







Fermented recipes

A collection from the World Microbiome Day 2019 fermentation competition



Celebrating fermentation together!

World Microbiome Day takes place every year on 27th June to celebrate the diverse world of microbes and raise awareness of how important they are for our health (and disease) and our environment. In 2019, World Microbiome Day was celebrated with a number of competitions, one of them being a competition on fermented food favourites. This recipe booklet is a collation of those recipes that have been submitted, with Bren's Kim Chi being the winning recipe.

We hope you enjoy giving the recipes a try!

First Step:

How to sterilize

To decrease the risk of mould developing alongside the fermentation bacteria, it is recommended to sterilize the jars in which fermentations take place beforehand

Glass jars and glass shot glasses:

for 10 minutes in the oven at 100 °C

Metal lids and rocks:

for 5 minutes in boiling water

Glass bottles:

rinse with hot, but not boiling water

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Bren's Kim Chi

by Brendan Collins



Traditional Korean side dish made easy!

What you need

A big and a medium bowl 2-3 Kilner or glass jars (medium-sized) A small rock or glass shot glass Optional: gloves and a food processor

Ingredients

2 chinese cabbages (washed, try to keep whole leaves of cabbage)
1 mooli (Chinese radish), washed and peeled then thinly julienne sliced
4 medium sized carrots, washed and peeled and thinly julienne sliced
1 bunch of spring onions, washed and finely chopped For the paste:

4 garlic cloves, ground up
Big (± 4 cm) piece of ginger,
ground up or grated
2 tsp fish sauce
(or soy sauce for vegan)
2 red chillis, ground up
2 tsp white sugar
4 tsp rice vinegar
4 tsp boiled water
Optional: 1 tsp white
wine vinegar (gives
an extra fizzy kick)

Recipe

First make the paste: grind up in a food processor (or finely chop) the garlic, chillies and ginger.

Add the fish sauce or soy sauce, some sugar, rice vinegar and white wine vinegar and a bit of boiled water and mix it all up.

Put the paste in a big bowl and then slowly add the washed and chopped veg, dipping and mixing them into the paste and then put all into jars. Try to pack the jars very tightly by pushing the vegetables to the bottom and ensuring that the paste covers all vegetables.

Then leave to ferment either in the fridge or outside; you can give the jars a little turn upside down every few days to keep the vegetables at the top coated. Putting in the fridge slows down the fermentation, hence, it is best to ferment the Kim Chi a week at room temperature and then keep it in the fridge.

You should be able to see the fermentation happening by observing the bubbles that are being formed.

It is ready to eat after about a week but best after 3-4 weeks. Open the jar carefully as it can explode a bit! Serve with rice and soy sauce and chicken, prawns or vegetables.



Jun Kombucha

by John Leech



Jun is similar to Kombucha. The main difference is that Jun is exclusively made from green tea, whereas kombucha can be made from green or black tea. Importantly for Jun, table sugar is replaced with honey, and the fermentation time is shorter.

What you need

2 x 1 liter Kilner or similar jar, medium-sized A tea pot A sieve

Ingredients

A Jun scoby (symbiotic culture of bacteria and yeasts) 160 ml honey

4-6 green tea teabags

Recipe

Make a pot of green tea and allow to cool to room temperature. Add approximately 160 ml of honey and mix well into the tea.

Transfer the liquid to a 2-liter vessel (e.g. a Kilner jar).

Add the Jun scoby and 200 ml of the previous fermented Jun (if available). Fill remaining space in jar with water and cover with a cloth.

Leave for 5 days in a dark place at room temperature.

Keep the scoby and 200 ml of fermented tea for the next batch, separate the rest for consumption with the sieve and enjoy.



Plumboocha

by John Leech



A lovely twist to a traditional kombucha drink by fermenting Kombucha a second time with plums!

What you need

1.5-2 liter Kilner jar (or similar) A sieve

Ingredients

1 liter kombucha drink (fermented for up to 14 days) 3-4 plums

Recipe

Add the kombucha in the Kilner jar and chop 3 or 4 plums into small pieces. Put the pieces of plum into the bottle with the kombucha.

Leave at room temperature for up to 7 days, with the bottle sealed, then separate the kombucha from the plums (using a sieve or similar).

Note: Fermenting the Kombucha at room temperature with a sealed lid can cause the bottles to explode. Burp the bottles daily to release pressure (i.e. open the lid a tiny bit for gas to escape the Kilner jar), until you get a feel for the secondary fermentation process taking place in this recipe. Alternatively, use strong bottles and ferment in a garage or shed where exploding bottles will not cause harm.



