

# Lacto Fermentation

## Why Ferment?

1. Food preservation
2. Unlock vitamins and nutrients
3. Unlock unique flavors, acidity and funk
4. Create alcohol in certain forms

## How does fermentation work?

Millions Microbes in environment, in you and your food.

Yeast

Bacteria

Mold

Microbes Feed off Carbs (sugars and starches) and convert those starches into acid and into gas and alcohol

## 3 types of Fermentation

Lactic – sauerkraut, kimchi

Alcohol – wine and beer

Acidic – Vinegar and Kombucha

The most important part of fermentation is controlling the Environment

To ensure only Good microbes thrive and Bad microbe are eliminated. We only want good microbes

Lacto Fermentation is our technique being demonstrated because of we are using vegetables like Potato and carrot. Lacto Fermentation will create lactic acid, which creates the tanginess flavor

## How to control the environment?

*2 key elements for perfect environment*

1. ELIMINATE OXYGEN. We want NO oxygen! Oxygen creates BAD bacteria (mold)  
Therefore no vegetables can be above the water line in the jar. This is where weighing down the veg is important. Also, be cautious about whole spices floating to the surface of the water. See tips for weighing down veg to keep submerged.
2. Pure Salt. Remember. Only pure salt! Not table or Iodized. Look at ingredients on package. Looking for one ingredient: SALT

## **RULES TO NEVER BREAK**

Weigh the salt using a scale.

Wash your veggies

Use water that is between 60 to 70 degrees

Use salt with no additives

## **TECHNIQUES FOR SUBMERGING VEGETABLES**

1. Glass weight
2. Plastic bag filled with water

## **STAGES OF FERMENTATION**

1. 24 hours. Microbes kill bad bacteria
2. 2 days to 4 days sugars get converted to acids. See bubbling, & funky smells
3. 4 days to 4 weeks. Develop more acids. Bubbles trying to escape

When you want fermentation to stop, place jars fridge for 3 to 6 months.