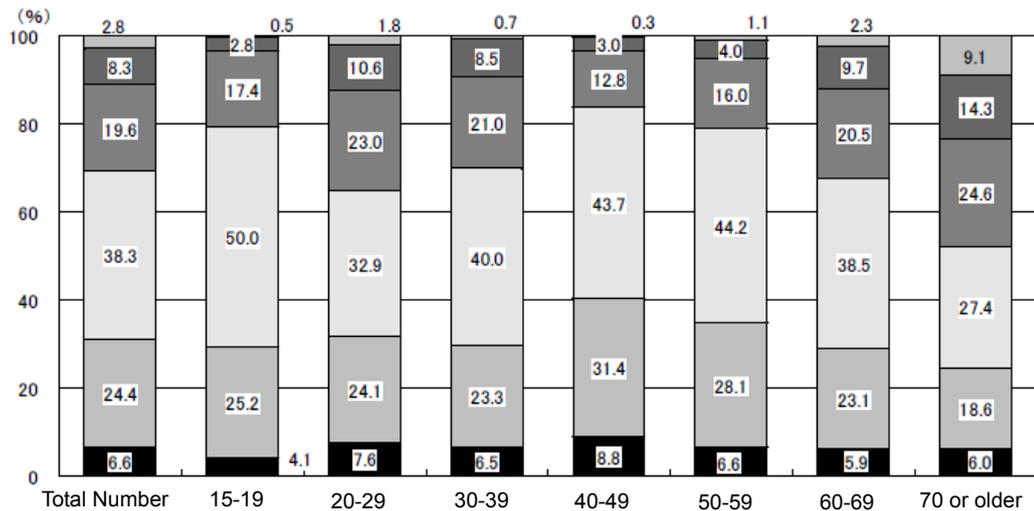
A large number of subjects (approximately 40%) averaged 6 - 7 hours of sleep per day, for both males and females.

Figure 12. Average sleep duration per day (subjects aged 15 years or older)

Male



Female

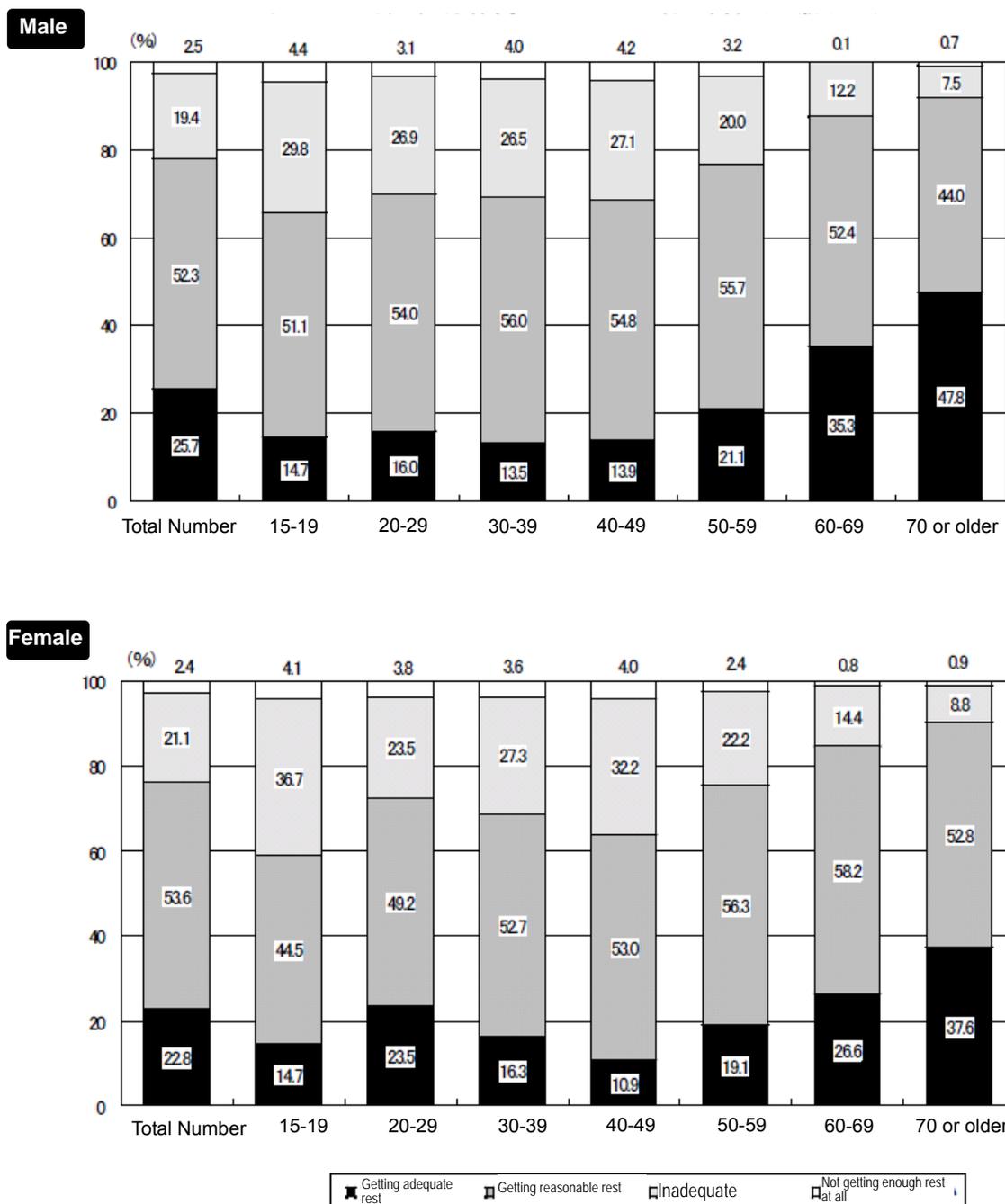


Less than 5 hours
 At least 5 hours, but less than 6 hours
 At least 6 hours, but less than 7 hours
 At least 7 hours, but less than 8 hours
 At least 8 hours, but less than 9 hours
 At least 9 hours

3-2. Percentage of subjects getting adequate rest by sleep

Overall, the percentage of subjects getting adequate rest (those “getting adequate rest” and those “getting reasonable rest”, combined) totaled 75% or more for both males and females. On the other hand, in the 15 - 49 age group, many of the subjects answered “Inadequate” or “Not getting enough rest at all.”

Figure 11. Percentage of subjects getting adequate rest by sleep
(subjects aged 15 years or older)

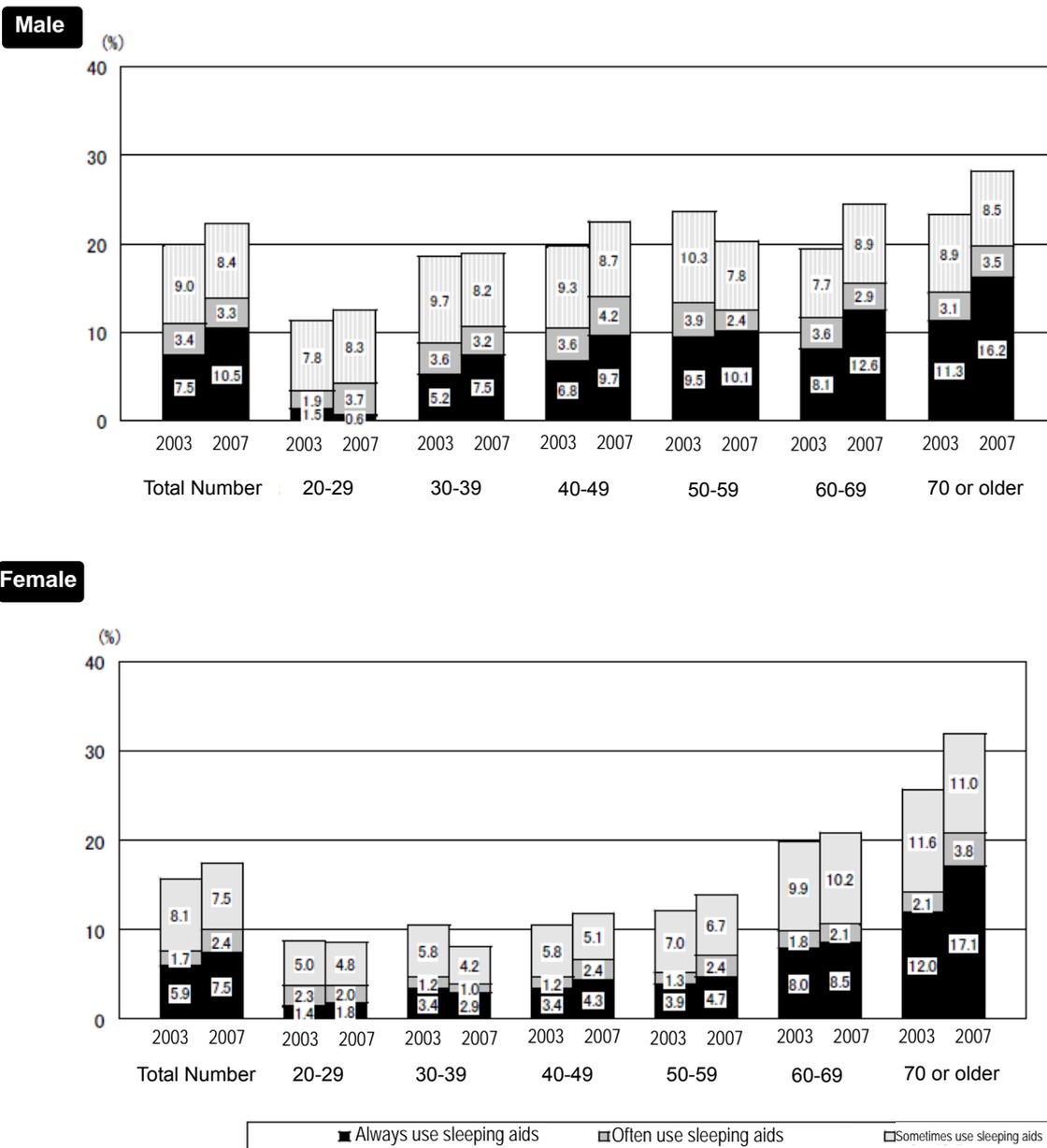


(Reference)
 “Health Japan 21” Target Values
 The percentage of subjects not getting enough rest by sleep: 21% or less

3-3. Current status of subjects using sleeping aids - including drugs such as sleeping pills and tranquilizers, and alcoholic beverages

The percentage of subjects using sleeping aids drugs - including drugs such as sleeping pills and tranquilizers, and alcoholic beverages - increased in comparison with 2003, except for males in their fifties and females in the 20 - 39 age group.

