일본의 전통식과 비만

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Japanese Traditional Food and Obesity

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1. Traditional Japanese Food

Traditional Japanese food employed fundamentally regional culinary everyday dishes, by the first half of the 20th century. Rice was the staple food, plus wheat, cereals added. Side dishes comprised of marine products, many vegetables, beans, tubers like potatoes. Generally the frugal menu consisted in: soybean paste soup, "misoshiru" and other three dishes: for example grilled fish, boiled vegetables and pickles.

Fresh fish was used for sliced raw fish, "sashimi", fish on vinegared rice, "sushi" and "tempura dishes". Moreover there were processed goods in a rich variety: dried, elegant salted preserved and boiled fish paste, "kamaboko".

Soybean, we call "meat of the field" kept our health-good quality protein source. Many other soybean processed goods "tofu", deep fried, freeze-dried, fried mixed with vegetables, fermented, "natto", soy milk skin, "yuba" and roasted flour were employed daily.

Seasoning: soybean paste, soy sauce fermented with wheat and salt, sweet alcohol "mirin" and rice vinegar. Comparing to frugal eating habits, special, seasonal, epoch dishes were made to enliven the table. New year: we had rice cakes in vegetable soup, "o-zoni", colorful, celebrating with sea bream, "tai grilled", boiled lobster, herring-roe, Chinese herbs soaked in rice-wine, "o-toso".

Weddings: full course dinner "Honzen cuisine" was a long time traditional style, refined dishes on luxurious trays.

Funerals: following Buddhist tradition, very frugal meals excluding any animal dish sources.

These were the two distinctive eating habits: special and every day nutrition.

2. Eating Habit Changes

Japanese eating habits changed enormously after the second half (1960) of the 20th century, as there was a remarkable economic development. Intake of rice and potatoes, our staple food, decreased, and in their place, meat, oil, fat, and milk increased(Fig. 1).

According to "the National Nutrition Survey Data", rice intake daily amount decreased, per person, from

347g(1955) to 160g(year 2000). Meat increased from 12g(1955) to 78g(year 2000). Increased lifestyle-related diseases like: obesity, diabetes, myocardial infarction, apoplexy and cancer came to be regarded as wester-

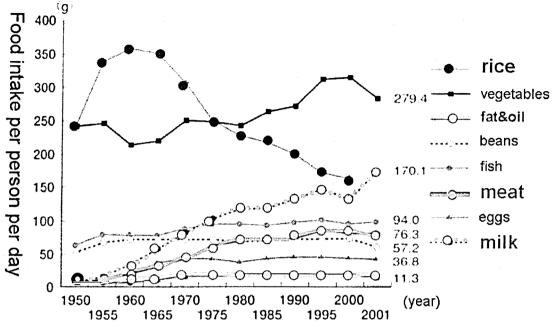


Fig. 1 Annual change of the amount of food group intake of Japanese (The national nutrition survey, 2002)

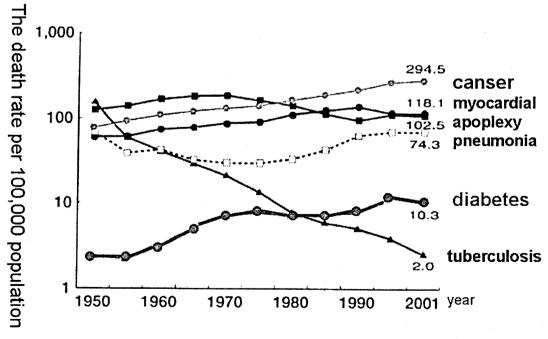


Fig.2 Annual change of the main causes of death (male)

(The statistical research of population dynamics)

nized eating habits and lack of exercise(Fig. 2).

To prevent these scourges and for health enhancement, were shown: "Recommended dietary patterns in Japan" (1983) (Table 1), "Dietary Guidelines for health Promotion" (2000) (Table 2). Contents showed; moderately taken meat, milk, eggs, oil, fat and fruit having rice as staple, vegetables and the traditional pattern using fish, decreasing salt amount were a Japanese meal unbalance.

However, the latest PFC(Protein-Fat-Carbohydrate) energy ingestion ratios: are 15%, 25% and 60%(2003). Fat ratio especially is over between 20~40 year old(Fig. 3).

Recently, dining out, snacks and manufactured food, increase year by year. Seasonal items faded, as imported goods cultivation and preserve technology soared. Becoming the time, when abundant food is always obtained.

