

Lab-4 (Protozoa)

-Amoeba

- **Habitat: freshwater ponds.**
- **Means of locomotion: pseudopodia.**
- **Reproduction mechanism: asexually by binary fission**
- **Shape and characteristics: quite irregular in shape; the body changes its shape constantly with the formation and withdrawal of the pseudopodia**

-Intestinal Amoeba

Entamoeba histolytica(pathogenic)

Entamoeba histolytica It causes amoebic dysentery.

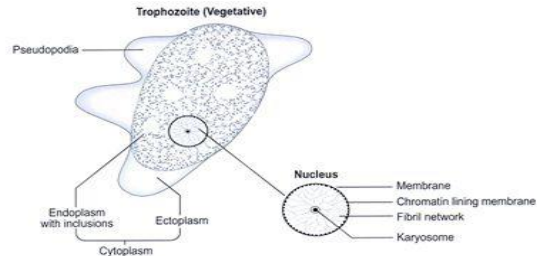
Life cycle :

- **The trophozoite: feeding dividing form) It has one pseudopodia).**
- **Cyst: have 4 nuclei (infective stages)**
- **Infective stage: Cyst.**
- **Mode of infection: contamination of food and water with cyst.**

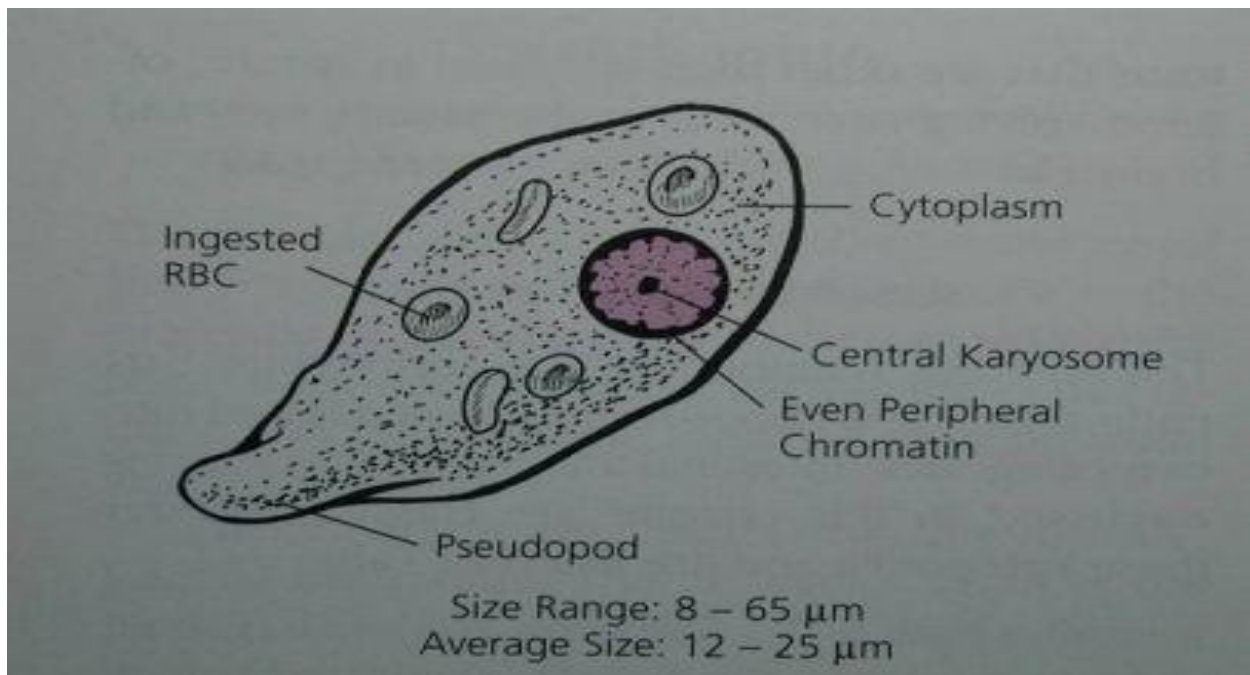
Entamoeba histolytica

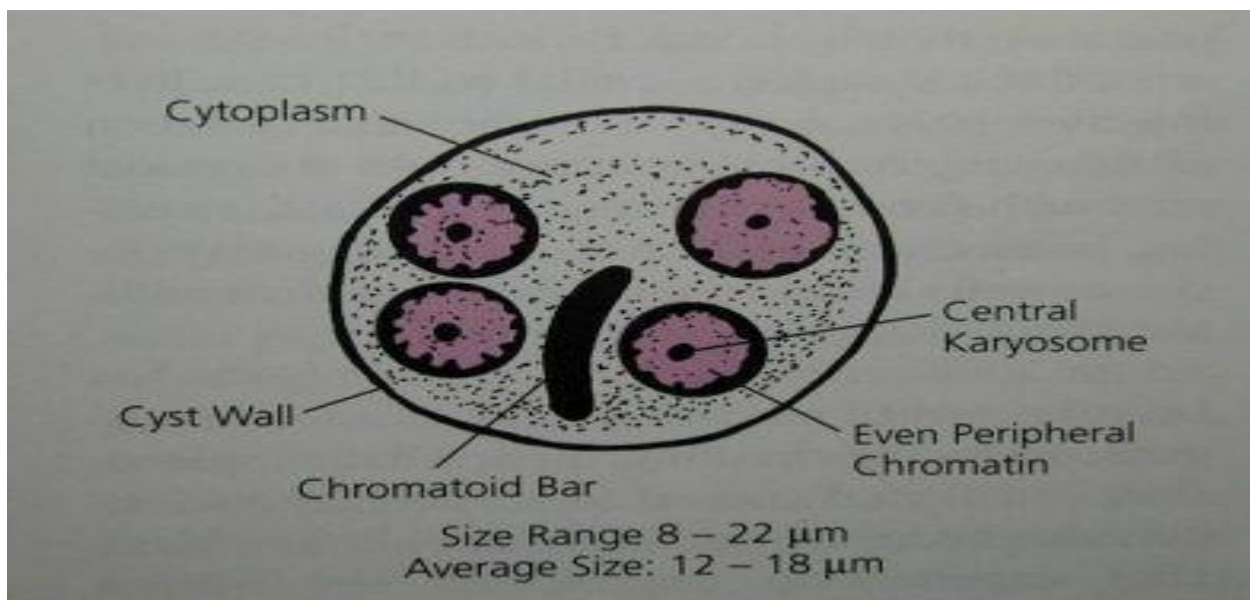
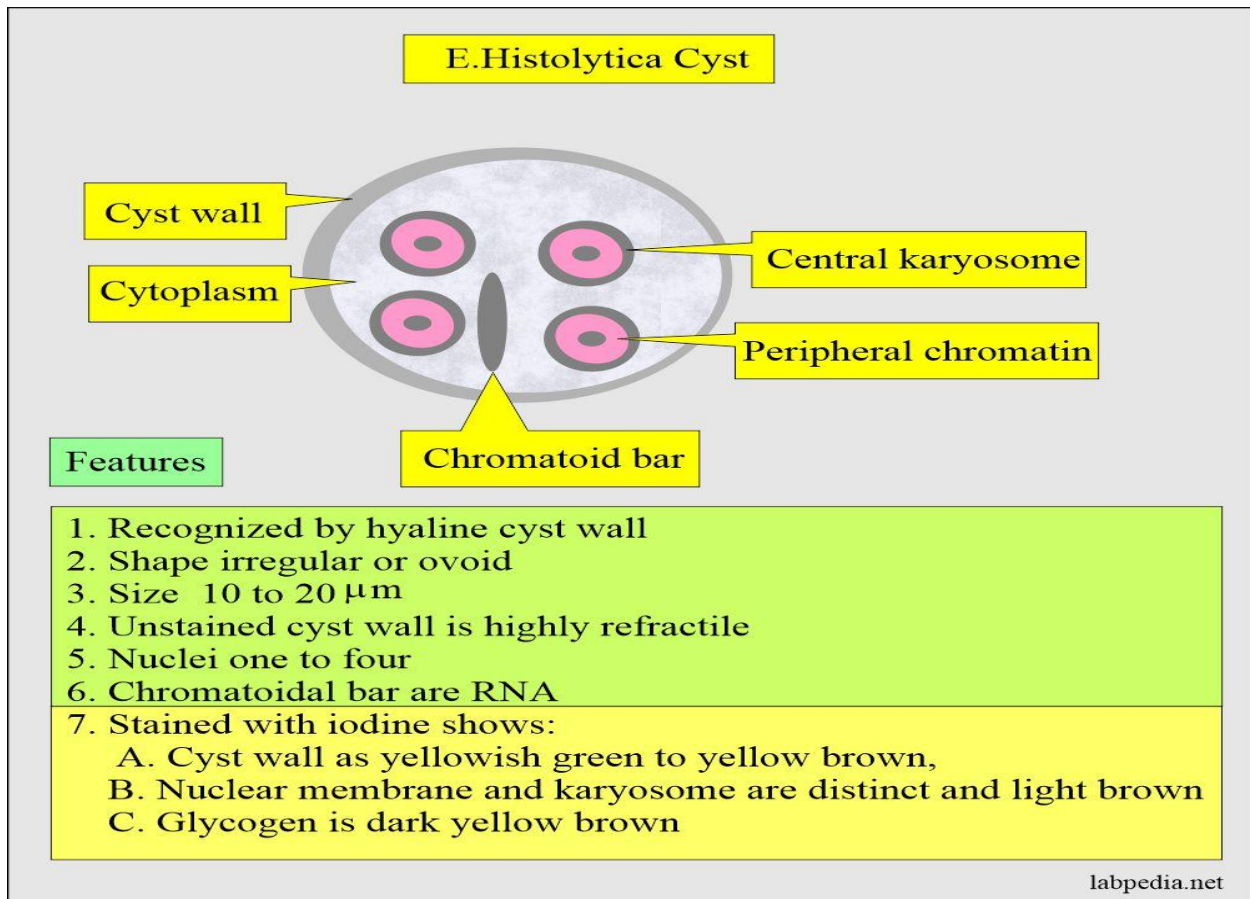
Morphology of Trophozoite(vegetative form):

- 10-60 X 15-30 μ average (20-25 μ)
- Cytoplasm is clearly differentiated into:
 - **Ectoplasm:** is clear with well developed pseudopodia.
 - **Endoplasm:** dense & fine granular enclosing:
 - **Nucleus:** spherical containing central karyosome & peripheral evenly distributed small chromatin dots.
 - **Food vacuoles:** contain leucocytes-bacteria-may be RBCs.



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Stool characterization recovered from patients with amoebiasis

1-The appearance: consists of blood and mucus

2-Coloured: dark red

3-Odor: offensive (foul smell)

4-Chemical reaction: acidic 5-Presence of pus cell: scanty

6-Presence of R.B.Cs numerous

7-Presence of macrophage: nil

8-Presence of eosinophils: present (scanty



cyst



trophozoite