Figure 14. Current status of subjects using sleeping aids - including drugs such as sleeping pills and tranquilizers, and alcoholic beverages (subjects aged 20 years or older)



(Reference)

“Health Japan 21” Target Values

“The percentage of individuals who sometimes use sleeping aids or alcoholic beverages to ensure adequate sleep”: 13% or less

Table 9. Current status of subjects using sleeping aids - including drugs such as sleeping pills and tranquilizers (subjects aged 15 years or older)

		Total Number		15-19		20-29		30-39		40-49		50-59		60-69		70 or older		
		Actual number	%	Actual number	%	Actual number	%	Actual number	%	Actual number	%	Actual number	%	Actual number	%	Actual number	%	
Male	2007	Never use sleeping aids	3,404	90.6	223	99.1	309	95.4	541	94.9	534	92.9	616	94.0	618	88.4	563	79.3
		Rarely use	78	2.1	2	0.9	10	3.1	11	1.9	7	1.2	14	2.1	14	2.0	20	2.8
		Sometimes use	91	2.4	0	0.0	2	0.6	5	0.9	14	2.4	8	1.2	25	3.6	37	5.2
		Often use	36	1.0	0	0.0	2	0.6	3	0.5	1	0.2	5	0.8	10	1.4	15	2.1
		Always use	149	4.0	0	0.0	1	0.3	10	1.8	19	3.3	12	1.8	32	4.6	75	10.6
		Total Number	3,758	100.0	225	100.0	324	100.0	570	100.0	575	100.0	655	100.0	699	100.0	710	100.0
	2003	Never use sleeping aids	4,178	91.6	276	97.9	516	98.1	668	97.0	626	94.1	785	93.3	691	88.7	616	79.3
		Rarely use	93	2.0	5	1.8	4	0.8	6	0.9	15	2.3	14	1.7	21	2.7	28	3.6
		Sometimes use	103	2.3	1	0.4	3	0.6	2	0.3	5	0.8	13	1.5	24	3.1	55	7.1
		Often use	35	0.8	0	0.0	2	0.4	2	0.3	2	0.3	7	0.8	8	1.0	14	1.8
Always use		150	3.3	0	0.0	1	0.2	11	1.6	17	2.6	22	2.6	35	4.5	64	8.2	
Total Number		4,559	100.0	282	100.0	526	100.0	689	100.0	665	100.0	841	100.0	779	100.0	777	100.0	
Female	2007	Never use sleeping aids	3,713	85.2	214	98.2	379	95.7	666	96.2	585	93.6	653	87.9	630	79.1	586	65.9
		Rarely use	130	3.0	3	1.4	6	1.5	10	1.4	15	2.4	23	3.1	33	4.1	40	4.5
		Sometimes use	196	4.5	1	0.5	6	1.5	7	1.0	9	1.4	28	3.8	61	7.7	84	9.4
		Often use	67	1.5	0	0.0	2	0.5	3	0.4	4	0.6	13	1.7	13	1.6	32	3.6
		Always use	253	5.8	0	0.0	3	0.8	6	0.9	12	1.9	26	3.5	59	7.4	147	16.5
		Total Number	4,359	100.0	218	100.0	396	100.0	692	100.0	625	100.0	743	100.0	796	100.0	889	100.0
	2003	Never use sleeping aids	4,501	86.1	287	96.6	549	95.5	699	94.1	671	94.0	855	90.4	689	78.1	751	70.1
		Rarely use	190	3.6	5	1.7	12	2.1	16	2.2	17	2.4	23	2.4	48	5.4	69	6.4
		Sometimes use	231	4.4	2	0.7	5	0.9	11	1.5	10	1.4	32	3.4	66	7.5	105	9.8
		Often use	49	0.9	1	0.3	3	0.5	2	0.3	5	0.7	7	0.7	13	1.5	18	1.7
Always use		257	4.9	2	0.7	6	1.0	15	2.0	11	1.5	29	3.1	66	7.5	128	12.0	
Total Number		5,228	100.0	297	100.0	575	100.0	743	100.0	714	100.0	946	100.0	882	100.0	1,071	100.0	

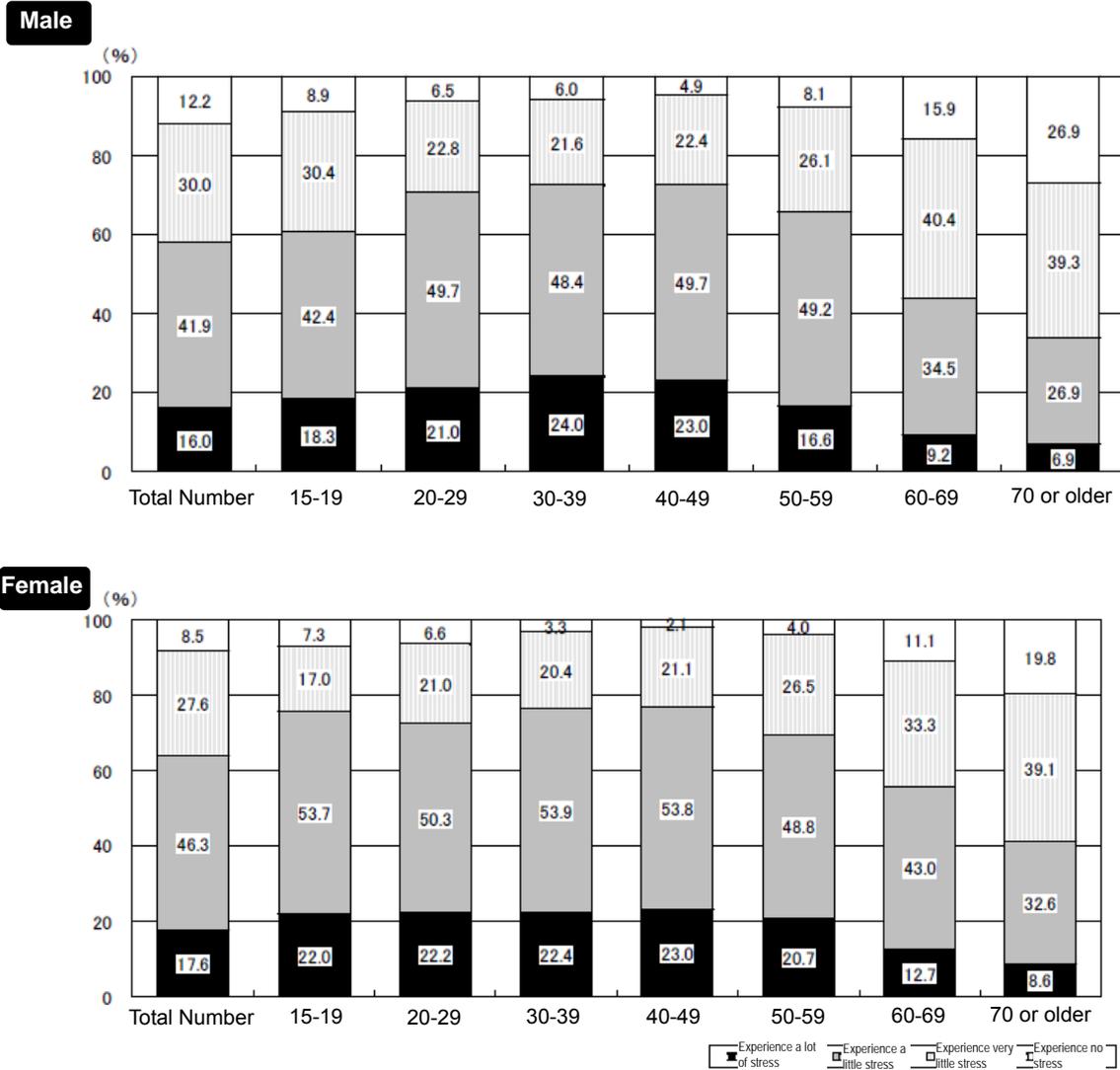
Table 10. Current status of subjects using sleeping Aids - including alcoholic beverages (subjects aged 20 years or older)

		Total Number		20-29		30-39		40-49		50-59		60-69		70 or older		
		Actual number	%	Actual number	%	Actual number	%	Actual number	%	Actual number	%	Actual number	%	Actual number	%	
Male	2007	Never use sleeping aids	2,567	73.0	251	77.7	411	72.5	395	68.8	461	70.6	495	71.3	554	78.6
		Rarely use	370	10.5	36	11.1	63	11.1	70	12.2	72	11.0	80	11.5	49	7.0
		Sometimes use	254	7.2	25	7.7	44	7.8	43	7.5	50	7.7	48	6.9	44	6.2
		Often use	89	2.5	10	3.1	16	2.8	23	4.0	15	2.3	13	1.9	12	1.7
		Always use	236	6.7	1	0.3	33	5.8	43	7.5	55	8.4	58	8.4	46	6.5
		Total Number	3,516	100.0	323	100.0	567	100.0	574	100.0	653	100.0	694	100.0	705	100.0
	2003	Never use sleeping aids	3,104	72.9	415	79.3	499	72.6	463	69.7	537	64.1	565	72.6	625	81.2
		Rarely use	535	12.6	53	10.1	70	10.2	87	13.1	130	15.5	118	15.2	77	10.0
		Sometimes use	325	7.6	39	7.5	68	9.9	61	9.2	83	9.9	43	5.5	31	4.0
		Often use	117	2.7	9	1.7	24	3.5	22	3.3	29	3.5	21	2.7	12	1.6
Always use		179	4.2	7	1.3	26	3.8	31	4.7	59	7.0	31	4.0	25	3.2	
Total Number		4,260	100.0	523	100.0	687	100.0	664	100.0	838	100.0	778	100.0	770	100.0	
Female	2007	Never use sleeping aids	3,655	88.6	350	88.6	601	87.2	532	85.1	655	88.4	703	88.8	814	92.1
		Rarely use	222	5.4	17	4.3	43	6.2	39	6.2	41	5.5	49	6.2	33	3.7
		Sometimes use	152	3.7	17	4.3	26	3.8	27	4.3	29	3.9	25	3.2	28	3.2
		Often use	39	0.9	7	1.8	5	0.7	12	1.9	6	0.8	6	0.8	3	0.3
		Always use	58	1.4	4	1.0	14	2.0	15	2.4	10	1.3	9	1.1	6	0.7
		Total Number	4,126	100.0	395	100.0	689	100.0	625	100.0	741	100.0	792	100.0	884	100.0
	2003	Never use sleeping aids	4,235	86.9	480	83.8	627	84.6	576	81.2	814	86.7	775	89.6	963	92.1
		Rarely use	352	7.2	56	9.8	60	8.1	71	10.0	69	7.3	50	5.8	46	4.4
		Sometimes use	204	4.2	25	4.4	35	4.7	45	6.3	41	4.4	29	3.4	29	2.8
		Often use	43	0.9	10	1.7	9	1.2	8	1.1	6	0.6	4	0.5	6	0.6
Always use		39	0.8	2	0.3	10	1.3	9	1.3	9	1.0	7	0.8	2	0.2	
Total Number		4,873	100.0	573	100.0	741	100.0	709	100.0	939	100.0	865	100.0	1,046	100.0	

3-4. Current state of stress

The percentage of subjects experiencing "a lot of stress" or "a little stress" accounted for 70% or more of both males and females in the 20 - 49 age group.

