**FERMENTED FOODS RECIPES**

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# Simple sauerkraut

Cabbage is a good vegetable to start learning to ferment with, as it’s got lots of natural water. Red cabbage is a great source of antioxidants and polyphenols. Both red and white cabbage are great sources of fibre. Both are also grown extensively in the UK, and for multiple months of the year, so they are readily available and therefore great additions to a sustainable menu. This combination of both white and red cabbage creates a really lovely pink coloured sauerkraut.

**Simple Sauerkraut recipe**

Timeframe to ferment: 1-6 weeks

Yield: 1 litre jar

1⁄2 medium green or white cabbage
1⁄2 medium red cabbage
Approximately 15g or 1 tbsp sea salt or rock salt for each 1kg of vegetables. 1 tbsp of fragrant seeds such as caraway seeds, fennel seeds, or just some black peppercorns

1. Take off several of the top layer of outer leaves of either the green or red cabbage, which will be used for packing the contents of your ferment into the jar at the end, to ensure your ferment stays underneath/submerged in the liquid.
2. Chop or grate the cabbage, finely or coarsely, including with the hearts (to avoid waste). Place the chopped cabbage in a large bowl.
3. Sprinkle salt on the cabbage in the bowl. Leave the cabbage to sit for half an hour or so if you can, as the salt pulls water out of the cabbage (through osmosis), which creates the liquid in which the cabbage can ferment without rotting.
4. It helps to ‘massage’ the cabbage to speed up the release of moisture from the cabbage leaves (osmosis), which is then added to the jar, for submerging the cabbage in.
5. Mix everything together (including the seeds or peppercorns or any other herbs or spices) and pack into Kilner or Mason jar. Pack just a bit into the jar at a time and tamp it down hard using your fists (if they fit into the jar) or any sturdy kitchen implement such as a rolling pin. This packing it down packs the sauerkraut tight in the jar and helps force water out of the cabbage, as well as depriving it of oxygen, which is what we need for the cabbage to ferment.
6. Remove the spine from the outer cabbage leaf you kept aside and place on top of the packed sauerkraut. Tuck it in and down around the kraut until the liquid rises up.
7. Place a clean weight (a glass or a special weight or a sterilised stone) over the mixture. This weight helps to force water out of the cabbage as well as keeping the cabbage submerged under the liquid.
8. Leave the sauerkraut to ferment at room temperature for at least three days then transfer to a cooler dark cupboard for a minimum of one week. The longer you leave it to ferment the more healthy bacteria is formed.
9. When ready to eat: Once you’re happy with the ferment, transfer the jar to a fridge. This will stop the fermentation process (as the cold temperatures stop the fermenting), but the ferment will keep well in the fridge for several weeks. The flavour will evolve further over the course of a few weeks.

If you notice the sauerkraut is rising above the liquid you can add a little water, but this may not be necessary.

Each time you take out some sauerkraut out of the jar to taste, you must repack it carefully and keep it under the liquid to preserve the life of it.

# Kimchi (Korean sauerkraut)

A good kimchi recipe balances texture, flavour and chilli heat. Unlike sauerkraut, where cabbage is the predominant flavour, a good kimchi should contain a variety of tastes and textures. It works best when roughly chopped chunks of vegetables, larger shreds of cabbage, grated carrot and sliced radish and lots of good, garlic are used. Traditional kimchi is very spicy, but you can make it to your taste. Traditionally kimchi also contains fish sauce. However if you prefer to make a kimchi without fish sauce, that’s okay too. Plus fish sauce is not suitable for vegan dishes, so you can omit it if you wish. There are brands of vegan fish sauce on the market that you can use, however do note that these often are made using soy sauce, and as soy is one of the 14 regulated allergens, you will need to consider whether to use it or not.

# Kimchi with optional fish sauce

This is a take on a kimchi ‘type’ ferment, with a focus on using UK grown, seasonal produce – cabbage, kohlrabi, carrot, radish.