3. Obesity Increase

According to the "National Survey on Nutrition" (2003), BMI (Body Mass Index) score 25 or more over weight people, average 27% males, 21.4% females, exceeds 30% between 30~60 year-old males and 60's

Table 1. Recommended dietary paterns in Japan (1983)

- 1. Don't take too much energy, and keep you in proper weight.
- 2. Take various food with good balance.
- 3. Recognize rice as an elemental diet.
- 4. Take sufficient milk.
- 5. Be careful the animal fat intake.
- 6. Be careful too much salt and sugar intake.
- 7. Take sufficient green vegetable and seaweed.
- 8. Breakfast is important.

Table 2. Japanese dietary guidelines for health promotion (2000)

- 1. Let's enjoy a meal.
- 2. Build a healthy life rhythm from the meal rhythm.
- 3. The staple foods, main dish and side dish should be balanced.
- 4. Sufficient cereals, such as boiled rice, are recommended.
- 5. Combine vegetable, fruit, milk, legumes and a fish.
- 6. Salt and fat are made moderate.
- 7. Good combination with proper weight and the amount of intake meals corresponding to daily activity.
- 8. Make a best use of cooking culture and regional food, and sometimes create a new dish.
- 9. Do skilful cooking and preservation, and reduce abandonment.
- 10. Let's improve our eating habits.

females. The transition in 20 years (1983 \sim 2003): the increase of 30 year or older males is 1.5 times, but in females is decreasing(Fig. 4, 5).

Following the "School Health Statistical Research" (2004), the overweight tendency apparent ratio (120%

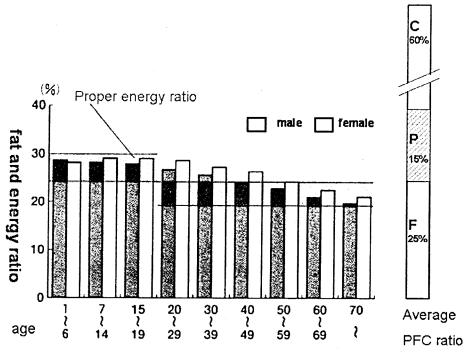


Fig. 3 The fat energy ratio per every age

(The national nutrition survey, 2003)

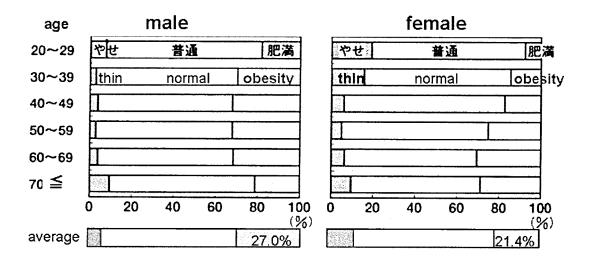


Fig. 4 Obesity and thin situation by BMI per age and sex

(The national nutrition survey, 2003)

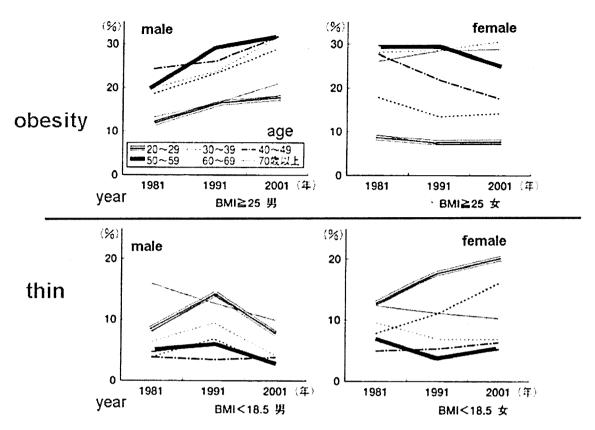


Fig. 5 Annual change of obesity and thin ratio

(The national nutrition survey, 2001)

Table 3. Appearance ratio of obese children above 120% of proper weight (national average)

Age	Male %	Female %
10	10.59	9.27
11	11.09	9.35
12	11.12	9.73

or more weight average) of $10\sim12$ year-old is over 10% (national average)(Table 3). On the other hand, 20 year-old females have a low weight (score 18.5 or less BMI), the rate is over 20%. This situation is harmful from the view point of health(Fig. 5, 6).