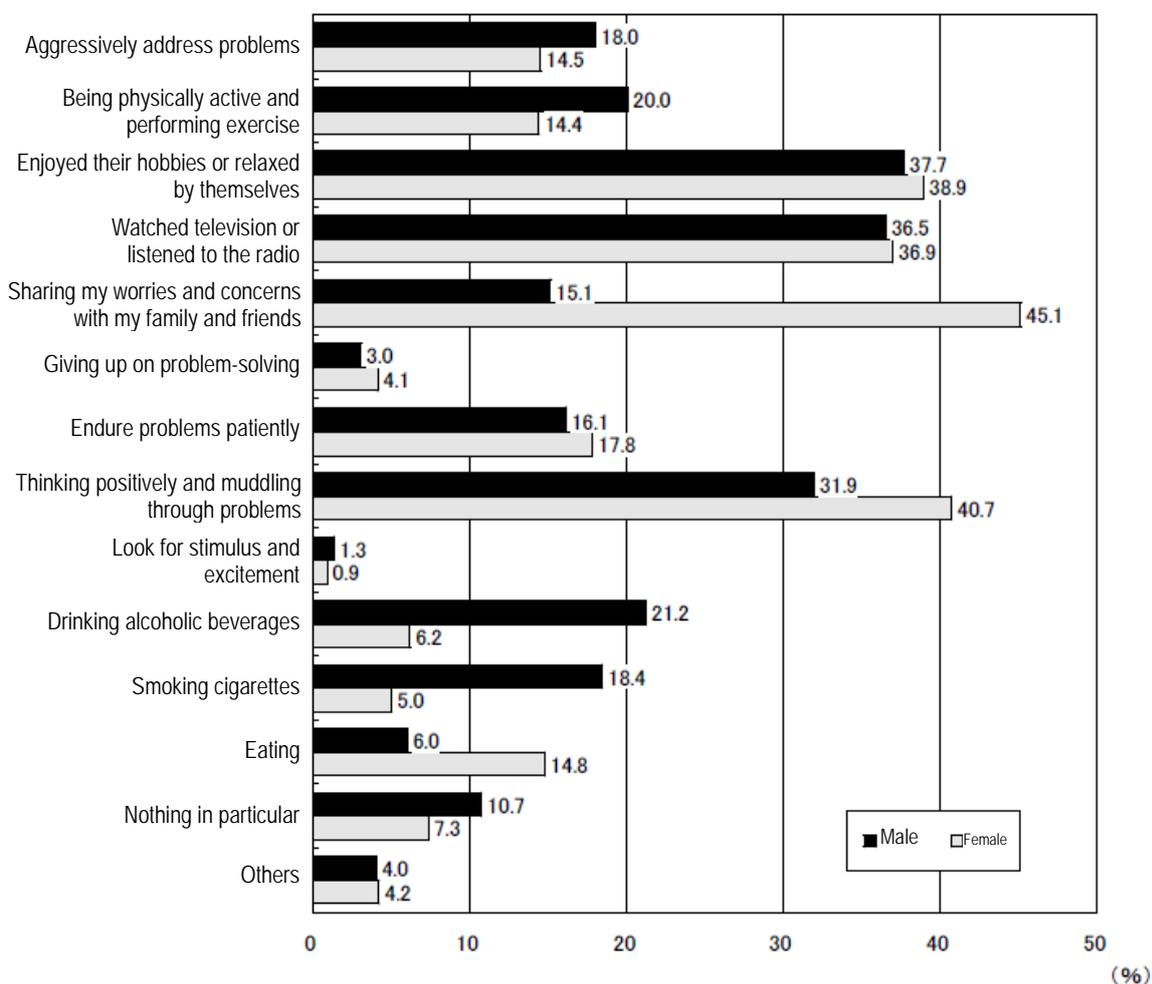
Figure 15. Current state of stress (subjects aged 15 years or older)



3-5. How to deal with stress

A high percentage of subjects, both male and female, “enjoyed their hobbies or relaxed by themselves” and “watched television or listened to the radio” in order to “deal with stress.” A higher percentage of male subjects reported “drinking alcoholic beverages” or “smoking cigarettes” compared with females. On the other hand, a higher percentage of female subjects, compared with males, reported the following attitudes: “Sharing my worries and concerns with my family and friends”, “Thinking positively and muddling through problems” or “Eating.”

Figure 16. How to deal with stress (subjects aged 15 years or older)



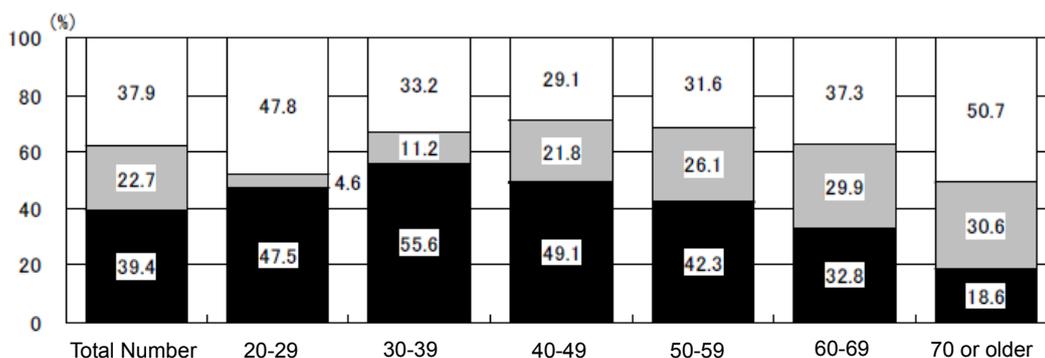
*The percentage of “Drinking alcoholic beverages” or “Smoking cigarettes” relates to subjects aged 20 years or older.

4. Current situation on the smoking habit

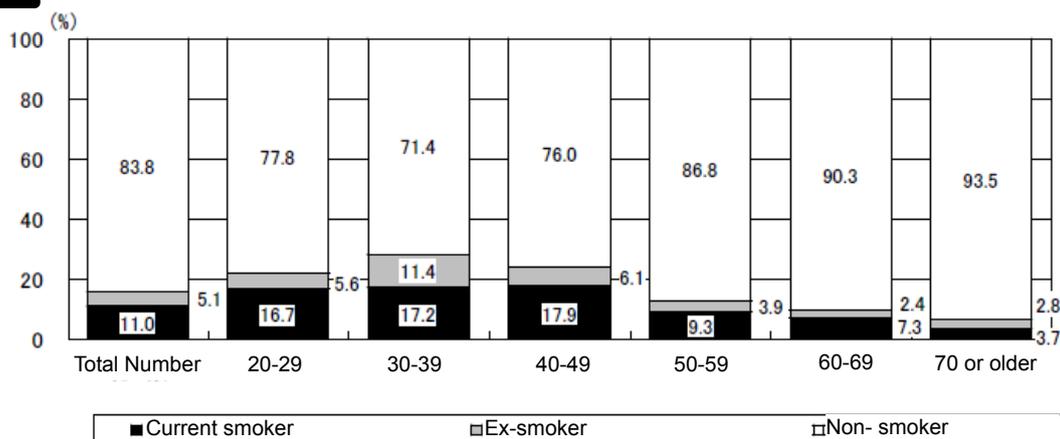
In both males and females, the 20 - 49 age group had the highest percentage of current smokers, accounting for about 50% of all males and about 20% of all females, respectively.

Figure 17-1. Current situation on the smoking habit (subjects aged 20 years or older)

Male



Female



Current smoker:

Among those who have smoked more than 100 cigarettes or for more than 6 months, the ones who smoke everyday or sometimes during the past one month

Ex-smoker:

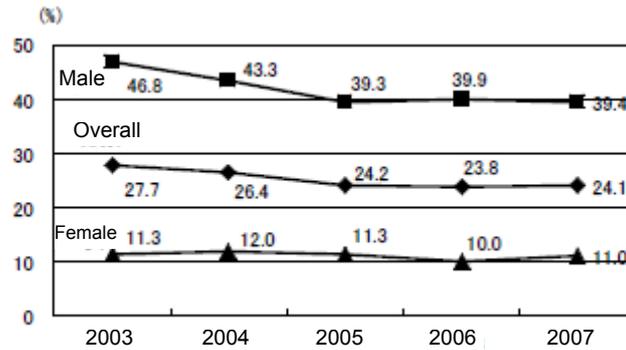
Among those who have smoked more than 100 cigarettes or for more than 6 months, the ones who never smoked during the past one month

Non- smoker:

Those who have never smoked or smoked less than 100 cigarettes or for less than 6 months

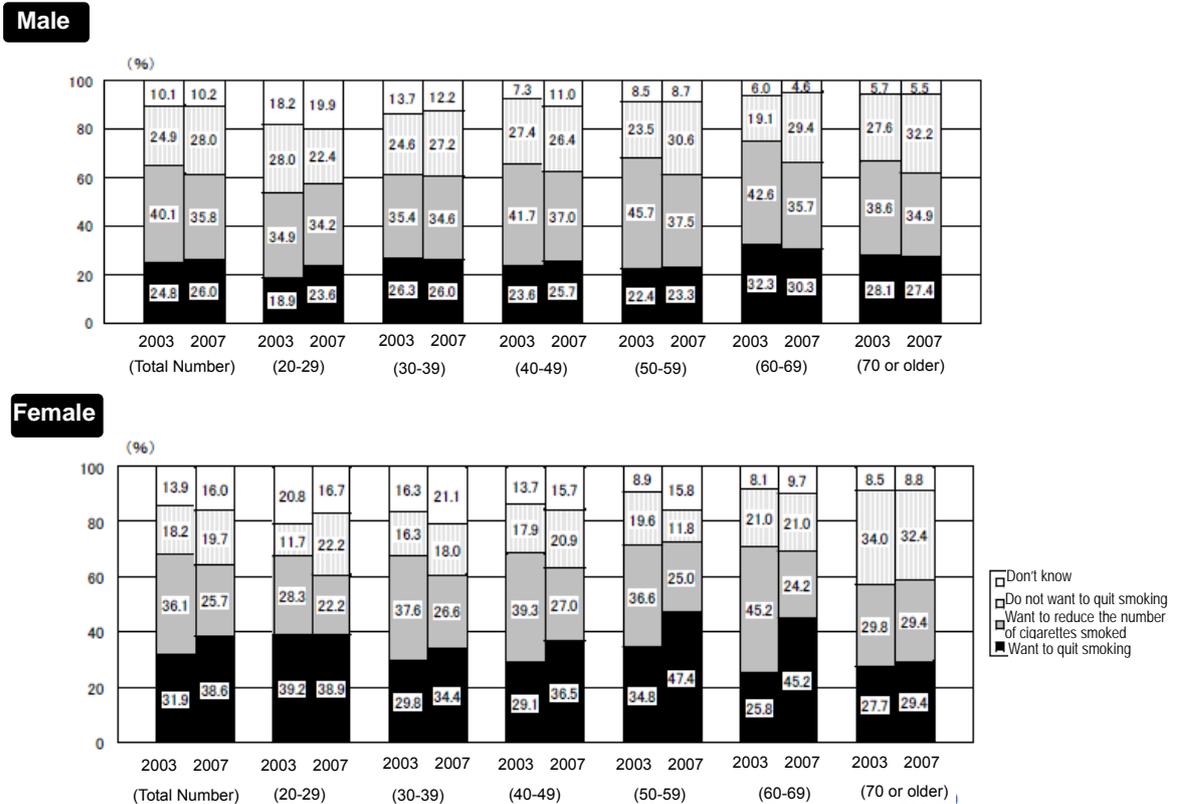
The percentage of current smokers showed a decline for males but still accounted for approximately 40% of the total while the corresponding percentage for females remained unchanged and accounted for approximately 10%.

