

T A Story of Shoyu

The History of Shoyu (Soy Sauce) 3

Ryoichi Iino
Specialist in Food History



Born in Tokyo in 1938, Ryoichi Iino graduated from the department of English literature at Waseda University. He is also a graduate of the History-Geography Program at Meiji University. Iino, a scholar of Japanese food history, currently teaches food history at Hattori Nutrition College. He is a leading member of two societies that study the history of eating habits, and member of a society for research on Japanese manners and customs. His research has led him to lecture on such topics as: *Did the Japanese Live on Rice?; An Experimental Approach to So, an Ancient Japanese Cheese;* and *Soy Sauce and Bean Paste (kara-miso)*; his published works include *A Study on Tuna and Peasant Eating Habits in the Edo Era as Seen in Local Histories*.

Sho in the Kamakura Period

In the previous issue of *Food Culture*, I noted that both liquid *sho* and unrefined *sho* were manufactured during the Heian period (794-1185); that the term *sho* was generally used to refer to unrefined *sho*; and that the use of liquid *sho* gradually declined. In this continuation of my article, I would like to discuss the situation in the subsequent period; that is, during the medieval age, up until the appearance of soy sauce.

The *Chiri-bukuro*, a dictionary thought to have been compiled during the Bun-ei and Koan eras (1264-87) of the mid-Kamakura period (1185-1333), contains an entry for *miso*. The passage explains that *miso* was originally written using the characters *matsu* (meaning “powder”) and *sho*. The *matsu* of *miso* was later mistakenly substituted with a different character, *mi*, meaning “not yet.” It notes that the term *hishio* was generally used when the ingredients are not ground into a powder, and that *miso* was used when the ingredients were used in their powdered form. For this reason, the dictionary notes, the character *matsu* (“powder”) should be used when writing *miso*, but the character *mi* (“not yet”), which is similar to the character for “powder,” had come to be used instead. The passage goes on to state that the *kuchi* radical was now used in conjunction with the character *mi* (“not yet”), and that *so* (“formerly”) was written instead of the character *sho*. The character *sho* could be read either as *hishio* or *aemono*, which indicates that in the mid-Kamakura period, *hishio* was used in granular form and may have been the same as the unrefined product known as *aemono*.

The *Chu-ji-ruiki*, a record of recipes and manners of cooking compiled during the late Kamakura period, contains references to ground *hishio* used as a seasoning. The skewered fish dish called *mukago-yaki*, for example, was made by taking slices of carp with skin still attached, coating them with *suri-bishio* (ground *hishio*), and then broiling them¹.

The Development of Nimono

The most common feast dishes during the Heian period were preserved foodstuffs such as dried fish, *kubotsukimono* (a kind of salted and fermented fish), sushi and pickles, along with uncooked dishes and the occasional broiled dish, soup, or dish mixed with *miso* or other seasonings. The medieval era saw the variety of such dishes increase, along with the development of *nimono*, or simmered dishes, which formed the basis of the vegetarian diet that was common at the time, particularly at Zen temples. The *Teikin-ourai*, completed in the early Muromachi period (1333-1573), gives examples of vegetarian dishes that should be served during a Buddhist mass. These include simmered dishes made with burdock, seaweed and butterbur.

The *Chirizuka Monogatari* (1569) describes the following episode. Motouji Samanokami (Motouji Ashikaga) was an epicure. One day, he summoned his cook and ordered him to carefully prepare a soup made with broiled carp. After broiling one side of the fish well, the cook presented it to Motouji in hot *miso* soup. Motouji began to eat the meal and found it to his liking, but after eating half the fish he turned it over to find the other side uncooked. Enraged, Motouji summoned the cook. The cook was certain he would be put to death, but in the end he was spared. In this story, the broiled fish was simmered in *miso*.

The various diaries and guides to customs and manners that appeared from ancient times until the medieval age contain numerous references to dishes, but little is known about how they were seasoned. The story above relates to Motouji, the son of Takauji Ashikaga, who later went on to become the first chief administrator of the Kanto district. This particular episode relates to the time when he was a head official in charge of the stables (1352-59), and is a valuable source of information indicating that *miso* was actually used in simmered dishes at the time. As this example

shows, *miso* played an important role in the development of simmered dishes throughout the medieval era.

