

Yeast Races

Yeast is a microorganism added to dough to make bread rise. Yeast turns the sugar in the dough into alcohol and a gas called carbon dioxide. As the dough heats up the bubbles of gas get bigger and the bread rises. Do you know what else yeast can be used for?



Equipment needed:

2 plastic cups

Permanent marker pen

Yeast sachets

Flour

Water

A variety of 'additives'

- *White sugar*
- *Honey*
- *Corn syrup*
- *Artificial sweetener*
- *Salt*
- *Etc.*

Spoons



Divide class into groups – each group should have an additive to test out.



For the yeast races you will need to:

- 1) Label your plastic cups with your names – one cup should be labelled 'control'.
- 2) Add 4 level teaspoons of flour to each cup.
- 3) Add 1/2 level teaspoon of yeast to each cup.
- 4) Add 1/2 teaspoon of your 'additive' to the non-control cup.
- 5) Add 2 level tablespoons of warm water and mix well with a spoon or straw.
- 6) Record the exact height of the dough in each cup by marking the outside of the cup with your pen.
- 7) Place the cups into a shallow basin of hot water.
- 8) Monitor every 15 minutes for half an hour or up to 2 hours or more if you want to. You can mark it with your pen to make measuring easier.

Time (minutes)	Measurement (cm)

Which additive made the yeast grow the most?
Why do you think that is?