Miso is Japan’s traditional seasoning and health food. Made from fermented soybeans mashed into a thick paste, the many health benefits of miso have been well documented in scientific studies. Indeed, recent years have seen miso steadily gain a global reputation as a superbly tasty and versatile health food.
What’s MISO?

No traditional Japanese meal is complete without miso. The paste is used as a seasoning for soups and a host of traditional dishes, and has been a key ingredient in healthy diets for centuries.

1. Where does it come from?
Originating in China, miso found its way into Japan in the 7th century where it was gradually transformed into intrinsically Japanese seasoning.

2. How is it made?
Miso is made from soybeans, salt and a special mold starter.

3. What’s so good about it?
Miso is a healthy, balanced food that does wonders for the body.

4. And the taste?
Superb! Miso is an all-round seasoning that adds flavor to any type of dish.

Miso is pronounced [mee-soh].
Miso through the ages

The method for making miso is believed to have originated from the application of a fermented spice made from ground fish, meat and salt, and a type of fermented soybeans and millet that were brought to Japan from China or the Korean Peninsula in the 7th century.

Over the following centuries, the methods for making miso were refined and enhanced, creating a broad spectrum of styles and tastes, a process which still continues today.

The Heian period
8th–12th century
Only for society’s elite

During the Heian period, miso was a delicacy eaten only by the nobility and monks; it was strictly off limits to the commoner. It was also given as a gift or provided as wages for society’s elite. Rather than used as a seasoning as is common today, during this period miso was spread directly on food or eaten straight.

The Kamakura and Muromachi periods
12th–16th century
A samurai staple

Soup made from mashed miso soybeans became a staple for the Kamakura samurai during this era. Later, miso soup found its way into the diets of the common people as farmers began making their own homemade miso.

The Warring States period
15th–16th century
The ingredient to victory

During these hundred years of civil war, the calories in rice and the nutrients in miso played an important role in securing victory on the battlefield. As a result, the benefits of the precious paste came to be held in even greater esteem and efforts were made to improve the fermenting process.

The Edo period
17th–19th century
The thrifty delicacy

The importance of miso increased even more during this period, especially after the shogunate issued a “thrifty ordinance” urging samurai and townsfolk alike to embrace frugal lifestyles and eating habits. As a wealthy merchant class also began to emerge at this time, however, demand for high-grade miso also rose, spurring development of increasingly sophisticated recipes and products. The dual trends towards frugality and luxury further boosted demand for the product, and miso shops in the big cities of Edo (former name of Tokyo) and Kyoto enjoyed a brisk trade.

Today

Exports of miso are increasing every year as its health benefits are being discovered by an ever-growing global audience.

In 2006, the export market shares were North America: 47%, Asia: 31%, Europe: 15%, and the remainder going to Oceania, the Middle East, Latin America and Africa.
Types of Miso

Miso's fermentation and aging process involves a multitude of factors, the slightest variation of which can result in vastly different tastes, colors and textures. This is reflected in the more than 1,300 types of miso that can be found throughout Japan, each with its own distinct flavor.

Classifying different types of miso

<table>
<thead>
<tr>
<th>by malt type</th>
<th>by taste</th>
<th>by color</th>
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</thead>
<tbody>
<tr>
<td>Kome Miso</td>
<td>Sweet</td>
<td>White</td>
</tr>
<tr>
<td>Semi sweet</td>
<td>Light yellow</td>
<td>Red</td>
</tr>
<tr>
<td>Full-bodied</td>
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<td>Red</td>
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<tr>
<td>Mugi Miso</td>
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<td>Light yellow</td>
</tr>
<tr>
<td>Full-bodied</td>
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<td>Red</td>
</tr>
<tr>
<td>Mame Miso</td>
<td>Deep rich</td>
<td>Dark brown</td>
</tr>
</tbody>
</table>

Miso-making at a glance

How miso is made

Soybeans ➔ Boiling and steaming ➔ Pressure cooked ➔ Water, Salt ➔ Fermentation and aging ➔ Mixing ➔ Aging ➔ Miso

Soybeans ➔ Steaming ➔ Miso balls ➔ Pressing miso balls ➔ Mixing ➔ Aging ➔ Miso

Soybeans ➔ Steaming ➔ Miso balls ➔ Pressing miso balls ➔ Mixing ➔ Aging ➔ Miso
The Japanese have long known about miso’s remarkable health benefits. Recent research has found that the benefits of miso come not only from the nutrients in the soybeans, but also from other ingredients that arise from the actions of aspergillus and other molds used in the fermentation and aging processes.