4. Movements

The movements of promoting organic agriculture and rebirthing the traditional vegetables, as well as dietary education are starting at many districts in Japan.

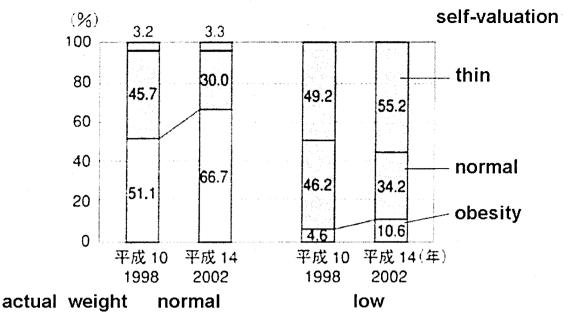


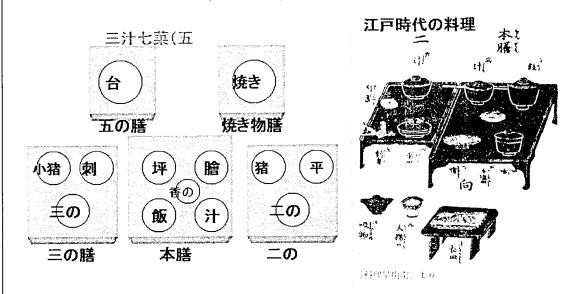
Fig.6 Self-valuation to the actual body shape female age 20-29 (The national nutrition survey, 2002)

Traditional dishes in Japan

everyday and special dishes

Honzen cuisine:本膳料理

Full course dinner, a long-time traditional style, refined dishes on luxurious trays. Established in Muromachi Era (14-16c)



Shojin cuisine: 精進料理

Following Buddhist tradition, very frugal meals excluding any animal dish sources.

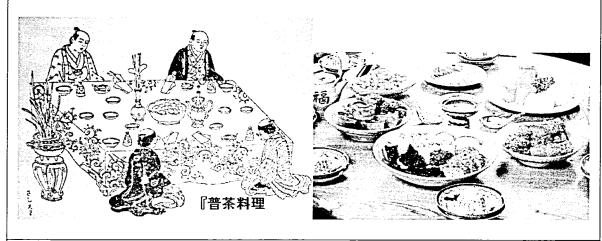
Established in Muromachi Era.(14-16c)

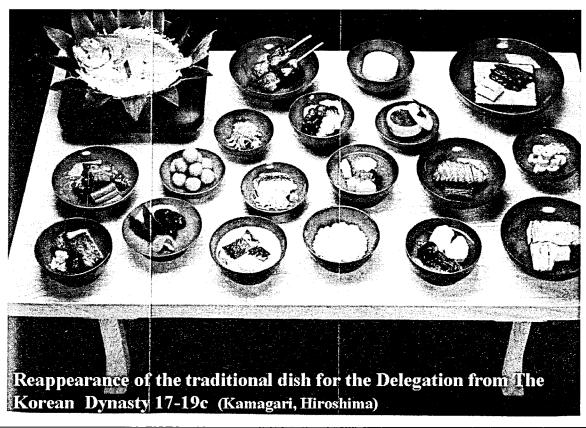


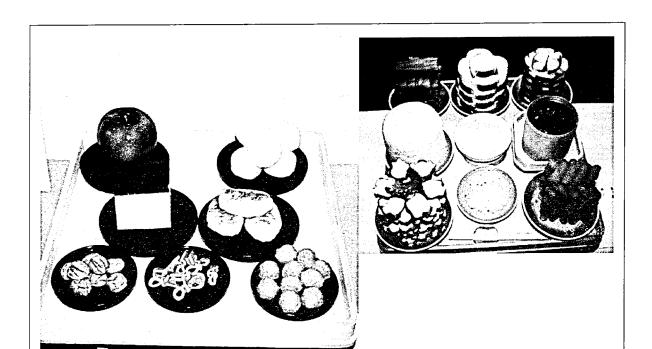
当麻寺の精進料理 Taima-Temple

Hucha cuisine: 普茶料理

Chinese style Shojin cuisine, introduced by high priest Ingen. Accompanied with tea ceremony.