The Appearance of Tare-Miso

Recipe books from various cooking schools indicate that by the mid-Muromachi period, *miso* was commonly used as an ingredient in simmered dishes and soups. In addition, there was widespread use of *tare-miso*, or processed liquid *miso* extract, as a seasoning.

Tare-miso is a liquid seasoning made by adding water to *miso*, boiling it down, and then straining the mixture by suspending it in a cloth bag. A method for making *tare-miso* can be found in the *Ryori Monogatari*, compiled in 1643. According to this source, three *sho* (one *sho* is about 1.8 liters) and five *go* (one *go* is about 0.18 liters) of water were added to one *sho* of *miso*. The mixture was boiled until it was reduced to approximately three *sho*, and then strained using a cloth bag. The same book contains a different recipe for *nama-dare*, which is a form of *tare-miso* prepared without cooking. For *nama-dare*, three *sho* of water was added to one *sho* of *miso*, which was then strained through a bag. However, as historical records from the Muromachi period contain no reference to *nama-dare*, it is assumed that both products came to be known as *tare-miso*.

A special bag was used for the manufacture of *tare-miso*. The *Toji-hyakugo-monjo*² contains a number of entries under the heading *Komyokohodogu-okuribumi*. The first of these refers to the use of a *tare-miso* bag on December 30, 1432, and the entries continue up until December 31, 1466, indicating that a new *tare-miso* bag was prepared for the *Komyoko*, a Buddhist mass, each year. In other words, *tare-miso* was already being manufactured, using special bags, in the first half of the fifteenth century. In addition, according to a December 1, 1454 entry in the *Komyokoho-yokyaku-sanyojo*, the budget for the *Komyoko* mass refers to money to be set aside for *tare-miso* bags, indicating that these bags were also bought and sold.

Cooking with Tare-Miso

Cookbooks from the Muromachi period contain

numerous recipes using *tare-miso*. These include the following:

1. “Jellied dishes. Small carp should be used, but other kinds of fish may also be used. Simmer in *tare-miso* until the mixture congeals, then serve.” (Jellied crucian carp) From the *Shijoryu-hochosho*, 1489.
2. “Oriental pickling gourd soup. A wax gourd may be used instead. Cut the gourd into thick slices, one *sun* and five *bu* [approximately 4.5cm] long. Simmer in *tare-miso*. Add shaved dried abalone.” (Simmered oriental pickling gourd with abalone) From the *Yamanouchi-ryorinosho*, 1497.
3. “*Matsukasa-iri* is made by cutting diamond shapes into the flesh of sea bream. Cut diagonally. When simmered, the pattern resembles that on pinecones. Simmer in *tare-miso*.” (Simmered sea bream fillets with lattice cuts)
4. Preparation of bean-curd refuse: “Cut the cuttlefish. Simmer in *usu-tare*. Add greens.” (Simmered cuttlefish pieces) Recipes three and four are from the *Hocho-kikigaki*, late Muromachi period.

Meals prepared for weddings in samurai families during the mid-Muromachi period also included dishes made by simmering yams and pheasant meat in *tare-miso*. One of these recipes involved cutting peeled yams into pieces one *sun* (approximately 3cm) long, simmering them in *tare-miso* with pheasant meat, and then sprinkling *amanori* seaweed over the top (*Yomemukae-no-koto*).

Diaries from this period also indicate that a variety of simmered dishes prepared using *tare-miso* were offered when entertaining guests. An August 2 entry in the *Yamashina-ke-raiki* (1492) refers to the preparation of a *tare-miso* dish containing rice cakes, boiled and dried sea cucumber, abalone, dried cuttlefish and beans.

