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V.B.4 🐼 Japan

Rice and Staple Food

Rice has long been the main staple of the traditional Japanese diet. It is not only consumed daily as a staple food but also used to brew sake, a traditional alcoholic drink. Japanese cuisine has developed the art of providing side dishes to complement consumption of the staple food. Table manners were also established in the quest for more refined ways of eating rice and drinking sake at formal ceremonial feasts. The history of the Japanese diet, which is inseparable from rice, started therefore with the introduction of rice cultivation.

Subsistence during the Neolithic period in Japan (known as the Jōmon era, beginning about 12,000 years ago) was provided by hunting and gathering. Agriculture did not reach the Japanese archipelago until the very end of the Neolithic period. Collecting nuts (especially acorns and chestnuts) and hunting game were common activities, and a large variety of marine resources was intensively exploited throughout the period. The Jōmon era, however, ended with a shift from hunting and gathering to sedentary agriculture.

The Yangtze delta in China is considered to be the original source for the practice of rice cultivation in Japan. Continuous waves of migrants bearing knowledge of the technique reached Japan from the continent around 2,400 years ago via two major routes. One was through the Korean peninsula and the other was a direct sea route from China. Rice production

techniques were accompanied by the use of metal tools, which provided high productivity and a stable supply. Population increased rapidly, and localized communities appeared in the following Yayoi era (1,700 to 2,400 years ago). Paddy-field rice cultivation was then under way except in the northern Ainu-dominated region of Hokkaido and in the southern Okinawa islands, an island chain between Kyūshū (the southernmost main island of Japan) and Taiwan.

From the beginning of cultivation, only short-grain rice was known in Japan. Although long-grain rice was common in Southeast Asia and India, its absence from Japan caused the Japanese to develop prejudices about rice that persist until today. For them, rice means exclusively the short-grain variety; the long-grain type is regarded as inferior and unpalatable.

Traditionally, a meal consists of boiled plain rice, called *gohan* or *meshi*, and seasoned side dishes, called *okazu*. Cooked rice has always been the staple of a meal, so much so that the words *gohan* and *meshi* are used colloquially as synonyms for the word "meal." Side dishes complement rice consumption with their seasoned flavors, and as a rule, the sophistication and variety of such dishes has betokened the affluence of those who served them.

Peasants living in mountain areas with low rice productivity, along with poor people in general, formerly mixed millet with rice. The sweet potato, introduced in the eighteenth century, also became popular as a staple in the south of Japan, where it supplemented a low yield of rice. However, even the poor cooked pure boiled rice and pounded rice cake from pure glutinous rice for important meals. Pounded rice cakes (*mochi*), prepared by pounding steamed glutinous rice with a mortar and pestle, have been indispensable food items for Japanese ceremonial feasts. People thought that the essence – the sacred power of rice – was made purer by pounding, and *mochi* was believed to contain the "spirit of rice." Naturally this was and is the most celebrated form of rice and therefore the most appropriate food for feasts. Thus, New Year's day, the principal annual feast in Japan, sees *mochi* always consumed as a ceremonial food.

In a census record of 1873, nutritional information for the Hida Region (Gifu Prefecture, Central Honsyū) shows that rice was the most important food, notwithstanding the general unsuitability of the area for the crop's cultivation (Koyama et al. 1981: 548–51). The same data reveal a typical daily intake of nutrients for premodern Japanese people. The recorded population of this mountainous region was about 90,000, and these people are thought to have maintained the highest dependency in Japan on millet as a rice substitute. The average daily energy intake per capita was 1,850 kilocalories (kcal) (in 1980 it was 2,600 kcal), of which 55 percent was supplied by rice, which also supplied 39 percent of the protein.

Both rice and millet, when served as a staple, have

always been either boiled or steamed. Milling, however, was not developed generally, and processed powder was used only for cakes or snacks and not for bread. Later, noodle products made from the powder became popular. The oldest form of the noodles, *sakubei*, produced by adding rice powder to flour, was introduced from China in the eighth century.

Noodles made from flour as a light lunch or snack became popular during the fourteenth and fifteenth centuries, and consumption increased considerably after the seventeenth century, when a processing technique for buckwheat noodles (*soba*) was developed in Edo, now Tokyo. Since then, *soba* has become popular mainly in eastern Japan, where Tokyo is located, whereas *udon* noodles (made from flour) have always been popular in western Japan (Ishige 1991a).

Meat and Fish

A unique feature of Japanese dietary history has been the country's various taboos on meat eating. The first recorded decree prohibiting the eating of cattle, horses, dogs, monkeys, and chickens was issued by Emperor Temmu in A.D. 675. Similar decrees, based on the Buddhist prohibition of killing, were issued repeatedly by emperors during the eighth and ninth centuries. The number of regulated meats increased to the point that all mammals were included except whales, which, given their marine habitat, were categorized as fish.

