



Fermentation:

The process by which organic molecules are broken down by microorganisms in the absence of oxygen

Why Ferment?



FOOD
PRESERVATION



ENHANCED
NUTRITION



PROBIOTICS



FLAVOR!



Food Preservation

During the course of their various processes, the microorganisms that ferment food produce alcohol, lactic acid, and acetic acid

These substances act as “bio-preserved” that prevent the spoilage of food and allow it to be kept longer with little or no refrigeration.



Enhanced Nutrition

Fermentation can breakdown and remove some anti-nutrients such as phytates, tannins, and even cyanide increasing bioavailability of many nutrients

Depending on the starting substance and microorganisms involved, fermentation can increase levels of many vitamins and minerals including calcium, iron, zinc, vitamin K, thiamine, riboflavin, and niacin

Microorganisms produce many antioxidants and polyphenols during fermentation

Fermentation can dramatically increase the bioavailability of proteins and decrease the glycemic index of carbohydrate rich foods



Probiotics

Fermented foods which are not heated or filtered after their production can contain high levels of probiotics – microorganisms that are beneficial for gut health.

A good gut microbiome can improve digestion and decrease constipation, diarrhea and other GI issues.

The gut is a very important site for neurotransmitter production and healthy gut microbes are associated with lower rates of anxiety and depression.

Higher intake of probiotics is associated with lower C reactive protein levels, lower insulin levels, an lower inflammation.



Flavor!

- Many unique compounds are produced during fermentation that enhance and transform these foods in ways that can only be found in fermentation!
- Sauerkraut, pickles, kimchi
- Yogurt, kefir, buttermilk, CHEESE
- Sourdough
- Beer, wine, cider, mead
- Vinegar