# Yeast Incubator Experiment

1. At the beginning of class, heat approximately 125 mL of tap water to 37 $^{o}$C.
Use a 250 mL beaker to hold the water, and center it on the Magnetic Hot Plate/Stirrer.
Carefully slide a 1 inch stir bar (magnet) down the side of the beaker, and center the magnet on top of the hot plate.
Adjust the hot plate to just above 30 $^{o}$C.
Adjust the spinning of the stir bar so a slight dip is seen in the top of the water.

2. Review & discuss the Lab Notebook format while waiting for the water to heat.

3. Prepare your lab write up on your own paper- this will be taped into your notebook when the notebooks arrive. Write down background information from the discussion and the handout.

4. Obtain a balloon; record all information about it on your lab write up. Stretch the balloon or even blow it up but do NOT tie a knot in the balloon. We will use the balloon later to cover the opening of our yeast container.
5. Measure 10 mL of yeast, record information
6. Measure 5 mL of sucrose, record information
7. When the water is between 35- 39 $^{o}$C, measure 100 mL of the warm water and pour it into a pop bottle or small Erlenmeyer flask (125 mL or 250 mL).
8. Add the yeast and sucrose to the water in the bottle, mix gently
9. Immediately cover the bottle with the balloon.
10. Use masking tape to tape the balloon onto the bottle.
11. Prepare a data table on your lab write up

| Time (min or hrs) | Circumference of Balloon (cm) |
|---|---|
| | |
| | |

12. Write the time and balloon circumference as soon as you tape the balloon on.
13. Continue measuring at least every 5 minutes and recording your scores.
14. Record at least 10 measurements.
15. Clean up after yourself.

*(adapted from "Mapping your future: Exploring Careers in Biomanufacturing", North Carolijna Association for Biomedical Research and the North Carolina Biotechnology Center)*

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