

# Importance of dough mixing And its methods

The processes of mixing the dough are only mixing all the ingredients together and get a dough. But mixing dough has more scientific importance in bread making which is directly responsible for the quality of bread produced, that is the final output. So the process of mixing the dough in bread making has its own importance, which cannot be overlooked at since it will definitely affect the final output as bread.

## Purposes Of Mixing Dough Are:

1. To distribute the yeast cell throughout the dough
2. Distribute food for the yeast which will further lead to the fermentation process.
3. To form and develop Gluten.
4. Hydrate the flour and other dry ingredients

Bread dough mixing requires a method where all the ingredients are homogeneously mixed and hydrated which will result in a well-developed gluten network. Basically, Gluten is formed when water is mixed with the wheat flour. Gluten is a water-insoluble protein and has a great importance in bread making process. During mixing, a continuous network of proteins forms giving the dough its strength and elasticity. By holding gas produced during fermentation, the protein network allows bread to rise.

Traditionally mixing was done in slow speed only, due to lack of knowledge and technology. But slow mixing results into a low level of physical dough development leading to a longer fermentation process. This style of mixing yield excellent flavours, but resulting the loaves denser.

## Three Basic Methods For Mixing Dough:

### 1. Straight Dough Method.

The straight dough mixing method is the simplest mixing method of all. It consists of only one step. You don't have to think much about this method, combine all ingredients in the mixing bowl and mix. While using this method, there is a possibility that the yeast doesn't get evenly distributed in the dough. Therefore It is safer to mix yeast separately with a little water.

- Soften the yeast in a little of the water. Ideal temperature is 43.33°C (110°F)
- Combine the remaining ingredients, including the rest of the water, in the mixing bowl. Add the dissolved yeast, taking care not to let it come in contact with the salt.
- Mix to a smooth, developed dough.

### 2. Modified Straight Dough Method or Modified Mixing.

The modified mixing method is basically for rich sweet dough. This is basically the modification of the straight dough method to ensure that the fat and sugar are evenly distributed in the dough.

- Soften the yeast in part of the liquid, using a separate container.
- Combine the fat, sugar, salt and flavourings and mix until well combined, but do not whip until light.
- Add the eggs gradually, as fast as they are absorbed.
- Add the liquid and mix briefly.
- Add the flour and yeast. Mix to a smooth dough.

### 3. Sponge Method

Many Bakers feel this method of mixing is very effective to achieve a better texture, rise and even the taste for the rich yeast dough recipes. Sponge method allows the yeast to speedily and fully ferment and activate with part of the flour and water in the recipe and later incorporated with the remainder of the ingredients. This method is successfully prepared by following two stages which help the yeast action to get a head start.

- Combine the liquid, the yeast, and part of the flour (and sometimes part of the sugar). Mix into a thick batter or soft dough. Let ferment until double in bulk.
- Punch down and add the rest of the flour and the remaining ingredients. Mix to a uniform, smooth dough.

### **Importance of Dough Mixing**

Mixing of Dough is the most important stage in the entire process of baking. During this process, both the development of dough and temperature of the dough are established. If either of them or both of them are not spot on the processing than the product quality will suffer. If you do it wrong, there is no second chance to correct it later in further processes. Hence, mixing has a great importance and must be performed with proper discipline.

The secret behind the good quality of the baked product is mixing of the dough. If you are not disciplined at it, you will struggle to get the ideal product quality for your Bread.