

The Magic of **KIMCHI**

The Universal Superfood



Dr. Susanne Bennett

Intro to Kimchi

It's no exaggeration to say that kimchi is one of the healthiest foods in the world. Kimchi is a delicious Korean fermented vegetable dish which can be made with many different types of vegetables, spices, and sometimes seafood paste.

We all know that vegetables are insanely healthy on their own, especially leafy greens like napa cabbage which makes up the majority of kimchi recipes. But once they're transformed by the growth of lactic acid bacteria (LAB) through the miraculous process of fermentation, humble veggies become something even greater - a functional superfood capable of maintaining and improving our health even more so than the mighty vegetables in their original state.

Kimchi is naturally cholesterol-free (vegan version), low in fat and calories and packed full of fiber, an array of vitamins, minerals and phytochemicals.



Whether it's the traditional baechu (napa cabbage) kimchi or others such as cucumber, radish, or mustard green kimchi, you're getting nutritional benefits from each main vegetable used and also from the sub-ingredients like radish, spring onions, garlic, ginger, red pepper powder, pear and optional seafood ingredients.

Let's look closer at some of the ingredients typically used in napa cabbage kimchi:

Napa cabbage has vitamin C and carotene, which the body converts to Vitamin A.

Radishes also have lots of Vitamin C and minerals like calcium and phosphorous, which helps to build strong bones.

Red pepper powder has many vitamins and is one of the main reasons that harmful bacteria don't grow in kimchi, while helpful bacteria do.

Garlic is one of the world's best anti-inflammatory foods and contains high amounts of allicin, which is known as an anti-microbial agent. It can help remove heavy metals and other harmful substances out of the body and support health cholesterol levels and cardiovascular health.

Ginger is highly anti-inflammatory, a mild to moderate pain reliever, and greatly aids in digestion.

Asian Pear or **Fuji Apple** provides a touch of sweetness and serves as an optimal "food" for the growth of lactic acid bacteria.



Spring onions contain allicin as well, and like garlic can help ward off any harmful bacteria growth during fermentation.

Jeotgal (fermented seafood such as fish and shrimp sauce) adds to the flavor of kimchi and adds essential amino acids which can help the immune system, build muscle and more. (Optional)

No other fermented food in the world can compete with the synergistic blend of nutrients found in kimchi!

You can get almost half of your Vitamin A needs from a half cup of kimchi, 21% of your Vitamin C, and a whole range of B vitamins and minerals like potassium, phosphorus, and magnesium. Kimchi is truly nutrient dense and low calorie, only 96 calories per half cup!

Kimchi is best as a side dish, and I recommend starting off with eating just one to two tablespoons per day with your meals to ease into the process of transforming your gut biome to a more balanced state. From there you can work up to ¼ cup a couple of times per day.

Health Benefits from Eating Kimchi

There are almost endless health benefits that can come from eating kimchi on a regular basis. Every day scientists are confirming more and more about how helpful kimchi is to human health. Here are a few of kimchi's superpowers that you can look forward to after making it a regular part of your diet.



Better Gut Health

Our gut microbiome consists of colonies of microorganisms that live in each of our bodies, mostly in our large intestine. The collection of these microorganisms numbers over 100 trillion and can weigh up to five pounds!

When we don't have enough good bacteria, if they're low in diversity or there's an imbalance of microbes in our gut, it allows more "bad" bacteria, yeasts, parasites and viruses the opportunity to overgrow. When this happens, we can develop so many different ailments including, constipation, gas and bloating, irritable bowel syndrome, leaky gut issues, autoimmune diseases and even increased risk of cancer and heart disease.

One of the best benefits of kimchi comes from the lactic acid bacteria and organic acids produced during the fermentation process, which are phenomenal for gut health. These "good" bacteria can help with everything from digestion to energy production to mood regulation. By eating kimchi, we consume thousands of different strains of beneficial bacteria, which can help to protect us and improve our health and wellbeing.

There can easily be hundreds of strains of friendly bacteria in a batch of kimchi. Compare this to the five or so strains that most probiotic supplement pills give you and you'll see there's no comparison!