Figure 17-1. Annual variation in the percentage of current smokers (subjects aged 20 years or older)



The percentage of those “wanting to quit smoking” was 26.0% for males and 38.6% for females, respectively, showing an upward trend compared with results in 2003.

Figure 18. Current status of those wanting to quit smoking (subjects aged 20 years or older)



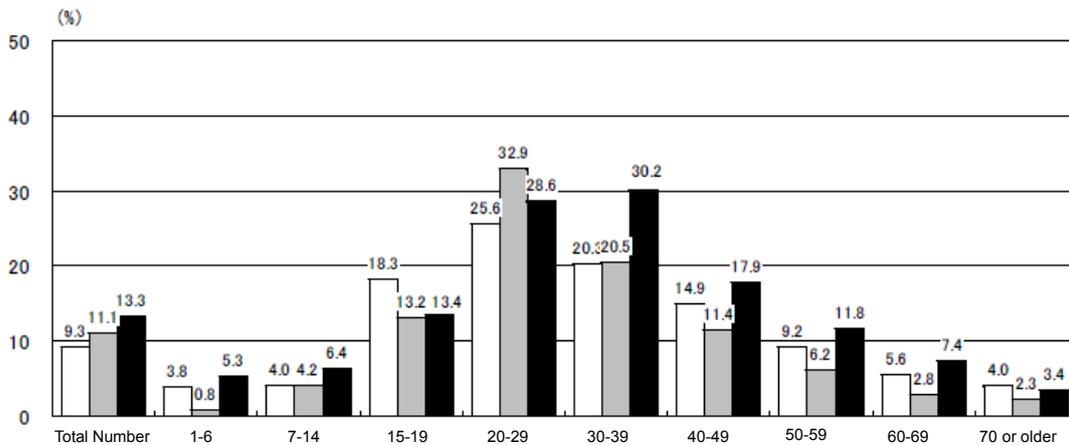
Part 3. Current status of eating habits

1. Current status of "breakfast skippers"

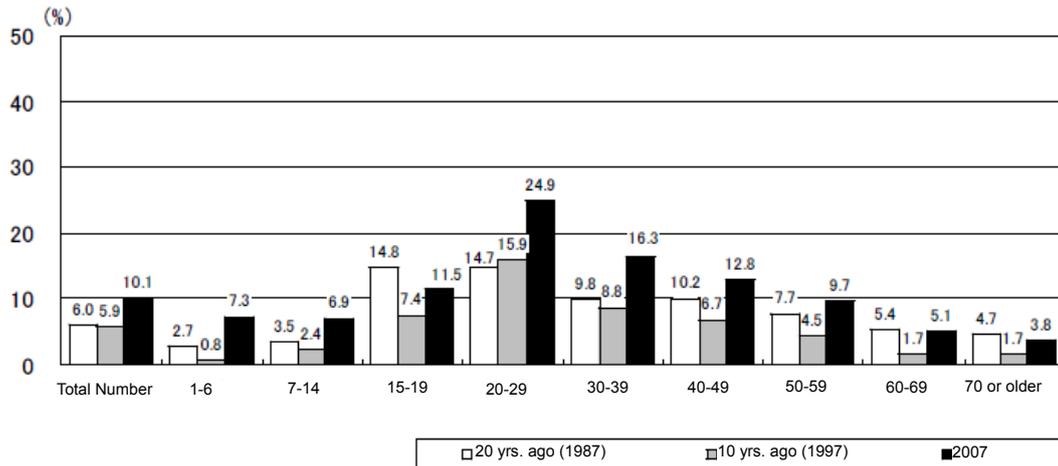
The annual variation in the percentage of "breakfast skippers" shows an upward trend for both males and females. Male subjects in their thirties comprised the highest percentage, accounting for approximately 30%, with female subjects in their twenties accounting for approximately 25% in 2007.

Figure 19. Current status of "breakfast skippers" (subjects aged 1 year or older)

Male



Female

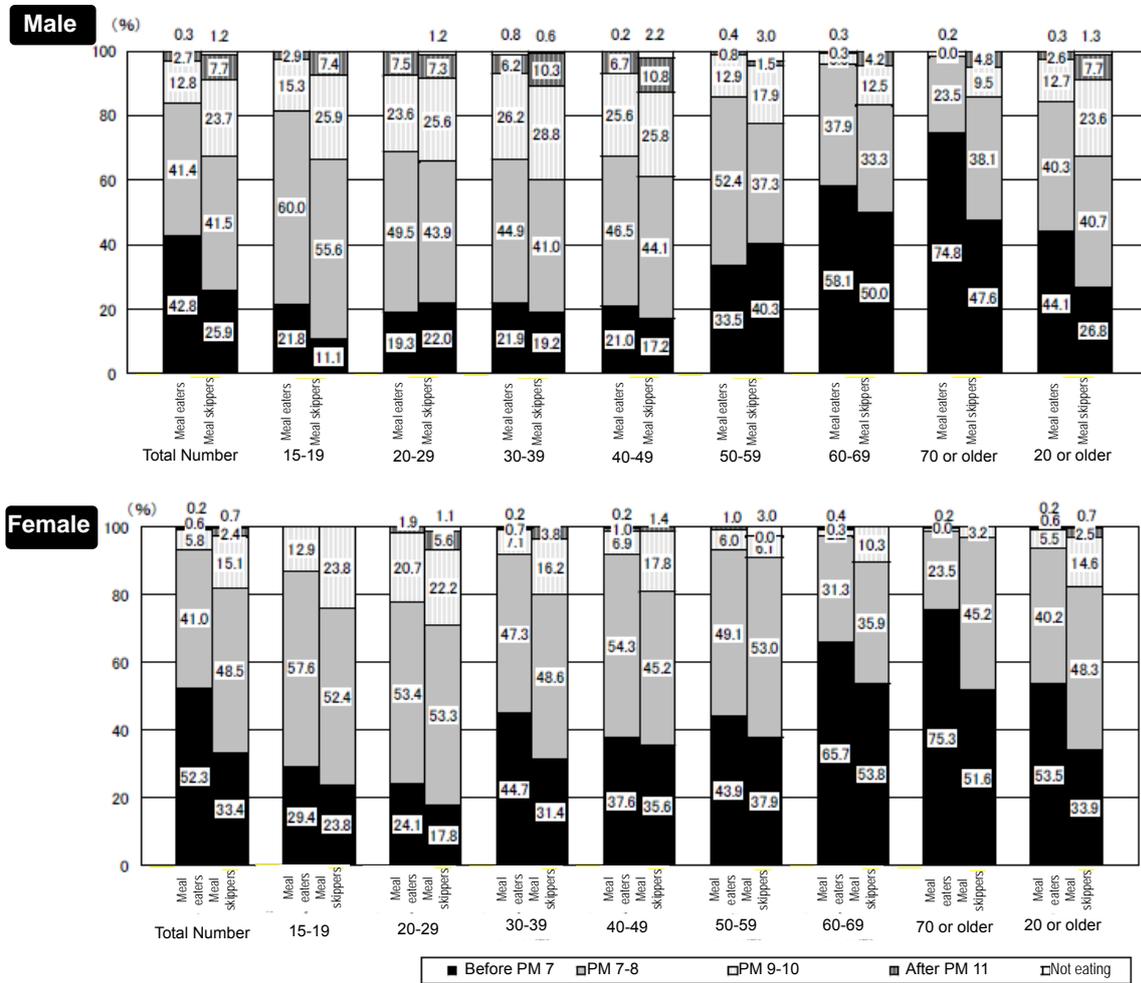


In this report, "meal-skipping" means any of the following three cases:

- (1) Taking only confectioneries, fruits, dairy products, beverages, or other similar foodstuffs
- (2) Taking only nutritional supplements, including tablets, or energy drinks
- (3) Not eating anything

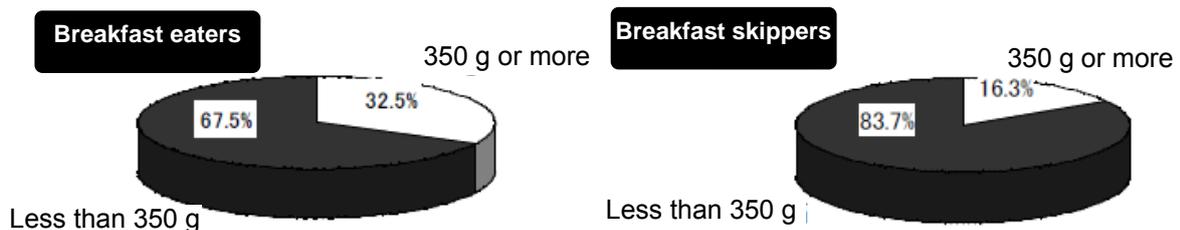
The relationship between dinner times and breakfast eating patterns showed that, in both males and females, more “breakfast eaters” had dinner by eight o’clock in the evening than “breakfast skippers”.

Figure 20. Dinner times in relation to breakfast eating patterns
(subjects aged 15 years or older)



The relationship between vegetable intake and breakfast eating patterns showed that 32.5% of “breakfast eaters” consumed 350 g or more of vegetables, compared to only 16.3% of “breakfast skippers”.

Figure 21. Distribution of vegetable intake in relation to breakfast eating patterns
(subjects aged 20 years or older)



2. Energy intake and fat energy ratio

Average energy intake decreased in both male and female.

Proportion of those who reported a fat energy ratio of 30% or more was about 20% and 30% for male and female respectively, among the subjects aged 20 years or older..