The taboo against the consumption of animal flesh developed further when the Japanese aboriginal religion, Shintō, adopted a philosophy similar to that of the Buddhists. This did not mean, however, that meat eating was totally banned in Japan. Professional hunters in mountain regions ate game (especially deer and wild boar), and it was not uncommon for hunted bird meat to be consumed. However, a lack of animal breeding for meat kept its consumption very low. Indeed, it was only during the fifteenth century and its aftermath that the tradition of eating both the meat and eggs of domestic fowl was revived. Fowls, until then, had been regarded in Shintō as God's sacred messengers and were reared to announce the dawn rather than as a mere food resource.

Milk and other dairy products failed to become popular in Japan, China, and Korea. In fact, the only Japanese dairy product known to history was *so*, produced between the eighth and fourteenth centuries. Milk was boiled down to yield this semisolid product. But even this food, consumed at the court and among the noble class, disappeared as a result of the demise of the aristocracy. Cattle were raised only for drawing carts or plowing fields. To utilize them for meat or even for milk was, until relatively recently, a long-forgotten practice.

Lack of meat and dairy products in the Japanese diet produced an aversion to oily tastes, so that even

vegetable oil was not commonly used for cooking. Tempura, fish or vegetables fried in a vegetable oil, is one of the best-known Japanese dishes today, but it became popular only after the mid-eighteenth century.

The lack of meat products also minimized spice utilization. Pepper and cloves were known from the eighth century and were imported either via China or directly from Southeast Asia, and garlic was also grown on a small scale. But these spices were used mainly to make medicines and cosmetics.

In the coastal seas of Japan, warm and cold currents mix to provide bountiful fishing grounds. This favorable natural environment and the traditional exclusion of fish from the meat taboo meant an extensive exploitation of marine resources. The Japanese developed a special liking for fish, and most people enjoyed a variety, although consumption was still largely forbidden for Buddhist monks.

Fish dishes, with a higher status as well as a more attractive taste than vegetable dishes, were formerly considered indispensable at feasts. However, before the introduction of modern delivery systems, the difficulty of preserving and transporting fresh marine fish minimized consumption in inland areas where freshwater fish were commonly eaten instead.

The basic concept of fish preparation in Japan is suggested by the following proverb: "Eat it raw first of all, then grill it, and boil it as the last resort." To amplify, it is felt that the taste and texture of fish is best appreciated when it is very fresh and eaten raw. If the fish is a little less than fresh then its best taste will be produced by sprinkling it with salt and grilling it. If the fish is not fresh, then it is better boiled with seasonings, such as soy sauce (*shoyu*) or soybean paste (miso).

The consumption of fish raw has been traditional since ancient times. *Namasu*, or the eating of thinly sliced raw fish dipped in a sauce with a vinegar base, is a typical example. However, the better-known sashimi has been popular only since the seventeenth century - its popularity increasing as the general consumption of soy sauce increased. Delicately sliced raw fish of the utmost freshness and quality is eaten after being dipped in soy sauce flavored with a small amount of grated wasabi (*Wasabia japonica*), which is similar to horseradish.

As a rule, the philosophy of cooking aims at the creation of new tastes that do not exist naturally - such creation is a result of imposing artificial processes on food materials. But Japanese cooking methods are antithetical to this philosophy. The ideal of Japanese cooking is to retain the natural tastes of food with the minimum of artificial processes. Thus sashimi, for example, can be viewed as a representative product of the Japanese cooking philosophy.

Nigiri-sushi, prepared by putting a slice of raw fish onto a bite-size portion of hand-rolled, vinegar-flavored rice, has recently become internationally

popular. But sushi originated as a means of preserving fish by fermenting it in boiled rice. Fish that are salted and placed in rice are preserved by lactic acid fermentation, which prevents proliferation of the bacteria that bring about putrefaction. A souring of flavor occurs during the process, and the fish is eaten only after the sticky decomposed rice has been cleaned off.

This older type of sushi is still produced in the areas surrounding Lake Biwa in western Japan, and similar types are also known in Korea, southwestern China, and Southeast Asia. In fact, the technique first originated in a preservation process developed for freshwater fish caught in the Mekong River and is thought to have diffused to Japan along with the rice cultivation.

A unique fifteenth-century development shortened the fermentation period of sushi to one or two weeks and made both the fish and the rice edible. As a result, sushi became a popular snack food, combining fish with the traditional staple food, rice. Sushi without fermentation appeared during the Edo period (1600-1867), and sushi was finally united with sashimi at the end of the eighteenth century, when the hand-rolled type, *nigiri-sushi*, was devised. Various styles of hand-rolled sushi were developed, such as *norimaki*, in which vinegar-flavored rice and seasoned boiled vegetables are rolled in paper-thin layers. In addition, sushi restaurants became popular during this era. They offered ready-made rice prepared with vinegar and other seasonings and rolled with different toppings according to the taste of the guests. In this manner, sushi has changed from its original character as a preserved food to that of a fast food (Ishige and Ruddle 1990: 21-94).