* 1 cabbage, keep 1 large leaf aside to use on top of the kimchi when storing
* ½ kohlrabi
* 2 tbsp sea salt
* 3-4 radishes, either grated or thinly sliced
* 4 garlic cloves, peeled and crushed
* 1 tbsp finely grated fresh ginger
* 1-2 carrots, either grated or finely julienned
* 1tbsp dried chilli flakes
* 1 tbsp fish sauce (Nam Pla) - optional
1. Shred the cabbage and kohlrabi (bar one large leaf) and place in a large bowl with 1 tbsp

salt. Massage the cabbage with your hands to release the juices. Takes about 10 minutes

1. After 10 minutes add the remaining ingredients and keep massaging.
2. Transfer to an airtight container, such as a kilner jar. Ensure you push down the

ingredients under the brine, leaving an inch between the top of the kimchi

and the top of the jar.

1. Place a cabbage leaf with the centre spine removed, on top of the kimchi and fold down into the jar.
2. Seal the jar and keep on the counter for three days before transferring to a cool larder, a cellar or fridge. This will significantly slow down the fermentation.

Store at room temperature to ferment. Always make sure the contents are submerged in the juices/water, as this will prevent oxygen getting to the contents. We need to have the contents starved of oxygen, otherwise mould will grow. You can ferment for at least 1 week, longer if you like it to be stronger. Once you transfer to the fridge, the fermentation will stop. You can then enjoy this kimchi for at least 3 months.

# Fermented Vegetables

With their sweet taste carrots can be a good vegetable to ferment.

**Fermented Ginger Carrots**

*The ginger in this recipe is a great combination with the carrot, and it serves up well as a condiment to your favourite protein or as an addition to a salad.*

Serving size: 1 tbsp as a condiment to a meal

200g grated carrots
1 tbsp (or more) freshly grated ginger 1tsp salt

1. Grate the carrots using the larger setting, so that they’re large ish pieces
2. In a medium size bowl, mix the grated carrots, grated ginger and salt. Once all the ingredients are evenly distributed spoon them into a litre-size jar
3. Press the mixture down tightly into the jar. Be sure to pack them down tightly enough that the liquid (brine) covers the mixture.
4. Seal with a lid and allow to ferment at room temperature for 5 to 10 days or until bubbly and tangy to taste.

Move the jar to the fridge to stop fermenting.
Will last several weeks in fridge (several months if not opened or touched).

# Lacto fermented Apple and Pear chutney

*A delicious accompaniment with UK grown fruit and nuts, to add to natural yogurt, or with porridge, salads, cheeses and cold meats.*

Yield: 1 litre / 2 x 500ml kilner or mason jars

250g apples and, or pears
5 tbsp blended dates (or 3 tbsp coconut or demerara sugar)

Approx. 100 ml water
50g hazelnuts/cobnuts, chopped
50g raisins
1-2 probiotic capsule (s), just the contents (not the plastic capsule)

*Optional*: 60ml fresh lemon juice
1⁄4 tsp sea salt
1 tbsp cinnamon *or* Chinese 5 spice mixture

1. Wash, quarter, and core the apples and pears. Coarsely chop them
2. Blend the date paste (or sugar) with the water, spices, probiotic and the optional lemon juice.
3. Combine all the ingredients, including the nuts, in a glass bowl. Transfer to a clean mason jar. Pack down so all ingredients are covered in liquid, and at least 3cm (1 inch) below the rim of the container. Add more water if necessary to submerge the ingredients. Seal tightly.
4. Leave at room temperature for circa three days. If the weather is very hot, fermentation may only take a day or so. Open the jar slightly to allow gasses to escape and to prevent explosions. When happy with the taste and texture, transfer to an airtight container and store in the fridge.

This will keep refrigerated for circa three weeks.

Please note that *you must check this ferment* frequently because it is made with fruit so will ferment very quickly and can over ferment very easily, and start to taste very alcoholic, which is not what you want.

# Quick pickled onion / cabbage

Yield: approx. 500g

300ml cider vinegar

3 tbsp sugar

1 tbsp sea or rock salt

6 black peppercorns

3 small red onions, or quarter of a red cabbage sliced thinly

Optional: Seeds or herbs etc to flavour your pickling brine (e.g. coriander seeds, black peppercorns, bay leaf

Place the vinegar into a saucepan, and add the sugar, salt, and optional flavours if you wish, and bring to a slow simmer. Stir gently until the sugar and salt have dissolved. Remove from the heat, and leave to cool to room temperature. This is your pickling brine.

Place the onion or cabbage slices in a colander and rinse. Pack them into a 500g sterilised jar. Pour over the lukewarm pickling brine and close the jar. Cool, then chill and leave to pickle for 2 hrs. Will keep for about 6 months unopened, or once opened approx. 2 weeks in the fridge.