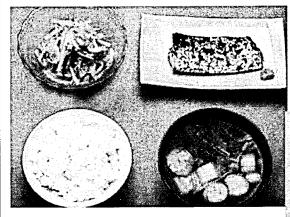


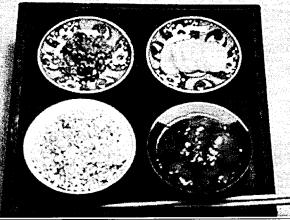
Reappearance of the traditional dish for the Delegation from The Korean Dynasty 17-19c (Murotsu, Hyogo Pref.)

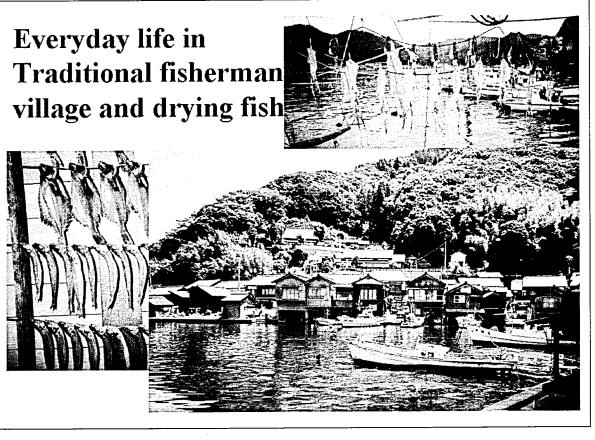


Chinese and European influenced traditional cuisine "Shippoku"

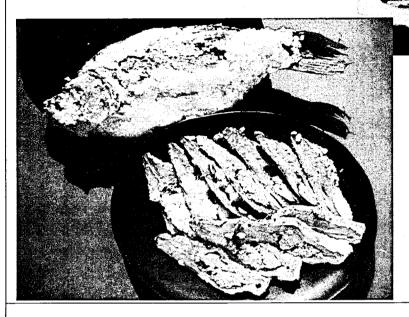
Everyday dish in old days 1930s







Fermented fish and tempura

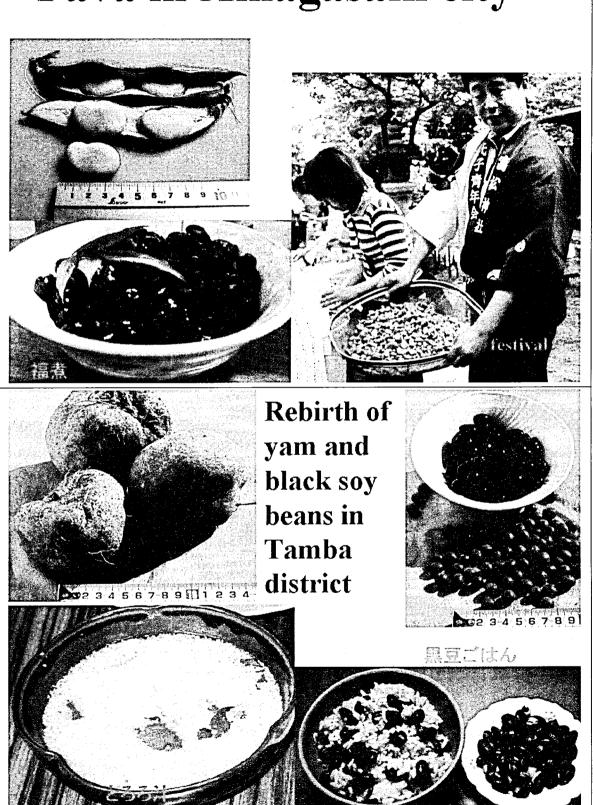


Organic agriculture and rebirth movement of the traditional vegetables

These movements are starting at many districts in Japan

- Fava in the suburbs of big city
- •Yam and black soy beans in the country
- •Sweetpotatoes in the big city.
- •Direct sale by organic fermars. etc.

Fava in Amagasaki city





Direct sale by organic farmers

\$ 710974 &7H \$

<약력>

• Education: Master of Fisheries of Nagasaki University

Faculty of Food Science of Nara Women's University

• Experience: 1996- The present post

1980-95 Professor of Tamaki Women's Junior College

· Field: Food and nutritional science, Dietary culture

Publications: "Research on Portuguese influenced dishes in Asia", "Traditional dishes in Nagasaki"
"Applied dietetics"

• Papers: "Dietary structure in a small island in Nagasaki prefecture"

"Dietary culture of beans and potatoes in Kansai district"

"A trial on rebirth and cooking development of a local sweet potato in Amagasaki city",

"Cooking fish and shellfish of a traditional fishing village Ine-town"

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