Vegetable Food

In daily meals, vegetables have generally constituted the main ingredients of side dishes and soups accompanying rice. Among these vegetables are a variety of sea plants that have been utilized since ancient times and remain a unique feature of Japanese cooking even today. Sea plants are usually dried and soaked in water before cooking. Sea tangle has been the most important of all. It is commonly used to prepare broth, and owing to its rich content of glutamic acid, it enhances the original taste of the foodstuffs with which it is boiled.

Traditionally, salted vegetables have been an indispensable part of the daily diet of even the poorest classes of people. Some several hundred varieties of salted vegetables are known in Japan; however, the method of pickling common in the West, using vinegar, has not developed there.

Of all beans, the soybean is the most significant. It is a good source of vegetable protein, and its importance in the Japanese diet is surpassed only by that of

rice. Varieties of soya in a processed state, such as tofu and *nattō*, have played an extremely prominent dietary role over the ages. Tofu, or soybean curd, which diffused from China and is first mentioned in Japan in an eleventh-century document, has been one of the most widespread of the processed foods. A cookbook providing 100 different recipes for tofu cooking was published in 1782 and became so popular that a second volume, containing another 138 recipes, was issued the following year. Many of these recipes were devised by Buddhist monks, who abstained from eating meat for doctrinal reasons and relied heavily on tofu as a source of protein.

Bacillus subtilis bacteria, which grow on rice straw, are cultivated on boiled soybeans to produce *nattō*. *Nattō* has a unique sticky consistency and is usually seasoned with soy sauce and mustard before eating; minced *nattō* is used as an ingredient of soybean-paste soup. *Nattō* contains abundant protein and vitamin B₂ and has been popular as a breakfast food because it is easily digestible.

Vegetarian diets, or *shōjin-ryōri*, rely on a variety of foods processed from soybeans. These include tofu, *abura-age* (fried tofu), *kōri-dōfu* (freeze-dried tofu), and *yuba* (paper-thin processed tofu), as well as mushrooms, sea plants, sesame, walnuts, and, of course, vegetables. *Fu*, which is produced by condensing wheat gluten, has also been a popular food-stuff. *Shōjin-ryōri* has generally been served during periods of mourning, for Buddhist rituals, and on the anniversary of the death of close kin.

From a dietetic point of view, the Japanese vegetarian diet is both well balanced and quite rational. It supplies protein from tofu and similar products, fat from sesame, walnuts, and vegetable oil, vitamins from vegetables, and minerals from sea plants. Such a diet not only is nutritious but also offers many palatable recipes, which have been refined by such techniques as employing a broth made from dried sea tangle and mushrooms as a base for cooking. Vegetable oils, which are extensively used, were especially developed by those Zen Buddhist monks who had maintained contacts with China.

Seasonings and Flavorings

Because of an absence of rock salt in Japan, salt made from seawater has been prevalent since the Neolithic era. But a salty residue fermented from soybeans has traditionally been used as a basic and versatile seasoning in Japan (as well as in China and Korea). Miso (soybean paste) and *shōyu* (soy sauce), the two major products of this residue, have been used to season boiled dishes and as ingredients in the preparation of various sauces.

Of the *kōji* fungi that are employed as starters for soybean fermentation, *Aspergillus oryzae*, which grows on rice grains, is the most common. The fermented products of soybeans were first recorded in

a law book called the *Taihō-ritsuryō*, compiled in A.D. 702. But it is known that by that time a type of miso was already being produced, using a technique thought to have been introduced from Korea. The indigenous Japanese processing method, which employs artificially cultivated starters like *kōji* and combines soybeans with rice and barley, was devised later. It differs from the Korean method, which relies on natural bacteria in the air to ferment pure soybeans, to which salt is added.

The traditional Japanese method of processing miso is to mash boiled or steamed beans while the *kōji* fungus is cultured on boiled or steamed rice or barley. All these ingredients are then mixed together with salt and placed in a container. After a maturation period of more than a year, the mixture changes into miso, a pastelike substance. The liquid that oozes out in the maturation container is sometimes used as a type of soy sauce. Other types of miso are also made; these all vary by region in processing techniques.

