Fermentation of foods using microbes

Certain microbes can be used to make food

Acid Fermenters/Fermentation

1. Pasteurize dairy products like milk using heat and pressure to kill all unwanted microbes/bacteria

2. Inoculate the dairy product with specific strains of bacteria

i.e. Lactobacillus acidophilus, Lactobacillus bulgaricus, and Streptococcus thermophilus

3. Bacteria eat the sugar in the dairy product (lactose sugar) and create CO2 gas and Lactic acid. The acid curdles the milk into yogurt and cheese –YUM ☺

Alcohol Fermenters/Fermentation

1. Yeast eat the sugars (i.e. glucose and fructose) from barley, hops, grapes etc. and release ethanol (alcohol) and CO2 gas.

i.e. beer, wine, liquor

\*Other times microbes are used to make acids or vinegar as a byproduct and these can ferment foods into pickles, sauerkraut, and sausage.