Ginger Bug

by Astrid Vandromme



Ginger bug is to ginger beer what a starter is to sour dough!

What you need

1 glass jars (500 ml is a great size) A piece of breathable cloth (cotton) An elastic that fits on top of your jar

Ingredients

15 ml x 5 of grated unpeeled organic ginger 15 ml x 5 of granulated sugar (any kind you want but use the same one for the whole process) 375 ml of water

Recipe

Day 1:

In your jar, combine the water, ginger and sugar and stir vigorously. Cover with the cloth and secure with the elastic. Leave it at room temperature.

Daily, for the next 5 days:

Feed the bug every day for 5 days. That means adding 15 ml of grated ginger and 15 ml of sugar (about 1 tablespoon of each) and stirring it vigorously. Cover the ginger bug and continue to leave it at room temperature. After 5 days, it should be bubbly, cloudy yellow and sludgy with a yeasty smell and the ginger should float. This means it is ready to use!

After that, feed it every week and keep it in the fridge. It is recommended to wait a week or two before making ginger beer so that the ginger bug has time to mature a bit.

Don't forget to give it a name! It may sound ridiculous, but it will help you to remember to feed it! Mine is Gingerella.



Ginger Beer

by Astrid Vandromme



Zingy, refreshing summer drink, just perfect to cool down during heatwaves!

What you need

2-3 glass bottles, sterilized

Ingredients

bug liquid

10 cm of organic ginger (or more if you want it extra gingery) 750 ml + 1750 ml of tap water, left for a minimum of 8 h to stand for chlorine to evaporate 250 ml of sugar ± 150 ml of ginger

Recipe

Day before:

Feed your ginger bug and leave it out of the fridge.

Day of:

Combine 750 ml of water with the 10 cm of ginger, sliced and bring it to a boil. Let it simmer for about 20 min. This is where you can add other flavours if you wish (like berries). Add the sugar off the fire, then let the mixture cool completely. This is very important because heat kills the bacteria that may cause food poisoning.

Combine this mixture with the 1750 ml of water.

Stir your ginger bug vigorously to bring the good bacteria for the fermentation process from the bottom equally into the whole mixture. Add approx. 150 ml of the ginger bug liquid to the sugar and ginger mixture then distribute the liquid into your bottles. Close the bottles very tight and leave them at room temperature. Feed your ginger bug and put it back covered with its cloth in the fridge.

2 days later (or 1, if very warm)

Burp your bottles: this means opening and closing them very quickly. It will bubble, that means it worked!

Burp them every day after that for 3 days.

On the $5^{\rm th}$ day after the original brewing, put the ginger beer in the fridge, it is ready to be enjoyed!

Note: since this is a fermented drink, it might naturally contain a bit of alcohol.



Sparkling Apple Water Kefir

by Bettina Schelkle



Serve with sliced apples and mint as decoration for an appealing mocktail.

What you need

A wooden spoon A sieve 1 glass jug 1 sealable glass bottle Kitchen towel

Ingredients

3 tbsp water kefir ½ lemon, cut into quarters 1 dried apricot 1 liter of water (filtered if hard water) 3 heaped tbsp of sugar 250 ml apple juice

Recipe

Primary Fermentation

Dissolve the sugar in the water and add it to the glass jug. Rinse your water kefir under water and add it to the sugared water alongside the apricot and the lemon quarters. Leave the kefir to stand for 24 hours at room temperature, then drain it using the sieve and removing the apricot and the lemon quarters. Squeeze the juice of the lemon quarters in the kefir liquid before discarding the lemon quarters and the apricot.

Note: you can drink the kefir water as is or proceed with the secondary fermentation.

Secondary Fermentation

Add the kefir water from the primary fermentation to the sealable glass bottle and add the apple juice. Seal the glass bottle and leave the kefir apple juice to stand at room temperature for 24 hours. Chill in the fridge for a few hours before drinking, taking care when first opening the bottle as the natural gas build up in the bottle may cause the liquid to overspill.

Note: to keep your kefir when you are not using it, submerge it in lightly sugared water and with a dried apricot in a jar in the fridge.



Fermented Lemons

by Bettina Schelkle



Ever fancied trying out some Middle Eastern recipes that require fermented lemons and realised that in the shop they are super expensive? Here is the cheap version!

What you need

1 glass jar, medium-sized Wooden pestle A small rock or glass shot glass

Ingredients

- 2-3 lemons, unwaxed
- 2-3 heaped tsp salt

Recipe

Cut the lemons nearly into half, ensuring that the two lemon halves are still slightly attached to each other on one side. Make another cut across, again making sure that the attachment between the different lemon quarters stays, so that you can open the lemon parts up to add salt in and close it up again.

