



The three most common jang in Korean cooking are all made with meju. Jang means sauce or soybean based sauce.

메주 Meju is the soul of Korean Cuisine

The foundational ingredient for making all jang



What is Meju? Meju is a Wild Ferment. No mold starters are used.
Boiled soybeans are mashed and shaped into blocks for fermentation.



Three stages of meju fermentation

First stage:

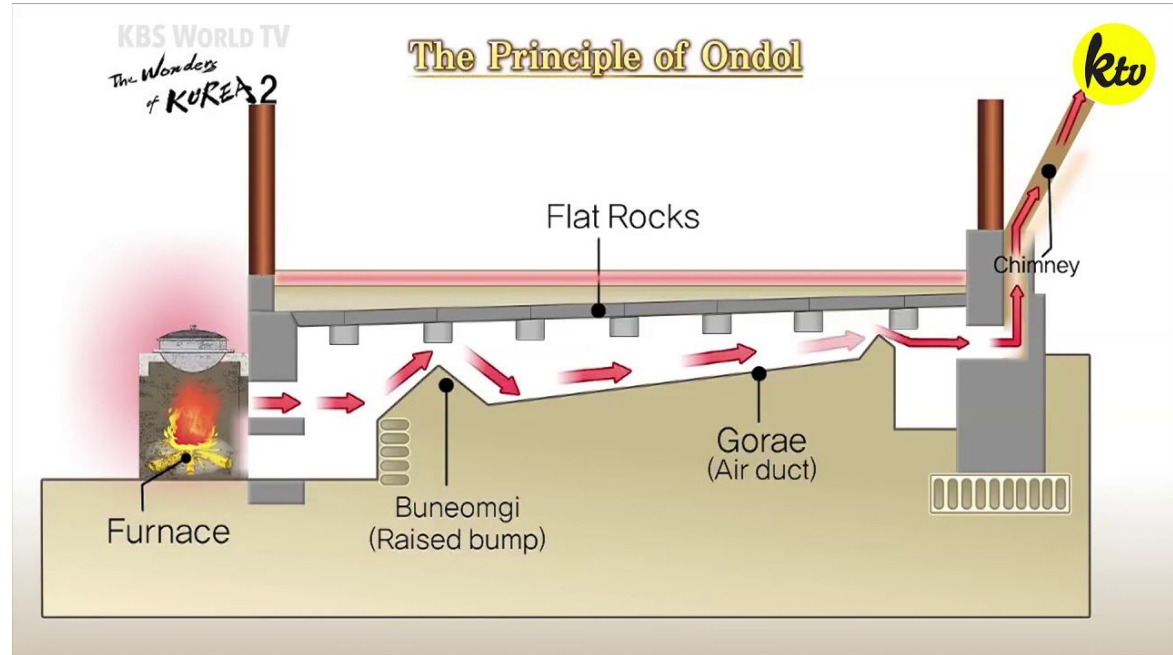
Drying the surface of the meju blocks. My method for the first stage is to dry the meju in a dehydrator set to 90F-95F for 3- 3 1/2 days.

The exterior starts to become parched, which causes cracks to develop. The interior should be moist and have mold growth.

The traditional method is to start the initial drying on an ondol floor. The traditional method for the first stage can take up to 30 days.



Traditionally, the first stage of drying meju was done indoors in a heated room. Koreans heat rooms by heating the floors (ondol).. We have modern versions of ondol floors that use electricity now.



Second Stage of Meju Fermentation

1st stage: dry heat, exposed to air, air circulation

2nd stage: humid heat. If the ondol floor method is used, the meju blocks are covered with straw or hay and covered with a blanket. The straw or hay helps attract good bacteria. The blanket reduces air circulation. This creates a humid heat environment. The meju blocks are left, undisturbed, for 15 to 30 days.



During the 2nd stage, white mold starts to grow on the exterior of the meju blocks. The interior starts to develop milk chocolate, coffee, espresso, and dark chocolate colored mold.

My alternative method to the ondol process, at this stage, is to utilize a cardboard box and an electric blanket. Place the meju in a cardboard box, top with hay, cover with tea towels, close the box, place an electric blanket underneath the box, set the electric blanket to level 2 or 3 warmth, and place a blanket on top of the box.

Regardless of the heat source for this stage, let the meju ferment for 15-30 days or until the meju blocks have a sufficient amount of white mold on the outside and dark mold on the inside.

Third Stage of Meju Fermentation

1st stage: dry heat, exposed to air, air circulation

2nd stage: humid heat.

3rd stage: wind drying. The meju blocks are dried outdoors or in a semi outdoor space like a patio for two to three months.



After drying for 2-3 months, the meju should look like this. The inside will be tacky or sticky to the touch and a bit soft. This is meju for doenjang and soy sauce. The brown and black mold is the flavor of Korean soy sauce.