Protein
Vitamin E
Saponin
Trypsin inhibitor
Isoflavones
Lecithin
Choline
Natural pigments
Dietary fiber
Vitamin B2
Vitamin B12
Prostaglandin E
Fatty acid
Minerals

Eat miso every day for better health.

Miso soup helps prevent gastric disorders

Studies indicate that those who regularly have miso soup are less susceptible to gastric cancer and suffer less from stomach disorders such as gastritis, gastric ulcers or duodenal ulcers. Miso is rich in digestive enzymes and provides protective action for the stomach lining. Studies have also shown that a daily intake of miso soup also helps to prevent breast cancer.

Lab tests have also shown that miso helps to prevent colon cancer in lab rats and liver cancer in lab mice.

Gastric cancer mortality rate by miso intake

<table>
<thead>
<tr>
<th>Frequency intake of miso soup</th>
<th>men</th>
<th>women</th>
</tr>
</thead>
<tbody>
<tr>
<td>have daily</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sometimes have</td>
<td></td>
<td></td>
</tr>
<tr>
<td>occasionally have</td>
<td></td>
<td></td>
</tr>
<tr>
<td>do not have</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Prevents high blood pressure and strokes

Miso is rich in magnesium and potassium, which can serve as an effective counter against excessive sodium intake.

Daily intake of miso may also help to slow down the aging process

Free radicals, or active oxygen, are known to cause aging. It is believed that miso’s antioxidant properties play a significant role in helping Japanese people enjoy the longest lifespan in the world.

Anti-oxidant capability of miso and tempeh (carotene discoloration method)

A fermented soybean dish popular in Indonesia.

This graph shows that miso’s main ingredient, soybeans, contains a high level of antioxidants. When the soybeans are fermented to make miso, however, the level of antioxidants far surpasses that attributable to the soybeans alone. (Hiromichi Kato, 1994)

Reduces toxins

Miso’s dietary fiber cleanses the intestines while the microbes found in miso purge harmful bacteria and toxins from the intestines.

Improves brain metabolism rate

Miso is rich in ingredients that work to counter high blood pressure and strokes, as well as improve the brain metabolism rate and reduce body toxins.

Reviewed by Osamu Mizukami, MD, PhD, Dr PH.
Cooking with Miso

Miso soup

For centuries the typical breakfast for Japanese people was rice and miso soup and waking up to the aroma of miso soup was a quintessential part of Japanese family life. Even today, for many Japanese, the word miso calls to mind images of good old-fashioned home cooking. Although in recent years it has become less common to see miso soup on the breakfast table as Japanese tastes become more Westernized, miso soup still remains an integral part of the Japanese diet.

Miso soup is surprisingly easy to cook. All you need is miso, dashi (soup stock), and a few ingredients such as tofu (bean curd), seaweed or vegetables. A typical brew of miso soup may include such ingredients as tofu, wakame (seaweed), and abura-age (fried bean curd) — but seasonal vegetables, seafood and meat also work very well. Indeed, given the versatility of miso as a base flavor, by mixing and matching ingredients, one may cook a different kind of miso soup for every day of the year.

Tofu & negi miso soup

Serves 2 to 3

- 2 cups dashi or stock
- 3 tbsp. miso
- 1/2 block tofu
- 2 negi (green onions)

1. Add 2 cups of water to a pot and bring to the boil. Add the dashi stock (Use instant dashi stock for added convenience. Follow the product instructions regarding the appropriate amount to add.)

2. Bring to a low simmer. Add the miso. Do this by putting it in a strainer and dipping it into the stock while stirring so that it dissolves easily.

3. Slice the tofu into 2/3 inch cubes and slide them into the soup, and heat slowly until it begins to simmer again (about 2 minutes). Once the tofu heats up, the soup is almost ready.

4. Add the chopped negi and simmer for about 20 seconds.

5. Serve in a small bowl.

About dashi

Dashi is an essential ingredient for making miso soup. Typical dashi is made from konbu (dried kelp) and kezuribushi (shaved bonito flakes) or niboshi (dried sardines), although the exact ingredients vary from region to region. Recently, the number of homes using simple instant dashi has been growing. Dashi can be substituted for bouillon, but in such cases, adjust the amount of miso to maintain the correct degree of saltiness.
Western-style miso soups

Miso also makes a great complement to Western-style food. For added zest, try adding a little to your everyday soup. By drinking a little each day you will soon come to realize the many health benefits of this wonderful health food.

Chicken & vegetable miso soup

This recipe suits a wide range of vegetables, so use anything you happen to have in your refrigerator. As the flavor of miso varies with each different type, adjust the amount as needed to suit your taste.

