

**Kingdom: Protista**

**Phylum: Protozoa**

**1. Subphylum: Sarcomastigophora**

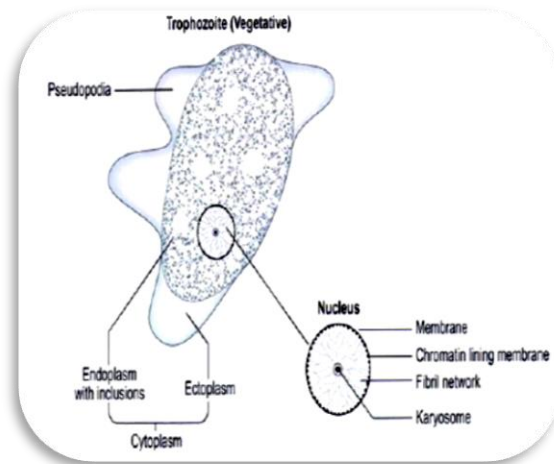
**Class: Sarcodina**

**Order: Amoebida**

**Family: Entamoebidae**

*Entamoeba histolytica*

*Entamoeba coli*



***Entamoeba histolytica***

Among these 7 species only *Entamoeba histolytica* is pathogenic parasite for man and others are commensals

**Habitat:** colon and cecum; and extra intestinal locations including liver, lung, brain, skin, and other tissues.

**Definitive host:** Human

**Intermediate host:** Not present; direct transmission by ingestion of cyst stage

**Infective stage:** Cyst stage

**Disease:** Intestinal amoebiasis (**Amoebic dysentery**).

**Treatment:** metronidazole (Flagyl) for both Trophozoites and cyst.

**Diagnosis :**

1. **Microscopy:** a. detect trophozoite when in acuted dysentery.  
b. detect cysts and trophozoites in chronic.
2. **Biochemical Methods: Culture and Isoenzymes**
3. **ELISA test**
4. **Molecular Biology- PCR**

**Table showing the main differences between cystic form of *Entamoeba histolytic* and *Entamoeba coli***

<u><i>Entamoeba histolytic</i></u>	<u><i>Entamoeba coli</i></u>
1-It's size is 3.5-20mM.	1-It's size is 10-33mM.
2-It has 1-4 nuclei with minute central karyosome	2-it has 1-8 nuclei, karyosome is eccentric

**The main differences between the vegetative form of *Entamoeba histolytica* and *Entamoeba coli***

<u><i>Entamoeba histolytica</i></u>	<u><i>Entamoeba coli</i></u>
1-It's larger in size range from 10-60mM.	1-It's smaller in size it's usually 15-50mM.
2-The ectoplasm is hyaline while the endoplasm is granular.	2-The cytoplasm is not differentiation to ectoplasm and endoplasm.
3-karyosome is small and situated at the center of the nucleus.	3-karyosome is larger and usually eccentric.
4-nuclear membrane inner surface has single layer of minute chromatin dots.	4-nuclear membrane inner surface lined with coarse chromatin dots.
5-Motility: its active motile by one large pseudopodium, finger shaped and hyaline.	5-Motility :it's sluggish, by two pseudopodia, which are shorter, blunter and more granular
6-food vacuoles contain R.B.C. no bacteria.	6-food vacuoles contain bacteria and other material and no R.B.C.

