



## **PRE-FERMENTS**

A pre-ferment is a preparation of a portion of a bread dough that is made several hours or more in advance of mixing the final dough. The preferment can be of a stiff texture, it can be quite loose in texture, or it can simply be a piece of mixed bread dough. Some preferments contain salt, others do not. Some are generated with commercial yeast, some with naturally occurring wild yeasts.

To add more flavor to breads, many bakers use pre-ferments, in which a portion of the bread flour is mixed with water, occasionally salt, and a tiny bit of yeast, and is then allowed to ferment for a long time – 12-18 hours, usually.

There are four basic types of pre-ferments, and they usually account for anywhere from 15% to 40% of the dough:

Pre-Ferments are basically divided into 2 categories:

- WET Pre-ferments
- STIFF Pre-ferments

### **WET PRE-FERMENTS**

Wet pre-ferments generally have high water to flour ratio and are bit difficult to handle. These are mostly divided into two types.

#### **POOLISH**

Most famously used to make tasty baguettes, a poolish consists of equal weights of flour and water along with 0.25% or less yeast. Less yeast makes the fermentation process very slow which in return makes a very flavorful dough.

A poolish is ready when it is very bubbly, smells sweet and has just begun to recede from its high point. From 3 hours to 2 days, a poolish works just fine.

#### **SPONGE**

It is another category under wet pre-ferment. It is faster in process than poolish. Most of the yeast in entire bread is present in sponge. Minimum time required is 1 hour to start fermentation.

### **STIFF PRE-FERMENTS**

These kind of pre-ferments are generally like a dough and has less hydration in comparison to wet pre-ferments.

#### **BIGA**

“Biga” is just an Italian word for pre-ferment, but in the English speaking world, it has come to mean a stiff pre-ferment, usually a dough at about 60% hydration with just a pinch of yeast.



It should be kneaded for a few minutes after it is mixed up. A biga is ready when it has begun to move just slightly in the center.

### **PATE FERMENTE**

It is a French word for “old dough”. In France, they will often save dough from the previous day’s batch, keep it in the fridge, and then used it in the next day’s batch. Typically, though, home bakers make one by exactly mimicking the proportions of flour, water and salt, and adding just a tiny pinch of yeast. It is then allowed to ferment for a long period of time.

Alternatively, one could even use the same proportions of yeast, but only let it ferment for an hour or so on the counter, and then placing it in the refrigerator. Like a biga, a pate fermente is ready when it just begins to recede in the center.

### **BENEFITS OF PRE-FERMENTS**

There are a number of important benefits to the correct use of preferments, and they all result from the gradual, slow fermentation that is occurring during the maturing of the preferment:

#### **1. DOUGH STRUCTURE IS STRENGTHENED**

A characteristic of all preferments is the development of acidity as a result of fermentation activity, and this acidity has a strengthening effect on the gluten structure.

#### **2. SUPERIOR FLAVOR**

Breads made with preferments often possess a subtle wheaty aroma, delicate flavor, a pleasing aromatic tang, and a long finish. Organic acids are a natural product of preferments, and they contribute to superior bread flavor.

#### **3. KEEPING QUALITY IMPROVES**

There is a relationship between acidity in bread and keeping quality. Up to a point, the lower the pH of a bread, that is, the higher the acidity, the better the keeping quality of the bread.

#### **4. OVERALL PRODUCTION TIME IS REDUCED**

To attain the best bread we must give sufficient time for its development. The preferment immediately incorporates acidity and organic acids into the dough, serving to reduce required floor time after mixing.