Similarly, the general method of processing *shōyu* (soy sauce) is to culture *kōji* fungus on pounded, parched wheat grains and then to mix this with boiled beans and a large amount of salt water in a maturation container. The mixture is stirred occasionally, and fermentation is completed within three or four months. During the maturation period following fermentation, the contents intensify in color and flavor, owing to chemical reactions among the ingredients. After one year of maturation, the liquid obtained by squeezing the contents is pasteurized and becomes *shōyu*. As with miso, *shōyu* also has many regional varieties.

The use of the liquid by-product of miso processing as a seasoning has been known for a long time, but commercial production of *shōyu* dates only from the sixteenth century. Propagation of recipes from major cities where *shōyu* was employed extensively during the Edo period gave *shōyu* national status as a seasoning, and more than 70 percent of present-day Japanese recipes employ it in some way. In contrast to *shōyu*, miso has decreased in importance as a seasoning for both boiled dishes and sauces, and its daily use has generally been restricted to soup.

Rice is employed to make the traditional Japanese vinegar. In addition, a type of sake with a strong sweet taste, called *mirin* (which is processed in a slightly different way from the usual brew), serves as a cooking wine.

Another unique feature of Japanese food culture is the extensive development of dried foods for the preparation of soup stock (broth), or *dashi*. Dried sea tangle (*konbu*), dried bonito (*katsuo-bushi*), and dried brown mushrooms (*shiitake*) are some examples. They are not only used for *dashi* but also often added to boiling vegetables.

Katsuo-bushi, or dried bonito, is produced by boiling the fish, after which it is heat-dried and cooled. This process is repeated more than 10 times until the water

content of the fish is reduced to less than 20 percent and the surface is covered by "tar." The covering of "tar" and fat is scraped off and the remaining meat is placed in a wooden box and left for two weeks to propagate an artificially planted fungus of the genus *Aspergillus*. After two weeks the surface is cleaned, and the fungus-planting process is repeated four more times.

At completion, a majority of the remaining contents are protein and flavor essence. Water content is reduced to 15 percent of the original, and the final product, *katsuo-bushi*, appears dry and hard like a block of wood. The fungus-planting process, which yields a better flavor and helps extract the water, was invented in the seventeenth century, although the rest of the process has been known since ancient times.

When used, small amounts of very thin flakes of *katsuo-bushi* are shaved from the block with a specially designed plane, then placed in boiling water to extract their flavor. When the water is strained it becomes a pure soup stock, and the flakes are usually discarded except in rare cases when they are combined with soy sauce to prepare a salty side dish. *Konbu* and *shitake* are similarly boiled to prepare soup stocks yielding their particular flavors.

Dried foods for making *dashi* were developed essentially to add subtle and enhancing flavors to traditional dishes that consisted mainly of vegetables with little intrinsic taste. But the traditional interest in such products led Japanese scientists to conduct chemical analyses of their flavors. The analyses found that inosinic acid from *katsuo-bushi*, monosodium glutamate from *konbu*, and guanylic acid from *shitake* were the sources of their natural tasty flavors. This research was the forerunner of Japan's modern natural and artificial flavor research industry.

Table Manners and Tableware

As is the case in China and Korea, Japanese food is usually served in sizes suitable for picking up by chopsticks, the use of which is thought to have been introduced from China in the seventh century. That the Japanese ate with the fingers prior to the introduction of chopsticks was recorded by a Chinese mission in the early third century. Spoons, however, although common in China and Korea, did not catch on in Japan, perhaps because the habit of sipping soup from handheld wooden bowls made the use of spoons superfluous. Japan's abundant forest resources meant that wooden tableware was more readily available than ceramic ware, and a wooden bowl can be more comfortably held than a ceramic or metal one.

Traditionally, only lacquered wooden ware was used for formal feasts. Chinaware remained unpopular until the seventeenth century, when mass production became possible as a result of new manufacturing techniques learned from Korea. The more widespread use of china caused a functional division between wooden and chinaware to evolve for daily use. Chinaware was

used for rice and side dishes, whereas boiling hot soup was served in wooden lacquered bowls.

As a rule, every individual has his or her own chopsticks and a set of tableware. An extra set of chopsticks is used to serve food from a communal food vessel to each individual vessel. If extra chopsticks are not provided with the communal food vessel, then individuals reverse their own chopsticks and use them to transfer food to their own vessels. This practice, however, reflects more a psychological cleanliness derived from Shintoism (in order to prevent one's spoiled spirit from passing to others through shared foods) than it does practical sanitary concerns.

No chairs were used in Japan before the general adoption of dining tables in the latter half of the twentieth century. Diners sat either on tatami (straw mats) or on the wooden floor. Vessels containing food were served on a small, low, portable table called a *zen*. Usually, each dish was set on a *zen* in the kitchen and then brought to and placed in front of the diner. Several *zen* tables were used for each person at a formal feast, as the numerous separate dishes could not all be placed on just one. The number of small tables at a feast consequently became a standard for evaluating the event as well as the host. One unique feature of a Japanese meal is that all the dishes are served simultaneously. The only exceptions are meals served as part of a tea ceremony, in which dishes arrive in an orderly manner one after the other.