Doenjang 된장 and ganjang 간장

After the third stage of fermentation is completed, the meju blocks are gently scrubbed on the outside and quickly rinsed under running water. Then transferred to a colander to drain excess moisture. Traditionally, jang is fermented in clay pots. The meju blocks are placed inside a clay pot, then salted water is poured over. The salted water is 20% salt or a ratio of one part salt to four parts water. The preferred salt is sun dried or solar dried Korean sea salt 천일염 with the bitterns removed. Bittern is a very bitter-tasting solution that remains after evaporation and crystallization of sodium chloride (salt) from seawater. It contains in concentrated form the calcium and magnesium chlorides and sulfates, bromides, iodides, and other chemicals originally present in the seawater. Bitterns are removed through drainage. A small slit is cut on a bag of sea salt for the bitterns to drain out. Some Koreans are very specific about the amount of the time the salt has been stored to have the bitterns removed. Someonly use sea salt that has been drained of bitterns for 3 or 5 years.



Jujubes, dried whole chiles, and pieces of burning charcoal are placed on top. Jujubes have sugar for good bacteria to feed on. Charcoal and chiles have antimicrobial properties.

Separating doenjang and ganjang



After 2-3 months of fermentation, the salt water transforms into shades of amber or coffee, signifying the beginning of soy sauce. The liquid is strained from the clay pot. The liquid is aged until it becomes ganjang. The meju that is left behind continues to ferment until it's ready to eat as doenjang.

The doenjang is ready to eat in 6 months to a year. However, many older Koreans wait 2-5 years before eating it.

Traditional nomenclature:

Cheongjang 청장 is ganjang that is less than 1-2 years old. It's called ganjang when it has aged for 1-4 years. Jinjang 진장 means "dark" soy sauce, that has been aged for more than four years.

Ganjang means soy sauce. It also has the broader meaning of "seasoning sauce." Gan means "seasoning".

간을 어떻게 잡아요? How do you season it?
Or rather, what do you season it with? Salt?
Soy sauce? Fish sauce?

The Funk Goes Far

Doenjang and ganjang are immortal, edible foods forever. The oldest batch of ganjang in South Korea is over 360 years old. Ki Soon Do of Kisoondo jang company is the bearer of this very old soy sauce.

You can make more doenjang from old doenjang by mixing in boiled soybeans.



Doenjang and ganjang are the two original Korean jang. Makjang 막장 and gochujang 고추장 were developed later. Makjang preceded gochujang.



To make makjang, meju blocks that have completed all three stages of drying and fermentation are cracked open with a mallet or hammer and dried for an additional week or two. This is taken to a local mill to be crushed into uneven pea sized pieces. This is called 막장용 메주가루, milled meju for the purpose of making makjang.

Makjang ferments more quickly than doenjang

- 1) Doenjang variant
- 2) Without form
- 3) Farfetched, genre bending K-Drama

Makjang typically includes meju, cooked barley or rice, gochugaru 고춧가루 or gochu seeds 고추씨, sea salt, a small amount of sweetener like rice syrup, honey, or malted barley syrup

Gangwon-do 강원도 is famous for making barley makjang

Barley tends to spoil more easily than rice when making jang

Gangwon-do has a colder climate than the rest of South Korea

But makjang is made in other provinces

In Jeolla-do 전라도, where the climate is warmer, it's made with rice



Jang is fermented in Hangari 항아리 (jar) or Onggi 옹기 (pottery)

Korean clay pots are porous. They breathe. Clay pots are prepared for initial use by pouring water into them, all the way to the lip or top. This is left to soak for a day. The water is drained. The clay pot is wiped dry. A burning lump of wood charcoal is placed inside and left to smoke. Smoke has anti-microbial effects. Alternatively, a clay pot can be placed upside down over a fire for sterilization.



Other common types of jang

청국장 cheonggukjang. This is made with boiled whole soybeans that are fermented using a damp and hot environment. This is used like doenjang for soups or stews. However, cheonggukjang spoils rapidly, if it's not dehydrated. There is a dried version. This has an indefinite shelf life. Cheonggukjang is called 담북장 dambukjang in Chungcheong-do. Variations of jeub jang 죽장 are also called dambukjang in Chungcheong-do.



Tojang is doenjang without the ganjang removed. It's made with less salted water. It has a stronger fermented soybean flavor than doenjang.



Two main types of soy sauce used in Korean foods

Korean, Joseon 조선간장 or Guk Ganjang 국간장 ingredients: soybeans, water, and salt.

Most store bought Korean ganjang is ultra pasteurized and doesn't age. Traditionally made Korean soy sauce continues to age. The initial sharp saltiness mellows considerably in about one to two years. Over 300 aroma compounds have been discovered in traditionally made Korean soy sauce. For example alcoholic, malty, caramel-like, smoky, floral, and fruity aromas and flavors.

Guk ganjang means soup soy sauce

This is soy sauce that's made in conjunction with doenjang

It's also called Joseon ganjang

Korean "Naturally Brewed Soy Sauce" is basically Japanese soy sauce.

Ingredients: soybeans, wheat, water, and salt

This type of soy sauce is labeled Yangjo Ganjang 양조간장 by Korean corporations

It's also called 왜간장 or 일본 간장

Both mean "Japanese soy sauce"

Most mass produced brands of naturally brewed soy sauce contain some additives.