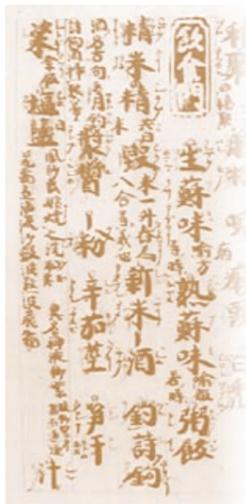
As these examples reveal, *tare-miso* and *usu-tare*, a diluted version of *tare-miso*, were used in a variety of simmered dishes. In addition, *tare-miso* was also used in making soups and dressings, indicating that it was used during the medieval age as a liquid seasoning prior to the appearance of soy sauce. It is following this so-called *tare-miso* period that soy sauce and *tamari* eventually appear on the scene.

Tou-Miso in the Tamonin-nikki

The *Tamonin-nikki* was a diary compiled from 1478 to 1618 by Eishun and other Buddhist priests at the Tamonin, a small temple attached to Nara’s Kofukuji temple. The diary

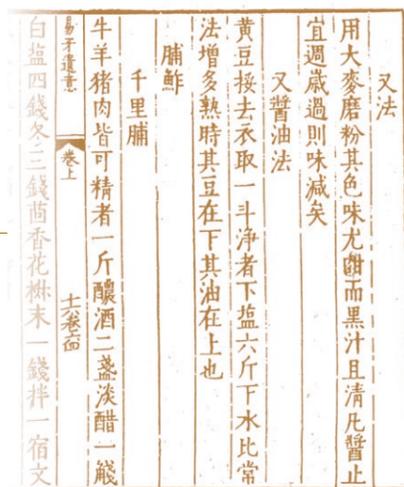
Table of Ingredients Used in Tou-miso and Shoyu During the Edo Period

Sources	Seasoning	Ratio of ingredients (%)				Period or year of compilation
		Soybean	Wheat / Barley	Salt	Water	
<i>Tamonin-nikki</i>	<i>Tou-miso</i>	17-18	17-18	17-18	47-48	1478-1618
<i>Ryori Monogatari</i>	<i>Masaki shoyu</i>	19.6	25.5	15.7	39.2	1643
<i>Nihon-saijiki</i>	<i>Shoyu</i>	19.2	19.2	19.2	42.3	1687
<i>Honcho-shokukan</i>	<i>Shoyu</i>	Approximately 22	Approximately 22	Approximately 22	Approximately 34	1695
<i>Wakan-sansai-zue</i>	<i>Shoyu</i>	18.2	18.2	18.2	45.5	1712



Bunmeibon-setsuyoshu

The compound made up of the characters *konzu* and *sho* is seen in the *Bunmeibon-setsuyoshu* (second column from left). The reading *shoyu* is shown on the right, while on the left the readings *konzu*, *sho* and *hishio* are shown.



Ekigaii

A recipe for soy sauce in the *Ekigaii* (from the *Imon-kotoku*). This is thought to be the oldest surviving document containing a record of the manufacturing process for soy sauce in China.

contains details on the manufacturing processes for *miso*, *hishio* and various other foodstuffs, and is a valuable record in understanding how *miso* and *hishio* were used during this period. Included are references to *yoki-miso*, *ooha-miso* and *tou-miso*, along with recipes for each of these varieties of *miso*³.

With *tou-miso*, we find that the manufacturing process was not yet well established, and that a variety of different methods were used. These included a method that calls for mixing boiled soybeans with crushed, roasted wheat or barley, or both to make *koji*, then adding salt water, after which came fermentation. This procedure is extremely similar to that used in the manufacture of soy sauce during the Edo period. References to “*tou-miso* soup” and “casks of *tou-miso* stock” suggest that the finished product was in liquid form.

As for the proportions of the ingredients, the oldest surviving recipe for *tou-miso* is from June 12, 1550. This states that soybeans, wheat and salt should be added in equal proportions, and that the amount of water added should be equivalent to the combined volume of the other ingredients. There are numerous references to *tou-miso* recipes in later texts, and most of these indicate similar proportions. Barley was sometimes used instead of wheat, but usually both barley and wheat were added.