# Kombucha recipe

You will need: 1 large glass or porcelain jar with a wide opening

2 litres boiled hot water
5 tea bags or 2 round tbsp leaf tea (black, green or white or mixture, not herbal tea) 190g sugar (organic white sugar is best for this recipe)
240ml ‘starter’ tea from last batch of Kombucha *or* 2 tbsp raw apple cider vinegar if it is your first batch 1 Kombucha culture (scoby)

1. Make the sugar-tea solution by boiling the water and pouring over the tea (bags) and sugar, stirring until the sugar dissolves.
2. Leave the tea bags to steep (brew) for 15 – 30 minutes. Remove the tea bags or strain the tea.
3. Make sure that the tea is cold or luke warm (not too hot to destroy the culture and not too cold so it is not activated). Add the starter tea or cider vinegar. Gently add the scoby. It may sink or float; either is fine.
4. Cover the container with a fine cheese cloth or muslin, tie a string around it, and leave in a warm, dark place
5. Leave it undisturbed for 5 days. Taste the brew, using a plastic or wooden spoon and tasting for sourness. It should be neither too sweet, nor too sour when ready, but is dependent on preferred taste. The longer you leave it the stronger it will become. The total fermentation time should be between 7-18 days, depending on the temperature. Keep tasting a little each day until the required strength is reached.
6. When ready, take the culture out with a cup of the tea for the next batch. You should now have two scobys. Occasionally this doesn’t happen until the second or third batch. Then you will start multiplying cultures!



7. Pour the ready kombucha into a bottle with a tight lid. Put in the fridge to stop fermenting. Keeps for several weeks in the fridge.

8. With time the kombucha will become more and more fizzy.

In theory, the Kombucha is now ready to drink. Although it tastes much better if you do a ‘second fermentation’. This develops more carbonation and enhances the flavour.

**Second fermentation**

A second fermentation is what will make your Kombucha fizzy, almost carbonated. This is the stage when you can get creative by adding different flavours to your brew; using seasonal fruits and berries to do so.

Adding fruit or juice makes your Kombucha more easy to drink and more creative! Choose flavours you would like to add to your drink; it needs to be sweet, as sugars help it become fizzy.

Note: Be careful when you open a kombucha that has been in the fridge for a while. Natural gases that form from the gut friendly bacteria in the fermentation process can cause the lid to quickly pop open and the drink can go everywhere.

# Water Kefir Recipe

*Water kefir, like kombucha is first cultured by introducing a symbiotic culture of bacteria and yeasts into sugar water. The beneficial bacteria develop in the grains, using the sugar to create a probiotic rich drink (with grains that will continue to grow and reproduce). It carbonates quickly and it is a wonderful alternative to fizzy drinks whilst being milder than kombucha.*

**You will need:**

Do *not* use any metal tools.
Plastic sieve, plastic or wooden spoon, plastic funnel, 1 litre Kilner jar, Flip top bottle

When you start: a jam jar until the grains outgrow it

100g Kefir Grains
100g Unrefined cane sugar (*organic if possible*)

1 litre filtered water (*kefir doesn't react well with chlorine from tap water, so if you only have mains tap water, use a 1.5 litre bottle of filtered spring water instead*)

Gently rinse the grains in a sieve with the filtered water.
Dissolve the sugar in 500ml mineral water and add the grains. After an hour *gently* shake the container to keep the contents mixed.
Leave for 24-72 hours depending on the strength you prefer and how warm it is. The warmer the atmosphere, the quicker the ferment. The first few fermentations might be a little experimental.
Strain the water kefir grains using the plastic sieve. Transfer the kefir grains in to another container and start a new batch with them.
Transfer the strained liquid into a glass bottle with an airtight lid such as a kilner type bottle or similar.
Add some fresh fruit juice, some whole fresh or frozen berries or pulped berries, ginger or lemon and a dash of maple syrup... there are multiple choices, and you can get really creative here. Seal the bottle and put in a dark warm place like a cupboard for 1-2 days. It will transform into a delicious, probiotic sparkling drink. After 24 – 48 hours store in the fridge.

Kefir grains really need looking after. They will not survive if you ferment them for too long as they will shrivel up and die. They also don’t like being in the fridge for too long.