

Micro-Organisms: Yeast Investigation

Did You Know?

- In 1857, Louis Pasteur discovered that yeast is a living organism whose activity causes fermentation.
- Yeast is tiny: Just one gram holds about 25 billion cells.
- Yeast feeds on sugar. As the yeast feeds on the sugar, it produces carbon dioxide.
- Yeast also produces alcohol as it feeds, which is why it is an important ingredient in making beer.

Investigation

We know that ALL living organisms need water, air and food, but what temperature does yeast prefer?

We are going to find out...

Apparatus	Method
<ul style="list-style-type: none">• 1 and a half packets of active dried yeast.• 1 cup of cold tap water, 1 cup of warm water, one cup of boiling water.• 12 teaspoons of sugar.• 3 balloons.• 3 empty water bottles.	<ol style="list-style-type: none">1. Stretch out the balloon by blowing it up a few times, then put it to the side.2. Add half a packet of yeast and 4 teaspoons of sugar to each cup of water, then stir.3. Once the yeast and sugar have dissolved, pour the mixtures into the bottles.4. Attach a balloon to the top of each bottle and then set all the bottles aside.

Diagram

Results

Time	Cold Water	Warm Water	Hot Water
5 mins			
10 mins			
15 mins			
20 mins			

Conclusion

As the yeast feeds on the sugar, it produces carbon dioxide. With no place to go but up, this gas slowly fills the balloon.

From our results, I think that yeast works best with _____ water. I know this because:
