

# **Outline for the Results of the National Health and Nutrition Survey Japan, 2006**

(extracts)

Office for Life-style Related Diseases Control  
Health Service Bureau  
Ministry of Health, Labour and Welfare

(Tabulation and analysis)  
Project for the National Health and Nutrition Survey  
Nutritional Epidemiology Program  
National Institute of Health and Nutrition

## **○ Prevalence of lifestyle-related diseases**

- The estimated number of people suffered from diabetes mellitus is 18,700,000 (8,200,000 with a strong symptom of diabetes mellitus and 10,500,000 with a moderate symptom).
- The number of individuals with hypertension is about 39,700,000 and those at the upper threshold of the normal blood pressure is 15,200,000, hence the total of 54,900,000.

## **○ Prevalence of metabolic syndrome**

- Among the 40- to 74-year-olds, one of two men and one of five women were either strongly suspected to have metabolic syndrome or prodromal metabolic syndrome.

## **○ The status of physical activity and exercise**

- On the question concerning exercise, more than 30% of male aged 20-39 years and over 70 and female aged 15-29 years and over 70 years stated that they “neither do exercise nor even think of starting it.”

## **○ Characteristics of dietary habit**

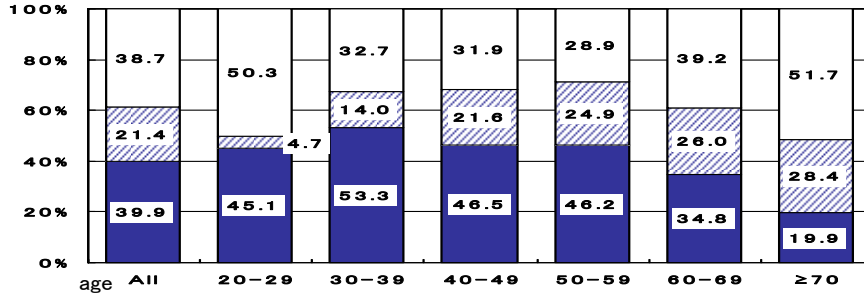
- For the percentage of those who skip breakfast, an increasing trend has been observed among both male and female.
- For the time for dinner, an increase trend was observed in the proportion of those who start dinner after 21:00 among both men and women aged 20-60 years.

**○ Current situation on the smoking habit**

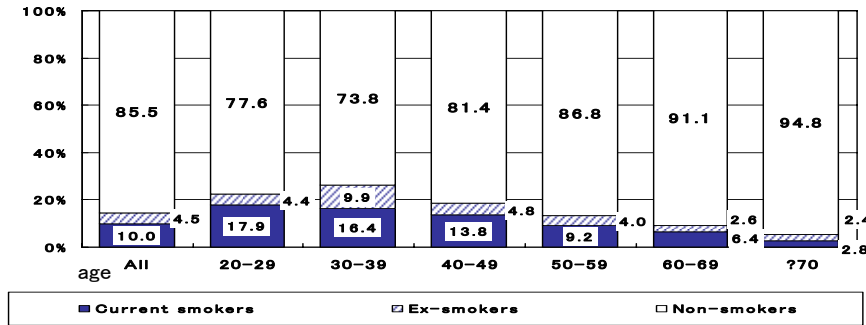
- The proportion of those who currently have smoking habit was highest among male aged 30-39 years (53.3%), followed by those aged 20-29 years (45.1%). As for female, the proportion was higher among those aged 20-29 years (17.9%) than those aged 30-39 years (16.4%).

Male

**Figure 1-1. Distribution of smokers (adults aged ≥ 20yrs)**



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:**

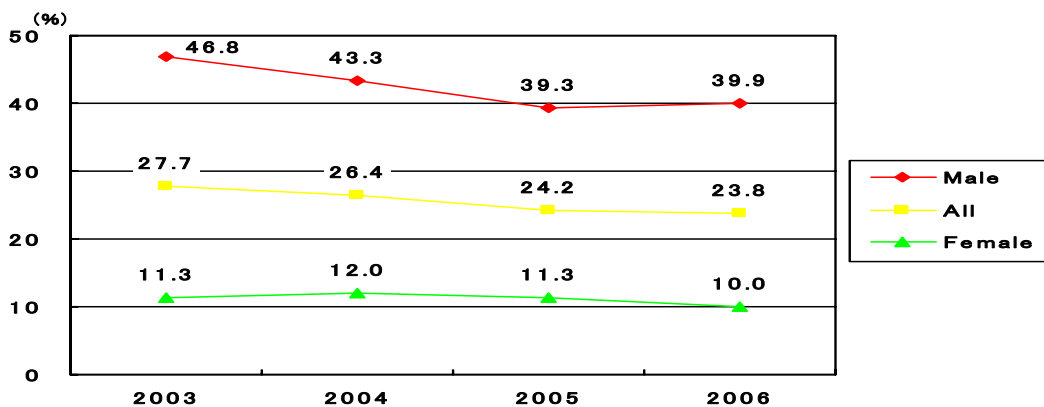
Among those who have smoked more than 100 cigarettes or for more than 6 months, the ones who never smoked during the past one month

**Non-smoker:**

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

Proportion of smokers has been decreasing since 2003, reaching less than 40% among male

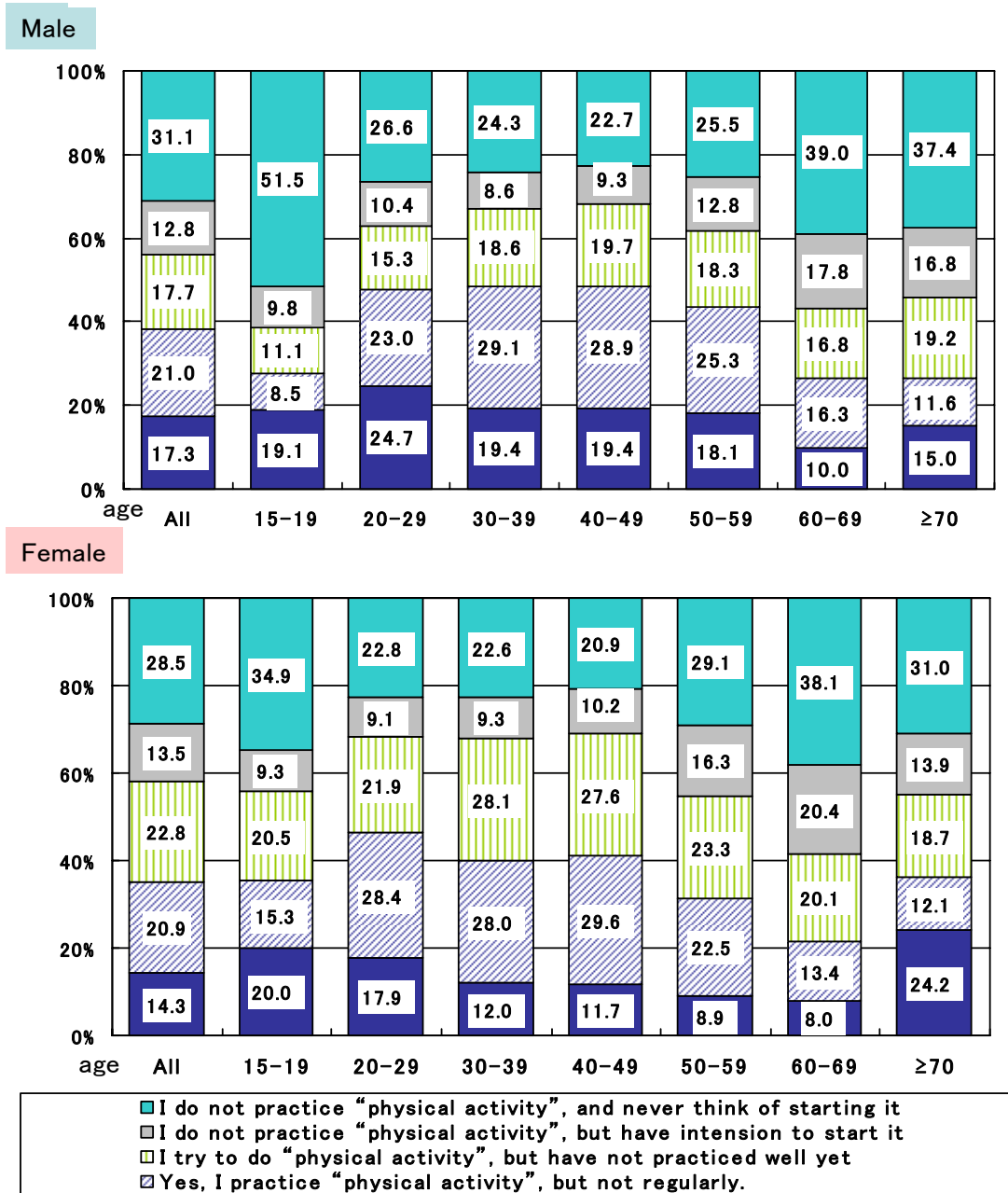
**Figure 1-2. Changes in proportion of smokers (adults aged ≥ 20yrs)**



○ **The status of physical activity**

- As for physical activity, more than 40% of male aged 20-50 years and female aged 20-40 years stated that they do not have enough “physical activity” habit in their daily lives.

