

**Procedure**

*To produce alcohol using yeast*

1. Prepare 500 cm3 of a 10% w/v glucose solution.
2. Into each of the two conical flasks, add 250 cm3 of the 10% w/v glucose solution.
3. To one, add 5g of yeast and swirl. Label this ‘yeast + glucose solution’
4. The second flask acts as the control (has no yeast). Label as ‘control’.
5. Attach a fermentation lock (half-filled with water) to each flask.
6. Place both flasks in the incubator at 30 oC overnight.

*To show the presence of alcohol: Iodoform test for alcohol*

1. Remove both flasks from the incubator and filter the contents of each into separate beakers and label as before.
2. Transfer 3 cm3 of the yeast and glucose filtrate into a test tube and label.
3. Transfer 3 cm3 of the control filtrate into another test tube and label.
4. To each test tube, add 3 cm3 of the potassium iodide solution and 5 cm3 of the hypochlorite solution.
5. Warm gentlyfor 4-5 minutes in a water bath.
6. Allow to cool and observe any change(s).
7. Record and compare results.
8. Replicate the investigations or cross reference your results with other groups.

**Result**

|  |  |  |  |
| --- | --- | --- | --- |
| **Flask** | **Original colour of filtrate** | **Final colour filtrate** | **Other changes** |
| **Yeast and glucose solution** |  |  |  |
| **Control (no yeast)** |  |  |  |