As a diner's personal table is very low, vessels containing food are handheld and lifted close to the mouth, to which the food is delivered with chopsticks. When sipping soup it is not considered bad manners to make a slurping sound. Modern Japanese table manners, for the most part, originated at the formal feasts of the samurai warrior class during the sixteenth and seventeenth centuries. From these feasts evolved the rituals and complicated manners for using tableware and chopsticks that are still commonly practiced today.

A big change, however, has occurred in the traditional table setting during the twentieth century. During the first half of the century, a larger portable table called *cyabu-dai*, on which there is space enough to place all the diners' dishes, gradually replaced the traditional personal table. Family members sat on tatami mats and surrounded the dining table for their daily meals. But the biggest change has been the increasing use of Western-style tables and chairs in ordinary households during the last few decades. This has drastically westernized Japanese dining settings: About 70 percent of all households now use a table and chairs for meals (Ishige 1991b).

Tea and Liquor

The first record of tea in Japan mentions an offering of prepared tea to the Emperor Saga, in A.D. 815, by a Buddhist monk who had studied in China. This partic-

ular tea was prepared by pounding a roasted block of compacted tea leaves into powder and then boiling it in water. The emperor became fond of it and ordered the planting of tea trees. Tea drinking quickly became fashionable among the aristocracy but, for some unknown reason, lost popularity in the tenth century. The taste and flavor may have been too strong for the Japanese palate at that time.

In the thirteenth century, tea drinking again became a popular custom as a result of the reintroduction of the tree, on the one hand, and on the other a new method of tea preparation, brought from China by a Buddhist monk called Yōsai. Yōsai's book, which recommended tea as healthful, caused a strong revival of interest in tea drinking among aristocrats and monks, and the popularity of tea has continued undiminished until the present. After its reintroduction, steamed tea sprouts were dried and then ground to produce powder, which was mixed with boiling water in a tea bowl, a method basically the same as that which continues today as the tea ceremony.

The tea ceremony, or *cha-dou*, was established in the sixteenth century by Rikyu, who refined the custom to an aesthetic form based on Zen philosophy. It was an attempt to create an aesthetic whole, unifying architecture, gardening, fine arts, crafts, religion, philosophy, literature, food preparation, and presentation. The meal that accompanies the ceremony, called *kaiseki-ryōri*, has come to be regarded as the most refined form of cuisine and is still served in the best Japanese restaurants today.

The drinking of powdered tea, however, did not achieve general popularity owing to the intricate preparation and drinking etiquette required. Even today it is limited to the tea ceremony or other special occasions. The popular green tea is a leaf-type tea, or *sen-cha*, which is prepared by pouring boiling water on dried tea leaves in a teapot. Neither milk nor sugar are added. Drinking of this type of tea started in China during the Ming dynasty, and in the seventeenth century was introduced to Japan, where it became a custom widespread throughout the population and, thus, was incorporated into the Japanese way of life. People who had drunk only hot water prior to the introduction of tea now finished meals with it, had tea breaks, and served tea to welcome guests. That this tradition has survived is evident in the free tea service still offered in virtually every Japanese restaurant.

Only in recent times have alcoholic drinks such as wine or beer (produced by the saccharification of cereal germination) existed in Japan. The oldest-known such beverage, mentioned in eighth-century literature, utilized the starch saccharification potential of saliva. Raw or boiled rice was chewed and expectorated into a container where it mixed with saliva. This primitive technique survived until the beginning of the twentieth century in Okinawa. By tradition, virgins prepared this type of liquor for special religious

ceremonies. Another practice – that of applying *kōji* fungus to rice as an initiator of fermentation (introduced from China) – has also been in general use since ancient times.

Rice wine or sake, which was homemade by farmers, is a result of the alcoholic fermentation of a simple mixture of steamed rice, *kōji*, and water. Professional brewers would prepare sake by adding low-alcohol sake to newly mixed steamed rice and *kōji* without previous filtering. This process causes saccharification and alcoholic fermentation at the same time and increases the alcoholic strength of the mixture. In contemporary commercial production, such a process is repeated three times to increase the amount of alcohol to nearly 20 percent. The mixture is then placed in a cloth bag and squeezed with a press. The pasteurization of the clear liquid from the press is the last part of the process.

The latter technique was first mentioned in A.D. 1568, in the *Tamonin-nikki*, the diary of a Buddhist monk, indicating its practice in Japan some 300 years before Louis Pasteur. In China, the first country in East Asia to develop the technique, the earliest record of the process dates from A.D. 1117 (Yoshida 1991).

