Kimchi Recipe

Vince Pitelka, 2021



This recipe makes approximately two gallons of kimchi. I packed it in half-gallon jars.

Ingredients

- 12 lbs. Napa cabbage approximately six medium heads
- 4 lbs. Korean daikon radish
- 1 ½ lbs. carrots
- 3 cups sea salt or kosher salt (NOT IODIZED)
- Clean tap water
- 4 large or eight small bunches of scallions
- 2 small potatoes
- 3 tbsp. chopped ginger
- 2 large heads of garlic or three smaller ones (heads of garlic, not single cloves)
- 1 cup Korean red chili pepper flakes
- 10 raw shrimp, peeled and deveined
- 1 cup fish sauce
- ½ cup light brown sugar

Prepare the Cabbage, Daikon Radish, and Carrots

- Put a gallon of water in a large saucepan, add the 3# of salt, heat over a burner, and stir to dissolve the salt. Allow the brine to cool.
- Cut the cabbage heads into quarters lengthwise, cut off and discard the hard stem part in the bottom center, and cross-cut the quarters into 1" slices.

- Peel the daikon radish, cut lengthwise into quarters, and then cross-cut into 1/8" slices. The slicing blade on a food-processor makes short work of this.
- Set aside one pound of the daikon radish to be used in the paste.
- Peel the carrots, cut the thicker portions in half lengthwise, and then cross-cut into 1/8" slices. Again, use the food-processor.
- Place all the sliced cabbage in a food-grade 5-gallon plastic bucket (available for \$5 at Lowe's).
- Add cool water to immerse the cabbage.
- Agitate with your hands to wash the cabbage.
- Drain the water from the cabbage. Place a plate over the cabbage, tilt the bucket, and pour through a colander to catch any cabbage that escapes the bucket.
- Add the sliced daikon radish (except for one pound) and sliced carrots to the bucket.
- Add the cooled salt brine to the bucket of cabbage mix.
- Add clean tap water to completely immerse the cabbage mix. Agitate the mix with your
 hands or a long spoon to ensure that the added tap water mixes with the salt brine to give an
 even brine throughout.
- Place a plate atop the cabbage mix and weight it down with a half-gallon bottle of water or other convenient sanitary weight. This will hold the cabbage mix beneath the level of the brine, but don't worry if some pieces float up to the surface. Just leave them there.
- Allow the cabbage mix to soak in the salt brine for 6-12 hours. A longer soak equals softer cabbage. I soaked overnight for 9 hours and liked the combination of wilted and crunchy.
- After the desired soaking time, drain salt brine from the bucket of cabbage as described above.
- Leave cabbage in bucket, fill with fresh water, agitate cabbage with your hands, and drain.
- Do not repeat. Residual salt helps preserve the kimchi.
- If you soaked the cabbage overnight, it won't hurt it to sit for a few hours after rinsing while you prepare the other ingredients.
- Soaking in brine removes water from the cabbage as salt enters the cabbage. Osmosis at work. Taste a piece and you'll see how salty it is.
- Remaining prep can be done in the food-grade plastic bucket, but works better in a very large mixing bowl. A 30-quart mixing bowl costs about \$35 on amazon and works great for this.

Prepare the Other Vegetables

- Rinse the green onions, cut off and discard the root and any damaged green portion. Cut a
 one-inch piece off the white end and set aside to be used in the paste. Cut the remaining
 lower portion in half lengthwise, cut the onions into 1" pieces, and except for the reserved
 pieces, add the rest to the drained, rinsed cabbage.
- Peel the potatoes, cut into quarters, place in covered dish in microwave, and cook until tender. *Note*: many kimchi recipes call for glutinous rice flower to give the paste more body, but I found a traditional Korean recipe that uses potato for the same function.
- Peel the ginger and coarsely chop.
- Dismantle the heads of garlic and peel the cloves.

Prepare the Paste

- In a food-processor with the standard chopper blade, combine the red pepper flakes, fish sauce, ginger, garlic, potato, 1 lb. of sliced daikon radish, end pieces of green onions, shrimp, and brown sugar.
- Pulse the food-processor until the materials are blended into a smooth paste.
- For the batch-size specified in this recipe, everything will fit into a normal-sized food-processor in one batch. If you double the batch, you'll have to prepare the paste in two batches and then combine in a bowl.

Prepare the Kimchi

- Do not drain off whatever liquid accumulates in the bottom of the container of cabbage, daikon radish, carrots, and green onion.
- Add all of the paste to the cabbage, daikon radish, carrots, and green onions, and mix thoroughly with your hands. This can be done in the food-grade five-gallon bucket, but works far better in a 30-quart mixing bowl.
- Wash the canning jars. Use whatever size jars you wish to use. I generally pack my kimchi in a mix of half-gallon and quart jars, the latter to give away to family and friends.
- As you are packing the kimchi into jars, continue to stir the remaining kimchi in the bowl or bucket with your hands or several large wooden spoons to ensure that the paste remains incorporated into the vegetables.
- As you pack the kimchi in the jars, press down with a wooden spoon as you fill the jar. Fill to within one inch of the lid.
- If any liquid/paste remains in the bottom of the original container, distribute it evenly among the jars.
- The cabbage and other vegetables will release liquid. When you press the kimchi down in a filled jar, the liquid should rise above the kimchi, but don't worry if it doesn't yet. Other than whatever liquid was remaining in the mixing container, do not add any liquid to the kimchi.
- Screw on the lids. If you are using fermentation lids, screw them on tightly. If you are using regular lids, leave lids slightly loose. **Do not screw regular lids on tightly**.
- For best results, use lids with fermentation locks. On amazon, search "mason jar fermenting lids" and get the ones with the clear plastic fermentation locks.

Fermenting the Kimchi

- As mentioned, for best results, use jar lids with fermentation locks.
- If you are using lids with fermentation locks, do not remove the lids except to sample the kimchi on one jar as mentioned below.
- If you are using regular lids, remove the lids once each day, and with the back of a clean soup spoon, press the kimchi down below the fluid.
- Some liquid will overflow as kimchi is fermenting, so set them on a cookie sheet to catch the overflow. Blot up the overflowing liquid with a sponge and rinse down the sink.

- Leave at room temperature (68-75 degrees) for 3 to 7 days a warmer room equals faster fermentation.
- When fermentation has continued for three days, remove the lid from one jar and sample the kimchi. If the kimchi has not achieved the desired balance of flavor and crunch, replace the lid and sample again the following day. Our kitchen was around 70°F at night and 74°F during the day, and the kimchi turned out very well after almost exactly four days.
- When the kimchi achieves the desired combination of flavor and crunch, wipe the rims of the jars with clean paper towel, screw regular lids on tightly, rinse the outer surface of the jars, and place in the fridge.
- Fermented kimchi must be kept refrigerated once it is ready!
- Kimchi will usually keep for at least three months in the fridge, but starts to get softer and more homogenous after about six weeks.
- Anyone who likes kimchi is well familiar with the smell of good kimchi. If it starts to smell rotten or like garbage, feed it to the compost pile.