Figure 22. Annual variation in average energy intake (subjects aged 20 years or older)

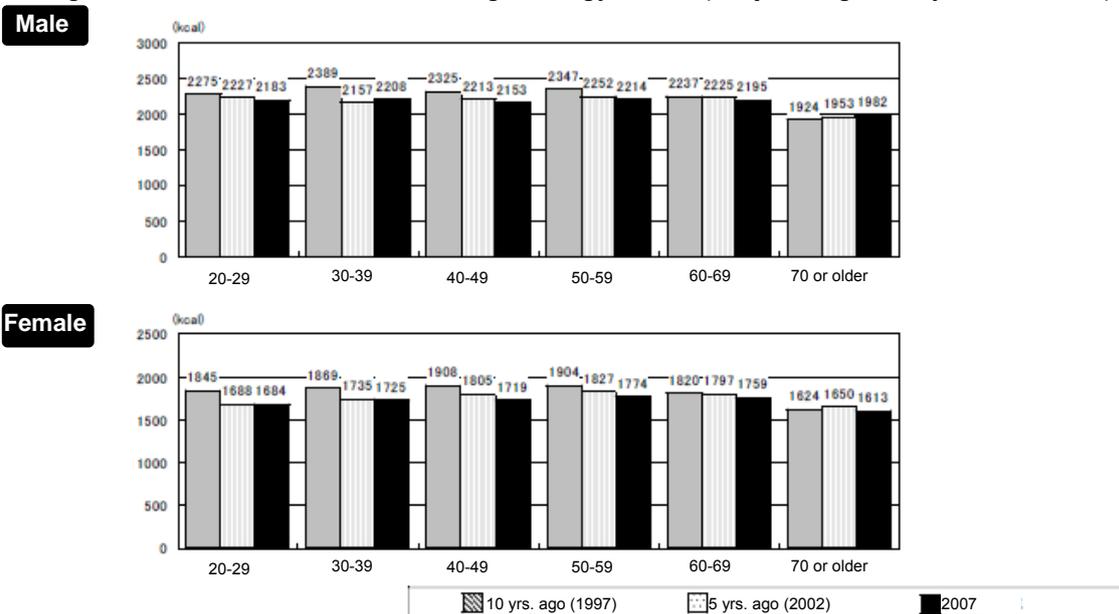


Figure 23-1. Distribution of fat energy ratio (subjects aged 20 years or older)

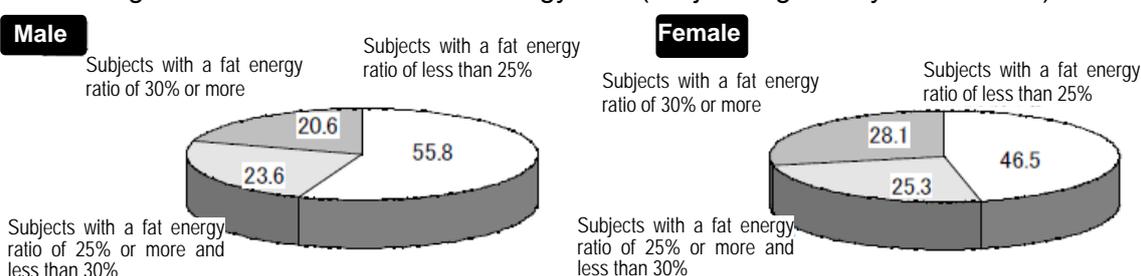
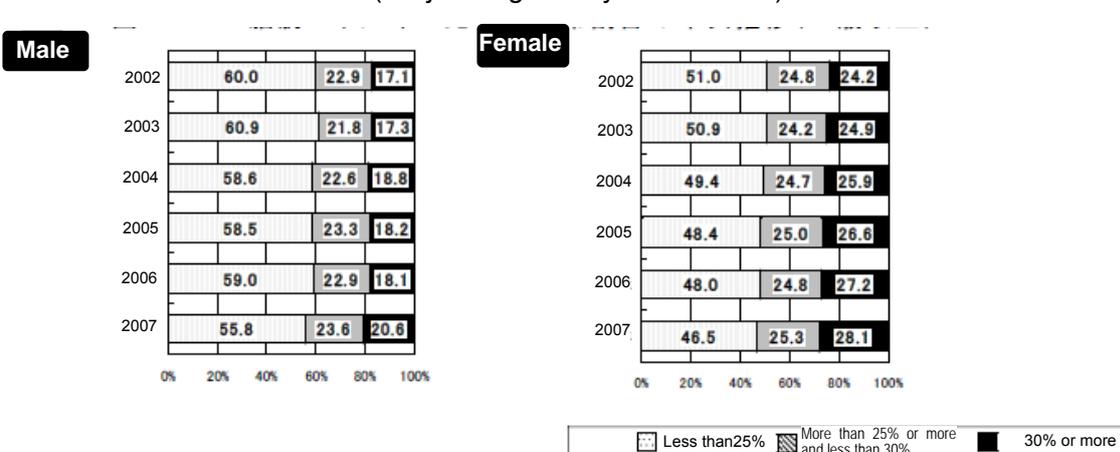


Figure 23-2. Annual variation in distribution of fat energy ratio (subjects aged 20 years or older)



Fat energy ratio= ratio of energy intake from fat in total energy intake

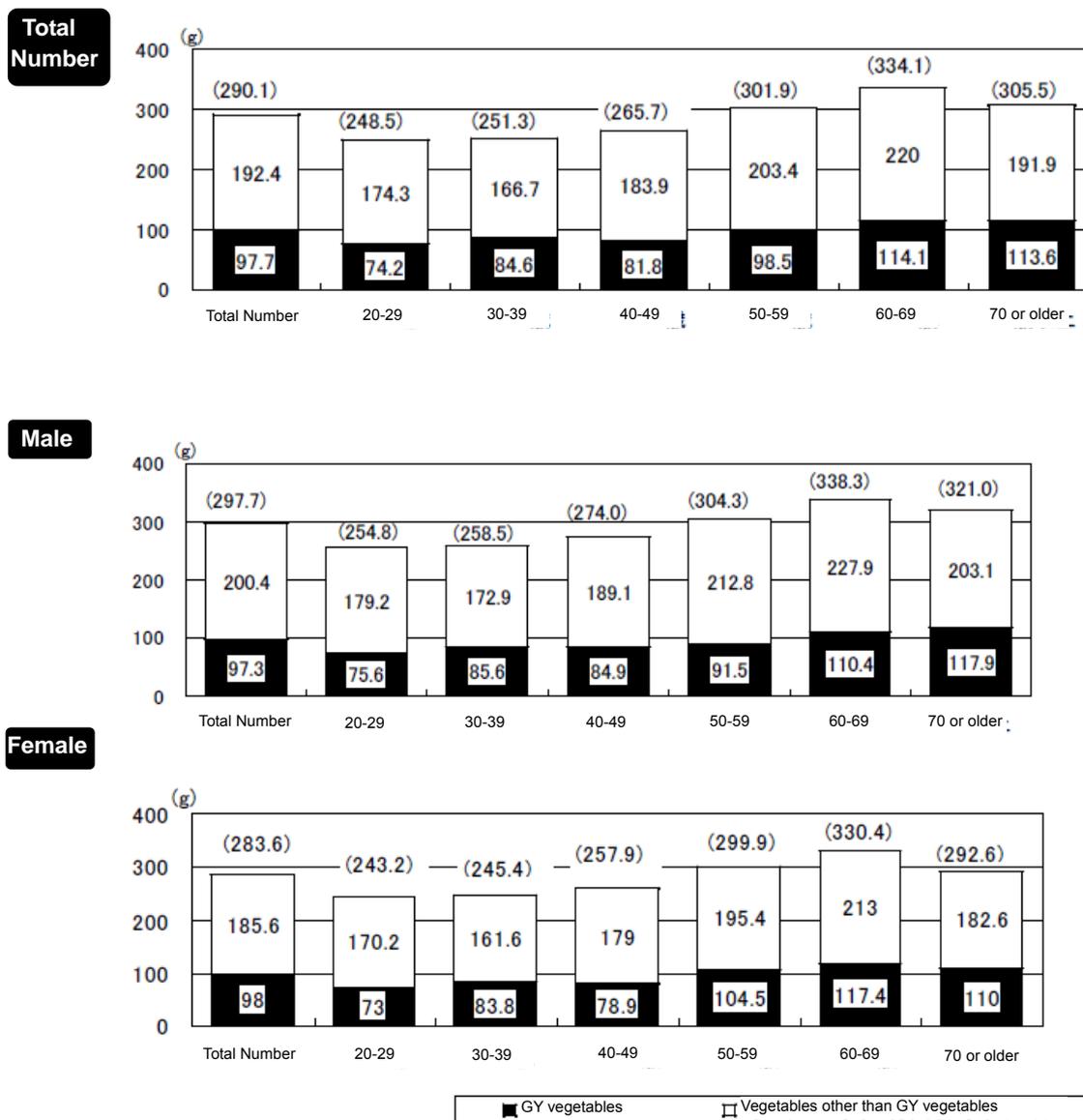
* Dietary Reference Intakes for Japanese (2005) set AI of fat energy ratio as below

(1) 18-29 years: 20-30%, 2) 30-69 years: 20-25%, 3) 70 years or older: 15-25%

3. Mean vegetable intake

Mean daily vegetable intake is 290 g, which is below the “Health Japan 21” target value of 350 g.

Figure 24: Mean vegetable intake per day (subjects aged 20 years or older)



The value in () is the sum of GY (green and yellow) vegetables and other ones.

(Reference)
 “Health Japan 21” Target Values
 Increase in vegetable intake per day
 350 g or more

4. Mean salt intake

Average salt intake is 12.0 g in males and 10.3 g in females, respectively, which is above the Adequate Intake of less than 10 g in males and less than 8 g in females (Figure 25-1).

Figure 25-1: Distribution of salt intake (subjects aged 20 years or older)

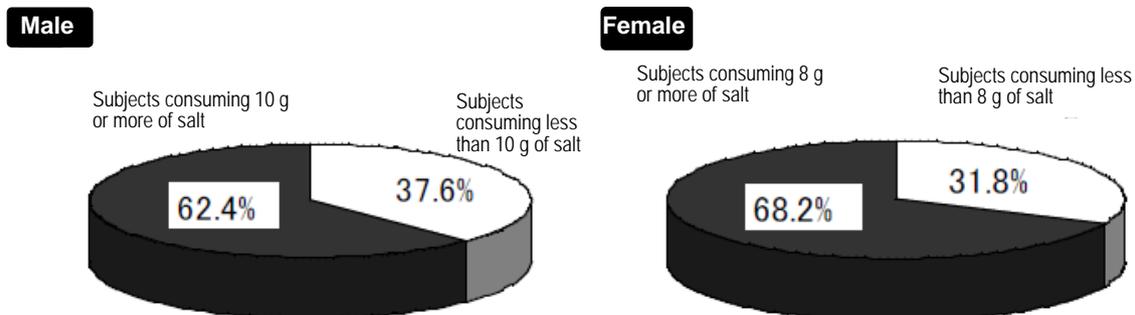
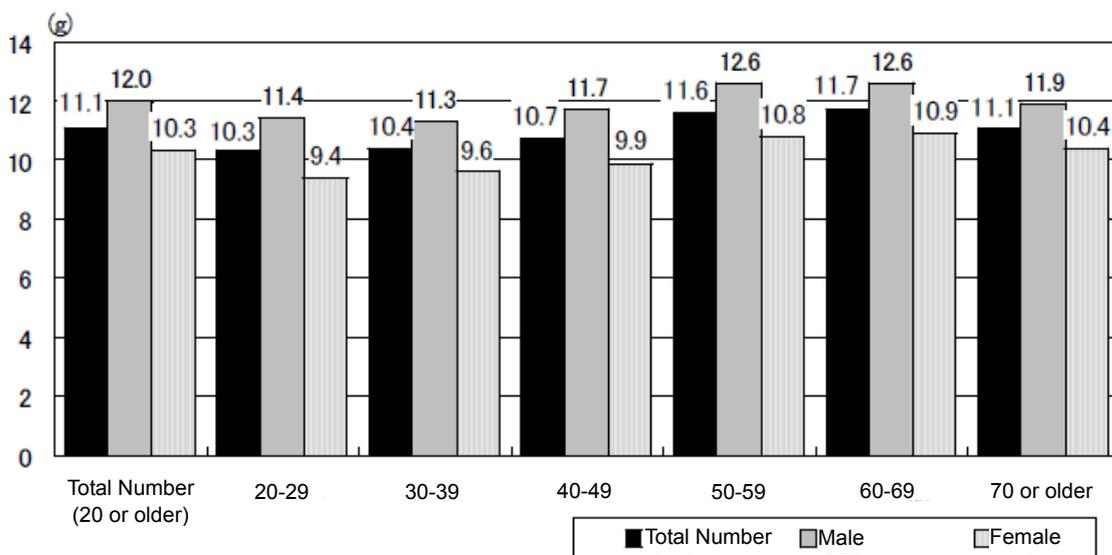


Figure 25-2: Mean salt intake (subjects aged 20 years or older)



Salt intake (g) =
 $\text{Na (mg)} \times 2.54 / 1,000$

(Reference)
 Dietary Reference Intakes for Japanese (2005) set AI of salt intake as below
 Adult male: less than 10g,
 Adult female: less than 8g

Table 11-1. Intake of nutrients (daily average intake) (total number)
- broken down by gender and age

	総数	1-6歳	7-14歳	15-19歳	20-29歳	30-39歳	40-49歳	50-59歳	60-69歳	70歳以上	(再掲) 20歳以上	
調査人数	人	8,885	488	795	393	665	1,201	1,107	1,268	1,426	1,542	7,209
エネルギー	kcal	1,898	1,329	1,985	2,163	1,912	1,942	1,930	1,978	1,962	1,779	1,913
たんぱく質	g	69.8	46.7	71.4	78.1	69.2	68.9	69.3	73.8	74.6	68.0	70.8
うち動物性	g	38.0	27.0	41.6	46.5	38.6	36.9	37.8	39.8	39.3	35.3	37.8
脂質	g	55.1	43.0	66.4	71.9	60.5	59.2	57.1	56.6	51.3	43.9	53.7
うち動物性	g	27.7	22.4	36.2	37.7	29.9	29.3	28.6	27.2	25.3	22.3	26.6
炭水化物	g	264.1	185.3	268.6	290.5	258.4	264.1	260.9	270.7	280.0	264.4	267.5
食塩 (ナトリウム×2.54/1,000)	g	10.6	6.2	9.4	10.6	10.3	10.4	10.7	11.6	11.7	11.1	11.1
カリウム	mg	2,306	1,513	2,249	2,194	2,035	2,102	2,174	2,468	2,673	2,513	2,372
カルシウム	mg	531	438	667	536	459	464	469	531	584	568	522
__カルシウム(通常の食品:再掲)	mg	524	435	662	534	456	460	463	523	577	555	515
__カルシウム(補助食品:再掲)	mg	4	0	1	0	0	2	3	5	6	9	5
__カルシウム(強化食品:再掲)	mg	3	2	4	2	2	1	3	3	2	5	3
マグネシウム	mg	247	151	227	232	221	233	240	267	286	264	256
リン	mg	1,000	713	1,086	1,076	946	961	970	1,045	1,079	994	1,006
鉄	mg	7.9	4.7	6.9	7.8	7.4	7.7	7.5	8.5	9.1	8.5	8.3
__鉄(通常の食品:再掲)	mg	7.8	4.7	6.9	7.8	7.4	7.4	7.4	8.4	9.0	8.4	8.1
__鉄(補助食品:再掲)	mg	0.1	0.0	0.0	0.0	0.0	0.3	0.1	0.1	0.2	0.0	0.1
__鉄(強化食品:再掲)	mg	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
亜鉛	mg	8.2	5.6	8.7	9.6	8.3	8.3	8.2	8.4	8.5	7.9	8.2
銅	mg	1.16	0.71	1.08	1.18	1.10	1.12	1.13	1.24	1.31	1.23	1.20
ビタミンA (レチノール当量)	μRE	615	413	612	686	616	558	573	607	685	677	625
ビタミンD	μg	7.6	3.6	5.2	6.4	6.7	5.9	7.2	9.3	9.8	9.2	8.2
ビタミンE (α-トコフェロール量)	mg-α-TE	8.6	4.7	6.5	8.1	7.1	7.9	8.5	9.2	9.5	10.9	9.1
__ビタミンE(通常の食品:再掲)	mg-α-TE	6.9	4.7	6.5	7.3	6.7	6.7	6.7	7.5	7.6	6.8	7.1
__ビタミンE(補助食品:再掲)	mg-α-TE	1.7	0.0	0.0	0.8	0.4	1.0	1.8	1.5	1.9	4.1	2.0
__ビタミンE(強化食品:再掲)	mg-α-TE	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.1	0.0	0.0	0.1
ビタミンK	μg	235	123	184	214	199	220	210	257	292	274	249
ビタミンB ₁	mg	1.43	0.59	1.23	1.19	1.21	1.21	1.26	1.45	1.67	2.03	1.53
__ビタミンB ₁ (通常の食品:再掲)	mg	0.87	0.59	1.14	1.01	0.89	0.85	0.86	0.87	0.88	0.80	0.85
__ビタミンB ₁ (補助食品:再掲)	mg	0.55	0.00	0.09	0.18	0.31	0.35	0.38	0.58	0.78	1.22	0.66
__ビタミンB ₁ (強化食品:再掲)	mg	0.01	0.00	0.00	0.00	0.01	0.01	0.02	0.00	0.01	0.01	0.01
ビタミンB ₂	mg	1.46	0.86	1.35	1.51	1.41	1.38	1.33	1.59	1.57	1.64	1.51
__ビタミンB ₂ (通常の食品:再掲)	mg	1.17	0.86	1.30	1.28	1.13	1.11	1.10	1.20	1.26	1.20	1.18
__ビタミンB ₂ (補助食品:再掲)	mg	0.28	0.00	0.06	0.23	0.27	0.27	0.22	0.39	0.30	0.43	0.32
__ビタミンB ₂ (強化食品:再掲)	mg	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.01	0.01	0.01
ナイアシン	mgNE	15.0	7.9	12.2	14.9	14.9	15.2	15.8	16.9	16.9	14.7	15.8
ビタミンB ₃	mg	1.67	0.71	1.12	1.43	1.42	1.42	1.46	1.72	2.03	2.40	1.81
__ビタミンB ₃ (通常の食品:再掲)	mg	1.13	0.70	1.03	1.12	1.05	1.06	1.09	1.21	1.29	1.19	1.16
__ビタミンB ₃ (補助食品:再掲)	mg	0.54	0.00	0.09	0.29	0.36	0.36	0.36	0.50	0.73	1.19	0.63
__ビタミンB ₃ (強化食品:再掲)	mg	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.00	0.01	0.02	0.01
ビタミンB ₁₂	μg	7.1	3.8	5.8	6.4	6.7	5.9	6.6	7.9	8.7	7.9	7.5
葉酸	μg	299	160	241	270	267	266	275	325	365	352	316
パントテン酸	mg	5.46	4.03	6.09	6.07	5.18	5.25	5.21	5.57	5.83	5.47	5.46
ビタミンC	mg	113	55	81	100	99	90	100	131	148	137	121
__ビタミンC(通常の食品:再掲)	mg	96	52	73	77	77	73	79	109	130	120	102
__ビタミンC(補助食品:再掲)	mg	13	1	2	14	9	12	16	17	15	16	15
__ビタミンC(強化食品:再掲)	mg	4	2	6	9	14	5	5	4	2	1	4
コレステロール	mg	323	239	343	425	341	327	331	337	323	289	322
食物繊維総量	g	14.0	8.3	12.8	12.7	12.3	12.7	12.8	15.0	16.7	15.9	14.5
うち水溶性	g	3.4	2.1	3.3	3.1	3.0	3.1	3.1	3.5	3.9	3.8	3.5
うち不溶性	g	10.6	6.2	9.6	9.6	9.3	9.6	9.7	11.4	12.8	12.1	11.1
脂肪エネルギー比率	%	25.8	28.5	29.9	29.6	28.1	27.1	26.5	25.5	23.4	21.9	25.0
炭水化物144kcal-比率	%	59.3	57.5	55.6	55.8	57.3	58.5	58.9	59.4	61.3	62.8	60.1
動物性たんぱく質比率	%	52.5	55.5	57.2	58.0	53.2	51.8	52.9	51.9	50.8	49.6	51.4

“Regular foods”, “fortified foods” and “supplemental foods” described in Table 11-1 are defined as follows:

Regular foods: obtained from regular foodstuffs

Fortified portion of fortified foods: obtained from the fortified portion of regular foods (for example, the fortified portion of calcium-fortified milk and iron-fortified yogurt)

Supplemental foods: obtained from granulated powders, tablets, capsules or drinkable products

Table 11-2. Intake of nutrients (daily average intake) (male)
- broken down by gender and age