Today, sake is normally served by warming it to nearly 50 degrees centigrade in a china bottle immersed in boiling water, after which it is poured into a small ceramic cup. This popular procedure began in the seventeenth century, although at that time hot sake was regarded as appropriate only in autumn and winter.

Shōchū, a traditional distilled liquor first mentioned in a sixteenth-century record, uses rice, sake lees, or sweet potatoes as a base material. A similar distillate from Okinawa, *awamori*, employs rice exclusively. In this case, the production technique is thought to have been diffused from Thailand in the fifteenth century, but the true forerunner of Japanese *shōchū* has yet to be firmly identified. One theory regards Okinawa and its *awamori* as the origin, whereas another insists that China was the source. We do know that *shōchū* was produced mainly in southern Kyūshū and Okinawa, where the hot climate made the brewing of good-quality sake difficult, and the liquor has been consistently consumed there since the Edo period. In other regions, *shōchū* has been regarded as a drink for the lower classes, who wanted a stronger (and cheaper) beverage than the more expensive sake.

Establishing Traditional Food Culture

As already mentioned, since the introduction of rice cultivation, various foods and their processing or cooking techniques have reached Japan from both China and Korea. In addition, European foods, brought by Portuguese traders and missionaries, started to flow into Japan between the late fifteenth and the early seventeenth centuries. But European styles of

cooking, which mainly used meat, were not accepted by the mostly Buddhist Japanese, who were banned from eating meat by religious decree. Nonetheless, Western desserts and sweet snacks were welcomed, and some of the techniques of preparing these were adopted locally and still survive today. A typical example is a sponge cake called *kasutera* that derived from the Portuguese *bolo de Castelo*, a cake from the Castelo region of Portugal (Etchū 1982: 78-9).

Fearing that the propagation of Christianity by Western missionaries was merely a pretext to disguise Western attempts to colonize Japan, the Tokugawa Shogunate banned Christianity and closed the country to outsiders in 1639. The resulting near-total isolation from the rest of the world, lasting until 1854, brought domestic peace during the Edo period (named for the Shogunate's city). Domestic social stability, combined with isolation, tended to lend an unchanging quality to Japanese culture, including the culture of food. Indeed, most traditional dishes served in homes and restaurants today had their origins in the Edo period.

During the Edo period, Japanese food culture was developed and refined among wealthy urban middle-class merchants and artisans. This was a situation much different from that of many other countries, the food cultures of which, including styles of cooking, preparation techniques, table settings, and manners, were first developed and refined in the social life of the court and aristocracy before they diffused to the general society. But the Imperial Court in Kyoto had only a symbolic status at that time, with little political, economic, or social influence. The warrior class that supported the shogunate administration adopted the ritualized court cuisine of former times, which placed great emphasis on an intricate etiquette of food consumption, rather than on the food itself. The ruling class that regulated its members through ascetic morals had little interest in developing better or different flavors and tastes in their cuisine, whereas the majority of the peasants lived in poverty and were scarcely able to sustain themselves on the meanest of foods.

Wealthy merchants controlled (at least economically) Edo society, and Japanese haute cuisine restaurants came into being about the middle of the eighteenth century to cater to them. These restaurants were mostly located in the three major cities of Edo, Osaka, and Kyoto, and were similar to those established in Paris for the French bourgeoisie. With their superb interior decorations and ornamental gardens, such restaurants made every effort to serve refined, palatable dishes that were utterly different from those offered at the formal banquets of the court and the warrior class. The new and innovative recipes and food preparation techniques gradually spread to influence eating habits nationwide and ultimately became the core of today's traditional Japanese cuisine.

The emphasis on aesthetic food presentation in

contemporary Japanese cuisine also originated in these restaurants with presentation devices of *kaiseki-ryōri*. The Japanese philosophy of food presentation seeks to reflect the Japanese view of nature in the elimination of anything artificial from the plate. Thus, symmetrical presentation, for example, is the antithesis of this philosophy, which would rather have imbalance and a blank space on a plate. This approach provides an elegant appearance, whereas to cover a whole plate with various foods is considered vulgar, even though it gives an affluent impression at first glance. Conceptually similar to an empty space in an India ink oriental painting, this deliberately proportioned space becomes an integral part of the art of food presentation. The representation of a season of the year in the display of a dish (by utilizing specific materials such as bonito fish in May or the taro potato in August - both lunar months) is also an important dimension of this philosophy.

