### FUNGUS PART 2: BREAD YEAST, AN INSTANTANEOUS CULTURE READY FOR THE AMATEUR MICROSCOPIST.

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#### **INTRODUCTION:**

Who has not enjoyed at breakfast or at dinner or at any meal time a delicious piece of bread? It is necessary to say that for the manufacturing of bread that in most of the cases yeast is used. I say in most of the cases because there are special kinds of dough that do not need it, for example puff pastry.

The function of yeast is to ferment flour and to expand it by degrading sugars present in it, it produces the final appearance of most pieces of bread as a kind of foam, because it becomes fluffy.

One of the multiple strains of *Saccharomyces cerevisiae* is used, there are many presentations of this, the most common a kind of "active" dry powder and fresh in a kind of cubes. The first one is easy to get at the supermarket, it is packaged in small bags of 11 g each, because that is the quantity of yeast needed to ferment 250-500 grams of flour.



It is easy to produce the culture of this yeast, see below.

# **DEVELOPMENT:**

Though most of the time yeast is directly mixed with the flour and the rest of the ingredients for a type of bread, In order to appreciate the fermentation that bakers get when preparing bread and because a liquid sample for the microscope is required, it is necessary to make a preparation such as this:

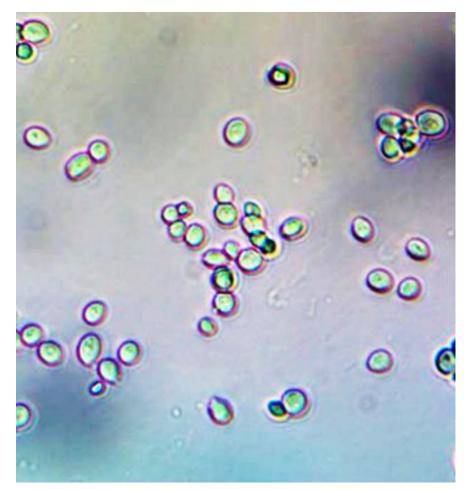
- > Pour in a bowl 120 ml of warm milk or warm water
- Add one table spoon of wheat flour and one table spoon of sugar
- Mix very well to undo all lumps
- Leave it for about ten minutes near a warm place.

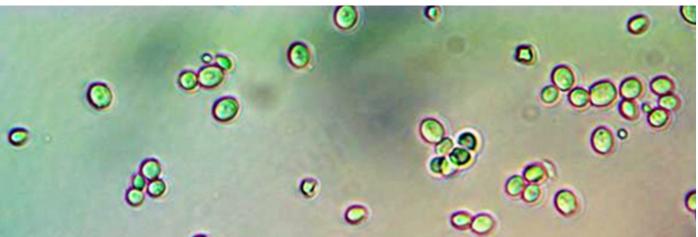
After ten minutes if the yeast is "active" it will produce a liquid foam.

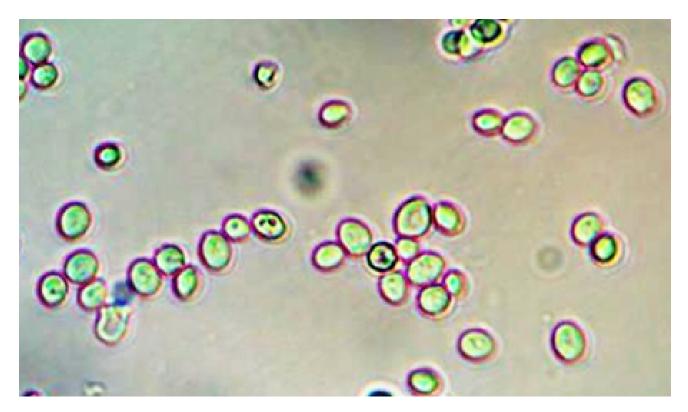


Which you can take a drop from to place it upon a slide to cover it with a coverslip and finally to observe it under the microscope.

# **RESULTS:**







Saccharomyces cerevisiae 40X BRIGHTFIELD ILLUMINATION

## **CONCLUSION:**

This is a culture of a specific specie of yeast that can be gotten easily at home. Apart from that it gives us part of the knowledge of bread making.

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