

Experiment 4

I. Aim : To study human cheek cells under a microscope.

II. Materials Required:

1. Compound Microscope
2. Cover slip
3. Slide
4. Tooth pick
5. Watch glass.
6. Methylene Blue Stain Solution.

III. Procedure:

1. Take a tooth pick and gently scrape the inner side of the cheek. Don't scrape too hard as you might end up injuring yourself. This inner lining of the cheek is composed of squamous epithelial cells.
2. Now the sample is spread on a clean slide by rubbing the tip of the toothpick on the surface of the slide.
3. In order to stain the cheek cell samples a drop of methylene blue solution is added to it.
4. A cover slip is now placed on the top with the help of a needle.
5. The excess stain is removed with the help of a tissue paper, gently pressing the cover slip and absorbing the excess stain with the tissue paper.
6. The slide is observed under the microscope first at 10X magnification and then at 45X magnification.

IV. Observation:

- i. The polygonal structures observed are the cheek cells. These cells are squamous epithelial cells.
- ii. The outer lining comprises of the plasma membrane and the inner deep blue spot is the nucleus

V. Precautions:

1. Be careful not to scrape too hard with the tooth pick.

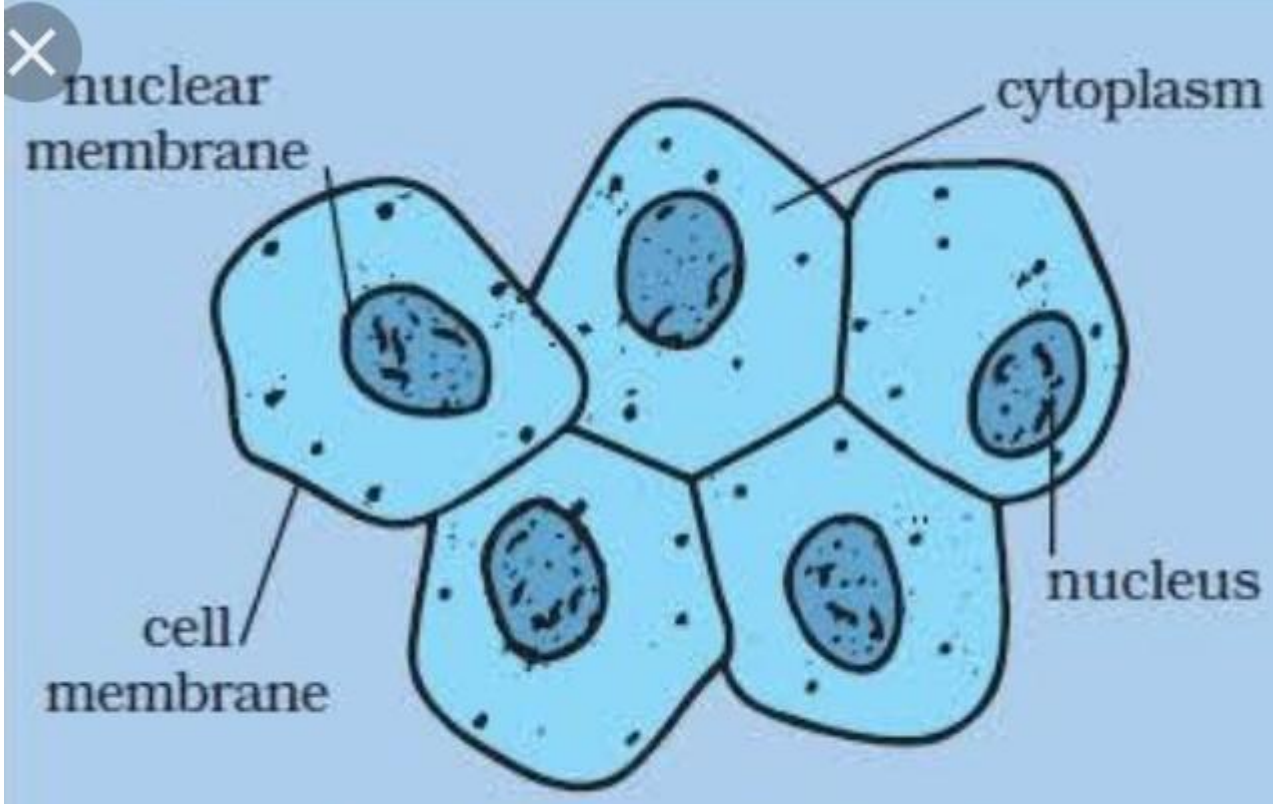


Fig. 8.6 : Human cheek cells