

Trivia from the Food Cultures of the World

Part 4: Rice Cultivation Finds a Third Route to Japan

Many Japanese people cannot imagine a meal that does not include rice and miso soup. Exactly how rice found its way to Japan is the topic of some debate. While there are a number of theories regarding the origin of cultivated rice, the oldest kernel discovered to date was found in China in 2005. This discovery seems to call for a revision to the presumed history of the rice-paddy culture.

A Major Discovery Upsets Old Views

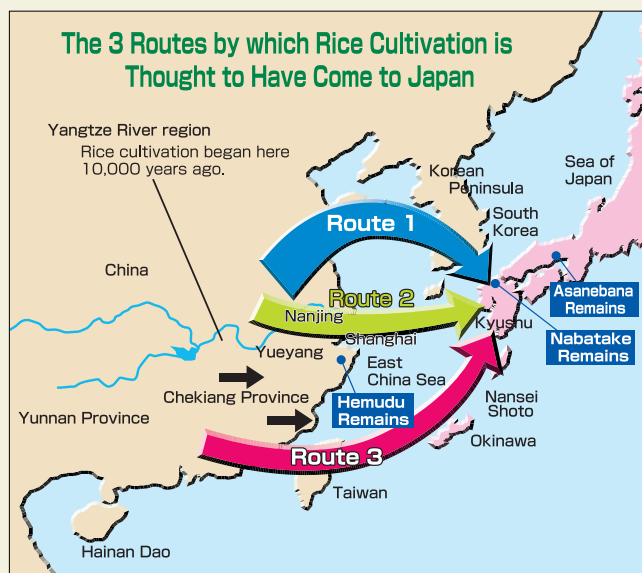
In 2005, the Xinhua News Agency reported that a kernel of cultivated rice dating back 12,000 years was discovered among the Yuchanyan cultural relics in the mid-stream portion of the Yangtze River in Daoxian County (Hunan Province), China. This latest find was preceded by the discovery of rice kernels dating back 10,000 years among the Shangshan relics in the downstream area of the Yangtze River, Zhejiang Province.

Prior to recent discoveries in China, rice cultivation was thought to have originated in the Indian state of Assam. Rice native to India is known as *Indica* or South Asian rice, while that native to the Yunnan Province of China is known as *Japonica*, or East Asian rice.

However, Chinese archaeologists long believed that though the oldest evidence of cultivated rice previously discovered in Yunnan Province dated back to around 3000BC, rice had certainly been grown much earlier.

Then Chinese archaeologists were proven correct when rice kernels dating back 7,000 years were discovered among the Hemudu cultural relics in Zhejiang Province. Japanese botanists then verified that the Hemudu rice was the same as the tropical *Japonica* variety thought to have been grown using slash-and-burn techniques during the Jomon period (13000BC–300BC) in Japan. With many discoveries along the Yangtze River valley, the oldest

kernels of rice uncovered are from hermit caves dating back 14,000 years. While this rice is not thought to be cultivated rice, the belief that rice cultivation began in India has certainly been overturned and the mid- to lower-Yangtze River region is now accepted



Map of the routes by which rice cultivation came to Japan (from the Zennou web site)

as the origin of rice cultivation.

Should evidence of rice cultivation dating back 14,000 years be discovered, the farming of rice would predate the cultivation of wheat 12,000 years ago in Mesopotamian civilization. Furthermore, although the earliest Chinese civilization is generally referred to as the Huang He, or Yellow River civilization, such references must also be reconsidered given the discoveries of evidence of a large, agriculture-based civilization along the Yangtze River. As cultivators of rice, ancient civilizations must surely deserve another look.

From the Continent to Japan, the Land of Abundant Rice

The rice-paddy culture almost certainly originated in China. However, when and how it made its way to Japan remains the subject of great debate. One theory is that this culture came to Japan from the Yangtze River region by way of the Korean Peninsula. Another theory supposes that it took a sea route from the region around present-day Shanghai to Kyushu, the most southerly of Japan's four major islands.

Evidence for a third route has also been uncovered. The oldest traces of cultivated rice discovered in Japan date from the early Jomon period and were unearthed in Okayama Prefecture. Opal phytoliths—tiny, three-dimensional, silica copies of plant cells created by plants when they absorb water—verify that the variety is the same as that of the Hemudu civilization. This would indicate a much more southerly origin than the first two theories—a route also suggested by the famous Japanese folklorist Kunio Yanagida. Analysis shows this rice to be of the tropical *Japonica* variety, leading many to believe that rice cultivation came to Japan via all three routes.