Flavored doenjang and ganjang

어육장 Meat Seafood doenjang for the Royal Court and Yangban

Dried and raw beef, poultry, seafood, and fish are added to the doenjang making process

This is fermented for 1 to 2 years before the soy sauce is separated

The results are flavored doenjang and flavored gangjang

어장 Seafood doenjang

Small crabs, abalone, dried mussels, dried fish, fresh fish, and kelp are added during the doenjang making process.

This is fermented for 3 months to a year before the soy sauce is drained

Meju is made into different shapes and sizes for different applications

Donut shaped meju is made for quick doenjang, makjang, or gochujang. These are much smaller than the meju blocks. They ferment and mold in about 2-3 weeks, compared to the 3 or 4 months it takes for meju blocks to fully mature. The flavor and aroma of donut meju isn't as deep and pungent as larger blocks of meju. In Korea, any kind of homemade meju can be taken to a local food mill 방앗간 for grinding to make meju powder for makjang or gochujang. 막장용 메주 or 고추장용 메주.



Korean food scholars believe that Koreans
once made 120 different types of fermented jang
Every household had their own variation on making jang

.The flavor of a household's cooking is their jang

Many factors affect flavor differences

- 1) Variations in ratios of ingredients
- 2) Additional ingredients such as different grains (barley, wheat, or rice) or legumes (red beans mixed with wheat or black soybeans)
- 3) Additional flavoring ingredients added to doenjang such as seafood, poultry, meat, kelp, dried mushrooms (this would have been rich people or the royal court)
- 4) Sweet pickled fruit added to gochujang
- 5) Environmental factors, different types of mold
- 6) Regional climate differences

Examples of climate and geographic differences that create regional differences in food

Gangwon-do has a cooler climate than the rest of South Korea

So less salt is used for fermented foods. Gangwon-do used to be rice

poor. Barley and potatoes were often substituted for rice. Barley

was once considered food for poor people. Now it's considered a

health food. Gangwon-do style gochujang often uses barley.

Jeolla-do has a warmer climate.

So more salt is needed to prevent fermented foods

from spoiling. Jeolla-do is also the most

agriculturally rich province in Korea with diverse access to

Seafood and fish. Jeolla-do is Korea's rice bowl. Jeolla-do style uses

sweet rice for gochujang, which has become the standard for gochujang.

In the not too distant past, white rice was used like cash. Abundance of seasoning.

Jeonju, Jeolla-do is the only Korean city that is a UNESCO Gastronomic City



Jeolla-do jeub jang 즺장

전남 강진 South Jeolla-do Gangjin-gun

This is a relatively quickly made jang made in the fall

It falls in the spectrum of gochujang and doenjang

Chili plant leaves and stems are most commonly added

But just about any vegetable can go into jeub jang

This is fermented for a few days

Spooned onto rice with a drizzle of sesame oil

It is meant to be consumed within months

It's not meant to be fermented for long periods



Chungcheong-do 담북장 dambukjang

Gochujang

Ingredients:

고추가루 Korean dried red chili powder 500 grams

엿기름 Malted barley 500 grams

찹쌀 Sweet rice or glutinous rice 500 grams

메주가루 Meju powder (make sure the label says “fermented meju”) 250 grams

천일염 Korean solar sea salt with the bitterns removed 250 grams

Records of red pepper paste first appear in the literature titled Forest Economy, published in 1715, and Jeungbo Forest Economy, with content added in 1760. It's described as a food that combines the savory taste of beans, the sweetness of glutinous rice, the spiciness of red pepper powder and the salty taste of soybean paste.

Chili peppers were not widely distributed in Korea until the late 1800s or early 1900s

Gochujang is often flavored with other ingredients before eating such as maesil (sour plum) pickles or syrup



Malted Barley Syrup for Gochujang

This isn't a seminar on how to malt barley or how barley is malted. Malted barley is a very common Korean market ingredient. It comes in coarse ground and finely ground grades. Coarsely ground malted barley is used to make gochujang. The malted barley is soaked in water for a few hours or overnight. The liquid is squeezed out and boiled until it becomes thick and syrupy. Malted barley has a mildly sweet flavor. The remaining ingredients are mixed with cooled malted barley syrup. Voila, gochujang. Gochujang is aged for at least 6-12 months before eating. Adding rice syrup and plum syrup to gochujang is common. After 5 years of aging, gochujang is considered medicine 약.



Ssamjang means “sauce for wrapped food”



The most common recipe for ssamjang is a mixture of ready to eat doenjang and gochujang. But it is far from the only recipe. Ssamjang can also be made with makjang. It's also made with fermented seafood.

If you have doenjang and gochujang, there's no need to buy ssamjang. If your Korean reading abilities are limited and you want to buy premium jang at a Korean market, it's best to avoid the generic green, yellow/beige, and red tubs that are mass produced jang. Look for unique packaging. These are generally made by smaller companies. They're often true ferments. At the very least, they have fewer additives.