

Nutrition education in Japan is based upon philosophies advocated during the Meiji period.

The term "nutrition education" (*shokuiku*) has yet to gain wide recognition in modern Japanese society as it is not yet a term included in Japanese dictionaries. Its origin, however, dates back to the Meiji period (1868–1912), and refers to the ways we can nurture children's physical and mental well-being by providing better knowledge of diet and providing more nutritious food.

Nutrition Education before Intellectual, Physical, and Moral Education

The first book thought to deal with the subject of nutrition education in Japan was authored by Sagen Ishizuka (1850–1909), an army physician and its top-ranking pharmacist, who advocated the cure of disease through diet. He believed that everyone with school-aged children should understand that physical and intellectual education, as well as education in particular skills, all stem from nutrition education.

In 1903, Ishizuka's beliefs became common knowledge



Gensai Murai at roughly age 62 (ca. 1926; from the Hiratsuka City Museum)

with another book, a novel written by Gensai Murai (1864–1927), which stated that nutrition education should come before moral, intellectual or physical education. Murai's novel includes recipes for over 600 Japanese, Western, and Chinese dishes with instructions for selecting the best ingredients. It also includes extremely detailed information

regarding a wide variety of topics, including the historical background of traditional dishes, information regarding seasonal foods, the nutritional benefits of specific ingredients and dishes, instructions for preparation and presentation, party dishes, foods for the ill, hygiene, kitchen utensils, and even pest extermination.

Murai's book was a best seller, selling over 100,000 copies. With the money earned from his book, Murai purchased a large parcel of land and recreated the world he had established in his novel with a vegetable garden, orchard, and livestock barns. In the vegetable garden and orchard, he grew Western vegetables and fruits, such as parsley, lettuce, asparagus, tomatoes, artichokes, strawberries, peaches, yellow watermelons, and figs, which were still rare in Japan at that time. Murai later published an expanded edition of his book that included new sections with tenets regarding

ingredients, cooking, and manners.

In the section regarding ingredients, Murai explains the

Ingredients

1. Use fresh ingredients whenever possible.
2. Use raw ingredients whenever possible.
3. Use natural ingredients whenever possible.
4. Use ingredients that do not spoil quickly whenever possible.
5. Use firm ingredients whenever possible.
6. Use ingredients that are as young or new as possible.
7. Use local ingredients whenever possible.
8. Use bland ingredients whenever possible.

Cooking

1. Do not sacrifice natural flavors.
2. Preserve natural compositions as much as possible.
3. Seek a balance between digestion and excretion.
4. Foods should provide beauty in flavor, aroma, color, form, and be served on attractive dishes.

Manners

1. Eat when hungry.
2. Chew thoroughly.
3. Eat in moderation.
4. Make a natural diet the norm.

modern concept that locally grown foods are better. His daughter later conveyed his tenet that food could alter personalities. Murai's experiences in the U.S. as a student in 1884 are believed to have led him to this doctrine. He expanded his knowledge by living with an American family in San Francisco for one year. The knowledge he acquired during this time surely aided in the development and cultivation of his personal theories on nutrition education.

References

- *Shoku Doraku no Hito—Murai Gensai*; Hisako Kuroiwa, Iwanami Shoten
- *Jidai no Senkusha—Meiji no Jitsuyo Shosetsu-ka—Yomigaeru Murai Gensai*; Hiroshi Doi & Mizuo Osuga, Hiratsuka City Museum

The Nutrition Education Movement Advocated by Japan

Dietary Guidelines

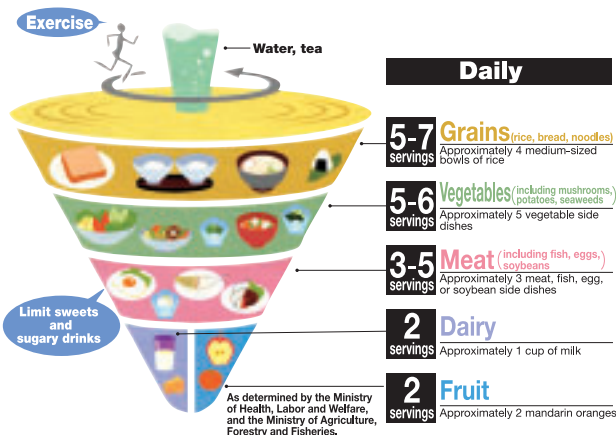
With more and more foods being imported and the diversification of lifestyles, Japan has seen an increase in obesity and diseases related to diet caused by excessive fat intake and irregular mealtimes. In March 2000, the Ministry of Agriculture, Forestry and Fisheries, the then-Ministry of Education and the then-Ministry of Health and Welfare formulated a set of dietary guidelines to promote physical and mental well-being with a healthy diet. The guidelines established are as follows:

1. Enjoy eating.
2. Establish regular mealtimes to promote sound daily rhythm.
3. Maintain a balanced diet.
4. Eat substantial amounts of rice and other grains.
5. Balance intake of all types of foods including fruits and vegetables, dairy products, beans, fish, etc.
6. Reduce sodium and fat intake.
7. Know your optimum weight and balance intake with daily activity levels.
8. Utilize local food cultures and products, with the occasional introduction of new dishes.
9. Cook and preserve food in a manner that minimizes waste.
10. Reexamine your own diet.