It is probable that the Japanese people have been cultivating and eating rice since the Jomon period, six to seven thousand years ago. The Japanese have long referred to Japan as The Land of Abundant Rice, with the oldest reference being from the *Nihon Shoki*, or Chronicles of Japan, one of the oldest histories of Japan. With numerous wetlands and a hot and humid climate, the rice introduced from the continent was soon established in Japan. This same rice has come to be the heart of the Japanese food culture.

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Part 5: Eating a Lot of Rice Relieves Stress?!

The Japanese food culture, influenced by post-war nutrition education, saw a tremendous transformation after World War II. Japanese people began to consider their traditional diet, in which rice was the main dish complemented by small quantities of fish, meat and vegetable side dishes, inferior to the Western diet, which called for decreasing the amount of rice and increasing the quantity and volume of what the Japanese considered 'side dishes.' Was this change actually beneficial, though? In recent years, the Japanese food culture seems to have reverted to more traditional ways. Further, this tradition seems to be influencing European and American food cultures as well.

Pre-War Government Recommends Three Cups of Rice Three Times a Day

Today, the average Japanese citizen consumes approximately 65 kg of rice. Compared with annual consumption rates of 100 kg per person in 1965, the Japanese have significantly reduced their per capita intake of rice. Influencing this reduction is the increase in the number and volume of side dishes. The Japanese have also increased their intake of wheat products, including bread and pasta, as well as traditional Japanese noodle dishes. In addition, a fewer number of people take their own lunches to work or school these days. Among those who do, the ratio of rice to side dishes has been reversed, with less rice than side dishes in the modern bento, or lunch box.

Prior to World War II, the Japanese government recommended a per capita daily intake of three cups of boiled rice at breakfast, lunch and dinner. At that time, meals were very simple, commonly consisting of rice, soup, one side dish and pickles. With the absence of today's variety and quantity of side dishes, it seems clear that rice alone was able to satisfy a huge majority of nutritional requirements.

The daily nutritional intake for the average Japanese person between 1931 and 1935 was 2,345 calories, with 74.1 grams of protein. Of the total protein intake, just twenty percent was animal protein. Given the method of preparation, three cups of uncooked rice was equivalent to .59 liters, a quantity eaten daily by adult men. This amount of rice provided 1,600 calories and 33 grams of protein. The remaining 800 calories and 47 grams of protein were acquired from side dishes such as small fish, eggs, fried



A 1941 edition of the *Shufu no Tomo* magazine (Hanayome Koza Dai 12-kan) illustrates a day's main meals.

vegetables, boiled greens and tofu. The famous poem *Ame ni mo Makezu* (Undefeated by the Rain) by Kenji Miyazawa refers to eating four cups (measured before cooking) of brown rice a day. At just over 2,000 calories, it may be inadequate for most adult males, but seems typical of Miyazawa.

One Step in Improving the Health of Modern People!

In nearly every nation of the world, people live on a diet consisting primarily of water and starch in the form of rice, wheat, corn, buckwheat and potatoes. It is said that only those living in desert or extremely cold environments have diets consisting primarily of meats and dairy products. When breads and noodles are the staples of a diet, the results are often obesity and related health problems. For example, bread is rarely eaten alone because it is rather dry.

By spreading butter or margarine on the bread, however, it tastes much better. When fried vegetables, salads, or omelets are served, even in small quantities, the amount of oil used to prepare or complete the dishes is rather large. A significant quantity of oil is even used to prepare ramen noodles and pasta. A comparison of the rice-based Japanese meal with the bread-based Western meal shows that the average Western meal accounts for twice as much fat at 31.2 grams compared to 15.2 grams of fat with the Japanese meal.

Rice has recently captured the spotlight because it has been found to contain Gamma-Amino Butyric Acid, or GABA. GABA stabilizes blood pressure, stimulates the brain, and prevents arteriosclerosis. When rice is soaked in water, the glutamic acid, or glutamate, on the surface of whole or polished rice is converted to GABA. The amount of GABA produced can be maximized by soaking the rice for four hours before cooking it. These discoveries act as further promotion of a rice-based diet and the traditional Japanese diet in general.

As GABA is also said to relieve stress and induce a calmer mental state, it would seem to be an essential ingredient for surviving in today's high-stress societies. Clearly, the traditional Japanese diet, with rice at its heart, has health benefits to offer the people of the fast-paced, modern world.

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Trivia from the Food Cultures of the World

Part 6: The Instruments Used with Meals Reflect the Lifestyle of the Times

The traditional style of eating meals from individual trays to family gatherings around a table changed with the times just as the ancient method of eating with the hands changed with the introduction of chopsticks from China. Similarly, as the use of chopsticks and consumption of rice has decreased, the use of knives and forks has increased. The eating habits of the Japanese people strongly reflect the influence of foreign cultures.