If we compare these proportions with the relatively early recipes for soy sauce found in records from the early Edo period, we find very similar figures, as shown in the table below. This also indicates that *tou-miso* was a forerunner of soy sauce in the Edo period.

The question remains, however, as to why the term *tou-miso* is used when it first appears in the *Tamonin-nikki* in 1550 when, as we shall see below, the term *shoyu* (soy sauce) was already in use at that time. The term *shoyu* appears in the *Tamonin-nikki* in at least two places after 1550. Yet the relationship between the two is unclear, as there is no mention of how *shoyu* is made, and the term *tou-miso* continues to appear after this.

The main ingredient in *hishio* is barley; the amount of soybeans added is equivalent to roughly only thirty percent of the amount of barley. Moreover, the soybeans are added in more or less a granular state. The amount of water added is also just over thirty percent, which is small compared to the amount used when making *tou-miso*. However, one passage refers to the need for a smaller quantity because the *hishio* had recently become

watery. Apparently, the finished product resembled *name-miso*.

The Appearance of the Term Shoyu

The term *shoyu* was first used in China. The Chinese characters for *shoyu* appear in both the *Sankaseikyo* (written by Rinko) and the *Chukiroku* (edited by Hoko Goshi) in the thirteenth century. Although we do not know how it was made, we know that it was used as a seasoning⁴. By the time the *Ekigaii* (figure above), compiled by Kan-eki, appears, in roughly the fourteenth century (late Yuan or early Ming dynasty), however, we do see details of the soy sauce manufacturing process. Questions have been raised concerning the relationship between the soy sauce made according to this method and the soy sauce we use today⁵, but there is no doubt that something called *shoyu* was being manufactured in China as early as the fourteenth century.

In Japan, the term *shoyu* first appears in dictionaries and diaries in the sixteenth century. An early example is the *Bunmeibon-setsuyoshu* (figure top left), which notes that the Chinese characters for *konzu* and *sho* should together be read *shoyu*. This book includes individual entries for the two Chinese characters that are now used to write *shoyu* and notes that the first character is read *sho* and the second character *yu* or *yuu*. This indicates that the Japanese pronunciation was either *shoyu* or *shoyuu*, but although the reading *shoyu* appears in the book, these Chinese characters themselves are not given together as a compound. The same book indicates that when the characters *sho* and *konzu* appear together in this order, they should be read as *tare-miso*⁶.

The main difference between *tare-miso* and soy sauce is that while *tare-miso* is processed from *miso*, soy sauce is a primary product made as the result of a dedicated manufacturing process. It is therefore likely that the term *shoyu* in the *Bunmeibon-setsuyoshu* is a reference not to soy sauce, but to a liquid seasoning similar to *tare-miso*.

The next reference to *shoyu* is an entry in the *Rokuon-nichiroku* for June 28, 1536, in which the writer mentions preparing *shoyu*. An entry for the previous day mentions preparing *hishio*, which suggests that *shoyu* and *hishio* were prepared separately. In addition, an entry for August 14 of the same year mentions putting *sho* in a cask, as if it were intended as a gift. *Tou-miso* prepared at the Tamon-in was usually ready for consumption in about sixty days; the *koji* being

incubated in the latter half of June, followed by the addition of brine within a week after incubation, and the refining process in the middle of August⁷. This *sho* referred to in the *Rokuon-nichiroku* was probably the end product of the batch of *shoyu* prepared on June 28. Later, an entry in the *Tokitsugu-kyoki* for August 27, 1559 mentions putting *shoyuu* in a small cask for use as a gift. There is a strong likelihood that the *sho* and *shoyuu* placed into casks for use as gifts were not *tare-miso*, but were in fact soy sauce.

The *Rokuon-nichiroku* consists of a collection of diaries kept by the head priest at the Rokuon-in temple, a smaller temple within the larger Shokokuji temple. The Rokuon-in was located in the center of Kyoto, then the nation’s capital, while the Tamon-in was in Nara. Because of its location, the Rokuon-in was likely to have been influenced by Chinese culture earlier than the Tamon-in, and may well have begun manufacturing soy sauce before the Tamon-in, and give the name *shoyu* to it. In any event, it is apparent that soy sauce was already being manufactured in Japan by the middle of the sixteenth century.

