

Session 1 – Sourdough Adventure

The Science and Flours Presentation Notes

THE SCIENCE:

Despite its name sourdough doesn't have to be tangy and sour. The name refers to the method of leavening bread with a "sour dough", which is the sourdough starter (culture). By manipulating time, temperature, and ratios, you can produce bread with a milder flavor. The tangy taste of sourdough comes from lactobacillus which live in symbiosis with yeast.

Starter Formation: When you mix flour and water, you create a paste. Microbes (like yeast and bacteria) from the environment and the flour start feeding on the sugars in the paste. Initially, any microbe can grow, including spoilage bacteria. Soon, lactic acid bacteria take over and acidify the mixture.

Lactic Acid and Acetic Acid: Lactic bacteria produce lactic acid (found in yogurt and cheese), giving sourdough its mild tang. Acetic acid (like vinegar) is also produced, adding to the sour flavor. The balance of these acids affects the taste and texture of the bread.

Flavor Development: Sourdough's diverse microbial ecosystem (yeasts and bacteria) depends on factors like flour choice, culture temperature, and feeding frequency. The microbes work together to leaven the dough and create flavor. The result? A unique, tangy bread that reflects its time and place.

As you continue this sourdough journey with us, you will not only be guided through each step, but also learn the reasons behind them. Understanding the why behind each action enhances our knowledge and helps us become better bakers. The more we comprehend the process, the more skilled we become.

TYPICAL FLOURS USED FOR MAKING THE STARTER

Additional information will be discussed in Session 2

Recommended to use unbleached and organic flours

Common Wheat Flours:

Bread, Unbleached all-purpose, Whole Wheat, White Whole Wheat

Non-wheat Flours:

Rye Flour

Recommended flours to make and maintain starter EITHER:

Whole wheat or white whole wheat

A mixture of bread and rye flour – ratio will be discussed in session 2

RECOMMENDED EQUIPMENT/SUPPLIES NEEDED TO MAKE STARTER

Two 1-quart clear glass mason type jars or canisters with lids

Rigid Spatula

Metric (Measures Grams) Digital Scale with Tare Function

Digital Instant Read Thermometer

Elastic band to place around jar to measure rise when fed