	総数	1-6歳	7-14歳	15-19歳	20-29歳	30-39歳	40-49歳	50-59歳	60-69歳	70歳以上	(再掲)20歳以上
調査人数	人 4,164	243	392	201	304	540	537	587	664	696	3,328
エネルギー	kcal 2,114	1,389	2,103	2,440	2,183	2,208	2,153	2,214	2,195	1,982	2,148
たんぱく質	g 76.2	48.8	75.3	87.5	76.7	76.6	75.8	80.5	80.9	74.8	77.7
うち動物性	g 42.0	28.1	44.1	52.4	43.0	42.0	41.8	44.4	43.1	39.3	42.1
脂質	g 59.4	43.8	69.6	78.2	66.3	65.1	60.6	61.1	55.3	47.8	58.2
うち動物性	g 30.5	22.4	38.3	42.1	33.2	33.0	30.9	30.2	27.5	25.1	29.4
炭水化物	g 291.7	195.9	286.1	333.6	300.2	299.3	290.4	296.8	306.7	289.1	296.8
食塩 (ナトリウム×2.54/1,000)	g 11.4	6.5	9.8	11.7	11.4	11.3	11.7	12.6	12.6	11.9	12.0
カリウム	mg 2,398	1,571	2,356	2,329	2,181	2,204	2,266	2,518	2,742	2,650	2,468
カルシウム	mg 540	456	711	578	475	451	472	517	589	587	524
__カルシウム(通常の食品:再掲)	mg 536	451	703	577	474	450	468	512	584	579	520
__カルシウム(補助食品:再掲)	mg 2	0	1	0	1	1	2	3	3	5	3
__カルシウム(強化食品:再掲)	mg 2	4	7	1	0	0	2	3	1	3	2
マグネシウム	mg 262	158	238	248	241	250	257	279	301	284	273
リン	mg 1,076	744	1,140	1,192	1,030	1,042	1,046	1,115	1,158	1,078	1,085
鉄	mg 8.2	4.9	7.3	8.4	7.8	8.0	8.0	8.7	9.4	9.0	8.6
__鉄(通常の食品:再掲)	mg 8.2	4.8	7.2	8.4	7.8	8.0	7.9	8.7	9.3	8.9	8.5
__鉄(補助食品:再掲)	mg 0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0
__鉄(強化食品:再掲)	mg 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
亜鉛	mg 9.0	5.8	9.3	11.0	9.4	9.4	9.1	9.2	9.3	8.6	9.1
銅	mg 1.26	0.75	1.13	1.32	1.23	1.24	1.25	1.32	1.40	1.33	1.31
ビタミンA (レチノール当量)	μgRE 641	419	618	805	603	592	630	601	674	750	650
ビタミンD	μgE 8.2	3.7	5.7	6.6	6.7	6.3	7.3	10.1	10.9	10.1	8.9
ビタミンE (α-トコフェロール量)	mg-α-TE 8.4	4.9	6.7	9.3	7.9	7.4	8.1	9.5	9.1	9.9	8.8
__ビタミンE(通常の食品:再掲)	mg-α-TE 7.2	4.8	6.7	7.6	7.3	7.1	7.0	7.7	7.9	7.2	7.4
__ビタミンE(補助食品:再掲)	mg-α-TE 1.2	0.0	0.0	1.6	0.6	0.3	1.1	1.8	1.2	2.8	1.4
__ビタミンE(強化食品:再掲)	mg-α-TE 0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ビタミンK	μgE 239	131	195	229	200	229	219	252	294	283	253
ビタミンB ₁	mg 1.36	0.61	1.28	1.42	1.39	1.23	1.25	1.42	1.44	1.71	1.42
__ビタミンB ₁ (通常の食品:再掲)	mg 0.94	0.61	1.20	1.11	1.00	0.93	0.92	0.93	0.93	0.87	0.92
__ビタミンB ₁ (補助食品:再掲)	mg 0.42	0.00	0.07	0.31	0.38	0.29	0.31	0.49	0.51	0.83	0.49
__ビタミンB ₁ (強化食品:再掲)	mg 0.01	0.00	0.00	0.00	0.01	0.01	0.02	0.00	0.00	0.01	0.01
ビタミンB ₂	mg 1.45	0.91	1.38	1.75	1.43	1.34	1.39	1.62	1.57	1.50	1.48
__ビタミンB ₂ (通常の食品:再掲)	mg 1.23	0.90	1.36	1.36	1.22	1.18	1.15	1.22	1.31	1.28	1.23
__ビタミンB ₂ (補助食品:再掲)	mg 0.22	0.00	0.02	0.39	0.19	0.17	0.23	0.39	0.26	0.20	0.24
__ビタミンB ₂ (強化食品:再掲)	mg 0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.01	0.01	0.01
ナイアシン	mgNE 16.6	8.3	12.9	16.5	16.9	17.6	17.5	18.9	18.7	16.2	17.7
__ナイアシン	mg 1.65	0.74	1.12	1.68	1.63	1.38	1.59	1.78	1.83	2.25	1.78
__ナイアシン(通常の食品:再掲)	mg 1.22	0.73	1.08	1.23	1.17	1.17	1.20	1.32	1.38	1.30	1.27
__ナイアシン(補助食品:再掲)	mg 0.42	0.00	0.03	0.44	0.44	0.20	0.37	0.46	0.44	0.92	0.50
__ナイアシン(強化食品:再掲)	mg 0.01	0.00	0.00	0.01	0.02	0.01	0.01	0.00	0.01	0.02	0.01
__ナイアシン	μgE 7.8	4.2	6.0	7.5	7.1	6.8	7.6	8.6	9.6	9.2	8.3
葉酸	μgE 306	162	246	290	277	283	288	322	367	369	325
パントテン酸	mg 5.85	4.23	6.39	6.78	5.59	5.69	5.62	5.88	6.20	5.91	5.85
ビタミンC	mg 105	55	83	108	92	85	87	115	135	131	111
__ビタミンC(通常の食品:再掲)	mg 91	51	72	75	77	73	75	98	121	119	98
__ビタミンC(補助食品:再掲)	mg 9	0	3	24	4	4	8	15	10	11	9
__ビタミンC(強化食品:再掲)	mg 5	4	9	9	10	7	4	2	3	1	4
コレステロール	mg 351	244	352	467	369	365	351	369	353	317	352
食物繊維総量	g 14.2	8.6	13.3	13.2	12.6	12.9	13.2	14.7	16.9	16.5	14.8
うち水溶性	g 3.4	2.2	3.4	3.3	3.0	3.1	3.1	3.5	3.9	3.9	3.5
うち不溶性	g 10.8	6.4	9.9	10.0	9.5	9.8	10.0	11.2	12.9	12.6	11.3
脂肪エネルギー比率	% 25.0	27.8	29.5	28.4	26.9	26.2	25.1	24.5	22.6	21.5	24.1
炭水化物(糖質)比率	% 60.5	58.2	56.1	57.1	58.9	59.8	60.6	60.9	62.5	63.4	61.3
動物性たんぱく質比率	% 53.3	55.7	57.5	58.6	53.5	52.8	53.4	53.2	51.5	50.4	52.3

“Regular foods”, “fortified foods” and “supplemental foods” described in Table 11-1 are defined as follows:
Regular foods: obtained from regular foodstuffs
Fortified portion of fortified foods: obtained from the fortified portion of regular foods (for example, the fortified portion of calcium-fortified milk and iron-fortified yogurt)
Supplemental foods: obtained from granulated powders, tablets, capsules or drinkable products

Table 11-3. Intake of nutrients (daily average intake) (female)
- broken down by gender and age

	総数	1-6歳	7-14歳	15-19歳	20-29歳	30-39歳	40-49歳	50-59歳	60-69歳	70歳以上	(再掲)20歳以上	
調査人数	人	4,721	245	403	192	361	661	570	681	762	846	3,881
エネルギー	kcal	1,708	1,270	1,871	1,873	1,684	1,725	1,719	1,774	1,759	1,613	1,711
たんぱく質	g	64.2	44.7	67.7	68.3	62.9	62.5	63.1	68.1	69.1	62.5	64.9
うち動物性	g	34.4	25.9	39.1	40.4	34.8	32.8	34.0	35.9	36.0	32.0	34.2
脂質	g	51.3	42.2	63.2	65.4	55.6	54.4	53.9	52.7	47.8	40.7	49.9
うち動物性	g	25.3	22.4	34.1	33.1	27.2	26.3	26.4	24.6	23.4	20.0	24.2
炭水化物	g	239.7	174.7	251.6	245.4	223.2	235.4	233.1	248.2	256.7	244.1	242.3
食塩 (ナトリウム×2.54/1,000)	g	9.9	5.9	9.0	9.5	9.4	9.6	9.9	10.8	10.9	10.4	10.3
カリウム	mg	2,225	1,455	2,145	2,052	1,913	2,018	2,088	2,425	2,613	2,401	2,290
カルシウム	mg	523	421	623	493	445	474	466	542	580	553	520
__カルシウム(通常の食品:再掲)	mg	514	420	622	489	441	469	459	533	570	535	510
__カルシウム(補助食品:再掲)	mg	5	1	1	0	0	3	4	6	8	12	6
__カルシウム(強化食品:再掲)	mg	3	1	1	4	4	2	3	3	3	6	4
マグネシウム	mg	234	144	216	216	204	219	224	256	274	248	242
リン	mg	934	683	1,033	955	875	895	898	984	1,010	925	938
鉄	mg	7.6	4.5	6.6	7.2	7.1	7.5	7.1	8.3	9.0	8.1	8.0
__鉄(通常の食品:再掲)	mg	7.5	4.5	6.5	7.2	7.0	7.0	7.0	8.2	8.7	8.0	7.8
__鉄(補助食品:再掲)	mg	0.1	0.0	0.0	0.0	0.1	0.5	0.1	0.1	0.2	0.0	0.2
__鉄(強化食品:再掲)	mg	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
亜鉛	mg	7.5	5.4	8.2	8.2	7.5	7.4	7.3	7.7	7.8	7.2	7.5
銅	mg	1.08	0.67	1.03	1.03	1.00	1.02	1.02	1.16	1.23	1.15	1.11
ビタミンA (レチノール当量)	μgRE	591	407	606	561	627	529	519	612	695	617	603
ビタミンD	μg	7.2	3.5	4.8	6.1	6.7	5.6	7.1	8.5	8.9	8.4	7.7
ビタミンE (α-トコフェロール量)	mg-α-TE	8.8	4.5	6.3	6.9	6.5	8.3	8.9	8.9	9.8	11.8	9.4
__ビタミンE(通常の食品:再掲)	mg-α-TE	6.6	4.5	6.3	6.9	6.3	6.4	6.4	7.4	7.3	6.5	6.8
__ビタミンE(補助食品:再掲)	mg-α-TE	2.1	0.0	0.0	0.0	0.2	1.6	2.4	1.3	2.5	5.2	2.5
__ビタミンE(強化食品:再掲)	mg-α-TE	0.1	0.0	0.0	0.0	0.0	0.3	0.0	0.2	0.0	0.0	0.1
ビタミンK	μg	230	115	174	197	198	212	201	261	291	266	245
ビタミンB ₁	mg	1.50	0.58	1.19	0.95	1.05	1.19	1.27	1.48	1.88	2.30	1.62
__ビタミンB ₁ (通常の食品:再掲)	mg	0.81	0.58	1.09	0.89	0.80	0.78	0.80	0.82	0.84	0.74	0.80
__ビタミンB ₁ (補助食品:再掲)	mg	0.68	0.00	0.10	0.05	0.25	0.40	0.45	0.65	1.02	1.55	0.81
__ビタミンB ₁ (強化食品:再掲)	mg	0.01	0.00	0.00	0.00	0.01	0.00	0.02	0.00	0.01	0.01	0.01
ビタミンB ₂	mg	1.46	0.82	1.33	1.27	1.39	1.41	1.28	1.56	1.57	1.76	1.52
__ビタミンB ₂ (通常の食品:再掲)	mg	1.12	0.82	1.24	1.20	1.06	1.06	1.05	1.18	1.21	1.13	1.13
__ビタミンB ₂ (補助食品:再掲)	mg	0.33	0.00	0.09	0.07	0.33	0.35	0.22	0.38	0.34	0.62	0.39
__ビタミンB ₂ (強化食品:再掲)	mg	0.01	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.02	0.01	0.01
ナイアシン	mgNE	13.6	7.6	11.5	13.3	13.2	13.3	14.1	15.2	15.4	13.5	14.2
__ビタミンB ₃	mg	1.69	0.67	1.12	1.16	1.25	1.45	1.35	1.66	2.21	2.52	1.84
__ビタミンB ₃ (通常の食品:再掲)	mg	1.04	0.67	0.98	1.01	0.95	0.96	0.99	1.12	1.21	1.10	1.07
__ビタミンB ₃ (補助食品:再掲)	mg	0.64	0.00	0.14	0.13	0.29	0.48	0.34	0.54	0.98	1.41	0.75
__ビタミンB ₃ (強化食品:再掲)	mg	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.00	0.02	0.01	0.01
ビタミンB ₆	μg	6.4	3.4	5.6	5.2	6.5	5.2	5.7	7.4	8.0	6.9	6.7
葉酸	μg	292	158	236	249	259	253	262	328	363	337	308
パントテン酸	mg	5.12	3.82	5.80	5.34	4.84	4.89	4.83	5.31	5.51	5.10	5.12
ビタミンC	mg	120	55	79	91	105	95	112	144	159	142	130
__ビタミンC(通常の食品:再掲)	mg	99	52	73	79	76	73	82	119	138	121	106
__ビタミンC(補助食品:再掲)	mg	16	2	2	3	12	18	25	19	20	20	20
__ビタミンC(強化食品:再掲)	mg	4	1	4	9	17	4	5	6	1	1	5
コレステロール	mg	299	234	334	382	317	296	311	309	297	265	296
食物繊維総量	g	13.7	8.1	12.4	12.1	12.1	12.5	12.5	15.2	16.6	15.3	14.3
うち水溶性	g	3.3	2.0	3.1	2.9	3.0	3.1	3.0	3.6	3.9	3.6	3.4
うち不溶性	g	10.4	6.0	9.2	9.2	9.0	9.4	9.4	11.6	12.6	11.7	10.9
脂肪エネルギー比率	%	26.5	29.2	30.2	30.8	29.1	27.9	27.9	26.4	24.1	22.3	25.8
炭水化物材料比率	%	58.4	56.8	55.2	54.5	55.9	57.4	57.3	58.2	60.1	62.3	59.0
動物性たんぱく質比率	%	51.8	55.2	56.9	57.4	53.0	50.9	52.4	50.9	50.1	48.9	50.7