**Figure2. Attitude and practice of “physical activity” in daily life**

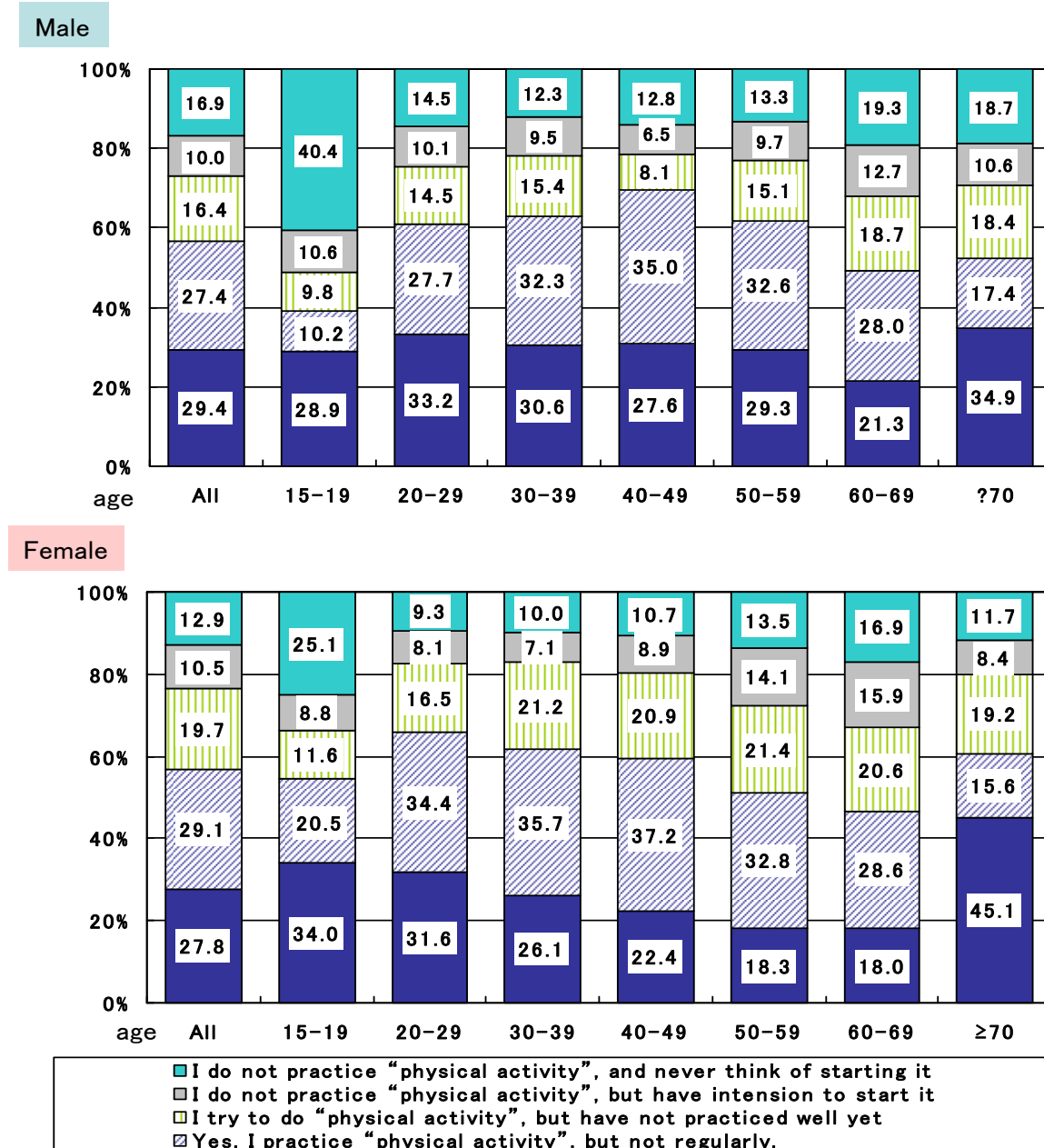


In this survey, “physical activity” is defined as “undertaking moderate physical activity like walking, riding a bicycle, doing household tasks with standing/walking for 60 min. in total per day in one’s daily life”.

○ The status of exercise

- On the question concerning exercise, more than 30% of male aged 20-39 years and over 70 and female aged 15-29 years and over 70 years stated that they “neither do exercise nor even think of starting it.”

Figure 3. Attitude and practice of “exercise”



In this survey, “physical activity” is defined as “undertaking moderate physical activity like walking, riding a bicycle, doing household tasks with standing/walking for 60 min. in total per day in one’s daily life”.

○ Trend in prevalence of obesity

- Compared with the statistics of 20 years ago (1986) and 10 years ago (1996), prevalence of obesity apparently increased regardless of age group in male, whereas that of obesity in the age group of 40-49 years decreased in female. Another finding to be noted was that about 20% of female in their 20s were underweight. For those aged over 70 years, prevalence of underweight decreased in both male and female.

Figure 4-1. Changes in prevalence of obesity and underweight (adults aged ≥ 20yrs)