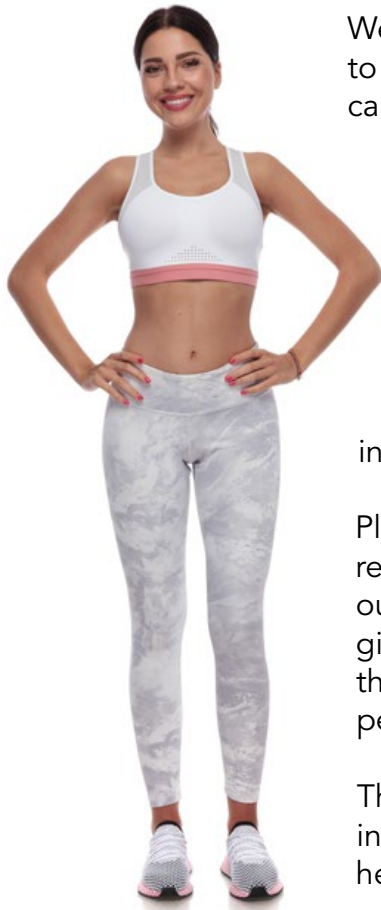
In two tablespoons of kimchi you can have 30 to 50 Billions of CFU (colony forming units) of probiotic bacteria!

I recommend kimchi if constipation is an issue, and on the other extreme if diarrhea is the problem, kimchi will also help with that too!

Kimchi is also a super effective digestive aid, helping to break down carbohydrates. The red pepper powder in kimchi helps to stimulate stomach acid production, so that we can fully digest and utilize our food instead of it sitting in our gut half-digested. And the lactic acid bacteria in kimchi helps to further break down food and to balance our entire gut microbiome as well.



Easier Weight Loss



We all know that being overweight or obese is a major contributor to many health problems, including life-threatening diseases like cancer, heart disease, stroke, and diabetes.

The good news is that numerous studies indicate that including kimchi as a regular part of your diet fights obesity and overweight conditions.

And it makes sense when you think about it, since kimchi is packed full of fiber, water, vitamins, minerals, phytochemicals, live enzymes and beneficial bacteria, while also being very low in fat and calories. Kimchi is definitely a perfect diet food!

Plus, the red pepper powder that's included in many kimchi recipes contains a phytochemical called capsaicin which increases our body's natural fat burning metabolism. The garlic, radish, and ginger in kimchi may play an even larger role in weight loss than the red pepper, so even white kimchi made without it can help people to lose weight.

The lactic acid bacteria in kimchi helps reduce inflammation in the body, which can in turn help with fat loss.

Anti-Aging Power

Antioxidants are powerful compounds that help your body to fight oxidation or "rust" in the body by capturing free radicals. Free radicals are oxygen-containing molecules that bond easily with other chemicals in the body, setting off harmful chemical reactions and causing cellular damage.

Aging is this process of cellular damage caused by free radicals.

Therefore, to reverse free radical exposure and slow the process of aging, we need to minimize our exposure to the above compounds and foods, and we should also include antioxidant-rich foods like broccoli, cherries, spinach, blueberries, and walnuts.



However, kimchi is one of the best antioxidant rich foods all around. Park and Ju (2018) show that kimchi has "Vitamin C, chlorophyll, phenols, carotenoids, dietary fiber, and other phytochemicals" as well as "further metabolites with LAB (lactic acid bacteria)" that have antioxidant and anti-aging properties.

Ok, so now you have a better understanding about how amazing kimchi is. You just need a good starter recipe to try, right? The following cucumber kimchi recipe is from the Phase 1 section (out of 4 Phases) of my book, *The Kimchi Diet™* (April, 2019). Although most people know about napa cabbage kimchi, cucumber kimchi is what I recommend to start with first, especially if you have any food allergies, gut problems or chronic health issues. It's also great for anyone who hasn't tried kimchi or other fermented vegetables before.

Preparing your own cucumber kimchi is easy to make after you've made it once! Ferment it for a day or two and eat a few bites per day as a side dish to go with any meal. As mentioned earlier, work up to a couple of tablespoons per day, and then you can eat up to ¼ cup a couple of times per day after many weeks of consuming it.

By adding kimchi slowly into your diet, you'll gradually inoculate your digestive system with optimum levels of lactic acid bacteria and organic acids and you'll soon experience the magic of kimchi!





Revive your gut, get lean and live longer with The Kimchi Diet™!



Cucumber (Oi) Kimchi Recipe

Select organic cucumbers that are waxless and have underdeveloped seeds such as Korean, English (hot house), Kirby (pickling), Persian or Lebanese cucumbers.

Ingredients

8 to 10 seedless Kirby or Persian cucumbers or 6 long Korean or English cucumbers
2 tablespoons of coarse solar sea salt

Kimchi Paste Ingredients

1 medium carrot, thinly sliced matchsticks, 1-1 ½ inches in length or shred with a grater
1 cup of Korean radish or daikon, thinly sliced matchsticks, 1-1 ½ inches in length
1 cup of Buchu or garlic chives (common chives can be used as well) chopped into ½ - ¾ inch pieces
2 teaspoon of minced garlic
1 teaspoon of grated ginger
½ cup of grated Asian pear or Fuji apple
2 teaspoon of anchovy fish sauce (optional)
½ cup Korean red pepper powder* (can reduce the amount depending on your desire of heat)
1 tablespoon of purified water

*If you're sensitive to spicy foods, than red pepper powder can be omitted in all kimchi recipes, but you'll have to adjust the initial time of fermentation at room temperature by shortening a couple of hours and eat it before it over ripens.

Red pepper powder slows down the fermentation and ripening process, so you'll need to adjust accordingly. If you don't want to add red pepper or any seafood, then you'll need to keep the brined vegetables a bit saltier before adding the sub-ingredient kimchi paste

Instructions

Brining time: 1 hour

1. Wash the cucumbers and drain.

2. Cut off the ends of each cucumber and cut them into 2 to 3 inch pieces. If you use Kirby's, cut them in half, or if you have longer cucumbers, cut them into 3 pieces, around 3 inches in length each.

3. Place a cucumber piece on the end on the cutting board and cut them down through the diameter of the cucumber vertically (lengthwise), without cutting all the way leaving ½ inch on the bottom of each cucumber piece uncut. Then turn 90 degree angle and perpendicularly, cut through the diameter , again without cutting through completely, making an "X". This will make each 3 inch cucumber piece into a 4 petal floret, leaving room to add the kimchi paste after the brining.





4. Add the fresh cucumber florets into a large glass or ceramic bowl and sprinkle the coarse sea salt inside and on the outside of each floret evenly. Cover the bowl and let it brine for an hour away from sunlight. After 30 minutes, you'll notice some "sweat" water in the bottom of the bowl. Toss the cucumber florets a couple of times and then let it brine for the final 30 minutes.



This is when you can start prepping for the kimchi paste - chopping, mincing, and grating the sub-ingredients.



5. After brining, the cucumber should be flexible, and you'll be able to bend them easily without snapping it in half. Put the brined cucumber florets into a strainer (discard the brined salty liquid) and quickly dip into a large bowl of fresh water only once, to take the excess salt and any debris off. Shake off the excess water and drain in a colander for 10 minutes while you make the kimchi paste.



Kimchi Paste



1. In a large glass or ceramic bowl, add the garlic, ginger, grated pear, and red pepper flakes. Wear disposable food preparation gloves and mix the ingredients into a paste. The gloves are only to prevent the red pepper from irritating your skin. Add the carrots, chives and daikon to the paste and mix well.



2. Stuff each cucumber floret with the chive/carrot kimchi paste. Set each stuffed floret upright in the bowl as you stuff the next floret.

3. Rub extra kimchi paste on the outside of the cucumber florets. Now you're ready for the final step - storage then fermentation!

Storage and Temperature Regulation

1. I like to bottle a few jars per recipe so that while I'm eating out of one jar, the others will continue the fermentation process without being disturbed and exposed to ambient air daily. The other bottles will be untouched, bubbling with carbonation until you're ready to eat it!



2. You don't want to under or over fill the container. Fill the jar with the florets and when you've filled the jar halfway full, push the florets down with a wooden spoon to bring up the oxygen bubbles to the surface and help prevent yeast growth.

3. Continue to fill to the top and push as much oxygen bubbles out. Pushing down on the cucumber florets also increases extra water release. This extra juice submerges the cucumber florets which keeps the oxygen away from the vegetables, and will help prevent yeast growth. Don't worry if you still see bubbles. As it ferments, more water will be released and the bubbles will come up to the surface.

4. Finally, add one tablespoon of purified water to any leftover kimchi paste left in the bowl, and distribute evenly in each bottle before covering with a lid. You can add parchment paper to the top of the jar and close the lid over it. If by any chance there's an overflow, the kimchi will not touch the plastic or metal lid. Parchment paper also helps keep the lid on tight.



5. Do not fill the jar completely. Leave about 1 inch of room at the top. As fermentation occurs, carbon dioxide gases will build up from the LAB, and more water will sweat out from the cucumbers, so the level of liquid and kimchi will rise up. If you fill the jar all the way, there's a chance that the kimchi will overflow.

This has never happened to me, but there may be a possibility of cracking your glass container. To prevent any problems, after a couple of days of fermentation, "burp" the kimchi bottle by turning the lid slowly and letting some of the gas out, just as you would with a bottle of carbonated water. Do this over the sink, as you may be surprised by the carbon dioxide action!

6. Finally, put a dish or bowl under the container to catch any excess juice that may leach out during the first couple of days of fermentation. Leave the container out in room temperature (68-72 degrees Fahrenheit) away from the sun for one or two days. Don't forget to "burp" out the carbon dioxide gas after a day or two. As the gas rises, you'll see the kimchi moving closer to the lid.