The Dining Table Born of the Japanese House

The *chabudai*, or low folding table, saw its limelight during the Showa Era (1926–1989). Because its legs folded up, it was perfect for small Japanese houses in which a single room was used for many purposes. At that time, people commonly ate and slept in the same room. Therefore, the *chabudai*, which could be folded up and leaned against a wall when it was time to pull out the bedding and go to sleep, was extremely convenient. Originally introduced during the second half of the Meiji Period (1868–1912), the *chabudai* gradually grew in popularity through the Taisho (1912–1926) and early Showa Periods.



A table set for mealtime. In the not-too-distant past, the *chabudai* was the standard in metropolitan homes. (From the Showa no Kurashi Hakabutsukan)

Prior to the introduction of the *chabudai*, the universal custom in Japan was to serve meals on individual trays. During the Edo Period, ‘box trays’ acted as modern cupboards or china cabinets. These box trays served the dual purpose of holding the rice bowl, soup bowl, set of chopsticks and a small plate required for one person’s meal, as well as acting as the tray upon which the meals were served. At

mealtime, the lid of the box was turned over and the dishes inside were arranged on top. The lid of the box, or the tray, had a lip which, when placed on top of the box, prevented it from moving. When not in use, these boxes were lined up on a set of shelves similar to bookshelves. The people of this time seem to have made excellent use of the small spaces available to them.

The *chabudai* began to be replaced by the Western dining table during the middle of the Showa Period, when Japanese houses took on a Western influence. Dining rooms with wood or linoleum flooring appeared and the need to replace the table used at mealtime with bedding at night was removed. Simultaneously, the younger generation began eating less rice and more bread, and Western dishes as side dishes to rice began to appear.

Heian Nobles Ate with Chopsticks and Spoons

Chopsticks are the most efficient utensil for the rice-based Japanese food culture and were introduced to Japan from China, the birthplace of rice cultivation. Prior to the introduction of chopsticks, people ate with their fingers. So how, then, did these ancient people deal with soup? Archaeologists have revealed that the Japanese have been making spoons from wood and shells since the Yayoi Period (300BC–300AD). From this information, we know that during the 3rd century the Japanese were eating boiled rice with their hands and soup with spoons.

By the 7th and 8th centuries, chopsticks had been introduced. A large number of wooden chopsticks have been uncovered in excavations of the Fujiwara and Heijo palaces of that period, and silver chopsticks from that

time are still held at the Shosoin imperial repository at Todaiji temple. The use of chopsticks began with the nobility and gradually found its way to the peasant class. By the end of the 8th century, the custom of eating with chopsticks had spread to the peasants of the Heian capital. However, the spoon did not gain the popularity of chopsticks. Among the nobility, spoons were only used when eating rice gruel. This custom was very similar to the way food is eaten in modern South Korea where rice dishes are eaten with a spoon and everything else is eaten with chopsticks.

The spoon did not last long in ancient Japan. One reason for this was the spread of wooden bowls, which could be held while eating because they were very light, making the use of chopsticks more convenient. It is thought that chopsticks came to be the only utensil used for eating in Japan because these wooden bowls were so easy to hold, even when they contained hot foods or soups.

Today, the spoon is a standard utensil in Japanese homes. Although the modern spoon was introduced from Western cultures, the effects of foreign influences over the centuries have become deeply rooted in the Japanese food culture.

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Summary of Trivia from the Food Cultures of the World, presented in FOOD CULTURE No.9

Part 1: The *Tofu Hyakuchin*, or One Hundred Tofu Delicacies, was published in Osaka in 1882. As its name implies, this cookbook from the Edo Era introduced the recipes for one hundred tofu dishes. This book provided detailed instructions for preparing each of the dishes, arranged by the following categories: ORDINARY, STANDARD, CONNOISSEUR, INTERESTING, UNUSUAL and EXQUISITE.

Part 2: In 17th century England, prior to the introduction of the porcelain teacup, the royalty drank tea from silver saucers known as porringers. As drinking directly from a cup was long considered vulgar, the next step in the evolution of England’s tea culture was to serve tea in a cup, but to then pour the tea into the accompanying saucer before drinking it.

Part 3: There are many theories as to the origin of the shape of croissants, but most make reference to the Ottoman Empire’s attack on the Hapsburg Empire (now Austria) in the mid-16th century. A baker working in a basement during the early hours of the morning heard and reported the Ottoman army tunneling under the castle walls. This warning, as well as the simultaneous arrival of allied forces, assured the Hapsburg victory. Some believe that the croissant is shaped in the form of the sickles used by the Ottoman army to dig their tunnels, while others say the shape comes from the Ottoman Empire’s national symbol, the new crescent moon.