Soy Sauce and Tamari

By the second half of the sixteenth century, *shoyu* was being written using the same characters as those used today. An entry in the *Tamonin-nikki* for October 25, 1568 mentions taking *shoyu* to Choinbo, a Buddhist monk. This appears to be the first time the contemporary characters were used. An entry in the same diary for August 24, 1582 uses different characters to refer to soy sauce. By this stage it seems that the Tamon-in had also started using the term *shoyu* when referring to *tou-miso*.

Next we find an entry for *shoyu* (using contemporary characters) in the *Ekirinbon-setsuyoshu* (1597). The oldest of these dictionary-like *setsuyoshu* is thought to be the *Bunmeibon-setsuyoshu*. Following its publication, similar volumes appeared successively, but none of these contains any reference to *shoyu*. The entry in the *Ekirinbon-setsuyoshu* appears to be the first reference to *shoyu* in a *setsuyoshu*. By this stage it seems clear that soy sauce was in common use, both in name and in practice.

An entry in the *Rokuon-nichiroku* for September 8, 1599 mentions a breakfast menu that included a dish of *matsutake* mushrooms simmered in soy sauce. Subsequent entries also refer to dishes made by simmering various foods in soy sauce⁸. In addition, as mentioned below, the *Nippo-jisho*, *Japanese-Portuguese Dictionary*, published in 1603, mentions that soy sauce is “frequently added when cooking meals and to add flavor to food.”

In addition to soy sauce, *tamari*, a product made from *miso*, was also being manufactured at this time. Entries in the *Japanese-Portuguese Dictionary* confirm

that by the Edo period, both soy sauce and *tamari* were in common use. Soy sauce is described as “a liquid used to season food, equivalent to vinegar but saltier. Also known as *sutate*.” The entry for *sutate* describes it as “a liquid made from wheat and beans frequently used in Japan to season and flavor food.” *Tamari*, on the other hand, is described as “a pleasant-tasting liquid made from *miso* and used to season food.”

The above entries indicate that soy sauce is a liquid made from wheat and soybeans, while *tamari* is a liquid made from *miso*. Soy sauce later evolved into a unique product, quite distinct from both *miso* and *tamari*. In the next issue of *Food Culture*, I hope to examine this topic further.

(Notes)

1. The *Hocho-kikigaki* (late Muromachi period) describes *suri-bishio* as follows: “*Suri-bishio* is made by cutting the fish and poultry unsalted. It is then sprinkled with salt and sake is poured on it.” This is thought to be the standard method of preparation, but in the example cited, it is taken literally to mean ground *hishio*.
2. *Dainihon-komonjo*, *Iewake-junosan* (edited by the Historiographical Institute, University of Tokyo).
3. For further information on fermented soybean products of the *Tamonin-nikki*, refer to *Japanese Food and Sake* (Hajime Yoshida, Jinbun Shoin).
4. Questions have been raised regarding the references to soy sauce in the *Sankaseikyo* and the *Chukiroku*. For details, refer to *Eating Habits in China* (pp. 352-3) (translated and edited by Takashi Nakamura, Heibonsha Toyo Bunko).
5. Regarding the soy sauce recipe in the *Ekigaii*, Osamu Shinoda, in *History of Chinese Food* (Shibata Shoten), states on page 255: “It notes that when making soy sauce, combining one *to* of beans and six *kin* of salt with a large quantity of water will result in the beans sinking to the bottom and the ‘oil’ floating to the top. It is unclear whether this is a reference to what we know today as soy sauce, or whether it is simply oil.”
6. The same book also gives the traditional reading *hishio* for the character *sho*.
7. *Japanese Food and Sake* (p. 212).
8. *Ookusa-ke ryori-sho*, a recipe book generally regarded as dating from the Muromachi period, contains numerous recipes using soy sauce. However, much of the text was added during the Edo period, and as this may extend to those passages relating to soy sauce, I have chosen not to include quotations from this source.