<http://www.e-shokuiku.com/guide>

Guide to a Balanced Diet

In July 2005, the Ministry of Agriculture, Forestry and Fisheries and the Ministry of Health, Labor and Welfare developed a guide to a balanced diet. This guide uses an illustration of a spinning top to recommend optimum combinations and amounts of foods to be consumed daily. The goal of this guide is to establish nutritional



guidelines that can be easily and readily applied to achieve a balanced diet. A spinning top was used to illustrate a balanced diet based on the idea that it will topple when balance is not maintained. It also assumes that motion—exercise—promotes stability. As an essential component of the diet, water takes the most important position. In addition, the guide recommends a diet consisting primarily of grains, vegetables, fish and meat, milk, and fruits.

<http://www.j-balanceguide.com>

A Law Regarding Nutrition Education

On July 15, 2005, the Japanese Diet enacted a law regarding nutrition education. This law is designed to comprehensively and systematically promote nutrition education to improve the physical and mental health of the Japanese people. The law defines nutrition education as follows:

1. The basis for living and the foundation of intellectual, physical, and moral education.
2. A means to nurture a society capable of maintaining a healthy diet with knowledge of foods and the ability to select the right foods through a wide range of experiences.

Ultimately, it can be said that the mind and body are formed through nutrition education.

<http://www.e-shokuiku.com/kihonhou>

Kikkoman and Nutrition Education

In May 2005, Kikkoman declared its stance on nutrition education with the slogan, "Offering people delicious memories." Our memories of food are based on two aspects; the taste of food and the circumstances in which food is eaten. Whether or not we consider a food delicious depends on with whom and in what state of mind the food is eaten. To truly enjoy a meal, it should not only be flavorful, but it should be eaten in a pleasant and relaxed atmosphere. We continue our support of nutrition education, hoping as many people as possible have "delicious memories."

<http://www.kikkoman.co.jp/shokuiku>

Dietary Guidelines in Other Countries

In 1977 *Dietary Goals for the United States* (the McGovern report) was issued by the U.S. Senate Select Committee on Nutrition and Human Needs. American dietary guidelines were first formulated in 1980 and have been revised every five years since to provide the latest dietary information. Likewise, many nations throughout the world, having become aware of the necessity of improving their populations' diets, also offer dietary guidelines. These guidelines reflect the eating habits and characteristics of individual countries.

National Dietary Guidelines in the United States

Twenty years ago, the late Professor Edwin O. Reischauer noted that soy sauce, tofu, and many other Japanese foods had made their way into mainstream American cuisine, heralding a significant change in the American diet. He further mentioned that products lining the shelves of health food stores were primarily Japanese foods. Among others, tofu had become known for being a wholesome food and tofu dishes were always included among the choices available in the cafeteria when he was teaching at Harvard University.

Behind this trend is an issue confronting American society: a high rate of obesity leading to conditions such as heart disease, diabetes, stroke, and high blood pressure. To address this problem, a radical review of the dietary habits of Americans was conducted, and *Nutrition and Your Health: Dietary Guidelines for Americans*, updated every five years, was first published in 1980 by the United States Department of Agriculture (USDA) and the Department of Health and Human Services (HHS). These guidelines are provided to help people select foods conducive to maintaining good health and lowering the risk for some diseases. They constitute the cornerstone of federal nutrition policy and nutrition education activities.

The food guide pyramid is a tool developed based on these guidelines and designed to facilitate their practical application. The pyramid has been referred to by many nations, including Japan, to formulate their own nutritional guides. To draw the attention of younger generations to the importance of a healthy diet, the USDA has sponsored the MyPyramid Plan Web site since 2005. This site allows individuals to estimate a personal food pyramid based on age, sex, and activity level.

1980 Dietary Guidelines

1. Eat a variety of foods.
2. Maintain ideal weight.
3. Avoid too much fat, saturated fat, and cholesterol.
4. Avoid too much sugar.
5. Avoid too much sodium.
6. If you drink alcohol, do so in moderation.

2000 Dietary Guidelines

1. Aim for a healthy weight.
2. Be physically active every day.
3. Use the food guide pyramid to choose your foods.
4. Eat a variety of grains, especially whole grains, every day.
5. Eat a variety of fruits and vegetables every day.
6. Store food in a safe manner.
7. Maintain a diet that is low in saturated fats and cholesterol, and moderate total fat intake.
8. Choose beverages and foods that moderate your sugar intake.
9. Choose foods with less salt.
10. If you drink alcoholic beverages, do so in moderation.