7. I like to taste the fermented kimchi at this stage before I transfer it to the refrigerator.

First, I want to see how good the kimchi tastes. I'm looking for a slight salty, sweet, tangy and savory taste. Second, the flavor tells me about the speed of fermentation for that batch, which will govern how quickly I need to eat it before it over ripens. If I feel it needs to ferment a bit longer, I'll keep it out at room temperature for another 6 to 8 hours.

The speed of fermentation depends on the amount of salt used during the brining process, as well as the temperature of the ambient environment where the jars will be stored during the initial fermentation process. In the winter, kimchi will ferment slower. In the summer months, it'll ferment faster. The saltier the kimchi, the slower it ferments. And finally, if you use the red pepper powder, then the kimchi will ferment slower as well. These are all nuances you'll learn as you make your kimchi from season to season.

8. Refrigerate it between 3-5 degree Celsius (37 to 41 degree Fahrenheit) and slip a dish under the jar to catch any possible overflow.

Enjoy!!!

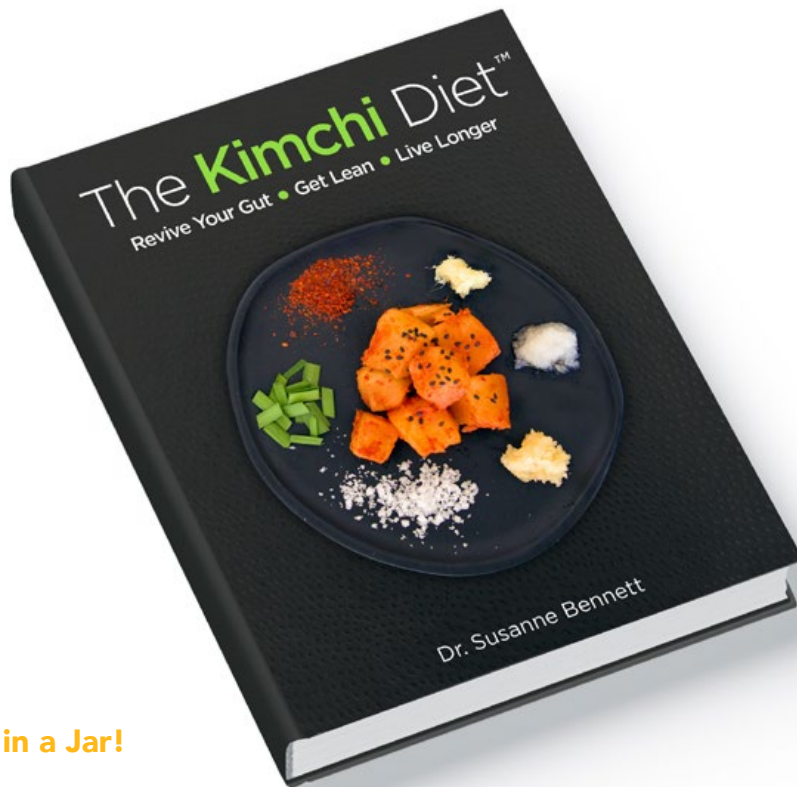
Cucumber kimchi is to be eaten with in two weeks, but save the juice! It's still loaded with probiotics and postbiotics (LAB metabolites). You can have a couple of teaspoons a day to continue your journey towards vibrant health!

What I love about cucumber kimchi is that it can be eaten fresh as soon as it's been prepared. This also allows those who've had a lot of digestive issues to introduce kimchi slowly into their diet without any strong reactions. With each day of fermentation, the LAB grows exponentially in the kimchi, and as you eat small amounts daily, you will reap the benefits of it, and in no time transform your inflamed, weak, dysbiotic gut into one with a robust, diverse and balanced microbiome!



The Kimchi Diet™ - Revive Your Gut • Get Lean • Live Longer, is now available on Amazon.

<http://drsusanne.com/amzkimchi>




Kimchi is Love in a Jar!

There is so much more information I want to share with you about the life-changing benefits of kimchi and why you want to add it to your daily eating plan!

Kimchi Making Masterclass: <http://drsusanne.com/kimchidetox>

<http://drsusanne.com/kimchidietgroup>

Dr. Susanne Bennett
1526 14th Street, Suite 111 Santa Monica CA 90404
310-315-1514
help@drsusanne.com
drsusanne.com

Follow me on  [@drsusanne](https://www.instagram.com/drsusanne) for my latest health strategies and tips for ultimate wellness!