

Human Cell DNA Extraction Lab

Background: Every cell in your body contains DNA. Once the cells are collected and broken, the DNA can be chemically collected.

Materials:

1 Test tube	2 ml 6% salt water	Saliva from mouth
1 plastic cup	2 ml 10% soap solution	Data table
1 pipette	2 ml 70% rubbing alcohol	

Safety: The only solution that goes in your mouth is the salt water.

Procedure:

1. Write down an observation of what the salt water solution looks like.
2. Swish 2 ml of **salt water** in your mouth for 45 seconds. MORE VIGOROUS SWISHING COLLECTS MORE CHEEK CELLS.
3. Spit the salt/water/ cheek cell solution back into the empty cup; write down an observation of this solution.
4. Gently pour the solution into a test tube. Cups will be thrown away.
5. Add 2 ml of **soap solution** and let it settle.
6. Mix by swirling gently several times. Write down one observation of this new solution.
7. Gently add 2 ml of **alcohol** to the salt/water/cheek cell/ soap solution with the pipette. POUR ALONG THE SIDES OF THE TUBE so that it forms a layer on top of the solution already in the tube.
8. Wait at least one (1) minute. While you are waiting, write down an observation.
9. Hold the tube up to the light. Write down an observation.
10. Do not disturb the test tube. The blob of DNA will break up and won't come back.
11. Make one final observation.