

Soy Sauce

Japanese Seasoning Loved Globally

By MATSUMOTO Nakako

Photos:
Consumer Co-operative Kobe (all dishes),
Soy Sauce Information Center (soy sauce),
Kadocho (soy sauce storehouse)

Characteristics of Soy Sauce

In China, vegetables, legumes and seafood used to be salted and fermented to make paste (called *hishio* in Japanese) even before Christ. Liquid pressed out of *hishio* is said to be the origin of soy sauce. A variety made from soybeans was brought to Japan, which later developed into the unique Japanese soy sauce thanks to the mild climate and good water of this archipelago. Because fresh fish and vegetables are always available in Japan, the Japanese prefer lightly seasoned dishes so as to savor the taste of ingredients themselves. Soy sauce can be used in any of these dishes. Moreover, soy sauce is the best seasoning for enjoying cooked rice, which is the staple food of the Japanese.

Soy sauce is a seasoning in which the three key elements of taste, color and flavor are exquisitely balanced. Although it is a salty seasoning, it has a very complex taste because it contains at the same time a little sweetness, acidity, *umami* (a subtle, tasty flavor coming from a combination of numerous amino acids) and even a hint of bitterness. Its unique aroma whets the appetite. It is even said the reason that the use of spices did not develop in Japan unlike in the West is because soy sauce was always there. The Japanese have been able to eat raw fish as *sashimi* (sliced raw fish) and *sushi* for many years thanks to soy sauce. This is a good proof that the aroma of soy sauce acts as a spice that masks the fishy smell.

Soy sauce is clear, reddish brown. Its beautiful color is compared to purple, which is said to be a noble color, and soy sauce itself is sometimes called "*murasaki*" (purple). When fish or meat is roasted or grilled, basted with soy sauce, it acquires a beautiful glaze. Nevertheless, soy sauce is a seasoning that knows its place, meaning that it does not assert itself. Instead, it makes ingredients taste their best. Therefore, there is a saying: "While Western sauce is paint, soy sauce is varnish." While

Western sauce covers up ingredients and gives the main taste and flavor to a dish, soy sauce, like varnish, allows the ingredients to be savored at their best.

Production Methods & Types of Soy Sauce

Soy sauce is made by mixing steamed soybeans and roasted wheat, and adding soy sauce *koji* mold (*Aspergillus oryzae* and *sojiae*) to this mixture, which is then allowed to cultivate for 44 hours. This *koji* is mixed with salt water, and allowed to ferment for six months. The liquid pressed out of the mixture after fermentation is soy sauce. *Koji*, which is often called a treasure box of enzymes, is a type of mold that produces numerous enzymes. These enzymes break down the ingredients to produce constituent elements of taste and flavor. The elements include 15 varieties of sugar and acids each, 20 varieties of amino acids and as many as 300 types of aroma. Using different types of *koji* is the reason that tastes and flavors of soy sauce made by different producers vary and why Japanese soy sauce tastes and smells differently from Chinese or other foreign varieties of soy sauce. Salt content is 14%, but soy sauce tastes milder and less salty than the figure suggests because the acids and *umami* elements moderate the saltiness.

Soy sauce mainly comes in two varieties: regular and light-color. In Japan, it is called dark or light because of its color. The more common variety is regular soy sauce. Light-color soy sauce is made by adding more salt to the ingredients to curb fermentation and is used when one wants to emphasize the colors of the ingredients or soup. It is often used in Kyoto cuisine, which pays special attention to the beauty of dishes. In recent years, as patients with hypertension or cardiac conditions who have to control the intake of salt have increased, reduced-salt soy sauce in which the salt content is only half of that of the ordinary type of soy sauce has come to be produced.



Regular soy sauce



Light-color soy sauce

Japanese Cuisine = Taste of Soy Sauce

Japan, a Buddhist nation, used to abhor eating animal meat. However, food culture of the West, which brought Christianity to Japan, lessened the Japanese abhorrence for meat. With the dawn of the Meiji era (1868-1912), the Japanese rapidly adopted Western civilization, and eating meat was one aspect of it. Not to be left behind by the wave of the introduction of Western civilization, the Japanese seasoned beef with soy sauce to make "*gyu-nabe*" (beef pot), which later developed into *sukiyaki* (see



A "*gyu-nabe*" (beef pot) restaurant scene contained in the book "*Agura-nabe*" published in the beginning of the Meiji era (possessed by National Diet Library)

the right photo above). People tend to be very conservative in their dietary habits and preferences, and are reluctant to change them. By seasoning meat with soy sauce, the Japanese gradually got used to eating meat. Today, the Japanese diet has become very westernized, with Japanese eating more dairy and meat products. For example, the

A time-honored soy sauce brewer's storehouse: The 150-year-old facility is still in use as the key to the taste is the yeast living inside its walls and floors.

consumption of traditional salty pickles has declined dramatically as people eat more and more vegetables in salads. However, the mainstream salad-dressing is one made with soy sauce. When Japanese-style steaks or hamburger steaks are served, they are always seasoned by soy sauce. The use of soy sauce easily and conveniently transforms foreign cuisine into Japanese dishes.



"Japanese-style hamburger steaks"

Soy Sauce Spreading Globally

In Southeast Asia, China, Japan and other areas where the staple food is rice, unique indigenous varieties of soy sauce suited to the local climate are being produced and used as a seasoning. Today, the use of soy sauce is not confined to rice-eating countries and regions. Soy sauce is being used for dishes in countries where there was no soy sauce culture and it has become a universal, basic seasoning.

Records show that Japanese soy sauce was exported to the Netherlands in the 17th century. Soy sauce was reportedly brought then to France, where it was used as a hidden flavor-enhancer for the cuisine for King Louis XIV. The use of soy sauce began to spread rapidly after World War II, first in the United States. During the postwar period, approximately three million American servicemen and civilians were stationed in Japan. They acquired the taste for soy sauce from such

Japanese food as *tempura* and *sukiyaki*, which served as a major engine for the rapid spread of soy sauce in the United States. Soy sauce first won popularity in that country when it was used to glaze chicken to make *teriyaki*. *Teriyaki* burgers made their debut in the United



"Teriyaki chicken"

States rather than in Japan.

More recently, health-consciousness has brought a Japanese-food boom, which spread the use of soy sauce around the world. Major soy sauce makers have plants in the United States, Singapore, Taiwan, Europe, China, etc. for local production. Today, the use of

Chinese-taste soy sauce is widespread, but before long Japanese soy sauce will become equally popular.

Dishes Using Soy Sauce

The Japanese seldom use only salt to give a salty taste to a dish. Soy sauce is used for almost all dishes. Raw food, such as *sashimi*, is dipped straight into soy sauce, while soups and boiled, broiled, grilled or pan-fried foods are seasoned with soy sauce. A teaspoonful (5 cc) of soy sauce contains 1 gram of salt. In a sautéed dish or a gratin, going easy on butter or cheese and replacing salt with soy sauce give depth to their taste and flavor because of the amino acids and other substances contained in soy sauce. The result is a dish that is not only tastier but also has fewer calories.

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Examples of soy sauce used together with other seasonings

<Add soy sauce for extra flavor in ordinary cooking.>