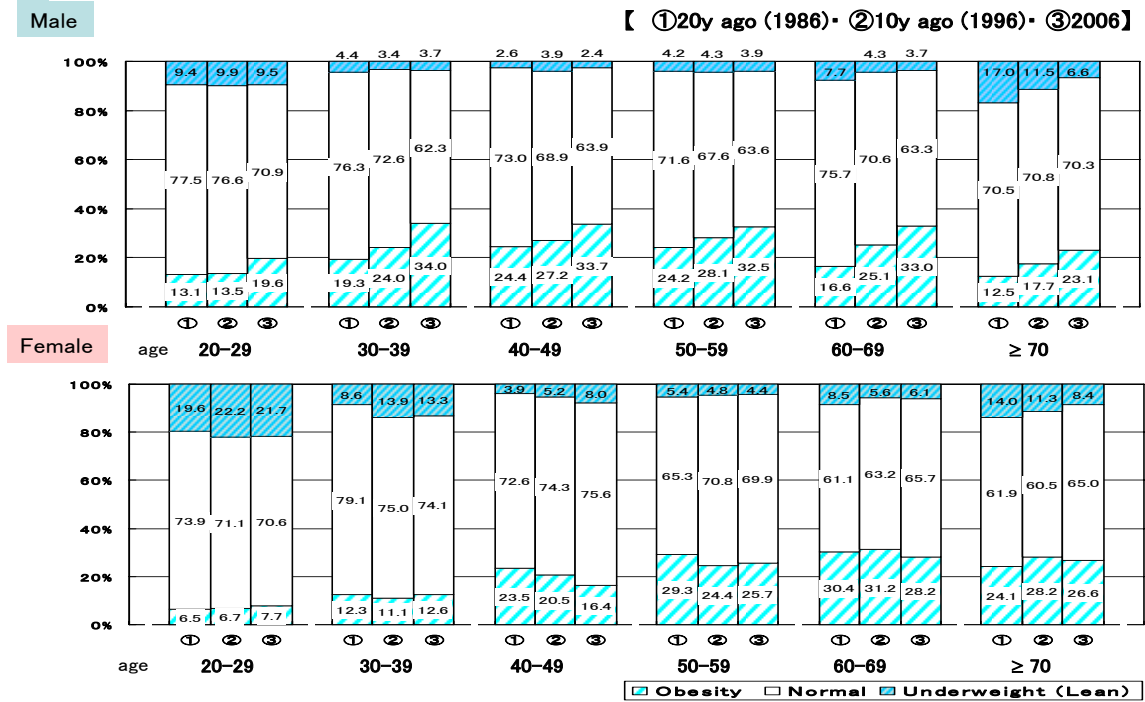
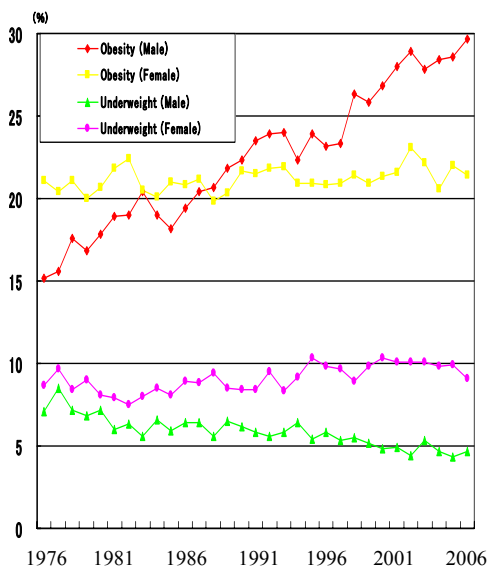


Figure 4-2. Secular changes in prevalence of obesity and underweight (adults aged ≥ 20yrs)



BMI (Body Mass Index) = weight[kg]/(height[m]<sup>2</sup>)

<18.5 Underweight (Lean)