“Regular foods”, “fortified foods” and “supplemental foods” described in Table 11-1 are defined as follows:

Regular foods: obtained from regular foodstuffs

Fortified portion of fortified foods: obtained from the fortified portion of regular foods (for example, the fortified portion of calcium-fortified milk and iron-fortified yogurt)

Supplemental foods: obtained from granulated powders, tablets, capsules or drinkable products

Table 12. Food intake (daily average intake) for each food group
 – broken down by gender and age

	総数	1-6歳	7-14歳	15-19歳	20-29歳	30-39歳	40-49歳	50-59歳	60-69歳	70歳以上	(再掲)20歳以上
調査人数(人)	8,885	488	795	393	665	1,201	1,107	1,268	1,426	1,542	7,209
穀類	445.7	264.4	424.1	513.1	455.0	476.2	465.1	453.3	461.2	434.5	456.6
いも類	56.3	37.6	60.5	55.4	54.5	47.3	55.8	57.0	61.8	62.8	57.2
砂糖・甘味料類	6.7	3.7	6.0	6.5	6.1	6.1	6.0	7.3	7.7	8.2	7.0
豆類	56.0	28.4	41.3	43.1	49.4	47.9	51.0	64.5	71.1	67.1	60.1
雑実類	2.0	0.7	1.8	1.2	1.3	1.4	1.3	2.4	3.1	2.7	2.2
野菜類	276.7	140.0	243.7	267.6	248.5	251.3	265.7	301.9	334.1	305.5	290.1
うち緑黄色野菜	92.2	50.0	74.0	79.7	74.2	84.6	81.8	98.5	114.1	113.6	97.7
果実類	111.6	109.0	95.0	85.1	77.0	66.3	71.3	125.7	161.9	148.7	115.0
きのこ類	16.0	7.8	13.1	14.7	15.5	14.7	14.3	18.5	19.9	17.5	17.0
海藻類	11.4	5.8	9.3	10.3	8.6	10.0	10.8	12.2	13.5	14.9	12.1
魚介類	80.2	35.9	53.1	60.9	69.6	65.1	74.2	98.6	104.6	96.1	87.2
肉類	82.6	61.8	102.2	140.0	105.8	102.2	96.8	77.2	63.8	51.0	78.8
卵類	35.6	27.2	35.1	50.6	37.6	36.3	35.9	36.8	35.3	32.2	35.4
乳類	123.9	199.3	307.1	160.5	88.8	94.1	83.9	92.5	100.3	111.1	96.6
油脂類	10.2	7.9	11.0	14.8	12.3	12.2	11.5	10.9	8.9	6.7	10.0
菓子類	26.3	35.8	43.6	34.5	27.6	23.3	23.7	24.7	21.3	21.9	23.3
嗜好飲料類	634.4	233.8	294.0	447.9	586.0	716.2	744.1	789.6	759.7	618.9	709.2
調味料・香辛料類	93.0	46.1	75.2	85.6	92.3	102.6	102.7	103.8	103.4	86.1	98.5
補助栄養素・特定保健用食品	15.8	10.4	7.7	13.7	15.2	13.8	13.6	20.2	19.5	18.7	17.2
調査人数(人)	4,164	243	392	201	304	540	537	587	664	696	3,328
穀類	518.2	287.9	460.9	615.4	555.1	570.0	543.8	534.5	535.2	496.6	535.9
いも類	58.6	40.7	64.2	58.6	61.5	48.0	57.8	58.3	62.1	66.1	59.2
砂糖・甘味料類	6.8	4.0	6.0	6.4	6.3	6.2	6.6	6.8	7.6	8.3	7.1
豆類	57.2	29.6	41.9	43.6	50.6	47.7	54.4	64.8	71.9	71.3	61.8
雑実類	2.0	0.5	2.0	1.2	1.3	1.3	1.3	2.3	3.0	3.0	2.2
野菜類	283.3	140.7	248.7	284.2	254.8	258.5	274.0	304.3	338.3	321.0	297.7
うち緑黄色野菜	91.8	48.7	76.4	82.5	75.6	85.6	84.9	91.5	110.4	117.9	97.3
果実類	100.1	110.7	93.9	80.2	70.7	57.9	60.5	99.2	144.9	139.9	101.3
きのこ類	16.1	7.6	13.5	12.8	14.0	15.3	13.8	17.5	20.8	19.3	17.2
海藻類	11.8	7.0	10.6	10.4	10.1	9.2	11.9	12.0	13.0	15.6	12.3
魚介類	88.8	38.4	56.0	64.7	76.8	73.7	84.8	109.9	116.1	108.1	97.8
肉類	95.9	62.6	108.8	166.1	121.9	126.1	111.5	92.2	71.9	59.3	92.6
卵類	38.6	27.6	36.5	53.6	41.3	40.1	36.7	41.1	38.7	35.8	38.7
乳類	121.7	207.7	330.1	178.6	85.5	71.1	71.7	76.6	97.2	113.0	87.4
油脂類	11.4	8.4	11.8	15.8	14.1	13.8	12.7	12.3	10.2	7.2	11.3
菓子類	23.1	37.4	41.9	36.6	24.3	18.0	18.4	17.4	18.1	20.0	19.0
嗜好飲料類	703.7	241.7	315.9	467.5	668.0	840.5	812.5	884.3	861.4	674.4	797.4
調味料・香辛料類	102.7	48.2	77.7	94.3	103.3	113.6	119.9	116.2	117.0	91.5	110.2
補助栄養素・特定保健用食品	16.0	10.3	8.4	14.5	15.7	14.0	13.9	23.6	18.1	17.6	17.4
調査人数(人)	4,721	245	403	192	361	661	570	681	762	846	3,881
穀類	381.7	241.1	388.3	406.0	370.8	399.5	390.9	383.4	396.7	383.4	388.7
いも類	54.3	34.5	56.9	51.9	48.7	46.7	53.9	55.8	61.5	60.1	55.4
砂糖・甘味料類	6.7	3.5	5.9	6.5	5.9	6.1	5.4	7.7	7.7	8.1	7.0
豆類	54.9	27.3	40.8	42.6	48.4	48.2	47.8	64.3	70.3	63.6	58.7
雑実類	2.0	0.8	1.7	1.2	1.2	1.5	1.3	2.5	3.1	2.5	2.2
野菜類	270.9	139.4	238.9	250.4	243.2	245.4	257.9	299.9	330.4	292.6	283.6
うち緑黄色野菜	92.5	51.4	71.7	76.8	73.0	83.8	78.9	104.5	117.4	110.0	98.0
果実類	121.7	107.3	96.0	90.1	82.2	73.1	81.4	148.5	176.7	155.9	126.8
きのこ類	16.0	8.0	12.7	16.7	16.8	14.3	14.7	19.4	19.1	16.0	16.8
海藻類	11.1	4.5	8.0	10.3	7.3	10.5	9.8	12.4	14.0	14.2	11.9
魚介類	72.6	33.4	50.4	56.9	63.6	58.1	64.2	88.9	94.5	86.3	78.2
肉類	70.9	60.9	95.8	112.7	92.3	82.7	83.1	64.2	56.8	44.3	66.9
卵類	32.9	26.9	33.7	47.6	34.5	33.1	35.1	33.1	32.3	29.2	32.5
乳類	125.9	191.0	284.8	141.5	91.7	112.8	95.4	106.2	103.1	109.5	104.5
油脂類	9.2	7.4	10.3	13.8	10.8	11.0	10.4	9.8	7.8	6.2	9.0
菓子類	29.2	34.3	45.2	32.3	30.4	27.7	28.7	31.1	24.1	23.5	27.1
嗜好飲料類	573.2	225.9	272.7	427.3	516.9	614.7	679.6	707.9	671.1	573.3	633.5
調味料・香辛料類	84.4	44.1	72.8	76.5	83.1	93.7	86.6	93.1	91.5	81.7	88.5
補助栄養素・特定保健用食品	15.7	10.6	7.1	12.8	14.8	13.7	13.4	17.3	20.7	19.6	17.1

Supplemental nutrients and foods for specified health use: obtained from granulated powders, tablets, capsules, drinkable products and foods for specified health use