Fermentation of flour by Baker's yeast

Yeasts: are eukaryotic unicellular microorganisms, classified as members of the fungus kingdom. Most yeast reproduces known as budding, they are largest of the bacteria, yeast species either require (oxygen for aerobic cellular respiration or are anaerobic. Yeasts growth are inhibited by salt.

Saccharomyces exiguus (also known as *S. minor*) is a wild yeast found on plants, fruits, and grains that is sometimes used for baking

• *Sacharomyces cerevisiae* is baker's yeast that use in bread & pastries, this yeast is carefully selected for:

1. Available and cheap.
2. Its capacity to produce abundant gas
3. Its viability during storage
4. Its ability to produce desirable flavor

Therefore its prefers among yeasts.

Fermentograph: a special device is used to measure the strength of the fermentation occurring in dough, Where the yeast, flour and water are placed then this device begins draw a line graph of the increase in size of the dough.

***Measurement of yeast activity for dough fermentation:**

1- Mix 50 am of flour + 1 gm yeast (dry) or 10 ml (liquid) + 30 ml water to make dough.

2. Insert the dough in a 100 ml graduated cylinder or baker smeared with oil to prevent its adherence with glass wall.

3. Press it to the bottom & measure the volume, incubate at warm condition.

4. Record the volume every 10-mint for an hour.

5. Write the values in a table

Time (min)	Volume of the dough
0	
10	
20	
30	
40	

6. calculte the % of volume increasing=(final volume / initial volume) × 100

Compare different kinds of yeasts by this test.