

# By MATSUMOTO Nakako

*Miso* (soybean paste) is a traditional food indispensable in the Japanese diet. It has its origin in China, where it was made centuries before Christ. The progenitor of *miso* was brought to Japan around the 6th century A.D. Since then, *miso* has been made in numerous parts of the country, using local soybeans, rice or barley. As it was made to suit local climates and tastes, it developed into distinctively Japanese *miso*.

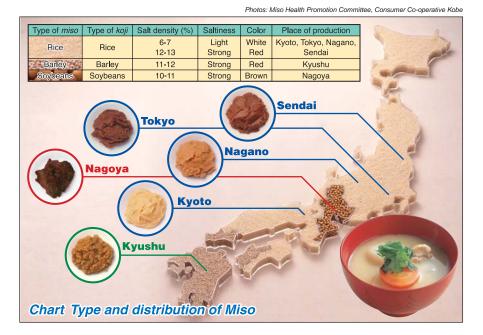
*Miso* was used primarily to make *miso* soup. The combination of cooked rice and *miso* soup for breakfast is the prototype of a Japanese meal, which has not changed over the years. For many Japanese whose staple food is rice, eating *miso*, with its many amino acids, was nutritionally salutary as rice lacks protein. Before Japan's high economic growth in the 1960s, an ordinary Japanese meal generally consisted of rice, *miso* soup, cooked vegetables and a pickled vegetable or two. Today, many Japanese also eat protein dishes, including eggs and fish.

A meal consisting of cooked rice and

miso soup has its problems, however. As it has been said since the olden times that "rice is a salt-carrying vehicle," the best way to enjoy rice is to eat it with something salty. The traditional miso soup inevitably leads to excessive intake of salt. However, as a result of efforts to reduce the amount of miso used, today's miso soup is only half as salty as that of some years ago as the density of salt has been cut by almost half. Another problem is that Japan's self-sufficiency rate of soybeans, one of the principal ingredients of miso, has fallen to as low as 3%-5%. As in the case of other foods, raising its selfsufficiency is an important priority.

## How to Make *Miso* & Types of *Miso*

In order to make *miso*, first steam and pound soybeans into paste, add *koji* and salt, mix them well and let them ferment. *Koji* is made by propagating molds that break down starch. For making *miso*, a mold called *Aspergillus sojae* is used. Depending on the material



Consumer Co-operative Kobe (left), Central Union of Agricultural Co-operatives, Japan (middle left/middle right/right), Morita Co. (background photo on next page: traditional miso warehouse)

used to propagate the mold, *miso* can be classified into three types: rice, barley and soybean. The period of maturing *miso* varies widely, ranging from 10 days to three years.

If we classify *miso* according to the type of koji used, there are only three types. However, there are numerous types of *miso* because of the working of a great variety of microbes during the fermenting process and also because of the difference in the quantity of salt added and also in the period of maturing. Local climates and conditions under which miso is made also affect the final product. Many years ago, each family made its own miso. It is said that even if one used the same ingredients as one's neighbor, no two families were able to make the same *miso* because different microbes lived in different homes. As miso passed down in each family was thought to nurture the lives of family members, there was even a folk belief in numerous parts of the country that said that when *miso* goes bad, there will be a death in the family. There still remain many votive shrines where people prayed so their miso would turn out well. When *miso* was homemade, each family must have taken pride believing "our miso tastes best."

Today, people usually buy *miso* at stores. *Miso* has different names depending on the type of *koji* used, the amount of salt, color, the place of production, and so on. Roughly speaking, rice *miso* (which uses rice *koji*) accounts for 80% of total output and is used throughout the country. Barley *miso* (barley *koji*) is consumed primarily in Kyusyu in southern Japan while soybean *miso* is consumed around Nagoya, central Japan.