Serves 2 to 3
- 6 oz. chicken thigh, diced into 1-inch cubes
- 2 oz. carrot, diced into 1/2-inch cubes
- 2 oz. cabbage, diced into 1/2-inch cubes
- 4 mushrooms, chopped in half
- 3-1/2 oz. mixed beans
- 1/2 cup canned tomatoes
- 2-1/4 cups water
- 3-1/2 tbsps. kome miso
- 1 garlic clove, finely chopped
- Parsley, finely chopped
- Flour
- Salt and pepper

1. Salt and pepper the chicken and coat lightly with flour. Heat the salad oil in a pot and sauté the garlic.
2. Put in the chicken and fry slowly, turning regularly so that it does not burn. Mix in the carrots and mushrooms and stir. Add the tomatoes and sauté briefly.
3. Add the water and dissolve the miso, then simmer until the chicken and carrots are cooked through.
4. Add the cabbage and mixed beans, and simmer until the cabbage becomes soft.
5. Season with salt and pepper to taste. Place into bowls and sprinkle with finely chopped parsley. The soup is now ready to serve.

Miso clam chowder

Add a dash of miso for a richer, tastier clam chowder. White or sweet miso also goes well with cream or milk.

Serves 2 to 3
- 6 oz. clams, shelled
- 2 oz. onions, diced into 1/2 inch cubes
- 2 oz. celery, diced into 1/2 inch cubes
- 2 oz. potatoes, diced into 1/2 inch cubes
- 2 oz. bacon, diced into 1/2 inch cubes
- 1 oz. canned corn
- 1 garlic clove, minced
- 5 tbsps. white wine
- 1-1/4 cups water
- 1 cup cream
- 4 tbsps. white miso
- 1-1/4 tbsps. flour
- Salt and pepper

1. Heat salad oil in a pot and sauté the garlic. Mix in bacon, onions and celery and sauté until wilted. Add the clams and flour and briefly stir.
2. Pour in the white wine and water. Bring to a boil and let simmer. Skim off the foam.
3. Add the potatoes and stir in the cream and miso and simmer for a few minutes.
4. Season with salt and pepper to taste.
Miso-based dips and spreads

Miso makes an outstanding complement to other seasonings and sauces. The natural preservatives in miso mean that miso-based dips or spreads will keep for a long time in your refrigerator. Miso also lends itself well to blending with other seasonings, so you can come up with our own original recipes.

The number of dishes you can make with miso is limited only by your imagination. Miso adds zest to your favorite dishes and opens a whole new world of cooking possibilities.

### Miso meat sauce
- 1-1/3 oz. ground pork
- 3-1/2 oz. onions, finely chopped
- 1 tbsp garlic, finely chopped
  - a. 5 tbsp mame miso
  - b. 9 tbsp kome miso
  - c. 1 tbsp soy sauce
  - d. 10 tbsp water
  - e. 2 tbsp sugar
- Black pepper (a pinch)

1. Place ingredients a. to e. in a bowl and mix into a paste. Heat the oil in a saucepan and sauté the garlic.
2. Mix in the onions and sauté for a few seconds, then add the pork and continue to stir.
3. Pour in the miso sauce and slowly boil down until it becomes a thick sauce.
4. Sprinkle with black pepper.

### Salad with miso mayonnaise
1. Obtain some scallops or other seafood and some of your favorite salad vegetables.
2. Toss a pinch of salt and pepper to the seafood and sauté on both sides in oil.
3. Prepare the salad vegetables as necessary, arrange on a plate and top with the seafood.
4. Pour the miso mayonnaise over the salad just before serving.

### Toast with miso butter
1. Warm a slice of bread in an oven-toaster or toaster range.
2. Take out the bread, spread evenly with a thin layer of miso butter and retoast to your liking. Take out the toast and spread on another layer of miso butter.
3. Make a slight well in the center of the toast and top with a poached or fried egg.

### Pasta with miso meat sauce
Miso meat sauce goes well with any sort of pasta. When making a pasta dish with the sauce poured on top, first lightly toss the cooked pasta in a pot with melted butter or oil.

### Salad with miso mayonnaise
- 6 tbsp kome miso
- 4-1/2 tbsp mayonnaise

1. Put all ingredients in a bowl and mix well. Modify the ingredients to suit the type of miso you prefer.

### Miso honey
- 3 tbsp mame miso
- 2 tbsp honey

### Miso butter
- 2 tbsp kome miso
- 5 oz butter

### Miso mayonnaise
- 6 tbsp kome miso
- 4-1/2 tbsp mayonnaise

**Potatoes with miso mayonnaise**
Miso mayonnaise goes well with any type of potato dish—boiled, fried or baked. For an extra zing in fried or sautéed dishes, try adding a little vinegar.
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Types of Miso
The wonders of Miso
Cooking with Miso

Kome miso

Mugi miso

Mame miso

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