Along with the haute cuisine restaurants, inexpensive eating houses and pubs for craftsmen and store employees also appeared in big cities. Not only did various noodles, along with sushi and tempura, become popular snacks in these eating houses, but other specialty restaurants and stalls serving only specific items proliferated. One *soba* shop and two sushi shops to a block was a common sight in the center of Edo, even in the eighteenth century, and according to the 1804 census, 6,165 eating houses existed in the city. This meant that there was one eating house for every 170 persons in the population, not counting peddlers' stalls and eating houses in the red-light district, which were excluded from the census. Another record (which again excluded peddlers' stalls) shows that in 1860, representatives of 3,763 *soba* shops from all over Edo held a meeting to discuss raising prices to meet the increased cost of ingredients.

Restaurant guidebooks for urban gourmets and visitors from the country became popular from the late eighteenth century, corresponding to the rapid increase of dining-out facilities in big cities. Indeed, there were urban bourgeoisie who enjoyed restaurant hunting in Japanese cities with help from guidebooks nearly a century before the publication of the *Michelin Guide* in France (Ishige 1990). Cookbook publication was also brisk, with about 130 originals and several hundred later editions of the originals known to have been printed.

Modernization of Foods

The Meiji Restoration, which put an end to the Tokugawa Shogunate in 1868, gave expression to the need for rapid social modernization. The government-led industrial revolution introduced Western technology and culture and developed a capitalistic economy with the ultimate goal of enriching and strengthening the Japanese nation in the world. A change of eating habits, which occurred in accordance with social

improvements, can be seen in government encouragement of meat eating and milk drinking so as to make the physique of Japanese people comparable to that of Western people.

The change began with a public report in 1872, which mentioned that Emperor Meiji enjoyed beef dishes. Following this declaration, it became a custom of the court to entertain international guests with formal dinner parties at which French cuisine was served, and the traditional taboo against meat eating disappeared rather quickly. The first popular meat dish was boiled, thinly sliced meat served with tofu and leeks. It was seasoned with soy sauce and sugar and later became known as *sukiyaki*. Yet Western cuisine in general was reserved for special occasions and was prepared exclusively by professional chefs; thus, although the number of Western restaurants in big cities increased, Western cuisine was not commonly adopted in Japanese homes for a long time to come.

Milk drinking, although introduced by resident Westerners and repeatedly praised as nutritious by the government, met nonetheless with stubborn resistance from a general public unwilling to accept it as part of the normal diet. Indeed, until the mid-twentieth century, milk was regarded as either a medicine or a special health drink for the sick or persons of weak constitution. Except for canned condensed milk, welcomed by nursing mothers as a supplement to breast milk, few people adopted the custom of consuming dairy products (such as butter and cheese) before the general introduction of bread as a breakfast food in the 1960s. Yet even in the present, the limited consumption of dairy products in the home is another of the features that set Japanese eating habits apart from those of other developed countries.

It is interesting to note that although Western cuisine became progressively more popular after the Meiji Restoration, Chinese cuisine was largely ignored, even though it shared with Japanese cuisine a common food element (rice) and eating method (chopsticks) and had long influenced Japanese food culture. Western cuisine was regarded as a symbol of modernization, whereas the late nineteenth century Japanese victory in the Sino-Japanese War over Korea strengthened contempt for the Chinese people and their culture. Such factors delayed the Japanese patronage of Chinese restaurants until the 1920s, though there were many such restaurants in Japan, catering to Chinese merchants and students. The Japanese maintained a similar prejudice against Korean cuisine, arrogantly disregarding the culture of a people whom they had annexed. But also at the time, the spicy flavor of Korean food created by the use of garlic and pepper was contrary to the traditional plain taste of Japanese food. Korean barbecues and pickles have, however, subsequently become common in Japanese homes.

The production of beer and wine began in the early Meiji era. Beer, despite its bitter and unfamiliar

taste, soon became popular, while sake drinking also continued. The government tried to promote a wine industry for export, but the project was destroyed by *phylloxera*, which raged through European vineyards at that time and reached Japan in 1884 via imported vine stock. After the devastation, only artificially sweetened wine, consumed as a nourishment for the sick or by people of weak constitution, was produced - and this on a small scale. However, quite recently a resumption of domestic table wine production has occurred in Japan to meet a demand that has increased since the 1970s. This development has paralleled Japanese economic growth and with it a growth of interest in European and Californian wines. But although wine was unpopular until recently, by the 1920s beer, whiskey, coffee, and black tea were regularly drunk at an increasing number of bars, beerhouses, cafés, and teahouses in the big cities.

The modernization of Japanese food culture after the Meiji Restoration was interrupted by the rise of militarism and World War II. Following the Manchurian incident of 1931, 15 years of war and large-scale mobilizations, along with trade sanctions by Western nations, caused food imports to decline severely and slowed domestic agricultural production as well. Consequently, major food items, including meat and dairy products, were rationed under government control. Even fish was in short supply as war destroyed the fishing industry, and a return to the traditional meal of rice with vegetable side dishes was strongly encouraged by the government.

