Good Taste and Healthy Eating

Kimchi Making for Dummies

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Kimchi Making for Dummies including My Kids
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Introduction
Jae Park (surimiman) who they say is a surimi expert, but he does not know much about Kimchi. Fortunately, he learned Kimchi making from his wife Sony. With Sony’s direction, surimiman writes how to make Kimchi for dummies, including his kids (Duke and Caroline) and former students for their healthy living. Kimchi is the #1 Korean side dish and Koreans eat it with every meal. It is napa cabbage (hereafter cabbage) fermented with naturally occurring \textit{Lactobacilli} (commonly used in yogurt) after being mixed with garlic, red pepper, ginger, and other green vegetables. Therefore like other fermented foods (i.e., cheese), once you try Kimchi, it is there in your body and you are hooked. My proud, former student Dr. Zach Reed, who is currently working at Oscar Mayer, is one of those who now have an insatiable craving for Kimchi.

According to the history of Kimchi, Koreans started to eat salted vegetables after fermentation as early as 2000 years ago. Modern Kimchi started when red pepper was introduced to cucumber Kimchi in 1715. Napa cabbage (Baechoo: 배추) Kimchi, in modern times, is the most popular, however, history indicates that radish (Moowoo: 무우), cucumber, or eggplant Kimchi was developed before cabbage Kimchi. Major ingredients in Kimchi such as cabbage, garlic, and ginger are known as anticarcinogenic ingredients. This makes Kimchi a health-friendly food.

There are numerous Kimchi which can be made using any vegetables. This article will feature several photographs representing Korean Kimchi, but it will cover the preparation of the two most common Kimchi: Baechoo (cabbage) Kimchi and Moowoo (radish) Kimchi.

1) Kimchi Photographs

- Baechoo Kimchi without red pepper
- Moowoo Kimchi without red pepper
White Kimchi (Baek Kimchi) is commonly made with cabbage, but without red pepper.

Baechoo Kimchi 1  Baechoo Kimchi 2

Baechoo Kimchi 3

Gochoo (Green pepper) Kimchi  Oyee Kimchi (Cucumber) Kimchi
Got (Mustard) Kimchi
Yolmoo (Radish leaf) Kimchi
Moowoo (Radish) Kimchi 1
Chonggak (Bachelor) - (radish with leaf) Kimchi
Moowoo Kimchi 2
Mool Kimchi (Soup Kimchi)
Dongchimi (Moowoo Mool Kimchi)
Surimiman selected the following four Youtube demonstrations in Kimchi preparation. These will certainly help you understand the process much easier.

(a) English version: http://www.youtube.com/watch?v=oK4843GdI0s
(b) Simplest Kimchi preparation video: http://www.youtube.com/watch?v=OcSl2i7TU8s
(c) http://www.youtube.com/watch?v=82cbcSQl6Y
(d) http://www.youtube.com/watch?v=MlOCk8vBRbQ

2) **Baechoo Kimchi (배추 김치)**

![Baechoo Kimchi](image)

**Ingredients:** 6 napa cabbage, 2 radish (to be shredded), 1-2 bundles of green onions, 1 bundle of water dropwort, 1-2 onion, 1 pear, ground garlic, ginger, anchovy fish sauce, small shrimp, waxy rice flour, sea salt (large granules), hot pepper, 1 bundle of mustard.

[Surimiman says, “Zach, remember what I have said to you. Cooking is not a science. Therefore your culinary art must be added.”] All ingredients should be obtainable from any Korean grocery store. Water dropwort can be replaced by parsley or removed. Small shrimp can be replaced by thin fish fillets (1-2 square inches) or Oregon pink shrimp. Shrimp and fish are used to enhance Lactobacilli’s fermentation. If you do not find waxy rice flour, regular rice flour would be ok. This will have to be mixed (start with 2-3 table spoons in 2-3 cups of water. Again it is not a science) in cold water and heat it till a soupy viscosity is obtained. Then chill it to room temperature before use. Ginger (2 finger size) must be peeled and ground or diced. Onion must be shredded. Mustard, if you have, can be chopped in 1-2 inches long. **These seasoning ingredients can be adjusted per your personal preference as you repeat this Kimchi making process.**

a) Cleaning cabbage and salting

When you purchase cabbage, it is recommended to taste the cabbage leaf. Pick a tiny portion and chew it. Cabbage with good taste always makes superior Kimchi.