≥18.5 and <25 Normal

≥25 Obesity

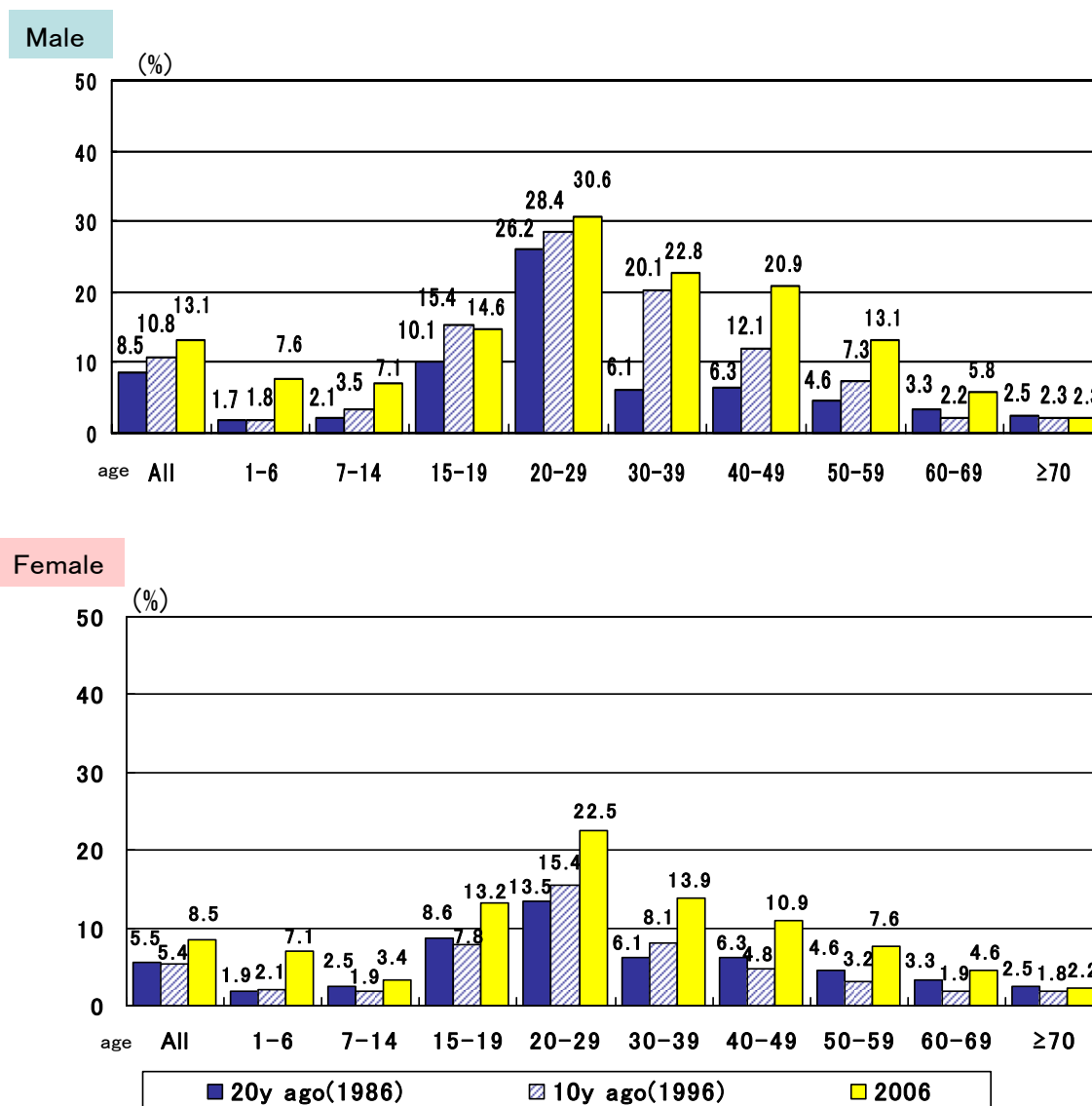
Reference) Data for Figure 4-2.

Annual	Obesity		Underweight (Lean)		Annual	Obesity		Underweight (Lean)	
	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	8.1	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					

### ○ Characteristics of dietary habit

- For the percentage of those who skip breakfast, an increasing trend has been observed among both male and female, with the highest proportions among those aged 20-29 years in 2006(30% for men and 20% for women).

**Figure5. Proportion of the population who skip breakfast (over 1 yrs old)**



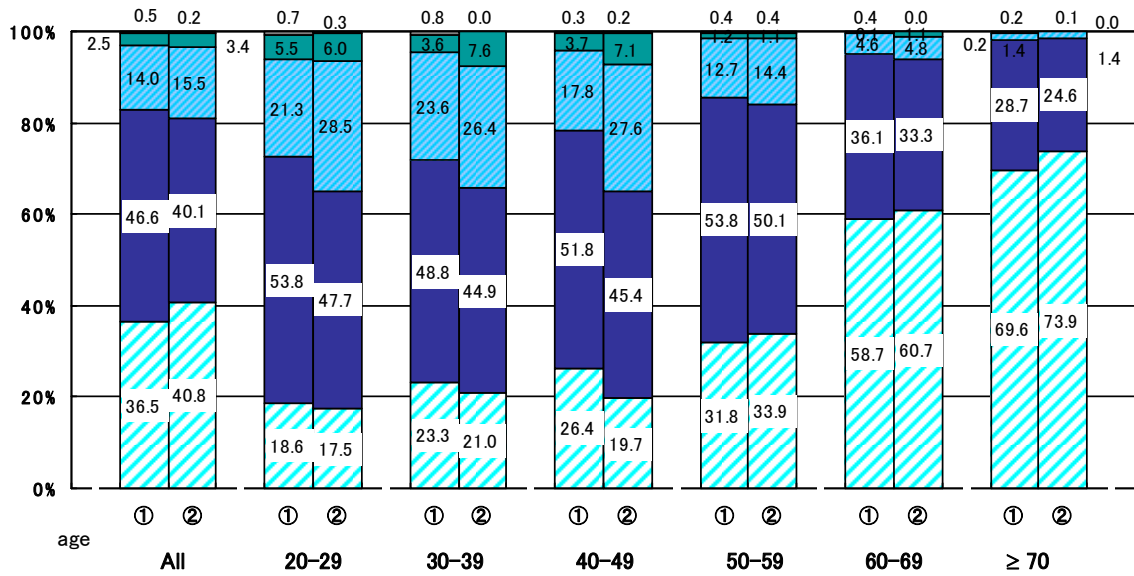
In this survey, “skipping meal” is defined as the following 3 groups:  
 1) do not eat anything  
 2) take snack, fruit, dairy products and beverage only  
 3) take only supplements and energy drink only

- For the time for dinner, an increase trend was observed in the proportion of those who start dinner after 21:00 among both men and women aged 20-60 years.