As the war progressed, even the minimum food ration could not be distributed regularly, and malnutrition became a serious problem. People were forced to supplement their rations by growing sweet potatoes (as a rice substitute) and other vegetables in home gardens; even after the defeat in 1945, it took 10 years for the nation to regain its prewar level of agricultural output. However, as a result of the rapid growth of the Japanese economy since the 1960s, diets previously concentrated on carbohydrates and poor in fat and animal protein have greatly improved. As foreign foods and styles of cooking have been embraced for cooking in the home, with their original tastes altered to conform with Japanese preferences, a large-scale fusion of foreign and traditional cuisines has taken place.

Thus, annual per capita rice consumption, which reached a maximum of 171 kilograms (kg) in 1962, has since declined and has remained at around 70 kg since the late 1980s. The consumption of sweet potatoes and barley as rice substitutes has declined drastically, and only a few people still eat them regularly. Such traditional carbohydrate foods have been largely supplanted by bread, which school-lunch programs made popular. These programs served bread made from American flour to schoolchildren. The flour had been received as food aid during the postwar food shortage.

Today, about 30 percent of the adult population

eats bread for breakfast, but very few people eat bread at lunch or dinner. In contrast with the laborious preparation needed for rice, timesaving bread is suitable for the breakfast needs of a developing urban society in which many people commute and so have less time for meals.

Although there has been a rapid increase in the consumption of previously rare foods, such as meat, eggs, dairy products, and fats, the consumption of traditional foods, like fish and vegetables, has also increased. People in Japan no longer maintain the attitude that meals are merely a source of energy for labor and that a staple food is the most efficient source of such energy. Now people enjoy the meal itself through the various tastes of side dishes, and a greater emphasis on side dishes than on staple foods has kept pace with increases in the national income.

A large variety of foreign foods and cuisines are now part of the household menu. But they have become popular only as it was determined that their flavors complement rice, soy sauce, green tea, and so on. Moreover, their tastes and preparation have often been adapted to moderate flavors, and their size or form has been arranged for use with chopsticks. In other words, such modifications should be viewed as part of an expansion of Japanese eating habits and cuisine, rather than a headlong adoption of foreign dietary patterns.

The Japanese intake of the chief nutrients reached an almost ideal level by the end of the 1970s, except for a little too much salt and a lack of calcium. The general physique has improved accordingly and the average life span has become the longest in the world. This ideal situation, however, may not continue long, as the generation now being raised in this affluent society on a high-protein diet may later pay a stiff price in geriatric diseases as a result of overnutrition – a problem that is becoming acute in other developed nations.

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V.B.5 🇰🇷 Korea

Historical Background

If the history of a dietary culture is, in many ways, the history of a people, then the evolution of Korea's dietary traditions clearly reflects that nation's turbulent history. Geography and environment play a decisive role in determining the foundation of a nation's dietary culture, whereas complex political, economic, and social conditions and interactions with other cultures contribute to further development.

Traditional dietary strategies must balance the need for sufficient calories and specific nutrients with the need to avoid or minimize diseases associated with foods that are contaminated, spoiled, or otherwise unhealthy. An account of traditional diets should, therefore, deal with food- and waterborne diseases as well as with typical foods and cooking methods. Once dietary habits and food preferences have been established, they become a central part of the culture and are highly resistant to change.

It is not uncommon, however, to find that in the course of exchanges between cultures, foreign foods have become so thoroughly adapted to local conditions that their origins are quite forgotten. In a rapidly changing and interdependent world, it is important to understand the historical background of traditional diets and the impact of modernization in order to maintain and develop dietary strategies that balance cherished traditions with new circumstances. An understanding of the traditional foods of Korea, therefore, requires a brief overview of Korean geography and history.

Korea occupies the mountainous peninsula south of Manchuria; the Yellow Sea separates Korea from mainland China to the west. Japan is only 206 kilometers (km) away across the southern Korea Straits. Because of its strategic location, Korea has a history that has been intimately linked to developments in China, Japan, and other Asian countries. The total size of the peninsula is about that of the state of New York. It was artificially divided along the 38th parallel as the result of World War II and the Korean War, with the area of the northern zone about 122,370 square kilometers (sq km) and that of the Republic of Korea about 98,173 sq km. The peninsula is approximately 1,000 km in total north-south length and 216 km wide at its narrowest point, with a rugged coastline about 17,269 km long. Korea has long been a cultural bridge and a mediator between China and Japan and often the target of their territorial ambitions and aggression. Devastated and exhausted by centuries of conflict, the "Hermit Kingdom" during the sixteenth century embarked on a policy of isolationism that kept Korea virtually unknown to the West until the last decades of the nineteenth century.