2005 Dietary Guidelines—Overview

1. Acquire the necessary nutrients within the optimum calorie range.
2. Maintain a healthy weight and balance caloric intake and expenditure.
3. Reduce sedentary activities and engage in regular physical activity.
4. Consume a sufficient amount of fruits and vegetables while staying within the optimum calorie range.
5. Limit saturated fat and cholesterol intake.
6. Eat whole grains and vegetables rich in fiber.
7. Choose foods with little sodium content and eat potassium-rich foods like fruits and vegetables.
8. Those who choose to drink alcoholic beverages should do so in moderation.

These guidelines indicate that the leading principle for prevention of diseases related to diet has been balanced nutrition, intake of fiber-rich vegetables, fruits, and whole grains, and the need for regular exercise. Change in the diets of Americans over the past twenty five years and their physically inactive lifestyles are also noted. A similar trend seems to be occurring in Japan.



U.K. 1990 Dietary Guidelines

1. Enjoy your food.
2. Eat a variety of foods.
3. Eat the right amount to maintain a healthy weight.
4. Eat plenty of foods rich in starch and fiber.
5. Don't eat too much fat.
6. Don't eat sugary foods too often.
7. Acquire vitamins and minerals from the foods you eat.
8. If you drink alcohol, do so in moderation.



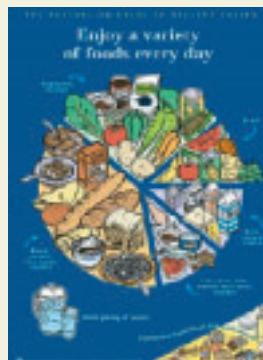
China 1997 Dietary Guidelines

1. Eat a variety of foods, with grains as the staple.
2. Eat more vegetables, fruits, and tubers (including sweet potatoes and cassava).
3. Eat milk and soy beans and products derived from them every day.
4. Consume an appropriate amount of fish, poultry, eggs and/or lean meat, and decrease the intake of oils and/or animal fats.
5. Maintain balance between the amount of food consumed and physical activity, in order to maintain a healthy body weight.
6. Eat a diet with less fats/oils and salt.
7. For those who consume alcohol, do so in moderation.
8. Do not eat foods that have spoiled.



Australia 1992 Dietary Guidelines

1. Enjoy a wide variety of nutritious foods.
2. Eat plenty of breads and cereals (preferably whole grain), vegetables (including legumes), and fruits.
3. Eat a diet low in fat and, in particular, low in saturated fat.
4. Maintain a healthy body weight by balancing intake with regular physical activity.
5. Limit your alcohol intake if you choose to drink.
6. Consume only moderate amounts of sugars and foods containing added sugars.
7. Choose low-salt foods and use salt sparingly.



8. Encourage and support breastfeeding.
9. Eat foods containing iron (this applies particularly to girls, women, vegetarians, and athletes).

India 1988 Dietary Guidelines

(Guidelines for the Poor)

1. Foods should not be expensive and should conform to traditional and cultural practices as closely as possible.
2. Energy derived from cereals should not exceed 75% of the total energy requirement.
3. Pulse (legume) intake should be included in a cereal-based diet, and the diet should provide a minimal milk intake of 150 ml and 150 grams of vegetables.
4. Energy derived from fats and oils should not exceed 10% of total calories, and that from refined sugar should not exceed 5% of total calories.

(Guidelines for the Affluent)

1. Overall energy intake should be restricted to levels commensurate to sedentary occupations to avoid obesity.
2. Choose whole cereals rather than refined and polished ones.
3. Green leafy vegetables should be included in meals.
4. Edible fat intake should not exceed 40 grams and total fat intake should be limited to levels at which fat will provide no more than 20% of the total energy. The use of ghee (clarified butter) should be restricted to special occasions.
5. The intake of sugar and sweets should be restricted.
6. High salt intake should be avoided, especially by those prone to hypertension.

The dietary guidelines of the U.S., U.K., China, Australia, and India reflect the characteristics of the individual countries. However, the guidelines of all of these nations recommend avoiding excessive intake of fats, salt, sugar, and alcohol, and ensuring sufficient intake of vitamins and minerals. All of these nations seem to be sounding an alarm at the gluttonous diet of modern populations and to be attempting to guide the people of their respective nations to a healthier diet.

References

- National Diet Library (Issue Brief No. 450—Obese no Shokukui Jijo)
- Ministry of Agriculture, Forestry and Fisheries of Japan Web site (<http://www.maff.go.jp/e/index.html>)
- The Information Service Center for Food and Foodways (<http://www.e-shokuseikatsu.com>)