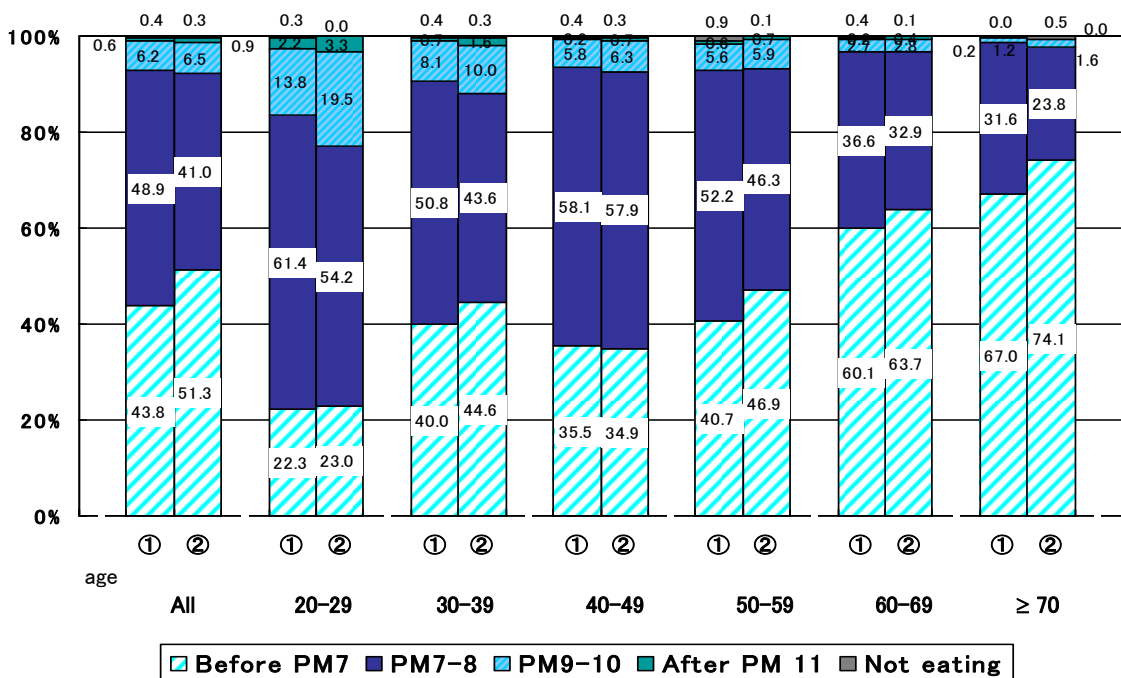
**Figure6. Time of having dinner (over 20 yrs old)**

【 ①1997 ②2006 】

Male



Female



Legend:  Before PM7  PM7-8  PM9-10  After PM 11  Not eating

## ○ Energy intake and fat energy ratio

- Average energy intake gradually 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.

Figure 7. Changes in average energy intake (adults aged ≥ 20yrs)

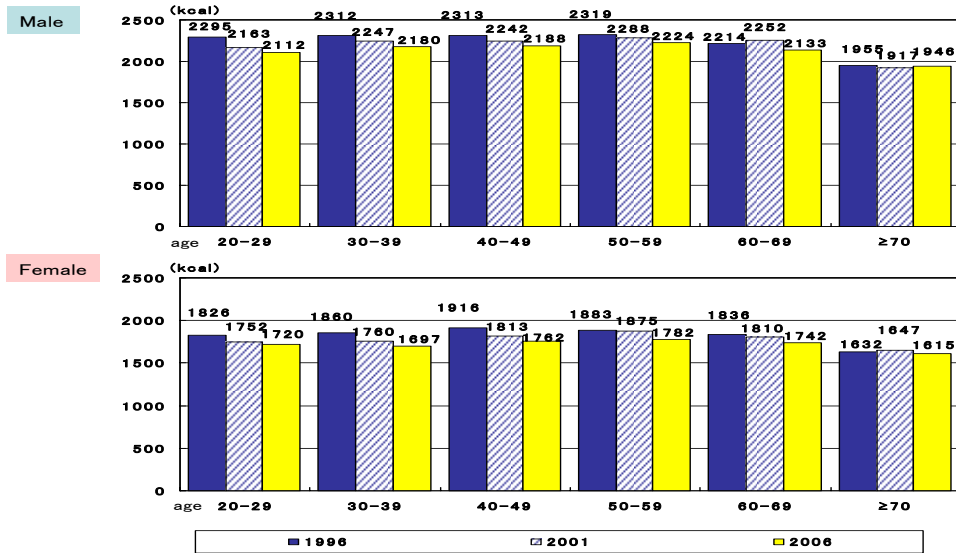


Figure 8-1. Distribution of fat energy ratio (adults aged ≥ 20yrs)