Add 1 tsp of salt per lemon into the cross you cut and add the lemons to the jar. You may have to add one lemon at a time and using the pestle to squash the lemons so that they release their juices. Tamp the lemons until they have released their juices and all of the lemons are submerged in their juices. Add the rock or shot glass on top of the lemons and close the jar with the lid: the rock or shot glass should support in keeping the lemons submerged in their own juices. This is important to avoid mould developing.

Ferment at room temperature in a draft-free area in the dark (e.g. under your sink or in the airing cupboard) for 3-4 weeks. You may have to slightly unscrew and screw the lid 2-3 times per week to release the gas build up from the fermentation. The fermented lemons will keep for 1 week in the fridge after opening.



Sauerkraut with Extras

by John Leech



The classic with a twist!

What you need

A big bowl 2-3 Kilner or glass jars, medium-sized A small rock or glass shot glass

Ingredients

1 head of white or red cabbage, grated 2 carrots, grated A handful of radishes, grated 2 onions, chopped in bite-size pieces 3 chillies, chopped in bite-size pieces 1 bell pepper, chopped in bite-size pieces 20 g salt for every kg of total ingredients

Recipe

Mix all ingredients by hand, squeezing the moisture from the vegetables as if you are kneading the vegetables. Keep going until the squeezing extracts enough moisture from the vegetables for the fermentation.

Transfer all ingredients and liquid to a jar (or several) and press down until all the vegetables are submerged in brine. Place a sterile weight on top of the vegetables and cover jar with a cloth.

Leave at room temperature for minimum of 5 days, but the longer the better (up to 1 month).

Keep in fridge once fermented and eat within 6 months.



Fiery Dill Cucumbers

by Bettina Schelkle



Enjoy these zingy, hot dill cucumbers as a side dish to a salad or a meal of your choice, or as a snack.

What you need

1 glass jar, medium-sized A small rock or glass shot glass

Ingredients

1 medium cucumber A bunch of fresh dill 2 tbsp salt 1 garlic clove (optional) 2–3 small, dried chillies (or to taste)

Recipe

Dissolve the salt in 300 ml boiling water and leave to cool down.

Cut the cucumber in thick chunks and add them to your jar. Add the peeled garlic glove, the dried chillies and the roughly chopped dill. Add the saltwater to the cucumber and dill mix until the jar is nearly full, having approximately 1 cm head space. Add the rock or shot glass on top of the cucumber chunks and close the jar with the lid: the rock or shot glass should support in keeping the pickles submerged in their own juices. This is important to avoid mould developing.

Ferment at room temperature in a draft-free area in the dark for 3-4 days. You may have to slightly unscrew and screw the lid every day to release the gas build up from the fermentation. The fermented cucumber will keep for 1 week in the fridge after opening.



Cauliflower and Lemon Pickle

by Bettina Schelkle



Zingy, refreshing Mediterranean snack or side dish.

What you need

1 glass jar, medium-sized A small rock or glass shot glass

Ingredients

1 small cauliflower, cut into florets 1 lemon, sliced 2 gloves of garlic, peeled 1 tbsp mixed herbs 2 tbsp salt

Recipe

Dissolve the salt in 300 ml boiling water and leave to cool down.

Add the cauliflower florets, lemon slices, herbs and garlic gloves to the jar. Add the salt water to the mix until the jar is nearly full, having approximately 1 cm head space. Add the rock or shot glass on top of the cauliflower florets and lemon pieces and close the jar with the lid: the rock or shot glass should support in keeping the pickles submerged in their own juices. This is important to avoid mould developing.

Ferment at room temperature in a draft-free area in the dark for 4-5 days or longer if you prefer the taste of your pickles more sour. You may have to slightly unscrew and screw the lid every day to release the gas build up from the fermentation. The pickle will keep for 1 week in the fridge after opening.



Viili

by John Leech



Viili is a fermented milk product, with a consistency similar to yoghurt, but a lot stringier.

What you need

1 glass jar, medium-sized A muslin cloth or kitchen towel

Ingredients

1 tsp Viili Full fat milk or cream (volume to fit the jar) Optional: fruit, nuts or berries

Recipe

Add a teaspoon full of Viili to a small jar and spread the Viili around the inside of the container. Add full fat milk (cream is better but not necessary) and cover with a cloth.

Leave for 6-24 hours (depending on preference) and remove a teaspoon full for the next batch (keep it in the fridge), before you enjoy the Viili.

Optional: Add fruit, nuts or berries to the Viili for flavour.