Napa cabbage must be split into halves and another cut on the root as shown in the photo below. Sea salt is recommended for salting cabbage. [Surimiman says, “Ancient Koreans knew the benefit of sea salt because it contains various minerals and natural sodium nitrite controlling microorganisms.”] Salting is the process to remove some of the moisture in the
cabbage while it also softens the cabbage’s cellulose structure. Good salting will provide good texture.

Sea salt in large granules is recommended, but surimiman says you can also use table salt.

Mix sea salt in cold water. Now you ask me how much? Remember what I said earlier. But I will tell you a secret. **Mix salt until it tastes really salty.** Sea water contains about 3.3% salt. Now you ask me how can you measure 3.3% salt in salt water. Are we talking science? Nope!

When you mix two table spoons (40 g) salt in 1 cup of water (240 g) and place a fresh egg, you will see a floating egg as shown in the left photo. Surimiman says it is about 14% salt concentration. **Since I told you it is more art than science, just mix salt appropriately in 5-10 gallon of cold water until you see a floating egg.** Make sure salt is completely dissolved when you test it with the egg.

Soak cabbages in this prepared salty water. Rotate cabbages from bottom to top and repeat the rotation 3 - 4 times for 4 - 6 hours or until softened texture appears as shown below. However, if cabbage is soaked too long, you will have Kimchi with less juicy texture. If cabbage is soaked too short, you will have Kimchi with too crispy and hard texture.

Once salting is completed, rinse salted cabbage with fresh water. Rinsed cabbage is then placed on any rack to drain excess water. The left photo denotes well salted, rinsed, and drained cabbages. These are ready to be mixed with Kimchi ingredients.
Taste the piece of cabbage. It cannot be too salty or too mild.

b) Preparation of filler ingredients
While salting cabbages for a few hours, prepare all remaining ingredients. First make radish shreds (below left) and add all other ingredients (below right).

When you mix all ingredients prepared above, you will see the pasty looking filler (below left).

c) Making Kimchi
Insert the Kimchi filler paste between cabbage leaves evenly (above right). Watch the video for proper demonstration. Please add a little more filler in the bottom side because the leaves are thick. Once filling is done, they can be placed in a bottle, jar, or any container. Fill up the container to only 80% capacity to allow room for the juice produced during fermentation. You can leave the container at room temperature for 18 - 24 hours for good fermentation. Then
place it in a refrigerator. You have to remember Kimchi tastes good, but smells stinky. Therefore you have to use a container that can be tightly sealed. Surimiman keeps his Kimchi bottles in a refrigerator kept in his garage. Koreans nowadays have a Kimchi refrigerator (specially designed for Kimchi fermentation and its longer storage). It can be purchased at Best Buy at around $800-$1500. Surimiman promised Sony to buy one in 2012. He will share the effectiveness when the second edition is released.

3) **Moowoo Kimchi** (무우 김치)

Moowoo (Radish) Kimchi can be made in a similar way. You need to taste a piece of radish or ask the store clerk to see if it has good taste. When you have radish with good taste, you will have Kimchi with good taste. Please note some radish can give a bitter taste which you should avoid for use in Kimchi. Crispy texture and mild taste (somewhat sweet aftertaste) will guarantee good radish Kimchi.

a) Cutting and salting

Radish can be cut into various shapes: strips or cubes per your preference. For salting, it is rather simple. Sprinkle sea salt over the cubes and make sure salting is done for all cubes. In 20-30 min, rinse the radish cubes using cold water and drain (below left).

b) Mixing ingredients

All ingredients used in Baechoo Kimchi, excluding radish shreds, can be added (above right). You may wonder how much ingredients can be used for how many radishes. Surimiman says again "Culinary is not a science. Use your own instinct".
Once all ingredients are mixed (below left), you may sprinkle some sesame seeds (below right) and complete radish Kimchi making. Fill the container 90% full. Note that radish does not release much juice when fermented.

Keep radish Kimchi at room temperature for 24-36 hrs for good fermentation. Then place it in a refrigerator.

Surimiman wants you to enjoy Kimchi for “Good Taste and Healthy Living”. Major ingredients such as cabbage and garlic as well as Kimchi’s natural microorganism *Lactobacilli* have demonstrated their strong anticarcinogenic properties. Dipeptides from fish sauce delivers good taste and antioxidative properties to Kimchi as well.

Surimiman hopes to revise this article with your inputs in the future. The second edition will cover Kimchi stews and Kimchi pancakes. Feel free to share your opinions with me using surimiman1@yahoo.com.

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