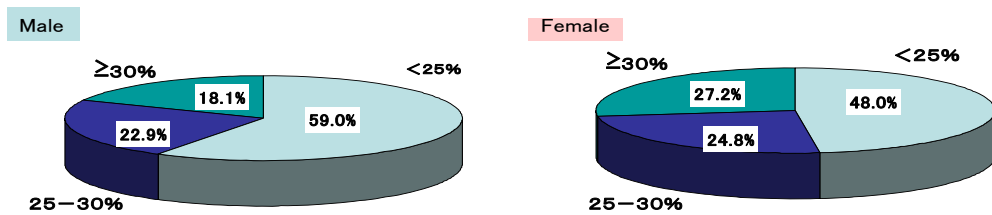
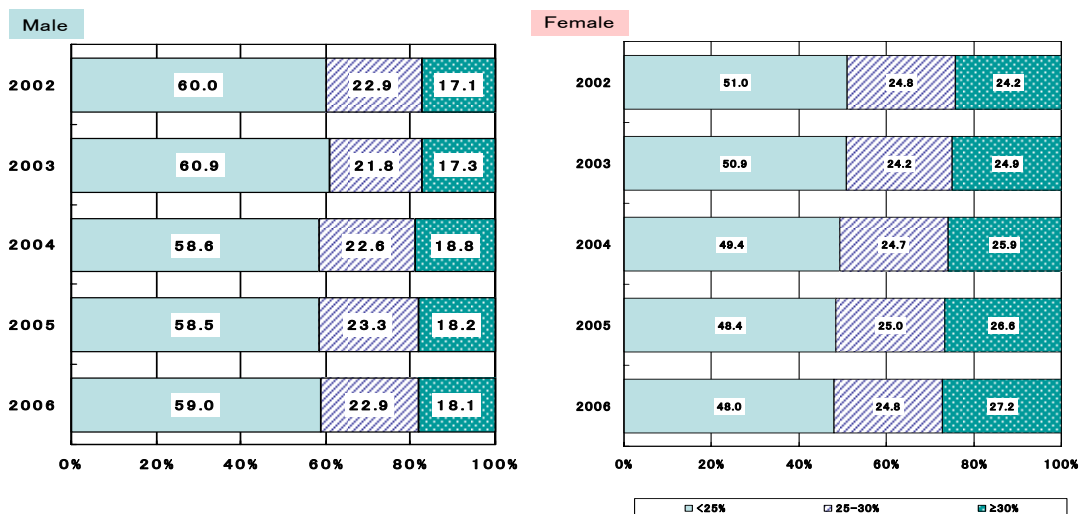


Figure 8-2. Changes in fat energy ratio (adults aged ≥ 20yrs)



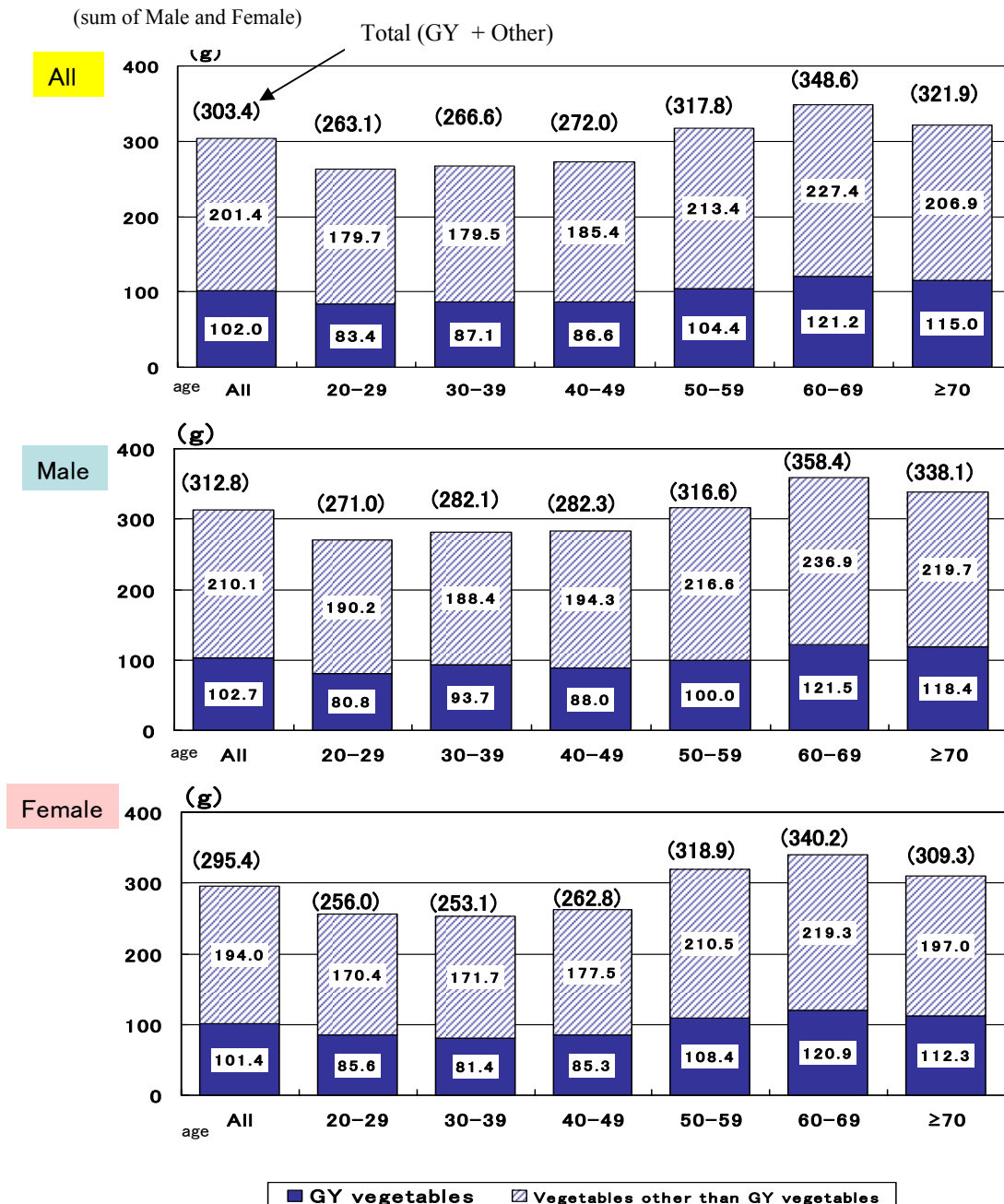
Fat energy ratio = ratio of energy intake from fat in total energy intake  
 \* Dietary Reference Intakes for Japanese (2005) set AI of fat energy ratio as below  
 1) 18-29 years: 20-30%, 2) 30-69 years: 20-25%, 3) ≥ 70 years: 15-25%