## Miso Soup & Other Miso Dishes

### Miso soup

*Miso* soup is a simple soup. First make *dashi* (broth) with kelp, dried bonito shavings or dried small sardines,

# **JAPAN'S FOOD CULTURE**

put in some tofu (bean curd), vegetables or other ingredients cut into small pieces and finally add miso to season it. The Japanese have eaten miso soup every morning for at least 800 years. In the 16th century, when Francisco Xavier brought Christianity to Japan, a "Japanese-Portuguese dictionary" was compiled for the study of the Japanese language by missionaries. In that dictionary, miso is defined as "a mixture of soybeans, rice and salt, which is used to season soup," suggesting that even in those days, miso was recognized as something for making miso soup. Spreading Christianity in Japan was not an easy task. Alessandro Valignano, a Jesuit inspector, thought that the impediment to spreading Christian teaching in Japan was in the diet. So, he banned meat from missionaries' diet and ordered them to eat the same food as the Japanese did. However, the unaccustomed diet of cooked rice and miso soup with leafy vegetables appears to have been almost painful to the missionaries. The smell of *miso* soup, in particular, appears to have been difficult for them. Today, however, when people travel back and forth across cultures so easily, miso is exported as a seasoning to many countries and territories, including the United States, Singapore, Taiwan, Britain and Canada.

In addition to the fact that cooking with *miso* is very simple, there appear to be two factors that have helped the Japanese eat miso soup without ever getting tired of it. One is that it can be enjoyed with a wide range of ingredients in it. Since the composition of *miso* is very complex, as sugars, amino acids, organic and inorganic acids and other substances are refined during its fermentation process, it has a very strong buffering effect. That is to say that even if acid or alkaline ingredients are put in miso soup, it does not change the soup's taste. In addition, as miso contains a substance that removes fishy smells, fish and meat having distinct smells (such as carp and pork) can be used as ingredients in addition to such usual ingredients as tofu, vegetables, taro, seaweed or shellfish.

Another factor is that it is possible to change the degree of concentration of salt in the soup according to the season. In summer, for example, a small amount of salty *miso* is used to make a "light" soup, while in winter a large amount of not-so-salty *miso* is used to make a "rich" soup. *Miso* soup offers a most effective stage for food to represent the season.

The tastiness of *miso* soup comes from its aroma. When one brings *miso* soup in a lacquered bowl up to his or her mouth, it gives its unique aroma, which is very soothing to the spirit. It is important not to boil *miso* soup because doing so will kill its aroma. The secret of making a good *miso* soup is to let it boil for only a fraction of a second after adding *miso* to it.

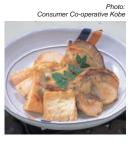
#### Other miso dishes

A tablespoonful of *miso* contains 2 grams of salt. Therefore, *miso* can be used in place of salt. It can be added to salad dressings or mayonnaise. If used for sautéing fish or meat, *miso* can enhance its taste.

In Japanese cooking, *miso* is used as a seasoning in practically every cooking technique, including broiling. Sometimes *miso* is also used in sweets as in *adzuki* bean paste and rice crackers.

#### Dengaku

Dengaku is skewered and broiled tofu with dengaku miso, sweet miso paste, on top. To prepare dengaku miso, add sug-



ar and *sake* to *miso*, and put it on slow heat, stirring constantly, until it becomes a paste. It can also be made with taro potatoes or fish.

#### *Miso-yaki* (broiled with *miso*) This is a *Consumer*

Photo: Consumer Co-operative Kobe

fish dish in which fish is covered with *miso* until it absorbs *miso*'s flavor and taste, and then broiled. This



cooking technique allows fish with watery meat, which does not have much taste, to make a savory dish.

#### Miso-ni (cooked with miso)

Fish with a very strong fishy smell, such as mackerel and sardines, are cooked with *miso*. This removes the fishy smell and makes the



Photo

and makes the dish tasty.

#### Miso-ae (dressed with miso)

Use *miso* dressing like mayonnaise to make *aemono* (Japanese salad) of vegetables, seafood, chicken, etc. Depending on the ingredi-



ents, vinegar, sesame seeds or mustard is added to *miso*.

### Miso-zuke (pickled in miso)

These pickles are made by pickling Japanese radishes, burdock and other vegetables in *miso*. Since *miso-zuke* keeps well, this was a staple side dish in olden days. Today, *miso-zuke* is not eaten very often.

#### Kashiwa-mochi (rice cake wrapped in an oak leaf) Photo: Kasyuan

Make dough with rice flour, wrap sweet *miso* paste with this dough and steam. Then wrap it in an oak leaf. Sweet



*miso* paste is made by adding white *miso* to sweet bean paste made with white *adzuki* beans. It is a special sweet for Children's Day (May 5).

Matsumoto Nakako is Professor Emeritus, Kagawa Nutrition University, where she taught from 1966 to 2006. She specializes in food acceptability and her principal themes of research have been the history of food in Japan and Japanese food preferences.