○ Mean vegetable intake

- The mean vegetable intake per day was 303.4 g for those over 20 years of age, with the highest value (348.6 g) in those aged 60-69 years. On the other hand, the mean value was below 300 g in both men and women aged 20-49 years.

Figure9. Mean vegetable intake per day (adults aged ≥ 20yrs)



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

○ Mean salt intake

- The proportions of those with a salt intake exceeding the target level was about 60% and 70% for male and female, respectively.

Figure10-1. Distribution of salt intake per day (adults aged ≥ 20yrs)

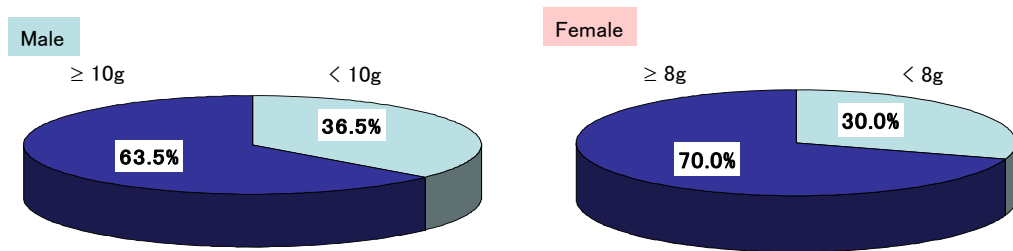
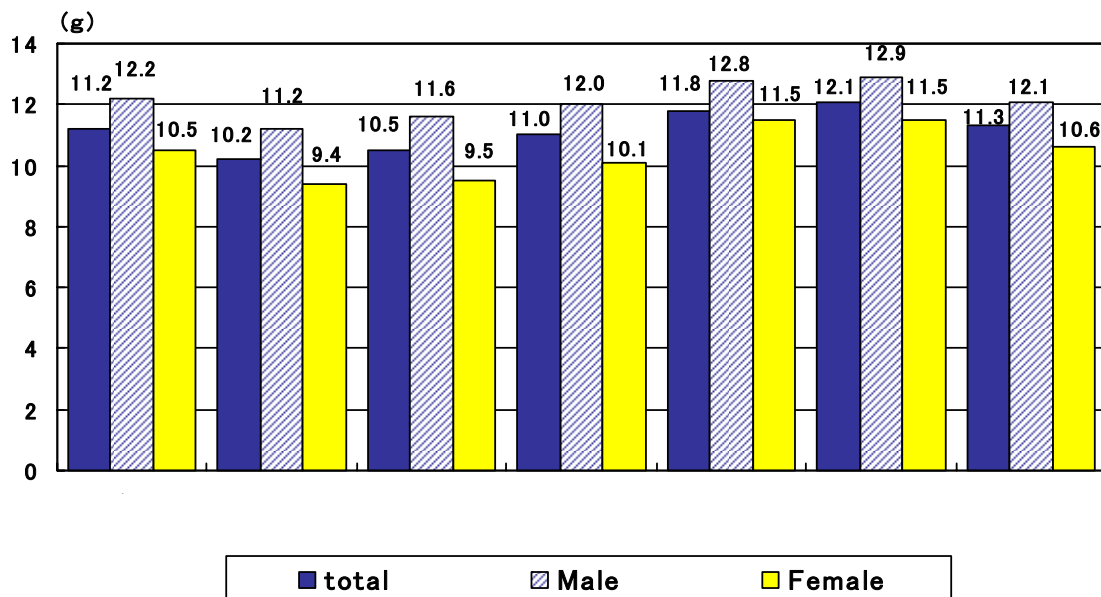


Figure10-2. Mean salt intake per day (adults aged ≥ 20yrs)



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

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